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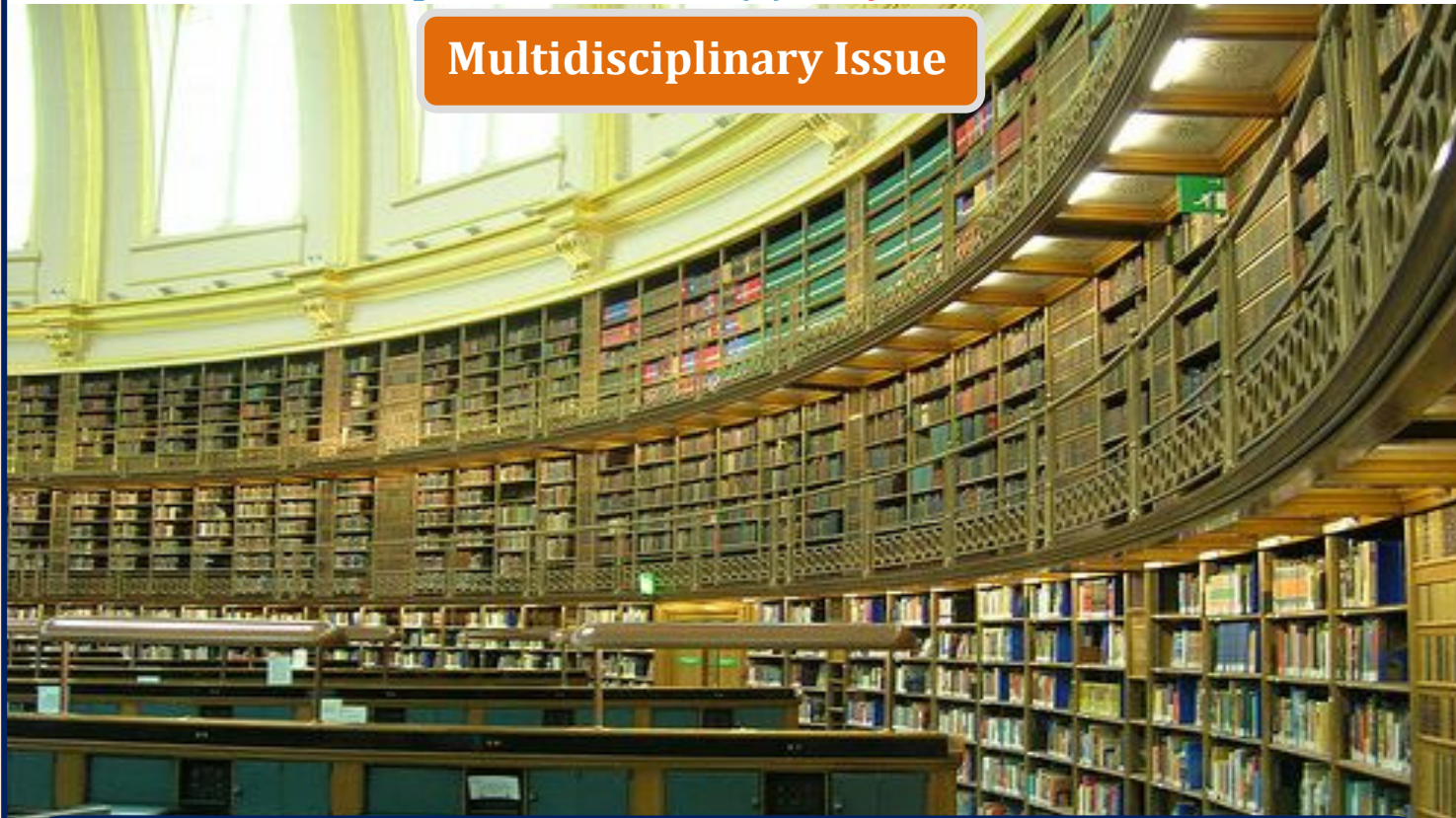
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Multidisciplinary Issue



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INDEX

No.	Title of the Paper	Author's Name	Page No.
01	Online Information Searching during Pandemic : A study with Reference to Library Science Students of Dr. C.V. Raman University Kota Bilaspur Dist.	Dr. Sangeeta Singh & Rajesh Sharma	05
02	Open Source Software's in Library Science Profession	Smt. Swati Gosavi	15
03	Finding the Geological Hotspots in A Raigad Fort Range and Its Development As Heritage Tourism - A Case Study of Columnar Basalt Structures Found At Mahad	Vijay Raykar	20
04	Comparative Study of Gauss Elimination Method and Substitution Method in Chemistry	Shweta Bibave	23
05	Jawaharlal Nehru Engineering College Central Library is an ICT Hub of Resources and Services	Mr S. B. Harkal	28
06	Pandemic Situation :The Paradigm Shift in Education Field	Dr. Sabiha Asif Faras	34
07	Status of Women Entrepreneurs in Karnataka	Dr. Radhika M. K.	38
08	ICT Based Smart Education in College Libraries	Dr. T. Prabakaran	47
09	Print VS Electronic Resources	Ms. Gunjan Mishra	56
10	Prospective of Social Stock Exchange in India	Prof. Sanjay Agrawal	63
11	Quality Questionnaire? – 'Questions' can be Answers	Keertee Parchure	67
12	An Analysis on Talaq-E-Biddat	Mr. Kashyapkumar Thaker	72
13	Factors Influencing Purchase of Computer in Coimbatore District	N. Raja & Dr. A. A. Magesan	77
14	A Study on Buying Behaviour of Consumers towards Organized Retail Stores in Chennai	Dr. M. Rajesh	84
15	Users Perspective on Mobile Library Services at Academic Libraries	Mrs. Pritam Maral & Dr. S. B. Telke	90
16	A study of Gautama Buddha's Life and Buddhism	Smt. Rupali Wagh & Smt. Pratiksha Pingle	96
17	Research on Packaging and Advertising of Creative Fast Moving Consumer Goods	Prof. Nitin Taware	101
18	Covid19 : Impact on Indian Agriculture	Dr. Chandrakant Kamble	109
19	Awareness and Use Pattern of Electronic Resources among the Students of Government Dental College Libraries in Andhra Pradesh : A study	Srinivas, Sonteni & Dr. T. Murali	112
20	A Comparative Study of Pre-Competition Anxiety Level between Cricket Batsmen and Fast Bowlers of University of Mumbai	Dr. Manohar Mane	119
21	Students and the Internet Use : An Overview	Mozzam Khan	123
22	Role of Digital Library Projects and E-Resources for Research Scenario	Mr. Machindra Wakchaure	127
23	Role of Media in Pandemic Situation	Alpa Vyas	134
24	Role of Media in Pandemic Situation with Special Reference to Broadcasting Media	Dr. Ruchy Sharma	138
25	Salesforce Automation Technology : A Tool for Enhancing Salesforce Efficiency and Effectiveness in the Organized Retail Sector	Shikha Upadhyay	145



26	COVID-19 and Distance Education on Private Universities Library Services in Chhattisgarh : A study	Salik Ram & Dr. Sarita Mishra	156
27	Scientometrics : Software for Analysis	Mr.A.R. Kaldate, Dr.D.K.Veer, Dr. Sudhakar Telke & Mr.K.M.Sawant	166
28	Seek Company Position in India	Thaker Maharshi M.	172
29	A Descriptive Study on Awareness and Preventive Measures about Covid-19 among High School Children (12-14 Years) At Z.P. High School, Vadlapudi, Visakhapatnam	Seema Kumari	178
30	Serendipitous Innovation-An Understanding through the Post IT Note	Durgesh Pandit	183
31	Quality Improving of Higher Education System in India	Dr. Surendra K.	190
32	Sustainable Marketing Practices of Manufacturing Units in Virudhunagar District	Dr. P. Rajmohan & Dr. A. A. Magesan	195
33	The Agrarian Crisis and the Challenges to the Development of Agriculture in Kerala	Basil Benny	202
34	Issues and Opportunities of Higher Education in India	Dr. Surendra K.	208
35	Mobile Libraries(M-Libraries) in Health Science Environment : An Overview of Web-Based Information Resources Going on Mobile	Dr. R Jayapriya & Mrs. M. Umamaheswari	214

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Online Information Searching During Pandemic : A Study with Reference to Library Science Students of Dr C.V. Raman University Kota Bilaspur Dist.

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Abstract:

This research paper examines “Online Information Searching” during pandemic with reference to Dr C.V. Raman University Kota Bilaspur Distt. The different aspects of Information Searching have been analysed and presented in the form of diagram. The various online activities of library have also been listed and explained. This research paper emphasised on types of search engines students preferred for their information demand during study at home. The frequency of using search through internet has also been analysed. This paper includes the profile and services of Dr C V Raman University Library.

The descriptive survey method was used, and simple random sampling adopted. Questionnaire was the major instrument of data collection. Results of the findings were interpreted using simple percentages and organized in tables, and charts for clarity and better comprehension.

The results of the findings revealed that students have good effective tendency to search internet for retrieving information and satisfy their requirements.

Keywords: Dr C.V. Raman University, Online Information Searching, Orientation Session, User’s Satisfactions, Search Engines, INTERNET, OPAC, Pandemic, Teaching Learning, Hands On Sessions, KOHA Library management Software

Introduction:

Library is a key feature of any academic institution and constitute a centre entity. It is indeed “Heart” of the University, hence it should preferable be located at the centre of the campus. A library indeed plays very vital role in “Promotion of Reading Habits among its users”. During the “current Pandemic” teaching-learning took place from home and library certainly played very vital role to assist in searching information.

The library of Dr C.V. Raman University is a resourceful and executes its services in a hybrid way. It is fully automated using KOHA Library Management Library Software. During recent Pandemic library services played very vital role in implementing online education in which students involved in teaching learning process from home. A survey was conducted to know the various aspects of “Information Searching” by the students. This survey helped to analyse the level of “information searching” took place through the initiatives of Central Library and its faculty members along with Guest lectures.

New format i.e., digital way enables users to retrieve information very quickly, pinpointedly and comprehensively.



Shri J. P. Choubey Central Library- Profile:

Dr. C.V. Raman University Central Library was established in 2006. Central Library is the soul of the institution and it has an extensive collection of the books, scientific and technical journals and electronic reference materials for satisfying the academic and research needs of students and faculty community. The Library is the hub of academic student life on campus. Dr. C. V. Raman University houses a spacious library, stacked with approximately 50,000 books, 10000 titles and thousands of CDs, National & International journals and reports that cover all subjects pertinent to the courses. The CVRU Library consists of a Central Library & Separate Departmental Libraries to help students and faculties alike have to easy access to courses and reference materials through a membership card. It opens from 10.30 A.M. to 5.00 P.M. from Monday to Saturday.

Besides a huge collection of books on Engineering, Science and Humanities, the Library has a total seating capacity of 600 with an Integrated Information System in place. All its activities include in acquisition, cataloguing, circulation and stock have been computerized. The Central Library spreads over to ground plus first floor with an area of 10,000 Sq.Ft. It is well-protected with fire alarm and CCTV Surveillance. It has specialized collections of Books, Journals & other resources is Sciences, Engineering and Technology, Biotechnology, Humanities, Social Sciences, Law and Management ranging from printed books, e-books, back volumes and CDs/DVDs. The Central Library subscribes to National and International Journals in print and electronic form. The Library has a video conferencing facility and NPTEL video courses.

The special features of the Library is the recent collection of study materials including e-resources. The Library provides CAS, SDI, resource sharing, list of latest arrivals, On-line e-resources, OPAC Services, Central Library is automated with KOHA Library Management Software.

E-Library: e-library equipped with 25PCs, offer access to online, e-journals, e-books, e-database, e-lecture videos and open sources software with useful links. User can access the contents abstracts or full text in a flexible and easy manner to use for their study.

Lectures and Videos (Nptel Videos): Members can access Multimedia Video lectures/NPTEL Videos of all Subjects in the e-Library Section.

DELNET: The Library arranges books on loan from other libraries on specific demand. Library also provides the full text resources with the help of DELNET. CVRU Central Library is an institutional member of DELNET (Developing Library Network).

Institution of Engineers: CVRU Central Library is having Life-membership of on-line resource IOE (Institution of Engineers). It gives the on-line access of resources of different branches of Engineering and Technology.

National Digital Library: Central Library provides the NDL facilities for members to access e-books and e-journals.

E-pathshala & E-pgpathshala : e-pgpathshala and e-pathshala is an initiative by Ministry of Human Resource Development to promote ICT based education. CVRU Central Library provide



the access for e-pgpathshala and e-pathshala for members to use the resources. It is a free portal of Government of India.

SWAYAM: SWAYAM is a joint initiative by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) to promote ICT based education. CVRU Central Library use to register the member of the Library on various undergraduate and post graduate online courses and allow them to go through the various video lectures of their concern courses.

J-gate (Engineering & Technology) & J-gate (Social & Management Science) : Central Library is providing the facility of access online journals of J-gate (Engineering & Technology) & J-gate (Social & Management Sciences) for the research scholars and faculty. J-gate is an electronic gateway to global e-journal literature and provides access to millions of journals articles available online offered by 13,395 publishers. It presently has a massive database of journals literature, indexed from 49,101 e-journals with links to full text.

Library Mission: Dr. C. V. Raman University Central Library will be an excellent modern knowledge resource center to disseminate information for teaching, learning and research of the University's diverse community by providing modern library and information services. Maintain effective National and International resource sharing network relations towards disseminating our value-added information services to all the University community within the library budget limits.

Library at a Glance :

- | | | |
|---------------------------------|---|--------------------------|
| 1. Year of Establishment | : | 2007 |
| 2. Total Carpet Area | : | 12,378 Sq.Ft. |
| 3. Total Seating Capacity | : | 1000 |
| 4. Working Hours of Library | : | 10.30 A.M. to 5.00 P.M. |
| 5. Library Members | : | 5000 |
| 6. Total No. of Books | : | 54966 |
| 7. Total No. of Titles | : | 13238 |
| 8. Total No. of Reference Books | : | 13238 |
| 9. Library Networking Facility | : | LAN, Wifi, Area Network |
| 10. Reprographic Facility | : | Xerox Rs 1/- per Page. |
| 11. Over dues Charges | : | Rs 1/- per day per book. |

Library Services:

Library offers the following Services, Documentation Services, Reading Room Facilities, Reference Services, OPAC, Reprographic Services, Xeroxing Facility, Circulation Services, access of on-line Resources, Periodical Service, Internet access Information Search, Library Orientation, Newspaper Clipping, Resource Sharing, Digital Library, Thesis project reports Section, Circulation Section, Circulation of Books. Database of Indian Business Insight (ibi) , MoU with Shodhganga, Member of NDLI, Urkund Antiplagiarism Software we are using, Uploading our awarded research works into Shodhganga, Membership with e-Shodhsindhu, Planning to build our own institutional repository using koha and soul Library Management Software

Objectives of the Study

This study is intended to achieve the following objectives:

- 1.To know the comprehensive profile of Central Library of University
- 2.To know the level of help from orientation sessions
- 3.To examine the frequency of searching internet.
- 4.To examine the preference of search engine for searching information by the students.
- 5.To know the existing e-libraries utilities are adequate.
- 6.To know the usage of OPAC
- 7.To know the satisfactions of users' demand through information searching
- 8.To find out any difficulties faced by the students during online searching in current Pandemic
- 9.Th know whether users are aware about internet and subsequently they can retrieve their demand
10. To know overall level of satisfactions through the assistance of Faculty members, Guest Lectures

Research Questions:

1. Have you been provided orientation session on information searching during pandemic?
- 2.Frequency of searching internet and browsing sites for information?
- 3.Whether the existing e-library materials are adequate?
- 4.Which search engine you prefer for searching information?
- 5.Have you been provided opportunity to access OPAC?
- 6.Do you think that e-library sources and services helped you to satisfy your demand?
- 7.Have you faced any difficulty in searching online information?
- 8.Are you able to search information using internet?
9. How you overall satisfied on information searching due to supervision from Faculties, Guest lectures?

Methodology adopted:

The descriptive survey study method was used in conducting this research. Users were given questionnaire through google form. Interview technique also been adopted.

This method is not simply amassing and tabulating facts, but includes proper analysis, interpretation, comparisons, identification of trends and relationships. This study method offers an opportunity to study a particular subject e.g., an organization in-depth or a group of individuals and usually involves gathering and analyzing information that may be both qualitative and quantitative.

The Survey Area:

This study is a case study of a selected area. The study is limited to BLISC and MLISC students of Library Department of Dr C.V. Raman University Kargi Road Kota. The respondents were given the questionnaire through google form and interview technique also adopted to complete this study.

The Sample Population:

To ensure a fair representative sample and effective handling, 142 students of BLISC and MLISC were sampled for the study through simple random sampling technique.

The sample were taken from students (BLISC and MLISC) of Dr C.V. Raman University Kargiroad Kota. This study was conducted during the ongoing pandemic.

Data Analysis and Interpretations

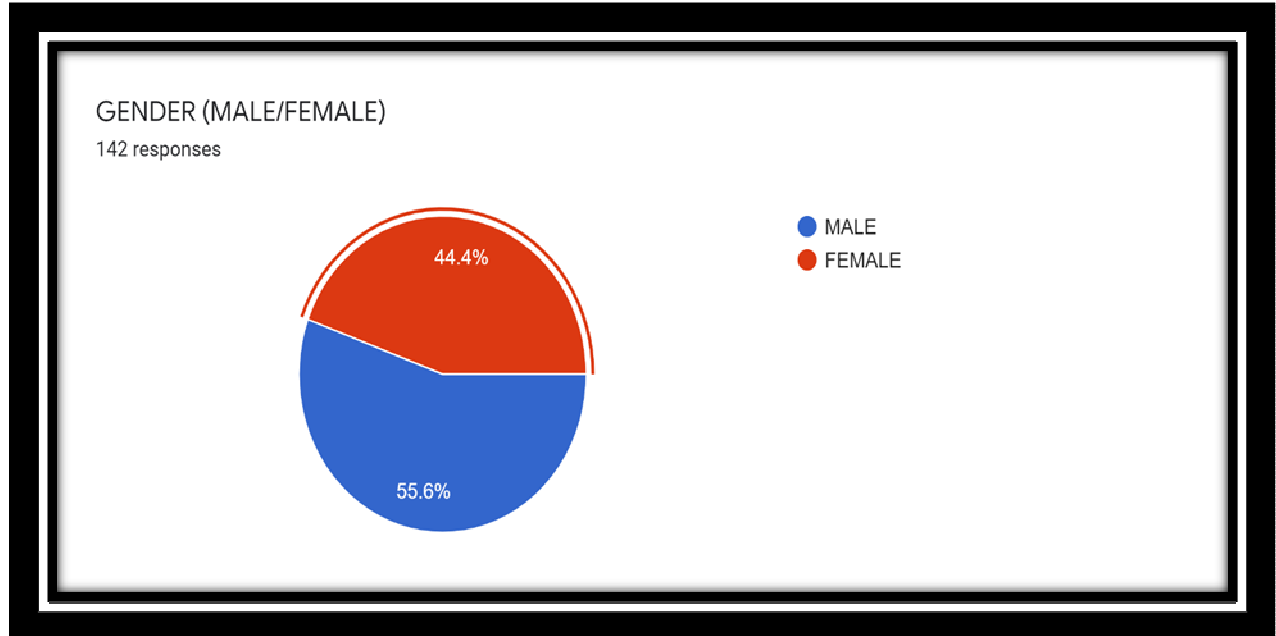


Fig.1: Gender Analysis shows 79(55.6%) of male whereas 63(44.4%) of females participated actively and responded the research questions.

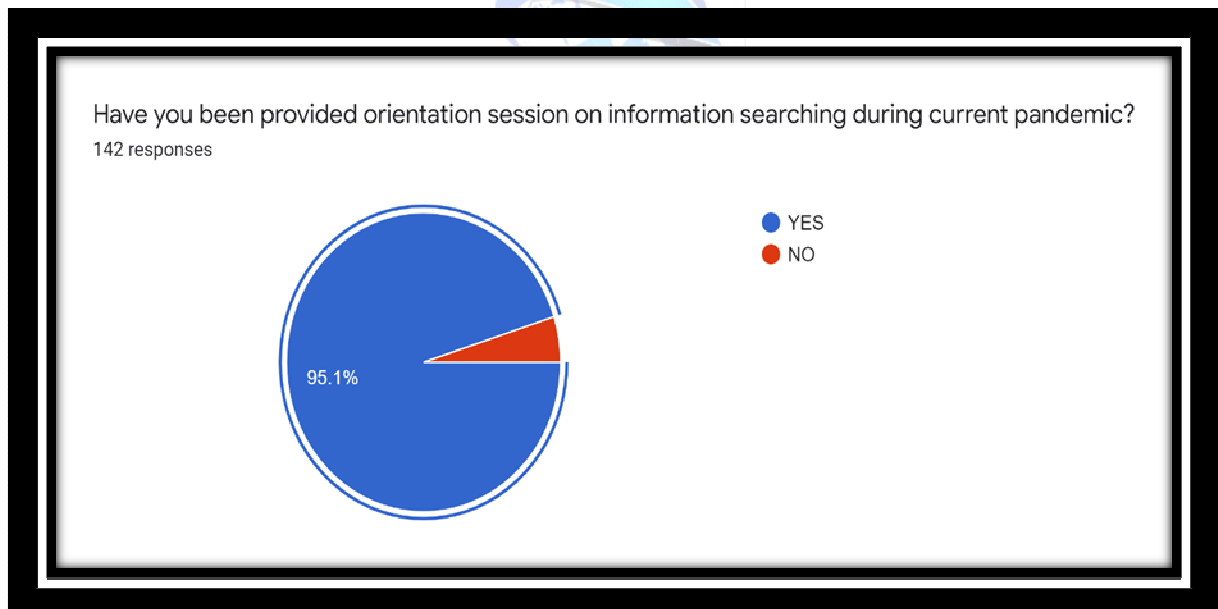


Fig. 2: Orientation Session clearly indicates that students taking part in orientation session which is taking place at regular intervals. This research shows 135 (95.1%) respondents agreed with having attended the orientation session on information searching during current pandemic whereas only 7(4.9%) of students are unaware about it.

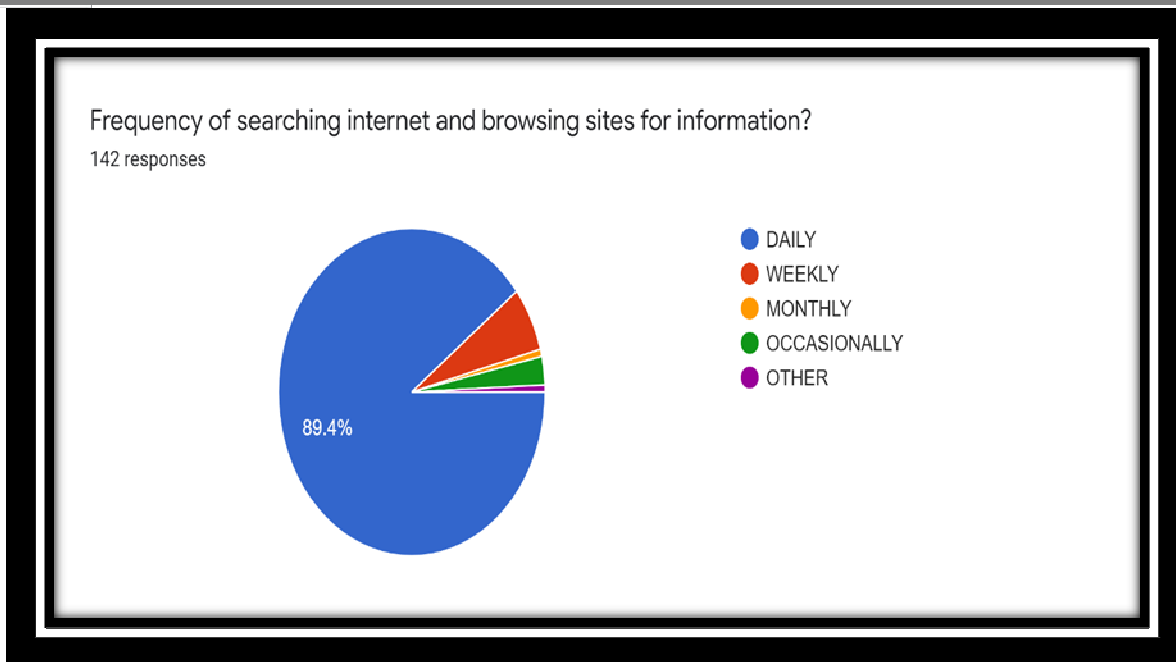


Fig. 3: Frequency of searching Internet shows large number of students 127 (89.4%) search information through internet and retrieve their specific demand and pursue their study where as 9(6.3%) of students prefer to search the internet for their desired information weekly. Rest of the students 4(2.8%)search occasionally.

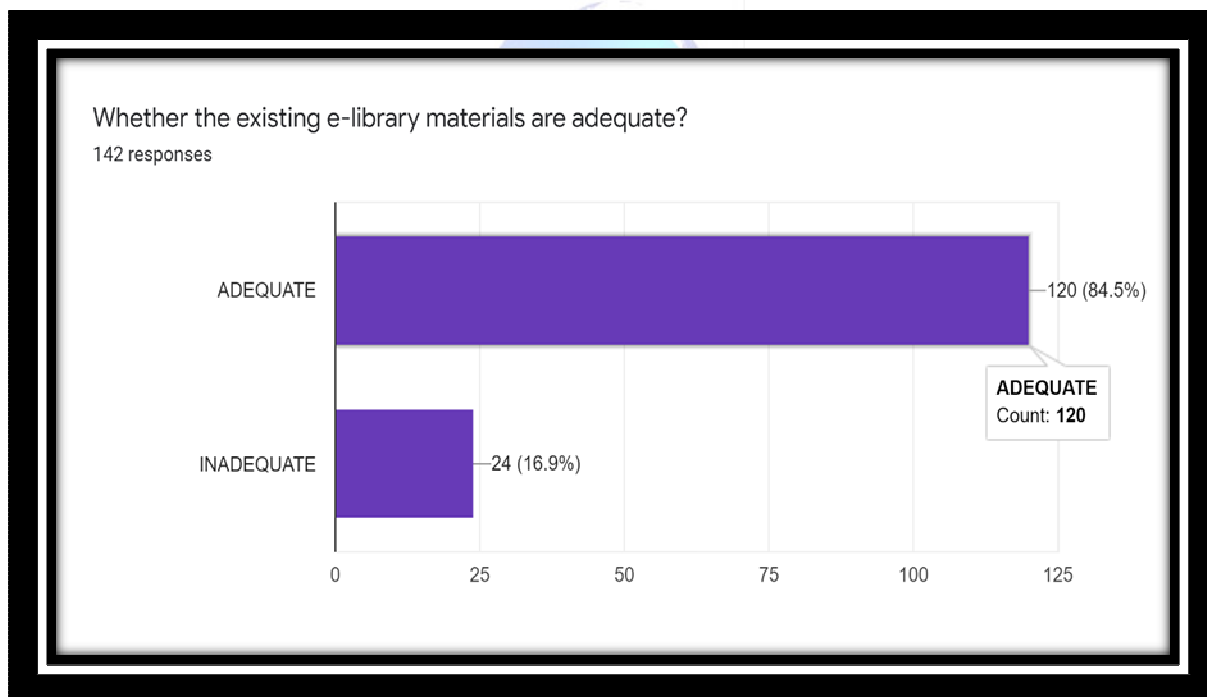


Fig. 4: Adequateness of existing e-library materials indicates 120(84.5%) of students are with adequate whereas only 24(16.9%) of students intend to place further requisitions to strengthen the e-library materials of the department.

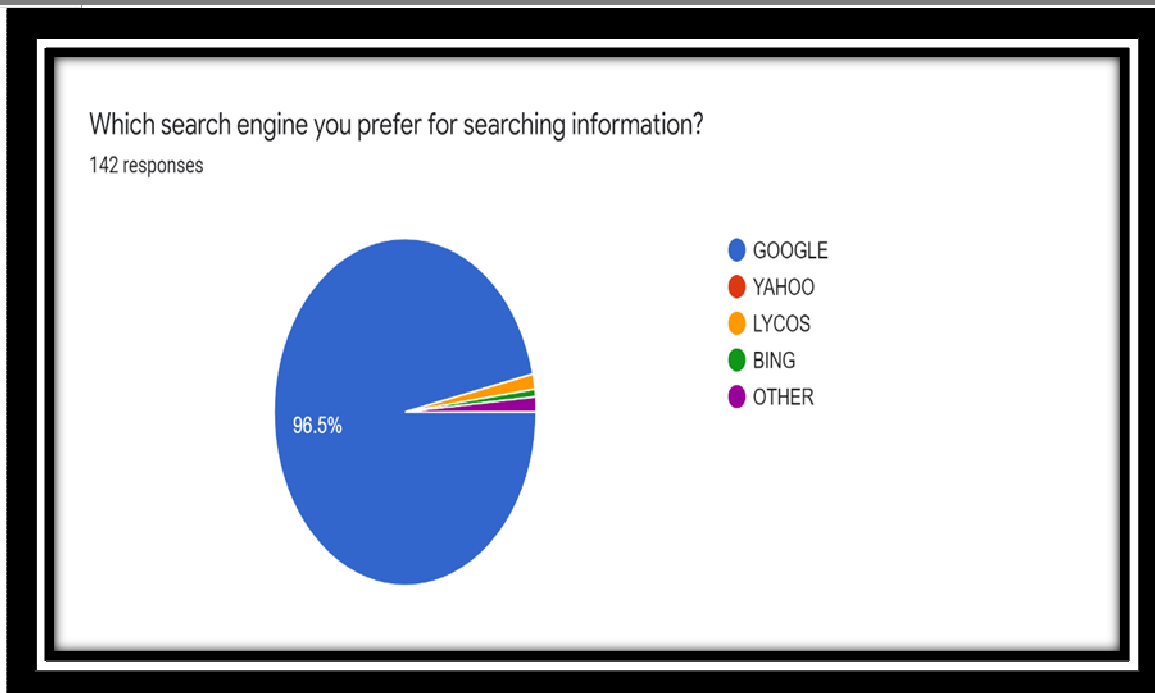


Fig. 5: This analysis clearly indicates the choice of Search Engine of students is “Google”. The large number of sample of students 137(96.5%) frequently use “Google” for information searching whereas only rest of the students 5(3.5%) are trying other search engines like Yahoo, Lycos, Bing etc..

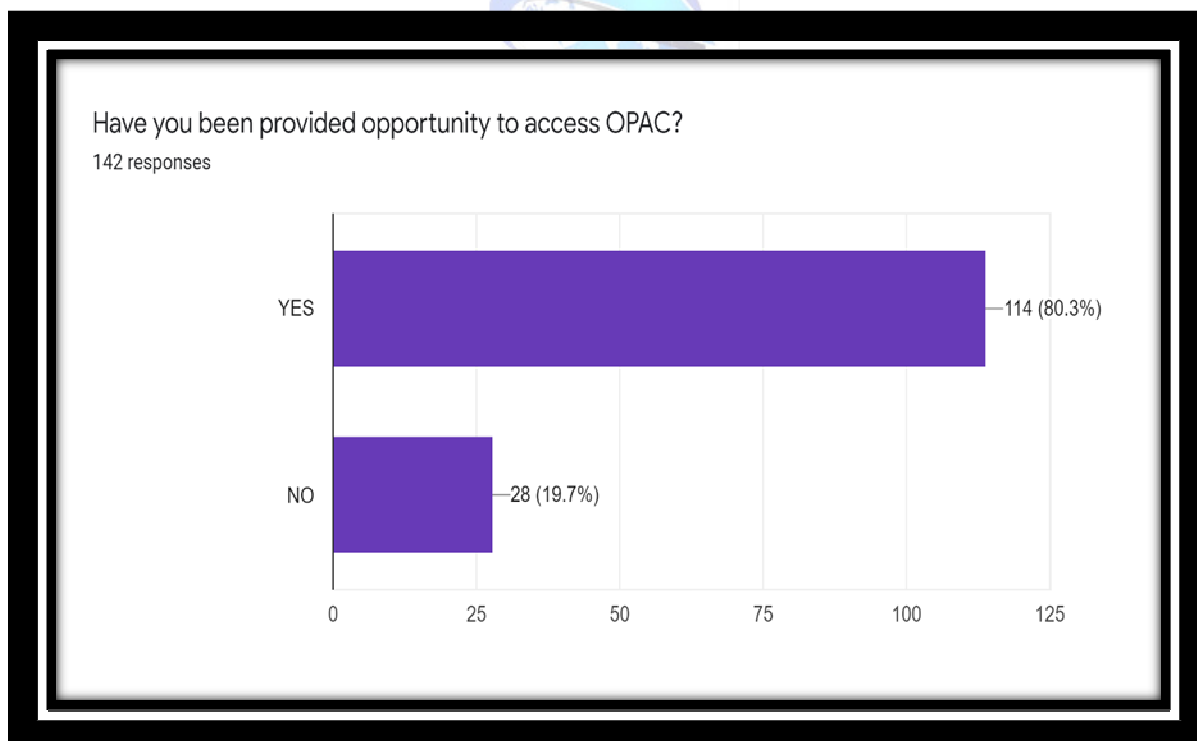


Fig.6: Have you been provided opportunity to access OPAC. This analysis indicates that 114(80.3%) of students agreed that they knew and use OPAC whereas only 28(19.7%) of students are unaware about it. They need regular orientation in this regard.

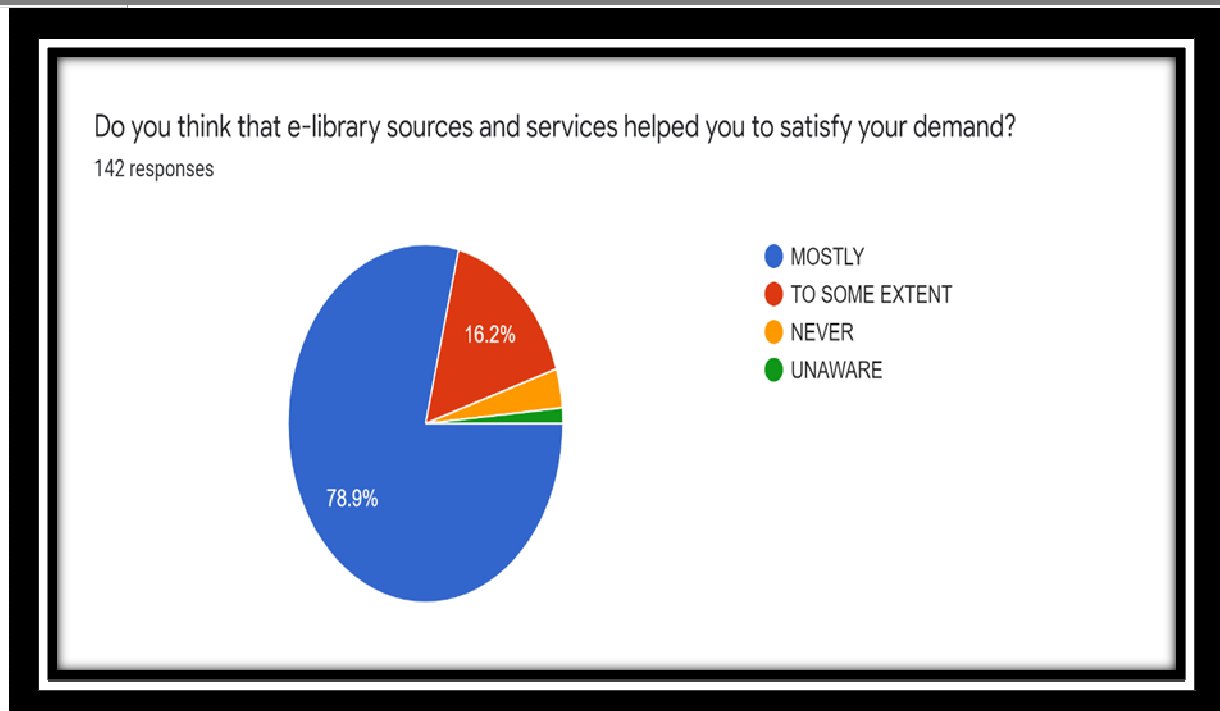


Fig.7: Whether e-library sources and services helped to satisfy user’s demand. The analysis reveals that 112(78.9%) of students are agreed with e-library resources helping them to retrieve the information they seek where as 23(16.2%) of respondents think they get it to some extent. There are very few students 4% are unare about it.

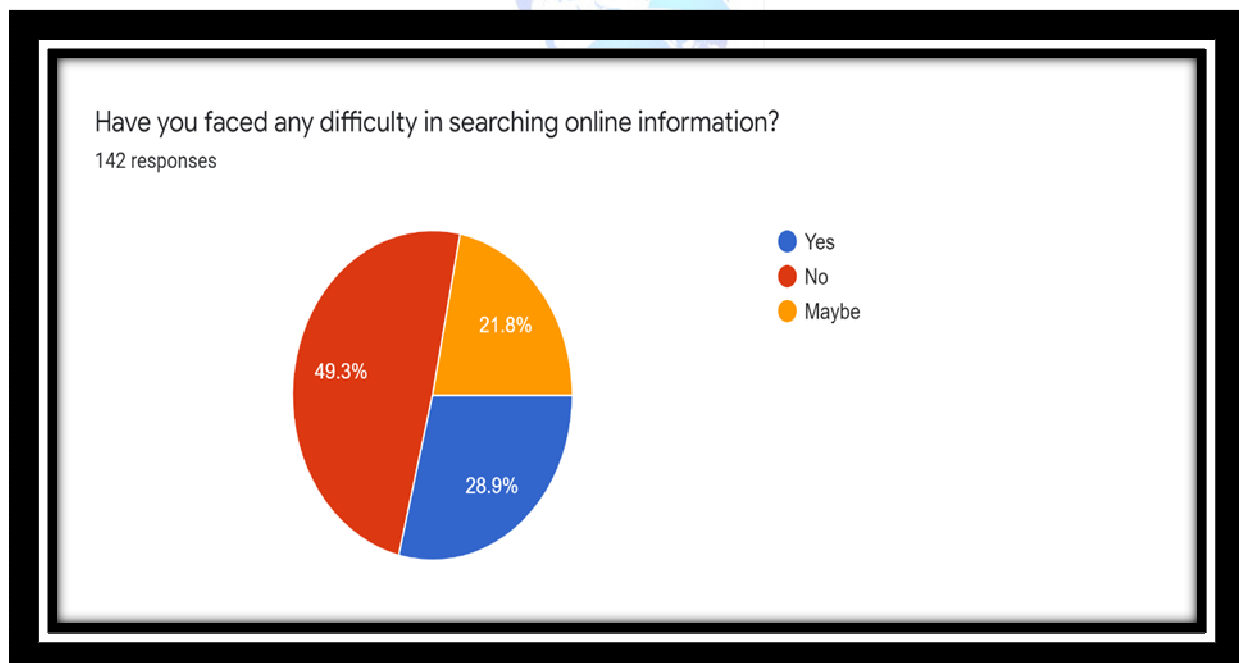


Fig. 8.: The analysis reveals that 70 students (49.3%) have not experienced any time of difficulties during searching for their information online whereas 31 students (21.8%) think that sometimes they face technical difficulties and 41 students (28.9%) students agreed with facing difficulties hence frequent hands-on session may be conducted for such segments of students in order to familiar themselves with such online searching of desired information.

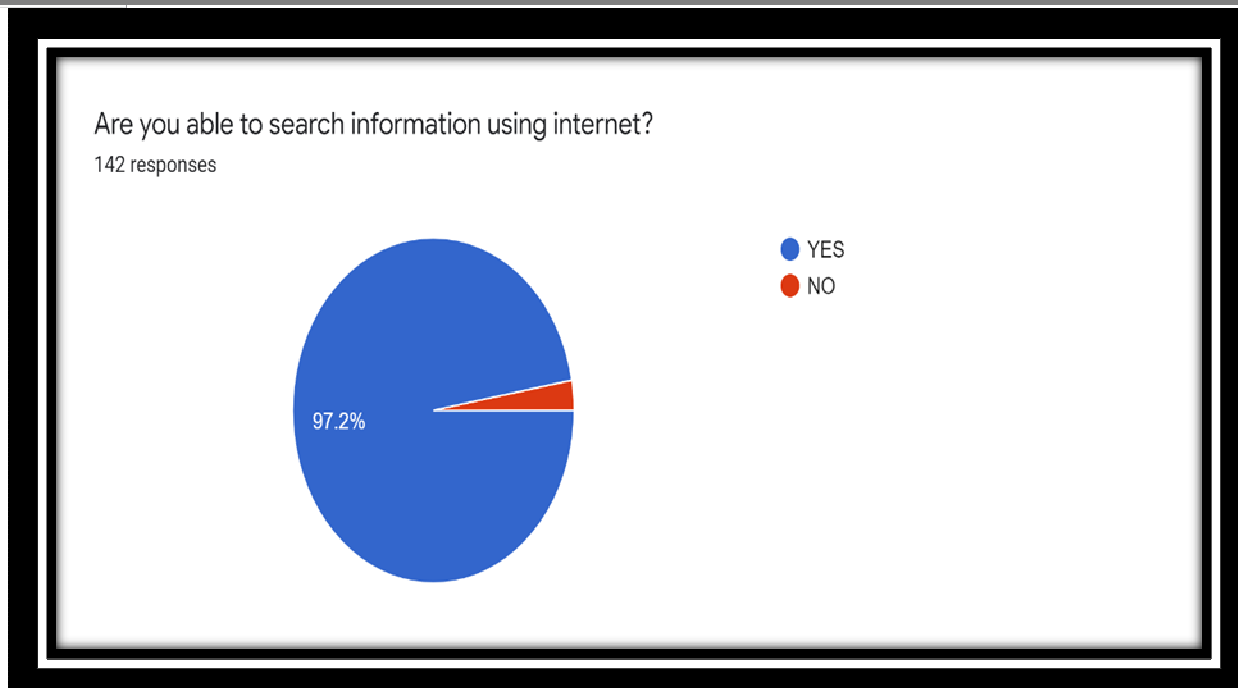


Fig.9: The present analysis confirms that majority of the students 138(97.2%) are able to search information using Internet whereas only 4 students (2.8%) students need training, hands on session in this aspect.

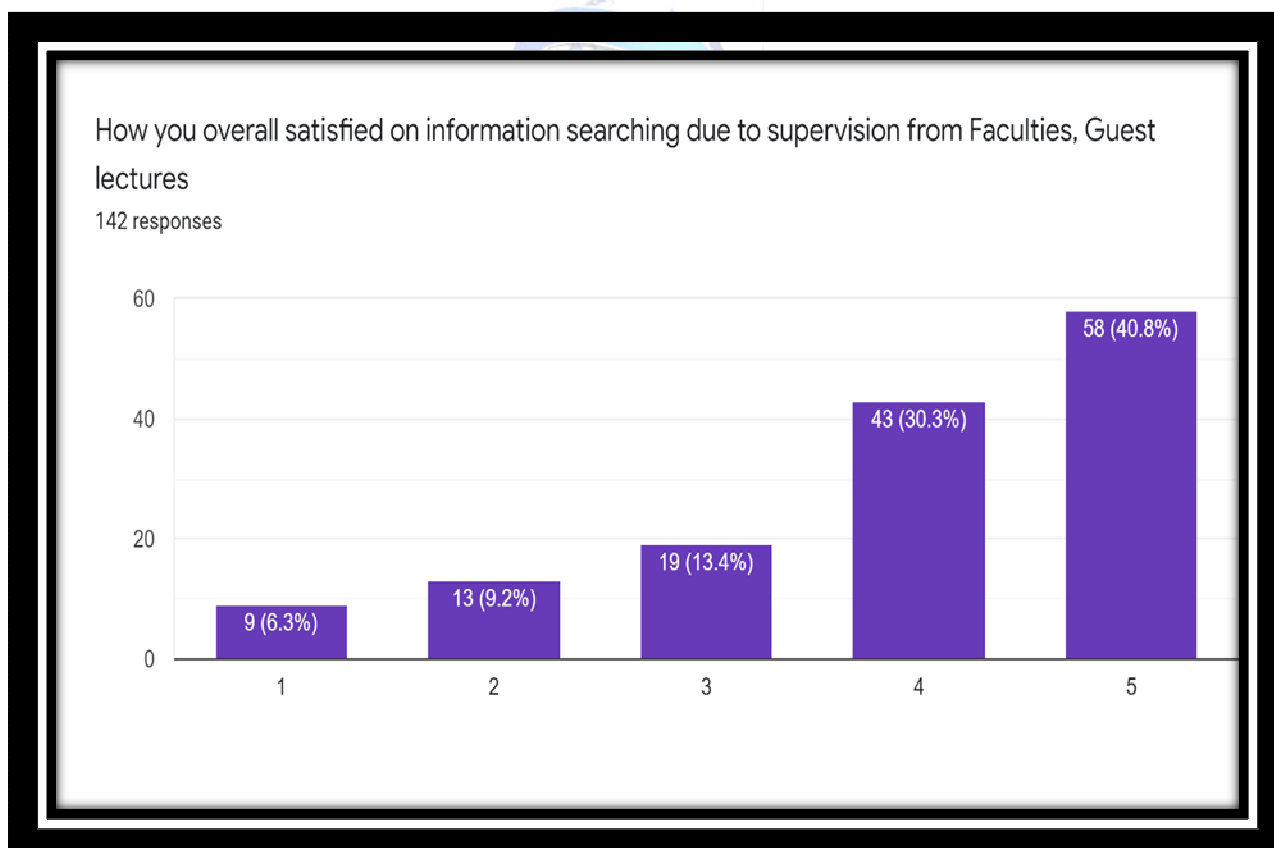


Fig.10: Overall satisfactions. The figure clearly shows that different level of overall satisfactions of information searching by the students with the help extended by their faculties, guest lectures etc.. These are almost 101(71.1%) are students in the scale of 4 to 5

indicating “Extremely satisfied” whereas 19(13.4%) of respondents expressing their satisfactions. As figure depicts the scale indicating 1-2 means 22(15.5%) to be satisfied with overcoming their hurdles.

Findings

The data analysis reveals the fact that students are accessing desired study materials using internet during current pandemic. Teaching and learning taking place online effectively. Online classes and orientation sessions by the faculty members help students to know various aspects of information searching. Guest lectures are also helping in this aspect. They are also enhancing their ICT skills. They update and secure information very quickly. It helps to know the existing facilities of e-library. They spend quality time in reading and retrieving desired resources. Data analysis indicates the most of the time students access “GOOGLE” search engine for accessing information and it takes place daily. Students are very satisfied and keen to utilize their online library services during current pandemic while staying at home

Suggestions:

- ✚ More orientation programmes may be conducted.
- ✚ User’s feedback should be regularly taken.
- ✚ Users should frequently share their e-requisitions.
- ✚ More hands-on session should also be planned.

Conclusion:

The present research survey clearly suggested the “online information Searching” and “Teaching-Learning” taking place very effectively through digital mode in the current pandemic. It also ensured the meaningful use of these ICT devices by the users very effectively. The students have been aware about application of ICT through the orientation sessions, hands on session and workshops along with online classes through their faculty members, Guest lectures. Group discussions. Students perform search through “GOOGLE Search Engine” regularly and retrieve their desired materials. It saves their valuable time also.

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Open Source Software's in Library Science Profession

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Abstract:

Open source software is, software that users have the ability to run, copy, distribute, study, change, share and improve for any purpose. Open source library software's does not need the initial cost of commercial software and enables libraries to have greater control over their working environment. Open source software requires a greater degree of computing responsibility than commercial software. Paper highlights major open source library software.

Keywords: Open Source Software, Library technology, Information Technology

Introduction -

Software -

Software is the operating system (e.g. Mac OS, Microsoft Windows, Android and various Linux distributions) is a type of software that is used as a platform for running the applications, and controls all user interface tools including display and the keyboard. Software is a set of instructions that the computer follows.

The term open source refers to something people can modified and share because its design is publicly accessible. The term originated in the context of software development to designate a a specific approach to creating computer programs. Today, however, "open source" designates a broader set of values i.e. "the open-source way." Open source projects, products, or initiatives embrace and celebrate principles of open exchange, collaborative participation, rapid prototyping, transparency, meritocracy, and community oriented development.

Open source software-

Open source software is software with source code that anyone can inspect, modify, and enhance.

"Source code" is the part of software that most computer users don't it ever see; it's the code computer programmers can manipulate to change how a piece of software - a "program" or "application" - works. Programmers who have access to a computer program's source code can improve that program by adding features to it or fixing parts that don't always work correctly.

Difference between open source software and other types of software:

Some software has source code that only the person, team, or organisation who created it - and maintains exclusive control over it - can modify. People call this kind of software "proprietary" or "closed source" software.

Only the original authors of proprietary software can legally copy, inspect, and alter that software. And in order to use proprietary software, computer users must agree that they will not do anything with the software that the software's authors have not expressly permitted. Microsoft Office and Adobe Photoshop are examples of proprietary software.

Open source software is different. Its authors make its source code available to others who would like to view that code, copy it, learn from it, Alter it, or share it. "LibreOffice" and the "GNU Image Manipulation Program" are the examples of open source software.



As they do with proprietary software, users must accept the terms of a licence when the use open source software - but the legal terms of open source licences differ dramatically from those of proprietary licences.

Open source licences affect the way people can use, study, modify, and distribute software. In general, open source licences grant computer users permission to use open source software for any purpose they wish. Some open source licences, people call it "copy left" licences stipulate that anyone who religiously modified open source program must also release the source code for that program alongside it. Moreover, some open source licences stipulate that anyone who alters and shares a program with others must also share that program's source code without charging a licensing fee for it.

By design, open source software licences promote collaboration and sharing because they permit other people to make modifications to source code and incorporate those changes into their own projects. They encourage computer programmers to access, view, and modify open source software whenever they like; as long as they let others do the same when they share their work.

The "open source" label came out of a strategy session held in Palo Alto in reaction to Netscape's January 1998 announcement of a source code release for Navigator (as Mozilla). A group of individuals at the session included Todd Anderson, Larry Augustin, John Hall, Sam Ockman, Christine Peterson and Eric S. Raymond. They used the opportunity before the release of Navigator's source code to clarify a potential confusion caused by the ambiguity of the word "free" in English. The 'open source' movement is generally thought to have begun with this strategy session. Many people, nevertheless, claimed that the birth of the Internet, since 1969, started the open source movement, while others do not distinguish between open source and free software movements. The Free Software Foundation (FSF), started in 1985, intended the word 'free' to mean "free as in free speech" and not "free as in free beer." Since a great deal of free software already was (and still is) free of charge, such free software became associated with zero cost, which seemed anti-commercial.

For many libraries, organizing their books and other media can be a daunting task, especially as the library grows with more material. Years ago we had crude card catalogue systems (remember the Dewey Decimal System) that kept things organized, but were difficult to maintain. With today's computing technology, organizing our libraries has never been easier or more efficient. Gone is the card catalogue and in some libraries, it's much easier to locate a book through an internet connection and picking it up upon your arrival, rather than wasting the time scouring the aisles looking for your next read. Now just because the world has been blessed with wonderful software solutions that make everything easier to do, doesn't mean that every library in the universe is using these solutions. Many Libraries do not have huge amounts of money to burn, and any that they do get usually goes to purchasing additional resources.

Advantages of Open Source Software:

- 1) **Lower software costs:** Open source solutions generally require no licensing fees. The logical extension is no maintenance fees. The only expenditures are for media, documentation, and support, if required.



- 2) **Simplified license management:** Obtain the software once and install it as many times and in as many locations as you need. There's no need to count, track, or monitor for license compliance.
- 3) **Lower hardware costs:** In general, Linux and open source solutions are elegantly compact and portable, and as a result require less hardware power to accomplish the same tasks as on conventional servers (Windows, Solaris) or workstations. The result is you can get by with less expensive or older hardware.
- 4) **Scaling/consolidation potential:** Again, Linux and open source applications and services can often scale considerably. Multiple options for load balancing, clustering, and open source applications, such as database and email, give organizations the ability to scale up for new growth or consolidate to do more with less.
- 5) **Support:** Support is available for open source—often superior to proprietary solutions. First, open source support is freely available and accessible through the online community via the Internet. And second, many tech companies are now supporting open source with free online and multiple levels of paid support. For example Liblime.
- 6) **Escape vendor lock-in:** Frustration with vendor lock-in is a reality for all IT managers. In addition to on-going license fees, there is lack of portability and the inability to customize software to meet specific needs. Open source exists as a declaration of freedom of choice.
- 7) **Unified management:** Specific open source technologies such as CIM (Common Information Model) and WBEM (Web Based Enterprise Management) provide the capability to integrate or consolidate server, service, application, and workstation management for powerful administration.
- 8) **Quality software:** Evidence and research indicate that open source software is good stuff. The peer review process and community standards, plus the fact that source code is out there for the world to see, tend to drive excellence in design and efficiency in coding.

Open Source Software for Libraries:

Library Automation:

1)Koha –

Koha is fully featured scalable library management system. Development is sponsored by libraries of varying types and sizes, volunteers, and support companies worldwide. Koha is a promising full featured open source ILS (integrated library system) currently being used by libraries all over the world. This system keeps track of the operations of a library - payroll, expenses, purchases, and most importantly, keeping track of the various media being checked out by the librarians patrons. Many smaller libraries cannot afford to purchase, install, and maintain an ILS, and Koha is a perfect alternative. Koha is built using library ILS standards and uses the OPAC (open public access catalog) interface. In addition, Koha has no vendor-lock in, so libraries can receive tech support from any party they choose.

2) NewGenLib (New Generation Library) –

NewGenLib is a complete solution for libraries. It is a unique combination of library automation software, digital library software and a database search facilitator. With its version

3.1.1 users can not only search library catalogue, but also search various databases subscribed by the library and some open access databases at a single click. NewGenLib is based on Client-Server technology for managing library functions and creating digital library where as its Online Public Access Catalogue is accessible through the Web.

3) Evergreen

The Evergreen Project develops an open source ILS (integrated library system) used by more than 2,000 libraries around the world. The software, also called Evergreen, is used by libraries to provide their public catalog interface as well as to manage back-of-house operations such as circulation (checkouts and checkins), acquisition of library materials, and (particularly in the case of Evergreen) sharing resources among groups of libraries.

The Evergreen Project was initiated by the Georgia Public Library System in 2006 to serve their need for a scalable catalog shared by (as of now) more than 275 public libraries in the state of Georgia. After Evergreen was released, it has since been adopted by a number of library consortia in the US and Canada as well as various individual libraries, and has started being adopted by libraries outside of North America. Because of the nature of ILSs, Evergreen has an interesting mixture of functionality. For example:

- Evergreen is a metadata search engine
- Evergreen is a transaction processing engine
- Evergreen is just another web application
- Evergreen is based on a robust, scalable, message-passing framework – OpenSRF

Digital Library:

1) Greenstone Digital Library Software –

Greenstone is a suite of software for building and distributing digital library collections. It provides a way of organising information and publishing it on the web or on removable media such as DVD and USB flash drives. Green stone is produced by the "New Zealand Digital Library Project" at the University of Waikato, and developed and distributed in cooperation with UNESCO and the Human Info NGO. It is open source, multilingual software, issued under the terms of the GNU General Public License. The aim of the Greenstone software is to empower users, particularly in universities, libraries, and other Public service institutions, to build their own digital libraries. Digital libraries are radically reforming how Information is disseminated and acquired in UNESCO's partner communities and institutions in the fields of education, science and culture around the world, and particularly in developing countries. This software encourages the effective deployment of digital libraries to share information.

2) DSpace-

Dspace is a ground-breaking digital institutional repository that captures, stores, indexes, preserves, and redistributes the intellectual output of a university's research faculty in digital formats. It manages and distributes digital items, made up of digital files and allows for the creation, indexing, and searching of associated metadata to locate and retrieve the items. DSpace design and developed by Massachusetts Institute of Technology (MIT) Libraries and Hewlett-Packard (HP).

3) EPrints –

Eprints is an open source software package for building open access repositories that are compliant with the Open Archives Initiative Protocol for Metadata Harvesting. It shares many of



the features commonly seen in Document Management systems, but is primarily used for institutional repositories and scientific journals. EPrints has been developed at the University of Southampton School of Electronics and Computer Science and released under a GPL license.

4) Fedora-

Fedora open source software gives organizations a flexible service-oriented architecture for managing and delivering their digital content. At its core is a powerful digital object model that supports multiple views of each digital object and the relationships among digital objects. Digital objects can encapsulate locally managed content or make reference to remote content. Dynamic views are possible by associating web services with objects.

