eCRM Features in Telecommunication Websites

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Abstract—Electronic Commerce (ecommerce) is very important nowadays since its introduction during the inception of the Internet. Organizations had realized the advantages of using the Internet for making online transactions especially for cost reduction and also improved customers’ satisfaction. The electronic customer relationship management (eCRM) features are the main factors that contribute to the success of any ecommerce web site. It is essential to identify the common eCRM features in service industry, and the features, which could be implemented in the Telecommunication web sites. Thus, by comparing Malaysian Telecommunication and Asia region web site and also with other regions had revealed important pattern of eCRM features used by these web sites. Almost 77 eCRM features were identified in this research, and total numbers of 103 telecommunication companies web sites were observed to ensure the validity and accuracy of the features. The identification of the eCRM features is believed to help Telecommunication companies to include important features and exclude unnecessary features from their websites.

Keywords—Electronic commerce, Electronic customer relationship management (eCRM), eCRM features, Telecommunication web sites.

I. INTRODUCTION

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Telecommunication industry in Malaysia has grown rapidly ever since its development in 1946. In 1999, the Government established the Commission as the regulatory body that responsible to manage the telecommunications and multimedia industry under the direction of the Minister. The industry has transformed from a monopolistic regime with Telekom Malaysia’s monopoly over mobile, fixed line and international telephony services to the current more transparent; more loosen structure that had increased the competition. Because of this rapid growth and also the introduction of equal access policy by Malaysian Government, the quality of telecommunication services had been improved and as a result of this enhanced operating efficiency, the price had also been reduced [6].

Web site plays an important role in telecommunication industry. Consumer can easily access information on products and services, doing transaction online and doing other activities as well. Because the transaction occurred digitally, there is a need for Electronic Customer Relationship Management (eCRM). This can be used to integrate business processes and activities that related to sales, marketing and services, as well as enhancing communication and connection with the customers. Moreover, this system helps the companies to gain profits, increase customer loyalty and also compete with others. Thus, the telecommunication companies ought to restructuring their current electronic services and seeking for the eCRM features to improve their web site.

Therefore, the objective of this paper is to identify the eCRM features that contribute to the representation of the appropriate telecommunication websites.

II. LITERATURE REVIEW

The advantages of ecommerce had driven large organization to involve in ecommerce and create their own web site in order to cut costs, free up time for busy executives and managers and bottom line as well [12]. Ecommerce is also one of the ways organization could shorten their time in marketing their products and services. Thus, ecommerce had benefited consumers as they are able to make transaction anywhere, anytime and pay at lowest price for the products.

According to [7] the effectiveness of eCRM is depending on the channel integration, ease of integration, trust, customer service quality and other key effectiveness that was identified in previous research. This key effectiveness is closely related with the eCRM features that will gain customer satisfaction, loyalty and retention. [11] mentioned that electronic service (e-service) is the activities that focus on customers’ requirements, including all pre-transaction, transaction, post-transaction activities that concerned with delivering products or services within a service level agreement. He added that there are 20 determinants with three major groups of e-services operations were identified. The first group which is service marketing consists of trusted service, internal communication, external communication, price and return process determinants. The second group is service delivery and the determinants involved are real time assistance by knowledgeable customer service representative (CSR), fulfillment and availability. Finally, the third group is service design and the determinants involved are responsiveness, site effectiveness and functionality, up to date
information, supply chain integration, systems integration, personalization, customization, navigability, security, interactivity, and service recovery.

Based on [4] service quality is where the service must satisfy customers' needs and requirements thus it should match to customers' expectations. [9] added that quality or service can be achieved by using four lessons which are fitness for purpose, conformance to specification, process control and quality audit or document control. Whereas, [3] stated that the central concern for service management academics and practitioners of this service quality is towards the identification of the determinants of service quality itself. Therefore, it is necessary to identify the eCRM features that could be used in Telecommunication industries in Malaysia and global. The identification of the most used features could also provide benefits to the industry in retaining their potential and current customers.

