PURPOSE AND CHALLENGES BEHIND USE OF E-INFORMATION NOTICE BY UNIVERSITY STUDENTS AT THE SHIVAJI UNIVERSITY KOLHAPUR, INDIA

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ABSTRACT

This survey examined the purposes regarding the use of e-information available at different e-resources and the problems occur while accessing, searching and retrieving of the desired e-information from the bundle of e-resources specified by the postgraduate and research students of Shivaji University Kolhapur Maharashtra, India. University students constantly work on the theoretical/practical aspects in classroom and at laboratory to showcases desired learning and research outputs by consulting varied documentary and electronic sources of information. As of now students' trend lies with browsing of electronic contents to match appropriate e-information as global, anytime access and in variety of formats by surpassing the access challenges to accomplish their teaching and learning assignments. Descriptive method of research and questionnaire was applied as a data collection instrument for this study. There were 3761 university students enrolled and considered as a total population and out of this 351 university students are fixed randomly as a sampling ratio from the Krejcie-Morgan table. Accordingly, the organised and pre-tested online questionnaire was distributed to targeted sample of 351 university students from different post graduate departments of Shivaji University Kolhapur and it is found that a total of 254 university students were responded (72. 36%) to the survey. The analysis was carried out using MS excel software and presented with tables and graphs to highlights the major findings. It is observed that, out of total population under study, 90.16% university students use e-information for their academic/teaching/learning (activities) intentions, followed by the rest of the purposes. Further, 'difficulty in accessing the Internet' was the biggest challenge noted by 52.76% of surveyed students, and it hindered their use in accessing different electronic information services. While looking against the students' category wise intentions, the analysis reveals that out of thirteen defined purposes the quantum of use of e-information is higher in 7 purposes in case of Research Students, whereas it is higher in 6 purposes for Post-graduate categories of students. Further, it has been found from the analysis that, intent for use of e-information is higher in male students (31.10%) as compared to female students (20.47%). Regarding faculty wise use of e-information for different purposes, the students from Humanities Faculty (20.86%) ratio is found to be higher than the rest faculties, and the

students of age group 22 to 25(20.07%) response is high among the other age groups. In this direction, the study resulted in the use of e-information for various intentions and the challenges in accessing the e-information by the university students of Shivaji University Kolhapur.

Keywords: Students, Information, E-resource, E-information, Literacy, Technology, Education

Introduction

Technologies are rapidly changing day by day that makes overall impact on human life resulting into changes in their behaviors and interests. 'E-' (electronic) is the buzzword of coming 22nd century as all life services are dependent on it. Information/e-information is an imperative commodity for all including the academicians. To survive in this digital smart environment, pursuing of right information is the only source useful for building of varied lifelong learning capabilities and achievement of great success. In order to cope with users' incessant classy information requirements, the information centre cum library is fully packed with latest as well as retrospective all sorts of resources in online mode. Information is vital media without which planning and decision making process cannot run effectively. Along with information repackaging, information consolidation in terms of construction of information are the aspects behind information management that lead to become an information literate person.

Thus, use of information reflects in perusing of varied academic needs, at the other end the unsure quality and mounting quantity of available varied information replicates in a big challenge for the academicians especially for the students. In this connection, assist the students to strengthen their research, consultancy and learning tasks is of the prime concern that may leads to prove themselves as a vital product in the nation building then only the name and fame of the students' will be highlighted in the global academic world. There are different kinds of electronic information resources used everywhere provided by reputed well known publishers (databases) accessible either in abstract, full text or Table of Content (TOC) form and also on free/paid (pay-per-view basis) basis for subscribed and non-subscribed users. Few such major e-resources are mentioned below:

1. Citation Indexes
2. Discussion forum/group
3. E-Books
4. E-Journals/E-Articles
5. E-Databases (contains Journal/Magazine/Newspaper article packages, Book reviews/chapters/citations, Dissertations/Theses, Citation and Abstracts of articles/theses, Aggregators etc.)
6. Electronic theses and dissertations (ETDs)
7. E-Newspapers

8.   E-Print Archives (Preprint platforms/Preprint servers)/Digital Libraries/ Institutional Repositories
9.   E-reference collection
10.   Open Access Resources/Open Educational Resources
11.   Search engines
12.   Subject gateways
13.   Web 2.0/3.0 tools

Review of Related Literature

Several documentary and modern sources of information are referred to know its uniqueness. Latest designated reviews are narrated in chronological order.