Open Source Software's on the WWW

Most convenient option to identify particular software for your library need is to ask professional friends who have experience in using open source software's. You can directly contact other libraries in your locality or post a message in any popular email discussion forum of librarians. Certain open source software's are highly popular among librarians community, for example Greenstone digital library software is a favorite candidate for the libraries who make use it for the collection and organization of digital materials. Librarians can select the software without much effort, if more popular software's are available for various library purposes. Websites which provide detailed listing of open source software are:

1) Free Software Foundations software directory (www.fsf.org)

2) UNESCO Free & Open Source Software Portal (www.unesco.org)

3) Source Forge (<http://sourceforge.net/>)

Conclusion:

So, it seems that there are some very powerful solutions available today that could be used to create a much more resourceful library. By using open source software in the library, money that otherwise would be spent on software solutions can be used for other important resources, such as purchasing additional media resources (books, journals, etc.), or can be used to hire educated, technical support that provides patrons with the know how to better use already existing resources. In addition, this free software is constantly being updated, changed, and customized to meet the library's needs. While all of this is fine and dandy, and sounds like the win-win solution for your library, there are still pitfalls and hurdles we'll need to overcome. Hopefully this article provides some introductory information as to how to wean your library off of traditional computing products and dive into the pool of open source resources available today.

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Finding the Geological Hotspots in a Raigad Fort Range and Its Development as Heritage Tourism-A Case Study of Columnar Basalt Structures Found at Mahad

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Abstract:

The paper describes identifying geological monuments in the Raigad fort range of Western Ghat section and making awareness about geology to the local people. The paper also shows the opportunities for the development of tourism and its implications on the economy of the local people.

Introduction:

Western Ghat is the world-class geological monument situated in India [1,2]. Its biological diversity attracts many researchers and tourists from all over the world. Identifying such geological hotspots is a great task for the researchers [3]. After travelling and visiting a number of places around a Raigad Fort we have identified such geological monument called Rare Basalt Columnar structures Near Mahad. This site is near National Mumbai-Goa Highway passing nearby to Mahad. Its urgent need of an hour that the youth of the Raigad district should start to focus on such God Gifted places, which are able to generate money by doing and developing tourist business [4].

Research Methodology :

The area of investigation forms parts of the famous Deccan Traps, which occur in all the districts of the State of Maharashtra. The columnar structures of Basalt rocks were found at 18°05'38.5"N 73°24'55.6"E near to NH 66, Pale, Mahad, Maharashtra 402301. The site is 163 Km from Mumbai and 144 km from Pune. The 5 to 6 columns of basalt rocks of different length and topology has been collected and brought to the lab for further study.

Survey:

In two dimensions the mud cracks shows the process of volume contraction. As the drying process starts the present clay minerals contract, eventually exert a force on one another when the contraction stress exceeds the mud strength [5] (Fig.1).

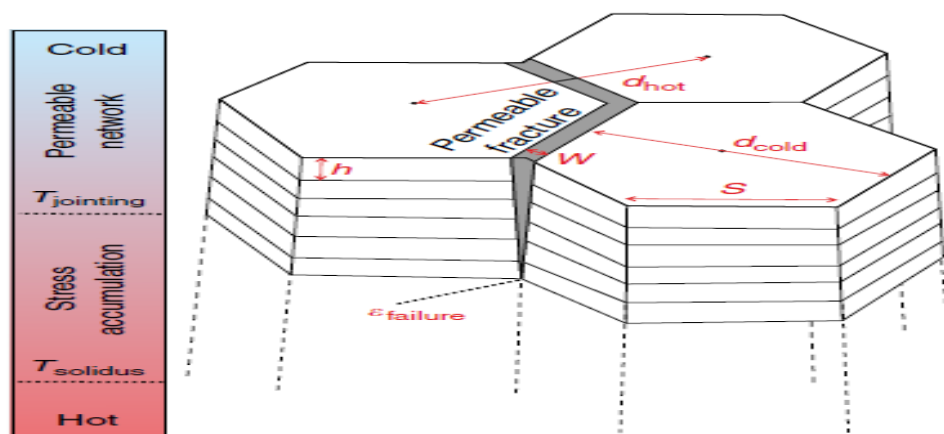


Fig.1 Columnar Jointing Model (Lamur et al)

In the lava flow, this extending process gives rise to extension along third dimension resulting in columnar joints [6]. We have carried out the systematic study of columnar joints at Mahad in Raigad district of Maharashtra. A remnant of thick lava flow in the form of pentagonal columns are abundant in the area of our study [7] (Fig.2). The temperature profile and the dynamics of lava well correlated with the experimental findings.



Fig. 2 Photographs of samples

Certain igneous rocks have been fractured into columnar prisms by thermal stresses produced during cooling. Columnar jointing is most prominent in flows, particularly basic lavas, but is also found in andesites, rhyolites, obsidians and others. The distance between these fractures varies. Cross-joints are not as open and apparent as columnar joints and in some instances are only made visible by weathering [8].

The evidence suggests that some joints may have formed at temperatures as high as 900° C., many have formed by the time the temperature has fallen to 800° C. and possibly most jointing is complete by 700° C [9].

Western Ghat is god-gift to us. Unique geological structures are still present in the hidden form inside these giant mountains. Such places are need to explore further so that our local community will aware about the science of geology. Announcing such places as World Heritage Places will boost the economy of the surrounding locality. The local people will explore the opportunities for tourism business and will get Self-employed rather than populating the cities of Mumbai and Pune.

Conclusion:

Nearby local people and community will be aware of geology of Western Ghats. The proposed site can be a place for tourist attraction. Local people can start doing small-scale business at the proposed site and good amount of Revenue will generate.

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Comparative Study of Gauss Elimination Method and Substitution Method in Chemistry

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Abstract:

In this paper, a formal and systematic method for balancing chemical reaction equation was presented.

In this paper, the chemical equation was balanced by representing the chemical equation into system of linear equations.

Particularly, the gauss elimination method was used to solve the mathematical problem with this method, it was possible to handle any chemical reaction with given reactants and products.

In this paper, there is comparison between Gauss elimination method and Substitution method to balance any type of chemical reaction.

Keywords: Chemical reaction, matrix algebra, substitution method, linear equation.

Method:

Gauss elimination method, Substitution method, to show comparison in between both of these, use graphical method, and little bit survey by the help of students to find which method is time saving?

Introduction:

Balancing of the chemical equation is one of the initial subject toughs in most preliminary chemistry courses amazing subject of matter for mathematics and chemistry students who want to see the power of linear algebra as a scientific discipline ^[1]. Since the balancing of chemical reactions in chemistry is a basic and fundamental issue.it deserves to be considered on a satisfactory level ^[2]

A chemical equation is only a symbolic representation of a chemical reaction ^[3] A chemical reaction can neither create nor destroy atoms so, all the atoms represented on the left side of the arrow must also be on the right side of the arrow.

i.e. $A+B \rightarrow C+D$

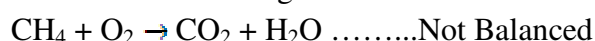
This is called balancing the chemical equation [4]. The application of the law of conservation of matter is critical in chemistry education and is demonstrated in practice through balanced chemical equations [5]. Every student who has general chemistry as a subject is bound to come across balancing chemical equations. The substances initially involved in a chemical reaction are called reactants, but the newly formed substances are called the products. The products are new substances with properties that are different from those of reactants [6]. A chemical equation is said to be balanced, the number of atoms of each type on the left is the same as the number of atoms of corresponding type on the right [7]. Balancing chemical equation by inspection is often believed to be a trial and error process and, therefore, it can be

used only for simple chemical reactions. But still it has limitations [8]. Balancing by inspection does not produce a systematic evaluation of all of the sets of coefficients that would potentially balance an equation. Another common method of balancing chemical reaction equation is the algebraic approach. In this approach, coefficients are treated as unknown variables or undetermined coefficients whose values are found by solving a set of simultaneous equations [9]. According to [5], the author clearly indicated that the algebraic approach to balancing both simple and advance chemical reactions typically encountered in the secondary chemistry classroom is superior to that of the inspection method. Also, in [10], the author emphasized very clearly that balancing chemical reactions is not chemistry; it is just linear algebra. From a scientific viewpoint, a chemical reaction can be balanced if only it generates a vector space. That is a necessary and sufficient condition for balancing a chemical reaction.

A chemical reaction, when it is feasible, is a natural process, the consequent equation is always consistent. Therefore, we must have nontrivial solution. And we should be able to obtain its assuming existences. Such an assumption is absolutely valid and does not introduce any error. If the reaction is infeasible, then, there exists only a trivial solution, i.e., all coefficients are equal to zero [6]. In Mathematics and Chemistry, there are several mathematical methods for balancing chemical reactions. All of them are based on generalized matrix form and they have formal scientific properties that need a higher level of mathematical knowledge for their application [1]-[16]. Here, we are presenting the Gauss elimination method and Substitution method, both are possible to handle any chemical reaction with given reactants and products. But here we check which method is very useful and time consuming to Solved problems are provided to show that this methodology lends well for both simple and complex reactions.

Main Result:**Problem 1:**

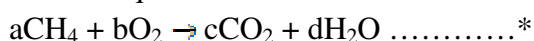
Balance the following chemical reaction



The equation to balance is identified the chemical reaction consist of three elements i.e. Carbon (C), Hydrogen(H), Oxygen(O)

Now to Assign the unknown coefficients (a, b, c, d) to each chemical species.

A balance equation can be written for each of these elements.



therefore, here three simultaneous linear equations in four unknowns corresponding to each of these elements.

Now algebraic representation of the balanced,

$$\text{C} \rightarrow a = c \Rightarrow a - c = 0 \dots\dots\dots 1$$

$$\text{H} \rightarrow 4a = 2d \Rightarrow 4a - 2d = 0 \dots\dots\dots 2$$

$$\text{O} \rightarrow 2b = 2c + d \Rightarrow 2b - 2c - d = 0 \dots\dots\dots 3$$

Now firstly by Gauss elimination method,

$$Ax = 0$$

$$\begin{bmatrix} 1 & 0 & -1 & 0 \\ 4 & 0 & 0 & -2 \\ 0 & 2 & -2 & -1 \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

R₂ - 4R₁

$$\begin{bmatrix} 1 & 0 & -1 & 0 \\ 0 & 0 & 4 & -2 \\ 0 & 2 & -2 & -1 \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

R₃ + $\frac{1}{2}$ R₂

$$\begin{bmatrix} 1 & 0 & -1 & 0 \\ 0 & 0 & 4 & -2 \\ 0 & 2 & 0 & -2 \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

R₃-R₂

$$\begin{bmatrix} 1 & 0 & -1 & 0 \\ 0 & 0 & 4 & -2 \\ 0 & 2 & -4 & 0 \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

Now C₂ ⇌ C₄

$$\begin{bmatrix} 1 & 0 & -1 & 0 \\ 0 & -2 & 4 & 0 \\ 0 & 0 & -4 & 2 \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

Now, a-c = 0

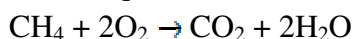
$$-2b + 4c = 0$$

$$-4c + 2d = 0$$

Solve these equations we get,

$$a = 1, b = 2, c = 1, d = 2$$

therefore equation * becomes,



$$\text{C} = 1$$

$$\text{C} = 1$$

$$\text{H} = 4$$

$$\text{H} = 4$$

$$\text{O} = 4$$

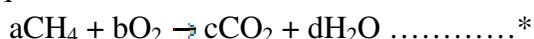
$$\text{O} = 4$$

This is required balanced chemical reaction

Now Secondly, Substitution method

Same problem

Equation *,1,2,3 becomes,



$$\text{C} \rightarrow a = c \Rightarrow a - c = 0 \dots\dots\dots 1$$



$$H \rightarrow 4a = 2d \Rightarrow 4a - 2d = 0 \dots\dots\dots 2$$

$$O \rightarrow 2b = 2c + d \Rightarrow 2b - 2c - d = 0 \dots\dots\dots 3$$

From equation 1 we get $a=c$

Substitute this equation in 3 we get, $4c - 2d = 0 \Rightarrow d = 2a$

i.e. $d = 2c$

now substitute $c = 1$ and $d = 2$ to verified this equation

then we get $a=1$ and $b = 2$

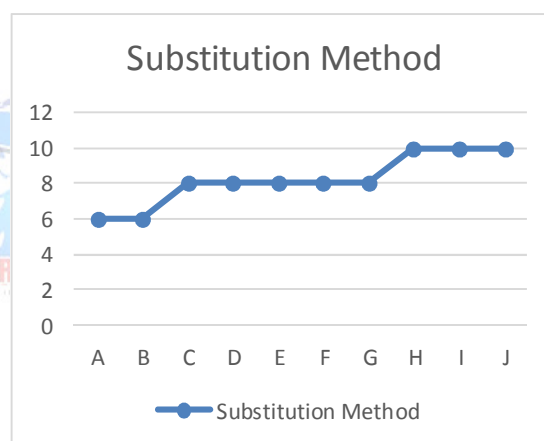
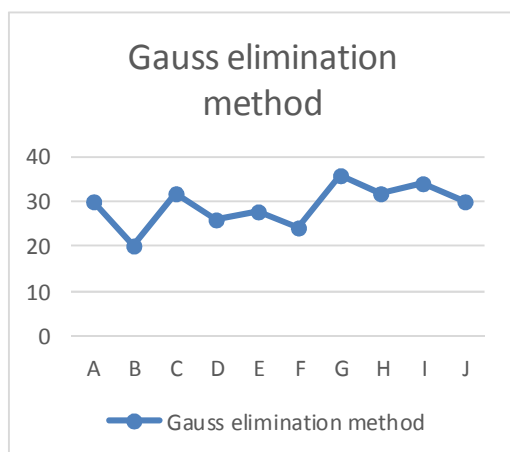
then equation * becomes



Which is required balanced reaction.

Also, we used the little bit survey along with these two methods. Means we take 10 students (A, B, C, D, E, F, G, H, I, J) and give them same problem and asking to solve this problem firstly Gauss elimination method and secondly substitution method and counting the time

So, graphs along with time and students to both methods



Conclusion:

By the graphs we conclude that Gauss elimination method is time consuming method than Substitution method. Because, in gauss elimination method graph there is much more variation in time, but in substitution method there is little bit variation in time. In gauss elimination method variation of time between students C, D, E, F, G otherwise in substitution method there is no variation in time between students C, D, E, F, G.

Therefore, we conclude that Substitution method is easy and time saving method as compare to Gauss elimination method.

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Jawaharlal Nehru Engineering College Central Library is an ICT Hub of Resources and Services

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Aurangabad, Maharashtra

Abstract:

The present study provides a overview of JNEC Central Library like Collection Development, Library Services & facilities and Library Management system. JNEC Central Library provides state of the art library services to Students, Faculty members, Staff members, Research scholar by using modern Information and Communication Technology. Collection of the Library is very rich and used to the maximum by its users. The Library has a qualitative collection of all types of literature like text and reference books, Magazines, Journals and News papers, story books, novels and special collections on various subjects in various formats like print and electronics. Collection of books is fulfill as per AICTE norms. Library staff is available as per norms of apex bodies. Library users are appear satisfied with the Library services.

Key Word: JNEC Central Library, Engineering College Libraries, Academic Libraries.

Introduction:

The word Library ready beaten from the Latin word 'Libraria' and its verbal meaning is the house of books. The house of books means the place where the books are collected or stored, but this not suitable definition of the Library. Aims and objectives of the Libraries has been changed always time to time. Before the inventions of the papers, printing and machines, the main aims of the Libraries was only to keep safe the books and make available for only reached peoples. But aims of the Libraries basically totally changed; now Libraries are opened now to everyone. Today we can clearly say that today libraries are those that collect, store, process, organize, disseminate and distribute information and knowledge, recorded in document. We see that there was a time when books were only stored in the Library, now Libraries have became dynamic social agencies of effective dissemination of information and knowledge.

Academic Libraries and Information centers are related to the education system in the country, it means academic Libraries are the affiliated to academic institutions such as Schools, Colleges, Universities and Research centers. Academic Libraries to teaching, learning, research and other educational functions related to their parents institution. JNEC Library support to teaching, learning, research programs and other educational functions, its main feature is it provides Students centric Library services. The aim of this study is a holistic study of JNEC Central Library.

Objectives of Study:

1. To find out the overall collections of Central Library
2. To know services and facilities that provides Library users
3. To know form wise collection of resources
4. To examine the fulfillment of resources as per AICTE norms
5. To find out the management system & staffing structure



Scope of Study:

The presented study is limited to Jawaharlal Nehru Engineering College Central Library run by Mahatma Gandhi Mission Aurangabad, Maharashtra.

Methodology:

The survey method was used for the present study and a questionnaire was prepared according to the study topic. In the view of stated objectives and scope of the study, multiple choice based questions, rating and opinion based questions and yes no type questions were kept in the questionnaire. Some open ended questions were also kept also. The questionnaire was sent to the librarian and completed.

About JNEC:

Jawaharlal Nehru Engineering College is a major institution in education and it has made a different imprint in the field of Engineering and Technology. The college has recognized its importance in the field of engineering education and has taken steps in that direction.

Unique in its structure, methods and goals, the college is strongly rooted in the philosophy of training and research that enhances the relationship between knowledge and its application and seeks to promote the creation of an ideal society. The college has also provides research facility to Ph. D. in selected five discipline through research center. JNEC has provides a hard good atmosphere for hard working academic pursuits, this has been reflected through the results. Most of the Students of Jawaharlal Nehru Engineering College are among the toppers in various Engineering branches in the University level exam and competitions.

The Jawaharlal Nehru Engineering College is now a part of MGM University Aurangabad from the academic year 2020-21. In the last decade college was affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and Dr. Babasaheb Ambedkar Technological University, Lonare, Raigad, Maharashtra.

Highlights of the College:

- JNEC is run by Mahatma Gandhi Mission Aurangabad, Maharashtra
- Approved By AICTE & accredited by 'NAAC'
- Constituent college of MGM University, Aurangabad, Maharashtra
- College has certified by ISO 9001:2015
- Self Aided College

Jawaharlal Nehru Engineering College Central Library:

Jawaharlal Nehru Engineering College Central Library is a Knowledge Resource Center for Teaching, Learning and Research. JNEC Central Library established in 1983. JNEC Central Library is Information and Communication Technology hub in Marathwada region of Maharashtra also serves a gateway of Electronic resources Engineering and Technology, basic science as Mathematics, Physics and Chemistry. Students, Faculty members, Staff, Research scholar and Trustee of MGM Aurangabad are the primary members of JNEC Central Library. JNEC Central Library has a collection of Engineering and MCA disciplines.

- Library is spread over three floors (1,587 Sq. meter area) with 600 students seating capacity with well designed furniture suited for long duration stay of students in reading rooms, Reading collection, Reference collection and Book Bank collection, Magazines and Journals Collection, stack area, Magazine and Journals section, News paper section,



Document scanning facility, Display and Notice board, Digital Library and MOOCs, Internet Facility, Separate Staff room, reprographic (Xerox) Facility, OPAC search facility are at under ground floor, Separate Reading room for Students and faculty at ground floor, Stack area of Circulation section, OPAC search Facility, Students discussion room, Tea/Coffee and Snacks facility at first floor of Library building.

- Library holds a huge collection of Printed as well as Electronics resources which includes **Print collection:** Text and Reference books, National and International print Journals, Non Technical magazines, Bound volumes of old Journals and Magazines, Non technical books collection (Novels, Story Books etc), Special Collection of Gandhian thought's and competitive books etc. **Electronic Resources:** E-books, E-journals, CD's collection of books and journals, Video lectures of 930 online courses.
- Currently Library hold 86,145 Volumes, 23,418 Titles, 125 National and International Print journals, 1,366 Bound volumes of Old Magazines and Journals, 4 General Magazines, 16 National Newspapers, 5606 General and Fiction books, 21,142 E-books, 2633 E-journals, 2336 CDs of Books and Journals,
- College has been taken membership of DELNET (Developing Library Network) to access E-books (10,000 E-books), E-journals (400 E-journals) and ILL (Inter Library Loan Service)
- College has subscribed GALE Cengage Learning Database for general Engineering E-journals (2233 E-journals)
- College Library have web based access of URKUND (new name is Ouriginal) UGC approved Anti plagiarism software/Plagiarism Detection to check similarity.
- College has registered on National Digital Library of India (NDLI) and its NDLI club also, More than 3,000+ Students registered on this portal to access Electronic esources.
- College has available Video lectures and e-content of NPTEL/SWAYAM for 930 online courses as IP based (IP: 192.168.206.205) also available NPTEL local chapter.
- Staffing formula of Library as: Librarian-1, Assistant Librarian-1, Library assistant-2, Library Clerk-5, Library attendance-1, Library Peon-1, Total Library staff is 11.
- Library is partially automated/computerized by JUNO ERP system, OPAC facility are available in each Students and Faculty ERP login credential also.
- Transactions of book is more than 80,000+ per year
- Library provide students centric facility to its users to fulfill Their academic needs, 2 book provides from circulation section for one week, 3 book provides as free from Book-Bank section for whole semester and 5 book provides from reading and reference section to reading, 5 Journals provides for reading.
- Books are arranged as Branch wise and Subject wise by DDC (Dewey Decimal Classification System) standard classification scheme.
- Open access system is available; Students and Faculty members can enter in stack area and can issue required books from Library issue return Counter.
- 24 Hours reading room open during Preparation Leave (PL) and exam period, during this period Library provides to students Tea/Coffee and Free snacks facility

- Separate library website and two mobile applications (JNEC LIBRARY for OPAC & Engineering papers for Old question papers) are available to Students awareness and access resources.
- Online repository of old University and Mid Term question papers are available on Library Website
- Library have a Library Advisory Committee to make Library policies which includes members as Principal is Chairman, Librarian is Secretary and one representative from each departments, Library having a standard ISO procedure, also Library Certified by ISO 11620:2014 Certificate.

Management of Central Library:

Working days of Library:

Circulation section, Reading section, Reference section, Book Bank section, Journals & Magazine section, News paper section, Technical processing section etc. were kept open on all working days of college. During PL (Preparation Leave) Exam Library were kept open all days including Sunday and public holidays.

Library Timing:

The college is open usually as 10:30 am to 05:30 pm., but library is open 10 am to 6 pm. The library is open 24 hours during the examination period and PL (Preparation Leave) including Sunday and Holidays.

Library Advisory Committee:

JNEC Central Library has a active Library Advisory Committee. Principal of the college is the Chairman, Librarian is the Secretary and every department has one member, total members of the Library Advisory Committee are 11. Library committee meets once in a month. Function of the Library Advisory Committee taking a strategic decision and assign the Library development plans.

Staffing Structure of Library:

Librarian and Library staffs are qualified and experienced persons as per norm. Library staffing structure is as per AICTE norms. The Library staffs are humble and very cooperative. Structure details as below;

Sr. No	Details	Total No
1	Librarian	01
2	Assistant Librarian	01
3	Library Assistant	02
4	Library Clerk	05
5	Library attendance	01
6	Library Peon	01
	Total	11

Performance Evaluation of Library:

Library services and performance are evaluated twice a year through Students feedback from also evaluated by ISO internal and external audit to enhance better Library services. If there

any complaints from the parents meeting they are also resolved by Central Library with the help of higher authority.

Collection Development:

The Central Library provides qualitative, up to date and required resources to amongst Students and Faculty members that support needs and mission of its users. The Library has a qualitative collection of all types of literature like text and reference books, Magazines, Journals and News papers, story books, novels and special collections on various subjects in various formats like print and electronics. The quantity of the resources are maintained as AICTE norms, there no deficiency. Details as below,

Sr. No	Particulars	Total No
01	No of Volumes	86,145
02	No of Titles	23,418
03	No of National print Journals	125
04	No of Bound Volumes	1366
05	No of News papers	14
06	No of General Magazines	5
07	No of E-books	21,000+
08	No of E-journals	2,633
09	No of Databases	2- Cengage & Springer
10	No of Book CDs	2336
11	No of NPTEL Video lectures	For 930 Cources
12	Gandhian Thoughts books	260
13	General & Fiction books	5606
14	NDLI Membership	Yes
15	NDLI Club membership	Yes

Services and Facilities of Library:

- Home lending service
- Book Bank facility
- Reference service
- Referral Service
- Inter Library Loan service
- Reading room facility
- Reprographic (Xerox) facility
- Scanning facility
- Current awareness service
- News paper clipping service
- OPAC (Online book search facility)
- Internet & Digital Library
- Online repository of Old question papers
- Plagiarism checking facility by Ouriginal (Old name is URKUND)
- Tea/Coffee and free snacks facility during 24 hours reading room open



Use of Technology:

JNEC Central Library use the state of the art technology for operations of Library activity, provide Library services and facility to its users. Library is partially automated/computerized by JUNO ERP system, OPAC facility are available in each Students and Faculty ERP login credential also. 10 good configured computers are available to access Electronic resources and other resources in Digital Library with 100 mbps speed.

Conclusion:

- JNEC Central Library's collection is perfect and it maintains the AICTE norms always.
- JNEC Central Library's services id ideal also Students and Faculty members centric.
- JNEC Central Library is able to fulfillment Students and Faculty members need, research activity and other educational functions.
- Management system of JNEC Central Library is excellent and ideal to others.
- Standard open access software is required to archiving project reports of final year Students, Dissertation of M Tech students and theses of Ph. D. Students.
- Syllabus oriented text e-books is required for Under Graduate Students.

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Pandemic Situation : The Paradigm Shift in Education Field

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Abstract:

*The rise in Internet users and the revolutionary changes that happened in education have created a very fertile environment for e-learning to emerge . In his exclusive article, Albert Einstein once said, “**Education is what remains after one has forgotten what one has learned in school.**” This rightly reflects the fact that effective education is, indeed, constant and always evolving E-learning has revolutionized the educational sector in true sense. Till the end of the last century, the education system in India was based on the traditional classroom-based learning, where the students didn't get the opportunity to participate in the interactive sessions. The present paper seeks to examine whether the Interdisciplinary approach to study can be supplemented with the digital competency for more effective teaching learning process. The digital platform will serve as a means of interaction and tasks-based learning activities for teachers and students as well. The unprecedented pandemic situation brought about the paradigm shift in education field in general. This naturally needs pondering whether the technological advances may lead to the total replacement of teachers from educational field, changing his role from centre to the periphery. The blended or collaborative teaching methods can be effectively used to become relevant even in the changing scenario.*

1.Introduction:

The significance of Humanities in Digital Era:

“Universities won't survive. The future is outside the traditional campus, outside the traditional classroom. Distance learning is coming on fast”

Peter Drucker, the Father of Modern Management said that way back in 1997. His prophecy couldn't seem more accurate now seeing that e-learning is one of the fastest growing sectors in the globe. In Developing countries like India also ,the Globalization ushered the new wave of digital era which made the conventional Education system outdated and obsolete. In this fiercely competitive world ,the role of technology and gadgets can't be overstressed. This again gave way to the increasingly dominant STEM subjects (Science, Technology, Engineering, Mathematics). They make us think critically and creatively in certain issues no doubt. However the researchers thought it to be alarming situation if the technocracy may arise as a dominant community in the present age as a direct threat to the social equality. The pros and cons of the technology can be critically analysed. Employability should never be the sole aim of education. We need to explore a new blend of educational disciplines. Interdisciplinary approach allows enough space to curious minds to sharpen their thinking, reasoning for a broader and deeper understanding of the problems of human society. Even University Grants Commission issued the Transdisciplinary Research Project Funds to encourage young talents to cross the disciplines .The idea is to innovate new research findings beneficial for the welfare of the society at large. The cultural heritage, civilizational understandings, enable us to document the present with maximum objectivity, understand complex histories in depth which can develop a strong moral sense to be a responsible, civilized citizens of the Nation. Introduction of new skill set is the



need of the hour. The technology along with other disciplines of knowledge can complement each other, as sciences take care of provision and liberal arts of vision. In the book, *You Can Do Any thing: The Surprising Power of a "Useless" Liberal Arts Education* (2017), George Anders has argued that the digitalization of urban post-modern life does not make literature less important, but rather, more important. **"The more we automate the routine stuff, the more we create a constant low-level human of digital connectivity, the more we get tangled up in the vastness and blind spots of big data, the more essential it is to bring human judgment into the junctions of our digital lives."** So some solutions in our lives can't be sought merely by googling everything.

Humanities can help us for Improving the social skills, facilitating deeper intercultural understanding in a rapidly changing world. There has been an extreme social unrest due to communal conflicts, social crisis which cannot be rectified, arguably, without the due focus on humanities and the arts. It has been observed that, the human touch has more importance in the workplace today. Technological education alone can't develop the personality. So the supplementary courses can be given to strengthen the effectiveness of technical supremacy. There is the pragmatic or practical value of studying each discipline. As it only can provide the right remedies on crisis in human lives.

The present pandemic is the live example of the failure of science in human life. The luxuries and riches could not give the necessary strength to the man to survive during the crisis. Empathy, compassion, moral responsibility toward the society shown by the medical practitioners, nurses became the real strength of humanity to combat this pandemic. These are counted as people skills or life skills, the personality traits enabling us to maintain the social equilibrium. These skills can never be taught in classroom conditions. These need to be learnt in the real life situations only. The Greek philosophers, Plato, Aristotle, were having multidisciplinary approach of study which needs to be acquired by the younger generation. Crossing the disciplines may enrich our knowledge enabling us to face the mental stress resulting from the digitalization.

Challenges Before Teachers and the p:

The real challenge again lies before the education domain which has seen drastic changes due to the frequent lockdowns resulting from the pandemic situation. All the services being suspended, humanity found to be confined within the four walls, the very foundation of the educational sector is shaken to the extent that the Education switched over to the online mode only. This paper specifies how to embrace the new changes in the field. To face the challenges of the changing time, it became necessary to make concepts more clear and students competent enough to cope up globally. Hence, the concept of Digital Learning evolved in 2002 - 2003. With technology spreading its wing to the education sector, the typical classroom which was once characterized by boring hour-long sessions now transforms into an interesting, fun-filled environment. Digital education made life easier for both, students and educators. Cloud-based platforms which help classroom go paperless are also finding takers. Also apart from the latest developments in ICT classrooms, Augmented Reality and Virtual reality is being adopted in the field of education which makes them visualise the object or the abstract concept explained through language. ICT solutions have gained momentum in driving quality education to the nooks and corner of the country. The fast growing Network Connectivity has brought the rural



population in the mainstream of Education facilitating the technological advances to make learning more easy and customised one. Teaching becomes a smoother experience with a perfect mesh of personalized packages having a blend of animations, gamification and elaborate audio-visual effects. The infotainment, which is the combination involved in digital learning makes it more practical, applicable to our life and surroundings in an interesting manner. The Environmental

The future of education explores the new ways to engage them. Technology has immense potential to upgrade today's educational system. The only condition is to upskill the teachers in this digital world. So, the future of education will not be teachers versus technology, but it will be teachers plus technology. The role of the teacher is almost always more central, indeed fundamental, than it was before the introduction of technology. New technologies can, and no doubt eventually will, replace many of the routine administrative tasks typically handled by teachers, like taking attendance, entering marks into a grading book. The numerous applications are available in mobiles to assist the teachers to perform this manual work. If taken positively, smart classes are a perfect solution to the challenging situation all of us are going through. Hence, smart classes come in as perfect learning territories for students to assimilate the nuances behind a subject in a single go or after repeatedly accessing subject details for a clearer understanding. Although the Indian market is still young, it will continue to adopt the concept of e-learning in order to meet its communication needs and seize business opportunities. The pandemic situation left few chances for us to engage the physical classroom situation. There is an art to imparting knowledge to students that current technology is nowhere close to mastering. Educational technologies are currently aiding teachers in their work, not completely taking over them. They are tools, not replacements. Non-verbal or invisible interactions, that affect the learning experience no doubt matter a lot. They help to identify roadblocks for students that might be more personal or emotional in nature, that a machine cannot pick up on. They help to contextualize lessons in real time, which might not be possible for a piece of technology to do. We need teachers who are able to figure out not just how new technology works but how it works for every student in his class and where the use of technology is most appropriate. Individualized learning tools are self-learning material. So technology will play a critical role in the future of education but this role is not as big as a role of a teacher. Besides, everyone will be benefited from the right mix of technology and teachers who will use technology as part of an expanding toolkit. Classrooms will continue to change but we can be completely sure that there will be a human teacher for a long time yet. The collaborative or blended models can synergize offline and online teaching methods. Teacher has to be more creative in using the blended teaching methods for the effective delivery of the content. The softwares can be used for this purpose. Affordable internet access, data enabled devices and appropriate Internet plans can play a significant role in tap into the recent trends in the subject. Creation of a Hindi modules (other supported local languages) can bring a sea change in Indian education system. The recorded videos in vernacular languages can be an easy access for the students in rural areas with poor Net facilities. So, the Digital awareness will definitely change trends like Distance Education to Digital Education. The teacher can monitor the use of the advanced synchronised learning tools like videoconferencing, teleconferencing, LMS, Live streaming lectures and asynchronized tools like pre-recorded lectures, presentations, Research projects, group projects as per the demand of the discipline and subject.

Conclusion:

The teachers will have to play the role of mentor, guide, and facilitator for the students through better interaction with them. They can encourage, motivate the student by highlighting the benefits of these trends which make the learning effortless and captivating allowing students to surpass the geographical boundaries. This is something which surely, no robot or artificial intelligence machinery can do. This type of warmth and personal care offered by the teacher can in no way be substituted by a machine. Thus, we can say that virtual learning resources can revolutionize the teaching learning process making the content more dynamic one, but they cannot completely replace the teacher. Computer can neither teach tolerance or empathy nor can encourage or understand an individual student's needs. It hardly can reach the minds of the students. Every student is unique and so needs individualized learning experience which was lacking in traditional education system. The customized learning experience is the boon of the technological advancement. The trust and bond between a teacher and student creates the perfect learning environment; which can never be achieved through virtual learning. If the learning tools are made available in the regional languages, relevant in Indian social context, that itself would revolutionize the total Indian education system. Teachers should seek the specialized training to use an approach to new educational method which combines the offline and online learning to be complimentary to each other. This hybrid learning should be incorporated in the curriculum to enrich the student's learning environment.

- 1) Live chats, message boards are the easy tools to interact
- 2) The group allows the students to engage in meaningful academic activities with the shared tasks
- 3) The free internet repositories can be reused, easily accessible and modifiable too.

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Status of Women Entrepreneurs in Karnataka (A Case Study of Gulbarga District)

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Introduction :

Women entrepreneurs may be defined as a woman or group of women who initiate, organize and run a business enterprise. Women who innovate, imitate or adopt a business activity are called "women entrepreneurs". Small scale industries are small in term but they play a significant role in the Indian economy. Small scale Industries (SSI) plays a key role in the industrialization of the country.

Objective :

the present paper attempt to assess the achievements of women in SSI enterprises and through which attainment of Women empowerment in Gulbarga district of Karnataka state.

Methods and sampling size :

The present paper is based on primary and secondary data sources. The women entrepreneur's 315 samples size through the purposive sampling methods and conducted the household survey. The researchers used simple technique of percentage and averages and applied five point Likert scale and measure the women empowerment index as well as the composite index of the study district in order to assess the empowerment of women enterprises.

Introduction :

Women enterprenur role is being renowned and steps are taken to encourage woman entrepreneurship. A woman entrepreneur is the one who creates something new and undertakes risks and hurdles of economic uncertainty and organises production. Today women have been a crucial factor in the socio-economic changes as they are the one who envisage new opportunities, new techniques and new line of production and also co-ordinates various other activites. Woman entrepreneur must be moulded accurately with entrepreneurial traits and skills to meet changing trends and demanding global markets and also be proficient a sufficient amount to maintain and struggle in the local economic area.

Definition of Women Entrepreneur Enterprise

The origin of the basic word "*Entrepreneurship*" is from a fernch word "*Entrée*" '*To enter*' and "*Prendre*" '*To take*' and in general sense applies to any person starting a new project or trying a new opportunity.

According to **Schumpeter entrepreneur** is one who introduces something new into the economy. In Indian context, entrepreneur is more an adapter (or) initiator than a true innovator. Therefore, any women who initiates, innovates (or) adapts an economic activity may be called woman entrepreneur.

The **Government of India** has defined a women entrepreneur is " an enterprise owned and controlled by a women having a minimum financial interest of 51% of the capital and giving at least 51% of the employment generated in the enterprise to women ".

In accord with condition of **Micro, Small, &Medium Enterprises Development (MSMED) Act, 2006** the Micro, Small, &Medium Enterprises (MSME) are classified in two categories.

A. Manufacturing Enterprises: The enterprises engaged in the manufacture or production of goods pertaining to an industry specified in the first schedule to the industries (Development and regulation) or employing plant and machinery in the process of value addition to the final Product having a distinct name or character or use.

B. Service Enterprises: The enterprises engaged in providing or rendering of services and are defined in terms of investment in equipment.

The limit for investment in plant and machinery / equipment for manufacturing / service enterprises as under.

Manufacturing sector.

Enterprises	Investment and plant & Machinery
Micro Enterprises	Dose not exceeds 25 lakh.
Small Enterprises	More than 25 Lakh but Dose not exceeds 5crore.
Medium Enterprises	More than 5 Lakh but Dose not exceeds 10 crore.

Service Enterprises

Enterprises	Investment and plant & Machinery
Micro Enterprises	Dose not exceeds 10 lakh.
Small Enterprises	More than 10 Lakh but Dose not exceeds 2 crore.
Medium Enterprises	More than 2 Lakh but Dose not exceeds 5 crore.

The **Traditional Women Enterpreneur** : The some of the women SSI units are heridetary in nature, which does not required any training for business, such activities are called as traditional or non-technical women SSI units viz Redymade Garments, Tailoring, Catering, Petty shop, Dairy, Other (Kirana, Hotal,Gold Smith).

Non-traditional Women Enterpreneur: The some of the women SSI units are organised and run with the help of up to date technology and technical training and such women SSI units are called as technical or modern one viz Beauty Parlor, Computer Training Center, XEROX, DTP, these two operational definition have been using the throughout the analysis of the present study.

Status of Women Enterpreners:

TABLE-1 , Age group of the respondents

Sl. No.	Age groups	Number of respondents	Percent
1	18- 25	17	5.4
2	26-35	170	54.0
3	36-45	99	31.4
4	46-55	22	7.0
5	Above 56	7	2.2
	Total	315	100.0

Sources: Field Survey

The table 1 is examining the age group of 315 respondents of the study area. Among them 17 respondents age group was 18-25 years. Which accounted for 5.4%, the sum of 170 respondents age group was 26-35 years, which accounted for 54%, the sum of 99 respondents age group was 36-45 years, which accounted for 31.4%, the sum of the 22 women SSI age group

was 45-55 years, which accounted for 7%, the sum of 7 respondents age group was above 56 years, which accounted for 2.2%. Totally 315 respondents have reported and co-operated in our household survey.

The similar number of households, age group, and percentages have also given the bar chart of the below of the table 1.

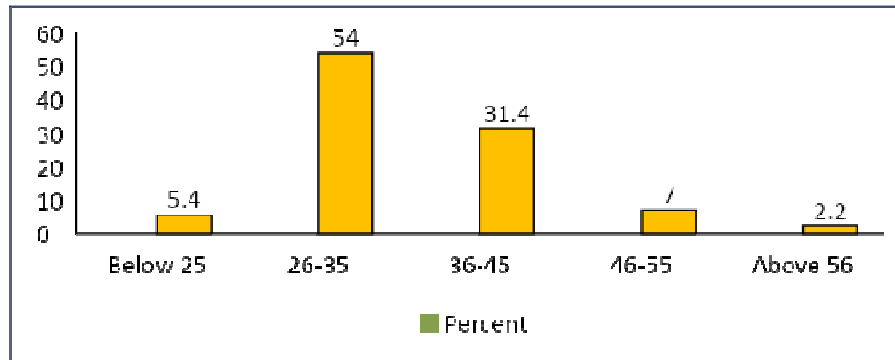


TABLE- 2 previous status

Sl. No.	Previous status	Number of respondents	Percent
1	Student	24	7.6
2	Employed	91	28.9
3	House wife	183	58.1
4	Other	17	5.4
	Total	315	100.0

Sources: Field Survey

Table 2- exhibit the previous status of the households of the selected study area. In the sense 24 respondents are coming from student background, which accounted for 7.6%, 91 respondents are already employed in various productive activities, which accounted for 28.9%. Almost 60% of the respondents (183) are housewife's, whom have been engaging in their own interested women enterprises. Lastly 17 respondents are not engaged in any specified productive activities but they are casual wage earner and mainly depends upon women enterprises of the study area, which accounted for 5.4%. The similar result in terms of their status and percentages have also been shown in the bar chart of the below of the table 2

Bar Chart No 2 previous statuses of respondents

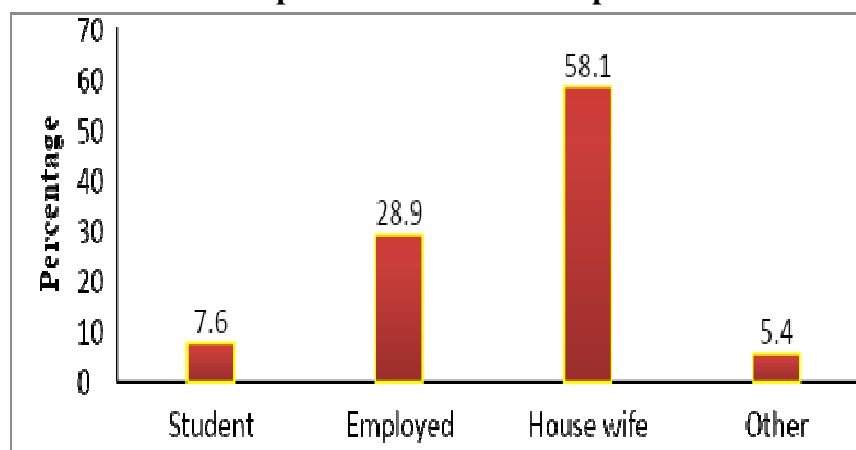


TABLE 3a Borrowed loan from the institutions

Sl. No.	Institutions	Number of respondents	Percentage
1	Bank	161	51.1
2	Co-operative Society	58	18.4
3	Private Finance	25	7.9
4	Money lenders	2	.6
5	Own money	44	14.0
6	Friends	14	4.4
7	Family Members	11	3.5
Total		315	100.0

Sources: Field Survey

The respondents have borrowed the required finance from the various sources. Since the days of independence the financial requirement are met from the institutional and non-institutional sources. Still these days the some convention is being continued in the study district. It can be seen in the table 3a more than 50% of the respondents i.e., 161 have approached institutional finance i.e. banking sector. Apart from commercial banking sector, the another institutional source is co-operatives, from this source 58 respondents have approached and borrowed the finance, which accounted for 18.4%. Including these two institutional sources (51.1 + 18.4 = 69.5) 69.5% of the households have met their financial requirements from these sources. On the other hand from non-institutional private sources rest of the respondents 17.5% have still been depending on this sector. However the 44 respondents have neither been depending on banking or private financial sector, but they have been investing their own fund for the units which accounted for 14%. The 2 respondents borrowed the required finance from money lenders on exorbitant interest of 60% P.A. which accounted for 6%, the sum of 14 respondents fulfilled their financial needs from their friends, which accounted for 4.4%. The remaining respondents 11 have utilized their family members finance for their enterprises, which accounted for 3.5%. Further the percentage value of the borrowed institutions of the respondents are graphically represented in bar diagram 3 (a) below.

Bar Chart No 3 (a) Borrowed loan from the various institutions

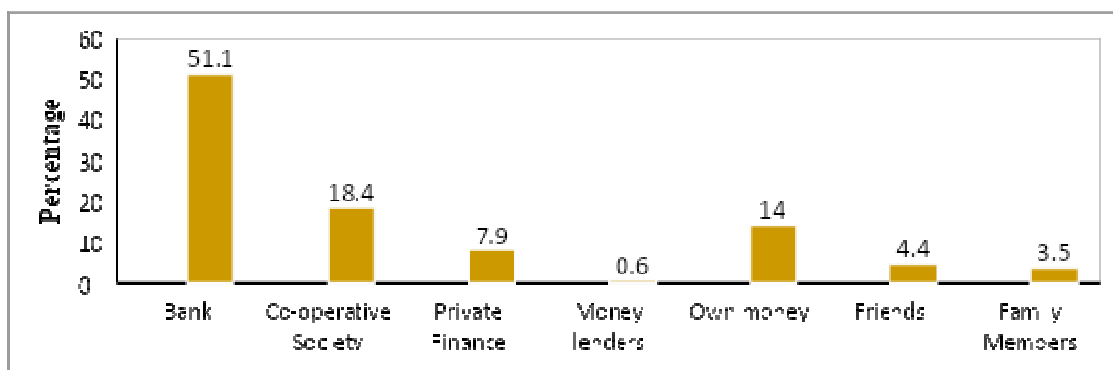


TABLE-3 (b) Education level Status of the respondents

Sl. No.	Education level	Number of respondents	Percent
1	Illiterate	38	12.1
2	Primary	78	24.8
3	SSLC	136	43.2

4	PUC / ITI	43	13.7
5	Degree and above	20	6.3
Total		315	100.0

Sources: Field Survey

The education is one of the strong weapon for self-survival of women enterprises in particular and all enterprises in general. In view of this background it can be seen from the table (3 b) that the 38 respondents are illiterates, through their physical labour they have been running their enterprises, which accounted for 12.1%, the 78 respondents educational level is upto primary education (up to 5th standard), which accounted for 24.8%, the sum of 136 respondents have been completed SSLC, which accounted for 43.2% some of the 43 respondents have completed PUC or ITI course which accounted for 13.7%, the remaining households (20) have completed degree as well as post-graduation degree, which accounted for 6.3%. The similar education level and their percentages have shown in the bar chart 3 (b) below.

Bar Chart No 3 (b) Education level Status of the respondents

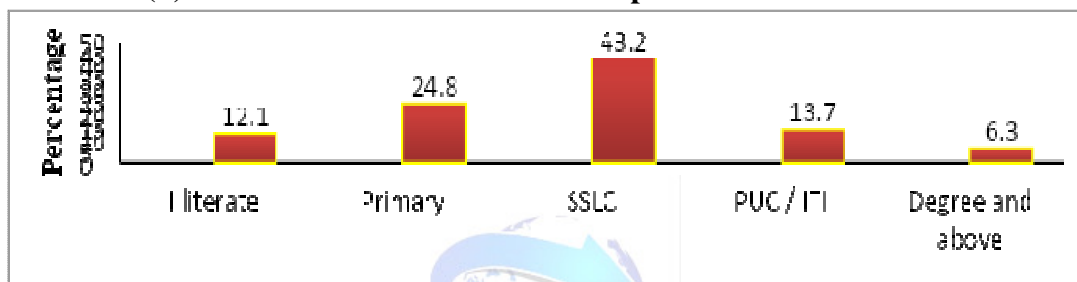


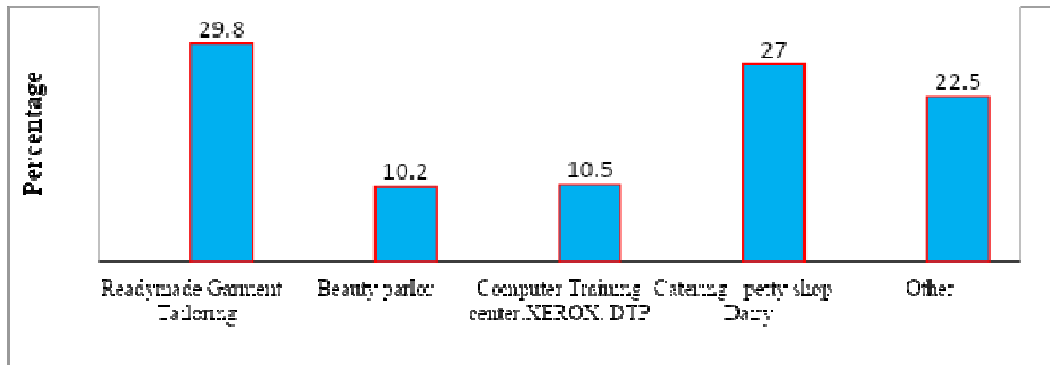
TABLE- 4 Women Entrepreneurial Activities of respondents

Sl. No.	Entrepreneurial Activity	Number of respondents	Percentage
1	Readymade Garment / Tailoring	94	29.8
2	Beauty parlour	32	10.2
3	Computer Training canter, XEROX, DTP	33	10.5
4	Catering / petty shop / Dairy	85	27.0
5	Other	71	22.5
Total		315	100.0

Sources: Field Survey

The above table 4 expressed the various types of women entrepreneurial activities in study area. It is clear from the survey data that 94 respondents have been involving readymade garments and the unit related tailoring activities, which accounted for 29.8%. Some of the respondents (32) have been engaging in beauty parlour, which accounted for 10.2%, 33 respondents have been chosen computer training canters, Xerox as well as DTP service canters and providing their services to the needed publics in the study area, which accounted for 10.5%. Further, another 85 respondents have been engaging in catering i.e. bakery food preparation for various functions, petty shop such as kirana, pan shop, hotels and dairy activities, which accounted for 27%. The remaining 71 respondents have been pursuing various other productive activities such as leather works, pickle and ready-made food activities in the study area, which accounted for 22.5% and the women enterprises involved in various productive activities have also been shown in bar chart 4.

Bar Chart No 4 Women Entrepreneurial Activities of respondents



Extent of Empowerment in women enterprises

Integration of women progress and their empowerment are inevitable for the progress of the nation in general and women enterprises in particular. Women empowerment is a process which addresses all sources and structure of the power of the SSI units. The Empowerment process has to work both at individual and collective level. Individually the poor women cannot overcome all hurdles, they can do it only on collective basis. Hence it is suggested that women have to be organised and have to be taken the help of the political forces. It required equal participation in decision making, control over resources and mechanisms for sustaining the various gains. In this context organising women through the formation of women enterprises organisations, are needed since it is required special attention of the units at present time than before.

The voluntary organisation is an important mechanism for empowering women. Organizing poor women into groups in order to reap the benefits from their progress. The organisations develop the women confidence and skills to improve their status and bring changes in the attitude of the society towards women. The women feel confidence after formation of organisation and are able to deal with outsiders including their well wishers. They feel equal to others in what way an unequal environment previously existed, However, how for the empowerment process has setup with in the households is to be achieved? The formed women enterprises must have the objective of accessing easy credit, such forum helping women to be equal partners with in the family as well as in the community. So, the present study made an attempt to measure the extent of empowerment achieved by women enterprises through their SSI units.

To measure the degree of empowerment, the empowerment index based on five point Likert scale was used. A Likert scale is a psychometric scale commonly involved in research that respondents questionnaires. When responding to a Likert questionnaire item, respondents specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. Thus, the range captures the intensity of their feelings for a given item.

A Likert item is simply a statement that the respondent is asked to evaluate by giving it a quantitative value on any kind of subjective or objective dimension, with level of agreement/disagreement being the dimension most commonly used. To measure the empowerment of women used 10 variables, these variables placed before the women enterprises to mark their choice showing their degree of agreement or disagreement to each variable. The points for choices were assigned as for strongly agree-2, agree-1, undecided-0, disagree-2, out of

315 respondents the number of respondents who marked each of the option was found. Then the frequencies were counted for different options under each variable. These frequencies were multiplied with their respective points and the total score was divided by total number of women enterprises. This would give the empowerment index. After finding out the empowerment index the composite index was computed by dividing the empowerment index by number of variables (10).

To analyse the extent of women empowerment the following decision criteria was used.

- (1) Zero and below zero = no empowerment.
- (2) Between zero and below 33.33 = low empowerment.
- (3) Between 33.33 and 66.67 = Moderate empowerment.
- (4) Above 66.67 = High empowerment.

Present study completed the empowerment mechanism, 10 variables indicating empowerment were identified and analysed. The result of the analysis has given in the table 5.

Table 5 Women Empowerment Index

Sl. No.	Empowerment	SA	A	NO	D	SD	EI
1	Self confidence	95	98	70	28	24	67.30
2	Social Status	98	97	68	30	22	69.52
3	Mobility	90	95	64	38	28	57.46
4	Involvement in public	98	99	70	25	23	71.11
5	Awareness in legal & political Activities matters	75	79	70	47	43	29.84
6	Decision making in the family	93	98	62	37	25	62.53
7	Health & Hygiene	96	95	72	25	27	66.03
8	Leadership	85	83	70	47	30	46.34
9	Communication	98	99	80	15	23	74.28
10	Creativity	95	93	60	37	30	59.04
Composite index							60.34

It can be seen from the table (5) that the composite index on empowerment through women enterprises was 60.34 and it was below 66.67. On the basis of this result it can be inferred that the level of empowerment achieved by the respondents was only moderate. The average indices among the variables varied between 29.84 minimum and 74.28 maximum. The highest average index was on the variable communication (74.28) and the least was on awareness in legal and political Activities matters (29.84%). The women enterprises provide ample scope for the members to express their views especially in their association meetings and this is the main reason for moderate empowerment in the area of communication. Among the 10 variables 6 variables shows high level of empowerment i.e., greater than **60.34, which shows more than moderate level, one variable shows low level of empowerment of below 33.33** i.e awareness in legal and political Activities matters). The discussion with the respondents opined that they are not interested in awareness in legal and political matters and this is mainly because of the fact that the mental stress and due to their dual role viz family as well as SSI unit. But they are interested to acquire awareness in legal aspects. Only few programmes have conducted on legal matters. The government of Karnataka has to be frame the policy of conducting at least 3-4 programs on legal issues relating to the SSI units through the DIC of respective districts.

As the composite index on SSI women empowerment was below 66.67, it can be concluded that the level of women empowerment achieved through the SSI units is moderate one. But the empowerment is continuous process and it will be taken sufficient time and it is hoping that the women SSI units will be expected to achieve high level empowerment in nearest future.

The performance of the women SSI units made a significant impact on their empowerment. Most of the respondents are able to increase their income and savings satisfactory level and contributed to the well-being of their family. The positive impact will be going a lone way to improving the equality of life of the respondents and their family in the study district.

Findings:

Present study has been pursued and measures the women empowerment by applying five point Likert scale method. Accordingly 10 variables which indicating empowerment was identified and analyzed. The result of the study shows that the composite index on empowerment through women enterprises was 60.34, and it was since below the high empowerment index of 66.67 and hence the result has been inferred that the level of empowerment achieved by the respondents was only moderate one. The average indices among the lovariables varied between 29.84 minimum and 74.28 maximum. The highest average index was on the variable communication (74.28) and the lowest was on the awareness in legal and political activities (29.84). Among the 10 variables the 6 of them have high level of empowerment greater than the 60.34, which shows more than the moderate level and one variable shows low level of empowerment i.e., below 33.33 score 29.84 one.

As the composite index on SSI women empowerment was below 66.67 score, it can be concluded that the level of women empowerment achieved through the women enterprises was moderate one. But empowerment is a continues process and it will be taken sufficient time and it is hoping that the women enterprises will be expecting to achieve still high level empowerment and it will be expecting to achieve still high level empowerment in nearest future. The positive impact will be going to a long way to improving the quality of life of the respondents and their family in the study.

Suggestion: The following suggestion are given on the basis of the result of the study in order to overcome limitations, to face the hurdles and to elevate the socio-economic status of women, which in turn will lead to the economic progress of the district, state and nation.

- The personal income of the women enterprises is not appreciable in the study area, the income generating activities are to be introduced and developed among the women enterprises.
- The some of the respondents are running their family enterprises inherited manner. They should shift from their traditional units to modern units in order to earn more.
- Creating seed-capital fund, upliftment scheme of women enterprises, women Entrepreneurs fund etc., should be developed to encourage women enterprises in the study.
- The women participation in all the decision-making stages should be encouraged.

- It has been suggested to organize an awareness programme on banking sector. For more convenience more women banks are to be established in study district and appoint only lady manager to share the business problems of the women enterprises properly.
- The respondents are aware of the banking procedures to get loan, they feel that the procedures are complicated and time consuming. Hence the loan procedures and formalities of the bank should be simplified and minimize the loan documents and all documents should be in regional language i.e. Kannada in Karnataka.

Conclusion

As of the previous study result women enterprises are not properly identified. Hence, the Government and private NGOs should conduct programmes to identify the potentialities of women enterprises, who could become successful in their field and such women managed unit can be established. The women enterprises study the economic status of the area, where the enterprises is to be initiated to fix the minimum quality system of the product the way of distribution of the products and delivery services involves cost and clients satisfaction factors. Each method of transportation has its advantages and disadvantages depending on time frame, volume, access to suppliers. The entrepreneurs can provide better suitable advise and may be given warning in a befitting manner. It has also been suggesting that the bankers should get rid of their negative attitude towards women enterprises and should give sufficient time for them to repay the loan. The women enterprises are suggested that they have to concentrate on prompt delivery and supply of their products to the clients.

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ICT Based Smart Education in College Libraries

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Abstract :

Today's world is technological world. The use of internet with ICT has made a transformational effect in the field of education. The use of ICT has fundamentally changed the practices and processes of teaching learning process. The main function of Library is to make systematic development of the collections, store, and organize information and knowledge in digital form and provides web based library services to the readers and access to online learning materials. This paper describes how the library helps to better education with the addition of ICT and how it can contribute to enhance the effectiveness of the faculties. The finding of the research shows that the faculties are having high level of knowledge in ICT. Most of the faculties using ICT sources and services to collect research work information. ICT sources very supportive, innovative and help to improve their activities of assessment and organization.

