

INFORMATION SEEKING BEHAVIOUR OF ENGINEERING CONSULTANCY LIBRARY WITH SPECIAL REFERENCE TO DCPL KOLKATA: A CASE STUDY

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Abstract

Purpose: The development process and the exponential growth of various technical documents in engineering fields are booming day to day which is surrounded by the services offered to patrons or users of such engineering consultancy firms. The library or data center should possess accurate information concerning all aspects of its operation and be aware of its measure of usefulness, and the efficiency with which services are performed. Our study attempt to determine the effectiveness of the use made of the engineering library, that organization providing services to build a strong nation to use hard core technical papers and documents.

Methodology: This study is followed a Survey method. A structured questionnaire was distributed among the Sr. engineer, Jr. Engineer and draftsman of the said consulting firm. Results are analyzed by means of numerous tables and necessary discussions have been made regarding the output.

Findings: The limited information resources are available to engineers at such consultancy firms. Engineers of this firm are able to locate their required document in their own through searching various databases. They are used various technical papers, literatures and National and International Standards' for job specification titled.

Keywords: Consulting engineering services, Data Centre, Information Services, Dissemination of Information, Standards.

1.0 Introduction

Library plays a crucial role in providing valuable services to engineering consultants community by selecting and organizing information resources that support research and find out specification and extension activities of the consulting engineers organization. Information is regarded as vital resources, ranking just after air, water, food and shelter (Kemp, 1976). The user's satisfaction is main motto of library services and its key success of any library. The services are offered by librarian are also very important for users satisfaction and should regular examine patrons satisfaction with library's collection, services and information preference to ensure that the information needs of users are satisfactorily fulfill within time. This case study is to find out the existing print and non-print resources, services and facilities. So according to (Moser & Kalfon, 1986) survey is a way and supremely useful one of exploring the field of collecting data round as well as well directly on the subject of Study so that problem is brought into focus and points worth studying are suggested. In respect of this study the term "consultant" originates in the Latin word "consultare" which means to discuss something or to deliberate. Consulting engineering is a profession where engineers provide independent expertise in engineering, science and related areas to government, industries, developing and construction firms. Such consulting engineering libraries in Kolkata like Development Consultants Pvt. Ltd., M/s M.N Dastur Pvt. Ltd., L & T Pvt. Ltd. & TCE etc. This study is carried out broadly with reference to Development Consultants Pvt. Ltd. Which is shortly known as DCPL, it is India based transnational consultants group. It renders concept through – completions services covering planning, technology selection and development design engineering, procurement assistance,

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construction supervision and project management. To provide such services they extensively used huge documents such as technical literature, native and overseas standards etc. through their Library or Data Centre.

1.1 Overview of the Engineering Consultancy Company in Kolkata

- **M/S M.N Dastur & Company (P) Ltd.:** This organization provides clients with engineering expertise through the project lifecycle, from feasibility studies and scope documents to design conceptualization construction management and post construction evaluations. This firm has an excellence in engineering consultancy. Dastur is an ISO 9001 & ISO 27001 certified organization. For provide all these above services they use no of technical literature like Standards, books, Periodicals, manufacturing catalogue through their library.
- **M/S Tata Consultancy Engineer Ltd.:** Tata Consulting engineer has successfully managed to complete various engineering project in India as well as overseas. They are one of the pioneers in this field for so many years. They work for integrated engineering consultancy solutions provider, offers engineering services in industry segment like power, nuclear energy, chemicals and infrastructure development. It has delivered over seven thousand successful project globally.

2.0 Objective of the Study

The objectives of the study are as follows:

1. To know the user satisfaction of such engineering consultants libraries.
2. To know the importance of engineering consultants library to utilize their services.
3. To know the usage of collections and services of the libraries.
4. To determine the way of documents location and search elements.
5. To get the information regarding their automated library software and how its help to services
6. To find out the infrastructure facilities are being provided by the library.

