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HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

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ENHANCING EFFECTIVENESS OF CRM THROUGH MOBILE CRM IN EDUCATION SECTOR**LAKSHMI KALYANI****SR.LECTURER & PROJECT LEADER****CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING****CDAC****NOIDA****DR. ABHISHEK SINGH****ASST. PROFESSOR****BIRLA INSTITUTE OF TECHNOLOGY****MESRA****ABSTRACT**

In recent years e-CRM has taken a step further from traditional CRM in implementing and effectively operating various CRM operations and services through electronic medium. Further, from using traditional CRM to e-or electronic CRM [1], the usage has now shifted to m-CRM due to its obvious benefits of any place, anytime, anywhere availability and accessibility of required information. While the use of m-CRM in market sector has been researched upon and even deployed, its usage in Education sector is quite novel. This study is being carried out to assess the benefits and possible adoption of mobile Customer Relationship Management (m-CRM) with respect to the various services and usability of technology in the targeted Education sector. This paper provides the details and findings of the study done through the conduction of a pilot survey. The study aims in establishing the usability of m-CRM in the Education sector for enhancing the effectiveness of overall CRM operations from Education perspective like on-the job training requirements etc. The study also proposes the use of m-Learning or mobile Learning as the m-CRM service for imparting educational CRM services.

KEYWORDS

CRM, e-CRM, mobile Customer Relationship Management (m-CRM), Customer services, m-Learning.

INTRODUCTION

 Evidence within the marketing literature has shown that organizations can aim for high levels only by constantly improving their operations via the exploration and embedding of newer and latest technologies.

From using traditional CRM to e-CRM or electronic CRM [1], the usage has now shifted to m-CRM due to its obvious benefits of any place, any time, any where availability and accessibility of required information.

If e-CRM allowed customers to access organizational services from more and more places, as the internet access points are increasing by the day, m-CRM has taken this one step further. This is so because m-CRM allows customers or managers to access the systems for instance form a mobile phone or PDA with internet access, resulting in high flexibility, mobility and timely implementation of various CRM operations –not only of marketing but also of on the job training requirements.

Mobile CRM or mobile Customer Relationship Management , in simple terms is nothing but communication, either one way or interactive, related to sales, marketing, customer services activities , training activities etc. conducted through mobile medium for the main purpose of building and maintaining customer relationships between an organization and its customers and thus enhance their organizational operations and activities.

The usage of m-CRM in market sector [2] has been mainly for enhancing business operations and for providing supportive on the job training and learning requirements, where the users of m-CRM in this sector would be internal employees of the organization such as sales representatives, managers, Head of the organization and other employees and of course the external users that is customers of the organization –both existing as well as prospective customers.

Though lot of research has been done for verifying the usability of mobile CRM in the market sector but majority of the research only focused on the usability of m-CRM for business purposes and not for handling the educational or training needs.

However, increasing number of Marketing and Educational institutions are in search of effective Learning tools for imparting effective and timely education and providing on the job training to its employees, students, officers etc. m-Learning or mobile Learning is identified as a possible m-CRM service for achieving the above successfully .

The usage of m-CRM in education sector is a novel view , but is being researched upon in the recent years[3] , where it is proposed to be used for educational and learning needs and for delivering and accessibility of required organizational information.

This paper presents the details and findings of the study done on the effectiveness of usage of m-CRM with respect to the Education sector, based on the exhaustive study of the recent education scenario and its requirements and through the conduction of a pilot survey.

LITERATURE REVIEW

The spread of mobile communication, which has become a global mega-trend, has opened up fresh opportunities to get to know the customer, attract new customers and cultivate customer relations (Silberer, 2004). Smith [2007] explored CRM in mobile technology and communication which showed the way mobile communication enhanced CRM prospects in any organization with the benefits of no downtime, increased sales, timely access to accurate customer info and many more . Today m-CRM is part of almost any successful business – whether banks, hospitals, financial institutions, food industry and other service industry like tourism, airline, railways etc. The successful adoption of m-CRM in various sectors led to the exploration of its usage in Education sector too. While CRM is a widespread concept in the corporate and business world, it is a relatively new phenomenon in the higher Education sector (Grant & Anderson, 2002). CRM as a concept is also relevant to the education industry (Seeman and O'Hara, 2006 and Burdt, 2005).

