Mobile Application for Customer Satisfaction (CS), Repurchase Intention (RPI)

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Abstract: Customer retention is based on the motive of attracting customers for future repurchasing intentions, which is facilitated by a continuous approach of greater returns and effective, long-lasting relationship benefits. Two of the most crucial sections in business are Repurchase Intention (RPI) and Customer Satisfaction (CS). The established link between the quality of a product and customer service are crucial factors for measuring efficiency and success. The motive behind the constant practice of offering quality products and services is for attracting future repurchase and customer retention. This study was performed under the power and electrical segment focussed at UPS (Uninterrupted Power Supply) in the country, Australia. In the study, the development of a mobile application, which is compatible with iPhone and Android will enable the understanding and knowledge of the customers regarding the different forms of UPS during the purchase decision. The study aimed at the identification of Customer Satisfaction by stressing on the offered service and product quality and customer retention for Repurchase Intention.

1 INTRODUCTION

Due to the availability of convenience of mobile phones for users with respect to calling and emailing, the opportunity and flexibility of operating electronic businesses have become easier. The growth and rise of the Web Application are accelerated by developing electronic commerce (Palmer, 1997). It is being anticipated for the future that mobile commerce will be considered as one of the key motivating force or factors in the rise of Mobile Application. The intersection point of the communication has been considered as the mobile application. The main feature of technology is that it enables the conception of 'anytime and anywhere' that demonstrates the accessibility for personal and professional communication. There are numerous features in the medium of wireless technology and mobile devices that stimulates customer relationships. The features include:

- Tracking the customers' data in all across media
- Customizing the services and content
- Offers quality services and content during the time of need
- Offers quality content associating involving features (Deans, 2004)

The procedures involved in a business for interacting and connecting with the target customer in order to stimulate sales and satisfy customers refer to as Customer Relationship Management. Mostly, company possesses a long-term and strategic perspective regarding Customer Relationship Management. The businesses utilize the existent past customer data for the purpose of maintaining sales, improvement and retention of customers (Hassan, 2015).

The application of customer service is very crucial for an organization as it enhances the opportunities for profitable opportunities, acquires competitive advantages and improves product quality of businesses as well as stimulates higher revenue and sales (Goffin and Price, 1996). In accordance with (Calif, 1987), the purpose of improved customer satisfaction, better accessibility in the market and high profitability, businesses prefer to incorporate quality customer service.

Organizations are adopting the applicability of quality customer service in the association of quality services and products for the goal of ensuring competitive advantage amongst the competitors (Sattari et al.,

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2015). According to (Ahmad et al., 2010) , there are numerous researched findings, which demonstrate a definite link between Repurchase Intention and Quality Retention amongst customers as well as customer satisfaction and service quality also holds a positive relationship.

This research study was conducted for an Australian company, Uninterrupted Power Supply, under the power and electric unit. The paper is categorized into seven segments, including the section of introducing the topic followed by an extensive focus on literature review. The research paper will also stress upon a proposal for stimulating customer repurchasing intention strategic model and customer satisfaction. The paper will include the discussion the framing of a mobile application with the next phase to design the UPS calculator. In this paper, a case study assessment will also be covered. The research paper will be concluded by presenting a summary of the findings and proposed actions.

2 LITERATURE REVIEW

There has been a number of research studies, which aims at different business organizations concentrating on the employee empowerment in spite of stressing on customers (Guha et al., 2018). This practice has been witnessed in spite of the fact that customers are one of the major contributors of a business and to the value of sales. Nevertheless, this strategy is not lead to undermining customers. The studies have been witnessed without the concentration on customer empowerment through the incorporation of knowledge. Mostly, the studies found under the theme of organizational practices for optimum success does not practice the use of customer data for the purpose of offering creating sales and stimulating utility. On the other hand, there are some research papers which stresses on the power growing amongst the customers, as with the increasing application of technological impact and competition, the line dividing customers and an organization has been blurred (Guha et al., 2018). For examples, the creative contribution and accountability of businesses have been presumed by the users, causing the rise of user-generated content. This phenomenon is believed to be existent in various forms. For examples, memes are created by users for comedy purposes. With the increasing exposure and accessibility for users, organizations realize the involvement of users in creative and critical tasks.