A survey was made by Akporhonor and Akpojotor (2016) identifying the challenging confronting postgraduate library and information science student in the use of electronic resources in Southern-Nigeria and the findings revealed number of challenges such as poor internet connectivity, epileptic power supply, information overload, high cost of access, download delay and difficulty in accessing some websites etc. that hinders the use of e-information resources. In the same year Bhat and Ganaie (2016) identifies the most popular places, gadgets, searching tools and techniques adopted by the users to accomplish their e-information needs. Ulo, Hidayanto, and Sandhyaduhita (2019) identified the factors behind the intention to sign e-petitions of Indonesian internet users, focusing on three aspects, i.e. information, source of information and personal perspective in which altruism found the strongest.

In this direction, Mammo and Ngulube (2019) revealed that accessibility of e-information resources (e-journals) is on the rise in academic institutions despite access barriers. It is confirmed that users' information need, practical situations of institutions and the motives of access models/initiatives are different. The study concluded by suggesting information literacy training to increase accessibility of information access models. Further, Umar and Sokari (2020) investigates the challenges associated with utilisation of legal information resources in the faculty of law libraries in federal universities of Northern Nigeria of law students. The findings revealed that, the printed legal information resources were highly utilised by students except e-resources and on-line legal databases that had low utilisation. The notable challenges explored were insufficient copies of books, inadequate reading facilities and defaced information resources, inadequate infrastructure for accessing resources electronically, insufficient computers and interrupted power supply.

Also, Leonard, Hamutumwa, Mnubi-Mchombu (2020) determined level of awareness of e-resources under different perspectives and found that the academics are well aware of e-resources that further restricted to use it for research, publications and teaching purposes, but irregular training, bandwidth problems and limited searching skills hindered their use of e-resources. In addition to this, Hak (2021) investigated the effect of e-literacy maturity level viz. Information Literacy, Media Literacy, Moral Literacy, and Learning & Thinking Skills on the lecturers' information use behaviour with formulation of two theories namely Social Cognitive Theory (SCT) and Uses and Gratification Theory (UGT). E-information extracted

from e-resources impacts to explore different data elements across varied disciplines best suited to predict and in ethical use of the generated information. To test the students' academic performance

Shah (2024) empirically tested a model examining the effect of four e-learning quality dimensions, i.e., information quality, system quality, service quality, and instructor quality as well as students' self-efficacy on e-learning behavior and academic performance at HEIs. Further, Xiong, Peng and Yang (2025) examined the factors influencing users' continuance intention to use self-built e-reserve database (SED) in university libraries of colleges and universities in China based on an integrative model that includes the Information System Success Model (ISSM), the Technology Acceptance Model (TAM), the Post-Acceptance Model of Information System Continuance, and the Stimulus-Organism-Response (S-O-R) model. The findings confirmed the direct influence of perceived usefulness (PU), perceived ease of use (PEOU), and personal innovativeness in IT(PIIT) on continuance intention to use SED. From the above review it was noted that most of the reviews deals with the challenges and intention of e-resources and not particular to intent of e-information and its challenges by the university students.

Statement of the Problem

The present survey ascertains awareness, adaptation and use of e-information retrieved from different e-resource tools for various academic purposes that too the problems facing while searching and accessing the desired e-information. Various kinds of online digital services boosts students in researching and learning ventures in this e-environment. The output leads to valid use of e-information that broaden their academic, intellectual and social core and as an initiation towards collaborated scholarly academicians/researchers of the future generation. At the same time focus is made on the limitation in the use of e-information. So this study not only showcases the intention but also the futuristic challenges in the use of e-information. Hence undertaken this survey.

