CHAPTER 5

Summary and Conclusions

This chapter deals with the summary and conclusions of this research. From the analysis and interpretations presented in the previous chapter, the summary of the research findings, suggestions of the study and direction for future research along with the conclusions of the study are presented as follows:

5.1 Profiles of the corporate library respondents and their nature of working

5.1.1 Total number of respondents participated in the study

It is found that 92.80% of respondents from Mphasis library are participated in the study. Followed by this, 88.00% of the CTS respondents are also participated along with 67.60% respondents of the Capgemini. The lowest percent i.e. 39.60% respondents are participated from TCS. And altogether a total of 720 respondents are participated in all these IT sector libraries under study.

5.1.2 Sex-wise distribution of the respondents

Out of 720 respondents of these IT sector libraries, 563 (78.20%) males and 157 (21.80%) females are participated in this study. This is because more number of male staff are employed in these corporates when compared with that of female software professionals.

5.1.3 Age-wise distribution of the respondents

A majority of the respondents 34.17% who participated in the study are between the age group of 31-35. The respondents between the age group of 36-40, 26-30 and 41-45 have participated in the study with 22.22%, 16.25% and 14.72% respectively. The software professionals in these categories are mostly responsible for
solution designing, managing the team at the ground level and reporting the operational metrics and delivery status to the senior management or end clients, requiring more support from the library services. An interesting finding of the study is that the respondents between the age group of 46 - 50 and >51 years are senior level managers, who have participated in this study, constituting 8.19% and 3.33% respectively, and this shows that these professionals are also using the library intensively amidst their busy work schedules.

5.1.4 Educational status of the respondents

A majority of the respondents are B.E (29.17%) graduates, followed by MCA, ME, MBA and M.Tech post graduates, who have also participated in the study. This is because these professionals are the core human resources of these corporates, being capable of fulfilling the objectives of the corporates.

5.1.5 Work roles of the respondents/cross sections of the human resources

Majority of the respondents who have participated in the study are technical leaders and front level management professionals (36.67%) in the reporting hierarchy of the organization. Project manager level professionals who handle the project are also participated in the survey with 29.44%, software engineers who are in the lower level have constituted into 21.25% and program managers are of 10.42%. The Directors who are in the top of the hierarchy constituted into 2.22%. It is identified that the technical leaders and front level management professionals have participated of these IT corporates are participated more in the study. Further, the analysis also indicates that they require library support in every step of their career growth.

5.1.6 Years of experience of the respondents in the IT Industry

The respondents with 9-12 years of experience have participated in the survey into 27.78% followed by this, the respondents with 5-8 years of experience have
participated into 25.56%. And professionals with less than 4 years of experience in
the IT industry are participated with 21.25% and 13-16 years of experience
professionals participated with 17.64%. This study found that 92.23% of the lower /
middle level professionals are involved in the software developments and
maintenance and these professionals are eagerly participated in the study as they are
using the library more consistently for their day-to-day routines in their professions.

5.1.7 Business unit of the respondents in the corporates

Majority of the respondents (57.92%) are working in the Applications
Services (APPS) followed by 18.47% of respondents from Infrastructure Services (IS).
It is also noted that rest of the respondents are from the corporate support team. Thus,
it is found that more respondents are from the application development side, as
majority of the outsourcing work involves application development, testing,
implementation and production support which demands support from library
resources and that these libraries need to disseminate information corresponding to
the various roles of the IT professionals.

5.1.8 Respondents industry verticals

A majority of the respondents are from the Insurance vertical comprising of
14.44% of the total respondents, followed by this, those working in IT Systems of
Capital Markets, Healthcare/Life sciences and Media/Entertainment verticals with
11.94%, 10.42% and 8.89% respectively. As BFSI (Banking, Financial Services and
Insurance) is the major driver and consumer of IT services in the world, a large
number of participants of the study are from these verticals.

5.1.9 Respondents competencies

Application maintenance and support professionals have participated in the
survey predominantly comprising of 27.08% followed by those with Network
Administration/Security competency and those with DBA, Data warehousing and
analytics competency with 9.86% and 9.44% respectively. It is also found that the respondents with application maintenance and support competency are more participated as they depend more on the library for archives, user manuals and architectural details of existing and old IT systems when compared to other professionals of these corporates.

5.2 Library visits, access mechanisms, types of resources and formats/devices preferred to use by the respondents

5.2.1 Frequency of library visits

It is found that 27.08% of the respondents visited the library on daily basis, 19.03% visited the library on weekly basis and 27.50% visited the library on bi-monthly basis. It is identified that nearly 87.08% of the respondents are visiting the library on these frequencies.

5.2.2 Frequency of borrowing library resources

It is identified that 24.86% of the respondents are borrowing the library resources on monthly basis, 18.47% of the respondents are borrowing the resources twice in a month, 17.08% of the respondents are borrowing the resources on daily basis and 10.14% of the respondents are borrowing resources on weekly basis. Thus, it is found out that nearly 70.55% of the respondents are borrowing library resources on regular basis and it shows their dependency on the library services.