Educational institutions worldwide are undergoing fundamental shifts in how they operate and interact with their “customers” (students, alumni, donors, business community and staff members). This use of technology is affecting almost every area of society, including education (Pollara.P.et al, 2011). In view of corporate CRM activities, college student enrollment management activities of converting probable students to the admitted represent the marketing components of CRM ; the conversion of admitted students to enrollees represent the component of sales and the continuous enrollment and participation as alumni represent the retention and support components (Chitra Nair,2007) . As higher education institutions are “student centric”, organizations that encompass a wide range of student outreach and counseling activities such as admissions, academic advising, job placement and more. Universities and colleges may benefit from CRM by improving student facing processes (Chen and Ching, 2005),personalizing communications with students (Karimi et al,2001),sharing information among departments(Chen and Ching, 2005) and increasing student retention and satisfaction (Bradshaw and Brash, 2001).

So, CRM and thus mobile CRM is finding place in Education too, as an essential tool especially for those education centers that are working on the web as Virtual or distance universities, providing e-Learning mode of education. In fact many e-Learning tools provide specific CRM and m-CRM functionality such as WebCT or IBM learning space etc. In this context, the use of mobile learning or m-Learning has been highlighted as a m-CRM service for education. Combined with web 2.0

technologies, mobile devices are today seen as offering new learning possibilities which represent a dynamic change in the strategies employed by learners and their production and consumption of learning products (Conole et al 2008). Tait (2000) has argued strongly in favor of incorporating customer centered practices into approaches to learning support which take into consideration the demands of course programmes such as assessment. Robinson, Riche and Jacklin (2007) have also called for the integration of university led and non-university led support services which provide opportunities to develop supportive relationships in the formal and informal learning environments.

OBJECTIVES OF STUDY

The main focus of the study is to investigate the effectiveness of adoption and usability of m-CRM for enhancing the implementation and management of learning and training needs.

Taking into account the purpose of the study, a broad study of the market and education sectors is seen as appropriate. This is so because more and more business and educational institutions are focusing on providing effective learning services either for on the job training requirements for their employees or for others in general. The choice undoubtedly influences the generalizability of the results of the study.

Thus the main objective of the study is to assess how the effectiveness of CRM could be enhanced through mobile CRM in Education sector, where the targeted mobile CRM service is providing learning to customers of education sector that is students as well as providing on the job training to employees and other customers of education sector. To achieve the objectives of the study, m-learning is identified as the m-CRM technology for providing learning and training services.

METHODOLOGY OF STUDY

The study consisted of collection and analysis of various kinds of data. The objective was to get both rich primary data as well as studied and analyzed secondary data for arriving at a stronger relevant conclusion.

The study for the market sector for its educational and training needs is primarily based on secondary data collected from the study of existing literature which majorly include journals, conference proceedings, national and international marketing reviews and surveys etc. which are relevant to the topic. The study was also based on the reflections combined with inputs from informal discussions with several management educators, consultants, sales representatives and managers which have taken place at several meetings, seminars and conferences over the last few years.

As the main focus of the study is studying effectiveness of m-CRM in Education sector so it consisted of collecting primary data through a pilot survey carried out through structured questionnaire comprising of around 100 respondents. The organizations identified and surveyed included Academic and Training organizations which were a mix of all the categories of Public, Private, Deemed, Autonomous and Government organizations.

EFFECTIVENESS OF m-CRM IN EDUCATION SECTOR

In the Education sector, the customers have been identified as being students, instructors, administrators, Head of Departments etc. and Mobile Learning is considered to be the main CRM service that can be imparted in Education sector using mobile technology.