Keywords: Smart education, library, digital, ICT, sources and services

Introduction:

Technology is in all places that is why modern-day world is known as technological world. Technology performs an essential position in nearly each and every element of human life. Technology takes our existence handy and comfortable, when technological know-how is used for the cause of accelerating or facilitating instructional practices and procedures regarded as instructional technology. ICT is a constructing block of training of training system. ICT is a digital suggest of capturing, processing, storing, communicating and retrieving information. Today's studying surroundings applied sciences are supplying new selections to college students and instructors to attain their dreams with increased ease.

The studying procedure is effortlessly more suitable when technological know-how is used. Now a day's all school rooms are outfitted with computer, DVD player, overhead projector, LCD, video display screen etc. Use of these equipment's, they assist to reinforce the instructing mastering system and making teaching. It is additionally regarded as web-base studying which grant several sorts of data in the shape of text, audio, images, animated movies etc. high quality and quite rote learning. Education machine of the country based totally upon the instructor coaching institutes of the country. These establishments are carrying the duty to produce advantageous instructor who can make contributions in the improvement of society and country as well. Teacher is predicted now not solely to be a realized student they additionally work as a knowledgeable professional. To be a profitable expert he ought to be tremendous in his teaching. The use of technological knowhow in schooling is now not constrained to the use of laptop or different digital devices. Internet has emerged as an integral part of laptop which totally revolutionized the way of instructing gaining knowledge of process. We can't omit the significance of laptop and the net in the subject of trainer education. The improvements that ICT has introduced in educating mastering technique consists of E-learning, e-communication, networking and convenient get right of information etc.



Information Communication Technology (Ict):

The term 'ICT' describes the use of computer-based technology and the internet to make information and communication services available to a wide range of the users. The term is used broadly to address a range of technologies, including telephones and emerging technology devices, and central to these is internet, which provides the mechanism for transporting data in a number of formats including text, images, sound and video.

Information and conversation applied sciences (ICTs) are a numerous set of technological equipment and assets used for creating, storing, managing and speaking information. For academic purposes, ICTs can be used to guide educating and mastering as nicely as lookup things to do consisting of collaborative studying and inquiring. One of the important functions of the ICTs in greater training is educating and studying primarily based on these new technologies. ICT assist to enlarge get right of entry to to education, make stronger the relevance of training to the increasingly more digital workplace, and elevate academic best make instructing and mastering into an energetic procedure linked to actual life.

The faculties prime factors of educating obligations are study room teaching, tutorial advisement, tutorial software evaluate and route duplication review, direction development, all of them can be categorised as curriculum improvement process. ICT sources assist to enhance institutional effectiveness, it is apparent that their utility in help of instructing and studying need to be critically considered. ICT enhance instructing effectivityof reminiscence retention, expand motivation and usually deepens understanding, promote collaborative learning, such as position playing, crew trouble fixing things to do and articulated tasks Majority of college contributors are principal catalyst to promote the integral modifications and to equip college students with the capabilities they are predicted to have upon graduation. ICTs can enhance the nice of schooling by way of the way of extend motivation, facilitate simple competencies and education to the faculties. ICTs equipment blended text, sound, and colorful, transferring pictures can be used to grant difficult and proper content material that will interact the scholar in the gaining knowledge of process.

Role of Ict In Higher Education:

Today, ICT play a tremendous role in the higher education. As information and communication technology (ICT) plays a greater role across society including public and private education, countries around the world are more than ever in need of high quality internationally comparable statistics on ICT in education. The ICT tools help to implement the principle of life-long learning, increase a variety of educational services and method, promoting equal opportunities to obtain education and information, develop a system of collecting and disseminating educational information, promote technology literacy of all, especially for students, develop distance education with national contents and to promote the culture of learning at educational institutions, preferably schools.

Some of the Ict Based Modern Education System

Digital class room:

Nowadays technological know-how has emerged as vital section of study room based totally teachings. Today in many schools, faculties and universities in India rather of blackboard projector displays are usedfor teachings. Hand writings of instructors are changed by using electricity factor presentation. Student ride a exclusive variety of set up in trendy technological



know-how based totally classroom. Gadgets like capsules and laptops are used totake down notes. Animated content material are created on quite a number topics and in extraordinary languages so that college students can have higher perception of a complicated issue in a easy way.

Online learning:

Many schools and universities in India are integrating on-line Learning Management System or LMS platform into their internet portal. Students can remotely login to get admission to route fabric and additionally attend stay instructions with teachers. Pre-recorded lectures, movies can be uploaded on the LMSplatform making it effortless for college students to go via it a couple of times. LMS adoption is nevertheless negative in manyparts of India the place college students do no longer have the get entry to to computer systems or broadband internet. However, authorities is presenting computer systems to faraway areas and developing content material that consumes much less information and can beeasily accessed on internet.

Mobile App:

According to a document launched with the aid of Counterpoint Research, India has grown to be the 2d largest clever smartphone market in the world after China with greater than 220 million energetic users. This provides a massive possibility for handing over e-learning content material via cell apps. Today instructional cellular apps are handy on famous structures like Android and iOS. Developers are growing instructional apps primarily based on unique subjects. They are simplifying complicated standards with convenient to recognize illustrations and animations, puzzles video games etc. With the expenditures of drugs and clever cellphone coming downpeople from villages and far flung areas can additionally make use of this apps to analyze and replace their skills.

Live instruction:

Certain curricula may additionally require specialised instructors. By the usage of stay broadcasts, these instructors can continue to be in one region and supply training to many college students in different locations. This kind of specialisation will increase as college students go into greater tiers of education, for instance closer to superior tiers in medicine.Video content material delivery: Pre-recorded content material such as lectures, documentaries and different video content material perhaps delivered in a keep and ahead mannequin so that the cloth can be seen when needed.

Student-to-student interactions (video-conferencing):

Students can also study simply as tons from every different as they do from teachers. So communications technological know-how can be used to join students.

Remote access:

In some countries, standardized assessments are used to consider college students on a stage enjoying field. These assessments need to be delivered securely and on-time to meet checking out schedules. In Indonesia, this is a daunting mission genuinely due to the fact of geography and populace size. Digital transport ought to be the solution.

Up-to-date materials:

Basics seldom change. However, genuinely all textbooks need to be updated. Textbooks are luxurious to purchase, keep and deliver. Digital transport solves this problem when coupled with e-readers.

Self-learning:

Computer-based education or self-paced getting to know is frequent in greater training and exchange oriented learning. Kiosks to help this may additionally be placed shut to under-served areas the place populations already work.

Objectives

- To understand the ICT knowledge of the faculty members
- To understand the ICT sources and services available in the library
- To understand the satisfaction level of ICT facilities by the faculty members

Research Methodology

Faculty members working in the Autonomous Arts and Science College, affiliated to University of Madras can be selected for the study. Totally 250 questionnaires are distributed to the respondents of five colleges and 230 were completed and utilized in this research. The collected data's were analyzed by using necessary tools.

Table 1: Friedman's test for the respondent's knowledge in ICT tools

	Mean Rank	Chi-square value
Internet	4.26	568.717** (p<.001)
e-mail	4.37	
MS-Word	4.91	
MS-Excel	5.19	
Power Point Presentation - PPT	5.28	
CD/DVD-R/RW	5.21	
Scanner/Printer	4.88	
Web Camera	6.63	
Pen Drive	3.01	

**** Significant at 1% level**

The result in the above table shows that the null hypothesis is rejected at 1% level. The knowledge levels of respondents on various ICT tools are not equal and different. The mean ranks show clearly that the faculties are having high level of knowledge in Pen Drive, Internet, e-mail and less knowledge in in the ICT tools of Web Camera, Power Point Presentation and CD/DVD-R/RW.

Table 2: One sample t-test for respondent's opinion to evaluating internet sources

Statements	Mean	SD	t-value	p-value
Navigation	4.02	0.549	86.696**	<.001
Link quality	3.67	1.127	26.852**	<.001
Site access and usability	3.89	0.913	36.109**	<.001
Author authority	3.81	0.939	32.360**	<.001
Documentation and sources identification	3.78	1.175	25.826**	<.001
Content balance and accuracy	3.94	0.910	38.118**	<.001
Validity content	3.71	0.998	27.464**	<.001
Information Structure and design	3.94	0.995	34.738**	<.001
Content relevance and scope	3.47	1.330	14.832**	<.001

**** Significant at 1% level**

In the above table, t-values of the variables under respondent's opinion to evaluating internet sources are significant at 1% level. This shows that there is significant difference between the mean responses given by the respondents towards the variables under respondent's opinion to evaluating internet sources and the test average score (=3). The Navigation, site access and usability, content balance and accuracy and information structure and design are the most evaluated factor in using internet sources.

Table 3: Respondent's opinion about ICT sources available in the college library

Sources	Mean	SD
Online documents	3.77	1.05
Electronic journal and news letter	3.44	1.17
Thesis and dissertation	3.79	1.03
Online index of print	3.72	1.04
Dictionaries of all types of e-journals	3.78	1.06
Audio and Video materials	3.74	1.15
Directories	3.76	1.16
Training materials	3.74	1.08
Document Delivery	3.86	0.75
Reference sources	3.9	0.71
Library catalogue	3.93	1.15
Subject database	4.33	1.07
Software achieves	3.49	1.37
Data achieves	3.8	0.93
Table contents	3.8	1.17
Technical reports	3.93	0.94
Printers	3.73	0.96

Source: Primary data

Faculties employed in Autonomous Arts and Science colleges have recorded their perception towards ICTSources. Their perceptions were recorded and represented through mean and standard deviations in the table 3. Subject database followed by Library catalogue, Technical reports, Reference sources and Document Delivery are the vital sources used by the faculties. Data achieves and Table contents, Dictionaries of all types of e-journals, Thesis and dissertation, Online documents, Directories, Audio and Video materials are Training materials are the sources used by the respondents most of the times.

Table 4: Respondent's opinion about the ICT services available in the college library

ICT services	Mean	SD
Current Awareness Services(CAS)	3.75	1.066
Selective Dissemination of Information (SDI) services	3.67	1.168
Multimedia service	3.73	1.133
CD/DVD service	3.42	1.517
Online Database search	3.76	1.128

Online Public Access Catalogue (OPAC)	3.76	0.957
Library websites	3.82	1.125
Internet services	3.6	0.979
Social networking	3.73	1.092
Photocopy (Xerox) service	3.69	0.985
Printer/Scanner service	3.83	0.857
Training/Demo/lecture on e-source	3.72	0.935
Electronic Surveillance System (EAS)	3.65	1.097

Source: Primary data

In the above table 4, it is inferred that the faculty members of Arts and Science colleges are using most of the ICT services very well like sources. Current awareness service, library websites, printer/scanner services and online database service are the most important ICT service used by the faculty members. SDI, OPAC, Multimedia, social networking, photocopy services are the other sources that are used by the respondents in the Arts and Science college.

Table 5: One way ANOVA test for Awareness about library sources

	Category	Mean	SD	F-value
Age	Below 30 years	3.99	0.911	18.321** (p=.000)
	31-40 years	3.98	1.048	
	41-50 years	3.46	0.897	
	Above 50 years	4.05	1.019	
Gender	Male	3.77	1.075	11.471** (p=.000)
	Female	3.91	1.012	
Designation	Assistant Professor	3.84	1.055	3.214* (p=.039)
	Associate Professor	3.94	0.973	

*Significant at 5% level ** Significant at 1% level

To test the significant influence of respondent's demographic variables (age, gender, designation) on Awareness about library sources among faculties employed in Autonomous Arts and Science colleges, one way ANOVA is applied to ascertain the influence of respondent's demographic variables on Awareness about library sources.

The obtained 'F' value is **18.321** and it is significant at 1% level. This shows that the respondents of above 50 years of age are getting more awareness about the ICT sources available in the library and the respondents in the age group of 41-50 years are getting less awareness about the ICT sources.

The obtained 'F' value is **11.471** and it is significant at 1% level. This shows that the respondents of female are more awareness in the ICT sources than the male respondents.

The obtained 'F' value is **3.214** and it is significant at 5% level. This shows that the respondents of Associate Professor are more awareness in the ICT sources than the Assistant Professors.

Table 6: Respondent's opinion about Purpose of using ICT sources and services

	Yes		No	
	N	%	N	%
To prepare for lecture notes	184	80	46	20
To prepare for examinations	161	70	69	30
To collect research work information	192	83.48	38	16.52
To Collect General Information	173	75.22	57	24.78
To read newspapers, magazines and journals	188	81.74	42	18.26
To prepare for seminar/conferences	147	63.91	83	36.09
To carryout projects	166	72.17	64	27.83
To use for recreation/Entertainment	152	66.09	78	33.91
To check e-mail and browsing	169	73.48	61	26.52

Source: Primary data

It is observed that most of the faculties (83.48%) using ICT sources and services to collect research work information, 81.74% of the respondents used for to read newspapers, magazines and journals, 80% of the respondents utilized ICT sources for preparing lecture notes, and 75.22% of them using ICT sources for collecting general information.

Table 7: One sample t-test for respondent's level of ICT usage in daily activities

Statements	Mean	SD
Supportive	3.85	1.050
Communicative	3.6	1.205
Significant	3.61	1.194
Assessment Activities	4.12	1.064
Organizational Activities	3.84	1.100
Innovative	3.92	0.875
Informative	3.56	1.310
Improve activities	4.02	0.854

**** Significant at 1% level**

From the table 7, t-values of the variables under respondent's level of ICT usage in daily activities are significant at 1% level. This shows that there is significant difference between the mean responses given by the respondents towards the variables under respondent's level of ICT usage in daily activities and the test average score (=3). It is observed that the respondents more satisfied to level of ICT usage in daily activities. They felt that the ICT sources very supportive, innovative and help to improve their activities of assessment and organization.

Table 8: One sample t-test for the respondent's satisfaction level in ICTsource and service

Statements	Mean	SD	t-value
Level of Computerization	2.97	1.053	34.097** P=<.001
Level of Communication	2.18	1.382	18.903** P=<.001
Networking (LAN/WAN/MAN)	1.53	1.008	46.436** P=<.001
Internet connectivity	2.35	1.193	17.353** P=<.001
CD/DVD databases	3.43	1.469	9.214** P=<.001
Reprographic (Xerox) service	4.05	1.453	14.175** P=<.001
Printer/Scanner service	3.06	1.230	27.493** P=<.001
ICT Trained library staffs	3.23	1.525	27.744** P=<.001
Library staff help to use of ICT tools	3.68	1.461	14.724** P=<.001
Library automation	4.14	.998	36.501** P=<.001
OPAC/Web facilities	3.52	1.543	10.727** P=<.001
Document delivery services	3.30	1.341	7.072** P=<.001
Electronic bulletin board service	2.85	1.245	28.100** P=<.001
Digitization of unique materials	3.01	1.327	20.491** P=<.001
Scan journal articles	2.95	1.560	3.664** P=<.001
Provide article indexing	1.78	1.283	19.629** P=<.001

**** Significant at 1% level**

One sample t-test was used to test the various Satisfaction level in ICT among faculty members of Autonomous Arts and Science colleges. Satisfaction level in ICT is measured through sixteen different factors. It is observed that the respondents satisfied about the usage of ICT sources and services. CD/DVD databases, Reprographic services, library automation are the main sources of using ICT.

Table 9: Respondent's opinion about the performance of library in ICT development

Classification	Number of Respondents	Percentage
Excellent	37	16.09
Good	86	37.39
Fair	94	40.87
Poor	13	5.65
Total	230	100

Source: Primary data

Table 9 presents the respondents opinion about the performance of library in ICT development. It could be noted that, 40.87% of the respondents were of the opinion that fair, 37.39% of the respondents opinion that the performance of ICT in library was good, 16.09% of them feel excellent and 5.65% of the respondent feel poor of the library development in ICT.

Conclusion:

Library in nutshell is the disciplined and linked store house of universe of knowledge. The present thrust of digital tool in everywhere has made it possible to visualise data and information. This has opened a new vista for smart libraries. As discussed, the academic libraries of today are required to brace for the rapid change in order to become relevant in this age where any information may be obtained from multiple sources. The use of ICT has fundamentally changed the practices and processes of teaching learning process. The libraries are provided available education and research data's to faculty, researchers, students, and others at the institutions and worldwide. The finding of the research shows that the faculties are having high level of knowledge in Pen Drive, Internet and e-mail. Library catalogue, Technical reports, Reference sources and Document Delivery are the vital sources used by the faculties. Current awareness service, library websites, printer/scanner services and online database service are the most important ICT service used by the faculty members. Most of the faculties using ICT sources and services to collect research work information. ICT sources very supportive, innovative and help to improve their activities of assessment and organization.

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Print VS Electronic Resources

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Abstract:

In today's scenario, due to advent of telecommunication technology we can see tremendous rise in the e-material or digital content of information. Especially with the introduction of iPad, Kindle etc this demand has increased even more. Both print and electronic or digital materials have somewhat effect on the population being it young students, professors, intellects or generals public. The usage pattern defers by individuals demographic, situational or environmental factors. This paper presents various pros and cons of using both print and electronic or digital material. Distinguishing factors include, Availability, Free availability, Usage, Relevancy, Time consuming, Authentic, Accessibility, Easy navigation, Space, Maintenance, etc.

Key Words: Telecommunication; E-Material; Digital Content; Electronic; Resource

Introduction:

Things gradually change their pattern. New technologies take over the older ones. Like earlier mute and black & white movies were being made and now with the advent of technologies we can see colourful and digital impactful movies. People tend to adapt new versions as per their requirement and easiness. Similarly, in the library world, older practices are often applied to the new medium of electronic information. There are very less areas where digital technology has made no impact. In the same way can see change in usage pattern of information or resources. Earlier books were available in print form only, but now there are digitized or electronic forms available. Books are being replaced by e-books. The arrival and proliferation of electronic resources and digital libraries have already influenced and changed the way students and scholars use print resources and traditional libraries. It has also sparked a new wave of literature on the perceptions and preferences of print and electronic resources.

This study attempts to identify the extent to which students at different level and professionals in a metropolitan city are using print and electronic resources. This study would enable us to better understand the changing patterns of information use in the increasingly intensive digital environment.

Literature Review:

Dilevko and Gottlieb (2002) conducted a web-based survey of undergraduate library users at the University of Toronto. They found that undergraduate students begin assignments and essays using electronic resources still traditional print resources (e.g., books and printed journals) remained important for their research because of their reliability and permanent accessibility.

Liew, Foo, and Chennupati (2000) found that a vast majority of graduate students (73%) prefer electronic journals over print journals. Reasons included, links to additional resources, searching capability, currency, availability, and ease of access.

Sathe, Grady, and Giuse (2002) reported that fellows, students, and residents favor electronic journals and faculty prefers print journals. Ease of access, ease of printing, and ease of searching are among the most common reasons.

Lenares (1999) finds that convenience, timeliness, and the ability to search text are the most important factors influencing faculty's choice of electronic over print materials. On the other hand, the ability to browse, portability, physical comfort, and convenience are the most important characteristics leading them to choose print over electronic resources.

Bonthron and other researchers (2003) examined the views of academic staff and students at the University of Edinburgh on the advantages and limitations of electronic journals and found that "academic staff incorporate electronic journal usage into their working patterns in different ways than students and that these differences may affect attitudes towards support services (library web pages, virtual learning environments) designed to promote electronic journal usage." Users' expectations of libraries and their patterns of library use are changing as they find more information readily available from the web.

Friedlander (2002) finds that "faculty and graduate students are using both print and electronic resources, while undergraduates seem more leaned towards online world."

Dillon and Hahn (2002) found that 70% of the faculties at the University of Maryland want core journals in both print and electronic format. Access to electronic resources not only influences the way students and scholars conduct research, it also changes the way they use the traditional library.

Schaffner (2001) observes that: "on several occasions, students have requested assistance in changing the focus of their research to a topic that could be searched using only electronic sources." Unlike users in traditional libraries, digital library users are basically invisible to librarians. Early and continuous involvement from potential participants is a critical step to understanding users' expectations so as to serve their needs more effectively (Giersch et al., 2004).

Methodology:

Survey method was used for this study and questionnaire was taken as a tool. In this study, 12 questions were designed to gather information about the perception and preference of print and electronic resources by students, professionals and general population. Sample of 200 people have been taken, 30 from three different schools; 30 from three colleges; 20 from two university; 30 from three eminent institutes and 60 from six different professional courses, including half students and half professionals respectively. 30 questionnaires have been filled by the general public near market areas, bus stand, etc. Detailed list of institutions/colleges is attached in appendix number 1. Findings of this study are presented in tables 1 to 4.

Findings & Discussion:

With this study it can be concluded that now majority of the students and professionals have started using electronic resources in addition to print resources. However, not a single user opted for only electronic resource, instead there are some users who are completely depending upon the print resources for their research and study purpose. This is mainly because of the authenticity and permanency of print resources. This mean that print material have their credibility and importance even in digital era. One cannot ignore the importance of these conventional resources but still we can add more crunches by using electronic devices and technology.

Detailed analysis of the received data, using open ended questions, is given in following, Table Nos. 1, 2, 3 and 4.

Table 1: Summary of Analysis:

Table No. 1 gives almost complete analysis of the study. It gives the type of group and its response with their respective age group and type of information received from the concerned resources. This table gives a complete glance of whole study.

Print	Age Group	Both	Age Group	Print	Age Group	Both	Age Group
Secondary / Higher Secondary Students				Secondary / Higher Secondary Teachers			
*13	12 - 18	#2	12 - 18	*10	33 - 42	*5	23 - 32
Degree College Students				Degree College Teachers			
*5	18 - 22	#10	18 - 22	@2	33 - 42	*13	33 - 52
University Students				University Teachers			
		*10	23 - 32	@1	43 - 52	*9	33 - 52
Institute Students				Institute Teachers			
		*15	23 - 32			*15	33 - 52
Professional Course - Students				Professional Course - Teachers			
		*30	23 - 32			*30	33 - 52
General / Retired							
*20	53 & Above	*10	33 - 52				

Note: Purpose:

@ - Study

- Reference

*** Both**

Table 2: Age Group Analysis:

Table No. 2 gives specific data about the age group of respondents, their education level and the purpose of using resources. When asked what type of information sources they usually consult first, 60% respondents between age group of 12 to 22 years, having secondary/higher secondary or Graduation have preferred print sources and 40% of them use both electronic and print resources. 100% of users being, post graduate and professional respondents between the age group of 23 to 32 years has preferred both types of resources. 97% of respondents between the age group of 43 to 52 have preferred both recourses, only 3% have preferred print recourses. 66.6% of general or mix population, between 33 to 53 years of age, has preferred print resources; only 33.3% have used both.

(Analysis of general mix population has done separately; the data was not mixed with the professionals and students.)

Age group	Education level	Average Preference
12 to 22	Secondary / Higher Secondary / Graduate	Both
23 to 32	Post graduate	Both
33 to 42	Professionals	Both
43 to 52	Professionals	Both
53 and above	General / Retired	Print

Table 3: Type of Information Received from the Resources:

Table No. 3 gives data about how education level makes the deference while selection of type of resources. It also affects the purpose of reference, ranging from study to research or else. In this table one separate column has been made to see the LIS professionals' choice, specifically.

Education level	Preference	Study / Reference or research / Both
Secondary / Higher Secondary	Print	Both
Graduate	Print plus electronic	Print for study and other for reference
Post graduate	Electronic plus print	Both
LIS Professionals	Electronic plus	Both
Other Professionals	Print plus electronics	Updating knowledge
General	Print	Casual

Table 4: Analysis on the basis of questions related to merits and demerits of print and electronic resources.

This table is the short analysis of the responses received through open ended questions. It covers not only the reason of preference but also merits and demerits of both the type resources. First part, in the form of table, shows the variance in reasons as per education level and the next part covers various merits and demerits point wise.

Education Level	Preference	Reason
Secondary / Higher Secondary	Print	Students and teachers are used to conventional methods of teaching and less accustomed to electronic world. Physical comfort, portability and convenience.
Graduate	Print plus electronic	Gradually starts entering into the ocean of knowledge and trying to search pearls into it. Those who prefer print resources prefer the same because of their reliability and permanent accessibility.
Post graduate – Management	Electronic plus Print	This is mainly due to timeliness, searching capability, currency and ease of access. In case of print resources they mostly use scan copies of available print material, meaning more preference to electronic gadgets or digital content.
Post graduate – Engineering	Electronic plus Print	Contents related in this field tend to get updated very frequently, and it takes time to get the same in print format rather to have it in e-form. Online contents usually provide link to additional resources.
Post graduate – Medical	Print plus electronics	Medical is a vast field and the same needs a great deal of research and self understanding of the fact and theories. Past theories and the new findings both go together. New findings which take time to come in print are quickly available online.
Post graduate – Law	Print plus electronics	A big amount of information is available in print format. But gradually, the system has adopted new technology and now many of the case contents are available on web.
LIS Professionals	Electronic plus Print	They get acquainted of using e-content and they have learnt various means of using and getting the required information.
Other Professionals	Print plus electronics	As per requirement.
General population	Print	Generally this population belongs to conventional readers who tends to get day to day knowledge of world through newspapers, etc.

Summarized pros and cons / merits and demerits of print and electronic resources:

Based upon the above study, following points can be summarized:

1. Easy availability and accessibility: Paper documents are difficult to search, carry, copy and modify. They are easily damaged, misfield or misplaced.
2. Ease of use: One can use electronic resources using electronic gadgets even while walking.
3. Ease of retrieval and access: Unlike paper files that must be searched manually and often by memory, electronic files can be retrieved using keywords included in either the file name or the content, no matter where the document is located.
4. Free access: Many of the online materials are available free of cost.
5. Space and preservation: Electronic resources solve this problem of space and preservation to a good amount unlike print materials they do not require racks, etc.
6. Portability: Textbooks are bulky and heavy whereas in a device like kindle people can store number of electronic books.
7. Interactivity: Placing a textbook in a digital environment unlocks a world of potential. Key terms and concepts become instantly searchable. Many digital textbooks have contents, important concepts, and exercises linked within the text, allowing students to quickly find and navigate to a topic or problem. Further, engaging videos and other interactive content can be embedded directly into the digital pages as an additional resource.
8. Price: Since digital production costs are comparatively low, digital materials are typically available to students at lesser price than their print counterparts.
9. Everything is not online: Some old literature especially in Ayurveda, many texts are still in traditional form.
10. Electronic materials are not always free: Many authentic online or electronic resources are available in the form of databases, especially in the fields of medicine and law.
11. Authenticity: One is afraid of unauthentic information available online. For ezample Wikipedia, anybody can edit its' content.
12. Permanent and completeness: Print books are durable, reliable, and function independently. Whereas, iinformation on internet is not permanent always. Sometimes the information are incomplete also, no in depth knowledge is guaranteed.
13. Password and hardware issues: E-textbooks in their nature rely on expensive and delicate hardware for access. While a printed text can certainly be pricey and easily misplaced, it may ask for a password which needs to be remembered.
14. Physical comfort: A detailed or complicated document is often easier to read, pass around and make notes on if it's printed. Continuous learning through electronic gazettes create eye strain, neck ache and various other physical ill effects.

Limitations:

This study is limited to selected and small user group of 200 people. Also the data collection area is restricted. This type of study can be conducted further to see what are the specific areas in which users are using electronic and print resources, respectively.

Based on above analysis it can be concluded that there is great move towards electronic resources. Of course print resources still have their value in the form of permanency.



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Prospective of Social Stock Exchange in India

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Abstract :

The noble idea of social stock exchange is current topic of discussion in India. The finance minister Nirmala Sitaraman in her budget speech for 19-20 laid down the need of establishing social stock exchange in India which will provide a platform for raising capital for social enterprises. Just like stock exchange which provides electronic platform for buying and selling shares and securities of commercial enterprises social stock exchange will enable social enterprises to raise funds by issue of securities and bonds to public. Social stock exchange will enable social enterprises, non-profit organization and non-government organization to raise capital by listing their securities and bonds on social stock exchange. The SSE will be regulated by security exchange board of India [SEBI]. The main objectives of SSE were to take the capital market to the masses and to help these organizations and enterprises raise funds. For realizing this objective SEBI formed a working group in 2019 which visualize functioning of SSE.

This paper is an attempt to study the concept and objectives of social stock exchange, concept of social enterprises and functioning of social stock exchange and the prospective of SSE in India. It is based on secondary data available from newspapers, websites, Wikipedia.

What is Social Stock Exchange?

We know that stock exchange is platform to trade financial instruments and the value of these financial instruments depends on the future earning capacity of the issuing entities. In the social stock exchange the value of instruments like shares depends on the social impact of the organization or the company or the society. A social stock exchange is a platform on which social enterprises volunteer groups and welfare organizations are listed so that they can raise capital. This is a revolutionary concept to provide an avenue to these organizations so that they can approach and tap the reservoir of investors for capital.

What is Social Enterprise?

Social enterprise means an organization of which main objective is social service and not profit making. A social enterprise is a revenue generating business but with a difference its primary objective is to achieve social objective. It does not ignore or shunt pursuit of profit but its primary goal is social service while pursuing goals the social enterprise does not do away with the profit because it ensured sustainability of the entity of cornerstone of the philosophy is that even social enterprises can highly profitable in fact the most social enterprises look and operate like traditional business the thrust and the focus is that the profit of these entities generate is not used for payouts to investors but it is reinvested into their social programs. But continuous flow of profit helps the social enterprises and plan and execute long term programs and bring on board required technology and professionals. Thus social enterprise includes service oriented non-profit making organizations and profit making enterprises with social motive which do not distribute their profit or surplus income among shareholders or contributories as dividend. In fact their profit is ploughed back for strengthening the enterprise.



Need of Social Stock Exchange:

There are more than two millions volunteer organizations in India which are working with the primary objectives of social service. They provide different type of social services to people. Their main objective is economic and social up-liftment of poor and backward class people, providing them free education and medical facilities and rendering wide range of services to common people. Most of them are charitable institutions and they fully depend on charity and donation. Therefore their source of income and revenue is limited and due to shortage of financial resources their area of operations is limited. They can't reach mass people due to non availability of infrastructure and fixed assets. They require huge amount of capital for developing infrastructure such as multispecialty hospitals, schools, colleges etc. Social Stock Exchange will enable them to list their shares and securities on stock exchange and raise capital from open market by converting small saving in investment. Social Stock Exchange can play important role in capital formation for social enterprises.

The whole world is suffering from covid-19 pandemic. There was complete lock down in India for about three months in 2020 due to which so many people lost their employment and were starving. So many social enterprises came forward to help them. Presently in 2021 the second wave of COVID-19 pandemic has destructed the whole economy of India. It is more dangerous than the first wave. Lacks of people are infected daily and there is acute shortage of hospitals, medicines, ventilators and other equipments. Many people lost their lives due to non-availability of oxygen. Many social, voluntary and non-government organizations have come forward for helping the people and overcoming the disasters. However due to shortage of financial resources the large gap between demand and supply of the medical facilities can't be bridge. Social Stock Exchange may help such social enterprises to raise capital for developing infrastructure and purchasing machinery and equipments.

Concept of Impact Investing:

Generally speaking investing means applying savings for productive purposes, we invest our savings in financial assets such as government securities, shares, bonds and debentures of companies and public sector enterprises. The main objective behind investment is to safe guard surplus money and to earn income by way of interest on dividend and earn profit arising due to appreciation in value of shares or bonds. The investments in such financial securities depend on the financial position of the enterprise, rate of return and future expectation of the investor. The market price of such securities depends upon net worth of the business enterprises and rate of return on investment.

Nowadays a news stream of investment is emerging which is called impact investing. The main objective of impact investors is not to earn income or profit but to bring out social change. There are so many people who are working for social welfare and philanthropic activities. For them social service is worship of God. They donate large amounts to charitable institution for charitable purposes. For them social welfare is more worthy than their own profit. So they are ready to invest large amount in securities or bonds of social enterprises which are engaged in social welfare activities. Such as providing medical and education facilities, environment protection, restraining pollution, forestation, tree planting etc. the impact investors are interested in social change and economic and social development. They invest in shares bonds or securities of social enterprises. The value of such securities depends on impact factor of the enterprise.

The more will be impact factor of social change, the more will be the value of securities. Thus Impact Investing not only boost the social enterprises, but also help the investors in growing the value of their investment.

Evolution of Social Stock Exchange:

Social Stock Exchange is considered as effective platform for raising capital for social enterprises. First SSE was set up in Brazil in 2003. SSE's are set up in UK, Canada, Singapore, USA etc. They are providing services in environment, transport, health services etc. The objectives and functioning of SSE in different countries is also different.

In India initiative for setting SSE was taken in 2019-20. The regulation of SSE will be under the ambit of SEBI. An expert panel was set up by SEBI in September 2019 under the chairmanship of Mr. Ishaat Hussain. The committee's objective was to suggest a feasible architecture and outline recommendations for setting up an SSE mechanism in India. The panel consisted of representatives of active stakeholders in the realm of social impact investing, Finance Ministry, stock exchanges and NGOs. The working group also conducted a series of consultations with various stakeholders including voluntary organizations, social enterprises and philanthropic organizations to compile their inputs. The expert committee submitted its report in September 2019 and made the following recommendation for structuring and functioning SSE in India.

1. Issuance of bonds:

- a. Allowing non-profit organization to directly list through issuance of bonds in the term of zero-coupon or zero principal bonds.
- b. Zero-coupon bond is a debt security that does not pay interest but instead trades at a deep discount, drawing a profit at maturity, when the bond is redeemed for its full face value.
- c. This would help to access funds from donors, philanthropic foundations and Corporate Social Responsibility spenders as they will be encouraged to buy zero coupon bonds.

2. Social venture Funds:

- a. It recommends a range of funding avenue, such as Social Venture Funds under Alternative Investment Funds.
- b. Social Venture Funds are funds investing in early-stage social enterprises to expand opportunity for people living in poverty.

3. Enhanced Reporting Standards:

- a. Profit social enterprises be allowed to list on the platform with enhanced reporting requirements.
- b. The social stock exchange can be housed within the existing national bourses like the Bombay Stock Exchange and the National Stock Exchange.

4. Tax relief:

- a. Investment in shares and securities and social enterprises should get 100% deduction u/s 80G just as donation. Profit arising on sale or transfer of securities should be free from capital gain tax, contribution made by companies to social enterprises should be fully deductible as business expenditure.



However, clear policies are not framed regarding the working of Social Stock Exchange, how Impact factor will be decided and social audit will help in reporting standards. Unless clear visions are drawn the confidence of investors can't be with one.

Future Prospective:

There are about two million social organizations working in India. Most of them are charitable institution and depend on charity and donation. Due to limited financial resources they are unable to develop infrastructure required for social development. Social stock Exchange will enable them to raise capital by issue of shares bonds and other instruments. Retail investors will be able to invest in such social enterprises. The impact investors will have pleasure to invest in such organization and bring out social change.

Conclusion:

Social Stock Exchange provides platform for social enterprises to raise capital. It will enable the social enterprises to tap financial resources from open market and attract the retail investors to invest in their shares, bonds and other instruments. Large number of impact investors who believe in social service rather than own profit, will be able to invest their funds in those voluntary organizations who are working for up-liftment of work and backward class equal by providing different type of services to them and bring out social change. Establishment of Social Stock Exchange will be a welcome step for impact investors who have burning desire to work for the society and it will strengthen millions of social enterprises working in our country.

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Quality Questionnaire? – 'Questions' can be Answers

Keertee Parchure,
Dapoli

Research is studious investigation of facts and findings. It is systematic enquiry for seeking facts through objective, verifiable methods in order to discover the relationship among them and to deduce from them broad principles or laws (Cauvery et.al, 2003). Therefore the success of a research work depends upon collecting the necessary information. This Data collection for research is very crucial task. In social science research, in case of user study, questionnaire play vital role in collecting data from respondents.

Questionnaire- Questionnaire is the main instrument in survey research. To obtain information about personal beliefs, feelings, motivations, expectations or future plans, private or past behavior, likings etc. questionnaire is very helpful. It is described as a written verbal stimulus and written verbal response. A questionnaire is a list of questions sent to a number of persons for them to answer. It secures standardized results that can be tabulated and treated statistically

The base of all questionnaires is the question. So it is necessary to know the content, structure, format and sequence of questions in every questionnaire. Questions must translate the research problem and research objectives. Answers of these questions provide data for hypothesis testing.

Content of questions- The questions in survey may be related with facts, opinions, attitudes, motivations and their level of familiarity with a certain subject. The questions can be classified content-wise in two categories- 1. Factual or objective questions

1. Factual questions- These questions are often easy to design as they are mainly background questions. These questions are constructed to evoke objective information from respondents regarding their history, their environment, their habits etc. These are asked to get information about sex, age or date of birth, marital status, education; In case of students their class, name of their college, their subject of interest etc.; in case of institution its establishment year, number of staff etc. These are objective questions and hence they are generally direct questions which are often easier to be framed.

2. Opinion questions- Opinions are the verbal expression of attitudes. These types of questions refer to the respondent's inclinations, prejudices, ideas, fears or convictions about some topic. For example – 'What is your opinion about digital library?' or 'Why do you like to study in reading room of library?' The answers of these questions can vary from person to person. These questions are subjective questions. The questions asked about opinions and attitudes are more difficult to be constructed than factual questions. For example it is easy to ask 'if both are available, what will you use to read –printed copy of book or its electronic copy?', but when it comes to opinions on the advantages or disadvantages of both type of books, it may not be easy to understand the depth of ideas in their minds. Also answers of opinion questions can be very sensitive to changes in wording or sequence. Questions presented in different ways can reflect different aspects of attitudes and they may result in different answers.

The questions can be classified structure-wise in three categories-

1. Open ended questions
2. Close ended Questions
3. Contingency Questions
4. Matrix questions

1. Open ended questions – Open ended questions are without pre-defined answers or without any readymade alternative answers. The probable answers to the questions are not listed under the open ended questions. This type of question does not force the respondent to follow pre-conceived answers so the respondent can express its thoughts freely, openly and spontaneously and in its own words. This type of question is useful to get views or feelings of respondents. These questions are flexible and have possibilities of depth in answers. For example, 'According to you, what will be the future of printed books?' or 'What is your opinion about your library website?'

As it can be used as exploratory tool researcher can use it before the research objectives are clearly defined or in pilot survey to get different options of specific question. These questions are difficult to analyze because of complex and in-depth answers.

2. Close ended questions – Close ended questions have set of probable answers given at the end of each question. The respondents are asked to choose the correct answer from that set of answers. Close ended questions take more time to be framed than open ended questions. But they can be quickly answered by the respondents because options of answers are given at the end of each question. For example, How frequently you visit your college library? (a) Every day (b) Twice a week (c) Once a week (d) Once in a month (e) Never
or Are you aware about book bank scheme of college library? (a) Yes (b) No

The analysis of data gained by these questions is also straightforward and simple and easy to analyze. There is another merit of this type of question. The provision of alternative answers help to clarify the meaning of the question.

3. Contingency questions – A contingency question is a special case of a closed ended question which applies to only a subgroup of respondents (). This is because some questions are related to some respondents only.

For example, 1. Do you visit library web site? (a) yes (b) no

2. if yes, What change would you like to suggest for improvement?

The first question is called a filter question because only those who answer 'yes' to this question can answer the second. The second question is contingency question. This is because the second question to the respondent is contingent upon his response to the filter question.

4. Matrix questions – In this type, a large set of questions having the same response categories are organized in a matrix form. The questions are arranged one under the other forming matrix with response categories along the top and a list of questions down the side. This is the efficient use of paper space and respondent's time. (S. Roopa and M. S. Rani, 2012)

Format of Question – Every researcher has to consider nature of questions and framing the questions and set of alternative answers while formatting questions. Following are some points regarding nature of questions-



1. The questions should be analytical in nature. They should be constructed with the reference of research problem tackled by the researcher. For example, if research is related to job satisfaction of college librarians then the questions should be about their salary, rewards, appreciations, freedom of working on new ideas, leaves etc. and not about yearly expenditure of college library on books and other resources.
2. The vocabulary and formation of sentences should provide complete and accurate idea of question to respondent. The language of the questionnaire should be easily understandable. When the respondents of survey are common people then the researcher has to use mother tongue of the respondents for questionnaire. For example, if researcher is collecting information on opinions on libraries in rural area of Maharashtra state, he/she has to format questionnaire in Marathi language, as it is state-language in Maharashtra, to get better results. When the questionnaire is to be implemented among general public, questions should be worded in simple manner. There should not be technical words when it comes to general or non-professional respondents. For example, if the question was asked to first year college student that 'Are you beneficiary of Book bank scheme of our college?' then the student may get confused. But if the question was like this 'Have you got any text book set this year from college library?' then he can answer correctly.
3. The leading questions should be avoided in questionnaire to get transparent answers from respondents. The leading question is one which by its content, structure or wording leads the respondent in the direction of certain answer. For example, in public library to see the favourite type of book of users, if the question was asked 'Novel is your favourite type of book for reading. Isn't it?' then it will be leading question. Instead of this the question must be 'what is your favourite type of book for reading?'
4. Double barreled questions or double loaded items should be avoided. (Young T.J., 2016) This type of question include two or more questions in one. The question 'Do you want the late fee should be decrease for UG and PG students?' for college library users is double barreled question. The answer may be difficult for users because they may prefer to decrease the late fee for UG but not for PG students.
5. The questions should be well arranged. Actually each aspect of the topic or problem being investigated in such a logical way that the answers and ideas of respondent come spontaneously. Previous questions should foster interest of the respondent to proceed further.
6. Embarrassing question should be avoided. These questions are about some behavior not socially acceptable. In library environment the questions about the habit of stealing books or cutting pages of books are examples of embarrassing questions. This type of question create a conflict in respondent's mind whether he/she respond truthfully or try to show good picture of him/her.
7. The questions whose answers can be secured more accurately from other sources must be excluded from questionnaire. For example, the information of number of books borrowed by particular user, number of staff in library, budget or status of computerization of library etc. may be available in documents or on the website of library, so for this information questions should

not ask through questionnaire. This means the researcher should ask only for such data which is not readily available in documentary or web sources (Kumbhar, 2014).

8. The questions should be framed with a view to be helpful in tabulation and analysis. It should be anticipated how the data will be tabulated and interpreted before the final form of the question is decided.

9. Researcher can use 'slant- side questions' for some problems (Cauvery et.al, 2003). To evaluate internal consistency of the replies, especially on crucial issue, two or more questions, should be framed which are worded differently but for same purpose and included in different parts of the questionnaire. For example, post graduate students will give positive answer to question 'Do you read journals subscribed by our college library?' In the different part of questionnaire if it is asked 'Name the journals of your subjects subscribed by our college library' then the answer of students will give clear picture of real use of research journals.

Framing the questions – There are various techniques of structuring close-ended questions and their probable answers.

1. All possible answers – The general format used is to give all possible answers and ask respondent to select his answer in following way –

Question – In which class you are studying? (question for senior commerce college students)

Type 1 : Put a tick for your answer

Type 2 : Encircle the number of your answer

a) F.Y.B.Com.

1. F.Y.B.Com.

b) S.Y.B.Com.

2. S.Y.B.Com.

c) T.Y.B.Com.

3. T.Y.B.Com.

2. Rating – Rating Scale is also one common format for questions for measurement of aptitudes or attitudes of respondents. Some categories are given as answers from which respondent can choose his/her answer. For example 'How will you rate the opinion 'Digital libraries are the only future of libraries' '

a) Strongly agree b) Agree c) Somewhat agree d) Undecided e) Somewhat disagree
f) Disagree g) Strongly disagree

These response categories are called 'quantifiers' They reflect the intensity of the particular opinion or judgement.

3. Ranking – Ranking is very useful device to provide some idea of relative order among objects or judgements or respondent's preference for particular variable. For example, the question asked to college students 'Please indicate your preference for following reading material. (Rank your preference from one to four, where first rank is for your most preferred reading material)

1. Text books (rank number)

2. Research Journal (rank number)

3. Reference Books (rank number)

4. E-books (rank number)

5. E-journals (rank number)

Sequence of questions –

Once format is decided, next comes sequence or the order in which questions are arranged in a questionnaire. Two patterns are used 1. The funnel sequence – In the funnel



sequence, as its name suggests, each successive question is related to the previous question and they become narrower in scope. This approach of narrowing down the issue is useful when the major objective is to get detailed information. Also if the objective is to discover unanticipated responses, broader questions should be asked first.

2. The inverted funnel sequence – In this sequence, narrower questions are asked first followed by broader ones. In this sequence narrow questions are asked first to discover broader facts.

Thus content, structure, format and sequence of questions must consider for formatting questionnaire. These four aspects about questions can make questionnaire, a quality questionnaire.

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An Analysis on Talaq-E-Biddat

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Abstract :

There are many misconceptions among people about divorce in Islam. It is a widespread view that a Muslim husband is empowered to divorce his wife whenever he has no reason to. This concept is completely wrong. A Muslim husband cannot exercise his right.

According to Allah's book, the Holy Qur'an, marriage is the union of the two human beings in love and kindness. In Islam, "marriage" is considered a sacred and spiritual covenant. But regardless of this, marriage is transparently a sacred and partial civil contract. Marriage is considered a sacred rite. But, when we talk about the rights and duties of both parties, they lead under the general agreement. Islam is a peaceful religion. It will take a couple of different lives to go through a different. In turn, it does not propose isolation and segregation for superficial and minor reasons. In Islam, divorce, when it is unavoidable, is condemned and frustrated¹.

Keywords: TALAQ-E-BIDDAT, Triple talaq.

Introduction

The Quran represents the main path of divine guidance for every Muslim. Due to his revelation the Prophet Muhammad (peace be upon him) and his experimental implementation, completed God's blessing for humanity, to provide us with a system of beliefs and values, which is valid for all time.

The Qur'an confirms the revelations given to previous prophets, this may not be accessible to us, in the form in which they were originally revealed. Nations and cultures are receiving this divine book because of its excellent language and eloquent message that directly appeals to the human heart.

For all that time, he will continue to guide those who turn to God in an honest way. The Holy Quran is the holy book or scripture of Muslims. It lays down for them illegal and commands, codes for social and moral behavior and has a broad religious philosophy. The language of the Quran is Arabic.²

Object Of The Study

1. To study TALAQ-E-BIDDAT provisions as per holy Quran.
2. To study need of TALAQ-E-BIDDAT provisions in Muslim religion.

Research Questions

1. What Is Muslim Law?
2. What Is Quran?
3. What Is Talaq-E-Biddat?
4. What Were Supreme Courts Verdicts?

¹https://www.Academia.Edu/Documents/In/Triple_Talaq

² Triple Talaq - A Deep Study Written By Charchit Khandelwal* & Palak Panwar** International Journal Of Legal Developments And Allied Issues Contemporary Law Review Edition Volume 3 Issue 6 November 2017

5. Shayara Bano V/S Union Of India And Others 2017.
6. Does Three Consecutive Announcements Of Talaq
7. Amounts To One Talaq?

Analysis :

It is a compilation of oral revelations given to the Holy Prophet Muhammad over a period of twenty-five years. The Holy Quran is divided into 11 11 chapters and each chapter contains individual verses. Runs for many pages other than a few lines. The text of the Holy Quran dates back to the last 1500 years. Millions of copies of the Qur'an circulating in the world today are towards a single letter. God says in the Holy Qur'an that it is not surprising because He Himself will protect this book: "Surely we are the ones who have revealed this demonstration, and surely we are the ones who are its guardians" (1:10:10).

To Muslims, the Quran is the word of God and is the perfect guide for mankind. Much of the Qur'an is about God, His attributes, and man's relationship with Him. But it clarifies the historical and historical accounts of his followers, some of the prophets and the people, the arguments for accepting Muhammad as the true prophet, and the warnings for the believers and the warnings for the unbelievers.

According to book of Allah, Holy Quran, marriage is the gathering of two human beings of opposite gender in " mawaddah and rahma ", love and mercy. In the religion of Islam, "marriage" is considered as holy and spiritual agreement. But regardless of this, marriage is partially sacred and partial civil contract. Marriage is regarded as a holy ritual. But, when we talk about rights and duties of both parties; they are lead under ordinary contract. Islam is a peace loving religion. It grant acouple to right to separate and does not impel a couple to undergo unhappy and discomfort life. Concurrently, it does not propose dissociation and segregation on superficial and petty causes. In Islam, divorce, when not indispensable , is strongly condemned and discouraged. It is reported that Holy Prophet said that " with Allah the most detestable of all thing permitted is divorce. " In Shariah, dissolution of marriage by the act of parties may in following forms:

1. by the husband:

- i. Talaq (repudiation)
- ii. Ila (vow of continence)
- iii. Zihar (injurious assimilation)

2. by the wife:

- i. Talaq e tafwid (delegated divorce)
- ii. Khula (redemption)

3. by common consent: Mubara'at (mutual freeing)

4. by judicial process:

- i. Ili'an (mutual imprecation)
- ii. Faskh (judicial rescission)

It is reported that the Holy Prophet said, "There is relaxation with Allah." In Shariah, the dissolution of marriage by the act of the parties can take the following forms:

1. By the husband:

- i. Divorce (denied)

- ii. Ila (continuous fasting)
- iii. Zihar (Harmful Assimilation)

2. By wife:

- i. Divorce e tafvid (assigned divorce)
- ii. Open (redemption) common.

3. By general consent: Mubarat (mutually free)

4 .. By judicial process: i. Ilian (mutual accusation) ii. Fasc (judicial immunity)

Divorce in small issues. Saying the words of divorce three times in a meeting is very sensitive, censored and unacceptable. The point of this paper is to learn about the realities of triple divorce. The purpose of this paper is to explain the real meaning of triple divorce.

It answers the query of what Sharia law says about the issue and how it protects women's light. Indeed, there is a misconception about Muslim women that they are deprived of their rights, especially under the system of divorce. In the paper on hand, the views of different sects on the triple divorce are also harsh. This makes a definite discussion of the relevant castles. Also, it explores the law on triple divorce, which is enforced in different states.

Talaq-E-Biddat

Triple divorce is known as talaq-e-bidat. It is a type of divorce in which three declarations are made in one sentence by the husband during the same tawhar i.e.; I divorce you three times, or inseparate i.e.; I am divorcing you, I am divorcing you, I will divorce you.

None of these are denied Divorce. According to Ibn al-Qayyim, the triple divorce that is honored Simultaneously considered as a divorce. He supported his argument by saying that Hazrat Muhammad considered it a single divorce. There is a husband in the Holy Quran Allowed to divorce twice. After two declarations of divorce, he can live with his wife.

Third divorce spouses have the right to live with each other, and after that, divorce Becomes complete and irreplaceable. The last prophet, Hazrat Muhammad Mal QQ Soh QQ بلع الله وى ص QQ Condemnation and annulment of divorce and bidat exercise. The second caliph was Hazrat Umar (RA). The husband who filed for such a divorce was fined. This instant application Divorce is widespread.³

The Sunni sect of Muslims accepts this practice, and accordingly it is legal In a Sunni school. Such a divorce is legal, though sinful, in Hanafi law; But in a Shia school Islamic jurisprudence, it is not valid. According to Tyabji, by a sad With the development of Hanafi law, sinful forms have become the most common for "men" Has always shaped the law of marriage so that they agree the most for themselves. So, Triple divorce is hostile to Islamic injunctions, it violates the rights of Muslim women.

Reasonable reason is a significant element of divorce. In this case Salim Basha vs. Mumtaz Begum, it was decided that the husband could not use arbitrary power to exercise his right Divorce. There must be a sensible root cause and the parties 'families must try Resolve their dispute and reconcile with them. The decision has also been upheld in Ahmed QasimMolla V. Khatun BB.

³https://www.academia.edu/44358279/An_Analysis_on_Triple_Talaq_in_India

Divorce. According to Ibn al-Qayyim, a triple divorce that is granted simultaneously is considered a divorce. He corroborated his argument by saying that Hazrat Muhammad Malso had accepted it as a single divorce. The Holy Quran does not allow a husband to divorce twice. After two declarations of divorce he can live with his wife. In a third divorce the husband and wife have the right to be with each other, and after that, the divorce is complete and unchangeable.

The last prophet, Hazrat Muhammad Mhal QQ Soh Q QYal Allah Allah QQ p condemned the practice of talaq e bidat and canceled it. The second caliph, Hazrat Umar (RA), punished husbands who used such divorces. The use of this instant device is widespread. The Sunni sect of Muslims accepts the practice, and it is legal according to the Sunni school. Such a divorce is legal, though sinful, in Hanafi law; But in Islamic jurisprudence in the Shia school, it is not valid. According to Tyabji, sinful forms have become the most common through the tragic development of Hanafi law, "Menhav always formulates the law of marriage, so that they may agree for themselves."

Therefore, triple divorce is a blasphemy of Islamic injunctions, it violates the rights of Muslim women. There is a rational reason for a rational reason. In this case, Salim Basha v. Mumtazbegum, it was decided that the husband could not use arbitrary power to use the toddlers on his right side. There must be a sensible root cause and the families of the parties must try to end their dispute and reach a settlement between them. The decision was also handed down to Ahmed QasimMolves. Khatun BB.

Conclusion :

In my opinion, Sharia law relating to divorce is the most misunderstood and abused of the law. From childhood, I thought that once a man talks of divorce to his wife, the divorce is enforced. I am not the only one who kept the ark in the dark and kept away from the real story of women's divorce and rights in Islam. In Pakistan, triple divorce is still a big practice. That is one of the main reasons why divorce is on the rise in our country.

It is a stereotype that divorce is a one-sided engine of oppression in the hands of the husband. My conclusion while researching this paper is that divorce does not mean discrimination on the basis of race, it is not partial and does not support men. The rules of divorce in the Quran and Hadith, primarily just and remarkably woman-friendly, have been unfortunately interpreted by men to keep exceptions in this matter.

At the time of writing this assignment and passing through the true law, I speculate that Islam gives their wives the futile power to unilaterally divorce or discriminate against women in this matter. I think the dissolution of marriage is primarily for the protection of women, and it promotes women's rights. If a man does not exercise his right teaching, he can marry three other women, but women cannot.

Therefore, my view is that the basic purpose of divorce in Islam is to facilitate women. It does not support gender-based discrimination, it provides equal surplus facilities to Muslim women. Pakistan is an Islamic republic. Unfortunately, divorces in the country are increasing day by day. According to research statistics, in 2018, more than 20,000 divorce lawsuits are filed in the infamous courts of Lahore. It is a worrying situation. To reduce the rising divorce rate in Pakistan and promote harmony in the society, the government should take steps to create

awareness about the realities of marriage and divorce. People should change their minds and stop these innovations. They should follow the real principles of Quran and Sunnah.

Institutions must function properly, and people should not be misled despite a triple divorce or any other ritual. It is a positive initiative that three months ago, Dr. Qibla Ayaz, chairman of the Council of Islamic Ideology (CII), defended the statement saying that triple divorce is a crime, and the husband is punished under the law. I speak further to see if our law will try to bring laws with modern ideas of Islam and social justice.

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Factors Influencing Purchase of Computer in Coimbatore District

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Abstract:

In the modern world the role of computer is highly commendable and multifarious. The purchase of computer by users needs consideration of many factors. Apart from the basic characteristics of individuals, there are many other variables that influence their purchase decision. The present paper, based on a formal research, focuses on the major factors that influence purchase decision of computer by the computer users in Coimbatore district. The study upshots the hardware features, software support and 24x7 service support as the major factors that have influence on the purchase decisions of the computer users.

Keywords: Computer Users, Internal factors, External Factors.

1. Introduction:

In the information age of our living, everyone knows the substantial role played by computer on every walk of our life. Since 1946, the year of invention, until now the computers recorded profound stages of evolution as the generations of computer development. Nowadays technology has brought the access and understanding of entire world and events politely in hands of every of the human beings. Though computer becomes an inevitable thing to ordinary person, numerous versions of hardware, software and other wares made the task of selecting a suitable computer system for an individual more and more complicated and tough. The present research paper is based on a formal enquiry made into the different factors influencing purchase decision of the computer users.

2. Methodology:

The formal study behind this research paper is based on both the secondary and primary data. The secondary data were collected relating to the previous studies made on the conceptual data relating to the factors influencing the purchase of computers. Primary data are also collected through a statistical survey of 105 computer users, selected as per convenient sampling technique, in Coimbatore city on matters relating to their profile and the extend of influence of the factors on them in purchase of computer.

The study is focused towards the objectives of ascertaining the profile variables of computer users and the various factors influencing purchase of computer by computer users in Coimbatore district. A brief review of the related literature narrated below reinstate the significant dimensions of research problem.

Santpal (2015) in his research entitled “Consumer Buying Behaviour –Towards Personal Computer” ascertained the computer buyers collected sufficient information before purchasing

the computer. A large number of people changed their computer because of new models with new technology.⁴

M. Saravanan(2016) in his research entitled “Consumer Buying Behavior While Purchasing Laptops In Tirupattur Town” found that today there are number of brands of computers available in the market. They differ in prices, quality, capacity, type and the like. The consumer prefers to purchase their brands due to various reasons like brand name. quality, price, capacity, style features, Guarantee/Warranty, after sales service, cash discount, installment system together decided the purchase.⁵

Dr. A C Brahmhatt and Sejal Acharya(2015) in their research entitled “A Study of Different Factors Influencing Consumers Pre-Purchase Buying Behaviour towards Laptop” found that there are basically four factors which influence the purchase decisions of consumers' laptops, namely, Technical specifications, Outlook of the product, Purchase convenience and Affordability.⁶

Ghazaleh Tehranchi Nia (2014) in his research report entitled “Factors Influencing Purchase of Personal Computers Devices from the Market in North Cyprus: An Empirical Study” described that some external factors like Brand awareness, brand familiarity and need for social acceptance are notable factors in the market place.⁷

This research paper focused on both the basic profile factors of computer users and other characteristic features of computers available in Coimbatore district in making purchase decision relating to computers. The findings of the study narrated below are subject to limitations including the drawbacks of convenient sampling, limited geographical coverage of Coimbatore district, and making of descriptive analysis of variables than an in depth analysis of them.