5.2.3 Preferred day to borrow the library resources

It is found that 26.39% of the respondents opted Wednesday to borrow library resources and an equal percentage of 18.33% of the respondents have opted Friday and Tuesday for this purpose. The major reasons identified from this study that on these days clients/stakeholders do not force the professionals to work, there are no user acceptance test (UAT)/project delivery and less client or team meetings.
Therefore, the professionals of these four IT sectors feel free to borrow the library resources from their respective libraries on these days.

5.2.4 Preferred time to borrow the library resources

It is identified by this study that 43.33% of the respondents are preferred to borrow the library resources from 12 noon to 4 pm and 34.58% preferred to borrow from 4pm to 8 pm. The reason behind this, as identified by the study is that, the professionals are making use of their lunch break/the time before and after their work shifts to borrow the resources from the library. And also identified that there are no project deliveries, client or team meetings during these timings of the day.

5.2.5 Reasons for visiting the library

It is found that 35.69% of the respondents visit the library for their studies/learning purposes and 28.33% of the respondents visit the library to read newspapers/ magazines, 25.97% are visiting the library to borrow library resources. The other major reasons for visiting the library as observed are to obtain information that is helpful for project work, to reserve library books and to access online resources such as e-books/e-journals. The main reason for the majority of the respondents to visit the library is for their studies/learning purposes to pursue higher education so as to obtain IT certifications and to complete their mandatory trainings, if any.

5.2.6 Status of library induction/orientation programs attended

It is identified that 83.75% of the respondents have received formal library training or library orientation which are mandatory in all these libraries under study, whereas 16.25% have not received any formal training or library orientation. This indicates that the IT corporates are providing library orientation programs to its employees as mandatory as soon as they are appointed into the corporates. And it is
an identification of the importance of the library in the corporate IT sector environments.

5.2.7 Availability of library services 24/7

It is found out that 48.33% of the respondents are accessing their library by 24/7, whereas 51.67% opined that they are not accessing the library by 24/7.

5.2.8 Usefulness of the library to find the required information resources

It is identified that 95.42% of the respondents opined that they are getting the right information at the right time from the library. But, 4.58% of the respondents opined that the library is not helpful in finding the required information. This finding implies the high level performance of the four corporate libraries under study.

5.2.9 Preferences over the document format

It is identified by this study that 48.06% of the respondents opined that they preferred to use both printed as well as electronic resources for their information needs. This is also an interesting finding of the study that both the resources are equally preferred by the respondents for their day-to-day activities.

5.2.10 Types of resources preferred to use for day-to-day routines

The study identified that 34.03% of the respondents preferred books, 34.17% are preferred journals, 30.97% preferred eBooks, and 23.06% preferred e-Journals for their work related information needs from the library.

5.2.11 Methods to access the library

The study identified that more than 94.31% of the respondents are accessing the library resources through intranet. And 35.56% of the respondents are also accessing the library through intranet using internet when they are away from the
company. It is also identified that a considerable percent of the respondents i.e. 27.92% are using mobile devices to access the library resources. These results indicate that unlike other library users, these IT corporate libraries users are using telecommunication networks to access and use the library resources extensively.

5.3 Familiarity with the library resources

5.3.1 Means of intimation on acquired library resources

It is identified by the study that 64.72% of the respondents are informed about the availability of library resources by eMail notifications from the library and 38.19% of the respondents are informed through library website, 24.03% of the respondents are informed through co-workers and 22.64% of the respondents are informed through library newsletters. This finding shows that the IT professionals are promptly informed through various means about the new arrivals and the availability of information resources of their respective libraries.

5.3.2 Preferred ways to access the library resources

It is identified that 60.56% of the respondents are preferring to use Library websites and 59.17% of the respondents are preferring to use corporate intranet sites to access library resources. Only 15.42% of the respondents are preferring internet through desktop, laptop, mobile devices etc.

5.3.3 Frequency of accessing the online resources

It is found that 28.89% of the respondents are accessing online resources of the library daily, however, 27.78% of them are accessing these resources once in two weeks and 20.69% of the respondents are accessing online resources once in a week along with 16.25% of the respondents accessing the online resources once in a month.
5.3.4 Ease of accessing of library resources

It is identified by this study that 46.11% of the respondents are opined as very easy to access online resources and 37.08% of the respondents consider it easy for them to access the online resources. Since they are IT professionals they are well versed in terms of access modalities.

5.3.5 Preferred document format to access online resources

It is identified that 78.19% of the respondents are preferring to use PDF format to access online library resources whereas 33.47% of the respondents are preferring HTML file format to access online library resources. The PDF format is being used more predominantly by these professionals to access online resources as it is more user friendly to them.

5.3.6 Preferred place to access library resources

It has been identified by this study that 58.47% of the respondents preferred workstation, whereas 24.17% of the respondents preferred place as library itself and 13.33% of the respondents preferred to access from home along with 4.03% of the respondents preferring internet centres to access library resources. It is noted from the study that 24.17% of the respondents preferred to choose the library as their preferred place to access library resources. The findings disclose that the majority of the respondents are favouring to access library resources from their desk itself as they are having internet and intranet site access in their desktops or laptops. However, it is to state that a portion of the professionals are willing to access the information resources by personal visits to the library itself.
5.3.7 Preferred devices to access the library resources

It is identified that 47.08% of the respondents preferred to use laptop devices, 25.97% of the respondents preferred to use Desktop devices during the office hours and 25.42% of the respondents preferred to use handheld devices like mobile or tablet PCs. Thus, 98.47% of the respondents are preferred to access libraries through these modes.