3.0 Review of Literature:

In this respect of engineering consultant's library user survey is basically not found largely in India earlier. But others user survey like user of engineering college library, user survey of public library etc. extensively done earlier. To carry out this survey we have widely searched various documents from engineering firms, other technical papers & searched various URL to get information about their requirements regarding the kinds of documents which they access. Earlier such study had been conducted like – i) 2016 Library user survey report University of Virginia Library, ii) User satisfaction of the students of engineering college libraries of Jaipur, Rajasthan by P.K Saini, Raj Kumar Bhaskar and Bhoop Sing, iii) Survey of Library Services at engineering News Record Top 500 Design firms : Implication for engineering education by John B. Napp, University of Toledo, iv) A user survey of five women's college libraries in South Campus, University of Delhi by Aktar Hussin, Uzmahuzzeb, Nishat Fatima, v) Data management practices across an Institution : Survey and report Cunera M. Buys, Pamela L. Shaw.

4.0 Statement of the Problem

Library has played a major role in the engineering consultants firm. Without libraries they cannot utilize their technical knowledge. Such firm invests a very big budget to procure various technical documents to serve their clients. But in tech. savvy era various information and technical literature and such resources both in on-line & off-line has made both library professional and user confused to locate appropriate information as and when required. So this study on library has been carried out on engineering consultant's organizations in Kolkata with special reference to DCPL library to know the user satisfaction which will help to design new library services in the ICT era.

5.0 Limitation of the Study

This study was carried out mainly on Development Consultants Engineering firm shortly in DCPL. So huge no. of documents and literature are not published before on this topic that's why this study depend on user feedback only and approximately 150 closed ended questionnaires served among the users to get their feedback and analyzed the data. Limitations of the survey were revealed in the analysis of the survey results.

6.0 Methodology of the Study

The study has followed the survey method. A well-structured multiple choice close ended questionnaires were prepared to use Google form and the same distributed through collected e-mail Id's and questionnaires were

drafted and revised numerous times and entire questionnaire prepared using the Google survey form to get the exact analysis of the data accurately.

Results :For measurement of overall user’s stratification of the Library services all the significant parameters are covered. User feedback had been collected through the suitable sampling method out of 150 samples approx only 71 nos. users had participated in this study which was over all 47 % of entire data.

6.1 Overall User Satisfaction:

Table- 1

Rating	No. of respondent	Rate of percentage (%)
Very Satisfied	45	63%
Somewhat satisfied	24	34%
Somewhat dissatisfied	2	3%
Dissatisfied	0	0%

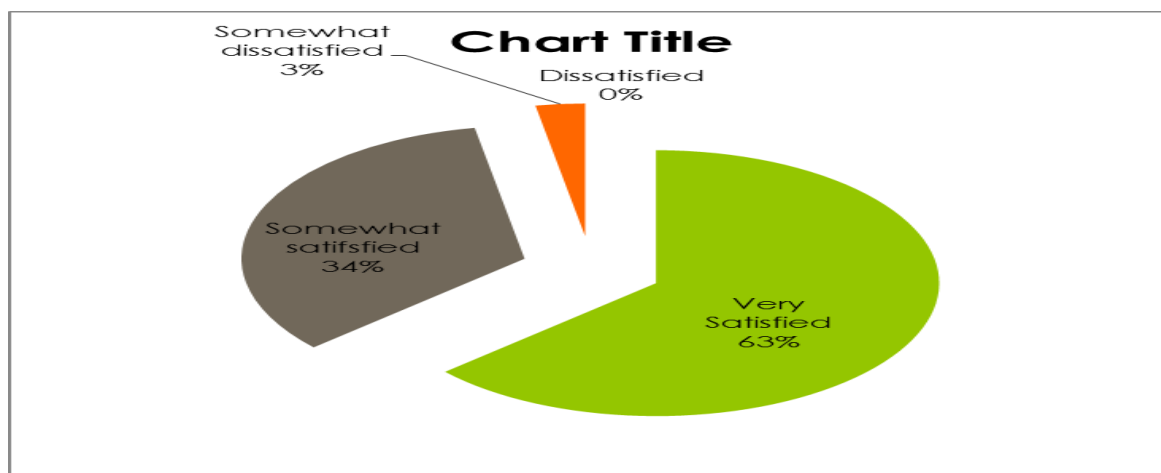


Figure-1

For over all library services out of 71 respondent only 45 respondents are very satisfied in rate of percentage which is 63%. Only 34 % is somehow satisfied whereas 3% only somewhat dissatisfied in respect of entire library services.