Objectives of the Study

The main objective of the present study is to determine the consumption behind use of e-information for academic, research and extension tasks of the Shivaji university students. The specific objectives are to:

1. examine the purposes of accessing the e-information followed by problems faced by the university students of Shivaji University Kolhapur; and
2. map these purposes of the Shivaji university students with different demographic levels such as category, gender, faculty and age group wise distribution for smooth use of e-information.

Methodology

The scope of the study was limited to the university students i.e both postgraduate and research students working at 39 different postgraduate departments of Shivaji University Kolhapur, Maharashtra, India which falls under the four faculties namely: Humanities, Science and Technology, Inter-Disciplinary Studies and Commerce and Management. Descriptive method of research and online ordered pre tested questionnaire as a data collection tool was used for this survey. The online questionnaire was supplied

randomly to 351 students as a sampling against the total population of 3761 university students with a base of Krejcie-Morgan. Out of that 254 students (72.36%) responded to the questionnaire. The empirical data was analyzed using MS Excel software package to arrive valid findings and presented in suitable graphical and table form for its best visibility.

Data Analysis and Results

Purpose of using of e-information

The University students collect and use different types of e-information for varied purposes. The data related to this is showcases in the Table 1.

Table 1: Purpose of using E-information

S/N	Purposes	No. of Respondents	Percentage (%)	Rank
1.	Academic/Teaching/Learning activities	229	90.16	1
2.	Current information/update in the field	170	66.93	2
3.	Research/Consultancy/Project work	159	62.60	3
4.	Checking, reviewing and evaluating data/result/information	153	60.24	4
5.	Higher education/Further development in the field /professional achievement	142	55.91	5
6.	Writing/participation/presentation of papers in seminar/workshop/ conference/training	142	55.91	6
7.	Availability of digital information in huge quantum and easy to search	132	51.97	7
8.	Entertainment	115	45.28	10
9.	Filing patent	48	18.90	13
10.	Guidance and orienting to others	122	48.03	8
11.	Online membership for sharing of e-resources	88	34.65	11
12.	Policy advice to government/international organisation	68	26.77	12
13.	Suggesting new ideas/techniques	119	46.85	9

Table 1 shows that, out of the respondents, more than half of the students use e-information for various purposes such as academic/teaching/learning (90.16%), current information/update in the field (66.93%), for research/ consultancy/project work (62.60%), for checking, reviewing and evaluating data/result/ information (60.24%) and for higher education/further development in the field/professional achievement and for writing/participation/presentation of papers in seminar/workshop/ conference/training (55.91%).

Category-wise Use of e-information

From Figure 1 students' category wise findings against the purposes reveals that, out of thirteen mentioned purposes the quantum of use of e-information is higher in 7 purposes in case of research students, whereas it is higher in 6 purposes for post-graduate students. Thus, anonymously both the categories of students (Research and Post-Graduate) use e-information on an average of equal quantum out of total number of mentioned e-information purposes.
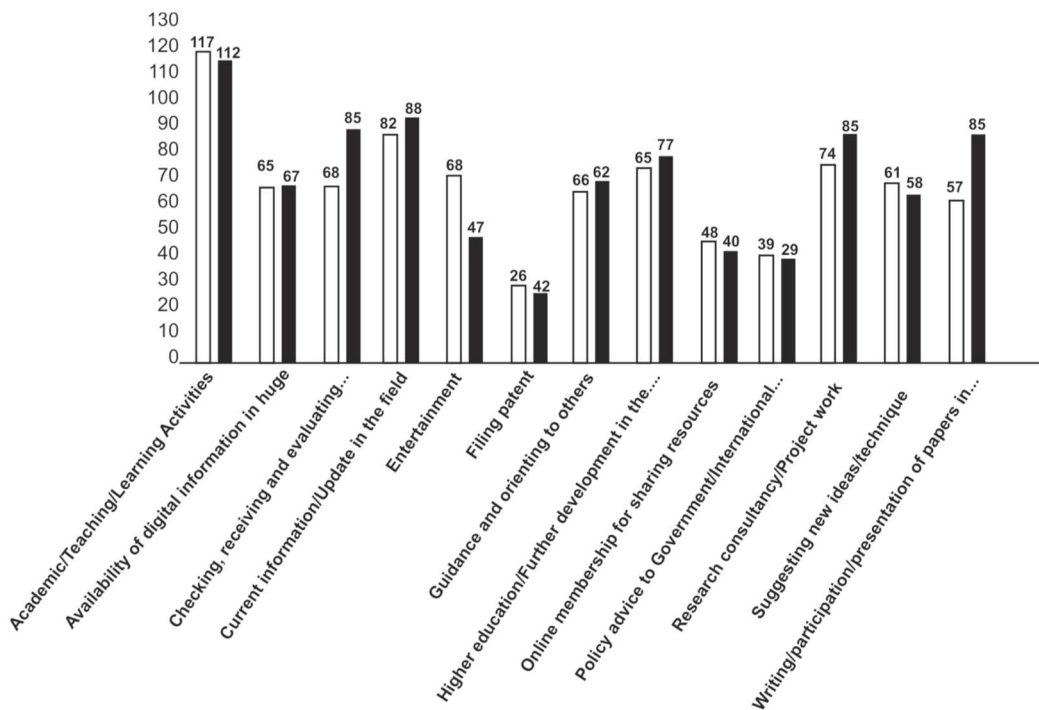

