Use of UGC-Infonet Digital Library Consortium Resources: Its Impact on University Libraries of Karnataka.

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Abstract

The recent developments in Information Technology changed the world scenario. Libraries and Information Centres have embraced the new information technology more profoundly than many other fields and most of them are currently using electronic products and services. IT offers tremendous opportunities to provide solutions to some of the major challenges now libraries are facing. Electronic Publishing or e-publishing is an important media of the new Information Technology. Nowadays the majority of publishers are interested in publishing their documents in electronic format. Electronic journals are attracting readers' attention in todays networked environment. In this environment these e-journals open up many exciting opportunities and have already brought a revolutionary transition in library philosophy. These are one of the main vehicles used by researchers for scholarly communication. UGC InfoNet, e-journals consortium programme is an innovative scheme implemented in India in the year 2004 to access scholarly journals in general university environment. A survey has been conducted among the librarians of universities of Karnataka and opinions were sought regarding the impact of using e-journals offered through the UGC-InfoNet e-journals consortium project. The paper highlights the results of the survey.

Keywords: UGC-Infonet e-journals Consortium Project, E-journals, E-resources,

E-journal Survey, Impact of e-journals

1. Introduction

Information is an important national resource for developing countries like India. It is synonymous with power. So its sharing is necessary for national development. The tremendous information revolution and proliferation have brought about drastic changes to the function and service in all types of libraries in India during the last two decades. Among sources of information, journals are considered to be a major source of communication of nascent thought. They are considered the notechord of any library's collection and have become indispensable for research in any field. In fact without journals it is difficult to ensure the growth of any research in any discipline. Academic libraries in India are facing challenges due to budget cuts, reduced staff, devaluation of rupee, steep hike in conversion of foreign currencies, and escalation in cost of publication. Due to these factors the academic libraries are finding it difficult to subscribe to scholarly journals and databases. Such a situation has adverse impact on the research and development programmes. Nowadays it is impossible for libraries to procure all the documents and subscribe to core journals which are in demand by the users. Realizing the need for scholarly electronic journal information in teaching, learning and research, (UGC has launched UGC-InfoNet e-journals consortium in 2004, which is now

known as UGC-InfoNet Digital Library Consortium. Under the consortium access is provided to 4453+ full text scholarly electronic journals from 25 publishers across the globe) [1] (The consortium provides current as well as archival access to core and peer-reviewed journals in different disciplines. The whole programme has been implemented in different phases.)[2]

(The aim of this consortium is to provide the scholarly literature to the entire community through single point administration and subscription. To access these resources the users do not require any Login ID or Password because access is made available through Internet Protocol (IP) addresses of institutions. IP addresses should be authenticated by the ERNET.)[3]

This facilitates the academicians to browse, download and print the relevant articles for their academic development.

(The E-Journals program aims at covering all fields of learning of relevance to various universities including:

- Arts and Humanities
- Social Sciences
- ♦ Physical Sciences and Chemical Sciences
- ♦ Life Sciences
- Mathematics, Statistics and Computer Science etc.[4]

The literature made available will include journals covering research articles, reviews and abstracting databases.

2. Need for the Study

"Users are the customers of a library and information centre. The library staff must first of all understand the users' perception and secondly serve them after understanding their expectations/ requirements. They can render excellent service only after analyzing and identifying the key components of requirement of users that will give a boast to the library staff, ultimately increasing the reputation of a library or information centre." [5]

As the number of electronic journals available in electronic form is growing everyday, the libraries are interested in subscribing to electronic journals considering their advantages over print media. A dramatic switch from print collections to digital collections has an impact on library users and on library functioning. Libraries need to justify their investments and provide the best resources for their users. Regarding this new library service, it is extremely important to study the impact or influence on library functioning and services.

Many researchers abroad have attempted to predict or measure the impact through either surveys or transaction log analysis. In India very few attempts have been made so far to study extensively the state of the use of e-journals by the university libraries and their impact or influence on functioning or services.

Keeping in view the above aspects, the present study has been taken up to know the current state of the use of electronic journals and its impact on the university libraries functioning and services.

3. Limitation of the Study

Though the access to e journals through the programme has been provided to the universities throughout India, the present research study is confined to the use and impact of e-journals on the users and libraries of universities of Karnataka State.

4. Statement of the Problem

The present study has been undertaken to answer to the research questions and accordingly to find solutions for the problems mentioned below.