6.2 Over all Experience of the users using all services offered by Library.

Table -2:

Services offered	Very Satisfied	Satisfied	Somewhat Satisfied	Dissatisfied	Total no. of response received	Response Rate in percentage (%)
Lending Services	29	39	3	0	71	17.75
Reference Services	41	24	4	0	69	17.25

Reservation Services	48	18	4	0	70	17.5
CAS/SDI/Recent Addition	43	25	0	0	68	17
Reprography etc.	37	23	10	0	70	17.5
Internet service	40	13	15	0	68	17
Periodicals	48	16	5	0	69	17.25
on-line data base search	40	21	8	0	69	17.25
Library Software Bibliosys	50	15	3	0	68	17

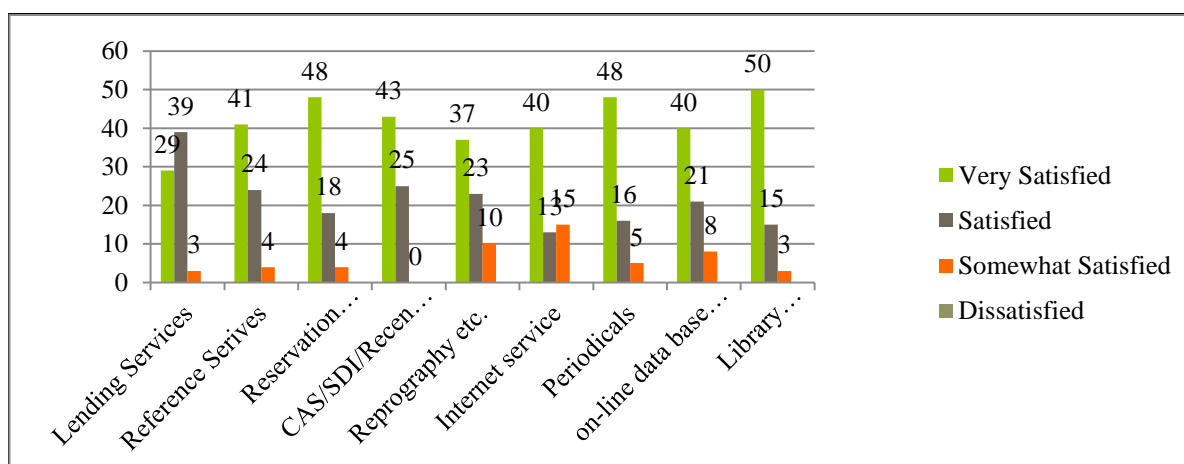


Figure -2:

Overall users are very satisfied regarding above services but there is some variation also. For lending services only 39 respondents are very satisfied in percentage which is 17.75%. Apart from other services like periodical, reservation services, reprographic and internet services are very effective for the users and for that user are overall very satisfied.

6.3 Frequency of as usual Visit to Library:

Table -3:

No. of times	Visit of Library	Response Rate
Daily	9	13%
3 times a week	35	49%
Weekly	16	23%
Twice a month	1	1%
As per Requirement	10	14%