According to (Kim et al., 2003), concentrating on customer data and synching the knowledge of the consumers with target services, product offerings, customer values and marketing program to customer satisfaction and loyalty is very crucial (as reflected in Figure. 1). The model suggested by (Kim et al., 2003), improving customer knowledge is considered to be one of the major factors. With the growing realm of development and learning amongst organizations, businesses are thriving towards educating the internal stakeholders and workforce (Inc, 2018). For facilitating these strategies, the key target for the organizations is its customers. Some of the instances lie the organizations Apple and Werner have been performing training and development programs concentrated towards the customer (2010, 2010). Nevertheless, in a research study performed by the Aberdeen Group during 2010, where the sample selected for the study was 400 deduced that more than fifty percent of the organizations are involved in the practice of training customers. Therefore, the study indicated the majority of the organizations are concentrating on the features and applicability of CRM, which incorporates customer training.

The techniques for training internal and external stakeholders are different but involved intersecting aims and objectives. Mostly the aims are concentrated on stimulating revenue, lowering costs, facilitating brand awareness and dependency on the help desks. One of the prominent instances of customer empowerment, where the customers are empowered with every phase of the knowledge building process is Apple Inc. For example, an Apple customer pays 99 dollars for one-to-one program and receives the accessibility of a tutor, who can assist with the setting up of Mac including software synching with the storage unit iCloud (Inc, 2018).

On the other hand, Werner has free online training programs for its customers. Werner's idea is frequently used by most organizations, mostly as a way of familiarizing customers with complex products. Moreover, the research studies demonstrate different needs for incorporating training programs for the customers, but every need can be correlated with the stimulating sales, offering control amongst the customers for dedicated processes and building relationships. (Inc, 2018). With the increasing competition in the market, the organizations are constantly struggling to maintain their position and fears the constant sense of losing customers. In accordance with this, organizations must adopt various activities and practices that lead to the state of empowered customers with the intention of customer satisfaction and repurchase intention. For example, the main concentration should be concentrated on appropriate content. The goal and processes of the businesses should be focussed on audience-related practices (Hassan, 2015).

For example, each process and system of a business must be categorized into various steps if the motive of the program is assisting customers with the linked complexities of a specific system. Nevertheless, it is very crucial for customers to collect and capture customer data. With the exception of the direct connection with the customers, organizations still possess various opportunities and spectrum for receiving customer knowledge.

These evidences relate to the concept of the IoT (Internet of Things). With the implication of the IoT, the extraction of customer data by the organizations becomes very easier by the interlinked platforms like; purchase history, websites, mobile phones and social media (Foss et al., 2008). With the recognition of market value, the extraction of information is becoming very challenging and costly. In the due course time, the market has experienced a range of entities that are involving operations in data extraction, data synthesis and selling data. Although the businesses are not dependent on such entities, organizations also involve in accessing data through the existent entities. Therefore, the understanding of customers is very crucial for organizations (Foss et al., 2008).

Moreover, data customization is very crucial for retaining customer (Hassan, 2015). For an overall effective method, humanizing the training experience is very crucial, which should restrict the presence of jargon and technical terms. There are few organizations, which has been a latecomer into the system of the street and informal approach with respect to content offering and language.

Moreover, business thriving at the optimization of training outcomes is engaged in offering training programs immediately. The main motive is to offer content efficiently so that the customers can be accommodated with the required information whenever required. The businesses are also involved in directing the customer behaviour towards the content post the purchasing decision.

Keeping content direct and short is also one of the strategic approaches for optimizing the learning process (Banin et al., 2016). The rationale behind this approach is that the customers should be accommodated with the data required by the customers as per their own schedule and need (Banin et al., 2016). The content should be designed with the aim of demonstrating the critical features of products, which needs explanation due to the mild or lower attention span of human beings.

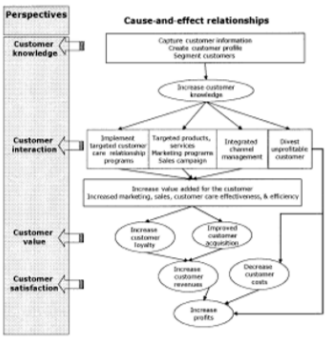

Figure 1: CRM Evaluation Model

The organizational landscape started transforming with the 21^{st} century (Hassan, 2015). Therefore, the organizations must invest time and efforts in discovering ways of ensuring strong customer relationships and lowering costs for the target customers.