♦ Are the librarians satisfied with journal coverage, and what is the impact or influence of using e-journals on the functioning of the libraries?

5. Objectives of the Study

The study seeks to:

- Ascertain the level of satisfaction of the librarians regarding the coverage of journals in the UGC-InfoNet project.
- 2. Opinion on how far UGC-InfoNet e-journals enable to meet the Information needs of users:
- 3. Identify the promotional methods used in libraries to enhance the effective use of the project journals.
- 4. Identify the most improved aspect in library by using UGC-InfoNet e-journals.
- 5. Ascertain the advantages and disadvantages of e-journals as perceived by the librarians.

6. Significance of the Study

So far, very few surveys have been undertaken to know whether academic community uses electronic journals and databases offered through UGC-InfoNet e-journals consortium project throughout Karnataka State. The result of the study would provide documentation indicating the impact of using existing electronic journals offered by UGC-InfoNet e-journals consortium project. These studies serve as an indicator to assess the opinion of the librarians regarding the coverage of the journals. This study would provide library professionals and academics with some clear insights into the benefits of using electronic journals. This study result would also be a base for any modifications or improvements to be made in the existing UGC-InfoNet e-journals consortium project. The result of this survey hopes to serve as input for the future policy decisions of the UGC-InfoNet project.

7. Methodology

To investigate the use of electronic journals and its influence on library functioning, the survey research method has been adopted for the present study.

8. Data Analysis

Impact of e-journals use on library: Views of the Librarians:

PART A: Demographic factors

8.1 Response rate

The questionnaires were distributed only to the university librarians of six universities i.e. Karnatak University, Bangalore University, Mangalore University University of Mysore, Gulbarga University and Kuvempu University under study and all of them responded to the survey accounting for 100% response rate. Opinions sought have been analyzed in detail and are presented in succeeding sectors.

8.2 Experience in handling Information Technology

It has been observed that experience and technical qualification, other than the professional qualification have a strong impact on the success of managing e-journals in the libraries. Therefore, the details of experience in handling Information Technology were sought. The result reveals that all six (100%) respondents reported having the experience of working with Information Technology (IT).

8.3 Educational background and experience of staff handling e-resources in the libraries

Managing e-resources requires skills that go beyond those of the consumers of e-resources. Success in the new environment will require learning much more than knowing about the use of digital resources, their preservation, and the training needed for operating the library of the future. In the present study the researcher has raised a question to know the background of persons who are handling e-journal service in the library. The survey result reveals that the library staff in all the six universities who were managing e-journals had an excellent educational background like, Doctoral degree in profession, Master of Computer Application, and had an experience of 4 to 25 years.

8.4 Training programmes attended by the library staff who were handling e-resources

In most of the libraries either professionals with higher qualification or a computer programmer was assigned the responsibility of handling UGC-InfoNet e-journals. It is also found out that all the staff who were managing UGC-InfoNet e-journals in universities had attended short term training programmes conducted by INFLIBNET Centre specially to access e-journals.

8.5 Perceived advantages of e-journals

The researcher attempted to gather information regarding the extent of advantages and disadvantages of e-journals as perceived by the librarians. The scale of response and value offered to advantages and disadvantages included "cannot say as 0", "not at all as 1", "to a little extent as 2", "to some extent as 3" and "to a great extent as 4." The results of the survey are displayed in Table 1.

It is clear from the Table that out of 6 librarians the majority had the similar opinion regarding the advantages of e-journals. The majority of respondents-5 (83%),considered "multi user access", "saving shelf space", "reduction in theft and damage as in hard copies", "desktop access" to be the advantageous to a "great extent". 4(67%) respondents viewed "current / up-to date information", "ease of search", "downloading facility", "24 hours access" as advantages "to a great extent". "Ease of browsing" was identified as advantage "to a little extent". The overall study result supports the result of the survey conducted at UK and North American libraries. which identified "multi user access" and "ease of search" as the main benefit of accessing e-journals. [6]

Table 1 Perceived advantages of e-journals

Advantages	No. of Respondents	Rate
	5	
Multi user access	(83)	To a great extent
	5	
Saved shelf space	(83)	To a great extent
	5	
Desktop access	(83)	To a great extent
	5	
Reduction in theft and damage to hard copies	(83)	To a great extent
	4	
Downloading facility	(67)	To a great extent
	4	
Current / up-to date information	(67)	To a great extent
	4	
24 hours access	(67)	To a great extent
	4	
Ease of search	(67)	To some extent
	3	
Ease of browsing	(50)	To some extent
	1	
Any other	(17)	To a little extent