5.3.8 Type of mode used to access e-resources after their office hours

It is identified by the study that 63.75% of the respondents are using data card to access, 21.39% of the respondents are using mobile internet and 14.86% of the respondents are using public/private Wi-Fi or WiMAX to access e-resources after office hours. This is an interesting finding that 63% of the respondents are supporting the client from home in carrying out the project and are requiring support from the library through the internet via data card.

5.3.9 Frequency of accessing the library resources by using the handheld devices

It is found out that 33.33% of the respondents are accessing the library resources using handheld devices at least once in a week when away from home/work in the last three months, whereas 21.94% of the respondents are accessing them less than a week and 11.53% of the respondents are accessing almost every day. This result is also an interesting phenomenon that most of the respondents are utilizing the library resources often even when they are away from office/home.

5.3.10 Activities done using the handheld devices for the last three months

It is found that 24.31% of the respondents are using handheld devices for reading or downloading online resources of the library which are related to their work, whereas, 27.22% are using them to participate in social networks for various reasons and 15.83% of the respondents are using the devices for sending and receiving emails.
5.3.11 Extent of information needs met through library resources

It is found that 51.81% of the respondents are benefitted by the library resources to a great extent, whereas, 27.50% are benefitted to some extent and 17.22% are benefitted to a little extent by the library resources to get their required information. It is also another indication of the great extent of the dependency of the respondents on the library resources.

5.4 Use of library resources for career growth and job related issues

5.4.1 Utility of library resources for their career growth

The study found out that 96.25% of the respondents opined that the library resources are more useful to them to carry out their current project work and thereby enabling them to improve their career skills. And 3.75% of the respondents opined a negative remark about the usefulness of the library resources. This finding shows that the library resources are vital for the career growth of the library users and thus, the existing resources of these libraries are a part and parcel of their career growth.

5.4.2 Contribution of the libraries in enhancing technology advancements

It is found that most of the respondents i.e. 42.08% ‘strongly agreed’ with the statements that the library resources are assisting them to enhance their technology advancements, whereas 33.19% of the respondents just ‘agreed’ that the library resources are moderately helping them to enhance their technology advancements. And it is identified that 19.86% of the respondents opined the usefulness of the library resources as ‘neither agree nor disagree” with the statement. However, totally 95.13% of the respondents of these four IT corporates express their positive opinions that the library resources are helpful to them to enhance their technology advancements.
5.4.3 Purposes of information seeking

The study also identified that 37.78% of the respondents utilize library resources in order to obtain academic excellence. This is because most of the software professionals undergo certain software courses along with their job routines that would help them in their current project and in the future these would enable them to obtain promotions. However, it is identified that 32.22% of the respondents use the library resources to follow the current IT market trends in order to be aware of the recent developments in the software field and 30.83% of the respondents are using the library resources to complete their mandatory training that has to be accomplished to reach higher levels in the software professionals hierarchy.

5.4.4 Success rate in finding the information for career growth

It is found that 39.03% of the respondents have given above 75% rating towards their success in finding the information for their career growth from the library whereas, 36.67% of the respondents have given the rating of 51-75% and 19.58% of the respondents rated as 26-50% success rate in finding the information from their libraries. This is an indication that a majority of the respondents are satisfied in finding their required information in their respective libraries that supports their career growth at the right time.

5.4.5 Software certifications obtained using library resources

One of the major findings of this study is the obtaining of following IT certifications with the use of the library resources.

- Application Services (Developers, Testers, Database Administrators, Quality Assurers and Project Managers)
- Infrastructure Services (Architects, Hardware and Networking Engineers)
- Business Process Management Services (Business Analyst, Domain Specialist and Subject Matter Experts)

In this context, 20.69% of the respondents are supported by the library resources to obtain testing related certifications, and 15.28% of the respondents have obtained managerial certifications by using the library resources. However, 13.89% of the respondents acquired IT infrastructure related certifications and 10.97% of the respondents have obtained Microsoft related certifications by utilizing their library resources. Thus, a marginal percent of the respondents in all the libraries under study are opined the use of their library resources for obtaining IT certifications. It is an indication of the contribution and importance of their library resources for their career growth.

5.4.6 Contributions of the library resources towards career growth

It is found that 34.44% of the respondents have given above 41-60% rating towards the contribution of the library resources for their career growth, 21.53% of the respondents have given the rating as 61-80% and 19.16% of the respondents rated that the library resources have helped them in their career growth. The findings indicate that most of the respondents of all these corporate libraries are benefitted from the library resources in relation with their career growth.