Customer empowerment by offering knowledge should be considered as one of the crucial tactics for improving a strong relationship. These tactics enhance the satisfaction level of the customers as well as ensures purchase intention and profitability. With the emerging competition, customers are becoming the key determinant in deciding the position and generation of sales in the market, leading to the significance of customer empowerment.

According to (Henkel et al., 2006), the study demonstrated that the level of customer satisfaction in a telecommunication organization determines the intentions, future purchase and usage rate. In accordance with (Cronin Jr and Taylor, 1992), the study reflected the customers' intention of being associated with a specific organization in the near future is interlinked with the service, overall satisfaction rate and service quality that is being offered by the organizations. According to (Chau and Kao, 2009), the study reflected that customer satisfaction and value associated with a product or service is directly linked with each and every element of the service quality.

3 PROPOSED MODEL

The model proposed for the aim of the research, which is to ensure retention and customer satisfaction can be experienced in Figure 2. The model consists of the strategies of repurchase intention related to the concept of CRM evaluation model, demonstrated in Figure 1.

Figure 2: Proposed model for retention purchase and customer satisfaction strategies

The study extensively examines and reviews existent literature with the practice of constructing a relationship with customer intention. The development of the strategies under the proposed model regarding Customer Repurchase Intention (RPI) and Customer Satisfaction (CS) was based upon a pilot research study focussing on customer, who uses the mobile application.

The link between customer retention and relationship management is being instituted in the proposed model. In the proposed model, a link was being established within customer satisfaction, costs, product quality and service feature for demonstrating interlink between various variables. Moreover, the model focussed on discovering the dependent variable regarding customer repurchase intention for the purpose of stressing on the probability of attracting target customers for repurchase.

Few of the critical forces influencing the aspects of customer retention, repurchase intention and customer satisfaction are costs, service, quality and product. In this research study, numerous variables have been considered, including customer satisfaction and customers' experience for a product as well as the variables like factors of marketing mix like customer intention, product, price and forces assessing repurchase intention and customer retention.

Further, the research study will proceed with the explanation of Mobile Application on the basis of the proposed model and with the motive of compatibility in both iOS and Android application.

4 DESIGNING OF MOBILE APP

The design of the proposed Mobile Application framework (Figure. 3) is based upon the proposed model in the research in the association of the strategies of retention purchase and customer satisfaction. The applicability of the mobile application needs to compatible with iOS and Android operating system. The design will involve the mobile application framework, significant design principles, a system classification, development lifecycle, the development lifecycle and the implementation of the system.

4.1 Mobile Application Framework for Developing Repurchase Intention and Customer Satisfaction

The mobile application framework can be characterized in two separate sections, where these sections are considered to be the most critical components for framing the application framework and analysing the state of repurchase intention and customer satisfaction. The main motive was that the easy accessibility and understanding of the customers with different categories by simply downloading the App from the official company website, which involved Power Supplies, Cabinets and UPS with technical documents. Customer can easily download the Mobile App from the company website that includes categories of UPS, Power Supplies, Racks and Cabinets along with the technical documents.

On the basis of the preliminary findings, one of the most significant aspects for ensuring repurchase intention and customer satisfaction are 24/7 technical and online after-sales service support for 24/7.

(a) Technical Section: The technical support of the mobile app will be dedicated towards the queries of customers regarding product prices, types, product and product classifications. The mobile app also involves a customer feedback section. The mobile application is the easy option for understanding, selecting and purchasing various categories including, ampere, voltage, UPS systems and power. The mobile app will be mutually benefitted as company's account department, and sales manager of an organization will be able to track and assess sales data and preference of items by Google analytics for future purchasing and marketing purposes.

(b) Social Media Section: Social media platforms can positively contribute to the retailers by accessing the measurement of results. The mobile application is also comprised of the various social media links for connecting discussion, enable FAQs and extract customer reviews. The sites included in the app are LinkedIn, Facebook and Twitter. The feedback of the customers is considered most significant for the mobile app framework with the motive of assessing repurchase intention and customer satisfaction. The social media division in the app will offer the opportunity of extracting market research data, helps in estab-

lishing customer services relationship, often termed as relationship networks, brand awareness and lead generation by assisting the company and customers for connecting through an online platform and acts as a medium for sharing ideas and data.

