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Abstract

The purpose of this study was to appraise the prevailing status of customer relationship management (CRM) practices in university libraries of Pakistan to increase strong and mutual beneficial relationship with user. Moreover, correlates of CRM practices with types, categories, and geographical locations of university libraries were also explored. This study adopted cross-sectional survey research design using a questionnaire. The survey questionnaire was emailed to the in-charge/head librarians of all 193 university libraries in Pakistan and response rate was 74%. The results were consolidated at the analysis stage. The results have demonstrated that current status of CRM practices (customer focus, organizational focus, customer feedback management) is in the adolescence phase, while information technology infrastructure is inadequate for absolute implantation of CRM programmes and strategies. The data indicate that CRM practices are linked with university libraries types and geographical locations private sector university libraries are concentrating more on organizational focus as compared to public sector while university libraries of Islamabad Capital Territory are having good IT Infrastructure from KPK Province and AJK region respectively. The study suggests that all academic institutions should formulate a clearly specified user care and satisfaction policy. In Pakistan, Information Management / Library & Information Sciences schools and library associations should conduct ongoing training, workshops, seminars, and conferences on CRM strategies, practices, programs, tactics and mechanism, defined in this study. University top management must encourage, provide financial resources and train staff for smooth running and implementation of CRM. Complete IT infrastructure, CRM software and models should be adopted as per market demand. CRM models may be developed for Pakistani university libraries or such models may be opted with some amendments from other pure business CRM models.

Keywords: Customer Relationship Management Practices, Academic Libraries, Pakistan.

Introduction

Libraries are service centers with the primary purpose to serve their customers (users) with better service and products. The library has been dramatically changed by the impact of the revolution in digital and network landscape of library services and facilities features (Sheikhshoaei & Oloumi, 2011). The prevalence of the internet and information superhighway linked to information technology, is widely used in library environments and has been a significant influence on library users. Users of every generation and level

have always required access to library resources and services (Omolola, 2015). It was good and significant to realize that libraries were available for use as needed, while visiting them quite often was not sufficient. The challenge facing libraries today is whether the mission of libraries have done in the past in today's world is still appropriate. Since their establishment, libraries have been the key source of knowledge and information. Earlier, libraries were only concerned in conventional systems in the preservation of reading material (Lakshmi & Rajavel, 2016). In contrast to their use the acquisition, sorting, arrangement and maintenance of library resources were more important. We are, now living in an age of information society where information seekers; the library's users are just curious with the information they are searching for. They are not often concerned with the type of information, material forms, method of retrieval, and library resources. He/she only demands relevant information at the earliest available time and possible way (Jin & Oriaku, 2013).

Library users are more knowledgeable, informative and aware about information and its sources; and their expectations and information needs, desires, choice of various products and services are rising day by day and users are more demanding today. Users are reluctant to make compromises on library resources, products and service qualities. Libraries are losing and shrinking users regularly and their image is low and vague (Hommerova et al., 2020). The varying customer requirements have compelled libraries to move from conventional library management systems to information communication technology-based libraries to please and satisfy their users (Khan et al., 2017). Therefore, building mutual beneficial, collaborative, solid and everlasting bond with users seems to be the one of most practical ways to keep track of their changing expectations and appropriately influencing them. With lacking of proper CRM, libraries are less aware of the user service demand, user pleasure or displeasure and seem to be incapable to accomplish their expectations (Rababah, et al., 2010). Application of CRM in academic libraries will assist in developing a stronger and longer relationship with users and maximizing use of library services and resources (Leligdon et al., 2015; Stokić et al., 2019).

Literature Review
The Components of CRM
Customer relationship management is the buzzword for businesses. CRM provides quick and cost-effective customer services, greater customer loyalty, and increased customer retention in the end. All of this is done in the expectation of additional profits and sales. According to the priorities of the organization, it is possible to accomplish them by recognizing and fulfilling the needs and wishes of the customers. CRM is a system which identifies targets, acquires and retains customers ' best results. It incorporates all sub-systems, among other items, to keep a database of customer interactions, purchase, and technical support. This database assist the firm recognize customer needs to improve the partnership efficiency (Rababah et al., 2011).

CRM is a technique for interacting with customer relations from business perspectives. The strategy addresses how customer relationships can be developed and enhanced from a profitability perspective, based on individual customer needs and potential. The fundamental of CRM is that all marketing and management practices should be focused on creating mutually beneficial collaboration relationships with

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customers and other partners in order to be successful and profitable (Gengeswari et al., 2013). CRM is the incorporation of customer emphasis in marketing, sales, logistics, and accounting, i.e. in all aspects of the process and management of the organization. CRM are the practices that an organization carries out to find, attract, obtain, grow and maintain ever more loyal and valuable customers by providing the right products or services to the right customer at the right time at the right way and at right cost (Dhman, 2011). CRM is not just about contact centre solutions, mail, web pages or automation of sales staff, but CRM is an organizational operation that emphasizes the creation, management and enhancement of productive relationships with users and partners. It is the mutually beneficial business strategy for recognizing and influencing user behaviour, desires and preferences through a sequence of significant interactions to enhance user acquisition, user satisfaction, user loyalty and control user departure (Bahader, 2014).