III. RESEARCH METHODOLOGY

This research focusing on the eCRM features applied in Telecommunication Company’s websites. There are 77 features of eCRM, where 42 of them were introduced by [2] and [5]. Where as, another 35 features was obtained from observing 10 websites.

The another 35 features of eCRM been identified were online feedback forms, activities, advertisements, announcement, annual report, best practices, blogs, color, discussion board, download tools, eBrochure, electronic newsletter/newsroom, financial calculator, gallery, glossary, images, instruction information/user guide, language, mobile edition, multimedia, number of visitors, online booking, online directory, online games, online payment, personalization, plan & schedule, posted disclaimer/term and conditions, promotions, rewards, roaming agreements, route map, RSS feed, security-sign, 3D Model, and toolbar featuring other websites.

Hundred and three (103) websites were observed and categorized into six regions. There are Europe has 41 website, followed by Asia (23), America (22), Malaysia (8) and Oceania (7).

IV. FINDINGS AND RESULTS

Demographic is concern on the website involved in the research, which from telecommunication companies in specific. However, only information related to the telecommunication company’s websites were discussed. There are 103 websites from various regions such as Europe, Asia, America, Oceania and Africa were observed, where as each region is differs between each other.
From overall eCRM features (Table 1), postal address (89%) has the highest percentage, followed by email (88%) and company profile (87%). These highest features are the common company information to ensure their business running well and getting a good response from their clients. The other features that are getting highest score are product information online, fax and images (85%), followed by posted privacy policy (83%), local search engine and posted disclaimer (80%), links (72%), color, FAQs and preview product (71%). These features are concern with the basic requirements in conducting online business transaction. The features will able to capture consumer interests in making transactions and other service.

Moreover, the features that rarely seen in the website such as call back button, member benefits, online purchasing, download tools, ease of check out, site customization, on-sale area, best practices, roaming agreements and purchase condition, security-sign and voice over IP, gift certificate purchase, ability to track order status, online directory and introduction for first time users, mailing list and gallery, request for catalogue, glossary, electronic bulletin board, and customization possibilities, spare parts and rewards, mobile edition and site tour, and personalization. The existence of advanced technologies also might reduce the importance of these remaining features such as discussion board, and chat, RSS (Really Simple Syndication) feed, toolbar featuring other websites, and eBrochure, online game, plan and schedule, financial calculator, and blogs, online booking, route map and number of visitors, and 3D model.

The most common eCRM feature observed from the websites is Postal Address with collective score of 89%. This is followed by E-mail (88%), Company Profile (87%), Product Information Online, Fax, and images (85%). Besides that, the least eCRM features applied in all websites are 3D model (1%), Route Map (2%) and Number of Visitors (2%).

For the purpose of this research comparison of eCRM features between Malaysia and other regions was made. Malaysia completely scores 100% for Email and preview product features in this survey. Email was accepted as main medium for communication while preview product is a technique to promote products and encourage users to visit the websites. Meaning, all websites in Malaysia which specialized in Telecommunication Industry provide these features in their website. To support the preview product features the following product highlight features scores 88%. Both of these features has closely related, where users will have the tendency to buy products through product highlight alerts, and they also will preview the other products that available in the website.

The other features that are slightly different are online purchasing, affinity program and security-sign, which scores 75%. In Malaysia, top up coupon, devices, gadgets, mobile phones and others are the common things available on the telecommunication websites. To ensure the transaction is secured, security-sign is one of the crucial parts. Meanwhile, the affinity program that is available could be used by members to access other available websites.

In addition, problem solving gained 63%. This result related to the higher purchasing online. Consumers intend to use online problem solving method in case of unexpected condition arise or if they dissatisfy with the products or services provided. Furthermore, Malaysia also had obtained 25% score for RSS feeds. With this feature, it will keep customers informed on the update of new products or current promotion. On-sale promotions and rewards features are higher in Malaysia. Users are interested to buy if there are sale season and gift are embedded with those products.

Instead of having highest score, Malaysian region also has some features that obtained low scores. There are Posted Privacy Policy, Posted Disclaimer, Annual Reports, Bulletin...
Board and Complaining Ability. Additionally, Malaysia also got 0% scores for other features such as Language, Best Practices, Introduction for First-time Users, Chat, Personalization, Site Tour, Financial calculator, online booking and Blogs.

