Chapter 8
Findings, Suggestions and Conclusion

8.1 Introduction

This chapter contains the summary of findings of the study, tenability of hypotheses and areas suggested for further research. The study verified the tenability of the hypotheses based on the findings evolved in the study.

8.2 Findings

8.2.1 The first objective was to study the existing state of University Libraries in Kerala and the changes during the last five years. The analysis revealed that all the university libraries in Kerala are growing and have a strong potential in terms of collection, resources, especially e-resources, membership and information products and services but the budget provision does not increase proportionately. Therefore, university libraries in Kerala have to generate at least a fraction of the funds by fixing a reasonable price and selling their information products and services using modern marketing techniques.

8.2.2 The analysis to fulfill the second objective, i.e. the objective analysis of Strength, Weakness, Opportunities and Threats of university libraries in Kerala shows that all the university libraries in Kerala with their strengths and opportunities can easily overcome the threats and weaknesses with appropriate positioning and marketing strategies. An intensive effort is required from the part of the top management of the library, staff, and authorities of the concerned universities to overcome the identified weakness. All the university libraries have enough potential to market their information products and services through a strategic marketing approach.

8.2.3 The third objective of understanding the use pattern and usefulness of information sources, products and services of the university libraries was met by analyzing the four classificatory variables viz. university libraries,
type of membership, subject of interest and qualification of the users. The results are given below.

1. The fact that more than 84% of the users visit the respective libraries regularly and 14.4% occasionally shows a consistency in user visit in all the university libraries in Kerala. Among the libraries, CUSAT is on top with 91.5% of the users visiting the library regularly followed by KUL with 90% and users in CHMKL is the least with 77.7%.

2. While 44.5% of the research scholars visit the library daily, 46.2% does it at least once in a week. This is followed by students with 33.8% daily and 53.2% at least once in a week. As far as teachers are concerned, the figures are 25.5% and 49.9% respectively. This shows the academic importance of the university libraries in Kerala. Teachers are only occasional users of the university libraries, may be due to the presence of the department libraries and college libraries for their use.

3. Most of the users from Social Science faculty visit the library more frequently with 36.1% daily and 51.1% at least once in a week and 12.8% occasionally followed by users from Arts and Humanities faculty with 28.7% daily and 58.2% at least once in a week and 13% occasionally. Even though, majority of the sample is from Science and Technology faculty, the frequency of visit of users is less with 33.1% daily and 50.3% at least once in a week, since they rely more on laboratory than library.

4. M.Phil. holders used the library more frequently because most of them belong to the research category and Ph.D. holders are the occasional users because most of them are teachers.

5. KUL users spend more time in the library. It may be due to the influence of a large number of full-time research scholars in the library, since it is one of the major research centres having more than 400 full time research scholars.
in various non-science subjects. The users in CHMKL spend less time in the library compared to other university libraries.

6. Public category members spend more time in the library compared to other categories. 90% of the public use the library more than 30 minutes and among them 18.3% uses the library more than 5 hours daily. Most of them may be using the library for the preparation of civil service examination or other competitive examination and it stressed the need for strengthening the reference collection.

7. Members who are interested in Social Science spend more time in the library than others. Science and Technology members spend very less time in the library since they rely more on laboratory than library. M.Phil. holders spend more time and Ph.D. holders spend less time in the library.

8. Based on user’s response, the main purpose of using the library is study and research which fall in line with the objectives of the university libraries. Getting specific information and current information ranked as the second and third by the users. The use of electronic resources ranked is last, may be due to its unawareness pointing out the need for user orientation.

9. The main purpose of all the university libraries is study and teaching and provision of specific and current information. Users in MGUL and KUL give priority to newspaper reading than to access electronic journals. Users of KUL give more importance to studying for competitive examination than to access e-journals. This may be due to the influence of public members in KUL. The underutilization of e-resources in KUL and MGUL can be rectified by proper promotion and thorough user orientation.

10. The correlation analysis between university libraries showed that the purpose of library visit by the users in CUSATL and CHMKL is the same and show a perfect positive correlation
11. The purpose of library visit ranked by the academic community is study and research while public gives more importance to study for competitive examination. Students were found to utilize the e-resources less which may be due to the unawareness and hence it needs proper user orientation.

12. A perfect positive correlation exists between research scholars and teachers in ranking the purpose of library visit which shows their purpose of library visit is the same. But negative correlation exists between teachers and public and research scholars and public based on the purpose of library visit. This shows the purpose of library visit by the public is different from the academic community.

13. Science & Technology members give more importance to access to electronic resources than others. Members from Social Science and Arts & Humanities give more priority to reading newspaper than access to electronic resources. This shows the importance of e-resources in Science and Technology domain.

14. Positive and perfect correlation exists between members from Social Science and Arts & Humanities in ranking the purpose of visit in the university libraries. This shows that the information needs of these two faculties are more or less the same.

15. Degree holders give less importance to e-resources while Ph.D. holders pay more inclination to e-resources in the university libraries.

16. Positive high-level correlation exists between the M.Phil. and postgraduates in ranking the purpose of visit indicating a similarity in their information needs.

17. The main reasons identified by the respondents for not using the university library regularly are that they get the needed information from other libraries followed by the inadequate collection. It shows that university libraries in Kerala are facing threat from other libraries and information providers.
18. Location of the library and the working hours of the library are the main problems identified by the users in MGUL. Less than 22% of the occasional users are of the view that the information provided by CHMKL is not current or specialized but the corresponding figures in MGUL was 8.2%. Only 11.2% of the occasional users in CHMKL noted that library environment is not suited for serious study followed by 5.7% in KUL. Staff’s attitude is not a problem for the users in each of the library for occasional use.