Two main studies were conducted to define key components of behaviour and attitude that underpin effective implementation of CRM in response to the operational issues of CRM. Prior to that, no systematic attempt was made to classify the behavioural dimensions on which CRM can be assumed to exist. These two studies were conducted respectively by Yim et al. (2004) and Sin et al. (2005) and both studies benefited from the notion put forward by (Crosby & Johnson, 2001; Fox & Stead, 2001; Ryals & Knox, 2001; Day, 2003; Kotler & Armstrong, 2004). The successful implementation of CRM requires four key areas: strategy, people, technology and processes, and that superior customer-related capability can only emerge when all of these four work together (Yim et al., 2004; Sine et al., 2005). As a consequence, both Yim et al. (2004) and Sine et al. (2005) found CRM to be a multidimensional concept composed of four key relational dimensions: Customer Focus (CF), CRM organization (CRMO)/organization through CRM, Customer Knowledge Management (CKM), and CRM related IT infrastructure. The conceptualization of CRM as a system consisting of these four elements is consistent with Kincaid (2003, p. 41) view of CRM as "the strategic use of information, processes, technology, and people to manage the customer relationship with your company (marketing, sales, services, and support) over the entire customer life cycle." It is also captured as "based on the premise of integrating people , processes and technology infrastructure throughout the value chain to better understand and deliver customer value and organization as well" in analysis of CRM (Kim et al. 2004). Next, an overview of the key elements and successful factors inherent in it, and the logical details of each of these components of CRM, is discussed.

Customer Focus (CF)

The main theme of the CRM construct's "Customer Focus" (CF) component is adherence to the needs of selected valuable customers by providing customized products or services that meet their needs and expectations. Lemon and Verhoef (2016), Zwick et al. (2008), Drienhart and Gregoire (1993) have described CF as a personal commitment of an employee to provide outstanding customer care. An essential factor for the organization to be truly customer-focused is the fact that it provides value to the customers. As Payne and Frow (2006) suggested an essential factor that can enable the organization to be fully customer-focused is to embrace a cross-functional strategy in the way that it provides value to its customers. In such strategy, cross-functional processes and resources provide a vital means of connecting the enterprise with its clients, rather than focusing on split,

uncoordinated individual inputs from organizational roles, as Webster (2002) claimed. As suggested by Baker (2012) these processes should be informed and powered by key performance objectives based on consumer expectations. Customer Focus includes creating ties between client needs (Baxter, 2012; Bergman & Klefsjö, 2010), customer service and customer satisfaction (Gebert et al., 2002; Hanif et al., 2010), and engagement, retention, commitment and loyalty of customers. This would allow consumers to stay longer, buy more often, new clients are easier to attract, and thereby increase the long-term value of the brand.

Organizational Focus (OF)

CRM as an organizational strategy is client profiling, identifying and forecasting consumer preferences, dividing clients into segments, one-to-one communication evaluating client purchasing habits, and recognizing who buyers are, where they are and what they need (Camilleri, 2018). Such approach is essential for decision taking to attract and please clients with respect to appropriate strategies. When profitable customers are recognized, organization may start developing long-term mutual beneficial relationships with clients by engaging in two-way communication (Deb, 2014), through direct market communication, face-to-face communication and indirect market communication via telephone or internet. It establishes an ongoing relationship as the business connects with each other and the client leading in a win-win situation (Parida et al., 2013; Brito, 2011). Top management must persuade employees of the advantages and future consequences of the plan and become the key promoters of CRM, as well as pass on encouragement and dedication to other levels of the company (Alshourah et al., 2018). The organization often depends on its workforce to use recorded customer data, implement innovative methods based on internal information research and thereby enhance customer experience (Zerbino et al., 2018; Shang & Lin, 2010). Employees play a leading role in fostering and maintaining healthy partnerships with users, and it is important that they are active in and dedicated to the CRM program and inspire them to meet the suggested goals (Rafiki et al., 2019; Mendoza, et. al. 2007). Currently organizations emphasis on cross-functional teams; motivational empowerment of staff and training; risk-taking / innovation; commitment; customer-focused culture; adaptability; exchange of information; orientation of learning and knowledge management; established set of departments with unique roles and responsibilities; interdepartmental integration; and management involvement are key indicators for successful CRM initiatives as mentioned by (Rahimi & Gunlu, 2016). Organizational focus helps the organization to continuous enhancement, increased communication, development and training of employees, development of products & services, creating customer centred firm, enhancing skills of decision making, getting advantages over competitors', and having increased business value.

Customer Knowledge and Feedback Management

Customer knowledge/information has been regarded as a vital organizational resource, allowing an organization to improve its customer relationship and gain a sustainable competitive advantage. An organization can't be customer centred without understanding customer needs (Croteau & Li, 2003; Shi & Yip, 2007).

Knowledge about Customers. Knowledge about customers is acquired by an organization with the goal of knowing and approaching its clients (Gebert et al., 2003;

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Nejatian et al., 2011). These procedures are generally initiated by an organization to get corporate visibility into the need and desire of growing client. It applies to profiles of customers, a database of purchase transactions (Davenport, 2001; Verhoef, & Lemon, 2013), Sales quantities, competitiveness, buying habits, duration, mood and desires of customers (Park & Kim, 2003; Salomann et al., 2005; Lin et al., 2006) and background, perceptions, requirements and specifications of customers (Gebert et al., 2003; Lin et al., 2006).

Knowledge for Customers. Knowledge for customers is needed to meet the information needs of the customers (Gebert et al., 2003). These processes are specifically initiated by an organization with the goal of offering information to help and improve the perception of its goods and services provided to customers (Hasanian et al., 2015). This is a requirement for helping and assisting clients in their business, purchasing process and influencing the expectations of consumers regarding the price of goods and services (Woodall et al., 2014; Tseng & Wu, 2014). "Knowledge for customers" requires knowledge about goods and services, markets and distributors (Guchait et al., 2011), knowledge for customers' preferences (Sanayei & Sadidi, 2011) and organizational awareness data which customers interpret as valuable (Park & Kim, 2003).