Asia region has obtained about 94% in Postal Address and company profile features than other regions. Beside that, it is highest in product information online, preview products and product highlights. In term of difference score by region, Asia region had highest score for frequently asked question. Posted privacy policy and posted disclaimed features are scored lower because both features require company to describe in detail the information related to their company. Call back button is still not popular due to cost constraint. The highest score among other 11 determinants is Security determinant. It is because majority of websites are concern on security in ensuring the transaction are safe and also to retain their customers.

Incentive determinant is the lowest among 11 determinants where it shows that only few websites are giving incentives to their users or customers. The lowest score might be due to the funding need to support this feature.

The determinants can be categorized into nine pages classifications namely Home, About Us, Contact Us, Ordering, Membership, Product Info, Help and Support, Community and Related Links. For Home page, the features that are suggested to be included are Site Customization, Product Highlights, Local Search Engine, Promotions, Announcement, Language, Site Map, Advertisements, Posted Privacy Policy, Posted Disclaimer and Ease of Check Out features. These features are important to be in the home page because it shows the overall business operations for particular company. For instance, products highlight will demonstrate what the products that the company sells are. Meanwhile, through advertisement users will know the current news from the company such as job vacancy, new product launched and others.

For About Us page, there are four features that have to be included, which are Company History, Annual Reports, Store Locator and Activities. The About Us page informs the users on the existence of the company. The annual reports are able to generate understanding of the previous and current state of company business and operation. Hence, users will know the status of that company. The information regarding the store locator and activities onwards will keep users with updated information. Users will be informed with the nearest store where they can carry out their products.

For Contact Us page, the suggested features include Fax, Email, Postal Address, Complaining Ability, Online Feedback Forms, Toll Free Numbers, and Call Back Button. In this page, the basic contact information of the company should be available because it is only way users or customers make contact with the company. The website should allow users to make complaints directly or via filling up the online feedback form. Essentially, complaints from customers are the main source for company to improve and be more successful in the future.

While for Ordering page, there are only two features which are online purchasing and online payments. Online purchasing is commonly used for top up coupons, service or order products packages. Besides, most users nowadays prefer to pay online instead of making payments at the counter. The main reason is that they do not want to waste time queuing for bills payments.

For Membership page, Member benefits, Account information and Affinity Program are the suggested features. This page gives details about the benefit of being a member for particular company. In the website, the member’s account information has to be in place as well as the benefits that will be gained through their registration. Members usually have special priority compared to regular customer, where they probably can access the affinity program supported by the company websites.

For Product Info, only two features are suggested, which are Product Info Online and Preview Product. Both of these features are closely related to each other. Meaning that, once customers or users preview the products, simultaneously they can capture the information of those products. In other words, both features complement with each other.

For Help and Support page, the suggested features are User Guide, Problem Solving, Online Help, Download Tools and FAQs. These features are important because each of them play their role in helping customers. For instances, FAQs consists of a set of questions and answers that able to assist customers in understanding the common issues arise in that company. Furthermore, online help and problem solving are specifically design to respond to problem that customers faced.

For community, the features are Bulletin Board and Electronic Newsletter. Users of the web prefer to obtain information through this medium because recent and updated information are available. Finally, the Related Links where the users can click and a new window will be opened, or a new page of information required will appear. Examples of this link are link to other websites, or link to individual details.

Therefore, with the important and most common e-CRM features identified, it will enable telecommunication companies to develop a website that fulfil the consumers’ needs.

V. HELPFUL HINTS

The main objective of the research is to identify eCRM features that are suited for Telecommunication Company’s Web sites. The identification of expanded eCRM features is believed to help Telecommunication Companies to reduce costs while unnecessary features excluded from the web sites. In addition, its not only reduces features, but to show the maturity of the company in managing its business operation and customers as well. The comparisons made between regions should also be able to convey important eCRM features that could be applied in Telecommunication Company’s web site.
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