5.5 Methods of sharing information

5.5.1 Methods of sharing information

It is found out that 35.56% of the respondents preferred to share information through Social/Professional Networking sites, followed by this, 15.69% of respondents preferred Corporate IM and the rest of the respondents sharing the information through Technology Blogs and Emails. It is also identified that 32.92% of the respondents are not opined in this aspect. However, it is observed that most of the
respondents are using mobile devices to share the information instantaneously and they are preferring social networking sites for their information sharing.

5.5.2 Sharing information through SNS

It is found that 280 respondents have ranked the Professional Social Networking site, LinkedIn as their preferred Information sharing Platform. It is also identified that LinkedIn, Facebook and Twitter are predominantly used by the respondents in sharing information and most beneficial for their career growth. However, WhatsApp is also being used to a certain extent. Thus, SNS play major roles in terms of sharing information.

5.6 Rating of library resources and services

5.6.1 Satisfaction with the availability of library resources and their adequacy

It is found that 81.39% of the respondents are opined that they are highly satisfied with the available library resources and 13.89% of the respondents are partially satisfied with the library resources. This study identified that majority of the respondents of all the four libraries i.e. 95.28% are satisfied with the available information resources. However, a minimum of 4.72% of the respondents of all these libraries under study are unhappy, expressing their dissatisfactions about the available library resources.

5.6.2 Rating of available library collections

It is identified that 32.36% of the respondents have given the rating as ‘good’, 26.95% of the respondents have given the rating ‘very good’, and 20% of the respondents have given the rating as ‘exceptional’, about the available library collections in all the libraries under study. However, 20% of the respondents have given the rating as ‘average’ concerning the collections of the library. This result
indicates that 79.31% of the respondents are satisfied with the available library collections in all these corporate libraries.

5.6.3 Satisfactions with library services

It is found that 50% of the respondents are somewhat satisfied, 43.33% are quite satisfied with the services offered by the four libraries whereas, 4.03% of the respondents have rated the services as ‘not at all satisfied’ and 2.64% of the respondents not rated the library services. This indicates that there is a separate study required to find out the reasons behind the dissatisfaction with the library services.

5.6.4 PCA analysis for the respondents’ level of satisfactions with the library services

The PCA analysis revealed the following facts:

The first component is highly loaded with 26.25% variance. The loading reveals that the circulation service offered by the corporate libraries are appreciated by the respondents of the four corporate libraries. The loading of the variables for e-books and e-journals on mobile devices shows the satisfaction of the respondents with 20.00% variance and that the software professionals are interested in accessing these services even after office hours. The subsequent loadings of the components reservation, reference and digital learning centre services indicates the satisfaction of the respondents. However, the other services are not satisfactory to the respondents since it is loaded with less than 5% variance.

5.6.5 Demanding need for the library resources during project life cycle

It is found out that 62.08% of the respondents articulated that they required library resources desperately during the functional design phase and Technical Design phase, followed by 16.67% of the respondents requiring library resources very much
to run successfully the business, operations, and ITSM best practices followed by other projects. And it is found that 14.86% of the respondents required information during the coding phase, 2.64% required them during the release and deployment phase, 2.22% during the requirement gathering and analysis phase and 1.53% during the testing phase. This result is an evidence that the software professionals are relying on the library resources for developing/delivering any software projects crucially during the functional design phase and Technical Design Phase. This is also another indication about the dynamic roles of the corporate libraries in the IT industry by providing the required information to carry out the projects which are vital for the sustainability and enhancement of the corporates.

5.6.6 Need for regular updates of library resources and services

It is identified that 89.58% of the respondents are interested to receive regular updates of their library resources/services, new arrivals, due dates of return, etc., whereas 10.42% have opined that they are not interested to receive new updates from the library. It is an indication that a majority of the respondents are interested to receive regular updates of the library resources and services. This is also an indication of the eagerness of these respondents to know the developments that takes place in their libraries.

5.7 Rating of library staff and their performances

5.7.1 Cluster analysis on the level of satisfaction on the performances of the library staff

In the dendrogram at 60 percent distance level, two interpretable clusters are formed. In the cluster one, seven variables are grouped. The cluster center ratio of the cluster indicates that the respondents of the study are highly satisfied with the following performances of the library professionals in all the libraries under study.
• Available for help when needed
• Prompt response to emails or phone calls
• Provide accurate answers in time
• Effective in resolving problems or questions
• Effectively helpful in using e-resources
• Effective interaction and communication between the library users and the staff
• Acceptance to change with technologies

Thus, this cluster is named as the “High Level Satisfaction towards the performance of the Library Staff”.

In the cluster – II, six variables are grouped which are as follows:

• Friendly and approachable
• Promote library programs and events
•Prompt response to queries and assistance
• Adequately trained for their roles
• Good understanding of their roles and responsibilities
• Possess advanced computer skills adapting the new technologies quickly

The cluster center of the cluster indicates that the respondents are having less negative opinions and moderately opined good about the above said roles of the library staff. Thus, this cluster is named as the “Medium Level Satisfaction towards the performance of the Library Staff”.