3. Demographic Factors:

The Knowledge about the basic features of the respondents shall help the clear understanding of the demographic factors that influence the purchase decision of computer users. The researcher examined five important demographic factors, namely, (i) Gender, (ii) Age, (iii) Educational qualification, (iv) Occupation and (v) Annual income. The analysis of the collected data revealed that out of 105 respondents, 53 respondents, representing 50.78 %, were 'Male', and the remaining 52 respondents (49.52%) are 'Female'. The analysis of the age of the respondents showed that out of 105 respondents, a small portion of 12 respondents, representing 11.43%, were in the age group below '20 years', followed by, 17 respondents (16.19%) were in the age group of '20 to 30 years', 36 respondents (34.29%) were in the age group of '30 to 40

⁴ SANTPAL ' Consumer Buying Behaviour –Towards Personal Computer', International Journal of Research in Finance and Marketing , 2015, April, Volume 5, Issue 4, pp.29,ISSN 2231-5985.

⁵ M. SARAVANAN 'Consumer Buying Behavior While Purchasing Laptops In Tirupattur Town', International Journal of Research – Granthaalayah, 2016, October, Vol. 4, No. 10: p.8,.ISSN- 2350-0530(O) ISSN- 2394-3629.

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⁷ GHAZALEH TEHRANCHI NIA, 'Factors Influencing Purchase of Personal Computers Devices from the Market in North Cyprus: An Empirical Study', Degree M.A.(Marketing Management) Eastern Mediterranean University, Gazimağusa, North Cyprus, January 2014, pp. 40.

years' and so on. Table 1 given below contains the distribution of respondents with reference to different demographic factors.

TABLE 1
Demographic Factors:

Demographic factors	Description	Frequency	Percentage
Gender	Male	53	50.48
	Female	52	49.52
	Total	105	100.00
Age (In Years)	Below 20 years	12	11.43
	20 – 30 years	17	16.19
	30 – 40 years	36	34.29
	40 – 50 years	32	30.48
	Above 50 years	08	7.62
	Total	105	100.00
Educational Qualification	Illiterate	2	1.90
	School	2	1.90
	Diploma	19	18.10
	Graduate	27	25.71
	Post Graduate	23	21.90
	Professional	32	30.48
Total	105	100.00	
Occupation	Agriculture	7	6.67
	Govt. Employee	12	11.43
	Private Employee	23	21.90
	Professional	49	46.67
	Business man	14	13.33
	Total	105	100.00
Annual Income	Below ₹50,000	4	3.81
	₹50,000- 1,50,000	20	19.05
	₹1,50,000- 2,50,000	62	59.05
	₹2,50,000- 3,50,000	14	13.33
	₹3,50,000- 4,50,000	2	1.90
	Above ₹4,50,000	3	2.86
Total	105	100.00	

Source: Primary Data.

It is vivid from Table 1 above that a simple majority of 50.48 percent of the respondents are 'male', another majority of 64.57 percent (34.29+30.28) of the respondents are in the age group '30 - 50 years', a commendable majority of 86.09 percent (25.71+29.90+30.48) of the respondents are educated as 'graduate', 'post graduate' or 'professional', another majority of 68.57 percent (21.90+46.67) of the respondents are either 'private employees' or 'professional', and a notable majority of 78.10 percent (19.05+59.05) of the respondents have the income ranging from ₹50,000 to 2,50,000.

4. Amount of Investment Made on Computer System:

The amount of investment on computer system varies with nature of configuration of the system purchased by the computer users. The amount of investment made on computer system by the users is classified into five heads, namely, (i) Below ₹ 25000, (ii) ₹ 25000 to ₹ 50000, (iii) ₹ 50000 to ₹ 75000, (iv) ₹ 75000 to ₹ 100000, (v) ₹ 100000 and above. The analysis of collected data disclosed that out of 105 respondents, an important portion of 52 respondents, representing 49.5 per cent, invested above ₹100000 in computer system followed by, 28 respondents (26.7 per cent) invested between ₹25000 to ₹50000, 20 respondents (19.0 per cent) was below ₹25000 and so on as presented in Table 2.

Table 2

The Amount of Investment Made on Computer System

S. No.	Amount of investment	Number of respondents	Percentage to total
1.	Below ₹25000	20	19.0
2.	₹25000- 50000	28	26.7
3.	₹50000- 75000	2	1.9
4.	₹75000- 100000	3	2.9
5.	Above ₹100000	52	49.5
	Total	105	100.0

Source: Primary data.

The Table 2 upshots that majority of 55.3 per cent (49.5+2.9+1.9) of the computer users in Coimbatore invested an amount of ₹75000 and more on computer system.

Relationship Between the Amount of Investment And Profile Variables:

The extent of investment in computer by a person, fundamentally, is characterized by his profile status like gender, age, educational qualification, occupation and annual income. Hence, the existence of relationship between the 'amount of investment' and the 'profile variables' is examined. For this purpose, null and alternate hypothesis were formed as under:

H₀: There is no significant relationship between the amount of investment and profile variables.

H₁: There is a significant relationship between the amount of investment and profile variables.

For the purpose of testing this hypothesis, Mann-Whitney 'U' test and Kruskal Wallis test are used. Since the groups in the variable, 'Gender', is two in number, Mann-Whitney 'U' test is used. Further, as the groups in the variables, 'Age', 'Education qualification', 'Occupation' and 'Annual income' are more than two in number, Kruskal Wallis test is used. The results of the tests with reference to relationship between amount of investment and the profile variables are projected in Table 3

Table 3

Relationship Between Amount Of Investment On Computer System And Profile Variables

S. No.	Profile Variables	Size	Mean Rank	Z value / Chi-square	P value
I. Gender		Mann-Whitney 'U' test			
1.	Male	53	48.76	-1.558	.119
2.	Female	52	57.32		
II. Age		Kruskal Wallis test			

1.	Below 20 years	12	52.71	17.132	.002
2.	20 – 30 years	17	77.88		
3.	30 – 40 years	36	44.49		
4.	40 – 50 years	32	49.41		
5.	Above 50 years	8	53.25		
III. Educational qualification Kruskal Wallis test					
1.	Illiterate	2	43.25	3.407	.637
2.	School	2	34.50		
3.	Diploma	19	54.84		
4.	Graduate	27	56.26		
5.	Post Graduate	23	57.72		
6.	Professionals	32	47.53		
IV. Occupation Kruskal Wallis test					
1.	Agriculturist	7	40.50	4.430	.351
2.	Govt. Employee	12	51.00		
3.	Private Employee	23	62.37		
4.	Professional	49	50.47		
5.	Businessman	14	54.43		
V. Annual Income Kruskal Wallis test					
1.	Below ₹50,000	4	61.38	4.367	.498
2.	₹50,000- 1,50,000	20	54.45		
3.	₹1,50,000- 2,50,000	62	49.15		
4.	₹2,50,000- 3,50,000	14	64.50		
5.	₹3,50,000- 4,50,000	2	65.75		
6.	Above ₹4,50,000	3	49.50		

Source: Primary data.

Table 3 makes it clear that at 5 per cent level of significance, since the P value is more than 0.05 in case of gender (0.119), education qualification (0.637), occupation (0.351) and annual income (.498), the null hypothesis is accepted. It means that there is no significant relationship between the amount of investment on computer and the profile variables like 'gender', 'educational qualification', 'occupation' and 'annual income'.

It also discloses that at 5 per cent level of significance, since the P value is less than 0.05 in case of age (0.002) the null hypothesis is rejected. It means that there is a significant relationship between the amount of investment on computer and profile variables 'age'.

The examination of relationship between amount of investment in computer and profile variables, by testing of hypothesis, affirms that the amount of investment on computer by users in Coimbatore district is not related to their gender, educational qualification, occupation and annual income. The examination further makes it clear that the amount of investment on computer is related to the age of computer users. Thus, the above analysis affirms that except age all other profile variables are not related use of computer by users in Coimbatore in terms of amount of investment. Hence, the study further enquired about the other factors that influence the purchase decision of computer users.

5. Factors Influencing Purchase of Computer:

The preliminary survey of comes out with a series of factors that influence the purchase decision, with reference to computer system, of the computer users in Coimbatore district. For

the purpose of study, 18 important factors were identified as (i) Hard ware features⁸, (ii) Software support, (iii) Connectivity options, (iv) Security solutions, (v) Choice of colors (vi) Warranty, (vii) Social status, (viii) Weight, (ix) Price⁹ (x) Mode of payment, (xi) Power consumption, (xii) Ease to usage (xiii) Accessories provided, (xiv) Advertisement, (xv) Brand image, (xvi) Service network, (xvii) Shopping convenience and (xviii) 24x7 Service support.

During the survey the study participants are asked to state the level of influence of these factors on the purchase decision of computer users in Coimbatore district. The study analyzed the level of influence under five levels, namely, 'very high', 'high', 'normal', 'low' and 'very low' by assigning weights as 5,4,3,2 and 1 respectively. The analysis of the data collected revealed that the level of influence, the aggregate of the weighted points, was 453 points (315+92+39+2+5) for the factor 'Hardware features', followed by 403 points for 'software support', 374 points for 'Connective option'. 324 points for 'Security solutions', 300 points for 'Choice of colors' and so on as given in Table 4.

Table 4

Factors of Influence Towards The Purchase of Computer

Sl. No.	Factors	Very Low	Low	Normal	High	Very High	Total	Points
1	Hard ware features	5	1	13	23	63	105	4.31
		5	2	39	92	315	453	
2	Software support	4	18	12	28	43	105	3.83
		4	36	36	112	215	403	
3	Connectivity options	2	6	46	33	18	105	3.56
		2	12	138	132	90	374	
4	Security solutions	4	38	21	29	13	105	3.08
		4	76	63	116	65	324	
5	Choice of colors	32	10	24	19	20	105	2.85
		32	20	72	76	100	300	
6	Warranty	4	34	20	29	18	105	3.21
		4	68	60	116	90	338	
7	Social status	6	20	41	22	16	105	3.2
		6	40	123	88	80	337	
8	Weight	6	21	25	43	10	105	3.31
		6	42	75	172	50	345	
9	Price	3	8	12	69	13	105	3.79
		3	16	36	276	65	396	
10	Mode of payment	13	14	27	41	10	105	3.2
		13	28	81	164	50	336	
11	Power consumption	12	14	29	26	24	105	3.24
		12	28	87	104	120	351	
12	Ease to usage	33	10	19	20	23	105	2.9

⁸ BRUCKS, M. (1985), "The effect of product class knowledge on information search behavior", Journal of Consumer Research, Vol. 12 (1), Pp. 1-16.

⁹ RAY, S. Building a model for purchase decision of Laptops and Price Performance Analysis of Major Players. The Icfai University Press, 2009.

		33	20	57	80	115	305	
13	Accessories provided	13	14	38	18	22	105	3.24
		13	28	114	72	110	337	
14	Advertisement	37	12	25	22	9	105	2.56
		37	24	75	88	45	269	
15	Brand image	7	39	23	25	11	105	2.94
		7	78	69	100	55	309	
16	Service network	5	20	45	28	7	105	3.11
		5	40	135	112	35	327	
17	Shopping convenience	10	23	37	25	10	105	3.01
		10	46	111	100	50	317	
18	24x7 Service support	3	6	14	69	13	105	3.79
		3	12	42	276	65	398	

Source: Primary data.

Close observation of the above Table 4 highlights that the important factors influencing purchase of computer by consumers in Coimbatore district are 'Hardware features'(453 points), 'Software support' (450 points), '24x7 Service support'(398), 'Price '(396), 'Connectivity options'(374), and 'Power consumption' (351 points),

6. Suggestions Of The Study:

The findings of the study narrated above advocates that the amount of investment on computer by computer users relates to his age. As the variables like education, occupation, annual income and gender of the users are not related to the amount invested in computer, these are not influencing purchase decision. The study makes a specific suggestion that the computer users are to take into consideration six important factors, namely, hardware features, software support, service support, price, connectivity options and power consumption in making purchase decision.

7. Conclusion:

Computer technology is fast growing with newer technology, intruding into the daily life of all of us and offer more sophisticated and simple tools for the use of every one irrespective of their gender, age, income, level of education and occupation. **A careful scrutiny of information relating to the hardware, software, service, price, connectivity and power shall enable every user of computer to buy and use unique computer system meant for meeting their specific requirements at least cost with ease and effectiveness.** Effective design and implementation of marketing strategies focusing on the hardware, software, service, price, connectivity and power features of their products and services, the computer suppliers and easily win wider collection of loyal customers for them.

A Study on Buying Behaviour of Consumers towards Organized Retail Stores in Chennai

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Abstract :

The perception and buying behaviour of consumers towards organized retail stores are helpful for holistic understanding of fallings, insights, compassions, buying pattern and buying activities towards organized retail stores. The factors determining choice of organized retail stores among consumers are useful to discover major factors that determine selection of organized retail stores among consumers. Loyalty of consumers towards organized retail stores are helpful to ascertain the level of loyalty of consumers and pave means to absorb new consumers. In this study we will discuss the buying behavior of the consumers, determined factors and loyalty of the consumer buying behavior towards organized retail stores in Chennai.

Keywords: Buying behavior, consumers, retail stores, factors of buying behavior

Introduction :

Nowadays, organized retail stores are swiftly growing and highly prefer among consumers across India particularly in urban centers. This is paramount development is contributed by numerous factors starting from policies to changes in buying behaviour of consumers. Continuous increase in disposable income, growing demands for quality products, consciousness on brands, emergence of higher quantum of middle and upper middle income groups, education and awareness are leading to popularization of organized retail formats among consumers.

India is one of the largest nations having large number of organized retail store and it is having around 14 million organized retail stores and it is having share of only five per cent in gross retail operations and it is growing very well in the coming years. Besides, retail sector forms 10-12 per cent of Gross Domestic Product (GDP). In India, the retail growth is 23 per cent before 1990; during the year 1990 to 2000 it was increased to 34 per cent after 2000 it reaches 46 per cent at present. The size of the Indian Retail Industry touched Rs.1810000 crore by 2012 and the organized retail may constitute around Rs.2530000 crore in 2020 and it is growing rapidly at the rate of 15-20 percent in the next 10 years.

Consumer behaviour towards organized retail stores:

Across all sections encompassing the value-for-money seeker, the monthly grocery and annual clothes consumer, the impulsive consumer and the promotion-offer-pursuer, buying behaviour pattern in the city is changing radically. People have imbibed an aspirational lifestyle and have become brand conscious. Consumers no longer feel intimidated by the well-formatted air-conditioned retail stores and the upper-middle class as well as the lower-middle class is gradually being swept into the different formats of organized retail stores.

Consumers increasingly expect higher quality and service and customization. In response entrepreneurial retailers are building entertainment into stores with coffee bars, demonstrations and performances. They are marketing an 'experience' rather than a product assortment.



Subsequently, store-based small retailers are succumbing to the growing power of giant retailers. Although the influence of the elements differ, factors like store location, store design and physical facilities, merchandise assortment, advertising and sale promotion, store personnel, consumer services and clientele exert great influence on store choice and buying behaviour. Product variety and convenient timings seem to be primary impression about the store, consumers carry with them.

Indian consumers today became more demanding with their rise in standard of living and changing lifestyles. The major factors that have fuelled this growth are the increase in disposable income of the consumers, improved lifestyles, increased international exposure and high awareness among the consumers. These macro level factors alone can't be held liable for this spectacular market growth. Simply having the cash to shop for doesn't necessarily translate into an actual purchase. The Indian consumers have used the retail boom to their advantage. They now have more options than before and exert their power of data alright.

The different factor, changes in life styles and features of consumers are attracting them towards organized retail stores. In terms of buying a specific product, a consumer is conscious of some risks like finance, psychology, performance and time. Increasing disposable income, educational level, use of plastic money and knowledge and exposure to global market trend are highly impacting buying habits of consumers in India.

Availability of wide range of products and brands, social norms, discounts, suggestions of friends and family, better relation among retailers and consumers, insights of consumers on organized retail formats are highly influencing buying behaviour of consumers in organized retail stores. There has been an interesting change in consumer taste and preferences over a final few years since the opening from the market, entry of foreign brands and their products. With increasing exposure to global products and the media, the preference for the relatively expensive but quality-guaranteed branded products has increased. Urban consumers today in increasingly becoming fashion conscious and hence brand names are more important to them more than the utility aspect of the products.

Exposure to the internet and privatization of the television channels also contributed immensely to shifts in consumer demands leading to the need for more sophisticated retail chains to cater to their varied and specialized demands. The huge proportion of young consumers in India implies a demographic dividend for the retail sector since this portion of the consumers is more brand conscious and ready for spending more on quality products.

Objectives:

- To examine buying behaviour of consumers towards organized retail stores.
- To discover factors determining choice of organized retail stores among consumers.
- To ascertain loyalty of consumers towards organized retail stores.

Research methodology :

The present study is conducted in Chennai city. Data are collected from primary and secondary sources. The primary data are collected from consumers of organized retail stores in Chennai city. The secondary data are collected from the sources such as books, journals, research studies, and research report and on line journals. Totally 711 samples were collected from the

consumers of organized retail stores and the collected data are discussed with necessary statistical tools.

Table 1: Buying behaviour of consumers towards organized retail stores

Sl. No.	Buying Behaviour	Mean	Standard Deviation
1.	I buy products in organized retail stores because of my knowledge	3.99	0.65
2.	I feel happy about buying products in organized retail stores	3.94	0.71
3.	I buy products in organized retail stores over conventional stores even quality of products are same	3.91	0.74
4.	I buy products in organized retail stores if they are costlier than conventional stores	3.33	1.15
5.	I am very much interested to buy all type of products in organized retail stores	3.75	0.98
6.	I buy products in organized retail stores because of their performance is better than conventional stores	3.87	0.78
7.	I buy products in organized retail stores because they are giving discounts	3.85	0.82
8.	I buy products in organized retail stores because they are worthy	3.79	0.92
9.	I buy branded products in organized retail stores	3.83	0.85
10.	I make minimum efforts to buy products in organized retail stores	3.81	0.88
11.	I buy products those are reasonably priced from organized retail stores	3.77	0.95
12.	I buy products in organized retail stores because of maintaining good relation with consumers	3.37	1.13
13.	I buy products in organized retail stores due to their buying atmosphere	3.71	1.05
14.	I buy products in organized retail stores as they are reliable	3.73	1.01
15.	I buy products in organized retail stores because of friendliness of employees	3.67	1.10

Source: Primary Data

The consumers of organized retail stores are agreed with they buy products in organized retail stores because of their knowledge, they feel happy about buying products in organized retail stores, they buy products in organized retail stores over conventional stores even quality of products are same, they are very much interested to buy all type of products in organized retail stores, they buy products in organized retail stores because of their performance is better than conventional stores, they buy products in organized retail stores because they are giving discounts, they buy products in organized retail stores because they are worthy, they buy branded products in organized retail stores, they make minimum efforts to buy products in organized retail stores, they buy products those are reasonably priced from organized retail stores, they buy products in organized retail stores due to their buying atmosphere, they buy products in

organized retail stores as they are reliable and they buy products in organized retail stores because of friendliness of employees, but, they are neutral with they buy products in organized retail stores if they are costlier than conventional stores and they buy products in organized retail stores because of maintaining good relation with consumers.

Table 2: Level of buying behaviour of consumers towards organized retail stores

Sl. No.	Level of Buying Behaviour	Number	Percentage
1.	Low	126	17.72
2.	Moderate	333	46.84
3.	High	252	35.44
	Total	711	100.00

Source: Primary Data

Amidst 711 consumers, 35.44 per cent of consumers hold high level of buying behaviour, but, 17.72 per cent of them hold low level of buying behaviour towards organized retail stores.

Table 3: Factors considered by consumers while buying in organized retail stores

Sl. No.	Factors Considered While Buying	Mean	Standard Deviation
1.	Type of products	3.90	0.72
2.	Exchange of products	3.37	1.05
3.	Replacement of products	3.85	0.87
4.	Ease of access to products	3.92	0.75
5.	Credit facility	3.32	1.08
6.	Time spend for buying	3.83	0.90
7.	Attractive brands	3.87	0.82
8.	Behaviour of employees	3.78	0.96
9.	Retail schemes	3.29	1.11
10.	Enjoyment	3.73	1.01

Source: Primary Data

The consumers of organized retail stores are agreed with type of products, replacement of products, ease of access to products, time spend for buying, attractive brands, behaviour of employees and enjoyment, but, they are neutral with exchange of products, credit facility and retail schemes as factors considered by them but buying in organized retail stores.

On the basis of Mean \pm SD, the factors considered by consumers while buying in organized retail stores is segregated as low moderate and high levels (Mean = 36.86 ; SD = 4.54) and is disclosed in Table 4.

Table 4: Level of factors considered by consumers while buying in organized retail stores

Sl. No.	Level of Factors Considered While Buying	Number	Percentage
1.	Low	138	19.41
2.	Moderate	340	47.82
3.	High	233	32.77
	Total	711	100.00

Source: Primary Data

Amidst 711 consumers, 32.77 per cent of consumers possess high level of factors considered while buying, but, 19.41 per cent of them possess low level of factors considered while buying in organized retail stores.

Table 5: Loyalty of consumers towards organized retail stores

Sl. No.	Loyalty	Mean	Standard Deviation
1.	I will surely purchase in the same organized retail store in the near future	3.90	0.87
2.	I consider this organized retail store as my prime choice	3.92	0.83
3.	I will purchase in the same organized retail store in next time	3.87	0.93
4.	I recommend this organized retail store to someone who seeks my advice	3.83	0.98
5.	I say positive things about this organized retail store to other people	3.30	1.03

Source: Primary Data

The consumers of organized retail stores are agreed with they will surely purchase in the same organized retail store in the near future, they consider this organized retail store as their prime choice, they will purchase in the same organized retail store in next time and they recommend this organized retail store to someone who seeks their advice, but, they are neutral with the positive things about this organized retail store to other people.

Table 6: Level of loyalty of consumers towards organized retail stores

Sl. No.	Level of Loyalty	Number	Percentage
1.	Low	275	38.68
2.	Moderate	300	42.19
3.	High	136	19.13
	Total	711	100.00

Source: Primary Data

Amidst 711 consumers, 19.13 per cent of consumers are exhibiting high level of loyalty, but, 38.68 per cent of them are exhibiting low level of loyalty towards organized retail stores.

Table 7: Impact of factors determining choice of organized retail stores on loyalty of consumers

Factors Determining Choice of Organized Retail Stores	Regression Coefficients	t-value	Sig
Intercept	2.306 ^{**}	15.584	.000
Quality (X ₁)	.384 ^{**}	8.635	.000
Service (X ₂)	.367 ^{**}	7.976	.000
Price (X ₃)	-.272 ^{**}	6.842	.000
Layout (X ₄)	.215 ^{**}	6.250	.000
Promotion(X ₅)	.328 ^{**}	7.168	.000
R ²	0.57	-	-
Adjusted R ²	0.55	-	-
F	43.728 ^{**}	-	.000

Source: Primary Data

^{**}Significant in 1% level

The coefficient of multiple determination (R^2) is 0.57 and adjusted R^2 is 0.55 revealing the regression model is good fit. F-value of 43.728 is significant implying that the model is significant. Quality, service, promotion and layout have positive and significant impact on loyalty of consumers, but, price has negative and significant impact on loyalty of consumers towards organized retail stores.

Conclusion :

This study examines factors determining choice of organized retail stores among consumer's buying behavior and loyalty towards domestic organized retail stores. Quality, service, price, layout and promotion are factors determining choice of organized retail stores among consumers. Perception, buying behaviour and satisfaction of consumers towards organized retail stores are moderately, positively and significantly inter related. In overall, it is concluded that there is a scope for improving buying behavior of consumers and it will be helpful to improve their loyalty towards organized retail stores.

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Users Perspective on Mobile Library Services at Academic Libraries

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Abstract:

The day by day the mobile technology is increasing. the mobile phones and the mobile technology having a huge impact on the young generation. as we know this technology is growing day by day and reaching towards everyone's hands. It means it's a time for librarians to become a mobile friendly and start using innovative technology in their library profession to avoid footfalls in library.

Keywords: mobile technology, Academic Libraries, Engineering College Libraries, Mobile Library Services, QR Code

Background of the research :

The purpose of this study to know the user's perspective towards the mobile library services at engineering colleges. The day by day the mobile technology is increasing. the mobile phones and the mobile technology having a huge impact on the young generation. as we know this young generation is mobile technology addicted and try to meet there every demand of information with the use of this technology. as we know our users are techno-savy and using this mobile technology in there every activity of life. With the keeping in mind libraries also needs to explore some a new technology service, which cater the mobile devices. due to their growing importance in everyone's life and therefore to know the user's perception survey has been taken to the hand.

as we know this technology is growing day by day and reaching towards everyone's hands. It means it's a time for librarians to become a mobile friendly and start using innovative technology in their library profession to avoid footfalls in library.

Introduction:

As we are in the Digital age our libraries are also changing from traditional library-hybrid library-digital library and now it's the time of virtual library. The day-by-day Technology has been changed. Which also affect the needs and information seeking behaviour of the library users. we have to take into consideration this situation and try to change our information providing methodologies according to seeking behaviour of the users.

as we know our users are multitasking want a quick information on their problems. they didn't have much time to go at library and find information from books. if they get their required information on their mobile devices at their finger then and then only the young generation is going to use library services and hence today's librarian needs to design their library services with keeping in mind young generation searching strategy.

our many traditional library services we can transfer /mould in such a way, through which definitely we can serve our young generation users. our each and every traditional library

service we can transfer in digital library service as well as in mobile library service. Our today's librarian facing problem of Limited library staff and budget so in this case, technology definitely help us to reach our every user with our limited staff and budget.

research problem :

The need for more mobile library facilities prompted the research question for this initiative. To do so, it was determined that it was necessary to learn about the different types of mobile devices that students had at the time. researcher wanted to see if they were using them and whether they were interested in using their smart devices for library resources. The results of this feedback will help the librarian of the engineering colleges to make decisions on probable areas of libraries where mobile library services may adopt.

Objective:

the aim of this research is to investigate whether there is a demand for mobile library services at engineering colleges. and what type of mobile library services should be considered to Cater our user.

- To know which type of mobile devices owned by the engineering students
- To know students of engineering colleges, use their mobile devices for which purpose
- To understand student's opinion about use of their mobile devices for library services
- To investigate the potential areas in which mobile library services should be given

Scope of the research

The study was conducted on the UG students of the Engineering Colleges. overall, 73 students were participated in this study and give their opinion about the use of mobile devices for gaining the library services. the finding of this study was used to introduce the variety of library services in mobile friendly environment.

Research methodology

researcher was using a survey method for this research. the purpose of this study is to investigate/know whether there is a demand for mobile library services among the engineering college students of Pune. a short survey was taken to solve the research problem. the questionnaire was used for the data collection, with the help of Google forms. the data were analysed with the help of Microsoft Excel. different question formats were used for this study.

Literature Review

Users are more likely to conduct fast, context-based searches and are not bound to a specific location (Walsh, 2012, p. 24). QR codes are used in the library at the University of Huddersfield to connect services and information relating to their location (Walsh, 2010a). According to L. Thomas (2012), mobile technologies empower students by allowing them to be self-sufficient and providing easy access to librarians. Patrons would be less likely to visit the physical reference desk if mobile systems are well-designed, and this will fuel demand for "patron self-service technology and sensitive contact." (p. 27, 2012)

Mobile Technology

Mobile devices are precisely as its name implies: handheld technology. It refers to any gadget that you can take around with you and use to perform a wide range of "tasks." It is technology that allows certain activities to be completed using a mobile phone, a PDA, a car, a laptop, and other devices. Mobile IT devices contain -Laptop, netbook computers, Wireless

debit/credit card payment terminals, Global positioning system (GPS) devices, personal digital assistants, Mobile Phones and “Smart Phones” Ms. (Dhara Sharma, Dipti Ranjan Sahoo,2014). Mobile technology brings computing and the Internet to the wireless medium, allowing for increased connectivity, coordination, and knowledge sharing versatility. Encrypted connectivity to a private network is provided by virtual private networks. In the other hand, this technology offers one-of-a-kind learning experiences as well as portability and versatility. Mobile technologies could be used in service advancements, m-learning, mobile user teaching, web tutorials, reference systems, and catalogue searches by academic, general, and special libraries. (Sudhir Ramdas Nagarkar)

Mobile Library Services-

Libraries may provide a variety of mobile services to interested patrons, including:

SMS - Libraries can offer “text-a-librarian” service to its patrons. Which is ideal for simple questions that can be answered with a brief response.

Instant messaging - Instant messaging, also known as talk, allows libraries and their patrons to communicate in real time over the internet. Instant messaging as a service can be implemented using a variety of technology solutions.

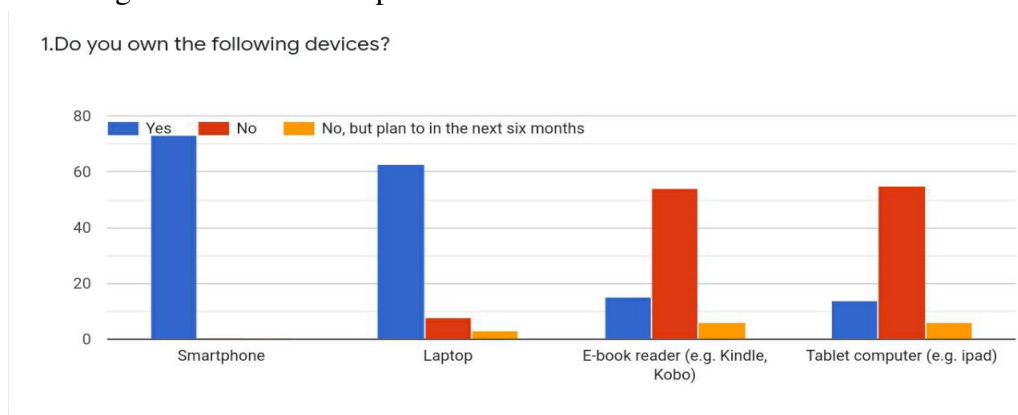
Mobile Web Sites - many businesses, Institution and organisations create mobile versions of their websites that are more suited for browsing on mobile devices in addition to or instead of mobile apps. e.g., Encyclopedia Britannica Mobile, MedlinePlus Mobile, World Cat Mobile etc.

mobile Apps -mobile Apps are built for a single application, unlike mobile websites, which are programmed to run through many platforms. Since they're just for one audience, the focus should be on making the content as appealing as possible. They often need more experience to build than mobile websites, and therefore have the ability to be more costly.

QR code- QR stands for Quick response.it is a form of two-dimensional (2-D) matrix barcode that can be scanned using smart and web-enabled cell phones with cameras. QR code allows to browse website URL, email address, catalogue information, phone numbers, and so on. (Shettar, 2013). To put it another way, a QR code can store data in either horizontal or vertical direction which includes numbers, messages, hyperlinks, contact information, e-mail addresses, phone numbers, maps, and so on. (Saleeq Ahmad Dar and Margam Madhusudhan,2016)

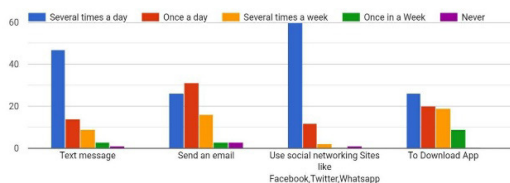
Data analysis

Researcher create questioner nearabout 19 Questions. Researcher got total 73 responses for this survey. Collected data were analysed with the help of Microsoft Excel. When researcher ask about which type of mobile devices respondent have, researcher found that 100% of the respondent use the smartphone where as 86% respondent used laptop and 20% use eBooks and 19% use tablet computer. 63% of the respondent having Limited internet plan and only 35% respondent having unlimited internet plan.

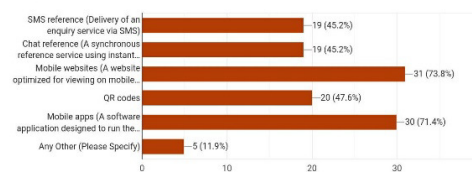


The next question is asking about the use of smartphone for doing various activities. in this respond researcher found that 65% of the respondent use their smartphone for sending the text messages several times a day, then 19% students use their smartphone to send the text messages once a day, 12% several times a week and 4% once in a week .likewise researcher ask other activities also to the respondent and get the information that 36% student use their smartphone for sending emails several times a day 82% student use their smartphone for navigating Social Networking Sites like Facebook and Twitter and 36% use their smartphone for downloading app ,43% use their smartphone for download coursework material and 44% use their smartphone for downloading eBooks and online journals. respondent of this survey mentions here that their use of laptop in the daily activities to download a course work material several times a day. 33% of the students use laptop to download Course work material Whereas 36% students use laptop to send the emails.10% of the students use tablet computer for sending text messages and download the videos and apps. there are 11% of the students who use tablet for sending e-mails and using social networking sites.

3.how often do you use your smartphone to do the following? Please tick all that apply.



7.If Yes, from the following which mobile library Services do you know?
 42 responses

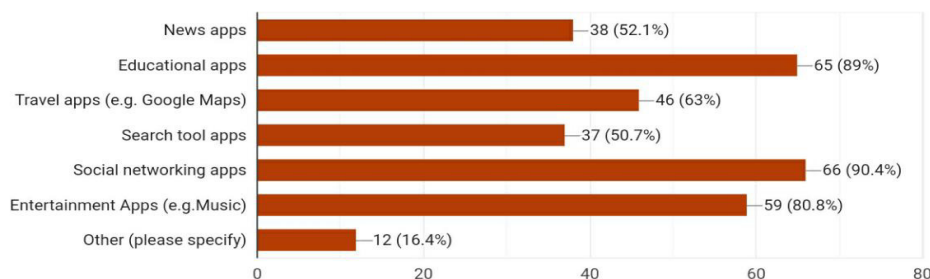


When the researcher asks about familiarisation of mobile library concept, in this response researchers found that 53% of the student know the concept of mobile library. in this regard researcher got 42 responses out of 73 students. out of which 73% of the students know the mobile website, 71% of the students know the concept of mobile app and 43% of the students know the concept of QR code Technology.

The responses for the question- what type of mobile apps students were used? Researcher found 90.4% students use social networking apps, 89% of the students use educational apps and 80% of the students choose entertainment Mobile apps.

8..what type of mobile apps do you use?

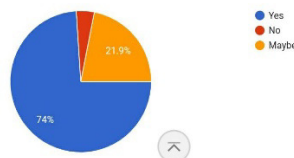
73 responses



The question about whether there is college library is providing mobile library services or not? in this regard researcher found 56% students does not know about whether their college library is providing mobile library services or not, 28% student's college library is not providing mobile library services and 15% student's college library is providing mobile library services.to continue the above question of mobile library services, researcher ask the respondent if your library plan to provide mobile friendly website how likely would you do the variety of activities

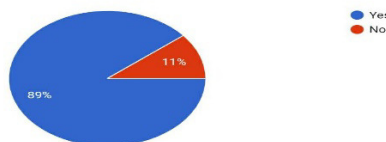
with the help of them? in this regard surprisingly students say that 64% of the students happy if they get the information through mobile library services on their phone about the new arrivals, 59% of this are happy if they get the information about library catalogue, 55% of the students happy if they get information about reservation of book and online journals whereas, 42% of the students interested in to check the library loans and 48% interested in getting library information. When Researcher ask to the respondent about the various mobile based library services and respondent respond that 51% of the students interested to get Ask the librarian service via text and chats, 66% of the students are like to get the overdue information and 59% of the students wanted to reserve the book and updates from library. moving further the aim of the research is to get the information about willingness of respondent in downloading eBooks through mobile app or mobile devices.in this regard respondent express their views.74% users are ready to download the eBooks through their own mobile devices and very surprisingly 21% students unable to decide about downloading eBooks option.

12. would you like to view or downloaded one of the your library books on your mobile device?
 73 responses



74% of the people get connected to college Wi-Fi network with their mobile device and reasons are, to access IP address, to search the queries that arises for while doing Course work, to get extra knowledge for download purpose, for educational purpose, when their personal internet plan is fully utilised and sometimes for entertainment. Researcher found 93.2% of the respondent know the concept of QR code whereas 89% students wanted to see this QR Code at library services.

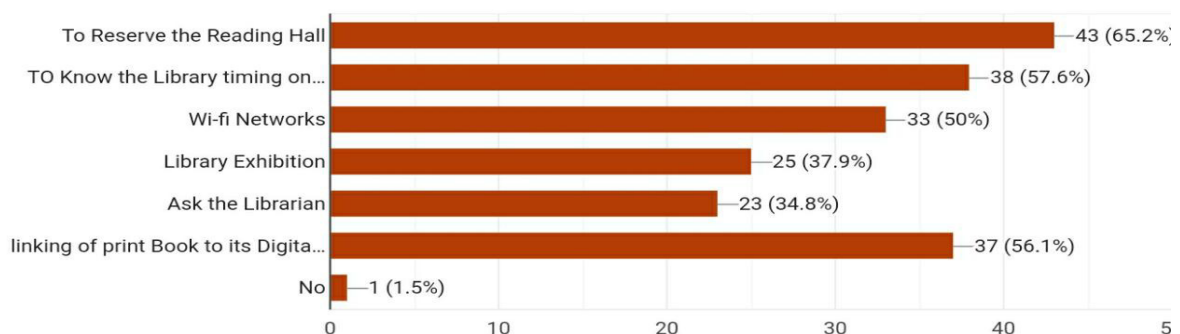
17. if yes, would you like to see this QR code at your Library ?
 73 responses



When the researcher asks about the user's willingness to use the QR-code at libraries and get the information, 65% of the respondent want to reserve their seat is reading hall with the help of QR code, 57% wanted to know the library timing with the help of QR code and 56% wanted linking of print collection to its e- version.

18. for which library services you might like to use QR codes at library?

66 responses



Conclusion:

Mobile library services are very helpful in the today's techno-savvy age. the users of Engineering College libraries are very techno savvy, they owned their personal mobile devices with them and also the carry their mobile devices with them every day. 100% of the library users of the engineering colleges having their own Smartphone and the use of laptop is also very positive in numbers. engineering colleges students Express their willingness about using the mobile library services. They also know the QR code Technology. they use that technology in their daily life and also ready to use this technology in their library services. they are feeling happy if their library is providing such type of library services. overall, the student's willingness and responses are very positive towards the mobile library services. they also suggest some recommendations about the library regarding the user orientation programme about how to use mobile library and also looking forward if they get the books and journals in e version rather than print format.

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A study of Gautama Buddha's Life and Buddhism

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Abstract:

Teaching of Gautama Buddha showed the path to many people and they found the meaning of their life. Million people follow the path of Buddhism. Buddhism spread all over the globe. Gautama Buddha taught virtues like wisdom, kindness, patience, generosity and compassion. These virtues are really the need of everyone to tackle many problems in our life.

This review paper throws light on life of Buddha and how his teaching spread and followed by people. It also focuses on the different aspects of Buddhism.

Keywords: Lord Buddha, Buddhism, noble truth, social development

Introduction:

Early Life of Buddha

Siddhartha Gautama, the founder of Buddhism, born in 563 BC at Lumbini in Nepal [6]. His mother died after few days of his birth. He was raised by her kind step mother queen Mahamaya. Gautama's father King Suddhodana was built three palaces for him; when he came to know that his son would be a spiritual leader or great king. He wants to secure his son from the worldly miseries [3].

He was married to Yashodhara at the age of 16 and Rahula was his son [9]. One day he saw four different states of man – sick man, old man, corpse and ascetic; after that the idea of renunciation occurred to the Buddha [4]. He came to a decision to find the truth. He left all luxuries, his beloved wife and son and adopted the practice of the denial of physical desires to attain a spiritual goal [5].

Gautama became the Buddha means "enlightened or awakened one" after 49 days of uninterrupted meditation [2]. He wandered for seven years and he attained enlightenment at the age of 35 at Uruvela on the banks of the river Niranjana while meditating under a Peepal tree [6]. This tree then called as 'Bodhi tree' and the place as Bodh Gaya (Bihar). He spent the rest of his life teaching others about how to achieve this spiritual state. His first sermon is called 'Dharmachakrapravrtan' [2] (Turning of the wheel of law).

Buddha asked his disciples to avoid two extremes of fulfillment in worldly pleasure and the practice to follow the middle path [2]. According to Buddha, everyone was responsible for their own happiness in life. At the age of 80, he died in Kushinagar (UP, 483 BC). This event is called the Mahaparinirvana [2,10].

Events of Buddha's life are known by different terms and symbols. **Lotus /Bull** show the birth of Buddha. **Horse** represents The Great Renunciation (Buddha left his home, Mahabhinishkramana). **Bodhi tree** means attained Enlightenment (Nirvana) and **Wheel** represents First Sermon (Dhammachakraparivartan) and **Stupa** means Death of Buddha (Mahaparinirvana).

Objectives of the Study:

- 1) To study the life of Buddha.
- 2) To study the different values given by Buddha to the world.
- 3) To analyses the impact of Gautam Buddha's life on Society.

Theory of Buddhism:

Teaching of Buddhism is based on four noble truths and the eight-fold path. The noble truths are: **Dukkha** means suffering which make us realize that the world is full of sorrow. There is no end of pain. **Samudaya** means cause of suffering (origin of ill-being): craving for material goods or sensual pleasures. **Nirodh** means we can conquer sorrow by conquering desire (termination, stop craving). **Magga** is the end of suffering; origin of well-being [10]. It shows Noble Eightfold Path. Desire can be conquered by following the eight-fold paths (**Ashtangirka Marga**). [1]

Buddha presented the Noble Eight-fold Path which he believes that break the chain of suffering. This marg taught us the right belief, right mindfulness, right speech, right resolve, right occupation, right effort, right conduct, and right Samadhi (meditation). This path taught that Actions have consequences, cycle of rebirth is painful. We should focus on love and compassion. We never speak lie and don't be rude, never injure or kill anybody, don't take the things which are not ours. Only possess what is essential to sustain ethical living. Be aware of thoughts and action, stay away from negative thought. Finally achieve the state of meditation.

Triratnas of Buddhism are Buddha, Dhamma and Sangha.

Buddha is the highest spiritual potential in everyone.

Dhamma means the teaching of Buddha or natural truth. The Dharma is word in Sanskrit and Dhamma is in Pali language. It taught that world is unsatisfactory, things are based on causes and conditions. Follow the path of generosity, behave ethically, increase our wisdom, lessen the stress. By practicing Dhamma one can ends his suffering and become enlighten. Aspects of dharma are the textual tradition, practice and realization [4]. **Sangha** was the order of monks and Nuns who follow Buddhism. Regardless of caste or social standing they devote all of their time and energy to the attain the goal. They spread the knowledge selflessly which is achieved by them [10].

Five Precepts or Panchashil are:

Do not
commit
Violence.

Do not
covet the
property of
others.

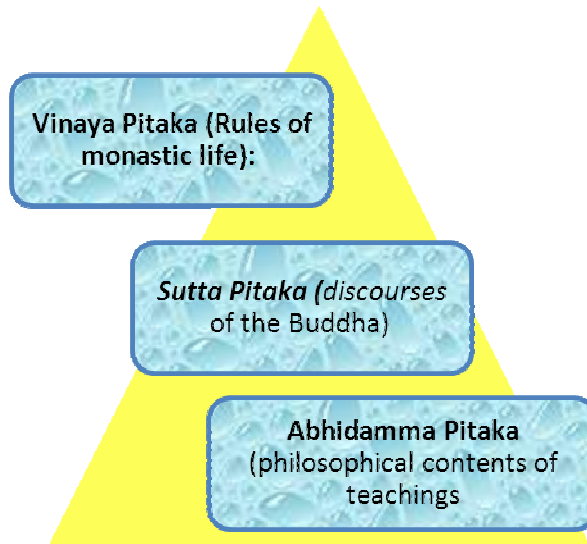
Do not
indulge in
corrupt
practices.

Do not
speak a lie.

Do not use
intoxicating
substances
like drugs
or drink

Buddhist Literature:

Buddhas teachings were oral so after the death of Buddha, his disciples compiled his teachings in pitakas. Tripitikas (Three-fold basket) are Buddhist scriptures in pali: collection of Buddhist writing [1]. Rules of conduct to the monastic life of the monks and nuns are included in **Vinaya Pitaka**. The teaching of Buddha (Dhamma), divided into various collections are found in **Sutta Pitaka** and philosophical contents of Buddha's teaching are in the **Abhidamma Pitaka**



There are more than 2,000 sutras (sacred teachings). The Tibetan text The Book of the Dead explains the stages of death in detail.[1]

Other important Buddhist texts include Jatakas, Divyavadana, Buddhacharita, Bodhivamsa, Dipavamsa, Mahavamsa, Milind Panha etc [6].

Buddhist Architecture:



The stupas at Sanchi, Bharhut and Gaya are wonderful pieces of architecture. Some more archaeological site are Ajanta Caves Aurangabad, Pandavleni Nashik, Ellora and Ajanta caves in Maharashtra [7]. Mahavihara at Nalanda, Bihar, Buddhist Monuments at Sanchi, MP, Mahabodhi Temple Complex at Bodh Gaya, Bihar, Sarnath Pillar, Nagapattinam vihara (Residential place for Buddhist priest) Tamilnadu [7].

Social Development through Buddhism:

Buddhism has made major contribution to the social development of India. The concept of ahimsa (non-violence) was its main offering. Buddha believed in karma and ahimsa. Buddhism became popular in lower orders as it did not support the caste system. Buddhism doesn't believe in supreme God [10], their goal is to achieve the wisdom and inner peace. Buddhism was liberal and democratic. Buddha considered every soul as equal. Women were allowed to participate in **Sangha**. This can be taken as a kind of revolution in the history of Indian religions. Buddha tried to fight evil by goodness and hatred by love. He remained calm and controlled under difficult conditions and deal with his opponents with presence of mind. As Pali language was the language of common people and Buddha wanted to teach common people, he taught people in Pali [2].

The Buddha said that it didn't matter what a person's status in the world was, or what their background or wealth or nationality might be. All were capable of enlightenment, and all were welcome into the **Sangha**.

Buddhism not only contributed to social revolution but also to the development of various art forms such as architecture and literature. Buddhism was soon spread into foreign countries like China, Japan, Mongolia, Burma, Java, Sumatra, Tibet and Ceylon and exercised a profound influence on the culture and civilization of those countries [2]. These countries believed that India is a holy place and the source of their religion. Political and economic relations are developed with these countries. Spiritual, Cultural, and Social life gradually changed between the mid-6th and mid-4th centuries by teachings of Buddha.

Indian culture influenced by Buddhism mainly during the Maurya empire. Emperor Ashoka spread the teaching of Buddha significantly. King Bimbisar, King Prasen jeet, King Ajatshatru, King Udaysen, King Kanishka and King Harshwardhan are some of the major kings who followed the Buddhism. Buddhism first influenced in East and Southeast Asia then spread to the West.

Its contribution to the art and architecture of India was also remarkable. Taxila, Nalanda and Vikramasila are residential universities. Through the teachings of Buddhism, the language of Pali and other local languages were also developed. Indian culture spread to many parts of Asia.

Spread of Buddhism:

Buddha's disciples became Buddhist monks and traveled in various part of India spreading his teachings [11]. Desire is the cause of pain; so, Buddha showed a way to live controlled life. If followed by everyone, remove all injustice and inhumanity. Buddhism is primary religion in Tibet and national religion in Cambodia, Thailand. Emperor Ashoka decided adopted Dhamma after the n Kalinga conquest, The Chinese pilgrim Fa-Hien (399-414 A.D.) and Hiuen-tsang (629-645 A.D.) traveled from China to India and lived in India approximately 14 to 15 years. They were greatly influenced by Buddha Dhamma[11].

Conclusion:

Life of Buddha is fascinating and his teachings give insights to face problems of life. Even after thousands of year Buddha's teachings remain powerful throughout the world. One should end his sufferings or alleviate the pain by reducing greed, hatred and spreading love. By altering the perspective, we are able to live a meaningful life. Buddhism is one of the greatest religions of the world. Buddhism attracts new followers continuously.

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Research on Packaging and Advertising of Creative Fast Moving Consumer Goods

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Structured Abstract:-

This research paper is an analysis of creative FMCG packaging and advertising, Marketing is a very important concept in today's world. In terms of marketing, we know the marketing mix very well we will consider P, such as product, price, location, promotion. Once again there is a combination of promotions, such as promotions, public Relationship, advertising, packaging, etc. In this study, packaging and advertising have always been important because it is Convince people to buy. Both packaging and advertising play a vital role in the market. People are very fascinated Eye-catching packaging. In this study, because consumers are using a lot of fast moving consumer goods every day, they are concentrated. They also need such packaging to preserve their products and provide correct information. Consumers are aware of packaging and advertising, but little is known about its innovation and creativity.

Advertising is also one of the important weapons to persuade consumers to buy products. No ads, Consumers don't know anything about the product. It is an advertisement that spreads information and conveys it to people. But people are busy they hardly read advertisements and get information. Therefore, creative advertising will attract them and influence them to buy products. Creative advertising not only does it mean its color or design, but it should also be more important than fabulous things.

In this article, the researchers studied how packaging and advertising can induce respondents to buy products without Waste a lot of time and salesman's time. Respondents are very knowledgeable about packaging, which allows them to even buy don't know the product. In addition, only after knowing the creative product, the interviewees can display their products with the help of creative advertising, and they can easily remember messages. Therefore, researchers are very interested in understanding how people react to the ads on the ads the media and products are packed in the best and beautiful packaging.

Key words- Packaging creativity, modern fast-moving consumer goods packaging, emerging new media advertising, fast-moving consumer goods creative advertising, Consumers' perception of packaging and advertising.

Introduction: -

In today's era, packaging and advertising have played its initial role, but used it as a product tool Protect and play a key role in development on the shelf Appeal, provide product information and establish Brand image and popularity. As packaging and the role of advertising in marketing is becoming more and more important, so research Entering this field is becoming more and more important. This The importance of packaging design as a means of transportation

Increasingly fierce communication and brand competition FMCG packaging market. Ads will also play important role in the human brain

Packaging and advertising in product promotion. Good packaging and fun Advertising will attract the attention of potential customers. It can Has influence on the decision to purchase the product. Combination of packaging and advertising campaigns and the right price, the product can succeed. Now, the packaging itself has become the company's sales promotion tool. Customers' shopping behavior is also inspired by packaging satisfactory packaging, color, wrapping paper and other characteristics. Wrap me up Bundling will become the remaining promotion proposition, thereby stimulating impulse buying behavior. Packaging will increase revenue and market percentage and reduce Marketing and promotional expenses

Consistent with (Rundh, 2005) package Customers' attention to positive brands will increase their photos and inspire the buyer's perception of the product. In addition, the packaging conveys an extraordinary price Commodities (Underwood, 2003; Silayoi and Speech, 2007), packaging Differentiate and allow customers to decide products from a wide range of parallel products, packaging can also stimulate customer shopping behavior (Wells, Farley and Armstrong (Armstrong, 2007). Previous research has shown a collection of wrapping cloth and bundling elements. To some extent Obtain the buyer's purchase behavior of fast moving consumer goods through selection Amino-linked products are safe and environmentally friendly Packaging technology will affect consumers' shopping behavior choices. Some Researchers try to understand all the volume factors of packaging and their impact on packaging Buyer's purchase options. The literature analysis of the surveyed questions shows that there is no consensus on the classification of the surveyed persons. Packaging elements and packaging research methods have an impact on consumers' purchasing decisions. Some Researchers tried to investigate all possible components of the packaging and their impact on consumers' purchasing decisions. Others focus on the various elements of packaging and their impact on consumer buying behavior.

Objectives:

- 1) To understand consumers' views on fast-moving consumer goods Packaging and advertising.
- 2) To identify the attributes that attracts consumers.
- 3) To determine your favorite aesthetic Component of FMCG packaging and advertising.
- 4) To Distinguish between Indians and foreigners FMCG packaging.

Research methodology:-

- This study uses the focus group approach Understand consumer behavior on packaging FMCG products and advertising. The challenge Researchers will assimilate packaging and advertising by understanding effective purchasing decision models Consumers are concerned about packaging and FMCG advertising.
- The paper is descriptive and analytical in nature.
- This article attempts to analyze Research on Packaging and Advertising of Creative Fast Moving Consumer Goods.
- According to research needs, my research is completely based on secondary data.

Literature of review:-

Rita Kuvykaite (2009) conducted a descriptive study. According to Rita Packaging attracts special attention from consumers the brand enhances its image and influences

consumers' perceptions of the product. Packaging also gives unique value To product (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004), as a tool of differentiation, that is to help consumers Choose products from a variety of similar products to stimulate customer buying behavior (Wells, Farley and Armstrong (Armstrong, 2007). Therefore, parcels play an important role in marketing communications and can be regarded as one of the most important factors affecting consumers to buy packaging, packaging elements and their impact on packaging Consumer buying behavior has become a related issue. His theoretical analysis based on packaging elements and their components the influence on consumers' purchasing decisions reveals empirically the elements that have the ultimate influence on consumers select. The research method used by Rita is a systematic comparative analysis of scientific literature; experience when research is being created, manufacturers and designers must consider six variables efficient packaging: Form, size, color, graphics, material and flavor. Similarly, Kotler (2003) distinguishes six elements According to his opinion; the decision to adopt packaging must be evaluated: size, form, material, color, text and brand. Rita's research results show that the impact of packaging elements on consumers' purchasing decisions can be Stronger. He concluded that Package can be regarded as one of the most valuable tools in marketing today Communication, so a more detailed analysis of its elements and the impact of these elements on consumers is required purchase behavior. The impact of packaging and its elements on consumers' purchasing decisions can be revealed in the following ways Analyze the importance of its independent factors to consumer choice. Adeline Broad Bridge and Henry Morgan (2007), Consumer buying behavior and perceptions of retail and branding baby product. A two-stage research method consisting of qualitative and quantitative research Technology is adopted. The population is defined as 'parents of children under five who use infant care product'. Both qualitative and quantitative studies show that respondents have adopted similar risk reduction strategies in their risk assessment they buy baby care products. This study investigates consumers' perceptions and buying behavior of babies Care products. Preliminary research results show that consumers need to be confident in the product In terms of reliability, performance and packaging.

Creativity in packaging design:-

Creative packaging involves innovative designs and solutions that can not only help products stand out, improve product growth and success rate, but also provide more sustainable and cost-effective solutions during the life of the packaging.

Creativity is the key to the success of many businesses, especially when you can buy seemingly plain products and add interest to them with unique creativity. A few years ago, when the packaging industry was still very new, creativity was not that important. In the past few decades, with the development of the industry, it has become a bigger factor. In the past, if the packaging was strong and durable and served its purpose, there was no need to worry. Soon, the company realized that the more attractive the packaging, the better the product sales. Since creative packaging can increase sales, the industry has begun to achieve tremendous growth in eye-catching product packaging/labeling. In order to compete with fiercely competitive manufacturers, manufacturers now need to start paying more attention to the design and quality of their packaging. Creativity has become a top priority.

Knowing the importance of design, as far as team members are concerned, companies in the industry are beginning to grow faster. Now they need to start hiring designers, marketers and other experts who understand what is important to design and consumers.

Packaging design elements Colors, fonts, and characters, slogans:-

Packaging design has become as important as any other type of design work, and it is important to consider everything that needs to be included on packaging and labels. Whether you are designing a company website, business card or banner, there are certain things that must be carefully considered.

The color you choose in your design is one of the most important factors. Here is a good guide that discusses colors and how they affect consumers. Typeface is another important element and must be legible and legible at short distances. If people cannot recognize or read what is in front of them, then their chances of buying will be greatly reduced. Another important factor is your brand characteristics or slogan. Using characters as the face of your brand is a great way to stand out, while also providing your brand with something that people can connect with. If any of these elements are part of the design, they can also be a way for people to remember you, which helps make your brand a top consideration.

Creative and unique packaging design:-

Part of the creative process is to come up with products that can show off your brand and product advantages, but also be unique enough to help your packaging be seen and remembered among competitors. To be unique and memorable, it is important to have the right creative talent on the team. This can be done by hiring people who already have great design work, or by spending time and money to train people you may already have creativity among your employees. You should never underestimate the importance of creativity and how it can take your business to the next level. Let your designer spend time researching the work of your competitors in packaging design. Your designer should also take the time to read the latest design trends, strategies and techniques being used by the world's top designers.

People always want to be different and want to have different things. Consumers' minds are easily attracted Captured by creative packaging. If it's not a creative ad, create Inspiration in the minds of consumers, and then fast moving consumer goods Manufacturers can seek innovative packaging. People will definitely come forward and will create a word here; we have some creative packaging Liked by respondents.