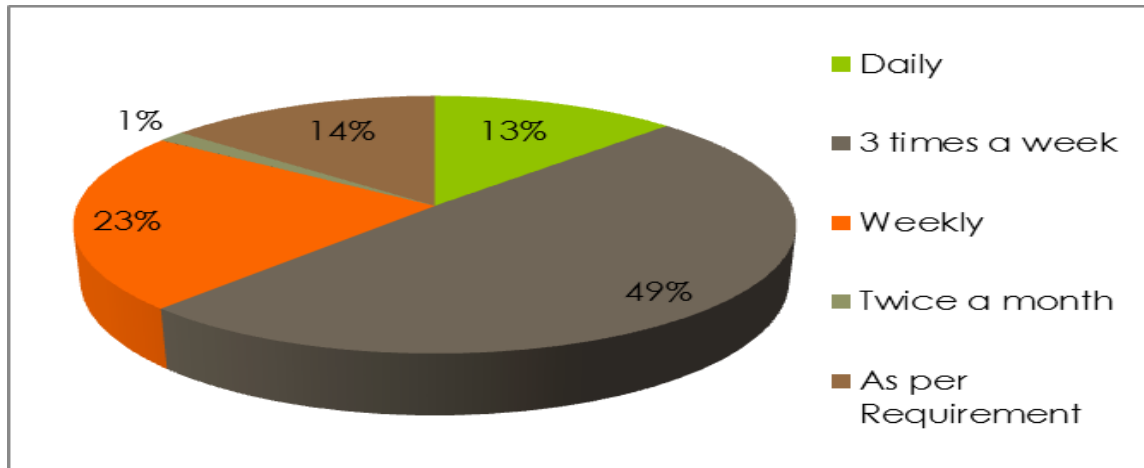


Figure -3:

The frequency of visit at library is twice a month's which is 49% of whole user's apart from other users visit daily or weekly. The rate of daily library visit is 13% and weekly visit of library is quite interesting which 23% of entire data. So, there is requirement of orientation programme for the users to utilize the library services more fruitful.

6.4 Importance of American National Standards

Table: 4

Standards	Very Important	Important	Somewhat Important	Not Important	Total no. of response received	Response Rate in percentage (%)
ANSI	29	40	0	0	69	17.25
API	55	11	0	0	66	16.5
ASTM	45	20	0	0	65	16.25
ASME	47	18	0	0	65	16.25
AISC	45	15	0	0	60	15
AWWA	41	22	0	0	63	15.75
ACI	50	9	0	0	59	14.75

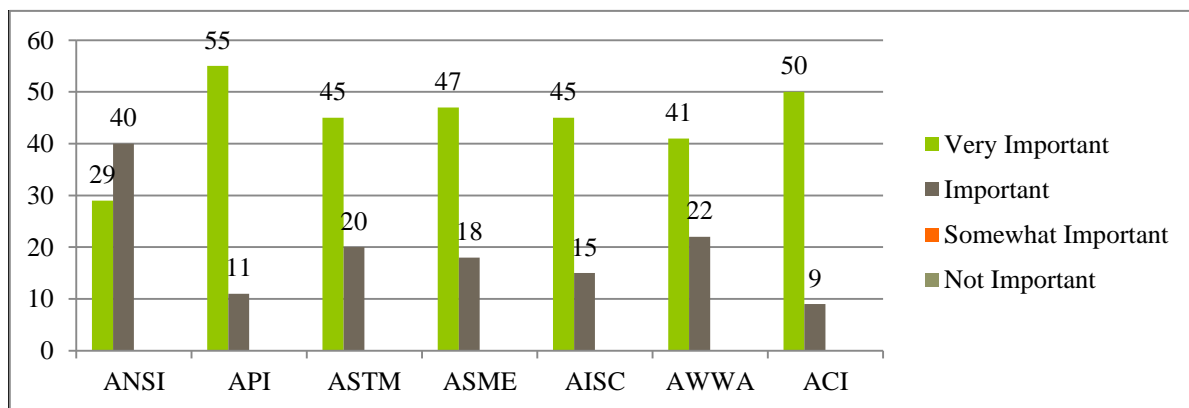


Figure-4

For specification and design purposes engineers are used American standards, it has been found from this study, figure - 4 is showing which American standards are actually being used like ANSI, API, ASTM etc. the usage of API standards are highest compare to others and their after ACI out of 59 respondent 50 engineers are using ACI standards for specification purposes.