5.7.2 Helpfulness of the library staff for their career growth

It is found out that 30.69% of the respondents opined that the library staff are very helpful for their career growth. However, 24.17% of the respondents opined that the library staff are essential for their career growth and 19.72% of the respondents
opined that the library staff are moderately helpful for their career growth. It is to say that a majority of the respondents accepted that the library professionals are helpful for their career growth.

5.7.3 Overall rating of the performances of the library staff

It is found that 37.78% of the respondents have rated the library staff’ performance as ‘very good’ and 24.58% have rated their library staff’ performance as ‘exceptional’. Another 23.75% of the respondents perceived that the library staff’ performances are ‘good’. Thus a majority of the respondents i.e. 86.11% expressed their satisfaction towards the overall performance of their library staff in meeting their information needs. However, 13.89% have given a negative rating concerning their library staff.

5.8 Assessment of the respondents opinions on library automation and ICT applications

5.8.1 Assessment of respondents opinions on the performance of library software

It is identified that 64.97% of the respondents rated the in-house developed library automation software used in these four IT corporate libraries as good in their performances. And 20.20% of the respondents have rated them as very good. However, 13.80% of the respondents have given the rating as average whereas only 1.03% of the respondents have given the rating as below average.

5.8.2 Difficulties encountered in accessing the library website

It is identified that 34.03% of the respondents have had technical issues rarely, 30.96% of the respondents never had such issues and 18.06% of the respondents faced technical issues sometimes when they are using the library website. The findings
signify that a group of respondents have opined that they are facing technical
difficulties in accessing the features of the websites of these libraries which needs to
be enhanced in the future.

5.8.3 Rating of the library infrastructure facilities

It is found that 56.35% of the respondents have rated the library infrastructure
facilities as “good” and 21.43% of the respondents have given the rating as “very
good”. The findings of this study expresses the satisfaction of the respondents towards
the library infrastructure facilities, existing physical environment, hospitality,
e-resources and the software rendered by the library. And, 20.24% of the respondents
have given the rating as “average” and only 1.98% of the respondents have rated the
library facilities as poor.

5.8.4 Need for the library software training

It is found that 92.08% of the respondents are not interested in availing library
software training, whereas, 7.92% of the respondents are interested in obtaining the
training on library software.

5.9 Barriers to use library and the suggestions for further library
enhancements

5.9.1 Factors affecting in accessing the library

It is identified that 47.50% of the respondents considered Lack of time /Tight
work Schedules as major obstacles, 89.45% of the respondents felt that working in
Shifts/ working at client locations, frequent travels and inconvenient operational hours
prevent their library usage. And, 25.42% of the respondents state that their lack of
interest and awareness averts them from using the Library Information resources and
28.61% of the respondents felt that the available collections do not cater to their needs.

5.9.2 Suggestions for further improvements of these libraries

It is found that 39.86% of the respondents are looking for adequately staffed, well equipped, bigger and better library facilities. And, 40.41% of the respondents are opined for state-of-the-art, user friendly Web and Mobile Library application software to access Digital Information resources located across multiple networked environments. However, 14.58% of the respondents are not opined for the future improvements of their libraries.

5.9.3 Respondents readiness to support the library activities

It is identified that 8.19% of the respondents are ready to assist in the Library Connect Programs on the Emerging technologies like SMAC (Social, Mobile, Analytics and Cloud), 38.75% of the respondents are willing to extend assistance on future expansion and support of library application software, 11.25% of the respondents are interested to assist the physically challenged in accessing the information resources, 7.5% of the respondents are ready to share their experiences and benefits of the Library resources during Orientation Sessions and 17.78% of the respondents are not opined about their readiness to support the library activities.

5.10 Suggestions

The study discloses many facts about the characters of the software professionals and their information seeking behaviour in the four IT sector corporates. These IT corporate library users are very keen on using the library resources through online along with print forms and they are also interested to share the information through social networking sites. This study enumerates the following suggestions to the IT sector libraries on the basis of the findings of the study.
5.11 Suggestions to the corporate librarians

The corporate librarians should be to date with the developments in information technology focussing on the latest trends in the digital environments and the methods employed by the corporate users to seek information. The corporate librarian must be aware of the expectations of the corporate library users in order to serve better and earn appreciation from the users for the library services offered. The following suggestions are for the skill improvement of the corporate librarians.

5.11.1 Upgradation of Technologies

To keep in pace with the current technological advancements, the corporate librarian must be pliant and conscious regarding new technologies. With the growth and expansion of the use of internet, the corporate librarian should be aware of the new challenges which are to be faced keeping in mind that the corporate professionals are well equipped with research and information retrieval techniques in various information sources. Thus, every corporate librarian must be transformed and modernised in harmony with the digital environment being conscious of the emerging technologies, current market trends, expectations of the software professionals/organisations, rare technology resources and discover innovative ways to help IT sector library user to get the information in time which will enable them to carry out their job efficiently, since they are working in highly competitive market environments.