(Note: Percentages are shown in parentheses)

8.6 Perceived disadvantages of e-journals

Davis,(1997)[7] points out that "there are pits into which even the experienced can fall. More experienced selectors often believe they have mastered the common electronic formats. But even basic products quickly become overwhelming to the user when they are acquired for network applications. The simple user- friendly CD-ROM that is a popular stand alone title may perform erratically on the local area network, and in the networked environment, problems with each search commands and printing options can quickly arise due to software updates."

The question was also raised to identify the barriers to the use of e-journals in libraries. The opinions disclosed by the respondents are displayed in Table 2.

The data in the table reveals that, 3 (50%) respondents expressed "depending on network speed", "lack of permanent archive", and 2(34%) respondents reported "lack of standardization of format", and "site license problems" as significant barrier and disadvantages "to a great extent" for accessing e-journals. "Lack of reliability", was cited by 3 (50%) respondents, and "difficulty of reading on the screen", "incomplete volumes", "insufficient hardware support", "insufficient software support" were cited by 2 respondents (34%) as a disadvantage "to some extent". Majority of the respondents, 4(67%) felt that "poor graphic quality" was a disadvantage "to a little extent".

Table 2 Perceived disadvantages

Disadvantages	Frequency	Rate
Dooding on the seroon	2	
Reading on the screen	(34)	To some extent
Incomplete volumes	2	
incomplete volumes	(34)	To some extent
Poor graphic quality	4	
Foor grapfile quality	(67)	To a little extent
Depending on network speed	3	
Depending on network speed	(50)	To a great extent
Site license problem	2	
Site licerise problem	(34)	To a great extent
Lack of standardization of format	2	
Lack of Standardization of format	(34)	To a great extent
Lack of permanent archive	3	
Lack of permanent aremive	(50)	To a great extent
Insufficient hardware support	2	
msumelent naraware support	(34)	To some extent
Insufficient software support	2	
msumcient software support	(34)	To some extent
Lack of reliability	3	
Luck of Tellability	(50)	To some extent
Any other	1	
Any other	(17)	To a little extent

(Note: Percentages are shown in parentheses)

8.7 Journal Collection in the Library

It is discouraging to note that the data gathered about the journals collection in the library reveals that all six universities had collection of print journals only in the range of 200-500. All the university libraries except Bangalore University library had in their e-journal collection, only those which were subscribed under UGC-InfoNet e-journals consortium project.. The study points out that only Bangalore University, had 10000+ e-journals in its collection as it subscribed to Ebsco database, in addition to UGC-InfoNet e-journals consortium.

8.8 Opinion on how far UGC-InfoNet e-journals enable to meet the Information needs of users:

Opinions were sought from the respondents about how far the UGC-InfoNet e-journals enabled to meet users' needs. 4(66.66%) respondents felt that the project journals met the needs of users "to some extent". Only one respondent (16.67%) felt that it met the needs of the users "to a great extent". One respondent did not express any opinion about it. (Table 3)

Table 3 Meeting the Information needs of users

Opinion	No of respondents
Cannot say	1(16.67)
Not at all	00
To a little extent	00
To some extent	4(66.66)
To great extent	1(16.67)

(Note: Percentages are shown in parentheses)

8.9 Level of Satisfaction Regarding the Coverage of Journals

Level of satisfaction about the journals covered in the project was sought by the respondents. The results as shown in Table 4 reveals that out of 6 respondents 4(66.7%) were "Moderately Satisfied" with the coverage of the journals, 1(16.7%) respondent stated that he was "Satisfied" and another mentioned that he was "Highly dissatisfied" with the coverage of the project journals. The personal discussion with the respondents who were dissatisfied with the project journals revealed that there was a heavy demand by the users for Indian journals which were not included in the project. The study also discovered that the respondents would like to add most of the full text articles of Elsevier Science journals to the project.