6.5 Importance of the Indian standards & others technical papers.

Table – 5:

Reputed Publication	Very Important	Important	Somehow Important	Not Important	Total no. of response received	Response Rate in percentage (%)
IS	42	28	1	0	71	23.66
CBIP	55	12	0	0	67	16.75
CEA	44	15	2	0	61	15.25
TAC	46	13	2	0	61	15.25
Topo Sheet	40	20	3	0	63	15.75
Maps & Atlas	46	14	2	0	62	15.5
Acts & Rules	38	22	2	0	62	15.5
IRS	47	14	1	0	62	15.5
IRC	37	16	1	0	54	13.5
AERB	42	16	2	1	61	15.25
CPWD	43	16	3	0	62	15.5
TERI	40	15	1	0	56	14
OISD	38	15	1	0	54	13.5
Technical Report	57	8	0	0	65	16.25

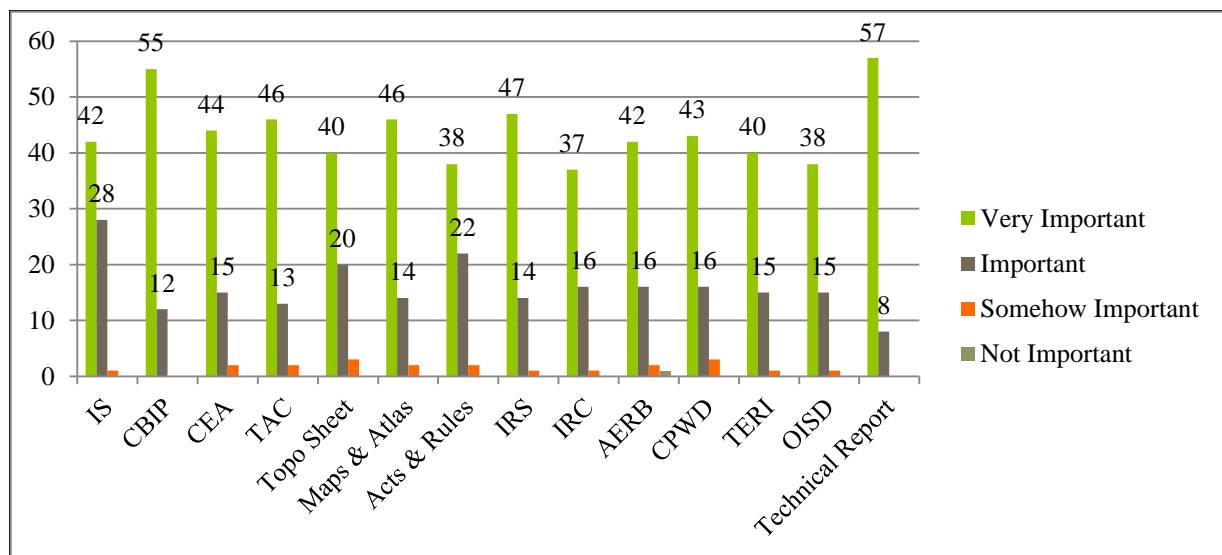


Figure – 5

Design engineers also take help of various technical papers and documents which are published by govt. of India like IS, CBIP, CEA, IRC & CPWD etc. Bureau of Indian standards (BIS) all these play a crucial role for

their design & specification purposes. For use of Indian standards and response rate is 23.66 % out of other technical papers and documents, thereafter CBIP (Central Bureau of Irrigation & Power) such govt. publication is also used for mechanical job purposes. Indian road congress (IRC) & Indian railway standards (IRS) are also used; out of 71 respondents respectively 47 & 37 engineers use the same respectively. Apart from AERB (Atomic energy & regulatory board) document is also used for nuclear job, the rate of percentage is 15.25%.