Knowledge from Customers. Knowledge from customers is the information that clients have regarding the problems they are involved in purchasing relevant to the goods and services (Garcia-Murillo & Annabi, 2002). This knowledge resides in customers, and therefore organization should pay more attention than two other types. Certain processes are primarily initiated by customers and require a transition of knowledge from the client to the organization, such as appropriate feedback frameworks (Gebert et al., 2003; Salomann et al., 2005). This includes awareness of the products and services utilized and interpreted by clients, customer complaints, grievances and requests (Garcia-Murillo & Annabi, 2002; Vasileiou & Rowley, 2003; Park & Kim, 2003; Österle, 2001). Customer knowledge and feedback management helps a business succeed by creating stronger client relationships which has a positive impact on the efficiency and performance of an organization, customer satisfaction, customer loyalty, and customer retention (Alrubaiee et al., 2015; Abdullateef, 2011; Bhakane, 2015; Akintunde & Akaighe, 2016). Therefore, they need to acquire new information about their clients, discover and use their current knowledge, and distribute this knowledge within the organization in order for companies to remain competitive.

Information Technology Infrastructure (ITI)

Information Technology and Information System play a significant role in CRM growth (Bahrami et al., 2012; Kincaid, 2003). As suggested by Ngai (2005), they serve an encouraging and promoting function in creating an infrastructural framework that facilitates the CRM initiative within the enterprise by handling the data needed to recognize clients. The IT supporting function involves maintaining a database as well as an associated hardware and software infrastructure that will well allow the organization to better service its customers (Mahmoud et al., 2017). The developments in IT allow companies to capture, preserve, interpret and exchange knowledge about clients in ways that significantly improve their capacity to react to individual clients' needs and thus,

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winning and retaining clients (Croteau & Li, 2003). Payne and Frow (2006) point out that the role of IT is increasingly critical in allowing organizations to handle one-to-one relationships with potentially large numbers of clients and in helping to establish better customer relationships. They draw attention to the fact that today's organizations have a variety of database, data processing, and data analysis tools at their fingertips, as well as increasing number of so-called CRM systems, allowing vast volumes of customer data to be captured and constructively processed, viewed, and exploited. Such a leveraging impact of IT is exemplified by the potential of CRM systems to provide validated user trend data to decision-makers, build forecast models, and efficiently tailor and distribute value products to particular users (Peppard, 2000; Vrechopoulos, 2004; Yim et al., 2004). The end result will be improved consumer growth and higher retention levels for customers, which boosts business performance.

CRM applications take full benefit of technology advances with their ability to collect and analyze client pattern data, i.e. interpret customer behaviour, develop predictive models, respond to customized communication in a timely and efficient manner, and deliver product and service value to individual clients. Use technologies to "maximize customer interactions," businesses are able to build a 360-degree perspective of clients and benefit about prior relationships and maximize potential ones. Innovations in network connectivity, client / server networking, and software for market intelligence are leading influences in creating CRM. CRM systems offer customer data warehouses at a fraction of the expense of traditional network architectures. CRM programs collect, archive, manage and spread information about consumers in the organization. Effective information management plays a crucial role in CRM. Knowledge is essential to product tailoring, business creativity, integrated client opinions and customer lifetime value estimation. For CRM programs, data warehouses, enterprise resource planning (ERP) frameworks, Internet, telecommunications and digital technologies, computer language programming and software, technologies for data analysis, computer telephony integration among others are key IT infrastructures (Chen & Popovich, 2003; Morgan, 2014).

Studies about CRM in Libraries: International and National Perspectives

The notion of customer relationship, customer-based marketing and customer-centred approach was not new for libraries. In order to satisfy the growing user needs, process, business, facilities, services, culture, structure and networks of the libraries must be fine-tuned. The thought began during the last quarter of the 19th century in the minds of librarians, as Green (1876) indicated that reference librarians would have four objectives: educating customers about the roles and services of the library, and how to utilize them; answering questions from customers; having patrons find appropriate reading material; and introducing the library to the wider community. In other terms, the library has a responsibility to the society it represents, and must respond quite efficiently to the user requirements. Users should feel comfortable in their local libraries and librarians should make this better by interacting regularly with customers and personalizing their service to each user. Macfarlane (1898) said that "This ideal presupposes the zeal and sympathy which incite to study and research, with which must be combined the care for detail and the firmness of character that belongs to the efficient man of business" (p.5). Ranganathan (1931) presented five laws for library science and presented shop analogy

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for library professionals to render the operation more accessible with a business perspective and appeals for all types of libraries to recognize that they are businesses, not just a human cause. He stated while the reputation of a shop depends heavily on the resourcefulness, personal awareness of the items in the store and a sense of eagerness to support the shop's customers, the quality of the library service depends heavily on the library staff's head and heart. He claimed that users want the same quality as customers. To him: The library now has to establish the new shop methods. It is accurate that it might not be feasible in a great many libraries to have enough assistants only standing around for anyone to come in. We will keep a positive mindset and express discourtesy on no account. However, the formal CRM strategy was transmitted in libraries, like many other managerial and services methodologies from business world. It is positive sign of libraries to welcome new concepts and trends facilitating their users. The whisper of CRM in academic libraries was heard in late 90s. A lot of literature has been published on the topic representing its importance.