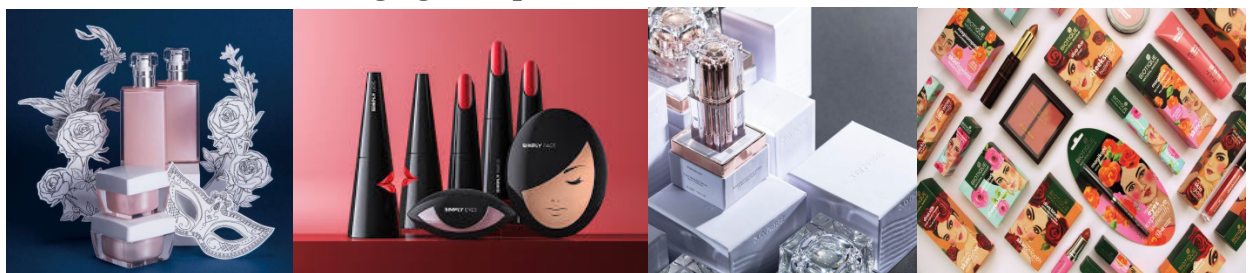
Food product creative packaging examples -01



Creative chocolate packaging design examples -02



Creative Fruit Juice Packaging examples -03



Creative cosmetics packaging design examples -04

The Emerging Trend of New Media Creative Advertising:-

Advertising trends have evolved from typical traditional print ads and TV ads to new marketing strategies including QR codes, co-branding, content marketing and online advertising. Although the printing and television industries are advancing steadily in the advertising industry, new technologies have opened up new avenues for consumers. Different types of advertisements? Paid search advertising. Social media advertising. Native ads. Display ads. Print Ads. Radio advertising. Outdoor Advertising

Digital advertising or digital marketing is mainly to market products to consumers through the Internet, mobile phones and other digital media. In other words, digital advertising is not an advertisement on TV or radio. It is not an advertisement that you see in print or poster form. Digital advertising is what it sounds like. Advertising that occurs in the digital space.

People are always busy, they spend less time Watch ads in this busy world they. There is only one way to provide creative and informative ads, and these ads are easy to attract, so they have Look. These are the ads that really attract them.



Creative Outdoor Billboard Hoarding adv. Creative billboards outdoor adv. Campaign on Seafood. Creative billboards outdoor ads.

Findings:-

- Most consumers have quickly browsed they pack when they have time; otherwise they Believe what the seller said and what happened Shown in ads.
- Most consumers prefer safe packaging Instead of understanding information. They also prefer easy-to-use packaging over color.
- Most consumers like it very much Packaging; they are even preparing to change from a brand Transfer to another brand because of packaging.
- Advertising is a place to convey information Transform into corners and corners of the world. Consumers passed advertising.
- Most of the consumers emphasized that manufacturers are changing their packaging design can compete with competitors the second is to attract consumers and provide Convenient for consumers.
- Even some consumers said the price Changes due to packaging changes, followed by Changes in quantity and quality.
- The some consumers were very determined to refuse Product, if the packaging is not comfortable and Ok.
- Most consumers are willing to buy Exquisite packaging also makes the product possible unpopular brands. Main differences between India and abroad the packaging of fast-moving consumer goods is shape and size, and then Colors, text and graphics and similar materials.

- Majority consumers Tend to online advertising and Purchase to save time, such as QR code tracking system, online purchase etc.
- There is consensus that the old media will play a vital role Even until and unless there is a new media in our country Get 100% of the literate population and some if there is technology, the media will not appear in the future development for new generation.

Suggestions:-

The Researcher would like to suggest that:

- Manufacturers should do their best to pay attention to fast moving consumer goods Product packaging because it's in the consumer's mind. They should give the necessary and correctly package the information as a consumer Believe what is written on the wrapping paper.
- The first thing in FMCG packaging is Safe; therefore, fast moving consumer goods should be packaged Use the right material for the right in such a clever way Product to save the product.
- Manufacturers are advised to concentrate on Convenience of packaging, not competition or attract.
- For manufacturers, it is more important Consumers believe that packaging changes quality it can also be changed to delete wrong ideas through frequent advertising.
- Color, shape, size, taste of text and graphics Varies from person to person, so the manufacturer The target market should be identified and based on Their view is that FMCG product packaging must Show some differences
- Compact FMCG product packaging height Favored by Indian and foreign societies Therefore, more attention should be paid to the same product.
- Advertisers are recommended to display various FMCG product packaging less than one product line because consumers notice the relevant information advertising.

Conclusion:-

Creative FMCG packaging and advertising are Product marketing. When the customer is browsing Choice between shelf and brand, Packaging is the main content they noticed. Consumer purchase Based on emotion, the correct packaging design can make the product satisfactory. They spend less time in Get product information, so the ad should be Ideas that both attract people and attract their attention it's clear at a glance; they should be clear at glance information. Therefore, product packaging and advertising of fast moving consumer goods can attract Consumers move forward and make buy. Packaging alone is not enough Public awareness, but advertising is it is also necessary. To be a healthy manufacturer Packaging and advertising should be kept in sync. Innovative and smart FMCG product packaging and Advertising makes the business most successful.

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Covid19 : Impact on Indian Agriculture

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Abstract:

Agriculture is an important component of the Indian economy. The majority of India's population is dependent on agriculture. Covid-19 pandemic the agricultural sector appears to have been affected to some extent. The performance of agriculture is most important to the development of country. In the pre Covid-19 period, agricultural GDP practiced an average growth rate of 3.3% per year in the last five years period 2014-15 to 2019-20 with fluctuation situation. Terms of trade for agriculture looks to have improved with the nominal agricultural GDP growth was 11.4% as compared to real growth of 4% in 2019-20. Impact of Covid-19 on agriculture has been much less as compared to industrial and services sectors. But the initial lockdown did affect agricultural events. The supply chain is necessary through several channels, input distribution, collecting, procurement, transport obstacles, marketing and processing, Shutdown of restaurants, transport blocks etc. reduced the demand for agriculture production. These productions included as fresh food, poultry and fisheries products, more affecting producers and suppliers. This paper studies an impact of COVID-19 pandemic situation on agriculture sector with supply chains, migrant labour, price level etc. and macro demand situation.

Key Words: Covid19 pandemic, agriculture, supply chains, migrant labour, cash flow, public goods.

Introduction:

The impact of covid19 pandemic is new phenomena for agriculture sector. First, we should understanding the overall food supply position of agriculture in the in India. The food situation in April and May 2020 looked sufficient, there were likely to be general food shortages in country. But food supply dependent on imports food situation. During the pandemic period there were particularly food exporting countries restricted exports of food. In the case of many agriculture products, that the extreme reduction in supplies created shortages in many are developing countries like India. Secondly, the distractions in food supply chains encouraged in the pandemic period. An International trade in agricultural market shortened during the lockdown as imports fell and dockyards remained closed. As per estimated data more than 2000 markets were considered to the fall in daily market arrivals for 16 crops across the country. Thirdly, investigation of prices indicates that global price tables for food, dairy and meat fell in April and May 2020. For India, we do not find an across the board rise in both wholesaler and retailer prices of agri-cultural goods during the lockdown. The come down in wholesale price indices for cereals, vegetables, eggs and poultry product by farmers. At the same time, the rise in urban CPI for cere-als, vegetables, and egg, mainly in April 2020, was suggestive of reduce supply chains in these commodities.

Finally, the Covid-19 pandemic made the human values and raises the cost of migrant labour. After the lock-down initiated, the flexibility of migrant workers was severely restricted

and large numbers of migrant workers returned home to themselves. In this situation agriculture was acutely affected; suffered from the impacts of labour short-ages across the country.

Objective of the study:

This study observes the impact of COVID-19 pandemic on Indian agriculture in the lockdown period with the various aspects of farming.

Research Methodology:

In this study secondary data have been used for collected through various websites, Newspapers, Books, reports and E-Journals.

Impact on Indian agriculture:

Covid-19 made significant economic and social troubles in India. In the agriculture including rural households, smallholders, migrant labour were affected by loss in income, livelihood and farm and non-farm incomes. The start of the coronavirus pandemic has coincided with the peak harvesting season. As the markets are locked down, there is a hazard to the crop in over 100 lakh hectares in the country. The impact of covid19 varies widely among different part among agriculture producers and consumers. This impact has elaborated one by one.

1. Disturbances in supply-chain

The lack of transport facilities run with attentive closing roads has an effect on the movement of agriculture activities. All migratory harvest labours have adversely impact. Also, trucks and tractors are not completely working in agriculture; it means agri-machinery of farming was not working in lockdown period. Therefore supply chains have not been working properly in the agriculture production process. Due to supply disturbance vast amounts of food started getting wasted leading to huge losses for Indian farmers. However the closure of all hotels, restaurants, sweet shops and tea shops during the lockdown period affected the milk producers harmfully. Because lack of demand of the milk of the dairy farmers. Unable to export their produce many farmers are also neglected their seasonal products such as grapes, pomegranate, and Bananas etc. Eventually disruption in supply chain affect decline in exports of vegetables.

2. Peak harvest with no procurement

This is the peak of Rabi season in India and major crops like wheat, gram, lentil, mustard, paddy etc. were at a harvestable stage or almost reaching maturity. When the farm harvests reach the peak level government agencies should have design patter of market or price but it is not determined at all over country.

3. Shortage of labour due to reverse migration

The shortage of labour has impact on operations in agriculture sector. Consequently, the non-availability of migrant labour has resulted in a large increase in daily wages for harvesting crops. Some parts of agriculture that has the bonus of arranging technology for harvestings, like Paddy and Wheat, are relatively more protected. In the lockdown labour unavailability, harvesting of current season crops like cauliflower, cabbage, tomato, and onion was adversely affected.

4. Fall in prices

Agricultural prices have come down due to lack of market access because transportation and closure of borders. The rise in daily wage of labour and lack of access means that farmers are staring at massive losses. Decrease in wholesale prices of vegetables (25%). Tomato and onion arrivals and prices were low in major APMC markets of specially Maharashtra and

Himachal Pradesh. Potato prices were higher during March 2020. However potato processing was badly affected, which about 50-60% of potato is processing in India.

5. Inadequacy of public goods

Some of the basic goods that is the food grains, fruits and vegetables and other essential items available to consumers, both in rural and urban areas, is the most serious experiment. Supply of public distribution system (PDS) items to last-mile delivery agents, by rail and road, has been strictly impacted in the beginning of pandemic. Milk sales during lockdown period about one million liters remained unsold every day. Milk consumption declined by 25% during March 2020, and sale price of milk also declined by Rs. 5-7/liter. Around 10% profit loss in dairy or milk industry.

6. Limitations on Sale

There were self-imposed and government restrictions on the inter- and intra-State activities of farmers/labourers. The harvesting and related farm machines movements were totally closed. Flower sale is severely affected due to closure of religious ceremony, social functions, events etc.

7. Lockdown made debt and Cash Flow Restrictions

The most important matter that farmers have to overcome is the problem of repaying their crop loans, gold loans and other informal debts. Crop loans are repaid between April and May and a new loan is granted at the start of a new season. Some farmers have failure to repayment and taking new loan for agriculture. Most of the farmers borrow money from the informal sector at high rates of interest for the new season.

Conclusion:

There were long-term impacts of the covid19 and lower economic growth on Indian agriculture. It was seen with a 4% growth rate in agriculture in 2019-20. Whereas 3.4% in first quarter of 2020-21 in the lockdown period. It was a moderate impact on the agriculture and allied sector. The bank credit from commercial banks to agriculture and allied sectors have been slowdown during the month of April 2020. A large number of migrant labourers who are back in the villages they are now jobless. Return of migrant labour take some support of MGNREGA. Finally the end of covid19 pandemic will not end the difficulties in the Indian agriculture. There is a greater need for government aid in the form of provision for all agricultural inputs.

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Awareness and Use Pattern of Electronic Resources among the Students of Government Dental College Libraries in Andhra Pradesh : A study

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Abstract :

This study's main aim is to examine the awareness and use pattern of E-Resources among the students of Government Dental Colleges in Andhra Pradesh. The researcher conducted a survey method for the study. A well-Structured 120 questionnaires were distributed among the students of Government Dental College Libraries. 100 obtained questionnaires were analyzed using a simple percentage by using SPSS software. Findings of the survey revealed that the majority of the dental students used the Dentistry and Oral Science Source e-database for academic purposes. It was also observed that most dental students are aware on E-journals of e-resources, so students are more focused on e-journals for their academic activities. Further study results explored that the majority of the student's opinion is that user education/training programs are more helpful to enhance usage of e-resources.

Key words: Awareness and use, Pattern, Electronic Resources, Government Dental College, Andhra Pradesh.

Introduction:

E- Resources are playing a key role in every field in the world especially in health science education and research. Present era, health science e-learning canters/libraries adopting latest information services, technologies and implementing new innovative services to fulfil the needs of health science users. However, it was noted that these innovative technology services are not utilized properly by the health science professionals. Library's main objective is to analyze the information and disseminate the right information to the right persons at the right time without any delay and hassles. Dental profession is one of the major fields in health science education. Most dental professionals are feeling having trouble obtaining the right information from various electronic resources on the Internet. To overcome these problems Dr. NTR University Health Sciences provided the high quality and quantitative electronic resources by the name of Digital Library Consortium Resources to students and faculty of affiliated dental college libraries of Andhra Pradesh. Unfortunately, as per the usage statistics reports of NTR-MEDNET consortium, the actual usage is very low due to the lack of awareness and user education programs. The main objective of this survey was to examine the awareness and use pattern of electronic resources among the students of Government Dental Colleges in Andhra Pradesh.

Objectives of the Study:

- To determine the level of awareness on electronic resources among the students of Government Dental Colleges in Andhra Pradesh.
- To explore the use pattern of electronic resources among the dental students.
- Find out the frequency of using electronic resources by the dental students.
- To examine the search techniques used for accessing electronic resources by the students.

- To find out the reasons for using e-resources.
- To determine the major hurdles during the use of e-resources.
- To examine the need our user education programs on e-resources.

Review of Literature:

Romanov, Kalle and Arnio, Matte (2006)¹ Conducted study on use of electronic information resources among the dental and medical students. 19% students are searched Medline database for their academic purpose and 10% dental students used full text articles for their academic activities. **Muruganandham and others (2016)²** expressed views in their paper awareness and utilize of e-resources by the dental and medical students. Online resources were found highly satisfactory and the majority of the availability of online resources was found highly satisfactory and students used Google Chrome for searching information from e-resources, dental students used Wiley Online Library for their academic purpose. **Thanuskodi, S (2011)³** conducted survey on usage of E-Resources by the dentistry department of Annamalai University. E-Resources and Internet used for the needs of health information and E-mail has been used for accessing electronic resources. **Anasuya, V (2017)⁴** in his study highlighted use of e-resources by the dental, medical and paramedical health professionals. Most of the dental/medical students take the second position in the purpose of collecting e-resources as their second mean score is 4.00 on a 7 point rating scale and 13% respondent searched online and medical/dental databases. Most of the dental students 7% used 'Ingenta' CD-ROM database for their academic use. **Sajjad and Ramzy (2004)⁵** conducted study on awareness and electronic information resources at the health sciences centre. It shows that respondents visited the central library for research purposes and respondents used the Medline for their needs and some respondents did not visit the library due to the lack of time.

Research Methodology:

The researcher used the survey method for data collection for this study. A pre-structured questionnaire was designed and asked to the respondents related to research questions to justify the objectives. At present, there are 16 dental colleges functioning in Andhra Pradesh. Out of sixteen, there are two Government Dental Colleges and fourteen Private/Minority Dental Colleges. Two Government Dental Colleges are selected for the study i.e. Government Dental College, Vijayawada and Government Dental College, Kadapa. Overall 120 participants were randomly selected from each of the clinical and non-clinical departments. Finally 100 useful questionnaires were taken for this research. The study focuses on dental graduate students only. The SPSS software was used for data analysis purposes.

Data Analysis and Findings

Table: 1 Demographic Characteristic of Respondents

Gender	Students (N=100)	Percentage%
Female	45	45
Male	55	55
Age	Students (N=100)	Percentage%
Below 25	8	8
25 - 30	51	51
30 - 35	26	26
35 - 40	15	15
Total	100	100

The age wise distribution of respondents below the 25 year age group of 8%, 25-30 age group of 51%, 30-35 age group of 26%, age group 35-40 were 15%. It clearly shows that the majority of participants belong to 25-30 age group students.

Table: 2 Aware of E-Resources

Awareness	Students (N=100)	Percentage%
Can't say	3	3
No	17	17
Partially Known	21	21
Well Known	24	24
Yes	35	35
Total	100	100

The respondents were asked to indicate their awareness on e-resources. **Table 2** results show that majority of the respondents 35% aware of e-resources, followed by 24 % students well known of e-resources, 21 % students partially known on e-resources, 17% students not aware of e-resources and low percentage of students 3% said their opinion on awareness of e-resources can't say.

Table: 3 How to aware of E-Resources

Who Made awareness	Students (N=100)	Percentage%
Friends	10	10
Library professionals	13	13
Library Website	22	22
Seminar/Workshop/Conference	20	20
Social Media	8	8
Use Education Program	27	27
Total	100	100

From the **Table 3** it can be seen that majority of the students 27 % students aware of e-resources by the user education/training programs , followed by 22% were aware of e-resources by the library websites, 20 % students aware by the seminar/workshop/conference, 13 % by library professionals, 10 % by friends, and low percent of students 8% by the social media.

Table: 4 Frequency of use of E-Resources

Frequency of use	Students (N=100)	Percentage%
Daily	38	38
Fortnightly	21	21
Monthly	10	10
Occasionally	4	4
Weekly	27	27
Total	100	100

Table 4 shows that 38 % of respondents used electronic resources daily, followed by 27 % were used e-resources by weekly, 21 % students used e-resources fortnightly, 10 % were used by monthly, and 4 % students used e-resources occasionally.

Table 5: Awareness on type of E-Resources

Awareness on type of E-Resources	Students (N=100)	Percentage %
E-Journals	17	17
E-Books	16	16
E-Thesis/ Dissertations	3	3
Bibliographic Databases	9	9
CD-ROM Databases	8	8
E-Consortiums	12	12
E-Blogs	2	2
E-Databases	13	13
E-Newspapers/Magazines	2	2
E-Encyclopaedias/Dictionaries	4	4
Online Public Access Catalogue	11	11
E-Standards/Reports	3	3
Total	100	100

The question asked for the respondent's awareness on which type of e-resources for your academic purposes. **Table 5** results show that majority of students 17% aware of E-journals, followed by 16 % students aware of E-books, 3 % aware on E-thesis/dissertations, 9% were aware of Bibliographic databases, 8% were aware of CD-ROM databases, 12% on E-Consortiums, 2% on E-Blogs, 13% were aware of E-databases, 2% on E-newspapers/magazines, 4% aware of E-encyclopaedia/dictionaries, 11% on OPAC (Online Public Access Catalogue), 3% dental students aware of E-standards/reports.

Table 6: Most useful E-databases

Useful Databases	Students (N=100)	Percentage%
DyanMed Plus	13	13
EBSCO Dental Collection	15	15
Clinical Key	12	12
ProQuest	7	7
Pub Med/Medline	6	6
Dentistry & Oral Science Source	19	19
CHINHAL Complete	7	7
Dental Education in videos	11	11
SCOPUS	10	10
Total	100	100

The question asked to the respondent which is the most useful e-database for your academic purposes. **Table 6:** results show that majority of students 19% selected Dental and Oral Science Source is the most useful e-database, followed by 13% DynaMed plus, 12% students used Clinical Key, 7% ProQuest, 6% Pub Med/Medline, 7% CHINHAL complete, 11% Dental Education Videos, and 10% students most used e-database is SCOPUS for their academic purpose.

Table: 7 Purpose of using E-Resources

Purpose of E-Resources	Students (N=100)	Percentage %
Article/Book/Chapter Publications	19	19
Seminar/Workshops/Conference	17	17
Academic Activities	29	29
Up-to-date knowledge	27	27
Others	8	8
Total	100	100

Table 7: results show that a total of 29 % students used e-resources for the purpose of academic activities, followed by 27 % students used for up to date knowledge, 19 % students used for article/book/chapter publication, 17 % were used for seminar/workshop/conference and only 8% students used e-resources for other purposes.

Table: 8 preferences of search technique for using E-Resources

Search Technique	Students (N=100)	Percentage %
Boolean Searching	18	18
Field Searching	23	23
Keyword Searching	27	27
Phrase Searching	20	20
Others	12	12
Total	100	100

Table 8: shows that 27 % students used keyword technique for browsing e-resources, followed by 23 % on field searching, 20 % used Phrase search technique, 18 % preferred Boolean searching technique and 12 % used others search technique for accessing e-resources.

Table: 9 satisfactory level of using E-Resources

Satisfactory Level	Students (N=100)	Percentage %
Average	26	26
Below Average	5	5
Highly Satisfactory	22	22
Satisfied	47	47
Total	100	100

Table 9: indicate that Majority of the dental students 47% satisfied with e-resources, followed by 26% students say the agree, 22 % dental students say highly satisfactory, and only 5% say below average with e-resources.

Table: 10 Problems encounter while using E-Resources

Technical Problems	Students (N=100)	Percentage %
Full text not accessed	14	14
Lack of search skills/IT skills	7	7
Login Problems	16	16
Navigation Problems	17	17
Power cut disturbance	11	11
Too much of information	35	35
Total	100	100

Table 10: depicts that technical problems encountered by the dental students while accessing the e-resources. 35 % of the respondents find too much of information on e-resources, followed by 17% find navigation problems , 16% students faced login problems, 14% find it full text not accessed, 11% find it power cut disturbance while using e-resources, 7% of the students reported that lack of search/IT skills are the problems faced while surfing e-resources.

Table: 11 User education/training programs for better using E-Resources

Require User Education	Students (N=100)	Percentage%
Strongly Disagree	9	9
Disagree	10	10
Agree to some extent	7	7
Agree	34	34
Strongly Agree	40	40
Total	100	100

The question asked the respondents to require user education/training programs for better using e-resources. **Table 11:** explored that the majority of the students 40% strongly agree to require user education/training programs for enhancing the usage of e-resources, followed by 34 % agree for require user education program, 10% disagree, 9% strongly disagree, and only 7% dental student's say can't say.

Major Finding of the Study

- Majority of the students 35% aware of e-resources and 24 % students well known of e-resources and low percentage of students 3% said their opinion on awareness of e-resources can't say.
- 27 % students aware of e-resources by the user education/training programs and 22% were aware of e-resources by the library websites, 20 % students aware by the seminar/workshop/conference, 13 % by library professionals, 10 % by friends,
- 38 % of dental students used electronic resources daily for their academic needs and 4% student's used electronic resources occasionally.
- Majority of the students are 17% aware of E-journals and least 3% dental students aware of E-standards/reports.
- 19% of students say the Dental and Oral Science Source is the most useful e-database and only 6% used PubMed/Medline.
- 29% students used e-resources for the purpose of academic activities and only 8% students used e-resources for other purposes.
- 27% students used keyword techniques for browsing e-resources and 12% used others search techniques for accessing e-resources
- Majority of the dental students 47% satisfied with e-resources and 26% students say the agree, 22 % dental students say highly satisfactory, and only 5% say below average with e-resources.
- 35 % of the respondents find too much of information on e-resources, followed by 17% find navigation problems and least 7% of the students reported that lack of search/IT skills are the problems faced while surfing e-resources
- Majority of the students 40% strongly agree to require user education/training programs for enhancing the usage of e-resources.

Conclusion & Recommendations:

In the Information Technology era electronic resources play a key role in the libraries, information centers, and digital learning centers especially in the field of health sciences. E-resources disseminate the required information for the users in a proper way. Dental students can use these electronic resources for their academic and research activities. At present there are a number of open resource databases/journals available on the Internet for example PubMed, Biomed Central etc. Dental students/professionals can avail these open source databases as well as commercial databases provided by the college/university libraries free of cost.

This study revealed that the majority of the dental students are well aware of electronic resources especially in Dentistry & Oral Science Source (DOSS). It is very useful to the dental students and professionals. The study explored that the majority of the student's opinion is to require the conduct of regular user education/training programs throughout the academic year. The study recommended that students should regularly visit the digital library for knowing the up to date information and regularly accessing the digital e-resources/consortium e-resources provided by the college/university library. The present study is to help the student community, especially dental students. It was showed that dental student's perception of their utilization of electronic resources and how to use the e-resources provided by their parent institute/organization. The author's view is to explore the awareness and use pattern of e-resources among the dental students of government dental colleges in Andhra Pradesh.

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A Comparative Study of Pre-Competition Anxiety Level between Cricket Batsmen and Fast Bowlers of University of Mumbai

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Abstract:

We know that in a country like India where cricket is a very popular team sport and it is mostly played by people of all ages watching the game as well as the game and even our children should watch cricket and have the feeling of taking it as a career. Anxiety before or during cricket match can hinder cricket players performance as an athlete. The coordinated movement required by a cricket match becomes increasingly difficult when their body is in a tense state. Some level of physical arousal is helpful and prepares us for competition. But when the physical symptoms of anxiety are too great, they may seriously interfere with a player's ability to compete. Similarly, decide how much to worry about how they perform in a match, but serious symptoms of anxiety such as negative thinking patterns and anticipation of failure can bring self-fulfilling predictions. If there is a substantial difference between how they perform during practice and how they do during a cricket match, anxiety may be affecting their performance. It was therefore decided to conduct the survey entitled "A comparative study of pre-competition anxiety level between Cricket Batsmen and Fast Bowlers of University of Mumbai." A total of 150 intercollegiate level male cricket players were randomly selected from various colleges affiliated with University of Mumbai. Out of which 80 are batsmen and 70 fast bowlers. The subject's age was ranged from 18 to 28 years. Anxiety was measured by using SCAT Questionnaire, developed by Rainer Martens in 1977. The null hypotheses were tested using a z-test at 0.05 level of significance. It is found that there is no important difference between the mean scores of anxiety among Batsmen and Fast Bowlers. Because the value of 'p' = 0.2009 is greater than the value of the level of Significant 0.05. So that hypothesis "There will be no significant difference level of anxiety among the male cricket players." is accepted.

Keywords: comparative study, competition, anxiety, batsmen and fast Bowler

Introduction:

In sport psychology, pre-competitive anxiety refers to an unpleasant emotion that is characterized by a vague but persistent feeling of apprehension and dread before an event. Anxiety before or during cricket match can hinder cricket players performance as an athlete. The coordinated movement required by a cricket match becomes increasingly difficult when their body is in a tense state. Some level of physical stimulation is helpful and prepares us for competition. But when the physical symptoms of anxiety are too great, they may seriously interfere with a player's ability to compete. Similarly, a certain amount of worry about how they perform can be helpful in the match, but severe cognitive symptoms of anxiety such as negative thought patterns and expectations of failure can bring about a self-fulfilling prophecy. If there is a substantial difference between how they perform during practice and how they do during a cricket match, anxiety may be affecting their performance. A team with strong mental health

may perform well or perform well. Competitive anxiety has gained great importance in the literature of sports psychology and is often referred to as the most studied field in the branch. It was therefore decided to conduct the survey entitled “A comparative study of pre-competition anxiety level between Cricket batsmen and Fast Bowlers of the University of Mumbai”.

Methodology:

The type of research undertaken by the investigator is exploratory in nature. It is a descriptive survey method of research. In this study, One Hundred Fifty (150) intercollegiate level male cricket players were randomly selected from various colleges affiliated with the University of Mumbai as the subject for this study. Out of which 80 are batsmen and 70 fast bowlers. The subject’s age was ranged from 18 to 28 years. All the subjects were male. Anxiety was measured by using. Sports Competition Anxiety Test: Sports competition anxiety test questionnaire was used to measure sports competition anxiety. (SCAT, developed by Rainer Martens in 1977)

The SCAT questionnaire contains fifteen items. The players were asked to indicate how they generally felt in competitive sports situation and responded to each item using a three-point ordinal scale score response (1 Rarely 2 Sometimes 3 Often). Less than 17 scores classified as low anxiety, a score between 17 to 24 classified moderate anxiety and more than 24 scores classified high anxiety.

Findings:

According to this study, this investigation has been carried out through descriptive statistical analysis, such as measuring measures of a central tendency such as Mean and calculating the mathematics of an event such as a standard deviation. The z-test is used by the investigator to test the null hypothesis (significance of the difference in meaning). The significance level of 0.05 was studied for the study of ideas which is believed to be sufficient for the purpose of the study.

Table No. 1 Descriptive Statistics of the Anxiety of Batsmen and Fast Bowlers

Source of Variance	N	Mean	Std. Deviation	Std. Error	Z score	'P' value
Batsmen	80	17.43	3.240	.362	-1.279	0.2009
Fast Bowlers	70	18.16	3.690	.441		

The above table no1: indicates that all the two groups of cricketers’ viz batsmen (N= 80) and Fast Bowlers (N= 70) consisting of total samples one hundred fifty. On the score of Fast Bowlers showed highest mean value 18.16, followed by and Batsmen 17.43 and standard deviation value batsmen is 3.240 and fast bowlers is 3.690.

The finding of Table no 1: shows that there is no important difference between the mean scores of anxiety among Batsmen and Fast Bowlers. Because the value of ‘p’ = 0.2009 is greater than value of level of Significant 0.05.

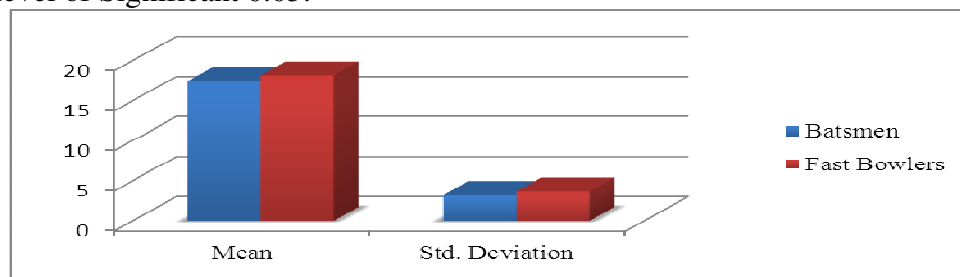


Figure no.1 Mean Difference score of the Anxiety of Batsmen and Fast Bowlers

Discussion:

Null Hypotheses:

H_0 = There will be no significant difference between cricket batsmen and fast bowler.

This corresponds to a two-tailed test, and a z-test for two means, with known population standard deviations was used. Based on the above information, the significance level $\alpha=0.05$, and the critical value for a two-tailed test is $Z_c=1.96$.

The z-statistic is computed as:

-1.279

Decision about the null hypothesis: Since it is observed that $|z|=1.279 \leq z_c=1.96$, it is then concluded that the null hypothesis is not rejected.

Confidence Interval:

The 95% confidence interval for $\mu_1 - \mu_2$ is $-1.849 < \mu_1 - \mu_2 < 0.389$.

Using the P-value approach: The p-value is $p = 0.2009$, and since $p=0.2009 \geq 0.05$, it is concluded that the null hypothesis is not rejected.

Conclusion:

It is concluded that the null hypothesis H_0 is not rejected. Therefore, there is not enough evidence to claim that the population mean μ_1 is different than μ_2 , at the $\alpha=0.05$ significance level. The pre-competition anxiety level did not show any significant difference between the two groups of cricketers' viz. batsmen and fast bowlers.

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Students and the Internet Use : An Overview

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Abstract :

The Internet benefits people worldwide, particularly students. As a result, as a student, you should make the best use of advancements in internet technology. It serves as a hub for the generation and exchange of information for millions of people. In fact, this influences a tremendous and profound social and academic accomplishment. How efficient the student learning process is by using the Internet as a reference information source. This study included an analysis of the Review of literature about the Internet's impact on academic performance and on their lives. In addition, this literature review examines the positive and negative consequences in the learning process of Internet use and obstacles to academic performance.

Keywords: Student, Internet Use, Academic performance, information communication technology (ICT), Internet addiction.

Introduction :

The Internet is a vital technology in the evolution of information technology. The Internet has developed into a key tool and a requirement for information management, information search, communication, research, and education in today's knowledge-based society. The Internet allows us to live in a world without boundaries. People will be able to receive a variety of information, including the most up-to-date information, more quickly and effectively thanks to the usage of internet technology.

The Internet has become a need in modern society, bridging the gap between computer literates and illiterates. In today's society, Internet-based resources and services drew a large number of students and young. According to the researcher, new media, such as the Internet, should be developed and used with caution in Indian society. Ohri (2011) examined the mobile web's rise in contemporary culture, stating that modern consumers profited from media exposure, including the Internet, as a result of demographic traits and the pleasure sought from media. The study discovered that Internet exposure among the younger generation has developed into a daily routine in contemporary culture as a result of a new phenomenon known as "habit formation" facilitated by Internet use.

Review Of Literature :

The Internet has risen in popularity since its introduction—importance as a means of communication, research, and entertainment. The reason for this is that it presents numerous chances to a large number of people In a number of methods, all around the world. Not only has the Internet taken its place in daily life, but so have other new digital technologies. The widespread availability of this technology enhances people's lives and opens up new possibilities. People have begun to utilise the Internet to readily access any type of information and take advantage of it for social, recreational, and educational objectives. The Internet has two advantages: information and communication (Warren et al., 1998). On a broader scale, the



Internet serves several purposes, particularly in education, including 1) information storage, (2) unrestricted communication, 3) interactive learning, 4) research, 5) new world innovation, 6) increased interest in learning, (7) global education, and (8) information catalysis (Park, 2009).

Without question, the growth of the Internet and increased accessibility to technology have growing demands for teaching and learning on the Internet. Distance education is a fast expanding environment that enables users to work in ways that are not constrained by time or geography (Chaney, E. G. 2001). The digital divide between the haves and have-nots among Kerala's higher education students. A large minority of graduate and postgraduate students lack a fundamental understanding of the Internet and hence cannot make use of the vast educational opportunities available through it. (Abudullakutty,2009).

By and large, it was obvious That the Internet can be used educationally by a majority of students. Only a small fraction of people who participated indicated that they could not use it for academic reasons that are encouraging for the future. Numerous parts of the Internet provided students with a sense of security, such as search engines; Additionally, they claimed to have used social media sites to exchange information and discuss school-related issues. Additionally, they reported that they could swiftly conduct Internet searches, download pertinent data and photographs, and so on. Additionally, participants used electronic dictionaries, encyclopaedias, and translation tools to assist them in writing homework and completing tasks. As a result, provision is critical. Children have the opportunity to develop essential skills for today's academic and social lives (Dogruer, N., Eyyam, R., & Menevis, I. 2011).

The current study provides significant food for thought for individuals who deal daily with college students and for those conducting research on Stress and Internet use among college students. At the most fundamental level, it calls into question the possibility that the amount of time spent online is related to students' overall stress levels. Our findings underscore the importance of taking a more sophisticated approach to evaluating the Internet use of students. Students used the Internet to manage and possibly avoid personal issues are more likely to face increased stress levels., whereas those who use the Internet to enhance their lives, experience positive affect, and vent are more likely to experience lowered stress levels (Deatherage et al., 2014).

This study suggests that, among Italian university students, the usage of the Internet via new technologies may outweigh its actual benefit, with some sex-related variances. Men seemed to be more likely to use the Internet to pass the time, while women use it to maintain social contacts. Men are also in danger of acquiring internet addictions. Again, Internet use could be a basic vulnerability factor in young people's weight increase and obesity(Rahardjo et al., 2016).

The results have demonstrated the most effective element in enhancing student academic achievement among final-year students. Scholar found that the use of media for online education also for their academic success. This study makes a significant contribution to universities that wish to improve their students' academic performance because students are a valuable asset to them. (Shahibi & Rusli, 2017). People's lives have been improved as a result of the Internet's growth, resulting in a large increase of online customers. Because of its quick accessibility, the Internet has assumed a greater role in education, entertainment, and a networked society.(Ryding & Kaye, 2018; Wartberg, Kriston, Bröning, Kegel, & Thomasius, 2017).

The number of people who use the Internet is growing, and the number of people who use it for work is growing as well. Internet users' average age is falling. The Pew Research

Center reports. (2018), 45 per cent of American teenagers (ages 13–17) claimed to be online virtually frequently, up from 24 per cent in a Pew Research Center (2015) study. This represents a 21 percentage point rise over a three-year period. Individuals should be worried that the Internet may expose children to harmful or inappropriate materials, or that Internet use may become problematic. Historically, The majority of study on Internet addiction has been conducted on high school students, college students. (Poli, 2017).

Due to the widespread use of smartphones, and wireless networks, the usage of information communication technology (ICT) Time and place are no longer constraints on objects. Smartphones have gradually superseded laptops as the primary instrument for accessing the Internet as their popularity has grown in recent years. Smartphones are being used to fulfil an increasing number of daily tasks. People are becoming more reliant on cell phones as they provide more convenience and enjoyment in their lives, and they are keen to spend more time using them to access the Internet. (Ryding & Kaye, 2018).

The Internet provides three of the most influential factors: ease of living, access to knowledge quickly, and the creation of tight relationships among social entities. According to the findings, the university's ICT framework should be improved, and more options for free Internet access for students should be created(Nahar et al., 2020).

Boys who have more severe issues with the Internet is more attractive than females. Male and female students engage in a variety of Internet activities—students whose parents permit them to access the Internet unsupervised experience more severe Internet difficulties. Students who begin using the Online before they enter primary school are more likely to experience significant internet difficulties. When children have increased access to the Internet and a broader selection of gadgets, they are more likely to engage in problematic online behaviour. Students who utilise the Internet for academic purposes, according to this survey, Students who use the Internet for social and recreational purposes confront more Internet issues than students who use it for educational objectives (Wang & Cheng, 2021).

Conclusion and Recommendations:

The widespread expansion of the Internet has created several opportunities for people worldwide in a variety of ways. Students typically utilise the Internet for social and recreational objectives. However, the Internet facilitates social interaction and amusement, but also intellectual and scientific knowledge. It is vital to encourage students to utilise this outstanding resource for obtaining any information necessary for their academic endeavours.

In fact, these web-based tools were discovered to improve student communication as well as teacher-student communication. Students' participation can also be encouraged through social networking. Students who are frequently ridiculed or bored in class may feel more at ease expressing their creativity and thoughts on a social networking site. Another outcome of this study is that social media applications promote teamwork by allowing students to collaborate to achieve a common goal. These educational advantages are available to us. Internet addiction may lead to psychological and health issues. It is suggested that a sound knowledge of ICT and balanced parental supervision needed for students during internet consumption.

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Role of Digital Library Projects and E-Resources for Research Scenario

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Abstract:

Now there is an urgent need for changing the mindset of librarian, users and the administration for subscribing and using e-resources in India. The library environment is currently undergoing a rapidly leading to new generation of libraries with the emphasis on e-resources. A lot of efforts have been taking in past few years to overcome this problem of financial crunch by resource sharing through consortia for universities and college libraries. This efforts must be a boon to university and college library users which will definitely boost the level of higher education our country. A modern library is not a collection of traditional reading material like a books and printed journals. Today the library is involves the fast charging e- environment of publishing.

Key Words: Digital Library, Digitization of Rear Information, e-resources, consortia, Digital Library Projects, National & International Digital Libraries.

Introduction:

Many college and university libraries are now aware about digital library, e-resources and databases. Because it is compulsory for accreditation of institute. Every library should be compulsory to subscribe or purchase e-resources as per need of our users. So digital e-resources is playing important role for current libraries. These resources are available in remote access and direct access. Online tools that index, abstract or provide electronic access to articles, books, dissertation and other type of content e.g. books and journals. A digital resources is defined as any work encoded and made available for access through the use of computer, it includes digital data available by remote access and direct access. In other words digital resources refer to the use of digital resources via internet and computer networks. Direct access refer to the use of electronic resources via carriers like a disks, cassettes, cartage, pen drive, Hard drive etc. design to be inserted into a computerized device or its auxiliary equipment.

Examples of digital resources include, but are unlimited to web sites, online databases, e-journals, e-books, e-Journals, Magazines, electronic integrating resources and physical carriers in all formats, whether free or fee-based, required to support research in the subject covered, and may be audio, visual and text files. As traditional as well as new formed libraries are start the digital projects with e-resource. In this paper we are study about how can libraries are provide digital services to users through digital projects.

Problem Statement:

The flow of information is increasing rapidly. Libraries around the world are working hard to bring it under control. World renowned libraries have started library projects for this. Hope has studied some of the world's libraries through this research and researchers are collect the information from this project on his desktop. So today's need is scattered information is gather together and store and distribute from one place.

Purpose of Study:

The aim of this research paper is to review major digital libraries' project role in supporting e-learning. Methods: at first a definition of digital library is provided and then differences are discussed between Digital Library and traditional libraries, one and at the end e-learning definition and position of digital libraries are explored in providing new form of learning and education. Findings and Results with attention to online learning based on web there is lots of advantage in comparison with traditional libraries, like as place and time limitless, availability, possibility of information retrieval in various multimedia form, and creating equivalent learning opportunities for every nation. Digital libraries unlike traditional one can make services and library resources available via internet to support e-learning.

Objectives of the study:

1. To empower students and researchers to convey a richer message through the use of multimedia and hypermedia technologies.
2. To empower all types of libraries to unlock the information resources.
3. Every user is known about major digital library projects. And use advance digital library technology.

Significance of the study:

Digital Library:

A digital library is a special library with focused of digital objects that can include text, visual material, audio material, video material stored as electronic media formats, along with means for organizing, storing and retrieving the files and media contain may be stored locally or access remotely via computer networks. An electronic library is a type of information retrieval system.

A digital library reference model which defines a digital libraries as a potentially virtual organization, that comprehensively collects, manage and preserves for the long depth of time rich digital content and offers to its target user communities comprehensive codified policies.

Digital library means no physical boundary, Round the clock availability, Multiple access, Information retrieval, Preservation and Conservation, Much more space or easily accessible. But digital libraries or at least their digital collections, unfortunately also have brought their own problems and challenges in aria such as equity of access, interoperability, User authentication, Information organization, Interface design and digital preservation. But every library can making change and given the digital services to our users as per need. Although it is compulsory to every library.

Digital E-resources:

Digital libraries are concepts that convey, store and distribute written information in digital form. The digital library's collection of digital resources includes online resources hosted elsewhere, physical format publications, digital media files and birth-digital resources. The library makes digital copies of its unique heritage content available to users through its digitizing program. The library provides access to digital information resources, preferring to compile other forms with similar information. Online Resources, The library's online resources include journal archives, newspapers, electronic books, independent electronic journals and magazines, bibliographic indexes, manuals and guides. The online journal collection is a force to be



reckoned with and intends to expand the electronic book collection. Online resources are evaluated on a variety of criteria before selection, including:

- Full text subject content.
- ease of use and suitability of the resource in the Library's technical environment. • Access for onsite and remote registered users.
- Whether the acquisition will build usefully on an existing strength or address an existing weakness.
- Long-term archiving and access arrangements.
- Ownership is preferred over an annual subscription, where cost effective.

Types of e-Resources:

- Audio Recording
- Bibliography: bibliographic references to secondary or primary sources
 - Searchable Bibliography: database format
- Blog
- Catalogue: (e.g., for archives, libraries, images)
- Crowd-sourced database
- List Format
- Searchable Database
- Dictionary/Glossary
- Digital Edition
- Discussion List
- Downloadable data: site allows data to be downloaded
- Downloadable software: Site that allows/requires software to be downloaded
 - E-book
 - Images
 - Manuscripts/Facsimiles
 - Modern: photographs, digital images, diagrams of medieval material
 - Linked Open Data
 - Map
 - Multimedia: including 3D
 - Numeric Data
 - Online Journal/Webzine
 - Portal/Gateway
 - Relational Database
 - Scholarly Society
 - Teaching Resources
 - Text: Medieval: Transcriptions or editions of primary sources
 - Text: Modern: Interpretive essays
 - Video
 - Wiki

National and International Digital Library Projects:

National Digital Library Projects:

Digital libraries have become the need of the hour. The mission is to create a big and unique port for the digital library of India which will foster creativity and free access to all human knowledge. The availability of online search allows to locate relevant information quickly and reliable thus enhancing student's success in their research endeavour. Indian national



Digital libraries are play a vital role for researchers and provide latest digital information from this project.

1. Raman Research Institute-

The Raman Research Institute, Bangalore was set up in 1948 by Dr. C. V. Raman. The library collection is strong in the areas of astronomy and astrophysics, theoretical physics, optics and liquid crystals. Apart from these subjects there are books on Computer Science, Electronics, scientific biographies, general science, nature and fine arts. The library also has a collection of non-book materials like CD-ROMs & DVDs. The library participates in inter library networking activities and has a good rapport with the libraries in the city as well as outside. It was funded personally by him and with donations from private sources. Preserve the printed material produced in relevant information quickly and reliable thus enhancing student's success in their research endeavour. (<http://www.rri.res.in/library.html>)

2. National Library of India-

The origin of the National Library is traced to the former Calcutta Public Library. Established in the first half of the 19th century, it was opened to the public on 21st March 1836. The Calcutta Public Library was subsequently merged with the Imperial Library and combining the collection of a number of secretariat libraries, the Imperial Library was opened to the public on January 1903. The National Library, Kolkata is the National Library of India and the National Repository. It is also a legal deposit library of India, where books published in the country are deposited under Delivery of Books Act, 1954. The National Library of India is the largest library in the country. It is an institution of National importance under the Department of Culture, Ministry of Tourism and Culture and Government of India.

(<https://www.indiaculture.nic.in/national-library-india>)

3. Inflibnet-

Information and Library Network (INFLIBNET) Centre is an autonomous Inter-University Centre of the University Grant Commission (UGC) of India. It is a major national programme initiated by the UGC in 1991 with in Head Quarters at Gujarat University Campus, Ahmedabad. Initially started as a project under the JUCA, it became an independent Inter-University Centre in 1996. (<https://inflibnet.ac.in/>)

4. Nalanda Digital Library-

The library at National Institute of Technology, Calicut, Kerala State, India decided to go digital in 1997. They have started by automating the routine operations of the library by installing a Library Management Software and by Bar Coding our entire collection of books and back volumes, and then set up a Digital Library.

(www. http://www.thenalanda.com/digital_library.php)

5. Vidyanidhi Digital Library-

Vidyanidhi (Meaning 'Treasure of Knowledge' in Sanskrit) is India's Digital Library imitative to facilitate the creation, archiving and accessing of doctoral theses. Vidyanidhi is an information infrastructure, a portal of resources, tools and facilities for doctoral research in India.

(<https://www.vidyanidhi.org.in/home/index.asp#r>)

6. Ernet-

ERNET (Education and Research Network) has made for significant contribution to the emergence of networking in the country. It practically brought the Internet to the India and built



up national capabilities in the area of networking especially in protocol software engineering.

(<https://ernet.in/>)

7. Indian Institute of Science, Bangalore-

Indian Institute of Science was conceived as a research Institute or University of research by Jamsetji Tata in the 19th century. A long period of almost 13 years was to elapse from the initial conception in 1896 to the birth of the institute on 27th March, 1909.

(<https://www.iisc.ac.in/about/foreword-from-the-director/>)

8. Kalasampada-

Indira Gandhi National Centre for the Arts (IGNCA) is a Digital Library having Resources of Indian Cultural Heritage. The main objective of this project is to enhance the accessibility of Indian Cultural resources using digital technology.

(<http://ignca.gov.in/online-digital-resources/>)

9. Electronic Theses and Dissertation Digital Library-

Indian Institute of Technology, Bombay has established electronic submission of theses and dissertations. Etd since 1999-2000, in addition to its printed copy the Central Library Maintains. ETD server and help students in online submission at URL, In addition to that Central Library (IITB). Digitized abstracts of Ph.D. thesis submitted to the institute and made it available on internet with bibliographic details using Greenstone Digital Library Software.

(<http://www.ndltd.org/resources>)

10. National Social Science Documentation Centre-

National Social Science Documentation Centre (NASSDOC), was established in 1970 NASSDOC also provides guidance to libraries of ICSSR Regional Centres and ICSSR supported Research Institutes. Meeting the challenges posed by technology driven world, it exemplifies the use of digital environment for creating, applying and utilizing information with its automated library collection, WEBOPAC, online databases/e-resources etc. It has effectively attained itself to the web enabled information and is marching ahead. (<https://nassdoceresources.remotexs.in/>)

International Digital Library Projects:

1. NSDL National Science Digital Library-

NSDL was established by the National Science Foundation (NSF) in 2000 as an online library which directs users to exemplary resources for science, technology, engineering and mathematical (STEM) education and research. NSDL provides an organized point of access to STEM content that is aggregated form a variety of other digital libraries. NSF funded this projects, and NSDL reviewed web sites. NSDL also provides access to services and tools that enhances the use of this content in a variety of contexts.

2. British Library-

The British Library (BL) is the national library of the United Kingdom. It is based in London and is one of the world's largest research library. Holding over 150 million items in all known languages and formats. E.g. Books, Journal, Newspapers, Magazines, Sound and Music Recordings, Patents, Databases, Maps, Stamps, Prints, Drawings etc. and much more. Its Book collection is second only to the American Library of Congress. The library collection include around 25 million books.

3. European Digital Library-

EDL project was a targeted project funded the European Commission under the e-Content plus Programme, coordinated by the library. The project started in September 2006 and completed in February 2008. Worked towards the integration of the bibliographic catalogues and digital collections of the National Libraries of various countries.

4. National Library of Australia-

The national Library of Australia is the country's largest reference library. Their role is to ensure that documentary resources of national significance relating to Australia and the Australian people as well as significant non-Australian library materials are collected, preserved and made accessible either through the library itself or through collaborative arrangements with other libraries and information providers.

5. Digital South Asia Library-

The Digital South Asia library provides digital materials for reference and research on South Asia to scholars, public, officials, business leaders and other users. This projects builds upon a more pilot projects funded by the Association of Research Libraries. Global Resources Programme with support the Andrew W. Mellon Foundation.

6. Digital Library of Georgia-

The digital Library of Georgia is gateway to Georgia's history and culture found in digitize Books, Manuscripts, Photographs, Government Documents, Newspapers, Maps, Audios, Videos and many more resources. The digital Library of Georgia connects users to 5,00,000 digital objects in 105 collections from 60 institutions and 100 Government Agencies.

7. Akro-Summit county Public Library-

Akron-Summit County Public Library is among the growing number of libraries taking their resources online. They have recently invested in electronic books from Gale Virtual Reference Library. The unprecedented e-Reference platform offered by reference book and database publisher Gale a part of Engage Learning.

8. Alexandria Digital Library-

The Alexandria Digital Library (ADL) offers easy access to its collections of geographically referenced materials. The library headquartered at the University of California at Santa Barbara, is hosted by the Davidson Library's Map and Imagery Lab (MIL).

9. California Digital Library-

The California Digital Library supports the assembly and creative use of the world's scholarship and knowledge for the University of California Libraries and the communities they serve.

10. The New Zealand Digital Library-

The New Zealand Digital Library project is a research programme at the University of Waikato whose aim is to develop the underlying technology for digital libraries and make it available publicly so that others can use it to create their own collection.

In Short:

- Digital Library is nothing but an organized collection on digitized material accessible form a computer over a network.



- Fortunately most of new information created today is already digital form and may just require conversion to formats appropriate to Digital Library.
- Digitization projects have been important for libraries aiming the digitization of manuscripts, thesis, dissertation, special collections which are special in nature.
- For any institution digitization is need of the hour. Every libraries should digitize their collection to provide a wide and dynamic way. Yet efforts are to be made by libraries in India and international level also.
- It will provide solution to their several problem like space, preservation of old age and fragile materials user's satisfaction.
- Librarians should look forward to improve/develop DL and new offerings connected with the www.
- Libraries are challenged to meet increasing demand for service with limited staff and budget.
- Technology is moving librarians into new roles some welcome, some uncomfortable. New services will continue to develop, but still traditional services will continue in some from or other.

Conclusion:

The researchers are find information from this project and complete our needs. The world of libraries and Information Centres has been witnessing a sea of changes due to its development and development of information and communication technologies have not only changed, the way information is generated, organized, stored and distributed but more important they have become indispensable tools for teaching, learning and research. Since the new technologies are forever redefining the model of delivering instruction and service to keep pace with the technological development in information and communication technology to meet the expectations of the users. Many libraries making sincere efforts to establish a modern knowledge management base library.

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Role of Media in Pandemic Situation

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Abstract :

Since the commencement of the field of media and mass post hypothesis and exploration, claims have been made that 'broad communications' and 'mass' post are ideas that don't fit the contemporary media climate. In any case, contemporary turns of events and discussions in regards to the part of media and correspondence with regards to a worldwide pandemic plainly propose something else. In this article the field of study in regards to media and correspondences is audited dependent on the 7 major speculations clarifying the job of media in the public eye, as these have arisen out of a hundred years of grant in media studies and correspondence science. The investigation intends to show how every one of these hypotheses can be viewed as 'grinding away' in current discussions and worries about the job of media and correspondence in the worldwide Covid pandemic situations.

Keyword: Role of media, Trust, Continuity, Coronavirus, media theory

Introduction :

- ✓ Media are the correspondence outlets or instruments used to store and convey data or data.
- ✓ The term alludes to segments of the broad communications interchanges industry, for example, print media, distributing, the news media, photography, film, broadcasting (radio and TV), advanced media, and advertising.
- ✓ The improvement of early composition and paper empowering longer-distance correspondence frameworks like mail, remembering for the Persian Empire (Chapar Khaneh and Angarium) and Roman Empire, which can be deciphered as early types of media.
- ✓ Writers, for example, Howard Rheingold have outlined early types of human correspondence as early types of media, for example, the Lascaux cavern canvases and early writing.
- ✓ Another outlining of the historical backdrop of media begins with the Chauvet Cave artworks and proceeds with alternate approaches to convey human correspondence past the short scope of voice: smoke signals, trail markers, and sculpture.
- ✓ The Term media in its cutting edge application identifying with correspondence channels was first utilized by Canadian interchanges scholar Marshall McLuhan, who expressed in Counterblast (1954): "The media are not toys; they ought not be in the possession of Mother Goose and Peter Pan leaders. They can be depended distinctly to new specialists since they are artistic expressions." By the mid-1960s, the term had spread to general use in North America and the United Kingdom. The expression "broad communications" was, as per H.L. Mencken, utilized as right on time as 1923 in the United States.
- ✓ The expression "medium" (the particular type of "media") is characterized as "one of the methods or stations of general correspondence, data, or diversion in the public arena, as papers, radio, or television."

Impact of media:

Media innovation has made review progressively simpler as time has passed since forever. Youngsters today are urged to utilize media devices in school and are required to have an overall comprehension of the different advancements accessible. The web is ostensibly

perhaps the best devices in media for specialized apparatuses, for example, email, Skype, and Facebook have united individuals and made new online networks. In any case, some may contend that specific kinds of media can frustrate up close and personal. In this manner, it is a significant wellspring of correspondence.

In an enormous buyer driven society, electronic media (like TV) and print media (like papers) are significant for appropriating ad media. All the more mechanically progressed social orders approach labor and products through fresher media than less innovatively progressed social orders. What's more "publicizing" job, media is these days an apparatus to share information from one side of the planet to the other. Examining the development of medium inside the general public,

- ✓ Popkin evaluates the significant part of media, by building association between legislative issues, culture and monetary life and the general public: for example, periodical paper has been a chance to initially publicize and second to be in the know regarding current international concerns or the country financial circumstance. Meanwhile,
- ✓ Willinsky was advancing the job of current innovation as an approach to run over social, sexual orientation, public hindrances. He considered the to be as a chance to set up a reasonable and equivalent arrangement of information: as web might be available to anybody, any distributed data might be perused and counseled by anybody. Hence, the web is a reasonable answer for defeat the "hole" among created and agricultural nations as both will get an opportunity to gain from one another.
- ✓ Canagarajah is tending to the issue of uneven relations between the North and South nations, affirming that Western nations will in general force their own thoughts on agricultural nations. Subsequently, web is approach to restore balance, by for example improve distribution of paper, scholastic diary from agricultural nations.
- ✓ Christen is the person who made a framework that give admittance to information and ensure individuals' traditions and culture. For sure, in some customary social orders, a few sexual orientations can't approach a specific sort of information hence regarding these traditions limit the extent of dispersal yet permit the dissemination of information. Inside this cycle of scattering, media would assume a part of "delegates", that is say interpretation a scholarly examination into an editorial organization, available by lay crowd Levin.

Therefore, media is a cutting edge type of correspondence targeting spreading information inside the entire world, in any case any type of segregation.

Media, through media and correspondences brain science, has assisted with associating different individuals from all over a geological area. It has additionally helped in the part of on-line or Internet organizations and different exercises that have an on-line form. All media planned to influence human conduct is started through correspondence and the expected conduct is framed in brain science. Consequently, understanding media and correspondences brain science is crucial in understanding the social and individual impacts of media. The growing field of media and correspondences brain research joins these set up disciplines in another manner. Timing change dependent on advancement and effectiveness might not have an immediate relationship with innovation. The data insurgency depends on present day headways. During the nineteenth century, the data "blast" quickly progressed due to postal frameworks, an increment in paper openness, just as schools "modernizing". These progressions were made because of the increment of individuals getting proficient and educated. [citation needed] The approach of

correspondence despite the fact that has adjusted and scattered in various bearings dependent on the wellspring of its sociocultural effect. Inclinations in the media that influence strict or ethnic minorities appear as prejudice in the media and strict predisposition in the media.