5.11.2 Initiate and deploy various best practices and value added services

The corporate librarians must be proactive in their approaches to upgrade the library with new technologies by initiating new value added services, implementing best practices to meet the requirements of the corporate library users. The corporate librarian should function keeping in mind that the library user is now an IT buyer/consumer who cannot be satisfied with traditional library resources and services but
expects a rich knowledge of experience to accomplish their project delivery. Hence the corporate librarian cannot function like a traditional librarian as the advancements in technology have surpassed the previous benchmarks. The best practices listed below will help a corporate librarian to improve the library services in line with the future technological developments and expectations.

5.11.2.1 Introduce performance linked learning

The corporate librarian can propose to the management a new policy/directives to encourage employees to make use of available online resources emphasizing them to complete stipulated hours of reading/using/training over this platform. To facilitate this, the library has to set the learning target for each year, split into mid and end of year targets making it as a policy for every employee by crediting 3 minutes towards learning hours for reading a page of a book and thus, 2 hours of learning for 40 pages. Also the organization can setup a credit system for using these resources that are directly linked to the individual and the group performance systems by which defaulters can be rated accordingly.

5.11.2.2 Access library resources through handheld devices

(Mobile and Tablet PC)

The corporate librarian should ensure that the users can access the online resources even while away from their PC. With this facility, the users can access to powerful search and browse capabilities with personal and corporate folders. This will enable the users to bookmark, create notes and add titles to their existing personal folders allowing them to organize particularly useful and relevant contents. Many IT corporates tie-up with such service providers like Skillport, realizing the importance of such media.
5.11.2.3 Learning through digital learning centre

In this digital era, it will be a super step to pioneer the installation of a digital learning centre which will serve as a portal to information attainment. The corporate librarian should instil interest in the employees to make use of digital resources by providing excellent services.

5.11.2.4 Transfer of library resources through tool itself

The corporate library can make provisions to renew/transfer library resources through a COTS (Commercially of the Shelf) tool or an internally developed library information management system. This service would reduce the stress of the users in visiting the library during their busy schedules or when working from home / different locations enabling them to save their time, making a way, to borrow or renew or reserve the library resources at their desk itself.

5.11.2.5 Roll out reminders over phone

The corporate library must introduce a reminder mail system on mobile through a library system for return, renewal, reservation, and dues to the users. This is very helpful when the users fail to check their emails on the computer due to LAN issues, leave, training, working from home or onsite or travel and keeps them informed through SMS texts over cell phones. This best practice should be implemented in all the IT sector corporate libraries with the help of the management and the technical team, as everyone possesses gadgets such as laptops and cell phones. This best practice can be named as “Wherever you go our library will follow”.

5.11.2.6 Library connect/authors talk programmes

The corporate librarian can recommend to conduct a series of library connect programmes where authors or subject matter experts can be invited for an informal
lecture on specific subjects. This will improve the usage of the library resources and increase the number of visits of the users to the library. To carry out this service, the management must provide extensive support as it involves considerable expense in terms of getting such experts.

5.11.2.7 Marketing library services/promotional showcasing

The corporate librarian must continuously market the newly innovated library services and competencies to the corporate library users so that they will be aware of the various library services which will be helpful to them in delivering the project. The corporate librarian must also be up to date with the market requirements and current demands in the IT field to improve the library collections and its services, showcasing it to the users as well as to the organisation.

In some IT companies, when the corporate librarian fails to exhibit the library achievements, the management reduces the budget for the library or even plans to close it down or merge it with other departments like training or administration. Therefore, it is a crucial need for the corporate librarian to display the library achievements and the initiatives of the library and its services to the management as well as to the users to convey the improvements made in the library collections and services.

5.11.3 Utilise bench resource for library enhancement

In every IT company the professionals are released from their projects on completion and sent to bench until they are placed in another new suitable project vacancy and this repeats after completion of each project. During this time they spend most of their time in the library. Using this opportunity, the corporate librarian can procure help from them for carrying out any technical work that needs to be done to modify or enhance the library tools that are used in library activities. By doing this, the library resources and services will be made known to the IT professionals.
5.11.4 High level market research report

There is an urgent need to initiate and support the organization to bring more business from onshore or offshore and to improve the business models for more projections in the market. To facilitate this, the corporate librarian must keep watch of the market situation every day and assess the market entry opportunities and the company’s market. The corporate librarian must keep track of the competitor’s market presence, bid/tender announcements, worldwide IT-BPM spend and compile a strategic plan or report for the organization across verticals, geographically. The librarian should collate and analyse the information accurately to assist confident decision-making in determining market opportunities, penetrate strategies and market development metrics, as this is necessary for the organization to enter into a foreign business, as well as, bring more values and wins from onsite or offshore. Whenever, the organisation wins an opportunity the librarian is also benefitted along with incentives.

5.11.5 Collaborate with other departments

The corporate librarian should associate with other corporate support groups/information systems to provide value added services to their company and be aware of the current and future information needs of the corporate professionals. By doing so, the corporate librarian gains knowledge regarding the functioning and information needs of the professionals in the other departments, and can equip the library with the required resources to cater to their information needs. In certain IT companies, the librarian is expected to be a billable resource to the client with additional responsibilities, which requires the librarian to understand the employees’ as well as the client’s information needs to provide the essential information resources by taking the necessary steps in advance.
5.11.6 Beneficial testimonies

Most of the companies roll out performance awards to the employees, every year for their various achievements and telecasts the interviews of those who have won these awards at different locations. Like this, the corporate libraries can also showcase the video clippings of the testimonies of those who have benefitted from the library in achieving higher education or certification using the library resources and services. This will serve as a tool to market the library services making the corporate professionals aware of the benefits that can be availed from the library.