Mobile Learning in simple terms is nothing but provision of educational and learning services through the use of mobile devices. It has recently emerged as a possible solution for providing support for academic education as well as corporate trainings in Academic institutes and business organizations alike. This support would be in terms of the various services that are possible through m-CRM, which are identified as :

1. Training and Educational services
2. Information about the activities of the institute
3. Schedules, time plans etc.
4. Latest Notifications
5. Admissions and fee information and results
6. Examination schedules and results
7. Student records

These could be provided through SMS alerts, messages, and Discussion forums etc. accessible through mobile devices. These activities when done through traditional methods of web portals,

The successful adoption of mobile learning as m-CRM service in Education will depend upon the user's requirements, behavioral pattern and ability to adapt to the technology. To understand the same a pilot survey was carried out.

The pilot survey targeting the Education sector was conducted with random samples selected from institutes in and around Noida and NCR region comprising of Government, Autonomous and private educational institutions such as Amity, CDAC, IGNOU, and few engineering colleges.

A structured questionnaire was prepared with the main aim of assessing the benefits and adoption of mobile Learning as a m-CRM service in Education sector. The questionnaire was administered to over 100 people on pilot basis which majorly consisted of collection of students, and faculty from the above educational institutes.

The main purpose of the survey was to assess the user awareness, perception about e-learning, mobile learning, their primary reason to such tools, activities preferred in m-learning and the preferences over the existing traditional learning tools vis-a-vis the M-learning etc. The structured questionnaire was administered for the purpose of conducting the above exercise and the survey findings have been analyzed and tabulated.

RESULTS & FINDINGS

The results of the survey are as given below:

1. Preferred Type of Learning

The survey revealed more than 29% of the respondents preferring e-learning and 16% preferred m-learning and 39% preferred combination traditional, e-learning and m-learning which reveals that the education sector is in the transition phase and the future will be technology driven.

TABLE 1: PREFERRED TYPE OF LEARNING

Preferred Type of Learning	% of respondents
Traditional i.e classroom based	15.79
e-Learning	28.95
Mobile Learning or m-Learning	15.79
Combination of above	39.47

2. Usage of mobile Internet

More than 85% of the respondents use mobile on a regular basis, the respondents mobile usage levels are high. The challenge is of converting the above usage for the learning purposes through the use of cost-effective and user-friendly technologies.

TABLE 2: USAGE OF MOBILE INTERNET

Yes	No
84.4%	15.6%

3. Frequency of mobile Internet usage

The penetration of mobile and high usage is reflected by more than 2/3rds of the respondents use the mobile internet services on a daily basis which should help the planners to give a hint that acceptability of mobile as a learning tools would be easier option as it finds a day –to–day usage and occupies a vital role and the need to evolve converting the mobile from a communication tool to education tool.

TABLE 3: FREQUENCY OF MOBILE INTERNET USAGE

Using mobile Internet	% of respondents
Daily	65.63
Weekly	12.50
Monthly	6.25
Tried couple of times	9.38
Never used	6.25

4. Willingness to use mobile Learning services

More than 88% of the respondents were ready to adopt and use m-learning services for their learning purposes which reveals absence of any mind block for from traditional learning methods to the technology driven learning tools.