19. Membership wise analysis shows that while location is a barrier for regular use for public, inconvenient working hours and inadequate collection were identified by the non-teaching staff and the academic community respectively.

20. Nearly 46% of the respondents in Science & Technology depend on other libraries for desired information. It shows the inadequate Science & Technology collection in the university libraries in Kerala.

21. Those who have higher qualification hold the view that the university library is not suited to provide current or specialized information.

22. The use of back volumes of periodicals and newspapers is comparatively very low. Standards and patents are less utilized in the university libraries in Kerala. The analysis indicates the need for promotion of underutilized sources like back volumes of periodicals, back volumes of newspapers, standards, and patents.

23. Ranking of information sources indicates that subject books, reference books, internet sources, e-books/e-journals, printed current periodicals are the highly demanded sources in the university libraries in Kerala which highlights their importance in higher education. Ranking of information sources in the university libraries in Kerala indicates the most demanded information sources in all the libraries is the subject books followed by
reference books. IT based sources available in all the universities except in KUL are highly ranked based on the frequency of use. Users give more priority to other internet sources than e-journals and online databases in KUL which may be due to the lack of user awareness about the e-resources of the library. It can be rectified by proper user orientation and publicity. Users of all libraries give only average priority to online databases and theses. It may be due to the increase in number of student community at the degree level.

24. The highest correlation coefficient between CUSATL and MGUL in the use of information sources by the respondents. It indicates the similarity in the use of information sources by the respondents in these libraries.

25. Teachers give second priority to current periodicals due to their importance in study and teaching. Students and research scholars give only fifth and fourth priority respectively to current periodicals in printed form. At the same time research scholars give second priority to e-journals and e-books, but surprisingly teachers give least priority to e-journals. It is interesting to notice that public give more importance to back volumes of periodicals than the academic community.

26. Teachers and research scholars accorded almost the same priority in the use of information sources in the university libraries indicated by a correlation coefficient of 0.94.

27. Members who are interested in Science and Technology and Social Sciences give high priority to e-journals and e-books. But Arts& Humanities members give top priority to printed journals.

28. The positive perfect correlation exists between Science & Technology and Social Science members indicate the similarity in their use of information sources in the university libraries.
29. Back volumes of periodicals are more important to M.Phil. holders and e-journals are important to postgraduates.

30. The members having higher qualifications are mutually correlated in ranking the information sources based on their use. Significant positive high-level correlation exists between degree holders and postgraduates with a correlation coefficient of 0.99. It indicates the use of information sources for these categories is almost similar.

31. Subject books, reference books, current periodicals, e-journals and other internet sources are identified as the most useful information sources by the respondents in the university libraries.

32. Ranking of information sources based on the usefulness shows the insignificance of back volumes of periodicals, back volumes of newspapers, patents, and standards in the university libraries.

33. The library wise analysis of the usefulness of information sources indicates that current printed journals are rated as more useful than e-journals in KUL. The IT based sources available in all the university libraries are highly ranked by the respondents except in KUL.

34. Significant positive correlation exists between KUL and CUSATL based on the usefulness of information sources identified by the respondents. It indicates the usefulness of information sources identified by the respondents in these libraries is almost similar.

35. The current periodicals and online databases are more valuable to the public than students and research scholars. The usefulness of e-resources is greater than that of print journals for students and research scholars but print journals are more useful to teachers than e-journals.

36. Close correlation exists between students and research scholars with a correlation coefficient of 0.96 in ranking the information sources based on
usefulness. It shows a similarity in the usefulness of information sources to research scholars and students.

37. Members with Science & Technology and Social Sciences background give more priority to e-journals and e-books than others based on usefulness.

38. High level correlation exists between the members with Arts & Humanities and Science & Technology background in ranking the information sources based on usefulness.

39. Current periodicals in printed form are highly useful to Ph.D. holders. Degree holders give more importance to other internet sources. E-journals are more useful to both postgraduates and M.Phil. holders.

40. Comparatively high-level correlation exists between degree holders and postgraduate members with 0.99 and least, 0.9 with degree and Ph.D. holders in ranking the information sources based on usefulness.

41. Members frequently use the list of new additions and information bulletin, since these are the major information products available in all the university libraries in Kerala. It is unfortunate that most of the information products remains underutilized, as the effort to reach the target audience is inadequate in many of the university libraries this can be attributed to the lack of concerted efforts on the part of libraries to publicize their products.

42. The ranking of the information products based on the frequency of use, current awareness bulletin, abstracts, indexes, bibliographies and information bulletin show their market potentialities in the university libraries in Kerala.

43. Even though university libraries in Kerala have no comprehensive information products, the fact that users frequently use indexes, abstracts, bibliographies, and current awareness bulletin indicates the need to develop
these products in the libraries which cannot survive without these products in the highly competitive information world.

44. A high-level positive and significant correlation exists between KUL and CUSATL with a correlation coefficient of 0.93 shows the similarity in the frequency of use of information products in these libraries by the respondents.

45. The academic community gives more priority to repackaged and condensed information products such as indexes, abstracts, and bibliographies while others give more emphasis to current awareness bulletin.