5.11.7 Expand library collections to meet future challenges

The corporate librarian should ensure that new and recently published resources are acquired into the library so that the library is replenished in order to satisfy the information needs and expectations of the corporate library users. As technology development is on the rise there is an urging need to acquire resources that will cater to the needs of the corporate professionals who are moving along with the technology changes. To fulfil this requirement, the corporate librarian must be aware of the latest information resources that are of interest and use to the corporate professionals and expand the library collections to meet the future demands of the corporate library users.

5.11.8 Additional responsibilities of the corporate librarian

The corporate librarian must be capable of taking up certain additional responsibilities and involve in Corporate Social Responsibilities (CSR) like Blood camp, world environment day, world telecom day, Mother’s day contest, company annual day and other organisational activities in order to sustain the job, as the corporate librarian is facing job crisis due to the market recession in the IT industry. By doing so, the value of the corporate librarian in the corporate sector will be enriched ensuring job survival for a longer period.
5.11.9 Initiate marketing campaign internal and external

In an IT company with a great number of employees, the specialists in different domains/verticals are not clearly identified. The corporate librarian must initiate marketing campaign programme and keep track of all the practices and capability heads to show case their talents, capabilities, practices, solutions and innovations that are ready for marketing. In this way, the corporate librarian can make the project managers aware of the capabilities, innovations and new solutions that are available in the organisation. The librarian invites the solution owner to give presentation to the project manager who is marketing to the client who is in direct connect with the stakeholders. By doing so, new projects can be won by the project managers from the clients by showcasing the talent pool of the organisation paving a way for increased market value being accredited to the organisation.

5.11.10 Rewards and recognition programmes

Corporate librarian can introduce rewards and recognition programmes which will attract employees of all levels in the organization. This programme must aim at recognizing and rewarding the employee’s utilization of library resources. The corporate librarian needs to recommend library users for this award on a quarterly basis, based on the utilization of library resources such as resource borrowing, using e-resources, utilizing digital learning centres, book reservations and availing of corporate membership and so on. It will reward individual contributors, teams, managers and other employee categories on a customised criteria. This is applicable to all on-site, off-shore and full time employees of the organization. The reward can be of monetary benefit/Travel Voucher/Gift Voucher in nature as decided by the management.
5.11.11  **Act as a gatekeeper**

The corporate librarian should serve as a bridge between the organisational leaders and the library users for the progress of the library and its services. The corporate librarian should be in touch with the library users to be aware of their expectations with regards to the library resources as well as the library services and should take it to the notice of the organisational leaders to obtain a library budget to improve its resources and its services to facilitate the corporate library users.

5.11.12  **Be a risk-taker**

Now-a-days the corporate libraries are facing a risk of closing down due to cost cutting and budget restriction because of IT recession. This presents a threat to the job security of a corporate librarian and the corporate librarian should be confident and alert to cope up with such circumstances. The corporate librarian should exhibit the importance of the library well in advance to the organisational heads to avoid the closing down of the library.

5.11.13  **Think innovative plans for future expansion of the corporate library**

The corporate librarian should be proficient in formulating innovative plans for the expansion of the library in the future to cater to the increasing needs of the corporate library users and should take the required steps to implement the same. The corporate librarian should also provide the feedback to the organisational leaders on a quarterly/half-yearly basis. This will make the corporate library to stay replenished and up-to-date with regards to its collections and services to meet the information requirements of the library users.
5.11.14  Be a good shepherd

The corporate librarian should act as a good shepherd helping the library users locate the information resources that are beneficial to their career. Particularly, the corporate librarian has the indispensable responsibility of guiding the freshers who are new to the company as they are not aware of the library collections which could be beneficial for their career. In addition, the corporate librarian should also make the newly acquired library resources known to the corporate professionals so that they can be benefitted.

5.11.15  Assess information seeking behaviour of software professionals

The corporate librarian should assess the information seeking behaviour of these professionals from time to time to be aware of the expectations of these corporate professionals and take the necessary steps to provide for their requirements. This will enable the corporate librarian to keep the library collections replenished in line with the expectations of these professionals, so that they will be able to carry out their job successfully by using the library resources.

5.12  Suggestion to the corporates

In this fast growing IT sector, this study recommends the following suggestions to the corporate companies to deliver more effective information services to the user community of the IT industry.

Many corporate libraries are struggling to transform internally in order to meet the challenges of the changing library user preferences and expectations from the library. To fulfil its purpose, the library should provide accurate services being connected to the digital world. Also most of the corporates are investing in new technologies such as cloud computing, mobility and analytics, AMOD, Governance Risk and Compliance - GRC, Payment Solutions, SAP, Big Data and innovations that
will lead to bring more opportunities and more value to the clients. The library should be replenished in order to satisfy the information needs and expectations of the corporate library users so that they can perform well to meet the client’s expectations.