Fig. 1: Students Category wise purposes behind use of e-information

Gender, Faculty and Age Group-wise Use of e-information

Table 2 reflects the mapping of various purposes of students with the various variables like gender, faculty and age group by consolidating all the purposes related activities under single generic name as 'Intent for e-information' and drawn the findings.

Table 2: Intent for e-information of the Respondents

Categorical	Variables	Categorical Variables Y
Gender	Female	52 (20.47)
Gender	Male	79 (31.10)
Faculty	Commerce and Management	7(2.75)
Faculty	Humanities	53 (20.86)
Faculty	Inter-Disciplinary Studies	27 (10.62)
Faculty	Science and Technology	44 (17.32)
Age Group	22 to 25	51 (20.07)
	26 to 29	30 (11.81)
	30 to 33	16 (6.29)
	34 to 37	12 (4.72)
	Above 37	22 (8.66)

Note: Y= Responded; Figures in parenthesis indicates percentage **Note:** Y= Responded; Figures in parenthesis indicates percentage **Note:** Y= Responded; Figures in parenthesis indicates percentage

It has been found from Table 2 that, intent for use of e-information is higher in male students (31.10%) as compared to female students (20.47%). Regarding faculty wise use of e-information for different purposes the students from the faculty of Humanities (20.86%) ratio is found to be higher than the rest of the faculties namely Science and Technology (17.32%), Inter-Disciplinary Studies (10.62%) and Commerce and Management (2.75%). Again under the different age group wise purpose it is revealed that, students of age group 22 to 25 (20.07%) response is high as compared to the rest of the age groups viz. 26 to 29 (11.81%), above 37 (8.66%), 30 to 33 (6.29%) and 34 to 37 (4.72%).

Challenges in Accessing E-information

It is essential to know the various problems of the university students while accessing the e-information on day-to-day basis. The details about this is denoted in the following Table 3.

Table 3: Challenges in Accessing e-Information

S/N	Challenge Parameters	No. of Respondents	Percentage (%)	Rank
1	Accessing in the Internet	134	52.76	1
2	Computer, internet illiteracy	87	34.25	6
3	Continuous changes in URL names	75	29.53	9
4.	Do not know and hence problem in locating the most suitable e-information resource in the field	63	24.80	11
5.	Downloading/retrieval problem	117	46.06	2
6.	Due to virus, worms/spam	107	42.13	3