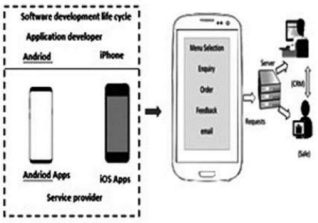

Figure 3: Mobile App framework for repurchase intention and customer satisfaction

In the office, the server will be connected to (a) the CRM (Customer Relationship Management), which handles emails and customer enquiries (b) a link with sales support like bill, delivery, suppliers, orders, sales and maintenance of customer account.

The 24/7 service of the server will be dedicated for the functions like FAQs, bill payments, enquiries.

4.2 Key Design Principles

The main goal of the Mobile Application is to offer easy, natural and fast services and knowledge. An efficient Mobile Application can demonstrate desirable features. The application offers data based on wants and needs for various situations. In accordance with (Singhal, 2001), seven principles related to goal-driven mobile application services are mentioned below:

- Ease in the usability of services
- Information and knowledge for nontechnical users
- Relevant data regarding technical people and users
- Terminologies for identification purposes by the user
- FAQs for users' convenience
- Compatibility in both Android and iOS.
- Available maps, location of stores
- These principles can be applied for the development of Mobile Application regarding product calculations in accordance with affordable prices and power factor.

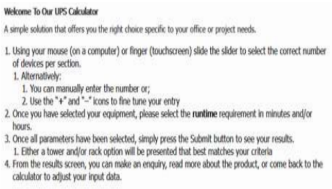

Figure 4: UPS Calculator Menu

4.2.1 System Implementation

The development of the application is considered critical for the developers. The investigation of the mobile phone industry was carried out for analysing various major phone segment, iOS (Apple Phone) and Android (Smart Phone). The investigation was categorized into two sections:

1. Android Apps
   The IDE (Integrated Development Environment) was used under Microsoft Visual in regards to android mobile phones. A code refactoring and IntelliSense (code completion element) are used under are included in this system. The function of the integrated debugger operates as both machinelevel debugger and source-level debugger. Almost 36 various programming languages and enabling the debugger and code editor for the purpose of supporting the programming languages and language-based services are assisted by the visual studio. The in-built languages contain Visual Basic Net, XML, JavaScript, TypeScript, CSS, HTML, XSLT, C++, CLI/C++
2. iOS Apps
   Apple devices use the operating system named iOS for the iPads and iPhones, and it is used for interactions from the Apple devices. An editor named CodeRunner is lightweight and has the ability to operate with multiple languages with the stage of execution, restricting the installation of multiple locales. One of the main qualities of the CodeRunner is that it supports multiple languages including Java, AppleScript, C++, C, JavaScript (Node.js), Objective-C, PHP, Perl, Ruby, Shell and Python.

5 UPS CALCULATOR

The UPS Calculator was developed, accommodating both iOS and Android Mobile Application. UPS tool is considered like an interactive device where customers can install and download the system on mobile phones. Main purpose of the UPS Calculator is

assisting want and needs of the customers for purchasing the UPS, which involves input voltage, prices and output voltage compatible for an electrical device.

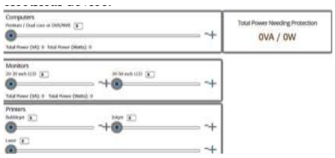

Figure 5: UPS calculator for printer and computer for calculating the output voltage, ampere

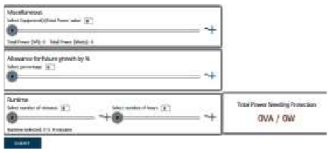

Figure 6: Power calculator regarding the runtime of the UPS duration of the power

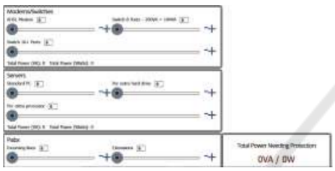

Figure 7: UPS calculator for the network server output voltage, duration of power and amp

The need for UPS client server network can be accommodated by adding server machines, numbers on computer, monitors, scanners and printers as well as the addition of numbers on for the run times. The calculator also offers different forms of UPS involving various prices and models to choose from. The computer network for the technical information of UPS is reflected in the figures, 4.a, 4.b, 4.c and 4.d.