46. The correlation analysis based on frequency of use shows that non-teaching staff and students are highly correlated with a correlation coefficient of 0.81 and is significant at 1% level of significance.

47. The analysis based on the subject of interest on the frequency of use of information products shows that members from Science and Technology background more frequently consulted abstracts and bibliography. Periodicals holding list, directories and reprints are of little value to faculties. CD/DVD databases are important to Science and Technology than Arts& Humanities and Social science members.

48. Significant positive correlation exists between Science & Technology members and Social Science members in ranking the information products based on frequency of use.

49. The finding that abstracts, indexes and bibliographies are frequently used by members with a minimum postgraduate degree shows their importance in high-level learning.

50. Comparatively high-level correlation exists between postgraduates and M.Phil. holders in the ranking of information products based on the frequency of use.
51. More than 50% of the users opined that information products such as abstracts, indexes, bibliographies, and CD/DVD based databases are useful for their areas of work.

52. Ranking of information products based on usefulness shows that the most useful product available in the university libraries in Kerala is the list of new additions. The usefulness of current awareness bulletin, abstracts, indexes, bibliographies, and information bulletin shows the market potentiality of these products in the university libraries.

53. KUL is not having any current awareness bulletin or abstracts of its own, the response from the users indicate its importance and highlight the need to start these products. The index brought out by KUL is identified as least useful by the members may be due to its irregularity and unawareness highlights the need for revision and promotion. In CHMK library based on the usage, current awareness bulletin was ranked second followed by CD/DVD databases ranked third.

54. The correlation analysis between libraries shows that CHMKL and KUL have high degree of correlation with a correlation coefficient of 0.87 in ranking the information products based on usefulness.

55. Periodical holding list and CD/DVD databases have little value to the academic community based on the indication given by the respondents.

56. A high level of correlation exists between research scholars and teachers in ranking the information products indicates the usefulness of various information products identified these categories are almost identical.

57. CD/DVD databases are useful to members in Arts & Humanities and Social Sciences than Science & Technology. Periodical holding list, directories, and reprints are of little value irrespective of the subject of interest of the respondents.
58. A high-level correlation exists between members with Social Science and Arts & Humanities background in ranking the information products based on usefulness. This implies that the utility of information products to the members in Social science and Arts & Humanities is almost same.

59. Current awareness bulletin and information bulletin are valuable to all categories. Index is more useful to degree holders while abstracts and bibliographies are important to Ph.D. holders.

60. In the ranking of information products, high-level correlation exists between M.Phil. holders and postgraduates and least with M.Phil. and Ph.D. holders.

61. Significant positive correlation exists between the frequency of use and usefulness of all identified information products. It indicates that the increase in frequency of use is directly proportional to the usefulness of information products and services.

62. The respondents are neither aware nor in the habit of using majority of services offered by the university libraries and it indicates the need for promotional activities and user education programme.

63. Ranking of information services based on awareness and usage indicates that basic services are on top followed by IT based services and then by digital information services. Inter library loan services, consultancy service, SDI, document delivery services and condensation services like indexing, abstracting, and bibliography ranked least indicates the need for developing and promoting quality services in the university libraries.

64. In KUL users are unaware of inter library loan, document delivery, reference/referral, indexing, DVD/CD based services. MGUL is weak in propagating their services such as SDI, document delivery service, DELNET, bibliography, literature search service and reprographic service. In CHMKL respondents are not aware of Inter library loan, reprographic services, reference/referral services, document delivery service and in
CUSATL the users are unaware of interlibrary loan, SDI, consultancy, document delivery and current awareness service.

65. Significant positive correlation exists between all libraries except between KUL and CHMKL. KUL and MGUL have a high level of correlation indicates that the awareness and usage of information services in these libraries are almost same.

66. The analysis shows that non-teaching staff utilized most of the services like abstracts, indexes, bibliographies than the academic community. It may be due to the fact that majority of the non-teaching staff who are members of the university library are potential users.

67. High level positive correlation exists between students and research scholars indicate that their level of awareness and usage of information services in the university libraries are almost similar.

68. The respondents with Social Science and Arts& Humanities background are more aware of and utilized most of the information services than the Science& Technology counterparts.

69. The correlation coefficient of 0.97 indicates that the awareness and usage of library and information service by the Science & Technology and Social Science members are almost similar. Degree holders are more aware of the latest information services available in the university libraries in Kerala. M.Phil. and postgraduates are equally aware of the information services rendered by the university libraries.

70. Even though the users are neither aware nor use majority of services offered by the libraries. Most of the services are useful to them except interlibrary loan, SDI service and consultancy services. The analysis clearly indicates the market potentiality of various services offered by the university libraries.
71. Ranking of information services based on usefulness indicates that basic library services followed by IT enabled services are on top. Inter library loan, consultancy service, SDI, document delivery service and condensation services are ranked low.

72. Respondents form KUL rated digital repository, internet services, online database/e-journals, printing, CD/DVD based service, current awareness service, reprographic service as the most useful information services. The most useful services rated by the respondents from MGUL are the IT and e-based services like internet service, online database/e-journal, digital repository, CD/DVD based services, DELNET service, current awareness service and document scanning service. The most useful information services identified by the respondents from CUSATL are online databases/e-journals, internet, document printing, digital repository, CD/DVD database service, DELNET service, literature search service and reference /referral service. In CHMKL the most useful services are literature search service, printing, CD/DVD based service, user orientation, online database/e-journals, and DELNET and bibliography service.