Cooper et al. (1998) explored needs and expectations of remote library users and find that employees of academic libraries now work with remote users (both students and faculty) with unique features, needs, and expectations of their own. Library personnel need to better understand users and their needs in order to facilitate user satisfaction and retention, as well as encourage users to meet those needs. Broady-Preston et al. (2006) concluded that CRM is a valuable tool for assessing university libraries' perceived interest. In the new business world, librarians not only have to recognize and satisfy their users ' expectations but also to engage effectively with their users if the academic libraries have the true market value. In order for CRM to succeed, good communication techniques are necessary. Information skills and/or new systems training for library employees and their users are critical element in a CRM approach. Wang (2007) conducted a study on CRM in academic libraries and found that libraries are in the stage of infancy in terms of CRM implementation. The study takes it as a challenge to aware libraries about CRM functions for future needs. Idrees (2007) conducted a case study on CRM on user perspective in academic library and concluded that library users are pleased and satisfied from professional staff because they are helpful and behave well while library non-professional staff is fairly cooperative, required training and rectification. He suggested user orientation and marketing of library resources and services. Siriprasoetsin et al. (2011) suggested that variables which have important effect on CRM practices in academic libraries are: (1) CRM expertise and awareness of library personnel and library administration leadership including knowing and appreciating customer relationship-focusing quality of service is essential to library success (2) organizational culture and engagement (3) Processes in customer care (4) customer service systems, and (5) library services and communications networks. Some other significant aspects may involve embracing and encouraging the usage of CRM by the library, the clear goal and purpose of using CRM in the strategic library plan, knowledge and comprehension of library personnel regarding CRM practices, user needs, and habits. Siddiqui (2013) wrote that CRM will help libraries to have in-depth insight of their users and what they and how to fulfil that needs. The better you may understand your users the more responsive you would be. Petal (2013) suggested that librarians seek to incorporate CRM as a system for creating public resources to address individual needs. The question is not how similar or different the detail of their services is. Importantly, the development of good user

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relationships has contributed to changes in the service level of their libraries as demonstrated by their core clients. Throughout the demanding environment brought on by the widespread knowledge technology networks, information explosion and greater demands, the libraries have to follow CRM principles and frameworks to pledge their user satisfaction. Jamali et al. (2013) indicated that library administrators in the public library need to improve users' satisfaction through the CRM method. The further this approach is seen, the greater the happiness and satisfaction of virtual library users. They said that improvements that are not based on customer preferences can lead to certain interruptions in the demand chain which will lead to high risks for users, in particular if this process is not carried out in due course.

Papi and Primorac (2014) concluded that the readiness level for e-CRM in Croatian academic libraries is poor. He considered eight areas are important to implement e-CRM in libraries are: (1) user contact (2) user friendly system design (3) library and public relations information (4) affective engineering (5) library products and services marketing (6) e-service extension and enhancement (7) superior quality of service and (8) interaction with prospective potential clients. Faed et al., (2014) founded that high standard for quality services, lack of user-employee relationships, lack of attention to user needs, an external communication gap between library and users, lack of attention to improving the performance of employees, etc. were causes of dissatisfaction among users of university libraries in Bangladesh. Khan (2015) narrated that for the implementation of CRM six key factors should be aligned for it, namely (1) CRM should be part of libraries' strategic plan (2) incorporated in service quality (3) leadership must have vision for CRM and support it (4) staff must be skilful enough (5) culture of libraries must be CRM supportive (6) technological resources must be latest. Leligdon et al. (2015) recommended that viewing libraries as business organization, with clients as customers, allows us to take advantage of business practices to enhance user satisfaction. In order to apply the CRM framework, academic libraries could have to shift their paradigm, but the concept outlined here offers the opportunity to show full value to all users and stakeholders and to improve the activities of academic libraries thereby.

Edalatiyan et al. (2017) results depicted that the degree of understanding of librarians with CRM is high and the need of implementing and using CRM is very reasonable. Fouad and Al-Goblan (2017) results of the study revealed that there is a lack of clarity of the CRM concept for the participating employees. Most university library employees are convinced that the CRM systems are necessary and have the right environment for CRM systems university libraries. The challenges to Egypt's university library include primarily the lack of funding for CRM and the lack of technology and software solutions; and the appropriate CRM personnel are crucial to Saudi university libraries. Stokić et al. (2018) report founded that most of the respondents' librarians are acquainted with the CRM concept. However, in these three developed countries i.e., Serbia, Montenegro and Bosnia and Herzegovina libraries are not utilizing CRM or smart technology to strengthen ties with stakeholders. This study also measures users' satisfaction with public library products, services, facilities and relationships in those three countries. Bahader *et al.* (2018, 2020) conducted studies on CRM on university libraries and concluded that there were no proper CRM practices in the university libraries of Khyber Pakhtunkhwa, Islamabad and Pakistan; however, some activities like

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email and face to face communication, library orientation, user feedback and complaint system are in practices.

Chelakand Khasseh (2019) explored that there is a linear relationship between CRM factors (proper process organization, information management, and technology) and library performance and play significant role in the improving level of library service and performance. Nwachokor and Okeke (2020) study findings revealed that respondents performed two out of the four CRM practices namely customer segmentation and customer interaction but did not practice customerization of products or services and customer lifecycle management. Moreover, CRM activities will be aligned with information technology, human resources and processes. It was also assumed that these university libraries did not completely accepted user orientation philosophy and most definitely will not please their clients. It was also suggested that university librarians and management will continue to work towards strengthening user relationships through the adoption of CRM strategies, review of already rendered programs or services and the usage of CRM technology to enhance efficiency.

Library leaders, faculty and students are the major stakeholders of CRM practices. Therefore, they must acknowledge its significance in order to initiate and develop CRM strategies and programmes in academic institutions. CRM understanding is essential for libraries and employees to recognize the importance of CRM knowledge to prepare them for imparting CRM tactics and programmes in their libraries. Academic libraries need to provide customized products and services to stockholders to enhance user satisfaction, loyalty and retention. Good service qualities, user values, library image, user satisfaction, and user loyalty are the key survival factors for libraries in the age of information explosion because many other sources and professions are replacing libraries and these library values are strongly supported by CRM. This wave of change is a continuous struggle to embrace new strategies, user relationship and technologies for the "survival of the fittest". The above discussions and quite a large number of studies in the literature show the importance of the topic. The gap in literature is so heavy that you could find very minimal literature in the Pakistani context which deals with the above-mentioned topic. The gap in the research is creating a remarkable problem in the future planning of academic libraries which is basis of survival.