6 CASE STUDY AND ANALYSIS

The case study will demonstrate the pilot study and preliminary study regarding repurchase intention and customer satisfaction. This section was built based on a brief overview of the case with the intention of keeping space for further explorations. The research study is reliant upon the aspect of customer preferences for understanding the suitability of the UPS on the basis of input variables through the use of a UPS Calculator to determine the repurchase intention. The creation of UPS machines is designed by the help of a transnational entity, named Sydney UPS Distributors Pty Ltd. The mobile app was designed for being compatible by both iOS and Android operating systems. The motive behind the application was to acquire access for developing knowledge and understanding of the customer by empowering them regarding the variables and technicalities. The functionality of the UPS can have different reflect various back-up times with the calculations, where the discovery of the suitable UPS must be assessed for the vast applicability in iOS. The application developed technical knowledge and capabilities for the customers with affordable prices. The app lets the customers feed the required variables with the help of UPS Calculator. For example, as per the need for backup, a user can feed the required number of amperes, voltages and devices with the specified run-time.

Therefore, the result of designing the application and system was to enable the easy access of the customers with the knowledge about sales and technical decisions from a wide range of devices to select from, with the consideration of the process of power conversions under the UPSs and the functioning of UPS like the interactive state of the UPSs on 1/3 phase, double conversion UPSs and UPSs 3/3 phase.

The pilot study received customer feedbacks, which contributed regarding the understanding of customers' preferences and usability for the mobile app in the calculation for UPS. Numerous factors were discovered during the study, like the descriptions allowed their rational buying decision efficiently. Earlier, an executive had to understand the offerings of electric wholesalers and UPS calculations with the price set-up.

The old process was a very complex purchasing process and used to absorb a lot of time. With the proposed model, the customers experienced an easier and efficient purchasing order process.

Moreover, the mobile application helped them experience empowerment for making a purchase decision as they were deciding with proper knowledge by holding a device in their palm. This enabled the ease of making a personal decision without being dependent on the third parties as the app allows easy feeding of data with the preferred variables and technology. The customers reported that the system offered flexibility, credibility and transparency. The application has customized the process of selecting services and simplification of calculation through the UPS calculator as the usage does not need any technical knowledge. The study also reflected an efficient result of conducting training programs for the customers by face-to-face medium, through salesman and by YouTube Application.

The application contributed to the significant result of increasing sales by 25 percent. This result was also the reflection of direct training and marketing approach by the salesman of the mobile app with

YouTube and direct training programs. The increasing awareness and easy usability enabled the improvement of sales, thereby demanding the evolution of the mobile app for different products.

Around 25 users of the app with the UPS calculator were selected, who were using iOS or Android compatible phone. A question asked to the customers was 'Will they use the mobile app to buy UPS again?'. In response to this question, around 15 were in favour of the convenience because of the factors involving ease of usage, easy calculator and time-saving. Six of the selected users said 'Maybe', because of the uncertainty in the projects related to UPS. Four people denied the repeated usage because of being rational and fearful for the confidentiality of the information to the third parties. On the basis of the pilot study, around sixty percent of the selected users were satisfied with the purchase assistance and UPS calculator, twenty-four percent were satisfied but were uncertain for the repeated purchase, and sixteen percent of the selected users were not satisfied due to the factor of familiarity with the modern technological implications and favoured traditional methods.

7 CONCLUSIONS

Therefore, other organizations may involve themselves in incorporating such designs of the mobile application for customers for offering a better experience. The aim should not only be focussed on the sales targets but should also be directed towards the understanding of customers' preferences and ease of their navigation. The content should be focussed on the customers' understandability.

Thus, organizations should invest in easy, brief and simple content like the UPS distributors Pty Ltd. UPS calculator in Sydney. Brief content focuses on precisions and restricts irrelevancy. For ensuring an effective emotional experience of the customers, organizations should also focus on humanizing the overall experience of users. Incorporating street language or humour may help with the humanization of experiences for customers.

The wants, attitudes and needs of the customers can be efficiently understood by framing and synthesizing the information. Relying on the direct demand of the customers regarding product information training should be avoided. The organization should understand the need and organize the training programs accordingly for easy and timely accessibility of the customers (potential or existent). Customers will feel connected and empowered if they are treated as the in-charge for a process enabling their active involvement. The aim of the training approach aims at satisfying the innate need of becoming the in-charge by communicating the technicalities of the processes and variables.

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