73. The highest correlation between CUSATL and KUL, and CUSATL and MGUL indicates the identical ranking of these libraries by the respondents based on usefulness of information services.

74. Membership category wise analysis shows most of the information services meant for the academic community are useful to the public and non-teaching staff. This indicates the market potentiality of information services in the non-academic segment. IT enabled and e-based services are more useful to the academic community.

75. Ranking of information services by research scholars and students is almost similar based on the usefulness.
76. Most of the information services are useful to members interested in Social science and Arts & Humanities than Science & Technology. A positive significant correlation exists between members from any two subject field in ranking the library and information services based on their usefulness at 1% level of significance. A high-level correlation exists between members from Science & Technology and Social Science and Social science and Arts & Humanities with a correlation coefficient of 0.96.

77. Qualification wise analysis shows that most of IT based and condensation services are more useful to those with minimum qualification while literature search, document scanning and printing are useful to those with higher qualification.

78. Correlation analysis shows postgraduates and M.Phil. holders are identical in ranking information services based on usefulness.

79. Positive significant correlation between awareness and usefulness of information services in the university libraries. It indicates that the awareness is directly proportional to the usefulness of information services in the university libraries in Kerala.

8.2.4 Based on the fourth objective i.e. to assess the market potentialities of information products and services, the willingness to pay for the information products and services, the major findings are summarized below:

1. Most of the respondents are willing to pay for information products such as CD/DVD databases, current awareness bulletin, list of new additions and abstracts. The analysis shows that most of the respondents are willing to pay for some of the information products and the implication is that they rely on the quality of information products than the existing products, which are freely available.

2. More than 50% of the respondents are ready to pay for information products in each of the libraries. Among the libraries, 66.5% of the
respondents in CUSATL and 66.2% in MGUL are ready to pay for advanced information products. 59.7% of respondents in CHMKL and 57.2% in KUL are also ready to pay for the new information products shows a positive sign in the marketing of information products in the university libraries in Kerala.

3. Membership wise analysis shows that 88.2% of the non-teaching staff are ready to pay for information products followed by teachers (80.3%), since their payment capacity is better than others. The finding that 48.3% of the students and 68.7% of the research scholars are willing to pay is against the popular belief that students are generally opposed to charging money for information in the university libraries. A general trend is in favour of charging fee for quality information products.

4. The majority of members with Social Science background (70.1%) followed by Arts& Humanities (63%) are ready to pay for information products. Comparatively less number of members from Science & Technology (55.3%) is willing to pay for information products.

5. The qualification wise analysis shows 78.9% of Ph.D. holders are willing to pay. More qualified respondents show more readiness to pay for information products. This may be due to an increasing information demand with higher qualification.

6. Most of the respondents have positive attitude towards charging fee for quality services especially IT enabled services. Respondents also wanted to start new services like translation and current content services.

7. University library wise analysis shows 70.5% of the respondents in MGUL, 69% in CUSATL are willing to pay for information services. A sizeable proportion of respondents in all the libraries are willing to pay indicate the scope of marketing information services in the university libraries.
8. Among the different categories majority of the non-teaching staff (82.4%) followed by teachers (81.8%) and public (75%) are ready to pay for information services. A sizeable proportion of research scholars and students (53.8%) are also willing to pay indicates a positive sign in marketing information services in the university libraries.

9. Members with background in Social Science followed by Science & Technology are more willing to pay for information services in the university libraries. Ph.D. holders followed by M.Phil. holders are more willing to pay for information services.

8.2.5 The major findings to fulfill the **fifth objective to formulate the pricing policies of information products and services** are given below:

1. The charges of all the items identified vary from library to library. The respondents reported that the membership deposit (61.6%) and annual subscription (61.4%) are moderate and rated as very low by 29.6% and 26.5% for member deposit and annual subscription respectively, it may be due to the influence of CUSATL, since there is no membership deposit as well as annual subscription for the academic community. The charges for duplicate borrowers’ ticket or ID card are rated as moderate by 51.4%, very low by 17% and slightly higher by 10.7%. Almost half of the users consider overdue charges and photocopying charges are moderate while 15.2% and 29.6% respectively opined that it is slightly higher. Printout charge is moderate for 37.5% and 35.6% have no opinion. It may be due to the fact that majority of the users are not availing this service. More than one third of the total respondents opined that internet charge is moderate and only 7.6% reported that it is slightly higher even though it is provided free of charge in all the libraries except in KUL. This reveals that the internet charge in KUL is slightly higher.

2. Those who are willing to pay for information products or services, most of the users in CHMKL (92.9%) are ready to bear 50% and only 7.1% willing to pay
full cost of the end products/services. In KUL 80.6% of the respondents are willing to pay 50% of the cost and 16.3% ready to pay for full cost, while only 4% has no objection even if the library makes a little profit out of the products or services. Almost same proportion of users in MGUL and CUSATL are ready to pay for half of the cost or full cost, while 6.7% of the users in CUSATL wishes to make some profit for the library.

3. The Chi-square test shows there is significant difference in the opinion of users regarding the extent of payment in different university libraries in Kerala. Overall, the responses is found to be encouraging. The analysis shows the preferred charging pattern in the university libraries in Kerala is to provide a subsidy to the extent of 50%.