5.12.1 Library space

In most of the corporate companies the space allotted for the library is small and so it is insufficient to accommodate large number of library resources, computers and visitors. This makes the library users unable to make the maximum use of the available library resources even though the library has a wide range of resources. Therefore, the corporate companies should consider this issue and take the necessary steps to meet the requirements, by increasing the library space so that the library users can be benefitted.

5.12.2 Budget restriction

The corporate libraries are facing major issues due to market recession, company loss and company mergers/acquisitions and lack of importance being given to the library. In some cases, this risk causes budget restriction and cost cuttings that would affect the maintenance and development of the library that may lead to decreased emphasis for libraries, diminished library visits, reduced usage of library resources and even closing down of the library. The corporates should take the necessary steps to give importance to the maintenance and development of the library as it is the storehouse of knowledge that facilitates the development of the human resources who form the company’s backbone.

5.12.3 Role clarity of the corporate librarian

In many IT companies there is lack of role clarity for the corporate librarian, as most of the corporate companies expect the librarian to involve in some kind of a non-technical job that would bring income to the company from the client, instead of
being a librarian alone. Therefore a corporate librarian is not able to focus on the improvement of the library and its services, which in turn leads to the decline in the efficacy of the corporate library. Therefore, the corporate companies should realise the importance of the library and its services in developing the knowledge power of the professionals and permit the librarian to work towards the betterment of the library and the company itself.

5.12.4 Reporting structure

In some corporate companies the librarian faces an issue with regards to reporting. Due to various reasons the corporate companies fail to provide importance to the library and the library is left with no proper line of authority to be responsible for its functions. In some instance, the librarian often experiences leadership changes which creates various difficulties in managing the library. Therefore, the corporate companies should make sure that the reporting head of the librarian remains consistent for maintaining a competent, dynamic and effective library.

5.12.5 Career growth of a corporate librarian

In most of the corporate companies there is no opportunity for the career growth of the librarian as there is only one designation assigned to the library with no further chances of promotions. Even though, salary hike is given to the librarian annually, there is no definite career growth related opportunities for the corporate librarian. This hinders the career growth of a corporate librarian and creates a feeling of job dissatisfaction. Therefore, the corporate company should facilitate the expansion of the library and its services creating more designations for the library staff.
5.13 Directions for further research in information seeking behaviour of IT sector library users

The present study has had its limitations on the information seeking behaviour of the software professionals. Thus, the following topics for conducting further research are suggested.

1. More in-depth research needs to be carried out on service-wise information seeking of the IT sector professionals (Application Services, Infrastructure Service and Business Process Outsourcing).

2. A comprehensive research on information seeking behaviour, and pattern need to be carried out on Emerging technologies like Internet of Things (IoT), 3D printing, Big Data as there are substantial IT uprisings expected in the next few decades.

3. Mobile computing is a technology that allows transmission of data, voice and video via a computer or any other wireless enabled device without having to be connected to a fixed physical link. Now a days, mobile computing is linked with internet. This is a separate topic on which IT professionals information seeking may be studied in a massive scale.

4. As BFSI (Banking, Financial Services and Insurance) is the major driver and consumer of IT services in the world, a separate research needs to be done on these domains in a massive scale on information seeking.

5. A comparative study on information seeking behaviours of IT sector library users and other academic/technical library users should be conducted to highlight the areas where the corporate libraries could improve to meet their future challenges.
6. A separate research on the information requirements and information seeking should be carried out for every stage in the Project Management Life Cycle (initiation, planning, execution and closure).

7. Research relating to the Impact of IT on the information seeking behaviour of corporate library users in India may be conducted.

5.14 Conclusion

Information and communication technology dominates the world, where everyone depends on the ICT tools for their ordinary life. The growth of the IT sector has led to huge investments into this sector paving way for millions of job opportunities. Among the many MNCs that have started their software companies in India, Mphasis, TCS, CTS, and Capgemini are popular in the IT industry. All these companies are maintaining libraries for the benefit of their IT professionals. Further, the libraries are offering the required information to these corporate professionals to equip or enhance or update their knowledge. In the study, irrespective of designations, software professionals are visiting the libraries for updating their knowledge and information. It is also noted that a majority of the respondents prefer to use online resources from their desk itself rather than coming to the library. It is also found that the respondents are expecting library services through handheld devices. Many of the respondents of the study are also preferring to share either personal or career related information through SNS such as Linkedin, Facebook, Twitter or WhatsApp. Therefore, the librarian’s role is very important to upgrade and implement the innovative library services through handheld devices. In addition, the study recommends the corporate library to market library services and sources to the user community through value added services. Overall, the corporate library should increase its collections of E-resources and make them accessible to the users 24/7 at their desk itself so that they will be benefitted extensively. The study has also
identified certain major barriers to use the library like lack of time, tight work schedules, work at client locations, frequent travels, work on shifts, work from home and uncertainty of job which the library needs to remove for effective usage of the library. The effective utility of the library can be facilitated by introducing value added services to the professionals through handheld devices.