The study of the CRM and its practices are of utmost importance. Otherwise, the libraries are already under threat of decreasing and losing of users and other sources of information as alternate to libraries are developing day by day. The only solution to the problem is to conduct a comprehensive study which may be helpful for Pakistani university libraries to look into future for their survival. This study would not only be an innovative addition in the existing body of knowledge but also will indicate the future strategies to the library planners. Therefore, the current study was intended to assess the current status of user relationship management practises in Pakistan's university libraries. This study addressed the following research questions:

Research questions

- What are the prevailing CRM practices in university libraries of Pakistan?
- Are there any significant differences in the index of CRM practices based on types, geographical locations, and categories of university libraries of Pakistan?

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Methods and Procedures

A cross-sectional research design using a questionnaire was utilized to investigate the prevailing CRM practices in university libraries of Pakistan. The questionnaire containing 43 statements along with universities categorization variables (e.g., types, geographical locations, and categories) was administered online among head/in-charge librarians working in universities and degree awarding institutions of Pakistan. This study used Sine, Tse, and Yim (2005) model for the development of research instruments consisted four important ingredients and factors of CRM; key customer focus, CRM organization, customer knowledge management and technology-based CRM. This model is reliable, valid, and generalizable in services sector organizations. The 43 statements related to CRM practices were developed based on literature review which was submitted to a panel of 10 experts from the field of Library and Information Science for construct validity. After pilot testing, a reliability analysis was executed on the perceived core value scale consisting 43 facets. Cronbach's Alpha showed the questionnaire to reach acceptable reliability, $\alpha = 0.96$.

There were a list of 193 universities and degree awarding intuitions, both public and private, recognized in general and specialized categories available on the website of Higher Education Commission (HEC), Pakistan. HEC is a regulatory body of universities and degree awarding institutes in Pakistan. It was decided to conduct a census of all the head/in-charge librarians of the universities and degree awarding institutes recognized till December 2018 by HEC.

Data Collection and Analysis

The web-based questionnaire along with covering letter was administered through email among all the head/in-charge librarians. A total of 140 questionnaires were completed by the survey participants. These questionnaires were screened for completeness and entered into SPSS (version 22) for analysis. Descriptive and inferential statistics were used to analyze the data. The mean scores and standard deviations (SD) were calculated separately for each statement to report the results. Moreover, an independent sample t-test, one-way ANOVA was performed for relationship testing.

Results

Profile of the Survey Participants

Out of 140 total respondents, there were 91 (65%) belonged to public sector and 49 (35%) to private sector universities/DAIs respectively. As for as, category of universities is concern 74(52.9%) are belong to general, 27(19.3%) to engineering & technology, 21(15%) to medical sciences, 8(5.7%) to agriculture/veterinary sciences, 7(5%) to business education and 3(2.1%) to computer science & IT respectively. Majority of the respondents belonged to Punjab province i.e., 44(31.4%) followed by 35(25%) of Sindh, 32(22.9 %) of Khyber Pakhtunkhwa, 18(12.9%) of Islamabad Capital Territory, 6(4.3%) of Baluchistan, and 5(3.6%) of AJK universities/DAIs respectively.

Current Status of CRM Practices in University Libraries

A list of 43 facets of CRM practices in libraries was presented to the participants in the questionnaire. Each statement was followed by a 5-point Likert scale (1= Strongly Disagree, 2= Disagree, 3= Neutral, 4=Agree and 5 = Strongly Agree). The respondents were asked to select one of the given scales to express their opinion towards the statements for their library. The opinion of respondents is presented in the form of mean (μ) and standard deviation (σ).

Customer Focus

Table 4.1 indicate mean score for the facets of "customer focus", the element that has highest mean score of (μ= 4.17) in the questionnaire is "Library concentrates to satisfy users", followed by "Library focus to increase number of users" (μ= 4.16), "Library emphasizes to retain valuable users", (μ= 4.00), "Library understands individual users' needs", (μ= 3.94), "Library strives to delight library users" (μ= 3.92), "Library provides customized services to the users" (μ= 3.77) respectively. Similarly, the facets "Library strengthens the emotional bonds with users by wishing them on important occasions" received (μ= 3.64), "When library finds that users would like to modify a product/service, the departments involved make concerted efforts to do so" (μ= 3.63), "Library customizes users' interactions to optimize value and loyalty" (μ= 3.56), and "Library involves users in tailoring and designing library products and services" (μ= 3.53).

Table 4.1
Mean Score of Respondents about Customer Focus in CRM Practices (N=140)

Rank	Customer Focus Attributes	Mean	SD
1	Library concentrates to satisfy users	4.17	.813
2	Library focuses to increase number of users	4.16	.867
3	Library emphasizes to retain valuable users	4.00	.960
4	Library understands individual users' needs	3.94	.807
5	Library strives to delight library users	3.92	.866
6	Library provides customized services to the users	3.77	.924
7	Library strengthens the emotional bonds with users by wishing them on important occasions	3.64	1.04
8	When library finds that users would like to modify a product/service, the departments involved make concerted efforts to do so	3.63	.932
9	Library customizes users' interactions to optimize value and loyalty	3.56	.858
10	Library involves users in tailoring and designing library products and services	3.53	.925

Scale: 5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; 1= Strongly Disagree

Organizational Focus

Table 4.2 shows mean score for statements of "organizational focus" and measured the first attribute is "university top management encourages staff to provide best users' services" (μ= 3.75), followed by "university provides variety of users' facilitation channels" (μ= 3.73), "university top management strongly encourages building up friends of library community" (μ= 3.63), "university top Management provides resources for CRM" (μ= 3.61), "university top management facilitates library to develop CRM system" (μ= 3.61), "University staff is trained enough to practice CRM" (μ= 3.55), and "University top management thinks that CRM is key to survive" (μ= 3.53) respectively.