4. The membership wise analysis shows, among the respondents who are ready to pay for, 95% are ready to pay for half or more of the actual cost of the product or service. However, 31.8% of the teachers and 7.9% of the students are ready to pay for full cost, 5.6% of the teachers and 11.5% of the non-teaching staffs have no objection even if the library makes a little profit out of the products or services, since they have more payment capacity than others.

5. Chi-square test shows significant variation in the readiness to bear the extent of cost. The analysis shows university library can adopt different pricing system for different category of users.

8.2.6 The sixth objective was to study the attitude of the users towards marketing; the major findings of the analysis are given below.

1. The working hours of CHMKL and KUL are more convenient to the users (i.e., from 8am to 8pm.) indicates the suitable position of the library to market their information products and services.

2. Working hours of the library is more suited to the respondents in the field of Science & Technology. Working hours of the university libraries in Kerala is more convenient to the degree holders than others.
3. MGUL is stronger in providing information services to its users and all other libraries have strong competitors.

4. Majority of users in all categories depend other libraries for their information requirement. Non-teaching staff and public more rely on other libraries since their information need may be non-academic.

5. Respondents from Arts & Humanities depend on other libraries. But comparatively less proportion of users in Science & Technology depend on other libraries and it shows the need to strengthen Arts & Humanities collection in the university libraries in Kerala.

6. M.Phil. and Ph.D. holders mainly rely on other libraries show that university libraries in Kerala are not well equipped to support higher learning.

7. The present marketing application of the university libraries has moderate acceptance by most of the users. The marketing application in CUSATL is well accepted by the respondents and there is no significant difference of opinion regarding the marketing activities in different libraries in Kerala.

8. Non-teaching staff are more satisfied with the marketing application of the university libraries. Among the academic community while students and research scholars moderately accept the marketing activities, the acceptance is less among teachers.

9. Members with Social Science background more accepted the marketing activities of the libraries than others. The mean score of more than 25 out of a maximum attainable score of 40 indicates that the marketing activities in the university libraries have a moderate degree of acceptance among the user community irrespective of their subject of interest.

10. Postgraduates are more satisfied with the marketing activities of the university libraries in Kerala. There exists a significant variation of opinion
regarding the marketing application with respect to the qualification of the respondents.

11. Majority of the respondents (80%) are looking for new information products and services in the university libraries in Kerala. Among them 62.8% agreed to pay for newly developed or started products or services. Below 74% of the respondents opined that the pricing policy of the library should be based on their feedback. Majority are against heavy charging for outsiders.

12. CUSATL members are more agreeable to the marketing of information products and services followed by MGUL. Also, irrespective of the university libraries all the users have a positive attitude towards marketing of information products and services.

13. Non-teaching staff have a positive attitude towards marketing of information products and services followed by public. Non-teaching staff and public members are small in number in the university libraries and those who take the membership are the active users. Also, they have more payment capacity than the academic community may be reason for their positive attitude towards the marketing of information products and services in the university libraries. The lowest score in this regards is by students and research scholars.

14. Members with Social Science back ground are more favourable to marketing of information products and services in the university libraries.

15. Qualification wise analysis of the data shows Ph.D. holders (mean score 25.5) are more favorable to marketing followed by postgraduate members (mean score 25.4).

8.2.7 The findings based on the seventh objective i.e. to study the quality of services and the extent of user satisfaction in the university libraries in Kerala are given below.
1. Quality of services rendered by the university libraries is moderately good. The attitude of the staff in rendering information service and personalized service is appreciated by most of the users. The users of the university libraries in Kerala are largely satisfied with various aspects of service quality except responsiveness. Some of the members give negative responses regarding the problem solving ability of the staff members in the university libraries in Kerala and it may be due to the lack of proper leadership quality.

2. Quality of service rendered by CUSATL is better than other libraries. Based on the service quality, CHMKL is ranked last by the users. But users from all libraries are moderately satisfied with the information services and products.

3. Non-teaching staff are more satisfied followed by public with the services rendered by the university libraries. Among the academic community teachers are more satisfied and students are the least satisfied group.

4. Respondents who are interested in Social Science are more satisfied and Arts & Humanities are least satisfied with the information services rendered by the university libraries in Kerala.

5. Postgraduates are more satisfied followed by M.Phil. holders. Degree holders are the least satisfied with the services of the university libraries.

6. Less than 50% of the users are satisfied with the collection, physical facilities and more than 50% satisfied with the information products and services and functional organization of the libraries. Behavior of the staff is highly appreciated by most of the respondents. The marketing activity is moderately appreciated by most of the members.

7. The users satisfaction based on collection, physical facilities, information products and services, behavior of the staff, functional organization, electronic resources and marketing activities of the university libraries,
CUSATL has the maximum mean score (30.6) followed by MGUL (30.3). The lowest score recorded in CHMKL (26.8). The mean score of all university libraries in Kerala for the ten statements in a five-point scale exceeds 25. It indicates that the users of the university libraries in Kerala are moderately satisfied with the physical facilities, collection, services, staff behavior etc. The analysis of variance (ANOVA), F-value 12.38 and P-value Zero, indicates there is significant difference in the satisfaction level of users in different libraries at 1% level of significance.

8. Non-teaching staff are more satisfied with the physical facilities, collection, information services & products, behavior of the staff in the university libraries in Kerala. The second highest mean score is recorded by public. Students are the least satisfied group.

9. The mean score for Social Science (29.3) is maximum followed by Science & Technology (28.6). The mean score is lowest for Arts & Humanities (28.3).