Table 4 Satisfaction on the coverage of journals

Level of satisfaction	No of Respondents
	1
Highly dissatisfied	(16.7)
	0
Dissatisfied	0
	4
Moderately Satisfied	(66.7)
	1
Satisfied	(16.7)
Highly Satisfied	0

(Note: Percentages are shown in parentheses)

8.10 Methods Adopted to Promote use of e-journals

Effective promotion can serve many purposes like, establishing communication, raising awareness. It also helps in building up the image of the library and librarian. Therefore, providing guidance and user education for stimulating the use of electronic journals is essential.

The method adopted to promote use of e-journals by the library is shown in Table 5 as a promotional activity all six universities under study (100%) conducted training programmes, 5 (83.3%) libraries circulated database specific user guide (hardcopy) and subject lists of e journals on library or university web pages. Only one library has developed a well advanced webpage with links to e-journals available in its library. It is also a felt need by the respondents to enhance effective use of e-journals. Email alert service for new or changed journals was not offered by any of the library which was identified as a highest performance gap area by the respondents.

Table 5 Methods adopted to promote use of e-journals

Discipline	ΚI	JD	В	A U	M	AU	UN	1 Y	GI	JU	K	υV	Total
	Υ	N	Υ	N	Υ	N	Υ	N	Υ	N	Υ	N	(%)
Training programme for users on e-journals use	1	0	1	0	1	0	1	0	1	0	1	0	6 (100)
University Webpage with links to e-journals/ Publishers/vendors	0	0	0	0	0	0	1	0	1	0	0	0	2 (33.33)
Database specific user guide/ hardcopy	1	0	1	0	1	0	0	0	1	0	1	0	5 (83.3)
Database specific user guide/ online	1	0	1	0	0	0	0	0	1	0	1	0	4 (66.7)
Electronic links from OPAC to journals/Publishers and Suppliers	0	0	1	0	1	0	1	0	0	0	1	0	4 (66.7)
Subject listing of e- journals on library/ University web pages	1	0	1	0	0	0	1	0	1	0	1	0	5 (83.3)
Advertisement features in University/Library Newsletter	0	0	1	0	0	0	1	0	1	0	0	0	3 (50)
General online guidance/ tutorials on library/ university web pages	0	0	1	0	0	0	0	0	0	0	0	0	1 (16.67)
Email alerts for new or changed e- journal services	0	0	0	0	0	0	0	0	0	0	0	0	0

Y=Yes, N=No. (Note: Percentages are shown in parentheses)

PART B: Impact on the functioning of the library

8.11 Impact of using UGC-InfoNet e-journals on various aspect of library

One of the objectives of this particular study was to identify the most improved aspects in library using UGC-InfoNet consortium journals. Respondents were asked to rate the improvements by using UGC-InfoNet e-journals in six aspects listed in the questionnaire. The rating has been given according to five point scale ranging from 0 as "Not improved", 1 as "Little improved", 2 as" Moderately improved", 3 as "Much improved", and 4 as "Very much improved".

The responses received are presented in Table 6. The results show that the respondents acknowledged the improvement in all the stated aspects of using UGC-InfoNet e-journals in their libraries. The majority-5 (83.3%) respondents were of the opinion that "Expectation and attitudes of users" was "Much improved" aspect in the library. 4(66.7%) respondents acknowledged that "efficiency in service" was" Moderately improved". The ratings offered by the respondents for the other aspects are shown in Table 6.

Table 6: Improvement in various aspects in library using e-journals

Aspects	NI	LI	MO. I	MU. I	V. MU. I
User satisfaction	0	1 (16.67)	3 (50)	2 (33.3)	0
Efficiency in service	0	0	4 (66.7)	2 (33.3)	0
Innovative way of service	0	1 (16.67)	2 (33.3)	2 (33.3)	1 (16.67)
Services	0	0	2 (33.3)	2 (33.3)	2 (33.3)
Utilization of Resources	0	0	3 (50)	2 (33.3)	1 (16.67)
Expectation and attitudes of users	0	0	1 (16.67)	5 (83.3)	0

V.MU.I = Very much improved (5); MU. I = Much improved (4); MO. I = Moderately improved (3), LI = Little improved (2); NI = Not improved

(Note: Percentages are shown in parentheses)

8.12 Impact of using e-journals on the workload of the library

This is the first time in Indian Higher Education system that the University Grants Commission has taken the initiative to introduce e-journals consortium in Indian university libraries. As per the survey result all the university libraries except Bangalore University has e-journal collection other than the journals offered by the UGC-InfoNet consortium project. In the present study the investigator sought the respondents' opinion regarding the affect on the workload of the library due to additional increase

of e-journals to its collection. A five point scale ranging from 1= "Strongly disagree" to 5= "Strongly agree" was used to respond to negatively worded statements.