Role of media durind covid-19:

Reliable Data or Battle of Half-Truth :

The World Health Organization (WHO) has found that the flare-up of COVID-19 and the reaction measures are joined by bountiful data, and it is hard to track down dependable sources and solid direction.

For reports and bogus data spread on friendly media, it is important to arrange the quest for sources, distinguish, and decrease their spread. An examination assessing the occasions individuals observe Coronavirus clinical recordings on YouTube found that free clients were bound to post misdirecting recordings than valuable ones (60.0% versus 21.5%, $P = 0.009$). The activities of government organizations and online media monsters have shown that public-private participation to distinguish, reality check, and even erase bogus or obsolete data might be a powerful method to forestall these online data from blocking or in any event, declining general wellbeing efforts. Social media administrators can monitor high-traffic data and join fake knowledge to eliminate misdirecting data in an ideal way.

As clinicians in China, we regularly hear patients say that they have needed to see a specialist for quite a while frame. When they saw a few reports in the media, they didn't set out to go out or even go to the clinic. A few patients

have said: "Coronavirus is a horrible irresistible sickness, most patients will bite the dust after disease," or "the infection is still noticeable all around, I dare not open the window." Albeit the Health Committee of the People's Republic of China suggests that individuals don't need to wear veils when there is no group outdoors, a few group are reluctant to remove the covers in light of the fact that they are stressed over being contaminated with airborne infections. Truth be told, online media assume a crucial part in the dissemination of general wellbeing information. Notwithstanding, during the pestilence, it is now and then mishandled to spread ridiculous news, which may cause psychological well-being problems. Therefore, web-based media need to distribute and update data about the pandemic in a convenient way, and advocate information through the government and clinical experts to help direct the public effectively and settle public slant.

The Healthy Development of Social Media

The WHO, scholarly foundations, and other authority wellbeing foundations ought to consider utilizing powerful web-based media to disperse precise clinical information to the overall population. The data nature of web-based media ought to likewise be checked. In a perfect world, established medical services specialists ought to guarantee that potential deception isn't dispersed. For worldwide institutions, like the WHO, the dispersal of right data in various dialects could be thought of, particularly in non-industrial nations.

Conclusion :

1. The 2019 Covid illness (COVID-19) pandemic has gotten close consideration from governments, scientists, and the general population in different countries.

2. For this situation, billions of individuals are anxious to get data about COVID-19 through online media. The quick spread of points and data identified with COVID-19 has influenced the conduct of people in general during the plague. Today, more than 2.9 billion individuals utilize online media regularly.
3. These web-based media have an astounding spread speed, inclusion, and entrance rate. During the COVID-19 plague, the web-based media stages play a significant job in dispersal data.

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Role of Media in Pandemic Situation : with Special Reference to Broadcasting Media

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Introduction:

Media refers to the communication channels through which we disseminate news, music, movies, education, promotional messages and other data. It includes physical and online newspapers and magazines, television, radio, billboards, telephone, the Internet, fax and billboards. The various ways through which we communicate in society.. Media can be broken down into two main categories: broadcast and print¹. Technology and the media are interwoven, and neither can be separated from contemporary society in most core and semi-peripheral nations. Today, it is impossible to discuss media and the ways societies communicate without addressing the fast-moving pace of technology change².

COVID19 is emerging and excruciating as major public health threat leading to global crisis that is unprecedented and extraordinary. Not only public health it has great impact on regional or global socio- economic environment. The whole world is currently passing through a period of very serious crisis³. Due to changes in the information environment since the last global epidemic, high WHO officials have spoken about the need to fight not only the current COVID-19 pandemic but also the related infodemic. It was explored how people search for information, how they perceive its credibility, and how all this relates to their engagement in self-protective behaviours in the crucial period right after the onset of COVID-19 epidemic. It was found that mass media, social media, and officials received relatively low levels of trust. Conversely, medical professionals and scientists were deemed the most credible. The perceived credibility of received information was linked not only with lower levels of negative emotional responses but also with higher adherence to much needed self-protective measures, which aim to contain the spread of the disease⁴.

Media can be classified into four categories⁵:

- Print Media (Magazines, Newspapers and Books)
- Broadcast Media (TV, Radio)
- Internet
- Out of Home (OOH) Media

Print Media:

This type of media used to be the only way to convey information to the public. For the generations of the 80s and 90s, print media was the either/only medium of entertainment and was at its zenith. In fact, they learned everything either from newspapers or magazines: recipes, celebrity lives, weather, business, politics, and more. Print media also includes billboards, brochures and flyers.

Broadcast Media:

Broadcast media describe the traditional media that include television and radio. Television is a principal/dynamic source of information. It is one of the most authoritative and



influential media as it can reach millions of viewers. There are hundreds of TV channels sharing various types of content to choose from: news, drama, movies, sports, animation, nature, travel, politics, cartoon, and more. It's the best broadcasting media in terms of audience accessibility. Radio uses radio waves to transmit entertainment, information, and educational content to the public. This media is commonly used to promote products and services due to its wide reach of audience. Movies include movies, motion pictures, screenplays, motion pictures, or worldwide movies. This is the best type of mass media to promote cultures and spread social awareness. Movies have always played an important role in the entertainment world.

Internet Media:

The invention of the Internet allowed breaking news to reach the globe within minutes. This rapid development of instant, decentralized communication is often seen as having the potential to change the mass media and its relationship with society. Social networking media include Facebook, Instagram, Twitter, youtube, Tumblr, linkedin, Snapchat, Pinterest, etc. In fact, everyone has a social account. Online forums such as Quora, Reddit, are online websites where the community can comment on, text, or discuss a particular topic. Forums allow us to share knowledge with others who have similar interests.

Out of Home (OOH) Media:

Out-of-home (OOH) media, also known as outdoor advertising, is advertising media that display outside of your home. Some of the world's biggest firms, such as McDonald's, apple, amazon and Coca-Cola spend millions on this type of marketing in their campaigns. Traditional out of home: billboards, posters, transit shelters & street furniture, airport media, taxis. Non-traditional OOH like mall advertising, fitness clubs, cinema, gas stations, stores, truck side advertising, salon advertising etc.

Review of Literature:

Er. Kanwal Gurleen ; Sukhmani & Zenith(2011)⁶, All television programs, especially the commercials, news, documentaries and cartoons, affect people of all ages in different ways. Youngsters constitute one of the groups in society who spend a lot of time watching television. In recent years, youngsters are even named as "active media users". The study was conducted to make note of various television viewing habits among youngsters of Northern India and to identify the factors, which encourage television viewership among youngsters. A Sample of 750 respondents from 5 states of Northern India were selected for analysis. Factor Analytic approach was applied on 14 statements to find the reasons for television viewership. The study also highlighted the TV program preferences among youngsters.

Hakim Khalid Mehraj; Akhtar Neyaz Bhat & Hakeem Rameez Mehraj (2014)⁷, The mass media occupy a high proportion of our leisure time: people spend, on average, 25 hours per week watching television, and they also find time for radio, cinema, magazines and newspapers. For children, watching television takes up a similar amount of time to that spent at school or with family and friends. While school, home and friends are all acknowledged as major socializing influences on children, a huge debate surrounds the possible effects of the mass media and findings both in favour and against effects are controversial. In this paper we have discussed various positive and negative impacts that today media has on society. It was found that major chunk of youth is using social media networks more than 5 hours a day resulting in decreasing

their general health in general and mental health in particular. It was also observed that media is playing both constructive as well as destructive roles on one hand it has lots of advantages but on the other hand it has lots of disadvantages and at the end its up to the individual and society to decide which ones to use.

Junling Gao, Pinpin Zheng, Huge & Others (2020)⁸, citizens expose to social media during a novel coronavirus disease (COVID-19) outbreak in Wuhan, China. The prevalence of mental health problems and examine their association with social media exposure was assessed. A cross-sectional study among Chinese citizens aged ≥ 18 years old was conducted during Jan 31 to Feb 2, 2020. Total of 4872 participants from 31 provinces and autonomous regions were involved in the current study. Besides demographics and social media exposure (SME), depression was assessed by The Chinese version of WHO-Five Well-Being Index (WHO-5) and anxiety was assessed by Chinese version of generalized anxiety disorder scale (GAD-7). multivariable logistic regressions were used to identify associations between social media exposure with mental health problems after controlling for covariates. The prevalence of depression, anxiety and combination of depression and anxiety (CDA) was 48.3% (95%CI: 46.9%-49.7%), 22.6% (95%CI: 21.4%-23.8%) and 19.4% (95%CI: 18.3%-20.6%) during COVID-19 outbreak in Wuhan, China. More than 80% (95%CI: 80.9%-83.1%) of participants reported frequently exposed to social media. findings show there are high prevalence of mental health problems, which positively associated with frequently SME during the COVID-19 outbreak.

K. Shalvee, SAMBHAV & SAURABH(2020)⁹, Media works as a bridge between government and society. Media have been recognized as robust power to form how we experience this world. In this crisis, media played a very significant role in making people aware about the situation, calm the junta and encourage them to do positive action. The different kind of media like digital media and print media with their impact have been presented in this paper. There are many challenges at ground level in spreading information to the people across the nation. There was a total of 36 responses received on google survey document form. The majority of responses were between 15 to 20 years old and they made 64% of the respondents, in which majority of them were students. The respondent were asked, which medium do they prefer the most to get information, 50% of the respondent uses social media for collecting information, 38.9% uses television, rest go for newspaper and radio. The respondent were asked do they feel positivity in news on television, 47.2 % said no, 27.8% said yes and 25% said maybe. Respondent were asked about cross checking of news, 54.3% said yes while 45.7% said no.

Heena Sahni & Hunny Sharma(2020)¹⁰, the world is facing the extensive spread of severe acute respiratory syndrome-coronavirus. This epidemic puts intensive pressure on healthcare, economic, and social structures. Commitment to implementing effective approaches for public health will take bold interventions by public health professionals and strong leadership by the nation's governing bodies. During this crisis, lack of awareness, knowledge, and preparedness would put people and health care staff at risk. The dilemma is how to pass the knowledge of current disease statistics and its prevention to the general population at a rate equivalent to or better than the spreading epidemic. At the same time, a huge amount of health-threatening misinformation is spreading at a faster rate than the disease itself. The major proportion of this

false rumour is disseminated in the web-2 era through social media. Thus, delivering fast, accurate and reliable information addressing critical problems of infection control is, therefore, of key importance. This review outlines both the positive and negative impact of social media during coronavirus epidemic on health-care professionals and on the general population.

Objectives of the study:

To study the role and challenges of Broadcasting media during pandemic.

Research Methodology:

The deductions are formulated on the foundation of secondary data. For gathering information regarding how broadcasting media is affecting people during Pandemic situation was collected through newspapers, research articles, websites and debates.

Role of Broadcasting Media during Pandemic:

Broadcasting media has quality of accessibility, accuracy, reliable sources, easy medium, transparency, collective emphasis of opinions, internationally authentic, unbiasedness and so played a vital role during COVID. However some important fields where it proved to be very beneficial are given below:

Health Issues updates---

The COVID-19 pandemic highlights multiple social, cultural, and economic issues arising from the media's arguable role. The racial prejudices linked to the origin of the virus prevented collaborations among scientists to find a solution. Media coverage of coronavirus news during geographical lockdowns, extended quarantines, and financial and social hardships induced fear and caused psychological stress. The media played a worldwide role in coronavirus disease tracking and updates through live updates dashboard. The media allowed for timely interventions by the Centre For Disease Control And Prevention (CDC) and the World Health Organization (WHO), enabling a rapid and widespread reach of public health communications¹¹.

Education ---

In pandemic children were probably the biggest victims. Their life has changed with being cooped at home, no social contacts, no friends, no outdoors. They are dependent on parent's smart phone for learning¹². Large number of parents in rural areas do not have smartphones and those with smartphones are facing net connectivity issues. The State of Punjab decided to telecast lessons through free to air television channels by adding ETV content to Door darshan in response to the crisis. Each lecture: a mix of videos, images, quizzes, games, exercise and feedback. The free-to-air channel available on DD Direct DTH and all the leading DTH service providers. With this facility, over 1M students of Classes III to V and over 600000 students of Classes IX and X studying in government or aided schools get education¹³. The central government is also encouraging the use of its existing online learning apps, DIKSHA and ePathshala, and has announced an initiative to crowdsource additional content for the DIKSHA platform¹⁴.

Cope With Resources Crisis—

About two-thirds of all Indian households and a little less than one-third of the poorest households own a TV (According to the latest NFHS and IHDS surveys). 37% of households without a TV report that their children watch TV at a neighbour's house¹⁵. Radio being a critical

medium has the dual responsibility of not only entertaining the listeners, but also ensuring that correct and genuine information reaches the country's citizens . The radio industry witnessed a listenership of 51 million people, which is nearly as much as television's reach of 56 million and social media's reach of 57 million, said the research¹⁶.

Enhancing Educationalisation And Emotional Support To People—

In the current crisis caused by covid-19, radio has again stood out as being an essential medium to stay informed, according to the study by Rodero (2020). The results indicate that radio is the medium that scores highest for its treatment of information about the pandemic. the coronavirus pandemic, radio has proven to be the medium of reference¹⁷. Not only information like do's and don'ts like social distancing, no unnecessary loitering around, use of masks etc. it also includes information on mental health, health and hygiene and translation of the information into the local languages and air them from UNICEF and WHO websites. Doctors ,Gynaecology to guide pregnant women, Agriculture experts to help farm-based entrepreneurs , Experts from the animal husbandry were invited for interactions. Issues like well-being, stress management, STPD disorder, depression, water conservation, economic literacy, women emancipation, literacy for children are also being regularly dealt with to help the listeners. Regular participation from gram panchayats ensures that government guidelines are also followed at the ground level.. **Gurgaon Ki Awaaz** broadcasts for 22 hours a day and their target audience include migrant workers and local villagers in Gurugram. At least, five lakh people listen to **Gurgaon Ki Awaaz**¹⁸.

Entertainment:-

The COVID-19 pandemic has changed the way people consume media and entertainment. Due to strict national lockdowns around the world people have been forced to stay at home, changing consumer behaviour on a large scale. As movie theatres, museums, events, and other external entertainment consumption models have been banned, social lives have moved online, and entertainment consumption has increased significantly for online gaming and over-the-top (OTT) services. In contrast, services like Hotstar, Amazon Prime and Netflix in India have seen an 82.63% increase in time spent. Similarly, YouTube has seen a 20.5 percent surge in subscribers in the country. It garnered over 300 billion views in the first quarter of 2020 and has been growing at a rate of 13 percent since the fourth quarter of 2019. The study depicts that there is only IT that entertain the people during lockdown like Ramayana, Mahabharata, Chanakya etc. serial on TV. People use to see movies on Netflix, Hot star, web series, video games etc. through internet. Technology has played a key role during lockdown by keeping the country alive and connected¹⁹.

Conclusion :

When the Ministry of Information and Broadcasting also advised TV channels to broadcast the videos, advising people on the basic do's and don'ts of COVID-19²⁰. At the Same time the media and entertainment sector were grappling with various challenging issues. Despite viewership on television channels and digital platforms increasing, monetisation and revenue earnings of these mediums are seeing a downward curve as it depend largely on advertising spends from other industries. The impact of the pandemic and the global recession on various industries such as e-commerce, manufacturing, financial services, fashion and retail,



automobiles, hospitality and travel among others, has led to reduction in advertising spends from these sectors. On the bright side, the demand for home consumption mediums including digital streaming services, which are hugely popular and subscription-based services, is likely to increase even further. Given a rise in demand for content and increasing viewership, and the halts in production of new content, existing content is likely to become more valuable²¹.

India has a long and successful history in delivering ETV and the central government is currently promoting its existing Swayam Prabha ETV channels. Due to unaware parents and students, it has not benefited many students. Programs and channels for higher education and Practical learning requirements is still a challenge¹⁵.

Suggestions:

Media organisations need to reassess to streamline existing broadcast operations and costs. They must invest in building technology platforms that can handle unpredictable streaming demand seamlessly, while also deriving deeper audience insights from their data in order to drive audience engagement, retention, and monetization. Content production has been on the rise for years, but the temporary halt in production has been a silver lining for media companies; this pause has presented an opportunity to step back and implement more digital, collaborative, streamlined, and global production and management processes, supported by the cloud. Post-production staff, visual effects artists, and video editors can utilize **virtual workstations** and editing applications to complete their work remotely. unexpected and accelerated change for all, but the ingenuity, innovation, and determination of media companies to continue delivering critical news, information, and entertainment to audiences across the world has been extraordinary²².

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Salesforce Automation Technology : A Tool for Enhancing Salesforce Efficiency and Effectiveness in the Organized Retail Sector

Shikha Upadhyay

Abstract :

Automation and information technology allowing sales employees to handle advanced and quality information belong to a large number of customers (Ahearne et al. 2007). Far ahead, he also suggested that the stages of the customer relationship management process, automation and technology can allow and involve sales employees for the business organizations future possibilities of each and every outlook in choosing of available prospects to target. The wide-ranging collection of customer information and data from their purchase history to their account showing choices and preferences taken or collected across multiple service platforms or counters is available and reachable for all future or expected transactions. They may be helping salespeople customize the value proposition and assistances to suit the individual needs of their clients. For the study, Indore and Bhopal were selected as a sample area and on the basis of convenience sampling total 255 respondents were chosen working in different Branded Outlets, like Shoppers' Stop, Westside, H&M, Levi's. Respondents were from various profiles and majorly were males. These respondents have been working for the last three years. The study concluded that Salesforce automation helps out in increasing the sales growth and it is the best tool to increase the efficiency and effectiveness for Salesforce development.

Introduction:

SFA technology is intended to enhance salesperson efficiency and effectiveness (Anderson et al., 2007; Hair et al., 2009) and ultimately firm performance (Kim & Kim, 2009). But this is an empirical question that whether this intention aligns with reality because a very little research has investigated the SFA usage/salesperson performance link. Ahearne, Jelinek, and Rapp (2005) examined the moderating impact of user training and support on the association between use of SFA and sales person percent of quota and daily number of calls (two measures of performance). The results of the study found that the use of SFA enhances those two performance variables only when sufficient user support and training are provided. Ahearne, Srinivasan, and Weinstein (2004) determined that the relationship between SFA usage and sales person performance (percent of quota achieved) is curvilinear. Avlontinis and Panagopoulos (2005), in their study found no association between SFA usage and salesperson performance. Notwithstanding these three studies, further examination of the SFA usage/salesperson relationship appears warranted, which is consistent with Avlontinis and Panagopoulos (2005) call for additional research in the area. Othman Boujena, Wesley J. Johnston, and Dwight R. Merunka (2009) in their study examine the benefits of SFA from the perspective of the customer. This research is based on theories from the sales and information systems literature relating to the benefits of the implementation of information technology. A detailed study is conducted among managers occupying "buyer/logistic" positions within customer organizations by means of qualitative research tools to identify perceived benefits of the use of sales force automation (SFA) systems by their vendors. To uncover the benefits most valued by management in customer organizations three content analytical techniques (thematic, lexical, and cognitive mapping) are used. The results of the study show that customers perceive benefits of their

interaction with salespersons on the basis four main dimensions—salespeople’s professionalism, customer interaction frequency, salesperson responsiveness, and salesperson–customer relationship quality. This is the first study which examined aspects of SFA from the customer perspective.

Salesforce Potentialities:

It is imperative for Salesforce to act on multiple fronts by realizing its full potentialities in organized retail sector. It is critical for senior leadership to design such modules for the development of Salesforce and to craft a large-scale transformation to stay and win in the market. It is believed that for the development of Salesforce two seemingly incompatible qualities before they have received even a day of training are: empathy with customers and a need to overcome their hesitation to buy.

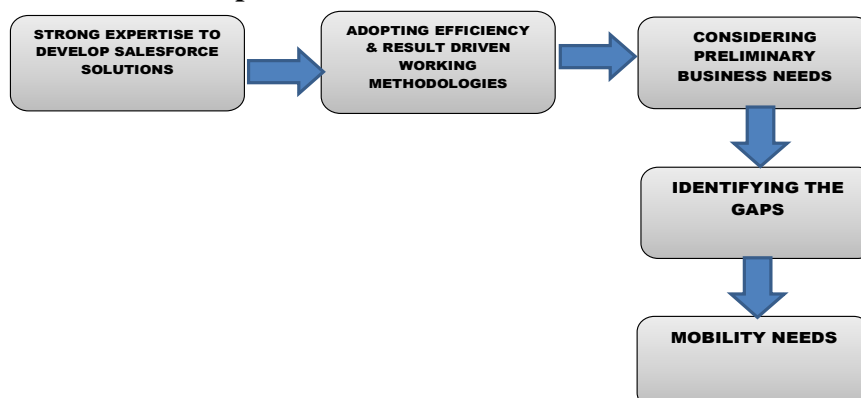
Empathy (ability to feel)- This quality means from the sales forces’ perspectives to feel what their customers need and able to sell the products/services to them without invaluable and irreplaceable ability, salesmen cannot see well and they get a powerful feedback from their customers through empathy. (David Mayer; Herbert M. Grenberg, 2020) He aims at the top on best he can and proceeds along his sales track; but if his target the customer-fails to perform as per his prediction, he could able to achieve his targets and missed the sales.

Salesforce with good empathy-He has the feelings for the reaction of customers and able to adjust to these reactions. The functions in terms of the real interaction between himself and the customer and not bound by a prepared sales track. He is able to change pace, as per the sensing of the customer and make changes in their planning to attain the goals and chose the sales.

Ego drive (need to conquer)- A good Salesforce possess the quality that makes him want and need to make the sale in a personal or ego way, not for money to be gained. He only thinks to sale and other side customer helps him fulfil his personal need. The conquest provides a powerful means of enhancing his ego by increasing the sales. By virtue of conquer, his self-picture improves dramatically and diminishes with failure. (David Mayer; Herbert M. Grenberg, 2020)

The Salesforce will find to sell more often than he will succeed because of the nature of all selling. Thus, his ego cannot be so weak that the poor self-picture continues for two long time since failure tends to diminish his self-picture. Success will bring the ego enhancement as a motivation toward greater efforts. (David Mayer; Herbert M. Grenberg, 2020) A subtle balance must be found between (a) an ego partially weakened in precisely the right way to need a great deal of enhancement (the sale) & (b) an ego always toward achieving success. The empathy along with ego drives helps him in attaining the target and make the sale. Ego pushes him to double the sales and empathy give him the connecting tool with which to do it.

Model on Salesforce Development:



The following points have been surfaced from the above model:

1. Strong expertise to develop Salesforce solutions for distinct industry niche while keeping eyes on targeted customers & sales goals.
2. Adopts efficient & result driven working methodologies that help to support customer management, generate sales revenue & surmount the productivity level.
3. By considering the preliminary business needs, craft and display highly customized Salesforce solutions satisfying the customers' core need.
4. Identifying the gaps, build CRM solution redefining the customer engagement, employee working efficiency and productivity rate.
5. Design and develop the solution that eliminates extremity and impact the bottom line.
6. In today's competitive age, driving enlarged sales volumes incumbent on how adequately dealing with the customer were struggling to sustain is a tough task indeed. To ensure expedience in organized retail sector, requisites to hire Salesforce services.

Increased Operational Efficiency and Effectiveness :

In present scenario of economic and technological situation taking upon superior intrinsic synergies in serving or helping the customer and offering better value-adding service through its ability to share information between departments within a company (Pullig et al. 2002). At the organizational level, Shoemakr (2001) suggested that within organization communication system allowed seamless purchase dealings with enhanced order precision and cost investments and saving. Through a system well integrated and designed for automation system, allowed sales people and managers to track order status in real time for shipment or consignment and also tracking delivery dates (Mithas et al. 2005). Certainly, the sales people can find themselves benefited from an improved and increases rapidity of response and the management also benefiting from cost investments and savings (can be understood as reduced supporting costs, reduced inventory necessities, reduced transactional errors) and faster revenue generation (e.g., augmented cash drift).

As far as individual level is concerned as, automation tools enable salesperson's performances in communicating their clients / customers in a precise but detailed manner (as information already available through application of software, on portal as well) and make them a reliable unfailing occupational partner (Hunter and Perreault 2007). Enriched and increased accessibility of the sales people lessen time taking to deal the contract with their clients and customers concerning even at the stage when the sales people found themselves far from their customer's site. An effective communication system within organization can also allow and assist salesperson in timely approaching and identifying and also solving the problems that customers face. This gives the salesperson a bigger perception of trustworthiness. Furthermore, automation and technology facilitating a quick admittance to information for specific customer expectations, product description and knowledge, trends in business and industry and awareness towards competitors' products and services and boosting towards the expected and perceived competency, skills and abilities of the salesperson (Hunter and Perreault 2007)

Here an emphasis on SFA system is rightly introduced to explain that how it allows sales employees together in the area of information belong to customers, identifying the needs of the customers, and develop more customer relationships with them through such information collection as suggested by Anderson et al. (2007), Hair et al., (2009), and Widmier et al., (2002).



Acquisition of information through sales personnel enabling to absorb the specific and unique requirement and apprehensions of their prospects and existing customers. Showing these such adaptive and dynamic behaviours is a crucial feature in establishing a solid relationship between sales personnel and customers (Weitz, 1978). Adaptive selling performance allows salespeople to go and look into the context and related information of existing and prospect customer. This can have a result on the way in which sales employees exchange their behaviour with their prospects and customers (McFarland, et. al. 2006) and also on the connections between salespersons and their customers (Robinson et al., 2005; Weitz et al., 1986). Rigorous empirical work has been done that uttered and explained that an effective utilization of information is positively associated with salesperson adaptive selling behaviour (Hunter & Perreault, 2006). Furthermore, in the same direction it has been suggested that behavioural pattern inclined to go for technology was decided to be positively associated with adaptive selling. For the reason, salespersons supposed to deploy SFA system mindfully and are likely to select an adaptive selling behaviour when contacting and interacting with their customers.

Sales employees in SFA allowed to seek and develop their associations with their customers by setting them to the situation of each customer, exploring their customer's needs, and resolving their problems timely (Weitz, 1978). When salespeople perform mindfully in those efforts, relationship quality with their customers is likely maintained and recognized, resulting in making their relationship more solid and sustainable.

Rationale of the Study:

The study tried to explore the area where given technology really influencing the question of how a given technology might influencing sales employee's performance and organizational performance that appearing in existing environment. Though, it can also be compared with the other department of the organization at their functional level generally have resisted information systems in the organizations. In the year or in the late 1990s organization started the concept as a challenge with existing manpower who are not very much acquainted with automation. But organizations begin capitalising and significantly in automation of sales and marketing functions (Rivers and Dart 1999). In contrast with number of research studies compare SFA with other information system applications, the nearly 30-year history of research into outcomes in other departments (DeLone and McLean 2003). Furthermore, most of the results from the customer-oriented approach reveal few significant effects, and the results generated by the firm-oriented approach, though they suggest clearer results, are still fragmented because such studies analyze processes within the firm to understand what causes end results.

Literature Reviews:

Previous studies on the effect of automated system (SFA) systems inclined to involve two ways of results—firm oriented and customer oriented. First, firm-oriented research revolves around the effects of sales outcome (Ahearne, et.al. 2005; Erffmeyer and Johnson 2001), whereas, customer-oriented research typically focuses on end results, such as sales levels (Avlonitis and Panagopoulos 2005), and customer satisfaction (Jayachandran et al. 2005; Mithas, Krishnan, and Fornell 2005), Sales force automation and customer-oriented performance. Most of the cases, practitioners analysed the normal contact or interaction between SFA and its usage and sales force performance and thus have been uttered to emerge with outcomes consistent with the information technology (IT) productivity paradox. That stated that investments in IT might

not improve firms' productivity, but also counts in the efficiency of the sales force. According to the study of Avlonitis and Panagopoulos (2005), that no significant difference has been found in the effect of SFA use and its acceptance, whereas, in terms of its use and orientation into activities of sales and their performance. Speier and, and Venkatesh (2002) similarly suggested in their study that no significant changes in sales volume from the time just before the SFA implementation until six months later.

Significantly, automation in sales and its use inclined to improve customer relationship performance in developed (scarce) relational information processes environments. In this regard, researchers such as Keillor, Bashaw, and Pettijohn (1997) reported in their studies that 64 percent of firms declared that automation and its use increased their sales levels, and Mithas, Krishnan, and Fornell (2005) suggested a positive association between SFA and its use and customers satisfaction through enhanced perceived quality. Automation, mainly allows its provision of more precise and correct customer information, SFA use provides salespeople with the ability to customize proposals and thus cater to customers' needs better SFA and Firm-Oriented Performance Prior research also recognizes a second category of outcomes resulting from SFA use that relate to transformations in internal firm processes and activities. In broadening the study of this direct interaction by investigating the moderating effects of salesperson expertise and experience, Ko and Dennis (2004) still arrive at significant results only for expertise. However, SFA use can modify customer satisfaction through its moderating effect on the relationship between relational information processes and customer relationship performance (Jayachandran et al. 2005).

Researchers Erffmeyer and Johnson (2001), studied the functional effects of SFA modes and methods, and indicated that number of firms have been achieved both improved access to information from their sales force and their customers and improved communication with customers. In contrast, Speier and Venkatesh (2002) asserted a remarkable association between SFA implementation and several negative results, such as increased turnover of sales force and their absenteeism. Gohmann et al. (2005) studied the impact of the perceptions of SFA tools mediums on sales forces, staff and sales managers and find significant differences, such that managers perceive the benefits of SFA tools more favourably than do salespeople.

In a functional area, Keillor, Bashaw, and Pettijohn (1997) defined that 79.8 percent of firms interviewed reported that automation in sales excelled salesperson productivity. By assessing the results related to employees' operations, Brown and Jones (2005) posited that this automation (SFA) usage may both increase role overloaded in the short term and decreased it in the long term.

Piercy et. al. (2019) suggested diverse roles pertaining to sales managers in the organizations working effectively in sales. The role of a sales manager is to vigorously and energetically perform throughout in their field of sales organizations and also set an example as role model which is going beyond the conventional command and practices and also controlling over the models set for the sales management. The study asserted that these comprehensions are extremely important to assess a role of a sales manager in organizations. The study suggested with Implications that at times of practicing functions such as recruitment, performance appraisal, training and development, mainly balance the need for "persons" skills and their team-based abilities with traditional competencies in effective sales approaches and knowledge



The findings of the study have been suggested that to recover sales effectiveness is a high priority of the organization at the time and after large scale changes in organizations. The findings also suggested that constructing and communicating important standards for sales force appraisal is important also allocation of the essential resources and designing their territory / area, superior – subordinate relationship for discussing any issues related to considered extremely important for effectiveness of the sales organizations.

Onyemah (2019) explore the relationship and moderate effect of traits and behavioural pattern of salesperson. The researchers also decided to set the effects of the interaction between to set the effect of the interaction between the cultural determinants and organizational factors in which the firms are existing and surviving or growing. The study revealed that coaching has been found as important factors as it is accountable to have a sentimental responsibility that associating by the sales person with their organization.

Napier, Elizabeth, (2019) in his study found that the Multinational firms publish annual corporate social responsibility (CSR) reports to signal to stakeholders they are 'doing better by doing good.' However, to generate impactful long-term solutions many firms have not effectively integrated technology with CSR. To satisfy consumers as well as limit resource use the era of mindful consumption is about creating hi-tech opportunities. This research examines that how CSR is revolutionized by technology. The authors in this study presents research based on in-depth conversations with experts and illustrative case studies on how AI is disrupting the world of CSR. Jain (2019) accepted in his study explaining the relation in training and developing programmes utilised within different business entity / units and its importance. It has been observed that training and development programmes are advantageous to the companies for taking in to consideration in many aspects. A large number of research studies have tried to identify relation between training and development and sales opportunities. It can be maintaining that previous literature has provided valuable insights in relation to significance of training and development programmes within the organization.

Johkle et al (2018) did a rigorous review on past studies and explained their rationale towards sales professionals' role in their communication practices. Using a Meta – analysis on the different facets and developed a model which explained the relationship of sales person communication skills and satisfaction, commitment, performance and sales person ambiguity referring lack of knowledge or information. The study concluded with the support that these communication practices definitely associated with the different expected or desired outcome from the sales person jobs.

Taylor et al (2018) suggested in their study that somehow the qualitative criteria are certainly missed or less importance given by the sales persons in the sales organizations. These criteria already had suggested important by the researchers as sales person can easily control them and also these criteria may help to evaluate themselves for their development at the time of appraisal. Sales person may perceive that either that their performance may be evaluated on unfitting criteria or the criteria that has already said uncontrollable for their performance. The consequences in both the situations considered important because salespersons' commitment, performance and their output related to their potential effect.

Sharma et al. (2018) in their study studied various researches and reviewed them with an analysis depicting an in-depth analysis of multi facet impact on the sales persons' role and the ways they managed. According to them a sales person's major concern is the risk and its



influence, and built relational investment may reduce. The risk they perceive that their role as mediator may lose. But thanks to web calls, internet facility that may help them to build their relationship with their clients and also create or generate new links for new clients. The services may help to sales personnel to make a better transition from short term to long term relationship with their customers and clients. Through these medium the sales force may develop their balanced relationship with new information related to product line or services and also advising and sometimes personalization.

Brashear et al (2018) suggested in that shared values should be considered as an important factor for building trust between the sales forces and their management. Their interpersonal relationship has been considered and said predictive and trust building process suggested that it definitely affiliated with both sales force and the immediate manager or managers. Interpersonal relationship and trust have been considered as direct relation with sales force' job satisfaction and indirect relation with overall performance and organizational commitment.

Careter and Tony (2018) asserted that the sales force should properly understand and study the complex nature of the selling environment and what modes are easily available to reach and understand the customers' favourite selling was. This homework definitely assists salesperson to work effectively and providing services after proper allocations of resources and meeting resources with their customers' needs to provide better services to them. In other words, if a customer has been found in a different deal or contract, it would have been considered an efficient utilization of company's sales possessions if a sales person is exactly dealing with that call. Additionally, it could declare a lost sale if it had been a negative impact on the customer.

Martin and Bush (2017) proposed number of predictors that are responsible for customer-oriented selling. These significant predictors suggested for customer- oriented selling are sales persons' perceptions of empowerment, the transformational leadership principles and its use for sales managers, the psychological dimensions climate for supporting sales person, given autonomy, and cohesion. It is suggested that sales managers are responsible to focus on different qualitative aspects which encourages the facets how to lead and guide sales people. Transformational leadership has been considered to have a strong impact on customer oriented selling and it also indicates that this leadership style should be opt by the managers to build a strong connection between sales people and their relationship.

Niels Schillewaert, Michael Ahearne, Ruud Frambach, and Rudy Moenart (2016) in their research to learn about The Adoption of Information Technology in the Sales Force studied 229 salespeople from a broad range of industries. The study also examines personal innovativeness, computer self-efficacy, training, technical support, supervisor support, peer usage, and customer interest. The results of the study identifies that usefulness is a fundamental driver of sales technology and ease of use is a secondary driver. The authors recommend that sales managers: hire technologically innovative salespersons, train the sales force how to use technology based upon impact on job performance, and communicate the user base of sales colleagues and competitors. Sales managers must lead by example since their sales forces are likely to follow their behaviour.

Research Gap:

The previous researches indicated with analysis and their discussion that training and development activities are highly appreciated for getting objectives fulfilled in the organizations and achieving success of the organization. It has already been stated that review of the past

studies advocated the approach in which training and development activities and practices predicted the benefits of the organization. It is argued that the mechanisms of training and development contributed extensively towards the performance improvement considering the all aspects of the retail sectors consisting of customer relationship with organizations, customer surveys etc. on the other hand, the existing literature is not satisfactory to establish and maintain proper connection between training programmes and sales opportunities observed within the organization. Henceforth, it can be uttered that a remarkable gap exist in exploring association between training programmes and sales opportunities generated within organizations.

Objective of the Study:

- To study the impact of Salesforce Automation on sales’ growth in organized retail sector.

Research Methodology:

This study is descriptive in nature. The research was empirical construct. The study has tried to examine the impact of Salesforce automation on the growth of sales. For the study, Indore and Bhopal were selected as a sample area and on the basis of convenience sampling total 255 respondents were chosen working in different Branded Outlets, like Shoppers’ Stop, Westside, Pentaloan, Lewis. Respondents were from various profiles and majorly were males. These respondents have been working for the last three years. Through the self-structured questionnaire based on Likert Scale responses were gathered and after the checked reliability, through Cronbach Alpha and further analysis was proceed. The reliability of 10 items is .957 means 95.7% instrument scale is reliable so this scale is accepted. Regression was applied in examining the impact of sales automation technology on SPSS.

Result on Hypothesis

H₀1: There is no significant impact of Salesforce Automation on sales’ growth in organized retail sector.

Table 1: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. Change	
1	.843 ^a	.711	.710	3.03537	.711	621.910	1	253	.000	2.218

a. Predictors: (Constant), Salesforce Automation

b. Dependent Variable: sales’ growth

The table exhibits the correlation between Salesforce Automation and sales growth in organized retail sector. The value of correlation is .843 means that the relationship is strong between these two variables. The value of regression is .711 depicting that 71.1% variance is explained in sales growth by Salesforce automation. The calculated p-value is .000<0.05 that is significant. The value of Durbin Watson indicates that both the variables are auto-correlated (standard value i.e. greater than 1) The F Model indicates the Goodness of Fit at 5% level of significance. Hence, the null hypothesis ‘There is no significant impact of Salesforce Automation on sales’ growth in organized retail sector’ is not accepted and the result stated that sales growth is affected by the Salesforce automation in organized retail sector.

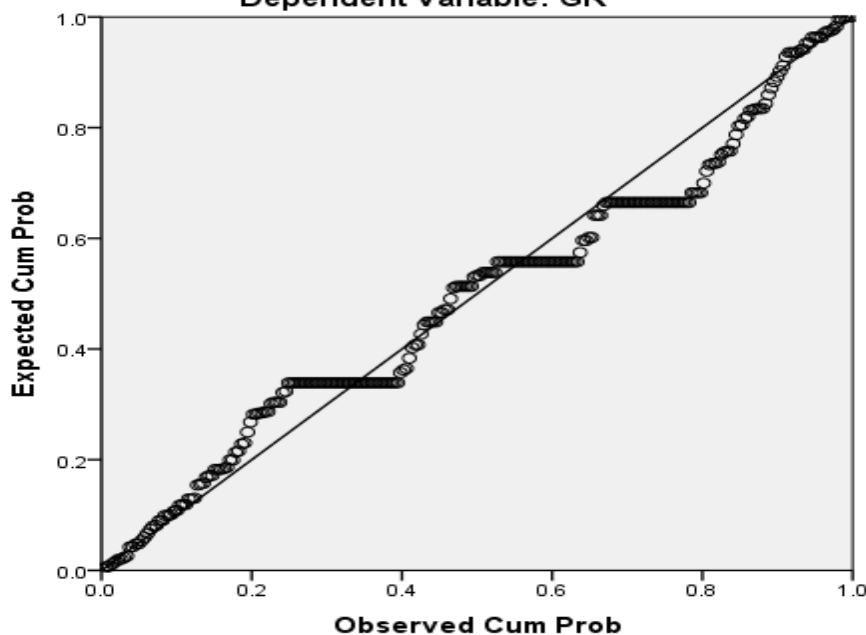
Table 2: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
1 (Constant)	2.962	.605		4.893	.000	1.770	4.154
SFA	.830	.033	.843	24.938	.000	.764	.895

a. Dependent Variable: sales' growth

The table coefficient indicates the Beta which means the risk of increasing so the equation is $Y=2.962+.830X$. The t-value checks the mean difference between the variables of Salesforce automation and sales growth. The Beta value is .843. The data indicates that if one unit is increased in independent variable (Salesforce automation) then .830 unit is increased in sales growth.

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: GR



The Normal Plot indicates the population distributed normally. As the diagonal line explains the significance of normality.

Conclusion:

In retail sector sales department, there is always a need of efficient and effective sales force. A well-mentioned and maintained sales force in retail sector always in need which can help customers in making more aware and well-informed for their buying decision. The advantage of training in the same direction in retail sector keeping employees intimated towards the services and their products to offer, so that the sales persons can have clear communication with the customer. This idea may lead to an increase in customer satisfaction and their confidence, which resulting in increased sales and its profits. It's a domino effect, starting with

an efficient and effective corporate training practice. The same rule has been applied to customers of retail sectors and their service associates. They must be conscious of processes and policies to proposals about the services and products that consumers are expecting for their continuous dedication. Number of challenges has been faced by sales force already instigated within the outside and inside the organizations (Jones et al., 2005). Still organizations are confronting the challenges related to same and trying to provide solutions on the basis of existing studies done in the same directions. The main reason behind these issues and challenges, customer expectations that continuously up graded and processes by the competitors' strategies in the sales business scenario. Among them the main challenge is the customers' expectations that increasing day by day. The information available about the product boosts customers to access more information and review products and its alternative. After the assessment of the information they may make purchasing decisions. These expectations are not restricted to product and its information but it is also related to sales people's abilities and skills to approach and convince people. They need to be well informed by the sales persons for the product and its specifications. They must be well equipped with the information for the product, its latest specifications, trends and best possible information to handle with them. Number of communication technologies gives ability to communicate and inform quickly and efficiently, building their customers requirement and expectations, giving quick response and approachability from the salesperson sideways. When customer buy products may create a complex and expect salespeople to deal with bigger networking within client organizations. Furthermore, customers have increased, opted and demanded customized solutions from the companies which definitely increasing pressure additionally on salespeople' shoulders to work hard in terms of gathering, disseminating and coordinating information among people especially buyer and seller organizations.

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COVID-19 and Distance Education on Private Universities Library Services in Chhattisgarh : A study

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Abstract :

On March 11, 2020, the World Health organization declared COVID-19 a global pandemic. Following the speed with which COVID-19 spread to all parts of the world, and to contain the spread of the disease, most governments around the world, including the US, authorized unprecedented social containment measures to stem the tide. These measures among others required social distancing and the temporary physical closure of educational institutions. The IGNOU - The People's University , like all other institutions of higher learning, had to create distance-learning opportunities to enable students to complete the 2019–2020 academic year. The unplanned, rapid, and uncertain duration of the approach presented challenges at all academic levels and play or various role of library in covid-19. The purpose of the study was to collect data on how the transition to distance learning impacted undergraduate and graduate students taking courses in public health at DEC. The goal was to identify student academic challenges and the unforeseen benefits of distance learning, and to use that information to inform practices that can be implemented during crises that impact university education.

Keywords: COVID-19, distance learning, Public Health, students, course transition, school

Introduction:

On December 31, 2019, Chinese authorities reported to the World Health Organization (WHO), the presence of numerous cases of an unknown pneumonia-like disease that presented like flu in Wuhan City, Hubei Province in China . After virus isolation and analysis of the viral genome sequence from the lower respiratory tract samples of infected patients, a novel coronavirus named severe acute respiratory syndrome-related coronavirus 2 or SARS-CoV-2 was identified and subsequently named COVID-19 by the WHO . A month after its emergence, the WHO declared COVID-19 a global pandemic and a day later, the United States (US) declared the disease a public health emergency . By May 27, 2020, the WHO had confirmed 5,488 million cases of COVID-19 in over 180 countries, with about 1.634 million of those cases occurring in the US .

With no successful vaccine or treatment available, and in an attempt to contain the spread of COVID-19, most governments around the world, including the US, authorized unprecedented social containment measures. These measures, among others, included social distancing and the temporary physical closure of educational institutions. Educational institutions and library to adopt a digital approach to instruction and student learning, dramatically transitioning traditional in-person classroom instruction to predominantly distance learning where teaching is provided remotely on digital platforms. At present, there are over 300 college and university closures in



the US, affecting millions of students . While distance learning is not a new approach to instruction and learning Indra Gandhi National Open University (IGNOU) School in library, the unplanned, rapid, and uncertain duration of the approach, is presenting challenges and taking a toll on students at all academic levels. Not much information on best practices was available to guide such abrupt transitions to college education. The purpose of this study was to collect information on how the transition to distance learning impacted undergraduate and graduate students taking courses in public health at IGNOU library provid the online facility of student . The goal was to identify student academic challenges and unforeseen benefits of distance learning, and to use that information to inform practices that can be implemented during future crises that impact university education.

Distance Learning and Indian Students:

From time immemorial, faculty lecturing in a classroom setting, students listening, taking notes, asking questions, and getting those questions answered have been the backbone of traditional academic education . With advancements in communication technology such as the telephone, radio, television and most recently the Internet, new methods of learning, including distance learning, have emerged . Through the Internet, students can now obtain instruction and learn with ease at home by simply clicking a few buttons on the computer to listen live or asynchronously to a professor thousands of miles away, interact with the professor, and solve problems without having to physically be in a classroom . While a more expensive option for education in terms of set up, distance education has progressed in concept and practice from an “anywhere” to an “anytime” education delivery method .

Distance learning, also known by various names such as distance education, e-learning, mobile learning, or online learning, is a form of education where there is physical separation of teachers from students during the instruction and learning process . It is also an instructional practice that effectively utilizes a wide range of tools and technology to enrich the student learning experience and to facilitate student-faculty and student-student communication . The minimum technological requirements for successful distance learning include the acquisition of hardware such as a computer, mobile device (cellular phones), or webcam, some form of listening device, video conferencing applications such as WebEx or Zoom, Microsoft Windows or Apple operating systems, and a stable internet connection with a speed of about 56K (56,000) or greater .The distance learning is a Council on Education in Public Health (CEPH) accredited school, located in the heart of downtown Atlanta, an area often referred to as the public health capital of the United States. Given the school's close proximity to leading national, state and local public health institutions, our school attracts many students interested in public health education.

Given the fact that the distance learning SPH student body like other schools and colleges on campus comprises traditional and non-traditional students, a combination of classroom, fully online and hybrid courses are offered each semester. Although initially geared toward non-traditional Distance learning SPH adult learners such as full-time workers, and individuals who were unable to attend classroom lectures in person, distance learning has become an established part of the Distance learning SPH curriculum and an option for some traditional students as well. What is at issue with distance learning in the COVID-19 environment is the lack of options for students to determine whether they want to take online courses or not, the lack of access to free technology hardware, software and internet services on campus due to social distancing, a lack of

motivation to learn; the new course workload, adapting to unfamiliar technology for first time online student users and uncertainty about the future among others .

Making distance learning work for all students is challenging. The best tools can be in place, but without equitable access by all students to the tools, adequate preparation time and training for faculty, and the adaption of existing curricula, or the development of brand-new course syllabus, it will be difficult to replicate the in-person learning experience, online. Consequently, some questions that have arisen with distance learning is whether it offers the same value as learning in a classroom, and whether it helps students to imbibe knowledge as they would if they were in a classroom? While these questions are relevant, there are additional significant issues that institutions of higher learning, have to consider, such as how to assist students without reliable internet access and/or technology to participate in digital learning. The disparity in access to technology and internet access is especially glaring among minority populations. While some universities have been able to provide digital equipment to students in need, some including SPH have not been able to adequately provide this service and are concerned that the pandemic will widen the digital divide between students and thus, negatively impact their education.

University in Chhattisgarh

S.No.	Chhattisgarh Universities Under UGC	Affiliation
1	Amity University, Raipur	Private University
2	Ayush and Health Sciences University of Chhattisgarh, Raipur	State University
3	Bastar Vishwavidyalaya, Bastar	State University
4	Bilaspur Vishwavidyalaya, Bilaspur	State University
5	Chhattisgarh Kamdhenu Vishwavidyalaya, Raipur	State University
6	Chhattisgarh Swami Vivekanand Technical University, Durg	State University
7	Dr. C.V. Raman University, Bilaspur	Private University
8	Durg Vishwavidyalaya, Durg	State University
9	Guru Ghasidas Vishwavidyalaya, Bilaspur	Central University
10	Hidayatullah National Law University, Abhanpur	State University
11	ICFAI University, Durg	Private University
12	ISBM University, Gariyaband	Private University
13	Indira Gandhi Krishi Vishwavidyalaya, Raipur	State University
14	Indira Kala Sangeet Vishwavidyalaya, Khairagarh	State University
15	ITM University, Raipur	Private University
16	Kushabhau Thakre Patrakarita Avam, Raipur	State University
17	Kalinga University, Raipur	Private University
18	Maharishi University of Management and Technology, Bilaspur	Private University

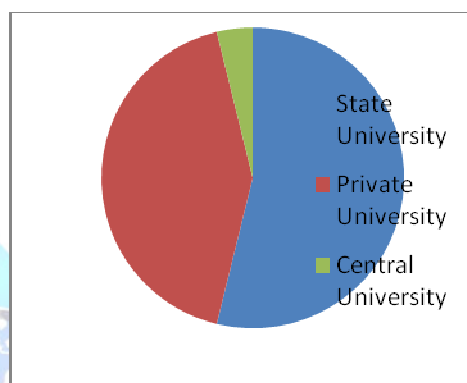
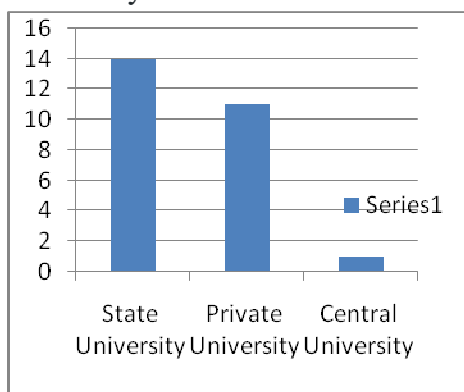
19	MATS University, Raipur	Private University
20	O.P. Jindal University, Raigarh	Private University
21	Pt. Ravishankar Shukla University, Raipur	State University
22	Pt. Sundarlal Sharma (Open) University, Bilaspur	State University
23	Sarguja University, Darripara	State University
24	International Institute of Information Technology, Naya Raipur, Chhattisgarh	State University
25	Shri Rawatpura Sarkar University, Raipur	Private University
26	AAFT University of Media and Arts, Raipur	Private University

Total Universities - 26

State University - 14

Private University - 11

Central University - 1



Private University in Chhattisgarh :

Universities in India are recognized by the University Grants Commission (UGC), which draws its power from the University Grants Commission Act, 1956. Private universities in India are regulated under the UGC (Establishment and Maintenance of Standards in Private Universities) Regulations, 2003. Per the UGC act and these regulations, private universities are established by an act of a local legislative assembly and listed by the UGC in the Gazette upon receiving the act. As confirmed by ruling of the Supreme Court of India, recognition by the UGC is required for the university to operate. Also per the 2003 regulations, the UGC sends committees to inspect the private universities and publishes their inspection report. And provide the affiliation in Chhattisgarh.

Amity University, Raipur

Dr. C.V. Raman University, Bilaspur

ICFAI University, Durg

ISBM University, Gariyaband

ITM University, Raipur

Kalinga University, Raipur

Maharishi University of Management and Technology, Bilaspur

MATS University, Raipur

O.P. Jindal University, Raigarh

Shri Rawatpura Sarkar University, Raipur

AAFT University of Media and Arts, Raipur

Distance Education Universities in Chattisgarh

As it has been seen that various **Distance Education Universities** are available in Chattisgarh for those individuals who want to join distance education courses, you can readily explore the best distance learning universities for pursuing your desired distance learning program. Therefore, for resolving this situation, here is the list of approved **Distance Education Universities in Chattisgarh** which has gained more popularity recently in 2019-2019.

Dr. C.V. Raman University kota Bilaspur Chhattisgarh

Mats University Raipur Chhattisgarh

Kalinga University Raipur Chhattisgarh

These universities offer diverse education courses under distance learning mode with quality services. Some of the instances are online MCA course, online MBA, correspondence BBA, distance BCA, online MSC IT degree, distance BSC IT, MBA, and much more. It's absolutely true that if you choose **Top Ranked Distance Education Universities**, then you can avail of the great services which are provided by them. Some of the services are as following:

- These universities have been listed by **UGC**(University Grants Commission) and **DEB** (Distance Education Bureau).
- These sorts of universities offer online lectures where the experts will guide to resolve your queries related to the course.
- As these universities are offering management courses via distance mode, you can find all your course-related details from examination list to courses of study information through online.

So, when you will join the **Distance Education Universities in Chattisgarh** from these sorts of online learning universities, then you will definitely get the top-notch quality services from the comfort of your home. Therefore, you should start to work on them.

Student Online Teaching Style Preference

- Student Academic Workload
- Faculty Activities
- Student Motivation to Learn
- Behavioral and Economic Impact on Students
- Student Reports of Positive Outcomes of Distance Learning Experience

While the transition to distance learning was abrupt and unnerving to many students, they reported some positive outcomes. Not having to commute to school and subsequently saving money was reported by more than a third of students (n= 144). They said:

"I do not have to commute to campus, which would take at least 2 hours out of my day everyday"

"I don't have to spend an hour and \$61 to commute to Atlanta campus via MARTA"

"I don't have to commute and pay for gas."

Other positive outcomes listed included the fact that students had more time to work on assignments and to be with family and friends (21 responses) - "Because courses have switched to online I now have more time to complete assignments and make sure the assignments submitted are done well."Some students learned to manage their time (three responses), others



had faculty support (19 responses)- “I think that some teachers have really shown flexibility and a strong desire to continue to help our class connect and keep things as normal as possible,” and a few had flexibility and thus, could manage course schedules at their own pace (27 responses). Only a small percentage of students reported that there were no positive outcomes (10 responses).

Discussion:

The study was conducted to identify challenges Distance learning students experienced as a result of the transitioning of all courses online in response to COVID-19, what faculty need to do to address the challenges that students faced, and also to identify the positive efforts that faculty made during the transition. Findings from the study provide information on the challenges and potential benefits Distance learning students experienced as a result of the transition of all courses to an online format owing to COVID-19 for the rest of the fall 2020 semester. The results also provide information on the strategies employed by Distance learning faculty that positively impacted student motivation during the pandemic, those that need to be improved upon, and those which can be replicated going forward.

Student Technology and Connectivity

Prior to the study, Distance learning faculty were concerned that students would have difficulty accessing and participating in courses online due to challenges associated with access to technology off campus. There was also a concern that this challenge along with other factors would affect student motivation to learn, academic performance, and success in classes during the spring 2020 semester. Faculty concerns are well documented in the literature. Confirmed that lack of access to technology by college students has the tendency to negatively impact their learning outcomes. Study results however showed the contrary, only one of the 184 students surveyed did not have access to a technological device. Nonetheless, access to a technological device does not guarantee access to internet services.

Although Distance learning provided students with access to the Schools hotspot, study results found that many could not use those hotspots to access the internet. Students who were unable to access internet services had to find alternative means. Given that distance learning will continue for the foreseeable future, it is imperative for Distance learning leadership to further examine this matter and seek viable solutions to assisting students with gaining reliable internet access. This is a matter for the success of our students, which is inexplicably tied to the future of higher education overall.

Student Online Teaching Style Preference:

The majority of students indicated a preference for the asynchronous approach to online teaching. Their choice was primarily based on the fact that it gave them the ability to learn at their own pace, and to do course work when they were ready. Additionally, having access to pre-recorded course lectures and other resources was convenient and enhanced their ability to manage their schedule from wherever and at whatever time. This finding is consistent with what Trach noted and what Distance learning faculty found based on evidence from a small unpublished student survey that was conducted when the Distance learning the Bachelor of Science in Public Health (BSPH) program was initially established in 2017. When asked to rank their preferred course offering modality, the majority (46%) of pre-public health students, opted



for the 100% online (asynchronous) offering. According to Trach, asynchronous learning gives students the ability to access course information, demonstrate what they have learned, and to communicate with classmates and instructors on their own time without having to be in the same classroom or same time zone. To Trach, asynchronous learning not only provides flexibility for non-traditional students, but also accommodates different learning styles, as students can choose the order they wish to cover material and how much time they want to dedicate to delving into a particular class (15). On the other hand, some students said the synchronous approach was the better option in that, it gave them the opportunity to participate in live streamed lectures, allowed for high faculty-student interaction, and the receipt of immediate feedback on course material. It also gave them some structure and caused them not to be lazy with their schoolwork. In their study, Lobel et al. found that one frequently mentioned advantage of the synchronous learning method, was the spontaneous and dynamic nature of interactions that the asynchronous method does not support. Other students preferred a blend of the synchronous and asynchronous style of teaching.

Student Academic Workload:

Although students indicated that their academic workload significantly increased as a result of the transition to distance learning, it did not affect their motivation to learn or to complete their assignments on time. This shows that irrespective of the challenges, students were determined to complete the semester with good grades. It also suggests that the best way forward with distance learning will be to adjust expectations, and to reduce assessments that overly test online participation and content assimilation. The best way forward will also require faculty to check on students from time to time and to talk with them about their academic challenges to strike the right balance and not overburden students. Some students indicated that faculty engagement in such activities will be very helpful.