10. In the university libraries in Kerala the satisfaction level of users with respect to their qualification shows that postgraduates are highly satisfied.

8.2.8 The eighth objective of the study was to work out the strategy for the marketing of information products and services in the university libraries in Kerala, and the major findings based on the marketing mix variables are given below:

1. The place component in the marketing mix is more adequate in CUSATL followed by KUL. The accessibility and availability of information services and products in CUSATL is better than other libraries in Kerala since most of the users in CUSATL are from the Cochin University of Science and Technology campus and CUSATL has a very good website.
2. The membership wise analysis with respect to the place component shows non-teaching staff and public are the highly satisfied group because they belong to the neighboring places of the university libraries.

3. Arts & Humanities background members are more comfortable with place since most of them belong to non-teaching as well as public category. M.Phil. holders are more satisfied with place component in all the university libraries in Kerala.

4. The promotional activities of CUSATL are also rated as better followed by MGUL and the least by KUL. CUSATL and MGUL have their own website so that they can portray the services and products in an appealing manner. This points to the need for an independent web site for the libraries which are updated daily.

5. The communication of information products and services to non-teaching staff is more effective. Among the academic community, research scholars are better informed about the information products and services and students are the least informed group. Hence effective steps should be taken by the university libraries in Kerala to communicate its information products and services through proper user orientation and communication.

6. Communication of information products and services were found to have effectively reached the Social Science members followed by Science & Technology members.

7. Postgraduates rated the promotional activities of the university libraries in Kerala to a maximum followed by M.Phil. holders.

8. The information products and services offered by MGUL are ranked on top followed by CUSATL. The information products and services offered by the university libraries in Kerala as a whole rated as above average.

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9. The membership category wise analysis of user perception about information products and services indicates that non-teaching staff followed by public are more satisfied because they constitute smaller groups and their information requirements are limited. Among the academic community, teachers are the more satisfied group followed by research scholars.

10. Members with Social Science background placed the information products and services of the university libraries at a higher pedestal compared to others.

11. Postgraduates followed by Ph.D. holders are the more satisfied group with respect to the information products and services of the university libraries.

12. Non-teaching staffs followed by public have positive attitude towards pricing of information products and services, since they have more payment capacity. Among the academic community, teachers followed by research scholars have positive attitude towards the pricing of information products and services in the university libraries.

13. Arts & Humanities members have positive attitude towards pricing in comparison than others since most of them belong to public and non-teaching member category. They are more depending on literature books and the same belong to Arts & Humanities subject group.

14. The mean score for Ph.D. holders (17.6) is maximum and the minimum is for degree holders (16.8). It shows that Ph.D. holders strongly agreed with the pricing of information products and services in the university libraries.

8.2.9 In order to fulfill the ninth objective “to establish a marketing plan for information products and services of the university libraries in Kerala”, such a programme was worked out which is given in chapter 7.
8.3 Tenability of the Hypotheses

The tenability of the hypotheses based on the analysis is discussed below:

The first hypothesis states that, “the utilization of information products and services of the university libraries in Kerala is inadequate in the absence of a strong marketing strategy, even though the libraries have sizable collection and a large number of users”. The SWOT analysis in chapter 5 shows the university libraries in Kerala are well equipped with collection and members. Also, the analysis in the Table 6.43 and Table 6.69 shows that most of the information products and services offered by the university libraries in Kerala are underutilized due to the unawareness of the users. This implies that the efforts of the libraries to reach the target audience are inadequate indicating the need for strong marketing strategy. Thus the hypothesis is fully substantiated.

The second hypothesis states that, “the information products and services of the university libraries in Kerala have a strong market potential”. Table 6.53 and 6.79 shows that most of the information products and services offered by the university libraries are more useful and the analysis in Table 6.64 and Table 6.90 indicates that majority of the users are willing to pay for quality information products and services. These findings support the hypothesis.

The third hypothesis “users differ significantly in their perceptions regarding the marketing of information products and services” is fully substantiated statistically by the analysis of variance calculated in Table 6.113. Since the test statistic, F (8.34) is less than the table value (15.3) at 1% level of significance, the null hypothesis is accepted i.e., users differ significantly in their perceptions regarding the marketing of information products and services in the university libraries in Kerala.

The fourth hypothesis states that “users are moderately satisfied with the information products and services of the university libraries in Kerala”. The RATER analysis in Table 6.116 shows that the quality of service rendered by the
university libraries is moderately good. Also, in Table 6.121 only 22.4% of the users are dissatisfied with the information products and services of the university libraries in Kerala. Hence, the hypothesis is almost fully substantiated.

8.4 Areas for further study

Various studies can be conducted in the area of information marketing based on the present study. Some of the dimensions in which studies of this type can be conducted are listed below.

1. Marketing of information products and services of the university libraries in Kerala from the manpower point of view.

2. Marketing of information products and services of public libraries/ special libraries.

3. Market study for the design and development of selective information products and services in each of the university library in Kerala.

4. Impact of Information Technology in marketing information products and services in the university libraries.

5. Role of social networking in marketing information products and services in the university libraries.

6. Comparative analysis of marketing of information products and services of the university libraries with other service organizations in Kerala.