The five facets whose mean scores are less than 3.50 are: "University top management thinks that CRM is key to survive" (μ= 3.44), "university provides skilful staff for CRM execution" (μ= 3.44), "employees' performance is measured and rewarded based on meeting user needs and on successfully serving the users" (μ= 3.36), "library employees are resistant and hesitate to implement CRM in library ®" (μ= 3.18), and "university top management is also resistant and hesitate to implement CRM in library ®" (μ= 3.15) respectively.

Table 4.2
Mean Score of Respondents about Organizational Focus in CRM Practices (N=140)

Rank	Organizational Focus Attributes	Mean	SD
1	University top management encourages staff to provide best users' services	3.75	.983
2	University provides variety of users' facilitation channels	3.73	.855
3	University top management strongly encourages building up friends of library community	3.63	.947
4	University top Management provides resources for CRM	3.61	.895
5	University top management facilitates library to develop CRM system	3.61	.894
6	University staff is trained enough to practice CRM	3.55	.924
7	University top management thinks that CRM is key to survive	3.53	.978
8	University structure diligently revolves around CRM	3.44	.923
9	University provides skilful staff for CRM execution	3.44	1.04
10	Employees performance is measured and rewarded based on meeting user needs and on successfully serving the users	3.36	1.11
11	Library employees are resistant and hesitate to implement CRM in library ®	3.18	1.15
12	University top management resistant and hesitate to implement CRM in library ®	3.15	1.11

Scale: *5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; 1= Strongly Disagree*

Customer Feedback Management/ Knowledge Management

Table 4.3 revealed that mean score for the attributes of "customer feedback management" and calculated the first attribute is "library welcomes user's complaints" (μ= 4.20), followed by "when any user has a problem, our library shows a sincere effort to solve it" (μ= 4.14), "users are encouraged to give feedback about library performance" (μ= 3.95), "Library has trained and empowered frontline staff" (μ= 3.93). At next positions are "Library has trained and empowered frontline staff" (μ= 3.86), "Library reviews user's complaints periodically" (μ= 3.74), "Library always gets feedback from right user, at right place and right time" (μ= 3.74), "Library formally communicates user's feedback to all library employees" (μ= 3.71), "Library seriously takes users feedback for its resources and services on regular basis and responds accordingly" (μ= 3.67), "Library has effective recovery strategy for any services failure" (μ= 3.59), "Library ignores user's complaints (R)" (μ= 3.57), "Library has formal feedback and complaints management system" (μ= 3.54), and "Library has proper punishment system on user's complaints" (μ= 3.05) respectively.

Table 4.3
Mean Score of Respondents about Customer Feedback Management in CRM Practices (N=140)

Rank	Customer Feedback Management Attributes	Mean	SD
1	Library welcomes user's complaints	4.21	.875
2	When any user has a problem, my library shows a sincere effort to solve it	4.14	.853
3	Users are encouraged to give feedback about library performance	3.95	.924
4	Library addresses real time quires and requests	3.93	.887
5	Library has trained and empowered frontline staff	3.86	.983
6	Library always gets feedback from right user, at right place and right time	3.74	.970
7	Library reviews user's complaints periodically	3.74	1.035
8	Library formally communicates user's feedback to all library employees	3.71	.916
9	Library seriously takes users feedback for its resources and services on regular basis and responds accordingly	3.67	.940
10	Library has effective recovery strategy for any services failure	3.59	1.011
11	Library ignores user's complaints ®	3.57	1.194
12	Library has formal feedback and complaints management system	3.54	1.109
13	Library has proper punishment system on user's complaints	3.05	1.062

Scale: *5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; 1= Strongly Disagree*

Information Technology Infrastructure (ITI)

Table 4.4 indicate mean scores for all statements of information technology infrastructure and the attribute that is highest mean score of (μ= 3.59) in the instrument is "Library possesses good information system infrastructure", followed by "Library possesses good telecommunications infrastructure" (μ= 3.51), "Library possesses an information system that is integrated across several functional areas" (μ= 3.49), "Library possesses the necessary infrastructure to capture user data from all user interaction points" (μ= 3.48), "Library possesses the ability to consolidate all acquired user related data in a centralized database" (μ= 3.46), "Library Possesses information technology that allows for one-to-one communications with current users" (μ= 3.41), "Library possesses information technology to acquire user related data in a centralized database" (μ= 3.39), and" Library possesses data sharing technologies that enable data access between information systems" (μ= 3.37) respectively.

Table 4.4

Mean Score of Respondents about Information Technology Infrastructure in CRM Practices (N=140)

Rank	I T Infrastructure Attributes	Mean	SD
1	Library possesses good information system infrastructure	3.59	1.099
2	Library possesses good telecommunications infrastructure	3.51	1.123
3	Library possesses an information system that is integrated across several functional areas	3.49	1.154
4	Library possesses the necessary infrastructure to capture user data from all user interaction points	3.48	1.102
5	Library possesses the ability to consolidate all acquired user related data in a centralized database	3.46	1.121
6	Library Possesses information technology that allows for one-to-one communications with current users	3.41	1.093
7	Library possesses information technology to acquire user related data in a centralized database	3.39	1.110
8	Library possesses data sharing technologies that enable data access between information systems	3.37	1.115

Scale: 5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; 1= Strongly Disagree

Prevailing CRM Practices Overall

Table 4.5 highlights the composite mean score (μ) for the overall "CRM practices" is (μ = 3.63, SD= 0.658) and its sub-facets are "Customer Focus" (μ= 3.83), "Customer Feedback Management" (μ= 3.75), "Organizational Focus" (μ= 3.50), and "Information Technology Infrastructure" (μ= 3.46) ranked first, second, third, and fourth respectively. These results suggest that university libraries in Pakistan are in the preliminary stage in utilizing CRM. However, Pakistani libraries are focusing on user needs and desire to accomplish it. They also try their best about the proper management of customer

feedback and knowledge. An alarming gesture for Pakistani university libraries is that they have no appropriate information technology infrastructure for CRM strategies and practices in the modern technological and competitive globe.