TABLE 4: WILLINGNESS FOR M-LEARNING

Yes	No
87.5%	12.5%

5. Adoption of Mobile Learning by every academic institute

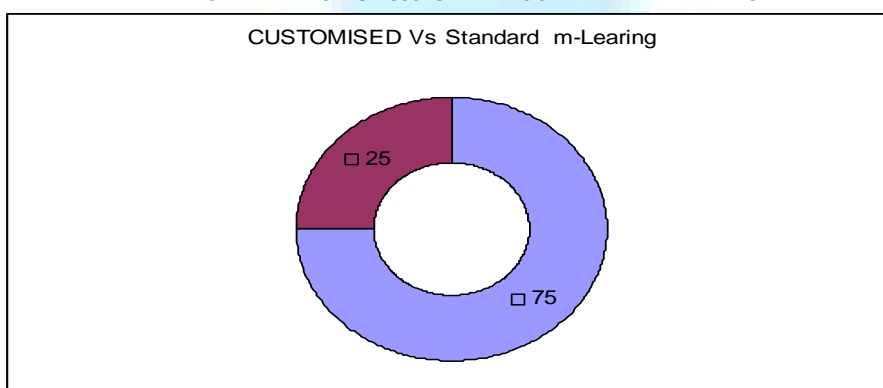
To a pointed question regarding introducing the m-learning in the academic institution 75% of the respondents agreed for immediate adoption while 25% did not agree for the same.

TABLE 5: ADOPTION OF m-LEARNING

Yes	No
75.0 %	25.0%

6. Preference for Customized Learning services to students

TABLE 6: PREFERENCE FOR CUSTOMIZED VS STANDARD M-LEARNING



75% of the respondents wanted a customized m-learning based on the learners requirements while 25% of the respondents preferred a standard m-learning tools.

7. Expected utility of m-learning tools

TABLE 7: EXPECTED UTILITY OF m-LEARNING TOOLS

Benefit of Learning through mobile	% of respondents
Send & Receive prompt response to queries	42.86
Just in time Learning support	14.29
On the move educational service	8.57
All of above	34.29

More than 43% of the respondents expected that m-learning should not only provide learning but also address the queries and other issues while 14% of the respondents viewed it as a just in time learning tool and 9% viewed it as learning tool on the move while 34% looked it as combination all.

8. Preferred Contents of learning through mobile

The preferred contents varied from glossary & definitions accounting for 44% while academic news& announcements for 28% class schedules exam schedules for 16%.

TABLE 8: PREFERRED MOBILE CONTENTS

Preferred contents mobile	% of respondents
Teacher notes	12.00
Supporting Learning content like glossary, definitions etc.	44.00
Academic news & announcements	28.00
Schedules like class schedule, exam schedule etc.	16.00

9. m-learning as anytime learning tool

More than 97% of the respondents viewed it as anytime learning tool while 3 viewed it otherwise.

TABLE 9: M-LEARNING AS ANYTIME LEARNING TOOL

Yes	No
96.9 %	3.1%

1. Preferred price for providing mobile Learning

TABLE 10: PREFERRED PRICE FOR MOBILE LEARNING

Price of mobile learning	% of respondents
At slightly higher prices than current	21.21
Same price	18.18
Low price	36.36
Flexible paying schemes	24.24

Thus, the above survey results draw the conclusion that

- Around 75% on average were preferring mobile learning as well as combined learning
- 80-90% of the respondents have agreed that m-Learning as a m-CRM tool will enhance provision and access of various types of educational services.

Analyzing the survey results, it has been found that m-CRM definitely enhances the effectiveness of CRM usage. The deployment and sharing of educational activities as indicated above when done through traditional methods of web portals, or online support, depend on the availability of such access facility at the customer end as well. Whereas mobile devices are available with almost all people and with cost of these devices decreasing with each day. the business and training needs are improved for the organizations at the same time achieving highest possible customer satisfaction.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The survey results and other research findings to some extent definitely prove that mobile CRM can be used for effectively enhancing overall CRM based educational services, which can get a big boost through mobile Learning and other training support services.

Still, the study has the limitations of collecting data from minimum sources only and that too from secondary informants. Future research need to include multiple primary informants for gaining confidence in the research findings. Further the questionnaire needs to be redesigned for the final survey so as to include relevant questions for drawing accurate inferences. Thus, the study in future is proposed to be done with a final survey encompassing bigger sample size in the Education sector for establishing and arriving at a factual conclusion of the above.

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