Faculty Activities:

In preparation for the transition to a full distance learning format, Distance learning faculty engaged in a series of preparatory activities to make the transition a smooth one. Results from the study show that the attention that was given to preparing faculty for meeting student needs in the online format was communicating course expectations to students, making available recorded class lectures and being accessible for office hours. Investigations from demonstrate that students show a high probability of assigning an excellent overall rating for faculty who in their view, facilitate learning, effectively communicate course materials and information, organize courses effectively, assesses student progress accurately, show interest in students' learning, and show respect for their students. Student Motivation to Learn Over 50% of students surveyed indicated that they were motivated to learn regardless of the learning environment. Thus, it was not surprising that they completed their assignments and turned them in on time and also remembered to log in to take quizzes. Some aspects of student motivation can be attributed to their access to faculty during the semester, their ability to access course materials and recorded lectures asynchronously, and the flexibility of schedules. Define motivation as the process whereby goal-directed activity is instigated and sustained. They indicate that one's motivation can influence what they learn, how they learn, and when they choose to learn. According to available literature, motivated learners are more likely to engage in challenging activities, be

actively engaged, adopt an approach to learning, and exhibit enhanced performance and persistence even under challenging circumstances.

Behavioral and Economic Impact on Students:

Not as many students were worried about contracting COVID-19 (24.7%). Financially, the majority of students (66.1%) had their economic activities disrupted by the pandemic. As was predicted by economists, the implementation of mitigation efforts around the world to counteract the tightening grip of COVID-19 will accelerate job losses and create new schedules. This is exactly what happened to indian students who work. Consistent with what indian faculty presumed, a little under 37% of students said that overall, their daily lives had been affected by the pandemic a lot. With unimaginable national response measures in place to contain the pandemic, families have been separated, public spaces have been closed, and economic activity has drastically slowed down, creating a new normal, and rearranging the lives of indian students to fit into the shifting land scape . indian international students who have no home in the US except campus, had to cope not only with the closure, but also with the fear that inflation arising from global economic inactivity, could potentially affect their scholarships.

Student Positive Outcomes of Distance Learning:

As students were still processing the shock of campus closure and adjusting to the new world of predominantly online classes, the general consensus was that they would miss out on face-to-face interaction with faculty and their peers. This is because, in any given semester, students do not usually enroll in only online courses- they usually go for a combination. After analyzing the data collected, it became apparent that many students were okay with not having to be in the physical presence of faculty - in so far as faculty communicated course expectations, were available, and made course materials and assessments available. Less commuting, saving on gas, having more time to do assignments, time management, and spending time with family were some of the positive outcomes proffered for the closure of campus. Additional positive outcomes stated included having more time to rest, increased communication with faculty, and obtaining leniency with assignment submission dates. The responses associated with time management were unforeseen.

Student Recommendations:

Students provided a number of recommendations in response to the question related to what indian students leadership and faculty can do to improve the distance learning experience. After analysis of the qualitative statements made by the students regarding recommendations, the following six themes emerged;

- (i) Need for reliable technology;
- (ii) more flexibility in assessments and grading;
- (iii) improve faculty access and response times to student correspondence; (iv) adjustment to student course workload;
- (v) faculty preparation for online teaching; and
- (vi) facilitate engaging content for synchronous classes.

Practices that did not enhance their experience will be addressed and those that were positive will be documented and replicated in the future. Research shows that educational experiences that are active, engaging, and student-owned lead to deeper learning.

Study Limitations:

Limitations to this study include the fact that <25% of the indian student population participated in the study. While the data is supportive of the efforts that SPH faculty and leadership have exerted in facilitating effective, relevant pedagogy during this crisis, it would have been preferable to have at least one-third of the student body respond. Additionally, the study is limited in that, it was conducted in unprecedented times, where there was a high likelihood that students' emotional levels could have affected their perceptions of the impact of the online transition.

Conclusion:

Despite the unprecedented events that led to the need for indian students to conclude the spring 2020 semester via distance learning approaches, this study found that students were still motivated to learn and to complete their assessments and assignments on time. Considering that the abrupt and unforeseen changes also had an impact on faculty teaching, motivation and preparation, student recommendations for SPH leadership and faculty to take certain measures to make their distance learning better going forward, were documented and will provide evidence for changes in the future. This study is specific to student outcomes only at indian, however, some of the recommendations provided by students may be pertinent to other institutions of higher learning.

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Scientometrics : Software for Analysis

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Abstract :

This paper aims to discuss the significance of resources on scientometrics study. Tools for scientometric analysis are listed out. Various software tools for bibliometric analysis like Bibexcel, CiteSpace, Histcite, Pajek, Publish or Perish, Scholarometer, VOS viewer-tool for constructing and visualizing bibliometric networks, CitNet explorer - tool for visualizing and analysing citation networks of publications etc are discussed, The study concludes that combination of different software tools can be used for complete scientometric analysis and the familiarization of bibliometric software among students and researchers will help to promote research in scientometrics in a more productive method.

Keywords: Scientometrics, Scientometric Analysis, Bibliometric Software

Introduction :

According to Concise Oxford English Dictionary, science is the pursuit of systematic and ordered knowledge. It is a very complicated system of knowledge production and knowledge exchange. It can be viewed as a means of constructing models of reality. Science is a major human activity having far reaching applications and implications in every aspect of human life. But measuring such an activity, knowledge or its impact in human life is a challenge and therefore the next best thing to do is to measure all that is measurable about them like measuring the volume of research, i.e., scientific output of a country by the number of research papers published by scientists in that country, extent of collaboration, citation rate for measuring the impact of articles etc.,

The academic and research activities need to be measured even in the scholarly world. Scientometrics has become a leading tool for measuring the value of research activities. The term "Scientometrics" has been first used as a translation of the Russian term "naukometriya" (measurement of science) coined by Nalimov and Mulchenko (1969). Scientometrics is a branch of science which can also be termed as "Science of Science". It involves quantitative studies of scientific activities, especially publications, which overlap with bibliometrics to some extent. The terms bibliometrics and scientometrics were almost simultaneously introduced by Pritchard and by Nalimov and Mulchenko in 1969. Pritchard explained the term bibliometrics as "the application of mathematical and statistical methods to books and other media of communication, Nalimov and Mulchenko (1989) define scientometrics, "as the application of those quantitative methods which are dealing with the analysis of science viewed as an information process. According to these interpretations, scientometrics is restricted to the measurement of science communication whereas bibliometrics is designed to deal with more general information



processes. Scientometrics is related to and has overlapping interests with bibliometrics. The term bibliometrics and scientometrics refer to component fields related to the study of the dynamics of disciplines as reflected in the production of their literature. Now a day's both terms are used as synonyms and the borderlines between the two specialties almost vanished. The work that gave rise to the laws of bibliometrics was perhaps the earliest research within the scientometric field. The first law, which came to be known as Lotka's Law, after Alfred Lotka, in 1926 suggested that within a defined area over a specific period a low number of authors accounted for a large percentage of publications in the area. In 1935, George Kingsley Zipf, described the frequency of words in a text and became known as Zipf's Law. In 1948 Samuel Clement Bradford's analysis indicated that within a given area over a specific time a few journals publish a high percent of articles and there are many journals that publish only a few articles each which came to be known as Bradford's Law. These laws form the foundation of the development of the modern-day scientometric literature. The development of the Impact Factor and the work of Eugene Garfield is one of the most renowned accomplishments in the field of scientometrics. Garfield first described the Impact Factor in 1955 as a method of selecting journals for inclusion in a genetics citation index he had been developing. This eventually resulted in the publication of the Science Citation Index in 1961 as a means of linking articles together via their references. Since then, journal Impact Factor has developed into a widely used bibliometric indicator. In the meantime, Derek De Solla Price was studying the exponential growth of science and the citation activity of scientific literature. Several papers were published by him who described the key elements of scientometric analysis, including work on patterns of communication between scientists and the overall history and study of science itself.

Definitional Analysis :

Scientometrics has typically been defined as the "quantitative study of science and technology", as the special topic issue of the Journal of the American Society for Information Science (JASIS).

Nalimov and Mulchenko (1969)⁸ of Russia defined scientometrics as the quantitative methods which deals with the analysis of science viewed as an information process.

According to Beck (1978)⁹ scientometrics has been defined as the quantitative evaluation and inter-comparison of scientific activity, productivity and progress.

Brookes (1990)¹⁰ gave a further insight into the use and definition and stated that "the scientometrics, nurtured by Tibor Braun, has become fruitful in science policy studies. Its techniques have been developed by small groups of scientists working with single-minded enthusiasm in compact research units notably in Budapest and Leiden. But other research units in Europe, East and West, are beginning to make contributions to scientometric studies. The term has now established a significant role in the social sciences. Applications have so far been restricted to exploitation of the citation data provided by ISI but further refinements are now being critically examined. Though the techniques of scientometrics and bibliometrics are closely similar their different roles are distinguished by their very different contexts."

Further, Tague-Sutcliffe (1992)¹¹ defined scientometrics as a "study of the quantitative aspects of science as a discipline or economic activity. It is part of the sociology of science and has application to science policy making. It involves quantitative studies of scientific activities including, among others, publication, and so overlaps bibliometrics to some extent. Brookstein



(1995)¹² defined scientometrics as “the science of measuring science”. Scientometrics is also considered as bibliometric measurement for evaluation of scientific development, social relevance and impact of application of science and technology etc.

Origin :

The origin of scientometric research can be traced back to the beginning of the 19th century. However, since early 21st century, the field is growing at an enormous pace and attracts interest far beyond the walls of universities and institutions.

One of the most recognized accomplishments in the field of Scientometrics is the development of the Impact Factor and the classic work of Eugene Garfield. He first described the Impact Factor in 1955 as a method of selecting journals for inclusion in a genetics citation index he had been developing. This eventually resulted in the publication of the Science Citation Index in 1961 as a means of linking articles together via their references. Since it was first described, journal Impact Factor has developed into a widely used bibliometric indicator.

Around the same time, Derek De Solla Price¹³ was working on the study of the exponential growth of science and the citation activity of scientific literature. Price published several papers describing the key elements of scientometric analysis, including work on patterns of communication between scientists and the overall history and study of science itself. There was tremendous growth in the scientometric literature in the 1960s and since then the field of scientometrics has developed and differentiated into several specializations. These were brought together by the launch of the first journal devoted to the field, *Scientometrics*, founded and edited by Tibor Braun of the Hungarian Academy of Sciences. One of the most notable developments is Citation Analysis

Software for Scientometrics Analysis :

In the technology era, qualitative and reliable databases are there for collecting and analyzing huge amount of data for scientometric studies. There are a number of analyzing tools which can be used for scientometric analysis. The databases provide fast, inexpensive, advanced, domain dependent, reliable and reproducible analytical tools. Article counting on different attributes, removal of duplicate items (when multiple sources are used), frequency analysis, defining of subset, ranking on specific criterion, h-index calculation, link analysis, mapping, visual representation, integration with external programs, etc., are all possible with modern databases. The popular bibliometric software/tools are: BibExcel, CiteSpace, HistCite, Pajek, Publish or Perish, Scholarometer, Scholar h-index Calculator and so on.

1. BibExcel:

It is a free-software designed by Olle Persson of Sweden for academic and non-profit use. It can be used for analyzing Frequency distribution (Authors, Titles, Citations, or any field specified), and Co-occurrence analysis (includes Co-citation analysis, Bibliographic coupling, Co-author analysis, Coword analysis). A useful feature in Bibexcel is the one that enables us to produce data matrices for export to statistical software. It allows easy interaction with other software, e.g. Pajek, Excel, SPSS, etc. The program offers the user high degree of flexibility in both data management and analysis and this flexibility is one of the program's real strengths.

2. BiblioTool :



It is a set of python scripts (open source) written by Sebastian Grauwin. They can read ISI data in csv format and do some analyses including cooccurrence map and bibliographic coupling.

3. Cite Space:

A free Java based software created by Chaomei Chen is a tool to visualize and analyze trends and patterns in scientific literature. It is a free Java application that can be downloaded by the users. The input data sources for CiteSpace are Web of Knowledge, PubMed, arXiv, ADS, and NSF Award Abstracts. A unique feature of CiteSpace is that records from Derwent World Patents Index can also be visualized. CiteSpace provides various functions to facilitate the understanding and interpretation of network patterns and historical patterns, including identifying the fast-growth topical areas, finding citation hotspots in the land of publications, decomposing a network into clusters, automatic labeling clusters with terms from citing articles, geospatial patterns of collaboration, and unique areas of international collaboration. CiteSpace supports structural and temporal analyses of a variety of networks derived from scientific publications, including collaboration networks, author co-citation networks, and document cocitation networks. It also supports networks of hybrid node types such as terms, institutions, and countries, and hybrid link types such as co-citation, co-occurrence, and directed citing links.

4. Copal Red:

A free program written by Xavier Polanco for the analysis of scholarly publications and scientometric purposes like analyzing and visualizing the network structure of a scientific field.

5. HistCite:

A free software developed by Eugene Garfield, popularly known as the father of Citation Analysis. HistCite is a system designed to help selectively identify the significant (most cited) papers retrieved in topical searches of the Web of Science (SCI, SSCI and/or AHCI). Once a marked list of papers has been created, the resulting Export file is processed by HistCite to create tables ordered by author, year, or citation frequency as well as historiographs which include a small percentage of the most-cited papers and their citation links.

6. Interdisciplinary Research (IDR):

A free tool to measure and map interdisciplinary research. It creates overlay maps of science, as a method to explore the degree of interdisciplinarity of a set of publications.

7. Loet Leydesdorff:

Leydesdorff's software is a set of command-line programs that enable a science mapping with different analysis functions to be performed. It was developed at the University of Amsterdam (The Netherlands). The set of programs is freely accessible to the academic community. It is a software to transform and analyse bibliometrics data obtained from sources such as Scopus, Web of Science and Google Scholar for co authorship, international, institutional collaboration networks, co-word, co-citation and bibliographic analysis. The results can be visualized using external software such as Pajek,

8. Pajek:

It is a free python based software for analyses and visualization of huge networks with a large to very large number of vertices. Pajek, an unusual name in English, means a spider Slovenian language. It was started in the year 1996 and developed into one of the most popular

software in the field of visualization and largely used by experts in scientometrics. Pajek is very useful tool in areas like organic chemistry, genealogy, data mining, diffusion networks etc. It can also be used in bibliometrics for visualize the collaboration and citation networks. Pajek is developed by Vladimir Batagelj and Andrej Mrvar. Some procedures were contributed also by Matjaz Zaversnik.

9. Publish or Perish:

It is a popular software program among scholars that retrieves and analyzes academic citations. It is developed and maintained by A.W. Harzing. It interprets Google Scholar outputs and allows academics to easily check their own or others performance. It computes excellent citation statistics about each author's work, including an overall „times cited“ score and times cited per year since publication. Total number of papers Total number of citations ,Average number of citations per paper, Average number of citations per author , Average number of papers per author , Average number of citations per year , Hirsch's h-index and related parameters , Egghe's g-index and some more metrics can be calculated using this.

10. Scholarometer:

Scholarometer is called so as it provides service to scholars by computing citation-based impact measures. It is a social tool to facilitate citation analysis and help evaluate the impact of an author's publications. Scholarometer helps authors and academic administrators evaluate the impact of someone's research publications, citation-based impact measures. Using Scholarometer, one can compute Hirsch's h-index, Egghe's g-index, and Schreiber's hm index. The latest version of Scholarometer can also calculate the new universal h-index (developed by Radicchi, Fortunato and Castellano).

11. VOSviewer:

A free Java based program, intended to be used for analyzing and visualizing bibliometric networks. It can create maps of publications, authors or journals based on a co-citation network or to construct maps of keywords .

Conclusion :

The merits and drawbacks of each software tools vary as each of has different characteristics and implements different techniques that are carried out with different algorithms. Therefore combination of different software tools can be used for complete scientometric analysis and will help in measuring knowledge in different perspectives. The scientometric researchers need to know about the various popular data analysis, mapping and visualisation softwares. Some software are able to do scientometric analysis, some are able to create maps and networks, while some are specialised in information visualisation. The study gives interesting information about scientometric study and its tools available online which will be helpful to researchers who want to identify primary sources of scientometric study. The familiarization of different bibliometric softwares among students and researchers will help to promote research in scientometrics in a more productive method.

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Seek Company Position in India

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Abstract:

With the Indian economy in turmoil and expansion, the term 'industrial industrial disease' has become a stumbling block as it drastically strains the state of economic systems and financial institutions as well as seriously denies the possibility of new investments. The government adopted the D-H measures to address industrial industrial illness. The nationalization of banks was one such step but it did not last long. Such measures do not lead to a permanent solution.

The Industrial Illness in general had a detrimental effect on the Indian economy, as the Indian economy was in its infancy and is still run mainly by industries such as cotton, jute, sugar and textiles, small steel and engineering and these industries were hit hard by the Industrial Illness. And the problem for this overall economy is that India is witnessing a sharp rise in industrial diseases, both large and small. Industrial industrial illness not only has an impact on employers, employees and creditors, but also increases the wastage of national resources and leads to social unrest. Therefore, it is considered very important to take appropriate steps to deal with sick units in addition to making proper adjustments for the identification of industrial industrial disease indicators at an early stage to take preventive action for illness. The progression of industrial industrial disease has led to the current situation since pre-independence times. Rehabilitation of sick companies is not the answer and compromise for industrial illness.

Introduction :

In India, industrial concerns were first encountered in 1948 and then in 1956 with a directed and regulated economy, which was followed in 1991 by a free-market economy after much deliberation. Between the Industrial Policies of 1991 and the beginning of the Indian economy, the Tiwari Committee was formed in 1981 for comprehensive and centralized recommendations for the elimination of industrial illness in India, the Sick Industrial Companies (Special Provisions) Act of 1985 (hereafter as a result of the Tiwari Committee's recommendations). Known as 'SICA'. The Board of Industrial and Financial Reconstruction (hereinafter referred to as "BIFR") was formed for the determination of sick companies and their rehabilitation.

Later on the BIFR's analysis of the endless delay in the case of sick companies, the government in 1999 dismissed the case of former Supreme Court Justice V.S. Balakrishna formed a committee headed by Eradi, the committee recommended the repeal of the SICA and the provisions for sick companies in the Companies Act. Subsequently, another committee chaired by the NL recommended Mitra to disband BIFR and AAIFR and the Companies Amendment Act, 2002 was adopted. The Companies (Second Amendment) Act, 2002 was introduced to provide for the rehabilitation and rehabilitation of sick companies. The Amendment Act, 2002 seeks to replace the two-tiered mechanism of the BIFR and the Appellate

Authority of Industrial and Financial Reconstruction (AAIFR) with the NCLT and NCLAT in the SICA. However, the above amendments were not notified.

Causes of Industrial Sickness:

The company can get sick for a number of reasons [1]. The general assumption is that the incidence of illness is a product of the economic situation and the global impact that economic prosperity is taking. The causes of illness can vary from unit to unit. Yet it is possible to group the most familiar causes of illness under two internal and external heads. In India, the Tiwari Committee has described the causes of many head ailments in its report

A. Internal causes

These are the elements that come under the control of management. Illness conditions of companies also occur due to the following conditions: -

a. Finance: Finance is the basis of every business. Lack of investments for new projects, mismanagement of funds, non-management of liquidity and capital reserve ratios etc. lead to economic crisis.

B. Technological the G: Using the latest technology for business is a need of the hour. Lack of knowledge is an old technology that is an example of an internal cause of illness.

C. Labor: Factors including labor as a cause of illness may include wages, over-labor recruitment, labor skills, labor welfare.

D. Product: The product should meet the demand of the markets. The quality of products in the market should be maintained in the long run.

E. Location: Many things depend on location such as transportation costs, skilled labor, availability of resources and access to the market.

F. Administration: This section of the company is to manage the company. Adequate spending on how to implement policies, engage with customers, on-point market research, fundraising, know the duty of the administrative department.

B. External Causes:

a. Infrastructure: Business development is based on infrastructure. Infrastructure includes water, land, electricity and roads. Thus, the growth of the state depends on the structure provided.

B. Money: Companies that have problems raising funds, investments are usually small in nature. Units that do not have significant assets against their name have difficulty raising money. Government schemes take a long time to disburse. Financial institutions lend at higher rates.

C. Government: Government plays a very crucial role. Applied policies, rates of import duty, procedure for renewal of licenses and other laws enforced by regulatory bodies.

D. Market: Market research is very important for long term sustainability. Adopting tax policies, globalization, licensing, technology are the challenges that the company is facing from the market.

E. Other factors: Conditions that stabilize business are God, war, labor strikes, epidemics and political circumstances.

Legal approach to resolving discrepancies, inaccuracies

Sick Industry Companies Act, 1985

The law was enacted to expedite the process of resuscitation of sick companies and to eliminate those companies which could not be revived. A board was formed for the implementation and direction of rehabilitation plans and for the investigation and research of plans that failed to address an issue. The board was named BIFR as mentioned in the introduction. The board had the power to grant concessions to sick companies.

Need for law:

Sick industries needed to be revived if possible as many aspects related to the sick company would affect the economy. Aspects such as investors, assets of companies, members of the company, employees, etc. were related to the sick company. Therefore, a special law was introduced for the revival and rehabilitation of sick industries. In order to prevent economic and financial activities in the country from stalling and paralyzing the Indian economy, it was also decided to release investment in unwanted companies.

Objectives of SICA:

1. To detect the sick companies and provide an opportunity for the revival of the company.
2. To rehabilitate the sick units if it is feasible or to help them with the winding-up scheme.
3. To expedite the procedure of winding up of the sick company if there is no chance for the revival of the sick company.
4. To curb the wastage of resources of public and private sectors as the economy of the country is affected.
5. To safeguard the workers of the sick units as far as possible.
6. Loopholes in the act were exploited by the management to gain the benefits and raise the funds. Amendments were made to stop the misuse of loopholes.

Definition of sick industrial company:

Initially, before the repeal of the Sick Industrial Industrial Company Act (hereinafter referred to as "SICA"), the term 'Sick Industrial Industrial Company' was provided under section (s) of the SICA Act.

"An industrial company (a company registered for less than five years) that accumulates losses equal to or greater than its total assets at the end of any financial year."

Preparation and approval of a plan for revival

Once the BIFR realizes that a company is ill, it gives the company a definite time to recover from the illness and make the net worth positive without any financial external assistance. If the BIFR concludes that it is impossible for the company to acquire assets on its positive side even after a certain period of time, the Board will appoint an operating agency. The operating agency will prepare and implement a plan regarding the company, including the following steps:

Financial reconstruction;

Change in management of a sick industrial company, or management of a company by takeover;

Mal attachment;

Undert on sale or lease of his guarantee;

Its rationalization of its staff.

The rating agency must provide the BIFR with a revival plan within 90 days. The revival plan will be different in case-by-case.

Rehabilitation by Giving Financial Assistance:

Upon receipt of the draft of the Revival Scheme, BIFR will send the draft to the parties interested in the draft. The draft is sent to the interested parties for their suggestions. BIFR will also publish a revival plan in a newspaper inviting suggestions and objections from shareholders, creditors, employees. BIFR will make changes if necessary.

C. Companies Act, 1956:

Following the repeal of the SIC Act, the definition of a sick industrial company provided under the Companies (Amendment Act) 2002 was notified under Section 2 (46AA) of the Companies Act, 1956, according to which an industrial company is a sick industrial company which has:

1. A loss of fifty per cent in any financial year, or more than its average total value during the four years prior to its financial year; Or
2. Failure to pay its debts for three consecutive quarters, on demand made in writing by the creditor or creditors of such company. "

Part 6A of the Companies Act contains provisions relating to the revival and rehabilitation of sick companies in Part 42LA to Act 24L [2]. It presents the necessary parameters as well as the necessary action for the approval of the plan and penalties for the violation of the part or plan. These provisions became somewhat redundant after the Insolvency and Bankruptcy Code, 2016 came into force.

Companies Act, 2013

A 2005 committee on the revival and rehabilitation of BNP companies, chaired by JJ Irani, reported on the need for separate legislation on the revival and rehabilitation of companies. The report "had a chapter on reconstruction and liquidation. The report recommends transparent and globally accepted rules and regulations for the restructuring and liquidation of companies. The process from company registration to termination should be available in a law.

The term "sick companies" was replaced by "insolvent companies" and the parameters of the sickness test were changed from the company's networth to the liquidity ratio maintained by the company. The report is silent on who will be responsible for the incompetence in corporate governance. Professionals such as chartered accountants, company secretaries, cost and works accountants were recognized as bankruptcy professionals by law. The "rehabilitation fund" replaced the "insolvency fund" and the contributions made by the company were made optional. Prior to IBC 2016, there were the following provisions of the Companies Act 2013 which were later deducted by IBC, 2016. These provisions under the Companies Act, 2013 were made to revive and rehabilitate the provisions under the Companies. The Act, 1956, however, was not notified to them and hence, up to the time of the Insolvency and Bankruptcy Code, 2016, the SIC continued to govern companies by revising and rehabilitating the CA, 1956, by amending section ((b) of the Repeal Act. Bankruptcy and Insolvency Code (Troubleshooting) Order, 2017 will be revoked.

Regulatory Framework-Revival and Rehabilitation of Companies (Non-notified Companies Act 2013 provisions)

Under the provisions of the Non-Notified Companies Act, 201 provisions regarding revival and rehabilitation of companies, the determination of the first illness has to be decided by the tribunal after an application is filed by the secured creditors who have fixed a fixed

percentage of the first sick. The Government, State Government, Public Financial Institution or Scheduled Bank, in view of the parameters prescribed in Section 253 of the Act and in case of satisfaction that the company is a sick company, the tribunal shall provide timely payment to the sick company. Following the aforesaid decision, the application for revival revival and rehabilitation will be made before the Tribunal by any secured creditor representing a debt or a specified percentage of the company within 60 days of the aforesaid decision. Subsequently, an interim administrator has been appointed under section 256 to carry out the necessary work under the Act, including the appointment of a committee of creditors as per the provisions. Thereafter, upon submission of a report by the Interim Administrator, if the tribunal resolves that the company cannot be revived and rehabilitated on the satisfaction of the conditions laid down under section 258, the tribunal will either order termination of the company or, by taking some action, revive the company. May or may not be rehabilitated, the tribunal shall appoint a company administrator under section 259 to prepare a plan for the revival and rehabilitation of the ailing company.

After the preparation of the plan is as per section 261, the plan will be placed before the creditors of his sick company for their approval by the company administrator within a period of 60 days of their appointment or within the prescribed additional period. Upon compliance with the provisions of section 262, the scheme shall be examined by the tribunal and a copy of the draft scheme shall be sent to various appointees as required under section 262 (3) for suggestions and objections and the tribunal may then make such changes in the draft. The suggested or objectionable plan and the plan accordingly should be approved by the tribunal and then submitted to the plan registrar.

D. Insolvency and Bankruptcy Code, 2016 and the Treatment of Sick Companies

Without going into details about the proceedings and provisions under the Code, for the purpose of developing the provisions from SICA to the current Code below, briefly discussed the current management of IBC.

Following the inclusion of the Insolvency and Bankruptcy Code, 2016 (hereinafter referred to as 'IBC'), proceedings under the SICA remained pending. In addition, the Ill Industrial Industrial Companies (Special Provisions) Repeal Act, 2003, dt. By notification dated 25.11.2016 and revoked SICA, 1985 from 1.12.2016 []]

Following the amendment in section (b) of the Sick Industrial Industrial Companies (Special Provisions) Act, 200 Act by IBC, 201, the provisions contained earlier for reference and investigation under the Companies Act, 19566 were changed as per reference and investigation. With reference to the IBC, 201 with. Code, any reference or inquiry pending before the Board or the Appellate Authority under the Ill Industrial Industrial Companies (Special Provisions) Act, 155 was avoided and then guidance will be given and action will be taken accordingly. B) as amended and substituted by the Code. Within 180 days from the commencement of IBC, companies have been provided to the NCLT for reference in respect of the above reference, appeal or inquiry. M / s ATV Project (India) Ltd. Union of India In the case of Ors. [], The Hon'ble Delhi High Court, while evaluating the constitutional validity of section ((b) of the above repealed Act, once the Act has been repealed and a new Act has been enacted in its place, It is not clear whether it should continue to be governed by the old law, unless the existing laws have been processed.

The IBC's primary corporate budget was to consolidate existing legislation on corporate restructuring and insolvency resolution, so it was deemed appropriate to amend the Companies Act, 201 Amendment by notification dated 15.11.2016 [1] and from the same date, had been done. Section 255 [8] of the IBC, 2016 was read with the eleventh list, with the exception of Section 253 of the Companies Act, 2013 to Section 253 of the Companies Act on Rehabilitation and Rehabilitation of Sick Companies [2].

Currently, the IBC has moved away from the 'sickness' tests charged under the SICA and Companies Act, 2016, to the 'cash flow' test, laying the groundwork for more objectivity in the assessment. Upon determining the illness, the next process begins as per the chart in IBC. In addition, to replace the Board of Creditors with a Committee of Creditors, IBC is taken from the previous insolvency model of 'debtor-in-possession' to 'creditor-in-possession'. The corporate insolvency resolution process and the separate procedures laid down in the provisions for liquidation of companies have elaborately simplified and covered the provisions that have been repealed or amended so far in the labyrinth of laws. The term 'sick' is no longer part of the IBC and deals with corporate entities rather than the code regardless of the illness or so the ambitions of the code are broad if the required parameters of the IBC are satisfied and proceedings are sought under the law. IBC, 2016

Conclusion:

In any economy, stability is essential for its positive and sustained growth. The sick state of companies affects employment, financial resources and other resources of the nation. It is in the national interest that, for the individual growth of the economy, there will be a strong and simple law of revival.

The measures provided by IBC for the rehabilitation and rehabilitation of sick companies are complete as they do not repeal the clearly stated revival and rehabilitation provisions under the Companies Act, 1956 or the non-notified and excluded provisions under the Companies Act, 2013. And besides, it brings about moderate to large changes in various laws after consolidating many laws. Necessary powers regarding rehabilitation and rehabilitation scheme of sick companies have been delegated to NCLT. These provisions of IBC, 2016 are tested on top of their scope, limitations and conversions, etc.

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A Descriptive Study on Awareness and Preventive Measures about Covid-19 among High School Children (12-14 Years) At Z.P. High School, Vadlapudi, Visakhapatnam

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Subject: Nursing.

Abstract:

A descriptive study on awareness and preventive measures about COVID-19 among high school children(12-14 years) at Z.P. High school, Vadlapudi, Visakhapatnam”.

Objectives:

1. To assess the demographic variables of high school children. 2. To assess the awareness regarding COVID-19 3. To assess the level of knowledge regarding preventive measures about COVID-19 4. To find out the association between the awareness and preventive measures with selected demographic variables. A Quantitative approach and descriptive research design was adopted for 50 high school children selected by using convenient sampling technique in Z.P. High school, Vadlapudi, Visakhapatnam, Andhra Pradesh to assess the awareness and preventive measures about COVID-19 by using structured questionnaire. Information booklet was provided regarding awareness and preventive measures of COVID-19 after data collection. The overall knowledge of the selected sample shows that, in the out of 50 High school children (12-14 years) 0% (0) had inadequate awareness, 20% (10) had moderate awareness, 80%(40) had adequate awareness regarding COVID-19. In out of 50 High school children (12-14 years) 2% (1) had the inadequate knowledge, 20% (10) had moderate knowledge, 78% (39) had the adequate knowledge regarding the preventive measures of COVID-19. There is a significant association between the selected Demographic variables with the awareness and preventive measures about COVID-19.

Key Words Covid-19, Awareness on covid 19, school children, public health, preventive measures: Corona virus.

Introduction:

“Sometimes real superheroes live in the hearts of children fighting big battles”

India is one of the largest developing countries in the world. The future of nation rest on the children hand; who became future citizens & leaders tomorrow care of child is not only vital itself , but is most important aspects of the health of the community SAARC. Children are the major consumers of the health care. In India about 35% of total population are children below 15 years of age. Respiratory diseases are very often found in children especially respiratory infections such as influenza, measles, Mycoplasma, pneumonia, Severe Acute Respiratory syndrome (SARS-1) and recently the corona virus causes COVID-19 (SARS-2). From a risk communication perspective using the name SARS CoV-1 can have unintended consequences especially in Asia which was worst affected by SARS outbreak in 2003. The emergence of severe acute respiratory syndrome corona virus (SARS CoV-2) provisionally named 2019 novel corona virus (nCOV-19) disease (COVID-19) in the china at the end of 2019 has caused a large global outbreak and is a Major public health issue. COVID-19 is a potentially severe, primarily,

respiratory illness, caused by fever, coughing, & shortness of breath may leading to death. The virus is transmitted via respiratory droplets and aerosols from person to person once inside the body. Virus binds to host receptors & enters host cells. Through endocytosis on pulmonary epithelial cells The new viral particles now ready to invade the adjacent epithelial cells as well as for providing fresh infective material for community transmission via respiratory droplets.

The incubation period of corona virus is 1 to14 days. The risk factors of corona virus are the person with previous respiratory disorders, Diabetes, CKD as using immune suppressants, smoking, the signs and symptoms of children are primarily with recurrent high fever, common cold, throat pain, body aches if untreated it may lead to death of the child.

COVID-19 is suspected primarily with signs and symptoms & later on confirmed with RT- PCR with the sample of mucus from nose, throat & saliva & history of travelling, food history, even through rapid antigen test, High resolution computed tomography (HRCT), chest x-ray, sputum culture, COVID panel (D- Dimmer, Ferritin, C-Reactive protein(CRP), Complete Blood Count(CBC), Serum electrolytes). The treatment for COVID-19 is the symptomatic one such as antibiotics, anti pyretic, steroids, vitamins supplements & following preventive measures can reduce the COVID-19 risk such as hand hygiene, social distancing , wearing masks, isolation of the person with the symptoms of COVID-19, drinking plenty of water, taking vitamins rich foods, protein rich diet & doing breathing exercises regularly

Objectives:

1. To assess the demographic variables of high school children.
2. To assess the awareness regarding COVID-19
3. To assess the level of knowledge regarding preventive measures about COVID-19
4. To find out the association between the awareness and preventive measures with selected demographic variables.

Review of Literature:

BRIDGETTE DO & SHIRLENE D.WANG (May 2020) conducted research in U.S.; on study of early effects of the COVID-19 pandemic on physical activity and sedentary behaviour in children living in the U.S., with sample size if 211, used online survey methodology the result shows 90% of children were free play and 55% of children are going for a walk.

Mrs. NEHA A PATEL (Sep 2020) conducted her research in America on Paediatric COVID-19 systemic review of literature in America with sample of 2914 and used PRISMA methodology the results shows present with cough(48%), fever(47%), sore throat(28.6%), upper respiratory symptoms/ sneezing, nasal congestion(13.7%), vomiting, nausea(7.8%), & diarrhoea (10.1%). The mortality rate of children that were hospitalized with COVID-19 was 0.18%.

Anjali Sharma, Kavita Verma, MANISHA SEHGAL, YACHNA VERMA, ANUPAMA.K (October 2020) conducted their research; on study to assess the knowledge of corona virus among nursing students of district Sirmaur, India with sample size of 145 students and used questionnaire methodology. The result shows 37 of students had good knowledge about COVID-19 and 68.3% have average knowledge.

Data Collection:

Data collection was done at the Z.P.High school, Vadlapudi, Visakhapatnam. The data collection has done on 30-12-2020. Formal written permission was obtained from the school

administration prior to the data collection. Concerned teachers are explained about the purpose of the study and their cooperation was obtained. An informed written consent was obtained from the subjects after explaining the purposes of the study and confidentiality of the study was assured to the high school children. The data collected was compiled for analysis. The investigator did not face any problems during the data collection procedure and got good response from the subjects. A Quantitative approach and descriptive research design was adopted for 50 high school children selected by using convenient sampling technique in

Z.P. High school, Vadlapudi, Visakhapatnam, Andhra Pradesh to assess the awareness and preventive measures about COVID-19 by using structured questionnaire. Information booklet was provided regarding awareness and preventive measures of COVID-19 after data collection.

Result:

Among 50 samples of high school children in Vadlapudi, Visakhapatnam When considering the age of high school children 12 years (1) 2%, 13 years (4) 8%, and 14 years (45) 90%. When considering the gender of High school children (27) 54% were Girls and (23) 46% were Boys. When considers Residential area of child (9) 18% from Rural, (38) 76% from Sub urban, (3) 6% from Slums and none from the Urban area. Regarding Socio economic status of child family (7) 14% have Rs.1000-3000 monthly income, (7) 14% have Rs.3000-5000 monthly income, (28) 56% have Rs.5000-10000 monthly income, (8) 16% have Rs.15000 or above monthly income. When see the health status of Child (50) 100% have the good health status and no one have the weak health status and history of illness. When considers Nutritional status of Child (44) 88% have Optimal nutritional, (5) 10% have Marginal Nutritional status, (1) 2% are undernourished and no one have Over nutritional status. While gone through the Educational status of Parents (23) 46% were illiterate and (27) 54% are literate. When considering Source of Knowledge (34) 68% from Mass media, (0) 0% from Neighbours, (13) 26% from School and (3) 6% children get the knowledge from Parents.

Out of 50 high school children(12-14 years) 0% (0) had inadequate awareness, 20% (10) had moderate awareness, 80%(40) had adequate awareness regarding COVID-19.

Discussion:

The purpose of the study was to assess the knowledge on awareness and preventive measures about COVID-19 among High school children. The assessment helps to determine the extent of knowledge on prevention of COVID-19. The discussion of the present study based on the findings obtained from the descriptive and inferential statistical analysis of the collected data. It is presented in the view of objectives of the study. The present study mainly concentrates on assessing the knowledge on awareness and preventive e measures of COVID- 19 among the high school children.

The problem statement of the study is “A Descriptive study on awareness and preventive measures about COVID-19 among high school children (12-14 years) at Z.P.High school, Vadlapudi, Visakhapatnam”. About 50 high school students were selected by using convenient sampling technique. A structured questionnaire was used to assess the awareness and knowledge on preventive measures of COVID-19 among high school students.

The first objective of the study was to assess the demographic variables of the high school children age between 12-14 years. In the study (1) 2% of 12 years, (4) 8% of 13 years,

(45) 90% of 14 years had participated of total population 50 and (27) 54% girls and (23) 46% boys are participated out of 50 high school children. The second objective of the study to assess the awareness regarding COVID-19. The study was conducted by using structured questionnaire. Out of 50 high school students (0) 0% had inadequate awareness, (10) 20% had moderate awareness and (40) 80 % had adequate awareness. The third objective of the study was to assess the level of knowledge regarding the preventive measures about COVID-

19. Out of 50 high school students (1) 2% had inadequate knowledge, (10) 20% had moderate knowledge, (39) 78% had adequate knowledge on preventive measures of COVID-19. 49 The fourth objective of the study was to find out the association between the awareness and preventive measures with selected demographic variables revealed that the present study found that there is an association between the awareness and preventive measures about COVID-19 among high school children with selected demographic variables with age, socio economic status, health status of the child.

Summary:

The data was collected from 50 high school children. The collected data was analyzed and interpreted by using descriptive and inferential statistics.

Major Findings of the Study:

Level of knowledge regarding awareness about COVID-19 among high school students, out of 50; (0) 0% had inadequate awareness, (10) 20% had moderate awareness and (40) 80 % had adequate awareness.

Level of knowledge regarding preventive measures about COVID-19 among high school students, out of 50; (10) 20% had moderate knowledge, (39) 78% had adequate knowledge. The mean knowledge score was 12 and 2 for standard deviation of awareness. The mean knowledge score was 11.79 and 2.24 for standard deviation of preventive measures.

Conclusion

In this study most of the children had adequate awareness and knowledge on preventive measures. There is a significant association between demographic variables such as age of child and health status of child and level of knowledge at Chi square value less than table value or P.

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Serendipitous Innovation-An understanding through the Post IT Note

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Abstract:

Modern businesses grow and succeed in today's corporate climate for a myriad of different reasons. Some are known for their products, others for their services, and others still for less easily-defined factors such as strong brand loyalty or captivating ad campaigns. If you were to look at the organizations that truly stand out from the pack today as clear leaders within their industries, however, it would be clear that they all have one common factor: they all embrace innovation.

Innovation by very nature impact every aspect of the manufacturing businesses, from design, research and development, production, supply chain and logistics management through to sales, marketing and even end of life management. These innovations will create highly intelligent, information-driven factories and distributed business models that can respond rapidly to change and deliver entirely new customized smart products and services.

Based on these propositions this paper tries to understand the 'Float Glass Process' developed at Pilkington Glass Company and relate the necessary management implications from industrial and process innovation perspectives.

Keywords: Innovation, Management, Serendipitous Innovations, Post it Note

Introduction:

Innovation is the commercial application of an idea that improves existing products or even creates new products, services, or industries. Nowadays, innovation is a must for the success of any organization.

An innovative idea is desirable, feasible, and viable. A desirable idea is one that customers need, a feasible one uses the existing technological capabilities and a viable idea is profitable.

The innovation process is the sum of all the activities needed to commercially apply the innovative idea. It starts with identifying a problem and creating a solution that addresses a customer need. There isn't one fixed innovation process, because it can be adapted from case to case. The innovation process usually looks like this:

Ideas – This is where ideation happens so try to gather as many ideas as possible. Try to have your sources of ideas (people, materials) from varied backgrounds so you can get a broader understanding of your problem.

- **Criteria** – This is the step where ideas are being selected and you have to make sure that they can bring real value to your company. Also, try to find out what resources you need to develop the selected ideas.

- **Testing** – Here, ideas are being refined and tested from the market, and users' point of view. Are they a good fit for the market? Are they solving real users' needs?
- **Launch** – If the ideas go past the testing phase, they are being launched on the market.

Serendipity is an unplanned fortunate discovery. Serendipity is a common occurrence throughout the history of product invention and scientific discovery. Serendipity is also seen as a potential design principle for online activities that would present a wide array of information and viewpoints, rather than just re-enforcing a user's opinion.

A **Post-it Note** (or **sticky note**) is a small piece of paper with a re-adherable strip of glue on its back, made for temporarily attaching notes to documents and other surfaces. A low-tack pressure-sensitive adhesive allows the notes to be easily attached, removed and even re-posted elsewhere without leaving residue. Originally small yellow squares, Post-it Notes and related products are available in various colors, shapes, sizes and adhesive strengths. As of 2019, there are at least 26 documented colors of Post-it Notes.

Review of Literature:

1. **Nick Skillicorn - The TRUE story of Post-It Notes, and how they almost failed (April 2017)** states even though everyone knows Post-It notes as an amazing success story, what they forget is that it took more than 10 years for the product to finally get the internal support to reach its target market. Sometimes, you just need a dedicated internal team who really see the value in something to keep pushing and improving a product until they find a way that shows the right value for it to become a successful innovation.
2. **Nick Glass and Tim Hume- The 'hallelujah moment' behind the invention of the Post-it note (2013)** states the story of the Post-it -- the self-attaching note that adheres in such a way that it can be removed without causing damage -- begins in 1968. Spencer Silver, a chemist for the giant multinational Minnesotan company 3M, was attempting to develop a better adhesive.
3. **Mary Bellis-Invention of the Post-It Note (2019)** deliberates that in 2001, Rebecca Murtaugh, a California artist who uses Post-it Notes in her artwork, created an installation by covering her whole bedroom with \$1,000 worth of the notes, using the ordinary yellow for objects she saw as having less value and neon colors for more important objects, such as the bed.
4. **BLAKE SMITH-Serendipity and Innovation (2020)** states breakthroughs began when the results of the experiments was not what was expected. It so easy and so common to find results one doesn't expect and to discard them as useless. We can't know how many important discoveries were delayed by not noticing the value of an unexpected outcome, but statistically it must be a vast number.
5. **Kristi Hedges- Serendipitous Innovation(2011)** states The cycle of serendipity (or not) came to me while having coffee yesterday with Valdis Krebs: "what you know depends a lot on who you know which depends a lot on what you know which depends a lot on who you know iteratively. If you stay within those confines, your network remains fairly constant and self-selected.

Objectives of the Paper:

1. To understand the different management avenues of Serendipity

2. To understand the relation between Serendipity and Innovation
3. To understand the different business implications for managers that becomes apparent due to Serendipitous Innovation.
4. To understand the business implications of Serendipitous Innovation for the organization through the example of Post it Notes.

Research Methodology:

This research study is aimed at exploring and deriving various management implications from Serendipitous Innovations. For doing so, the exploratory cum descriptive design would be used. The study seeks to analyze Serendipitous Innovation and derive various management learning's with directed focus on the Post it Notes. Also an attempt is made to derive avenues and parameters for guiding employee behavior in an organization which become an expected implied due to the growth spurred by introduction of Serendipitous Innovations.

Etymology:

The first noted use of "serendipity" in the English language was by Horace Walpole on 28 January 1754. In a letter he wrote to his friend Horace Mann, Walpole explained an unexpected discovery he had made about a lost painting of Bianca Cappello by Giorgio Vasari by reference to a Persian fairy tale, The Three Princes of Serendip. The princes, he told his correspondent, were "always making discoveries, by accidents and sagacity, of things which they were not in quest of." The name comes from Serendip, an old name for Sri Lanka (Ceylon), hence Sarandib by Arab traders. It is derived from the Sanskrit *Siṃhaladvīpaḥ* (*Siṃhalaḥ*, Sri Lanka + *dvīpaḥ*, island).

The word has been exported into many other languages, with the general meaning of "unexpected discovery" or "fortunate chance".

Aspects and elements of the concept of Serendipity:

1. Surprise and accidental encounter but no luck :

The aspect of a sudden occurrence plays a major role when defining serendipity. From the viewpoint of technological innovation, serendipity "means leading an accidental encounter to some invention or discovery, sometimes by interpreting data from a different point of view" Yet serendipitous innovation is not a result of pure luck. Pure luck is something that (sometimes) happens and is independent of prior knowledge. In contrast, serendipitous exploration requires preparedness and some sort of engagement . It means being active in searching but also being open to findings that are not considered in a linear problem–solution exploration. Serendipitous innovation originates from being aware of multiple problem spaces even in fields outside the intended focus (e.g. outside a specific technical domain, another industry, or a different customer group). The main element of accidental encounter is the absence of intent leading to surprise. The inventor is not aware in advance of the solution that will result. This requires some sort of alertness on the part of the inventor to be able to see applications and benefits outside the intended activity scope that distinguishes serendipity from pure luck.

2. Intellectual leap

The aspect of an unintended, surprising occurrence plays a major role when defining serendipity. From the perspective of information retrieval, this traditional viewpoint on the process is extended by the aspect of perceiving a certain benefit in this accidental discovery

While some perceive an accident as a negative collision, others are able to transform this accident into a positive collision and to make use of it. This transformation requires an intellectual leap in that the accident is perceived differently from the former expectations. The intellectual leap may result from minor modifications of the cone of expectation or a complete rejection of it. This surprise and intellectual leap is one of the essential points of qualitative research. Qualitative studies are inherently designed to discover unanticipated occurrences and to put them into perspective with existing knowledge. Through the course of researching, researchers gain more and more insight, connect different dots, and may create new connections. This creation of new connections is an intellectual leap and helps to create a meaningful understanding of unanticipated, serendipitous occurrences.

3. A beneficial perception as strategic advantage:

Serendipity has a dual nature consisting of the accidental process and the perceptual ability of transforming it into a meaningful outcome. The unexpected emergence of a meaningful outcome makes serendipity a valuable source for exploration and strategic advantages. Strategic advantages ensure firms' positions in the market because these advantages rest on valuable, rare, hardly imitable, and hardly substitutable bundles of resources in relation to the environment. Thus, the exploration of these sources of strategic advantage is vital for every firm. In this explorative process, firms are confronted with a high level of uncertainty with regard to the sources' characteristics, sources' locations, and how to attend to these sources. However, uncertainty is a double-edged sword in this explorative process because high uncertainty also impedes competitors' ability to identify these sources. Therefore, firms are challenged to explore these sources with both the help and the handicap of uncertainty.

4. Prior and follow-up knowledge

To turn unexpected events into a positive outcome, good preparation is essential to work toward the unexpected coincidence and to allow the intellectual leap. The searcher's attitude is the first important aspect of being prepared. As individuals are exposed to various stimuli, they selectively allocate attention to some stimuli while neglecting others. In other words, attention is a filter to cope with complexity and is driven by searchers' motivations. Thus, the occurrence of an unexpected event should not lead searchers to throw them away, but rather to accept them as potentially meaningful. The accumulation of relevant knowledge is a second important aspect. Numerous authors account for the importance of knowledge, yet use different notions: background knowledge, expertise knowledge of the past, or sagacity. Eventually, knowledge is needed to understand the meaning of a discovery or to create meaning by bringing together different perspectives. This is what happens in scientific teams in that researchers with different background knowledge work together and generate new knowledge. As more and more knowledge is acquired, the benefit from a discovery can be identified. The discovery of the motion center in the brain is an example of how additional knowledge enables serendipitous discoveries. This discovery was not realized for a long time because it was not well understood. The discovery of penicillin is a similar example. Further knowledge was needed to understand what happened during this "accident." "Often, the possibilities afforded by a phenomenon are only appreciated later, after the surprise of the discovery has worn off." Thus, prior and follow-up knowledge extend the possibilities of perceiving the accident's benefit in another context.



The Post IT Story:

The story of the Post-it -- the self-attaching note that adheres in such a way that it can be removed without causing damage -- begins in 1968. Spencer Silver, a chemist for the giant multinational Minnesotan company, 3M, was attempting to develop a better adhesive. "It was part of my job as a researcher to develop new adhesives, and at that time we wanted to develop bigger, stronger, tougher adhesives," he said. "This was none of those." What he came up with were microspheres, which retained their stickiness and had a "removability characteristic," allowing attached surfaces to be peeled apart easily. For years he struggled to find a use for his invention, preaching the merits of his creation to unreceptive colleagues. "I got to be known as 'Mr Persistent,' because I wouldn't give up," he said. But it never found a practical application, until in 1974 he was approached by a 3M colleague, Art Fry, who had heard him talk about his microspheres at a company seminar.

Fry had been in church for choir practice, grappling with a regularly occurring problem with his hymnbook, when he had his "eureka moment" -- "the one where you get the adrenaline rush," he says -- regarding the way Silver's microspheres could potentially help. During his Wednesday night choir practice, Fry would bookmark his hymnbook with pieces of paper -- but by Sunday morning they would have fallen out. "I thought what I need is a bookmark that would stick to the paper without falling off and but not damage the sheets," he said.

When the team started writing messages on the notes to communicate around the office, they realized the full potential of the idea. "I thought what we have here isn't just a bookmark," said Fry. "It's a whole new way to communicate." Not everyone saw the value in the idea, says Fry, but the team continued to lobby for their idea and eventually in 1980, after extensive market testing, 3M released the product on to the market. From that point, the Post-it was unstoppable. "The Post-it notes took off so rapidly that I think it left a lot of people in marketing and sales gasping a little bit," said Silver. "It spread "like a virus," said Fry. "It was always a self-advertising product," he said, because customers would put the notes on documents they sent to others, arousing the recipient's curiosity. "They would look at it, peel it off and play with it and then go out and buy a pad for themselves." Silver says that like many winning innovations, the Post-it was a product nobody thought they needed until they did. "It's like having a cell phone with a camera on it," he said. "Who would have thought that would have been useful for anything but you can't buy one these days without a camera or music on it."

The make-up of the Post-it's adhesive strips remain a closely guarded secret, protected by the patents on microspheres. "Because we didn't patent it, we didn't have to tell people how we make it," said Fry, whose car license plate reads "POSTIT". "This is a product that looks so simple but is very high tech." People wrongly assume the co-inventors of the Post-it must be extremely wealthy, he said, but they have had great careers out of the invention, and he now enjoys a "comfortable retirement." The real satisfaction though, says Silver, is seeing a product they created embed itself in the culture -- featured in films, office mosaic pop-art and the daily lives of millions.

Competing claims to Post IT Notes:

Alan Amron claimed to have been the actual inventor in 1973 who disclosed the Post-it Note technology to 3M in 1974. His 1997 suit against 3M was settled with a payment from 3M to Amron. As part of the settlement, Amron agreed not to make future claims against the

company unless the settlement agreement should be breached. However, in 2016, he launched a further suit against 3M, asserting that 3M was wrongly claiming to be the inventor, and seeking \$400 million in damages. At a preliminary hearing, a federal judge ordered the parties to undergo mediation. The suit was subsequently dismissed, upholding the previous 1998 settlement.

In July 2016 a former 3M marketing department employee, Daniel Dassow, admitted that in 1974 Alan Amron had disclosed his Press-on memo sticky notes invention to 3M.

Software Implementation:

Virtual Post-It Notes have been created for computers in the form of desktop notes. These include 3M's own Post-it Brand Software Notes, Stickies in MacOS, Sticky Notes in Windows, or other applications like ShixxNOTE. Virtual Post-It-like notes are also available online using Evernote, Google Keep, or Microsoft OneNote.

In 1997, 3M sued Microsoft for trademark infringement for using the term "Post-It" in a help file.

Conclusion:

We live in an era of accelerated and constant changes. We see drastic changes from the technology we interact with daily, such as Big Data, Blockchain, artificial intelligence, etc. Recently, we are witnessing exponential technological leaps that are impacting many different types of industries. These rapid advances require companies to be alert, transform and adapt to change. So while process innovation is often invisible to the customer, its impact serves as a strategy that allows organizations to perform at higher levels.

The history of innovation is full of examples where seemingly random or unwanted experimental outcomes lead to incalculably valuable discoveries. Seemingly random spikes in innovation often derive from a single unexpected outcome - but one that is observed by a curious researcher. The field of medicine and chemistry are famous for this kind of discovery.

When you discover something new or unexpected you still have to determine if it is useful or not. Sometimes the new insight may not be of use to you directly, but may be of use to other individuals or groups..

Serendipity complements more well-known types of exploration like searching, experimenting, and planning. Serendipity is neither more nor less important than the other types. Although serendipity is rather neglected as a source for innovation, many well-known and important examples like penicillin, the big bang theory, Coca-Cola, and Vaseline have its origin in serendipitous discoveries. Serendipity is characterized by absent intentions for a specific process or outcome, yet personal as well as social and contextual factors enhance the likelihood of serendipitous discoveries that provide significant competitive advantages. Therefore, managers should consider their visions as a "flexible umbrella" where unexpected events are encouraged and not banned.

Serendipity is only possible if people feel safe in their environment and when the conditions allow failures as well as unexpected surprises. In these serendipity-friendly environments, physical and mental spaces are provided to allow different perspectives whenever possible. They also include large stocks of knowledge sources and the active, open collaboration with representatives from other industries or customers to make new discoveries and get inspiration. Scientists, developers, and discoverers can increase their personal openness to



accident by the use of cheap prototypes and specifically seeking other work environments, as both solve cognitive fixations. Innovative outcomes result from a variety of sources. Therefore, physical and social conditions need to be prepared to achieve original goals in innovation projects, but at the same time to provide alternative departures for unplanned inventions that arise in the course of the project

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Abstract:

Higher education is extremely diverse and the challenges and issues faced by higher education institutions are just as diverse. The process of education is not merely digesting books. It is also about doing several co-curricular and extra-curricular activities that give a broader meaning to life in general and education in particular. I believe that opportunities for such holistic development are not enough in India. Facilities for the same are lacking or not easily accessible in India. Even where facilities exist, there is a lack of information about the same. The main objectives of the studies are To Study the factors of quality of education in India. To study the teachers and Researcher improved the qualities of education. To Study the Students improved examinations and Cross Culture Programmes. This is a theoretical research paper, where secondary information produced by different authors and researchers has been used. For obtaining necessary information, various books magazines, journals, periodicals and different websites have been explored by the researcher which has been mentioned in the reference section. Although there have been challenges to higher education in the past, these most recent calls for reform may provoke a fundamental change in higher education. the role of colleges and universities in the new millennium, and emerging scientific research on how people learn. These disparate literatures have not been tied together in a way that would examine the impact of fundamental change from the policy level to the institutional level and to the everyday lives of college and university administrators, faculty and students. Now the time has come to create a second wave of institution building and of excellence in the fields of education, research and capability building. We need higher educated people who are skilled and who can drive our economy forward. When India can provide skilled people to the outside world then we can transfer our country from a developing nation to a developed nation very easily and quickly.

Key Words: opportunities, improved, theoretical, excellence.

Introduction:

India's higher education system is the world's third largest in terms of students, next to China and the United States. Unlike China, however, India has the advantage of English being the primary language of higher education and research. India educates approximately 11 per cent of youth in higher education. The main governing body at the tertiary level is the University Grants Commission (India), which enforces its standards, advises the government, and helps coordinate between the centre and the state. Universities and its constituent colleges are the main institutes of higher education in India. At present in 2011, there are 227 government-recognized Universities in India. Out of them 20 are central universities, 109 are deemed universities and 11 are Open Universities and rest are state universities. Apart from these higher education institutes there are several private institutes in India that offer various professional courses in India. Distance learning is also a feature of the Indian higher education system.

At present, the world-class institutions in India are mainly limited. Most of the Indian colleges and universities lack in high-end research facilities. Under-investment in libraries, information technology, laboratories and classrooms makes it very difficult to provide top

quality instruction or engage in cutting-edge research. This gap has to be bridged if we want to speed up our path to development.