7. Market orientation of college libraries in Kerala in information dissemination.

8.5 Suggestions

The findings of the study have brought out many facts which are of interest and significance to educationists, university authorities, funding agencies, university librarians and users as well. A few suggestions under five major headings such as positioning, branding, logo, services, and marketing mix under 4P’s are given here
which, if implemented would be helpful in mitigating the issues in marketing of information products and services confronted by the university libraries in Kerala.

8.5.1 Positioning

1. An intensive effort is required from the part of the top management of the library, and authorities of the concerned universities to overcome the identified weakness.

2. University libraries in Kerala are facing competition from department libraries and other information providers. Teachers are the occasional users of the central library. It is suggested that efforts may be taken to pool the resources of the department libraries with the central library to strengthen the resources and to avoid certain duplication of books, multiple card catalogues, equipment, maintenance etc. It helps in better preservation and more comprehensive service. Also, the steady erosion of the old disciplinary boundaries and the cross-fertilization of disciplines compel library consolidation. The department libraries can function as service points by utilizing the resources of university library.

3. Since each of the university library in Kerala has unique collection it is suggested to establish library cooperation or consortia among libraries for resource sharing, acquisition, classification, cataloguing, and information delivery.

4. The finding that public or graduate members spend more time in the library shows that they are also the active users of the university libraries, mainly utilizing the library for the preparation of civil service or career development strengthens the need to build up a comprehensive career development wing in the university libraries in Kerala. MGUL should give the provision to admit graduate/public members in their library.

5. The users of the university libraries in Kerala are only moderately satisfied with the physical facilities, collection, services, staff behavior etc. Hence, it
is suggested that the physical facilities including modernization, air-conditioning, digitization of rare materials, building digital repository, application of IT in rendering services, motivating the staff are the ways in which the libraries can position in a better way to market their products and services.

6. Even though all the university libraries in Kerala, especially KUL, are housed in marvelous and magnificent buildings, they present an antique look in the absence of proper maintenance. Refurbishing and rearrangement of furniture are to be made in tune with the modern principles of interior decoration. Relocation of some of the functional divisions would also be needed. Weeding out has to be carrying out on an annual basis in all the university libraries in Kerala.

8.5.2 Branding

7. KUL and CHMKL have a good collection of rare materials and MGUL and CUSATL have institutional repositories. The preservation, management and updating of these materials can be outsourced by passed on to internationally accepted agencies.

8. Create consistency and confidence in using the services of the university library by the users through key campaign messages and the campaign themes such as “Ask @ your library. We Can Save You Time “or “Ask @ your library. Librarians Can Make Your Research Simple”. These campaign themes will encourage users to ask for help, so they don’t just get frustrated and leave from the library.

9. A separate marketing division with skilled staff with a marketing plan is desirable to make the marketing activities more efficient and effective. It may be appropriate to appoint specialist staff or librarian graduates in marketing and other business related disciplines as a “Marketing and
Communication Manager” to manage the marketing and communication functions in the university libraries in Kerala. This role establishes and maintains a marketing and communications framework for the library. It initiates market research, develops appropriate information products and services and web content, client feedback mechanism, and manages the library’s “brand” and academic image.

8.5.3 Logo

10. A logo is a design or symbol that an organization including a library uses as its special sign mainly to make a mark in the minds of its users. Logos help in creating a lasting impression in the minds of people. As far as university libraries are concerned the logo should be intimately connected to the logo of the parent body.

11. University libraries should adopt some of the marketing and promotional strategies including publications, programmes of events, the media and effective presentation of information products and services through the library website.

12. Library web 24/7 (24 hours 7 days in a week) access, initiating information desk with liaison librarians, information literacy programmes, establishment of virtual reference- telephone, e-mail and chat reference service are the major ways to increase the marketing orientation in the university libraries in Kerala.

13. University libraries should create blogs to promote their regular events and programmes. RSS feed can be set up for the blog to alert new materials like books, CD’s or DVDs, e-journals, e-books, information products have been added to the collection. On the blog site an e-mail subscription form can be put up to encourage visitors to sign up for permission.

14. University libraries in Kerala should take up the initiative for supporting the development of information literacy knowledge and skills with the help of
teaching faculties and librarians in teaching departments and affiliated colleges.

15. Each university library in Kerala should prepare the guidelines for research and research publications and make it available to the academic community through printed form, e-form or webpage/web portal.

8.5.4 Services

16. All university libraries in Kerala can develop (automated) personalized services, e.g. virtual reference, chat reference systems. The expected benefits are an improvement in the service quality and improved accessibility of literature by students and researchers. The development of such services benefits from the established network infrastructure and the large number of current users. This service can be offered with relatively small investments in additional infrastructure, hardware, software, and with small incremental operating costs.

17. The present market approach of the university libraries in Kerala is moderately accepted by most of the users. A regular user study is desirable to know the continuity/discontinuity of the existing products and services and initiation of new products and services. A feedback mechanism is highly appreciated to monitor the effectiveness of the services and products in the university libraries in Kerala.

18. The information products and services offered by the university libraries in Kerala are rated as above average. Among the libraries, the information products and services offered by MGUL are ranked high followed by CUSATL. So it is suggested to enhance the quality of services and products offered by KUL and CHMKL.

19. Most of the users reported that subject books and reference books are the most useful information sources. So steps should be taken to strengthen the
text book and reference collection in all the university libraries. Issue of text books for a short period of time is one of the ways to build an image of the libraries among the student community.