The results are highlighted in Table 7. It reveals that the majority of 4(66.7%) respondents "Agreed" for all the negatively worded statements. They were of the opinion that due to the addition of e-journals the workload had increased. Majority of the librarians-4(66.67%) "Agreed" that the "Reference interview took longer time as more time was spent with each individual". The negative statement "the number of users visiting library is reduced but still staff workload has increased" was also "Agreed" by the majority of respondents-4(66.6%). Based on this analysis the hypothesis "Respondents agree that using UGC-InfoNet e-journals has a negative affect of on workload of the library" is accepted.

Table 7: Impact of using e-journals on the workload of the library

Workload of the library	SD	D	UD	Α	SA
The workload has increased with increased	1	1	0	4	0
number of e-journals and static professional	(16.67)	(16.67)		(66.7)	
staff					
Reference interview takes longer time as		2	0	4	0
more time is spent with each individual		(33.3)		(66.7)	
The number of users visiting library is		2	0	4	0
reduced but still staff workload has		(33.3)		(66.7)	
increased					

(Note: Percentages are shown in parentheses)

8.13 Impact of using e-journals on infrastructure/systems and space

While providing UGC-InfoNet e-journals bouquet to the universities in India, the infrastructure facility has also been improved through UGC-InfoNet programme. While attempting to study the overall impact of introducing UGC-InfoNet e-journals on the library infrastructure/systems and space, the researcher raised a question on a three point scale: 1 as No change, 2 as Decreased, and 3 as Increased. Computer hardware/software, Laptops and also generators are essential infrastructure to access electronic journals. The transition to electronic journals essentially eliminates space concerns. The researcher was interested to know whether the e-journals provided extended any physical space in libraries by extending the library with browsing center exclusively for accessing e-journals. The impact of subscribing to electronic journals on the infrastructure, system and space as outlined by the respondents are highlighted in the Table 8.

Table 8: Impact of using e-journals on infrastructure/systems and space

Infrastructure	NC	D	I
Computer hardware	0	0	6 (100)
Laptop	5 (83.3)	0	1 (16.67)
Space	4 (66.7)	1 (16.67)	1 (16.67)
Generator	4 (66.7)	2 (33.3)	0

NC = No change (1); D= Decreased (2); I= Increased (3)

(Note: Percentages are shown in parentheses)

All the six respondents expressed their view that the computers hardware had "Increased" in the library after implementing UGC-InfoNet e-journals and that there was a great impact on the infrastructure regarding the number of systems. The majority -5 (83.3%) respondents reported that there was "No change" in "Laptop" facility, 4 (66.7%) respondents affirmed that there was "No change" in the "space" of the library and 4(66.6%) respondents found "No change" in the "generator" facility.

8.14 Impact of using e-journals on library staff

Human resources are the key to the successful use of any Information Technology in the library. The involvement of the library staff is essential for effective use of e journals. The present study examines the overall impact of e-journals on the library staff. The reactions of the respondents are displayed in the following Table. Opinions were sought by the respondents using five point scale, 1= "strongly disagree" to 5= "Strongly Agree". The study results reveal that all 6(100%) librarians "Agreed" that it had "upgraded knowledge and skill", "Increased job satisfaction", "improved competence and performance", and also made "it mandatory to learn to use modern technologies". 5(83.3%) respondents "Agreed" that "it had improved status", "offered new challenges and better opportunities for professional growth", "it had increased the morale and motivation" and also it had added more responsibility to work. 3 (50%) respondents "Disagreed" with the statement that "it had reduced workload".

Table 9 shows that each aspect given by the researcher was "agreed" by majority of the respondents and were of the opinion that use of e-journals had positive impact on the library staff.