Keeping in view The Government has constituted a Knowledge Commission to suggest measures to alleviate the problems that higher education sector is afflicted with and make India a Knowledge super power in the global economy. But the government is at a crossroad. While there is a need for an expansion of the higher education sector, resource constraint for both the Centre and the states poses challenge to ensure quality education even in the existing institutions.

Review of Literature:

Murname Richard J willett john B. (oct 1997) Training and education profiles estimated from national longitudinal survey of youth data 1979-1991 for 918 men and 699 women suggest that the probability that drop-outs received post secondary education or training was greater after receiving a general education development (GED) certificate, However, fewer than half of GED recipients obtained post secondary education or training.

Dei-George J sefa argued that our understanding of the school drop-out dilemma must be grounded in the institutionalized policies and practices of exclusion and marginalization that organize public schooling and structure the off-school environment of some students.

PrasanddushyantaMadakpaul (1992) revealed that graduated perceived themselves as being smarter, more ambitions and responsible, more involved in church and volunteer work less involved with drugs and alcohol and less involved in criminal activities than drop-outs.

Ingralim sandy (1996) illustrates that there is little to suggest improvement from the statewide picture of children provided by the 1995 issue. Three branch marks continued to worsen. Low birth weight infants, child abuse and juvenile arrests, two branch marks showed continued improvement. Infant morality and child death. The beandh mark for high school drop outs ceased its past improvement and showed little change although no new data for child poverty was available census estimated indicate that child poverty statewide continues to worsen.

Greason Philip(2002) dynarki mark findings indicate that most risk factors are not effective predictors of dropping out and that drop out prevention programs often survey students who would not have dropped out and do not serve students who did drop out.

Objectives of the Study:

1. To Study the factors of quality of education in India
2. To study the teachers and Researcher improved the qualities of education
3. To Study the Students improved examinations and Cross Culture Programmes

Methodology

This is a theoretical research paper, where secondary information produced by different authors and researchers has been used. For obtaining necessary information, various booksmagazines, journals, periodicals and different websites have been explored by the researcher which has been mentioned in the reference section.

Improving The Quality of Higher Education:

There are some suggestions and Expectations from Government, Industry, Educational Institutions, Parents and Students for improving quality of higher education-

1. **Towards a Learning Society-** As we move towards a learning society, everyhuman activity will require contributions from experts, and this will place the entire sector of higher



education in sharp focus. Although the priorities, which are being assigned today to the task of Education for All, will continue to be preponderant, the country will have to prepare itself to invest more and more on higher education and, simultaneously, measures will have to be taken to refine, diversify and upgrade higher education and research programmes.

2. **Industry and Academia Connection-** Industry and Academia connect necessary to ensure curriculum and skills in line with requirements. Skill building is really very crucial to ensure employability of academia to understand and make sure good jobs (keeping in view knowledge + skills+ global professional skills = good jobs).
3. **Incentives to Teachers and Researchers-** Industry and students are expecting specialized courses to be offered so that they get the latest and best in education and they are also industry ready and employable. Vocational and Diploma courses need to be made more attractive to facilitate specialized programs being offered to students. Incentives should be provided to teachers and researchers to make these professions more attractive for the younger generation.
4. **Innovative Practices-** The new technologies offer vast opportunities for progress in all walks of life. It offers opportunities for economic growth, improved health, better service delivery, improved learning and socio-cultural advances. Though efforts are required to improve the country's innovative capacity, yet the efforts should be to build on the existing strengths in light of new understanding of the research-innovation-growth linkage.
5. **To mobilize resources-** The decline in public funding in the last two plan periods has resulted in serious effects on standards due to increasing costs on non-salary items and emoluments of staff, on the one hand, and declining resources, on the other. Effective measures will have to be adopted to mobilize resources for higher education. There is also a need to relate the fee structure to the student's capacity to pay for the cost. So that, students at lower economic levels can be given highly subsidised and fully subsidised education.
6. **Coming of Information Age-** The world is entering into an Information Age and developments in communication, information and technology will open up new and cost-effective approaches for providing the reach of higher education to the youth as well as to those who need continuing education for meeting the demands of explosion of information, fast-changing nature of occupations, and lifelong education. Knowledge, which is at the heart of higher education, is a crucial resource in the development of political democracy, the struggle for social justice and progress towards individual enlightenment.
7. **Student-Centred Education and Dynamic Methods-** Methods of higher education also have to be appropriate to the needs of learning to learn, learning to do, learning to be and learning to become. Student-centred education and employment of dynamic methods of education will require from teachers new attitudes and new skills. Methods of teaching through lectures will have to subordinate to the methods that will lay stress on self-study, personal consultation between teachers and pupils, and dynamic sessions of seminars and workshops. Methods of distance education will have to be employed on a vast scale.
8. **International Cooperation-** Universities in India have been a primary conduit for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development, and continuing education. International



cooperation is gaining importance as yet another function. With the increased development of transport and communication, the global village is witnessing a growing emphasis on international cooperation and action to find satisfactory solutions to problems that have global dimensions and higher education is one of them.

9. Cross Culture Programmes- After education, tour to all the places in India and world as far as possible with the cooperation of government is necessary so that one can understand about people, culture, arts, literature, religions, technological developments and progress of human society in the world.

10. Privatization of Higher Education- In any nation education is the basic necessity for the socio-economic development of the individuals and the society. In reality only 20% of the population is educated in India. So, improved standard of education as first priority should be offered to the majority by the govt. authorities with sincere political will. Also, privatization of higher education is absolutely necessary in a vast country like India as government alone is helpless to do so.

11. World Class Education- Indian government is not giving priority to the development of Standard in education. India should aspire for the international standard in education. Many national universities like in the USA, UK, Australia, etc. allow studies in higher education for foreign students in their countries and through correspondence courses as well.

12. Personality Development- Finally, education should be for the flowering of personality but not for the suppression of creativity or natural skill. In the globalized world opportunities for the educated people are naturally ample in scope. As a result business process outsourcing (BPO) activities have increased competition in the world trade leading towards the production of quality goods and their easy availability everywhere in the world market. That is the way the world can be developed for peace, prosperity and progress by able and skilful men.

13. Stipends to Research Fellows- The number of Ph.Ds from Indian Universities should increase with proper standards. This should be seen in the context of extremely low fraction of Ph.Ds in India in relation to M.Sc./B.Tech., as compared to what it is in USA, UK, Germany, Japan etc. Meritorious doctoral students should be recognized through teaching assistantships with stipends over and above the research fellowships. Identifying talented, meritorious students and encouraging them through recognition is very important to attract students into research and teaching.

Conclusion:

After independence, there has been tremendous increase in institutions of higher learning in all disciplines. But with the quantitative growth has it been able to attend to the core issue of quality. India is today one of the fastest developing countries of the world with the annual growth rate going above 9%. In order to sustain that rate of growth, there is need to increase the number of institutes and also the quality of higher education in India. To reach and achieve the future requirements there is an urgent need to relook at the Financial Resources, Access and Equity, Quality Standards, Relevance and at the end the Responsiveness.

To attain and sustain national, regional or international quality, certain components are particularly relevant, notably careful selection of staff and continuous staff development, in



particular through the promotion of appropriate programs for academic development, including teaching/learning methodology and mobility between countries, between higher education institutions and the world of work, as well as student mobility within and between countries. Internal self-evaluation and external review must be conducted openly by independent specialists, if possible with international experts.

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Sustainable Marketing Practices of Manufacturing Units in Virudhunagar District

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Abstract:

Sustainable marketing practices focuses on increasing customer value, social value and ecological value. In addition, sustainability marketing also involves planning, organizing, operating, controlling of resources, and marketing campaigns that meet consumer needs and demands. Sustainable marketing practices bring a lot of economic, environmental and social benefits to the industries and public. Such benefit includes reducing the waste, consumption of raw material and resource, to control the pollution, to attain goodwill, improve their business profile and also satisfy their consumer. The manufacturing industrial units need to adopt sustainable marketing practices not only to achieve lot of environmental, economic and social benefits but also to protect the environment and society.

Keywords: Sustainable marketing, practices, Customer, Social.

1. Introduction:

Traditional marketing focuses on consumers who are the elements of an economic paradigm. This basically implies that the limitations of this paradigm will lead to unsustainable marketing practice in the long-run because it ventures only towards earning more profits. Sustainability marketing combines environmental, social, and economic purposes together. Awareness about environmental problems could potentially lead to the manufacture of green products that are derived from natural resources. As a result of that, green marketing is concentrated on addressing environmental issues and promoting pollution reductions. Even though green marketing is engaged in economic paradigm that is designed for exchange process within traditional economic theory of maximum profit, it integrates various marketing efforts such that it address of economic and social issues. This research paper discusses the review of related literature, methodology and sustainable marketing practices by industrial units in Virudhunagar district.

2. Review Of Related Literature:

Nitchakarn Noo-urai and Kaedsiri Jaroenwisan, in their paper titled "Sustainability Marketing: A Changing of Marketing Concept Lead to Sustainable Business" found that sustainability marketing formed of four factors that are planning, organizing, operating and controlling the resources and marketing operation in order to meet the needs of consumers. In the meantime, environmental and social factors are concerned with regard to achieve the organization milestones which encourage sustainable business based on marketing model comprises three dimensions are environmental protection, economic viability and social equity.

Igor Smolinski, in his article titled "Sustainable marketing in an Enterprise" concluded that sustainable marketing can bring such benefits as: cost reduction, increase reputation among customers and business partners, entering new markets, risk reduction of operational failures, aid in finding appropriate staff, as well as gaining a high market position by an entrepreneur. It also concluded that a modern enterprise must function with awareness that economic, ecological and social goals are of equal importance.

3. Methodology:

The present paper is based on both the secondary and primary data collected relating to the sustainable marketing practices. The secondary data provided the background and supportive information relating to this study. Primary data were also collected through a statistical survey with manufacturing industrial units in Virudhunagar district on matters relating to their profile and the sustainable marketing practices by the industrial units. A formal enquiry was made using interview schedule designed for the purpose, from 350 manufacturing industrial units selected conveniently. It was undertaken with the objective to analyze the sustainable marketing practices by manufacturing industrial units in Virudhunagar district. The study is subject to the limitations that the data gathered are at descriptive level than more specific detailed analysis and the geographical area covered is limited to Virudhunagar district only.

4. Nature of Units :

The entire manufacturing industrial units in study area belong to either private or public sector. The study classified the nature of industrial units under two heads, namely, (i) private and (ii) public. The analysis of data collected disclosed that a great majority of 347 respondents, representing (99.1%), were in the private sector and the remaining 3 respondents (0.9%) belonged to the public sector as provided in Table 1.

TABLE – 1 : Nature of Unit:

S. No.	Nature of units	Number of respondents	Percentage to total
1.	Private	347	99.1
2.	Public	3	0.9
Total		350	100.0

Source: Primary data.

Table 1 show that a great majority of 99.1 per cent of the manufacturing units in the study area are private sector that produce and market goods and services with profit objective.

5. Membership With Associations:

The study attempted to unfold the membership with association by industrial units under four heads, namely, (i) industry, (ii) commerce, (iii) eco-club and (iv) other associations of the locality. The analysis of data revealed that out of 350 respondents, majority of 253 respondents, representing 72.3 per cent, had membership with industrial association, followed by 73 respondents (20.9%) had membership with commerce association, 16 respondents (4.6%) had membership with eco-club and the remaining 8 respondents (2.3%) had membership with other local association like wild life save, consumer protection, union and so on as evidenced from table 2 given below.

TABLE – 2 : Membership in Association:

S. No.	Association	Number of respondents	Percentage to total
1.	Industry	253	72.3
2.	Commerce	73	20.9
3.	Eco club	16	4.6
4.	Other associations of the locality	8	2.3
Total		350	100.0

Source: Primary data.

The vivid disclosure of the above table is that that a notable majority of 72.3 per cent of industrial units in Virudhunagar district have membership with the industrial associations.

6. Sustainable Marketing Practices:

Based on the secondary data collected and preliminary survey in the study area, the following important sustainable marketing practices are identified proper maintenance of vehicles, Engaging eco-friendly carriers, use of vehicles using renewable energy, Use of refrigerated warehouses to extent life of products, Advice eco-friendly practices to customers, priority for eco-friendly middlemen, Use of recyclable packaging material , use of bio-degradable packaging material, Reuse of packages, Treatment of waste package, Affixing informative label, Printing reuse and after-use information on package, Induce on eco-friendly theme, Use of eco-friendly instruments of promotion, Proper selection of advertising media, Preparation of effective advertisement copy and reducing paper based advertisements.

The extent of sustainable marketing practices with reference to each aspect is ascertained in five levels as 'very high', 'high', 'normal', 'low', and 'very low'. During the survey, the respondents were asked to mention the extent to which the marketing practices were practiced by them. After ascertaining the number of respondents who stated sustainable marketing practices, weights were assigned as 5 points for 'very high', 4 point for 'high', 3 point for 'normal extent', 2 point for 'low', and 1 point for 'very low'.

The level of adoption of every sustainable marketing practice is considered as the aggregate of weighted points of different levels of the marketing practice. The scrutiny of data showed that the level of adoption of sustainable marketing practice with reference to 'Proper maintenance of vehicles' was calculated as 1484 points (860+520+78+8+18), followed by, 'Engaging eco-friendly carriers' as 592 points 'Use of vehicles using renewable energy' as 1131 points and so on. More data on the level of adoption of sustainable marketing practices are given in the following Table 3.

TABLE – 3 : Sustainable Marketing Practices:

S. No	Practices	Adoption					Total
		VH	H	N	L	VL	
		5	4	3	2	1	
1	Proper maintenance of vehicles	172	130	26	4	18	350
		860	520	78	8	18	1484
2	Engaging eco-friendly carriers	16	12	37	68	217	350
		80	48	111	136	217	592
3	Use of vehicles using renewable energy	23	147	113	22	45	350
		115	588	339	44	45	1131
4	Use of refrigerated warehouses to extent life of products	8	23	35	42	242	350
		40	92	105	84	242	563
5	Advice eco-friendly practices to customers	60	101	130	8	51	350
		300	202	390	16	51	959
6	Priority for eco-friendly middlemen	37	122	140	7	44	350
		185	488	420	14	44	1151
7	Use of recyclable packaging material	108	87	53	17	85	350
		540	348	159	34	85	1166
8	Use of bio-degradable packaging material	138	140	26	32	14	350
		690	560	78	64	14	1406

9	Reuse of packages	62	111	100	38	39	350
		310	444	300	76	39	1169
10	Treatment of waste package	20	125	107	74	24	350
		100	500	321	148	24	1093
11	Affixing informative label	106	120	63	11	50	350
		530	480	189	22	50	1271
12	Printing reuse and after-use information on package	129	68	69	12	72	350
		645	272	207	24	72	1220
13	Induce customers on eco-friendly theme	24	12	128	129	57	350
		120	36	384	258	57	855
14	Use of eco-friendly instruments of promotion	16	73	156	80	25	350
		80	292	468	160	25	1025
15	Proper selection of advertising media	12	117	78	49	94	350
		60	468	234	98	94	954
16	Preparation of effective advertisement copy	27	64	61	76	122	350
		135	256	183	152	122	848
17	Reducing paper based advertisements	37	113	126	38	36	350
		185	452	378	76	36	1127

Source: Primary data.

Table 3 upshots that the important sustainable marketing practices adopted by the manufacturing units at Virudhunagar district are 'Proper maintenance of vehicles' (1484 points), 'Use of bio-degradable packaging material' (1406 points), 'Affixing informative label' (1271 points).

7. Relationship Between Sustainable Marketing Practices and Nature of Units :

The study further examined the relationship between sustainable marketing practices and nature units. In order to ascertain the existence of the relationship, null and alternate hypothesis were formed for testing as under:

H0: There is no significant relationship between sustainable marketing practices and nature units.

H1: There is a significant relationship between sustainable marketing practices and nature units. For the purpose of testing this null and alternate hypothesis, **Mann-Whitney 'U'** test is used. Since the groups in the variables, 'Nature of units' are two in number, Mann-Whitney 'U' test is used. The results of the test are shown in the following Table 4 along with Z value, P value and Result.

Table – 4 : Relationship Between Sustainable Marketing Practices And Nature Of Units

S. No	Independent variables	Dependent variable	Z value	P-value	Result
1.	Nature	Proper maintenance of vehicles	-.220	.826	Accept
2.	Nature	Engaging eco-friendly carriers	-.376	.707	Accept
3.	Nature	Use of vehicles using renewable energy	-.544	.587	Accept
4.	Nature	Use of refrigerated warehouses to extent life of products	-1.137	.255	Accept
5.	Nature	Advice eco-friendly practices	-.257	.797	Accept
6.	Nature	Priority for eco-friendly middlemen	-1.573	.116	Accept

7.	Nature	Use of recyclable packaging material	-.071	.943	Accept
8.	Nature	Use of bio-degradable packaging material	-.270	.787	Accept
9.	Nature	Reuse of packages	-1.261	.207	Accept
10.	Nature	Treatment of waste package	-.425	.671	Accept
11.	Nature	Affixing informative label	-1.476	.140	Accept
12.	Nature	Printing reuse and after-use information on package	-1.584	.113	Accept
13.	Nature	Induce on eco-friendly theme	-.972	.331	Accept
14.	Nature	Use of eco-friendly instruments of promotion	-2.642	.008	Reject
15.	Nature	Proper selection of advertising media	-1.055	.291	Accept
16.	Nature	Preparation of effective advertisement copy	-.664	.507	Accept
17.	Nature	Reducing paper based advertisements	-.748	.454	Accept

Source: Primary data.

Table 4 makes it clear that since the P value is more than 0.05 in case of nature of industrial unit at 5 per cent level of significance, the null hypothesis is accepted. Hence, it is concluded that there is no relationship between the sustainable marketing practices except (Use of eco-friendly instruments of promotion) and nature of industrial unit in the study area.

It also discloses that since the P value is less than 0.05 in case of nature of industrial unit at 5 per cent level of significance, the null hypothesis is rejected. Hence, it is concluded that there is a significant relationship between the sustainable marketing practices like “Use of eco-friendly instruments of promotion” and nature of industrial units.

8. Relationship Between Sustainable Marketing Practices And Membership With Association

The study further examined the relationship between sustainable marketing practices and membership with association. In order to ascertain the existence of the relationship, null and alternate hypothesis were formed for testing as under:

H0: There is no significant relationship between sustainable marketing practices and membership with association.

H1: There is a significant relationship between sustainable marketing practices and membership with association.

For the purpose of testing this null and alternate hypothesis, **Kruskal Wallis** test is used. Since the groups in the variables, ‘Membership with association’ are more than two in number, Kruskal Wallis test is used. The results of the test are shown in the Table 5 along with chi-square value, P value and Result.

Table - 5

Relationship Between Sustainable Marketing Practices And Membership With Association

S. No	Independent variables	Dependent variable	Chi-Square	P-value	Result
1.	Membership	Proper maintenance of vehicles	16.568	.001	Reject
2.	Membership	Engaging eco-friendly carriers	1.105	.776	Accept
3.	Membership	Use of vehicles using renewable energy	13.893	.003	Reject
4.	Membership	Use of refrigerated warehouses to extent life of products	2.646	.450	Accept
5.	Membership	Advice eco-friendly practices	13.997	.003	Reject
6.	Membership	Priority for eco-friendly middlemen	2.050	.562	Accept
8.	Membership	Use of recyclable packaging material	5.513	.138	Accept
9.	Membership	Use of bio-degradable packaging material	6.550	.088	Accept
10.	Membership	Reuse of packages	13.621	.003	Reject
11.	Membership	Treatment of waste package	4.527	.210	Accept
12.	Membership	Affixing informative label	4.677	.197	Accept
13.	Membership	Printing reuse and after-use information on package	6.617	.085	Accept
14.	Membership	Induce on eco-friendly theme	11.914	.008	Reject
16.	Membership	Use of eco-friendly instruments of promotion	9.201	.027	Reject
17.	Membership	Proper selection of advertising media	4.825	.185	Accept
18.	Membership	Preparation of effective advertisement copy	.941	.815	Accept
19.	Membership	Reducing paper based advertisements	5.933	.115	Accept

Source: Primary data.

Table 5 brings to notice that since the P value is more than 0.05 in case of membership with association at 5 per cent level of significance, in case of Engaging eco-friendly carriers, Use of refrigerated warehouses to extent life of products, Priority for eco-friendly middlemen, Use of recyclable packaging material, Use of bio-degradable packaging material, Treatment of waste package, Affixing informative label, Printing reuse and after-use information on package, Proper selection of advertising media, Preparation of effective advertisement copy, Reducing paper based advertisements and membership with association in the study area, the null hypothesis is accepted. Hence, it is concluded that there is no relationship between these sustainable marketing practices and membership in association,

It also discloses that since the P value is less than 0.05 in case of membership with association at 5 per cent level of significance, in case of Proper maintenance of vehicles, Use of vehicles using renewable energy, Advice eco-friendly practices, Reuse of packages, Induce on eco-friendly theme, Use of eco-friendly instruments of promotion and membership with

association, the null hypothesis is rejected. Hence, it is concluded that there is a significant relationship between these sustainable marketing practices and membership with association.

9. Suggestions:

The findings of the research presented above makes it clear that every manufacturing unit either private or public have to adopt the sustainable marketing practices in their organization to attain the environmental and social goals apart from economic objectives. The membership in associations helped to some extent the adoption of sustainable marketing practices by the manufacturing units.

The adoption of the sustainable practices like Use of recyclable packaging material, Use of bio-degradable packaging material, Treatment of waste package, Affixing informative label, Printing reuse and after-use information on package, Educating the customers about sustainability of products, Proper selection of advertising media, Preparation of effective advertisement copy, Reducing paper based advertisements irrespective of the fact that the manufacturer got membership with association or not. Holding membership with association will help the successful adoption of sustainable marketing practices like Proper maintenance of vehicles, Use of vehicles using renewable energy, Advice eco-friendly practices, Reuse of packages, Induce on eco-friendly theme, Use of eco-friendly instruments of promotion.

10. Conclusion:

In the current business world, the manufacturing industrial units adopt more and more sustainable marketing practices in their business operations. The important modes of sustainable marketing practices by the industrial units are Proper maintenance of vehicles, Use of bio-degradable packaging material and Affixing informative label. The industrial units need to adapt sustainable marketing practices not only to achieve profitability and economic growth but also to protect the environment and society. **The adoption of more and more sustainable marketing practices depending on the nature of industrial unit shall lead to the faster growth of company, industry and economy in sustainable way.**

11. Scope Of Further Research

- 1) Sustainable Solid Waste Management practices of Textile industrial units in Rajapalayam Taluk.
- 2) Drivers and Barriers to Implementation of Sustainable manufacturing Practices by industrial units in Virudhunagar District.

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The Agrarian Crisis and the Challenges to the Development of Agriculture in Kerala

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Introduction:

Kerala's agriculture is unique in several ways, it is (1) a highly fragmented and small size of holdings, except in the plantation sector, (2) homestead farming with mixed crops yielding high income, (3) a larger area under commercial crops, especially capital- intensive perennial tree crops, (4) export orientation of crops, such as spices, cashew, rubber, coffee, tea, etc., (5) credit and hired labour-intensive cultivation, and (6) higher indebtedness of farmers (Bright & Joseph, 2005). Many scholars like P.D Jeromi, R.Ramkumar, P.S George etc, are pointing out that the agricultural sector in Kerala is under crisis. In this paper, I try to discuss the challenges of the agricultural sector in Kerala since 1995.

Causes of Agrarian Distress:

There are various reasons for the agricultural crisis. It varies from one crop to another. However, there are some common causes behind distress in all kinds of agricultural production. Some of them are examined in detail below like high indebtedness, high cost of production, rise in import and decline in export.

a. High Indebtedness:

It is important to take a look at the economic situation of agricultural households in Kerala. 'Income, expenditure, productive assets and indebtedness of agricultural households in India' survey conducted by NSSO in 2002-03 and 2013-14 demonstrates the economic condition of agricultural households in Kerala. The financial income of farmers was calculated by adding wages or salary, net receipt from cultivation, net receipt from farming of animals and net receipt from the non-farm business.

As per the 2003 data, the total annual cultivation income for a farming household was Rs. 13440. The total income was Rs. 48048. The survey analyzes the annual consumption expenditure of Kerala's farming households in detail and finds it to be Rs. 31296. The difference between total annual income and total annual consumption expenditure of agricultural households in Kerala was (-)2952 rupees. From these figures, we understand that the savings of a Kerala agricultural household were negative. They couldn't meet their demand through their income. In the 2012-13 monthly data of the same, the income from wages/salary was Rs. 5254, the net receipt from cultivation was Rs. 3531, net receipt from farming of animals was Rs. 575 and the net receipt from the non-farm business was 2529 rupees. In total, Rs.11888 was the average annual income of agricultural households in Kerala. The average monthly consumption of the same was nearly Rs. 11008. The monthly savings of an agricultural household was found to be nearly Rs. 880 only.

In the 2013-14 'Income, expenditure, productive assets and indebtedness of agricultural households in India survey', the accountable income from the cultivation part was 34% only. Nearly half (44%) of it comes from salaries and wages. The families which completely rely upon

cultivation income will be in a serious crisis. Income is less and expenditure is high; hence they naturally would want to find out other ways to survive. Farmers are again forced to take loans from the bank or private lenders for their livelihood and emergencies like hospital cases, crop damage, marriage, education etc.

The magnitude of indebtedness in rural areas of Kerala is higher than the national average. This is due to factors like the increased concentration on cash crops, higher value of assets per household and the availability of credit through the good network of both formal and informal credit (Jeromi, 2007). The average amount of outstanding loan per agricultural household in Kerala is Rs.213600, and which is the highest among all Indian states; the estimated total of agricultural households in Kerala with an agricultural loan is 10,90,800 which is 77.7% of the total agricultural households (Monitoring and Evaluation Division, 2016). Due to the good network of former credit systems available in Kerala, the farmers are taking the majority of the loans from the former credit system (Sadanandan, 2014). Another striking fact about the utilization of agricultural loans in Kerala is that the farmer households borrow mostly for non-agricultural purposes; the share of non-farm business in total loans borrowed was found to be more than the share of expenditure on the farm (Jeromi, 2007).

b. High Cost of Production

Understanding the cost of cultivation is important for understanding the condition of farming in the corresponding region. The relative profitability in farming, which is determined by the value of output and cost of cultivation and also the cost of cultivation, is one of the factors to determine the base level price of individual commodities (George, 1988). Scholars like P.D Jeromi pointed out that the agricultural sector in Kerala mainly cultivates cash crops, so naturally the cost is higher.

The Government of India and the state governments have initiated measures for obtaining the cost of cultivation of important crops and several estimates covering different crops in different regions are available. Most of these estimates use three different concepts of cost: cost A, cost B, and cost C, which are adopted in the Farm Management Studies (George, 1988). Cost A calculation consists of hired human labour, animal labour, machine labour, seed or seedlings, farmyard manure, chemical fertilizers, plant protection measures, land revenue, irrigation cess, repair, and maintenance charge of implements and interest on working capital, That is, as whole cash and kind of expenses incurred by the cultivator. The cost-B calculation is adding the value of interest on fixed capital (excluding land) and rental value of owned land. The cost-C calculation is adding the imputed value of family labour to cost-B.

While analyzing 'the Survey of Key Indicators of Situations of Agricultural Households in India' by NSSO in 2013, it can be seen that the average monthly expense for crop production in Kerala is higher than the national average. In Kerala, it is Rs.2270 while in India it is Rs.2192. Production costs do not rely on any single factor but multiple factors like cost of seed, irrigation, fertilizer, lease for the land, human labour, animal labour, minor repairmen of machinery and equipment, plant protection chemical, interest of the capital, lease of the land and other expenses, etc. The influence of these factors varies according to the nature of the crop. Let us examine the difference in the cost of production of crops grown in Kerala during the period 2004-2014

Crop wise total cost of cultivation per hectare from 2004-05 to 2013-14 (in Rs.)

Crop	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Pepper	20438	24082	25856	39207	41568	49990	58957	66986	66498	76517
Coconut	23619	23738	25840	30159	33919	37429	41316	45130	48938	58230
Arecanut	35656	29886	36747	46128	49249	47878	63397	52188	49794	59956
Banana	89490	86449	99345	131333	101133	127586	128514	159202	158533	156015
Ginger	61235	70115	68436	91150	100998	137880	135389	106328	105167	113184
Turmeric	39591	49045	48047	62766	62029	85225	87276	84409	89901	98154

Source: An analytical study on agricultural in Kerala with changes in area and production from 1955-56 and schemes implemented from 2005-06 to 2014-15

Coconut has been one of the largest cropping areas in Kerala. In 2004-05, the cost of production of coconut per hectare was only 23619 rupees. In 2014-15, it rose to 58,320 rupees. It means that the cost of cultivation is 1.46 times higher than in 2004-05. Hired human labour, cost of manure and chemical fertilizer are the contributing factors to the higher cost of cultivation of coconut. During 2004-14, the cost of hiring human labour has increased by 172 per cent, while the cost of manure & fertilizer, the second major component, has increased by 98 per cent only. This may be due to less application of fertilizers and other manures in coconut palm fields. The following table shows the year-wise cost of above components and total cost of cultivation of coconut in Kerala during the above period (division, 2016). In this same period, the cost of production of areca nuts per hectare has increased from 35656 rupees to 569956 rupees. The manifested rate of increase during this period of 10 years is 68 per cent. While examining the figures given in the above table, the cost of production of banana increased from Rs.0.89 lakhs per hectare in 2004-05 to Rs.1.56 lakhs per hectare in 2013-14 and the growth in cost during the period is 74.3 percent. Whereas the cost of ginger production increased from Rs.0.62 per hectare to Rs.1.13 lakhs per hectare during 2004-2014 and the rate of increase is 84.8 per cent. Further analysis of the cost of cultivation of pepper and ginger per hectare exhibit from 2004-2015, the production cost of pepper per hectare increased by an all-time high of 274 per cent. Turmeric is another important spice produced in the State and its cost increased from Rs.39591 per hectare to Rs.98154 per hectare during the above period and the rate of cost growth is 148 per cent.

Item wise average monthly expenditure and receipts for crop production

The following table shows the item-wise average monthly expenditure for crop production per agricultural household engaged in crop production in Kerala in comparison with all India average

	Expense Item	Kerala (In Rs)	India (In Rs)
1	Seed	105	250
2	Fertilizer/ manure	573	526
3	Plant protection chemicals	73	165
4	Irrigation	6	70
5	Minor repair & maintenance of	16	43

	machinery & equipments		
6	Interest	86	32
7	Lease rent for land	186	158
8	Human labour	1074	465
9	Animal labour	14	32
10	All other expenses	136	455
	Total	2270	2192

Source: Key Indicators of Situations of Agricultural households in India, 2013, NSSO, Govt. of India

There is not much of a difference in the average monthly expenditure for crop production required for agriculture in Kerala, compared to the All India level. At the same time, In Andhra Pradesh, it is Rs 6191 (division, 2016). Nevertheless, Kerala is above the national average. Nearly half of the monthly cost of farming is meant for human labour wages. The largest share of the cost of cultivation is allocated to human labour. Due to the cultivation of cash crops, dependence on credit is high in Kerala. Hence, the interest for agricultural credit is more than twice the national average.

The Decline in Export and Rise in Import

Traditionally, Kerala has become a major exporter of commodities such as pepper, cardamom, ginger, coffee, cashew kernels, coir and coir products, tea etc. (Jeromi, 2007) The diverse topographic, climatic and soil-related conditions of Kerala enable its people to cultivate a wide variety of seasonal and perennial crops. Currently, more than 80 per cent of the total cropping area in the state is used for the cultivation of 11 major crops: coconut, rice, rubber, tapioca, pepper, cashew nut, coffee, banana and other plantains, areca nut, cardamom, and tea. An analysis of the changes in the cropping pattern of the state from 1956 shows that there has been a persistent shift in favour of cash crop at the expense of food crop (Thomas, 2004). The area under food crops decreased from 45 per cent of the total cropped area to 10.32 per cent between 1960-61 and 2013-14, while the area under cash crops increased from 36.6 percent to 62.30 per cent during the same period. The emergence of cash crops as the dominant crop is the most notable feature of Kerala's agricultural development in the last five decades. The observed decline in area under staple food crops and the enormous expansion in the area of cultivation of cash crops, particularly of the export-oriented crops, conform to the general trend on the cropping pattern of countries which have implemented neo-liberal trade reform.

Rubber, tea, coffee, pepper were the major exporting commodities from Kerala. Export-oriented or exportable cash crops including natural rubber accounted for 26.8 per cent of the gross cropped area in the State (Kerala, 2016). More than 80% of the rubber and pepper are exported from Kerala. While exports of commodities from Kerala suffered a setback in recent years, there was a rise in the import of commodities which were produced and exported from the state for decades. The import of rubber, pepper, cardamom, coffee and tea increased significantly (Jeromi, 2007).

India as a member of the World Trade Organization and signatory to Uruguay round of GAAT, is required to dismantle all the physical barriers of import and replace it with a suitable tariff in a phased manner. As the Uruguay round seeks to boost agricultural trade via the substantial reduction in protectionism, prices in member countries are expected to move closer to international prices. Due to this market integration, the best protection against imports is to

maintain the domestic prices and cost of production at a level lower than the potential exporting countries. It can only be achieved if the supply growth keeps pace or higher than the domestic demand (Chand, 1998).

As Ramesh Chand pointed out, it is not possible to increase exports without restricting the cost of production. However, based on the report, Analytical Study on Agriculture in Kerala published by the Government of Kerala, one can examine the cost of production of pepper, areca nut, turmeric, and coconut exported from Kerala. The report says that the cost of pepper cultivation in Kerala showed a record increase of 274 per cent during 2004-2014. During 2004-05, the actual cost of cultivation of pepper was Rs.20438 per hectare, and now it is Rs.76517 per hectare. Turmeric is another important spice produced in the State and its cost has increased from Rs.39591 per hectare to Rs.98154 per hectare during the above period and the rate of cost growth is 148 per cent. In 2004-05, the cost of cultivation of areca nut in the State was Rs.35656 per hectare, now it has increased to Rs.59956 per hectare and the rate of increase during this period of 10 years is 68 per cent. The total cost of cultivation of coconut in the State has increased by 146 per cent from 2004-14. During 2004-05, the total cost was Rs.23619 per hectare and now it is Rs.58230 per hectare. Hired human labour and cost of manure and chemical fertilizers are the higher cost components, compared to other components of cultivation of coconut. These figures emphasize the fact that the agricultural exports of the State of Kerala as a whole have been adversely affected.

Significant growth in exports can be achieved, only if the agricultural output is produced more than domestic demand. While looking at the economic survey prepared by the Kerala state planning commission under the Government of Kerala in 2016, one can analyze the production of different potential exporting crops produced in Kerala. Coconut has the largest share in the gross cropped area in Kerala. It has the largest area under the crop in the country. But while comparing the production, Kerala is at the third place. Low productivity is a major source of shrinking production. According to the 2016 economic survey, only 7535 nuts per hectare coconut was produced in Kerala, but was 14873 nuts per hectare in Tamil Nadu and 13808 nuts per hectare in Andhra Pradesh. The main reason for the decline in coconut productivity is due to root wilt diseases, poor crop management, the existence of senile, and unproductive palms. From 2014 to 2015-16, pepper production recorded a decline from 70000 tonnes to 55000 tonnes in India.

Pepper production is mainly affected by low productivity and diseases. India is the largest producer of raw cashew nuts in the world. In Kerala, in the last decade, there has been a continuous and considerable decline in both the area under cultivation as well as the production of cashew. It is alarming to note that the production stood at 60 thousand MT in 2004-05, declined to 33.3 thousand MT in 2015-16. Another major crop cultivated in Kerala is Natural Rubber (NR). In India, natural rubber production declined by 12.9% from 6.45 lakh tonnes in 2014 to 5.62 lakh tonnes in 2016. The vast majority of rubber production in India comes from Kerala, the production scene of rubber was no different in Kerala also, and total production dwindled from 5.07 lakh MT in 2014-15 to 4.38 lakh MT in 2015-16. The volume of export came down from 1002 tonnes in 2014-15 to 865 tonnes in 2015-16. These figures show that Kerala's export potential crops have not been able to produce above domestic demand. Therefore, the import of domestically produced agricultural products to Kerala from other

countries is increasing like pepper from Vietnam and Indonesia, Cashew nut from Brazil and Vietnam, Rubber from China etc.

Conclusion:

The agricultural sector in Kerala is facing a crisis, due to many reasons. Some of these include high indebtedness, the decline in export and rise in import. In order to overcome these crises, the intervention of the state is inevitable. Measures to increase productivity, subsidise fertilizers, seeds, plant protection equipment that add up the cost of production and implement loan waiver system and exporting policies that would aid the farmers. Protection of the agricultural sector is essential for ensuring food security and sustenance of an economy with agriculture as its backbone.

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Issues and Opportunities of Higher Education in India

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Abstract:

Indian Higher education has experienced phenomenal expansion since independence. India has produced scientists, engineers, technologists, doctors, teachers and managers who are in great demand all over the world. Now it is one of the top ten countries in the industrial and technological capacity, because of the significant contribution of manpower and tools provided by higher education, especially, technical education. Main objectives of the studies are To Study the Issues and opportunities of higher education in India. To study the Industry and international collaborations of higher education in India, Research methodology used by this study is mainly based on secondary data which is collected from Ministry of higher education Government of India, University Grants Commission reports, teacher magazines reports and policies of higher education's corporate expert's opinion and other published and unpublished reports which is relevant to the study. For analysing the secondary data and Journals books magazines etc. Similarly, the present quality of higher education should be improved on par with global standard. Broadening the concept of making India a global hub for higher education is the need of the hour and the systems, procedure must be simplified to attract more foreign students to Indian institutions. By and large, there are more future prospects for the Indian higher education in the years ahead. The students of all categories have more opportunities for the latest and modern education. After independence, there has been tremendous increase in institutions of higher learning in all disciplines. India today, is one of the fastest developing countries of the world. However, it has to create more opportunities for increasing the number of institutes and the quality of higher education to achieve the future requirements. Given the present situation of Higher education,

Key Words: Phenomenal, Produced, Opportunities, Collaborations, Prospects.

Introduction:

Indian Higher education has experienced phenomenal expansion since independence. India has produced scientists, engineers, technologists, doctors, teachers and managers who are in great demand all over the world. Now it is one of the top ten countries in the industrial and technological capacity, because of the significant contribution of manpower and tools provided by higher education, especially, technical education. Methods of higher education also have to be appropriate to the needs of four pillars of education, learning to learn, learning to do, learning to be and learning to become. Student - centered education and the employment of dynamic method of education will provide more opportunities. The Indian higher education must teach every individual how to classify and reclassify information, how to look at problems from new direction and finally how to teach himself/herself. Teachers are the best trained manpower for a nation. Because, they produce technologists, scientists, doctors, engineers, policy makers,

businessmen and teachers. Therefore through quality assured training programs it has become necessary to produce, competent, professionals to meet the ever – growing demands of liberalization and globalization. Every system of education aims at moulding the individuals to play their roles in the society most effectively. Simultaneously, efforts are being made to create a robust and vast system of higher and technical education. Building upon the existing capacities and recognizing the immense contribution to nation building that the large network of educational institutions has made in the post independent India; the country has embarked upon a second phase of expansion and establishment of centers of excellence in higher education. It is envisioned that strengthening the two ends of the spectrum, namely,

Objectives Of The Study:

To Study the Issues and opportunities of higher education in India.

To study the Industry and international collaborations of higher education in India

Methodology:

The study is mainly based on secondary data which is collected from Ministry of higher education Government of India, University Grants Commission reports, teacher magazines reports and policies of higher education's corporate expert's opinion and other published and unpublished reports which is relevant to the study. For analysing the secondary data and Journals books magazines etc.

Results and Discussion:

Issues in Indian Higher Education

The Report of National Commission of Excellence in Education (1983) in the United States warns that the “educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens the very future of a nation and a people”. In the context of multinational entering into the field of education, quality assurance has become a necessity. India will have to decide on what knowledge and /or skills would be most helpful to prepare students for encountering the continuing change. The student of today learning a specific content of information will find to his amazement that he is not prepared to face the life which he has to live for the next five decades because the knowledge furnished with, has become outdated long back. The coming few decades will be miracles in space craft, satellites, internets and others offshoots of scientific enquires. The recent developments in communication technologies have helped to cross the barriers of time and distance and those boarders have become porous and the sky open. The methods of teaching through lectures will have to be supplemented with the methods that will focus on self study, personal consultation between teachers and students and informative sessions of seminars and workshops. In engineering Indian society, knowledge creation, exchange, networking and highest utilization have become most vital for the advancement of higher education. India needs to make the system of education innovative and futuristic in order to respond to the changing demands of the modern society.

Status quo of Indian Higher Education

In Indian higher education institutions, a student needs to get through senior secondary examination conducted by the states or the central board of school education. The duration of the first degree is of three years in general education in Arts, Science, and Commerce followed by



two years of masters degree level courses and three to five years of doctoral degree in the interested field. As far as recent Statistics is concerned, 37% of students are studying in the field of Arts, 19% of the students in Science, 18% of students in the Commerce and 61% of students in the field of Engineering. This is a significant improvement in the field of higher education compared to other developing countries. The system of Indian higher education has experienced an enormous success after independence and emerged the largest in the world. According to the recent survey of MHRD, India, it is found that more than 25 million of students are pursuing their higher studies in around 900 universities. Apart from that, there is degree awarding 40026 colleges. Of them 1800 colleges are exclusively for women. There are around 10 state universities for women. There are around 11669 standalone institutions. This is a huge potentiality for the rapid development and research for the country.

Regulatory Reforms:

The public private partnership is mostly encouraged in the rarest fields of space and the like, and used for the development of higher education in the background regions. The government can come forward provide some benefits to the private industries and institutions to implement the projects of Public Private Partnership. In improving the quality of higher the reshaping and reforming higher education should be given a prominent place regularly. The quality of education provided by the state, central and private institutions should be motivated and the changes be implemented by a quality assurance body of UGC. Hence, the government and the private education institutions have moved to some levels. The co-operation needs to be intensified with appropriate attention to all the aspects related in order to prepare quality and sufficient number of educational staff. Such efforts need a very serious structuring for the research base institutions. Public Private partnership is imperative to bring quality in the higher education system. The Government of India can bring public private partnership through an appropriate policy. University Grants Commission and Ministry of Human Resource Development should play a major role in developing a purposeful interface among the Universities, Industries and National Research Laboratories for the involvement of institutions of higher education engaged in research activities to facilitate availability of latest sophisticated equipment to the researchers.

ICT for Enlightenment:

The content, pedagogical modalities and assessment of degrees should be redefined to meet the demands in the ICT era. The world has entered into an information age and developments in communication, information and technology opened up new and cost effective approaches for providing the reach of higher education to the youth as well as to those who need continuing education for meeting the demands of explosion of information, fast changing nature of occupations and lifelong education. Knowledge which is at the heart of higher education is a crucial resource in the development of political democracy in the struggle for social justice and progress towards individual enlightenment. In this context, the education should be oriented to meet the challenges and the need of the people who are exploiting the tools of ICT in their walks of life. A number of initiatives have been taken by the MHRD to promote digital education literacy in the country.



International Collaborations:

Universities in India have been a primary source for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development and continuing education. Education is emerging to be one of the top focuses of all the developing nations around the world. **Study in India**, a unique initiative of the Government of India will help facilitate the student fraternity from all across the globe to come and experience the best of academic learning from the top institutions in India which would help accommodate the growing quality educational needs of students across the world. Under the umbrella of Study in India, **about 150 select** educational institutes from public, private and deemed universities are offering an array of options including courses ranging from engineering, management, commerce, photonics to yoga, Ayurveda, athletics and languages. The Government of India is inviting aspiring candidates from all over the world to pursue education in desired field from the top ranked institutions in India as per the National Assessment and Accreditation Council (NAAC) which is an organisation that assesses and accredits higher education Institutions in India and the National Institutional Ranking Framework (NIRF) both under the aegis of the Ministry of Human Resource Development (MHRD), Government of India). Launched in April, 2018 the initiative is helmed by EdCIL (Educational Consultants of India), a Central Public Sector Enterprises (CPSE) under the Ministry of Human Resource Development (MHRD), Government of India, the Study in India, initiative aims to make India a preferred education hub for students all across the globe, by elevating its position in the global educational landscape. This portal is a one-stop shop for foreign students seek to study in India. It provides all the information one needs on Indian education institutions in India, how to plan studies, how to stay in India, what kind of events are planned, application process among others. The website also has a helpline number to address queries from students.

Research and industry Collaborations:

The country is aspiring to become dominant in global economy with knowledge workforce, but a mere 0.5 % enrollment in research would not be sufficient. This has great impact in many ways including new innovations, quality teaching and socio-economic development. The absence of world rankings in top positions is viewed as India's underperformance in higher education (Pushkar, 2013). The academia-industry collaboration is quite limited and face challenges in keeping curriculum future oriented. However, the Academia-Industry-Research connectivity has unique benefits to ensure high quality teaching, producing industry-ready professionals and research innovations to meet community development

Investment for Higher Education:

The opportunities for higher education has been recently increased many fold due to the private participation. As soon as India signed GATs foreign universities started to enter the country and now there are more than 100 western universities established in the country. Recently our Indian Prime Minister has announced that within 2022, 1 lakh crore rupees will be invested for education. Similarly, India is in the process of setting Indian universities in the foreign lands. The higher investment in education is really a boast to the social, economic and technological development of the country. The growth of higher education has led to the higher investment in higher education. A large number of private colleges and universities cropped up and are in the recent years providing quality higher education from degree to doctoral degree in



variety of fields. The MHRD has taken several initiatives to ensure that the benefit of the scheme is availed by all the deserving students. As a result of various initiative including inviting of online application, online counseling and online allotment of seats, creation of supernumerary quota seats in Engineering, Medical, Architecture, Agriculture, Pharmacy and Nursing institutions, more number of students are taking admissions in professional courses and thereby improving their employability.

Ensuring the Quality of Higher Education:

Built on centuries of values, the Indian Education system is the world's third largest higher education system, having a rich mix of premier Government and private institutes with a network of 38000 colleges and 800 universities. Higher Institutions in India offers degrees that are competitive in the world market in terms of quality but are delivered at 1/4th the cost hence guaranteeing value for money. India offers quality education and research, and students will earn internationally renowned degree. Students will have a range of courses to choose from the latest advancements of science and technology like Virtual and Augmented Reality, Artificial Intelligence and Cognitive Computing to traditional subjects. For quality improvement In order to extend the vision of India is a hub for higher education, the enrolment and bureaucratic systems in universities should be simplified. The foreign students should be given various concessions and scholarship to increase the intake of foreign students. In this line UGC has work with other countries in getting more students to Indian universities. The quality society can be produced only through quality education. In this line, the higher education of India needs mechanisms to improve the quality of education provided through universities and other degree awarding institutions. The mechanism should pay attention on refining, diversifying, and upgrading higher present education and research programmes.

Conclusion:

In finding solution to the issues in higher education, the co-operation of international communities should be sought to share their experiences. Moreover higher education provided in Indian universities and colleges must suit the need of the education in ICT Era. There will be meaningless to give out date education. On the part of the Indian government a lot of changes were brought to the curriculum of higher education absorbing the global demand for receiving skilled manpower. Similarly, the present quality of higher education should be improved on par with global standard. Broadening the concept of making India a global hub for higher education is the need of the hour and the systems, procedure must be simplified to attract more foreign students to Indian institutions. By and large, there are more future prospects for the Indian higher education in the years ahead. The students of all categories have more opportunities for the latest and modern education. After independence, there has been tremendous increase in institutions of higher learning in all disciplines. India today, is one of the fastest developing countries of the world. However, it has to create more opportunities for increasing the number of institutes and the quality of higher education to achieve the future requirements. Given the present situation of Higher education, there has been significant improvement in the recent years. The investment in higher education, which has more potentiality, should be motivated to provide better higher education in the country.



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Mobile Libraries (M-Libraries) in Health Science Environment : An Overview of Web-Based Information Resources Going on Mobile

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Abstract:

This research work elaborates on web-based mobile information resources of health science that have led to improved information and library services in the medical/health discipline. Mobile technology has changed the information-seeking behavior of the users and services being provided by the librarians also making substantial inroads inpatient care and diffusion of health care information. It is changing the way health sciences professionals gain information. They use mobiles and other handheld devices to do things like accessing medical records, getting information on medicine, providing remote patient care through telemedicine facilities, and accessing health care literature due to library resources are increasingly available via either mobile applications or mobile websites in health science. This paper will be helpful to clinicians and other medical science concerned working in remote places to keep abreast with the recent advances in their respective fields by enabling them to access the information at the press of a button on mobile or handheld devices. How much mobile information sources have been used with the provision of Mobile-libraries has also been discussed.

Keywords: Mobile Libraries (M-Libraries), Health Science libraries, E- resources

1. Introduction:

More and more people accessing the internet from their pocket PCs and mobile phones, libraries are investigating ways to deliver their services to mobile phones and other small-screen devices so their customers can access them any time anywhere[1]. Mobile phones have a function in all aspects of life, and their use is increasing dramatically as well as in clinical routine have the potential to greatly improve the communication, facilitate information access, eliminate double documentation, and increase the quality of patient care in the long run[2]. So the use of mobile devices such as cell phones, iPhones, and Blackberries concerning academic mobile library services is growing [3].

An informally Mobile Libraries (M-Libraries) is a managed collection of information, with associated services, where the information is stored in digital formats and accessible over a mobile phone and combining an on-site collection of current and heavily used materials in mobile form available access by mobile format and mobile-process able to form and the functions of acquisition, storage, retrieval, access, and display are carried out through the use of mobile technologies. At present many libraries in western countries are providing various information services and making access to reference sources available on mobile devices for their users. Using a mobile device the library client of 2015 will be able to: search the library

catalogue, select material based on reviews and ratings by fellow clients and view full-text online resources, and reserve print materials [4]. Present trends in mobile tools and application for libraries so topics of m-Health/Mobile Libraries (M-Libraries) and medical informatics are required in the syllabuses of MedLIS in Iranian universities which can help to make the right medical decisions [6]. According to Lippincott (2008), clinical professionals and other researchers working in the field “may find ready access to directories, handbooks, and the like to be of great utility in the field” on mobile devices. Lippincott noted that ‘libraries might want to offer a set of mobile formatted reference materials for students studying’[7]. Reviews of some the health science and mobile application using mobile and other handheld devices for a variety of purposes. This paper addresses some of these issues by exploring the web-based mobile information resources in health science libraries. The finding of the study would help health science libraries and users to better understand the nature of web-based mobile/apps information resources and make a better negotiation with database vendors.

2. Objectives of the Study:

This study aims to achieve the following objectives: To familiar with the concept of Mobile Libraries(M-Libraries); to find out and analyses the web-based mobile information resources for health science libraries; how it has evolved from the library and user awareness regarding resources with academic and special libraries; and to review outstanding web based mobile information resources in health science.

3. Review of Related Studies:

There are several significant efforts as evidenced by many authors who have detailed information regarding the use of mobile devices; web-based mobile information for health science libraries. Baggett and Williams (2012) have recommended mobile applications for library resources [8]. Boruff, Jill T., and Bilodeau, Edward (2012) have attempted to facilitate medical student's access to mobile point-of-care tools directly on mobile devices to provide information [9]. Davies et al. (2012) has evaluated mobile learning in clinical medical students which model for mobile learning in the clinical setting to access up-to-date information for patient care [10]. Kamel Boulos et al. (2011) portrayed health and healthcare smartphone apps (applications) which are the market of today[11]. Shurtz and Isenburg (2011) conducted a study on e-readers loaded with medical textbooks and other relevant material that benefit medical students, residents, and preceptors in clinical settings [12]. Bala, A. and Gupta, B. M. (2010) have found that the positive attitude of the medical respondents towards the provision of library and information services on mobile devices [13]. Chatterley, T. & Chojecki, D. (2010) has mentioned that ‘49.1 % has accessing clinical textbooks’ [14]. Arul Chib (2010) has exerted a study on framework application of mobile technologies for accessing health information [15]. Sanjay Dixit et al. (2010) studied the latest consumer of mobile phones in medical colleges; that’s usage at residing in hostels [16]. Holt and Walker (2010) have described “Medical libraries were the first libraries to adapt to the mobile environment debuted”[17]. Adams, A. (2008) conversed to mobile devices which have been using healthcare and in hospitals. They articulated that PDAs and smartphones provide rapid information support for accessing medical digital libraries [18]. Carles et al. (2008) found that the attitudes of students to using PDAs in their clinical practices are positive [19]. Iluyemi, A. (2008) has taken a case study and noted that



the health workers distributed across the network use the connected PDAs to receive medical e-learning materials [20].

4. Methods:

The available literature on the topic has been studied and reviewed to examine the concept of web-based mobile information resources in health science libraries. Most of the data on the mobile information resources taken from different search engines using terms related to mobile information resources, mobile technology, and the internet had taken data from relevant websites. Sometimes the conceptual and textual information related to the present study were collected both from primary and secondary sources of information such as books, professional journals, magazines, conference proceedings, etc

4.1 Search Strategy:

We searched from differentiating search engines as terms using the following wide concept of publication available on mobile and other handheld devices related to the medical subject and keywords like: mobile, handheld devices, mobile library website; point-of-care systems; PDA; handspring; pocket PC and web-based mobile information sources, mobile publication, medical education, medical students, Mobile Libraries(M-Libraries), medical libraries; attitude of health personnel; attitude towards mobile; medical information apps, etc. Results were got from search engine-related web-based mobile information sources related to health science.

4.2 Mobile Libraries (M-Libraries): Brief Overview In Health Science Libraries:

The mobile web is all about discovering information at your place when you need it. Its advantages are understandable – information access whenever, wherever. Access to quick information in the health/medical field, mobile devices and handheld devices are now not only changing the way we communicate; they are going to change the way we access information [21]. The use of mobile phone technology for knowledge sharing among academicians in institutions of higher education is being [22]. Some of these possibilities in health science libraries are: transmitting, receiving, and storing information, connecting to the Internet, or running applications is possible in the library with the help of mobile technology in library services.

There are scores of different types, styles, and models of mobile phones and handheld devices, web-based mobile information sources resources are widely used available on the market today which can be supported to getting mobile-based information sources and also in library and its services: basic phones and smart phones; pocket PC devices; palm and other PDAs; Net books, e-reader; tablet PC; GPS devices, media players; pocketcirc, etc. Several universities have established campus-wide mobile initiatives like offered PDAs, smart phones, iPhones, and iPods to students. Academic libraries are making their services, such as the catalog, hour's listings, and computer availability, accessible via mobile devices [23]. The fundamental use of M- libraries is that provide better delivery of information and anywhere searching and browsing; m-library brings the library to the user; information can be shared; to keep information current; information is always available. Following services enable users more efficient access to resources and information whilst moving throughout the library: M-opacs (Mobile library online public access catalogues); reference services via text messaging;

audio tours and library instruction; text message alerts and circulation services; a due-day reminder and renewal-request service; new title notification service; multimedia borrowing notification service; request arrival notification service; overdue notification service; library News and event reminder service; the interactive library map service, mobile learning, etc.

In the health sciences field, so many libraries are offering health science-related mobile-based information services. In health science libraries, it can be used in different ways like use of information (data) and communication technologies for health processes (Health System) either locally and at a distance; health workers and health system capacity; Health management information systems, (EHR, DSS, etc) health knowledge systems (Libraries). PDA in work of cardiovascular and medical/ surgical; critical care nurses report using PDAs, decision support tools is being[24], use of Smartphone by researchers was utilized for access of useful links such as journals, reference guides, calculators relevant to their medical field[25] and mobile phone text messaging (Short Message Service, SMS) application is using for many tasks in health care [26]. In the health sciences, field, the library of the University of Alberta[27], Cold Spring Harbor Laboratory[28]library offers a vast array of health science-related reference services and access to other library sources to its users on mobile devices.

5. Results:

The e-database search on the internet yielded 486 citations. After preliminary screening for eligibility via titles, keywords/subject headings, and abstracts, and full text, we retrieved 156 articles for a more detailed review. Between these, 46 met the filled eligibility criteria. An additional 276 mobile-based journal's, 149 mobile-based databases, 198 major different mobile-based reference/information sources website was identified by searching from search engines of these eligible articles and prior reviews. Including the 16 unique papers selected from journals, books, conference proceedings were searched to identify a review of the literature.

6. Conclusions:

In recent years, mobile and other handheld devices have emerged as a powerful educational and informational tool, and Access to quick information in the health/medical field, mobile devices, handheld devices, and web based mobile information sources resources are widely used. In this era of information, the internet and mobiles are very important and useful sources for fulfilling the requirements of the health science concerned. Mobile information resources can be used for efficient retrieval and meeting information needs. It is clear from the study that Mobile information resources are useful to health science professionals. Librarians must familiarize themselves with the models offered by publishers and vendors, checking license agreements to ensure that mobile access is included. It is important to inform patrons about new and updated mobile resources. In conclusion, health librarians have a strong future in the mobile environment, but librarians should evaluate the proper medical apps based on the evidence for the health care professional community and more importance to providing access to mobile information resources.

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