7.0 DCPL e-resource Uses:

7.1 Frequency to visit the DCPL e-library portal:

Table -6:

Rate of visit	Respondent	Response rate (%)
Once a Week	20	36
Twice a Week	30	53
Thrice a Week	3	5
once a month	1	2
As per requirement	2	4

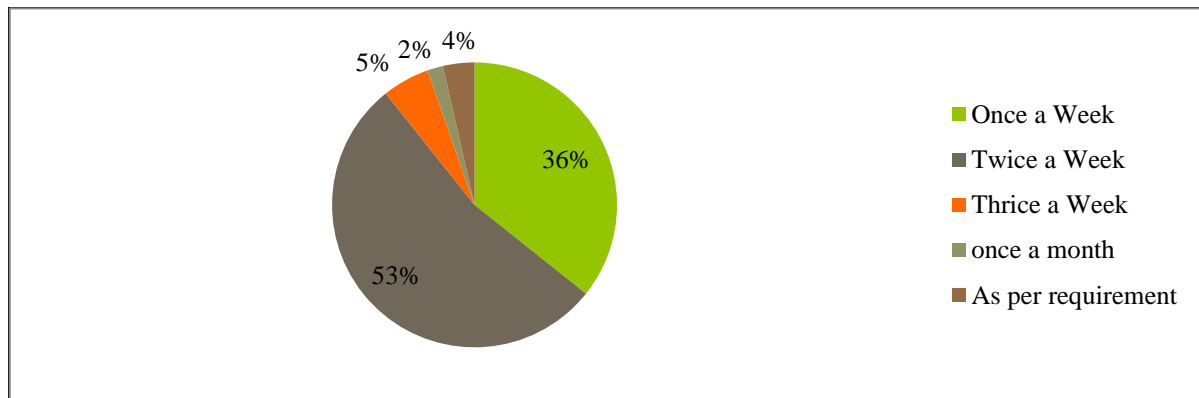
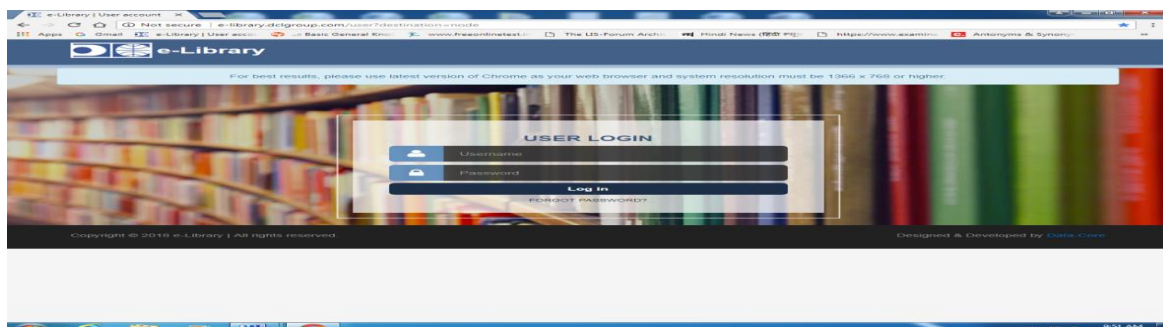


Figure – 6:

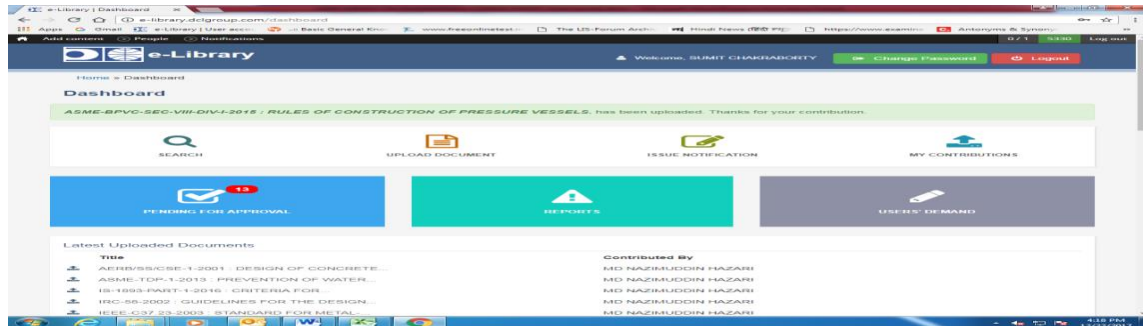
DCPL engineers are used e-repository library software for sharing the documents to each other’s using this platform. DCPL engineers are developed this software. From the above table it is observed that the frequency of visit to library is quite rare , because out of 56 respondents only 20 users visit e-library which is 36% and other hand twice in week is only 30 engineers which 53%. It is found that though they have made such software for serve their purposes but uses of it not up to the mark in percentage.

7.2 DCPL e-portal User login interface:

Development Consultants Pvt. Ltd. (DCPL) has their own e-library software for in house data repository; it is very user friendly with nice look and feel. It has good component to capture the metadata with proper order and required the final validation by the Librarian after submission of data in this e-library software.



It is the inner layout of the e-library portal with every required component for submission and validation of data.



7.3 Overall Experience Using DCPL e-Library.

Table – 7

DCPL e-Library	Very Satisfied	Satisfied	somewhat Satisfied	Dissatisfied	Response rate (%)
Look & feel of the e-Library.	30	20	5	0	55
Uploading and finding out of documents.	20	15	15	0	36
Display format of the documents.	30	15	5	0	9

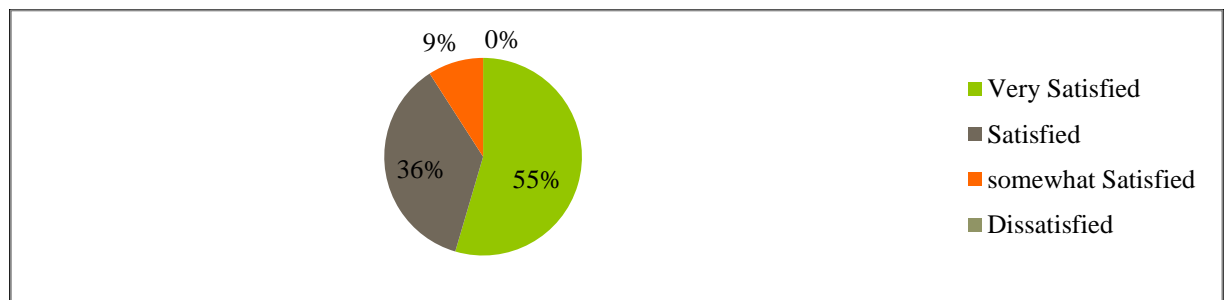


Figure – 7:

From above figure & chart we also find that regarding the look & feel of the website above 55% users are very satisfied and the 36% are satisfied and somewhat dissatisfied is only 9%. So it is very difficult to find actual reasons of less uses of e-library in this respect users are needed to be more aware by the library personnel.

8.0 Findings and Recommendations:

1. This study also explored what kind of technical literatures engineers are using to serve their purposes. In order to provide efficient services, and ensure user's satisfaction, it becomes necessary, at the outset, to examine the effectiveness and use made of existing services.
2. Highly qualified user's attitude regarding availability of the library collection and facilities offer some insight as to what remedial action should be adopted for improving services and encouraging library use.

3. Result indicated that overall satisfaction in all services was more than fairly high, except a few cases. It has also found from this study most useful contribution as one which will enlighten both library staff and administrators regarding what methods to adopt for measuring effective library use. In addition, it will serve as a guide for future decision – making and library planning.
4. This study is suggested that some progress has been made towards improving services, it must also be admitted that far more still remains to be done. Specially CAS service, Recent addition and maintenance of SDI services of DCPL and their quality system procedures documents and many others archiving documents are truly praiseworthy for serve the purpose of engineers.

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