8.5.5 Marketing Mix

Patrons/people

20. Most of the information services meant for the academic community are useful to the public and non-teaching staff which indicates the market potentiality of information services in the non-academic segment. It is possible for the university libraries in Kerala to market their information products and services to other segments with a proper marketing strategy.

21. With the increased prevalence of cell phones and handled devices such as Personal Digital Assistants (PDAs), smart phones, and laptops coupled with the nearly ubiquitous connectivity of Wi-Fi and cellular service in every area of life of the people in Kerala, university libraries should take necessary steps to format the information content for the mobile devices and provide access to catalogue, databases, information products etc. Also it is possible to provide information to their patrons about circulation records, book due dates, overdue notices, membership due date etc.

22. The membership criteria of the university libraries should be revised with the provision to admit distance education students, individual researchers and industrial organizations with a slightly higher rate of membership deposit and annual subscription fee.

23. Library personnel should be made aware of the concepts and principles of modern marketing. So provide better provision for the library staff to attend in-service and career advancement courses.

24. Introduction of Marketing Management as part of the curriculum in Library Schools.
25. Staff should be facilitated through workshops and seminars to acquire and sharpen ICT skills, which will enable them to market the information services and products of the university libraries in Kerala by designing the websites and portals that will enhance the image of the library.

26. Some of the members give negative responses regarding the problem solving ability of the staff members in the university libraries in Kerala can be rectified through in-service training for the staff in leadership and management. The appointment of a permanent university librarian in all the university libraries in Kerala is also a measure to improve the quality of services. A dress code for the staff in all the university libraries is also being appreciated.

Product

27. Most of the respondents are willing to pay for some of the information products imply that they rely on the quality of information products than the existing products, which are freely available. So university libraries in Kerala have to restructure or develop some of the existing products and services and to start new services based on market analysis.

28. The fact that the academic community gives more priority to repackaged and condensed information products such as indexes, abstracts, and bibliographies indicate their market potential in the university libraries. Therefore, it is suggested that university libraries should strengthen their documentation activities by providing more staff and infrastructure.

29. Information and communication technology facilities should be made available in all the sections for their house keeping operations and IT enabled services. It is to be suggested that the IT section in KUL, established in 1995 with the objective of the automating the house keeping operations, should be merged with Documentation and Information service section to initiate ICT enabled products and services.
Place

30. The accessibility and availability of information services and products in CUSATL is better followed by MGUL than other libraries in Kerala since they have separate websites. So it is suggested that KUL and CHMKL to host independent websites to provide access to their resources and to promote information products and services.

31. Establishment of more study centres and to strengthen the service and products of the existing study centres are the ways in which the university libraries to provide more access and availability of information to their user community.

Price

32. University libraries in Kerala have to fix a reasonable price, preferably 50% of the actual cost and sell their identified information products and services using modern marketing techniques.

33. Significant variation in the readiness to bear the extent of cost by different categories of users in different university libraries in Kerala. Hence it is suggested that each university library can adopt different pricing system for different category of users.

34. The price charged for the developed information products and services should be reasonable. According to the opinion of the users, the preferred charging pattern in the university libraries in Kerala is a subsidy to the extent of 50%.

35. The users of the university libraries in Kerala are moderately satisfied with the existing pricing policies. The photocopying charge in all the university libraries in Kerala is Rs.1/- per page, which is higher than the market rate. Also, most of the users reported that the internet charges in KUL are slightly higher. Hence, the university library management may give immediate attention to revise the existing pricing system.
Promotion

36. The respondents are neither aware nor use majority of services offered by the university libraries in Kerala. This points to the need to strengthen the promotional activities and user education programme. It is suggested that all university libraries in Kerala have a separate marketing wing to ensure the quality of information products and services through market analysis and market research.

37. University libraries should take necessary steps to install plasma or LCD screen in the library entrance hall to display notices and information (photographs, videos etc.) of their information services and products.

38. New promotional strategies are required to ensure that university libraries continue to reach their users and maintain the relevance of their service offerings. The e-services are underutilized in all the libraries, especially in CHMKL and may be due to the restriction of other internet services including e-mail, chatting etc in CHMKL. Hence it is suggested that all the internet services should be provided to the user community, since it act as a catalyst for the promotion of UGC-INFONET and other IT enabled services.

39. The underutilization of e-resources in KUL and MGUL has to be rectified by proper promotion and user orientation. Also, better facility should be provided to the users, researchers in particular for the access to databases, e-journals, and internet services.

40. Since most of the users are unaware of the some of the information products and service offered by the university libraries, communication is not effective in the university libraries in Kerala. So effective steps should be taken by the university libraries to communicate its information products and services through proper user orientation and information literacy programmes.

41. Necessary steps have to be taken by the authorities for the promotion of underutilized sources. More importance should be given to build a balanced
collection of textbooks as well as reference books. Better facility should be provided to the users for the access to databases, e-journals, and internet services.

8.6 Conclusion

It is evident from the study that the university libraries in Kerala need to resort to imaginative design of services and products, and develop communication methods and feedback mechanism to improve the overall functioning. Effective utilization of the resources, services, products can be achieved through the marketing approach. Most of the users are willing to pay shows that they value the quality of information products and services than the existing products, most of which are freely available. Some of the existing information services and products in all the university libraries have a strong marketing potential. Remedying the weaknesses and exploiting the strengths involve the first step towards marketing. Once the library is properly positioned, with specific marketing plan for each target group, the university libraries in Kerala can market their information products and services in an efficient and effective way.