Table 4.5
Overall Mean Score of Respondents of CRM Practices and its Sub-dimensions (N=140)

Rank	CRM Practices Dimensions	Mean	SD	Min	Max
1	Customer Focus	3.8307	.70394	1.20	5.00
2	Customer Feedback Management	3.7462	.69539	1.31	4.85
3	Organizational Focus	3.4976	.64394	1.92	5.00
4	IT Infrastructure	3.4625	1.01614	1.00	5.00
	Overall, CRM Practices	**3.6342**	**.65778**	**1.58**	**4.81**

Scale: *5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; 1= Strongly Disagree*

Significance Testing

Type of Universities and CRM Practices. An independent sample t-test was utilized for examining the mean differences in the index of overall CRM practices scale with regard to types of university libraries. The results in Table 4.6 revealed that there is no significant differences in the composite mean score of CRM practices based on types of university and the p-value is greater than alpha-value 0.05 that is (p=0.062>0.05)
Conversely, there is statistically significant differences in the mean scores of (μ = 3.41, SD = .604) public sector and (μ = 3.64, SD =. 694) private sector for the sub dimensions of "Organizational Focus". Where p-value is less than alpha value that is (p=0.045 < 0.05).

Table 4.6
Participants Mean Differences in CRM Practices based on Type of University Libraries (N-140)

CRM Practices Dimensions	Type of Universities				*t*-stats (df=138)	P-value
	Public 91(65%)		Private 49(35%)			
	Mean	SD	Mean	SD		
Customer Focus	3.78	.625	3.90	.833	-0.955	0.341
Organizational Focus	3.41	.604	3.64	.694	-2.026	**0.045***
Customer Feedback Management	3.67	.677	3.87	.716	-1.651	0.101
Information Technology Infrastructure	3.35	1.011	3.67	1.002	-1.795	0.075
Overall, CRM Practices	**3.55**	**.609**	**3.77**	**.724**	**-1.884**	**0.062**

*P< 0.05

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Geographical Locations of Universities and CRM Practices.

On-way ANOVA test was carried out on mean scores of respondents, to know whether there were significant differences in overall CRM Practices, and its sub-dimensions mean scores regarding geographic location of university libraries Table 4.7 results revealed there is no statistically significant difference in the composite mean score of CRM practices based on geographical locations where P-value is greater than 0.05 such as (F=2.090, P=0.070>0.05) and for sub dimensions of CRM practices that is "Customer Focus" (P=0.0.484>0.05), "Organizational Focus" (P=0.113>0.05), and "Customer Feedback Management" (P=0.138>0.05), where P-value of all facets are (P>0.05). Conversely, statistically significant mean difference was found for the sub-dimension of "Information Technology Infrastructure" (F=3.268, P=0.008<0.05) in relation to geographical area of university libraries. Applying Tukey's post hoc test it was exposed that university libraries that belong to Islamabad Capital Territory region were having more IT infrastructure from KPK Province, followed by AJK region university libraries.

Category of Universities and CRM Practices.

One-way ANOVA test was conducted and results revealed that there is no statistically significant difference in the composite mean scores of CRM practices and its sub-dimensions with respect to category of universities, where all p-values are greater than .05.

Discussion

Results of this report reveal that CRM practices in university libraries of Pakistan are in the adolescence stage and the respondents are inclination towards its two sub-dimensions; customer Focus and customer feedback management practices. As for as organizational focus is concerned, the study reflects that top management of the university libraries are trying to encourage library personnel to implement CRM and thinks that CRM is key to survive in current competitive era. Information Technology Infrastructure is very poor and university libraries are not in the position to execute complete system of CRM. These libraries are still lacking IT infrastructure in the modern IT period and this is alarming situation for university libraries in Pakistan (Table 4.5). However, university libraries are focusing to satisfy users, emphasize to retain and increase valuable users, understand individual users' needs, strive to delight their users, provide customized services to the users and strengthen the emotional bonds with users (Table 4.1). Academic libraries are welcome user's complaints, show a sincere effort to solve user problems and complaints, trying to get feedback about resources and services on regular basis from right user, at right place and right time and properly manage it, and address real time queries. University libraries have effective recovery strategy for any services failure and requests but have no proper punishment system on user's complaints (Table 4.2). University top management encourages staff to provide best users' services, provide variety of communication channels, building up friends of library community, provides resources and facilitates to develop CRM system in library. University provides skilful staff for CRM execution, library employees and top management does not resistant and hesitate to implement CRM in library (Table 4.3). Academic library is not properly equipped with information technology infrastructure to deployed CRM in library system (Table 4.4).

Table 4.7

Participants Mean Differences in CRM Practices based on Geographical Locations of University Libraries (N-140)

CRM Practices	Geographical Locations of University Libraries												
Attributes	Islamabad Capital Territory (n=18)		Punjab (n=44)		Khyber Pakhtunkhwa (n=32)		Sindh (n=35)		Balochistan (n=6)		AJK (n=5)		Sig.
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Customer Focus	3.87	.260	3.78	.760	3.73	.795	4.01	.722	3.68	.240	3.52	.858	0.484
Organizational Focus	3.54	.420	3.56	.687	3.30	.763	3.67	.581	3.19	.250	3.15	.430	0.113
Customer Feedback Management	3.85	.509	3.75	.774	3.48	.800	3.93	.591	3.80	.318	3.49	.426	0.138
IT Infrastructure	4.04	.538	3.58	1.023	3.16	1.117	3.50	.982	3.00	.987	2.50	.612	.008*
Overall, CRM Practices	**3.83**	**.325**	**3.67**	**.738**	**3.42**	**.761**	**3.78**	**.564**	**3.42**	**.396**	**3.16**	**.481**	**0.070**