No.	Challenge			
7.	Lack of adequate knowledge and skill in searching techniques to retrieve information effectively	60	23.62	12
8.	Lack of awareness and value on information literacy/e-information literacy	56	22.05	15
9.	Lack of funds	83	32.68	8
10.	Lack of information access and evaluation policy	49	19.29	16
11.	Lack of off-campus access to e-resources	93	36.61	5
12.	Lack of sufficient computer, internet, its accessories and power supply infrastructure	84	33.07	7
13.	Lack of time / take lot of time to explore the contents of particular information resource	57	22.44	14
14.	Lack of training/user awareness/ hands on programme to acquaint With e-information/e-resources	59	23.23	13
15.	Library staffs are not competent with current technologies	40	15.75	18
16.	Non availability of resources in Indian languages	67	26.38	10
17.	Not enough resources in the field of interest, hence no access to e-resources in the field	48	18.90	17
18.	Poor speed of computer and the internet bandwidth for Internet access	101	39.76	4

* Multiple answers allowed

It is shown in Table 3 that the respondents are facing different kinds of problems while accessing e-information. The data reveals that, difficulty in accessing the Internet was the biggest hurdle as noted by 52.76% of surveyed students followed by other problems such as downloading/retrieval problem (46.06%), virus, worms, spam (42.13%), slow speed of computer and the Internet bandwidth for Internet access (39.76%), lack of off-campus access to e-resources (36.61%), Computer, Internet illiteracy (34.25%), lack of sufficient computer, Internet, its accessories and power supply infrastructure (33.07%), lack of funds (32.68%), frequent changes in URL names (29.53%), non-availability of resources in Indian languages (26.38%), problem in locating the most suitable e-information resource in the field as they do not know

(24.80%), lack of adequate knowledge and skill in searching techniques to retrieve information effectively (23.62%), lack of training/user awareness/ hands on programme to acquaint with e-information/e-resources (23.23%), lack of time / take more time to explore the contents of particular information resource (22.44%), lack of awareness and value on Information Literacy/E-Information Literacy (22.05%), lack of information access and evaluation policy (19.29%), insufficient resources in the field of interest/no access to e-resources in the field (18.90%) and library staff are not competent with newer technology by 15.75% students.

The findings revealed that the intention behind use of e-information severely stickup for academic/teaching/ learning activities and update through current information but lacks in the use for filing of patents, policy advice, online membership and entertainment purposes. Secondly, a closer look explores the use of e-information for various purposes under students' category wise analysis (post-graduate and research). Furthermore, the study reveals insufficient internet nodes to access and browse e-resources that too retrieval and downloading problems for accessing e-information by the students under study. In general ICT facility is poor to offer and use online services. Lastly, male students under the age group of 22 to 25 show higher level behind use of e-information than their counterparts and remaining age groups.

Conclusion

The study portrayed the valid purposes in the use of e-information and factual challenges faces by the students of Shivaji University Kolhapur. Students should grab the essentials skills of information literacy as they are the life skills useful for their whole academic life. Information literacy/e-information literacy train and guide the students for proper use of information, as they are the sources of continuing lifelong learning and self-education. To ensure successful and competent utilisation of e-information resources against the technological influence it is necessary for the HEIs/universities to introduce and implement capacity building programmes such as short term/certificate course in Information Literacy, seminar/ workshop, awareness campaign, user orientation programme and core/open elective, and paper in the syllabi of UG/PG courses. that would strengthen information/e-information literacy skills of school/college/university students. Proper searching capabilities, ethical use of e-information, authenticity of available information are the challenging facet considered while using any sorts of resources/e-resources/e-information.

Recommendations

In line with the findings following recommendations are suggested for authentic and reliable use of e-information for the students of Shivaji University:

(a) Proper, sufficient and latest ICT infrastructure should be provided to use unrestricted access of e-resources.

(b) Periodic ICT training-cum-demonstration on the techniques of accessing and using electronic resources/services is the need of the hour to underline the academic, research, learning and extension assignments of the students.

(c) Considering the students age and their domain interest, a sort of 'open platform' with full of resources well equipped with strong ICT infrastructure and a point of guidance/interaction from their peers/guides/teachers should be accompanied.

(d) University students must be aware of their library resources (library literacy) to meet their academic demands.

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