Table 9: Impact on library staff

Impact	SD	D	UD	Α	SA
Upgraded knowledge and skill	0	0	0	6 (100)	0
Increased job satisfaction	0	0	0	6 (100)	0
Improved competence and performance	0	0	0	6 (100)	0
Made it mandatory to learn to use modern technologies	0	0	0	6 (100)	0
Added more responsibility to work	0	1 (16.67)	0	5 (83.3)	0
Improved status	0	0	1 (16.67)	5 (83.3)	0
Offered new challenges and better opportunities for professional growth	0	1 (16.67)	0	5 (83.3)	0
Reduced workload	0	3 (50)	1 (16.67)	2 (33.33)	0
Increased the morale and motivation	0	1 (16.67)	0	5 (83.3)	0

(Note: Percentages are shown in parentheses)

9. Major Findings

- 1. Majority of librarians-5 (83%) perceived "multi-user access", "saved shelf space", and "reduction in theft and damage as hard copies" as the advantage of e-journals "to a great extent". "Depending on the network speed", "lack of permanent archive" and "lack of reliability" were considered disadvantages "to a great extent" by 3 librarians (50%).
- 2. All the university libraries which were under study had in their collection only e-journals offered through UGC-InfoNet project, except Bangalore University which had more than 10000 e-journals as it subscribes to EBSCO database in addition to e-journals accessed through UGC-InfoNet consortium.
- 3. Majority of librarians-4 (66.66%) felt that UGC–InfoNet e-journals met the information needs of the users "to some extent."
- 4. Majority of librarians 4 (66.6%) were "Moderately satisfied" with the coverage of the journals in the project.
- 5. The impact on the library functioning as perceived by the respondents revealed that all the librarians (100%) were of the opinion that the expectations and attitudes of users had "much improved" with the introduction of UGC-InfoNet e-journals.
- 6. Regarding impact of using e-journals on the library infrastructure / system and space, all respondents (100%) stated that the numbers of "computers" in the library were "increased". As

- against this majority of the librarians- 5 (83.3%) expressed that "no change" in case of "Laptop", and 4 (66.6%) librarians said "no change" in "Space" in "Generator facility" in the library.
- 7. Study about the impact of using electronic journals on the workload of the library revealed that the majority of librarians-4(66.6%) "Agreed" the negatively worded statements like "workload has increased with increased number of e-journals and static professional staff", "Reference interview takes longer time as more time is spent with each individual" and "the number of users visiting library is reduced but still staff workload has increased".
- 8. Study about the impact of subscribing to UGC-InfoNet e-journals on the library staff revealed that all six librarians (100%) "Agreed" that the affect of using e-journals provided through UGC-InfoNet helped "in upgrading the knowledge and skills of the library staff", "increased job satisfaction", "improved competence and performance" and "made it mandatory to learn and use of modern technologies."
- 9. On the whole the views of the librarians were that UGC–InfoNet e-journals had been a success with their users and had a great impact on the functioning of the library.

10. Suggestions

The libraries have to accept the role of the intermediates between electronic journals and their end users.

- Developing its own library web page to provide links to electronic journal service of its library.
 (It was also identified as a second performance area with larger gap.)
- Creating database of e-mail addresses of all its users and providing alert service regarding the e-journals added to the project. (The study reports e-mail alert service as the performance area with larger gap.)
- ♦ Including the list of names with telephone numbers and e mail addresses of the library staff who deal with e-journals. Providing well structured, Frequently Asked Questions (FAQ) as part of the library web site. (This will allow the user to raise questions and clarify the doubt.)
- ♦ Developing online user guide for accessing e-journals and providing guides for all levels of users, from the beginner to the advanced users.
- Giving greater attention on promotion activities. (Printed promotional materials like posters and guide still have the same importance as promotion on library web pages.)
- Marketing services and products to library users.
- Conducting training courses and updates focusing on subject specific problems.
- Networking with scholarly leaders in other departments and engaging them to spread the word about the electronic journals' services.
- ♦ Maintaining online self-tutorial on the web page.

11. Conclusion

The present study reveals that there is increased acceptance of electronic journals by the university academicians and also by the Information Centres. All the librarians were of the opinion that electronic journals played a constructive role in enhancing services, user satisfaction, meeting users' demands, users' expectations and above all the image of the library. The research demonstrates that all the librarians are fully acquainted with the benefits of e-journals and agree that the electronic journals have, and will continue to have an impact on the library services, library staff and on the information services.

As the survey shows, awareness raising activities of the university libraries of Karnataka have already had some impact. The respondents have indicated that e-journals have changed the way research is done and the information obtained through electronic form has greatly improved the results of the research. It is also felt by the researcher that the success or failure of the UGC-InfoNet programme depends on how best the libraries are taking initiation in publicizing the programme

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