Scale: 5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; 1= Strongly Disagree

The results of this study are consistent with previous studies in libraries which also measured CRM practices, components, successful factors, challenges, strategies, mechanism, customer satisfaction and loyalty (Nwachokor & Okeke, 2020; Chelak & khasseh, 2019; Stokić et al., 2018; Badwan et al., 2017; Bahader, 2014; Jamali et al., 2013; Petal, 2013; Siddiqui, 2013; Wang, 2012; Siriprasoetsin et al., 2011; Saludin & Tan, 2010; Bhatti, 2008; Idrees, 2007; Wang, 2007; Broady-Preston et al., 2006; Dlamini, 2006; Sheng & Sun, 2006).

The practices of CRM are less understood in Iran's public and private banks (Rouholamini & Venkatesh, 2011). A study conducted on an evaluation of CRM practices in agribusiness firm by Torres et al., (2007) concluded that CRM has received much attention in the agribusiness firma as a management process to enhance organization performance, however IT infrastructure is not encouraging and their mean score is near to 3.0 in five point rating scale. A study conducted by Abdallah, (2011) on CRM practices on hotels in Ashanti Region of Ghana founded that the degree of CRM understanding and hotel orientation differs with regard to the four dimensions (key customer focus, CRM structure, information management, and technology-based CRM). The CRM dimension based on technology recorded the lowest orientation level among hotels, and the knowledge management dimension recorded the highest orientation level. The results of (Table 4.6) revealed that there are no significant differences exist in the composite mean score of participants' CRM practices and its sub-dimensions based on types of university where all the p-values are greater than alpha-value 0.05 (p=0.062>0.05), Customer Focus (P= 0.341>.05), Customer Feedback Management (P= 0.101>.05), and Information Technology Infrastructure (P= 0.075>.05). Conversely, there is statistically significant difference in the mean score of public sector (μ = 3.41) and private sector (μ = 3.64) universities for the sub dimensions of CRM i.e. "Organizational Focus". Where p-value is less than alpha value (p=0.045 < 0.05). Such findings indicate that libraries belonging to private sector universities were more oriented towards "Organizational Focus" as correlate to public sector. The top management of the private sector universities strongly encourage building up friends of library community, provides variety of users' facilitation channels and grant resources for CRM implementation. Private sector universities top management provide skilful staff for CRM execution and their staff is trained enough to practice CRM and to provide better user services.

As far as geographical locations of universities is concerned, One-way ANOVA results of (Table 4.7) revealed that there were no statistically significant differences in the composite mean score of overall CRM practices and for its sub-dimensions that is "Customer Focus" (P=0.0.484>0.05), "Organizational Focus" (P=0.113>0.05), and "Customer feedback Management" (P=0.138>0.05), where P-value of all facets are (P>0.05) based on geographic location of university (Islamabad Capital Territory, Punjab Province, Khyber Pakhtunkhwa Province, Sindh Province, Balochistan Province and Azad Jammu and Kashmir regions). Conversely, statistically significant mean difference was found for the sub-dimension "Information Technology Infrastructure" (P=0.008<0.05) in relation to geographical areas of university. Applying Tukey's post hoc test, due to significant differences presence, revealed university libraries that belong to Islamabad Capital Territory group stood to be stronger in IT Infrastructure from KPK Province as they scored higher means and followed by AJK region university libraries respectively. In order to know about category of universities, One-way ANOVA test was

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conducted and results revealed that there is no statistically significant difference in the composite mean scores of CRM practices and its sub-dimensions with respect to category of universities (general, agriculture/veterinary, engineering & technology, medical, business education and computer sciences & IT), where all p-values are greater than .05.

Conclusions

A happy customer is the essential aspect of an organization's performance. University libraries are now functioning in a dynamic world that is highly fast-moving. They need to actively seek to build good, strong, sustained and mutual beneficial relationships with customers in order to maintain their relevance to their clients. CRM is necessary for libraries in order to compete successfully in today's electronic world. The more efficiently you use your customer information to satisfy their needs, the greater the value and image of your library. The path to librarianship success requires that you understand your customers and their requirements and that customer satisfaction can be achieved with the CRM.

University libraries in Pakistan realize that CRM is "survival of the fittest" but holistic approach to CRM practices is in the adolescence stage. They are tendency towards customer focus and customer feedback/knowledge management practices and trying to modify organizational culture as per CRM system. IT Infrastructure is poor and not in the position to execute complete system of CRM. The results indicated statistically significant difference in the mean score of types of universities for the sub dimensions of CRM i.e. "Organizational Focus" where private sector university libraries are concentrating more. In addition, statistically significant mean difference was found for the sub-dimension "Information Technology Infrastructure" in relation to geographical areas and university libraries that belong to Islamabad Capital Territory group stood to be stronger in IT Infrastructure from KPK Province and followed by AJK region respectively.

This report produced useful insights for librarianship, particularly those engaged in CRM. These results could additionally be used as a guide for orientation and information professionals to take appropriate measures to build up and strengthen mutual beneficial bond with users. The study will make an important contribution to existing research as there were few studies which addressed this research problem. This study was limited to the opinions of the head librarians / library leaders of universities in Pakistan's and did not reflect the perspectives of other stakeholders such as management, faculty, students and other professional staff of central libraries. This study addressed CRM practices on a scale generated by Sin et al. (2005), who discovered only four elements (customer focus, organizational focus, customer feedback management, information technology infrastructure) of CRM. Meanwhile, more than four components could be involved in CRM practices and other elements could be added. This study is limited to university libraries in Pakistan and cannot be extended without further confirmation to other markets.

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