Facebook Insights for Implementing Social CRM

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Abstract

Expansion of the internet has made evolution of new know-hows such as social media technologies as Facebook, Twitter, Google + used to interact understand customers. Such interaction with businesses leaves behind a trail of information which businesses capture to understand customers to maintain a lifetime value of firms with individuals. In this study, we try to understand how Facebook insights are used to achieve customer relationship management by organizations in Facebook. Using a mixed methods research, for the purpose of understanding whether the content and posts on the Facebook pages and the websites of an organization contribute to creation of social CRM, content analysis will be done on a period of 1-3 years. Further the data of the Facebook insights will be downloaded and the patterns of the data will be explored using Dickey–Fuller test, Breusche Godfrey Serial Correlation LM Test to check serial autocorrelation, the White Test is used to test heteroskedasticity, and the JarqueeBera statistic to test normality. From the theoretical perspective, the study will provide insights of what features and trends in the contents of the Facebook page of the organization can enable to build social CRM and what new avenues can be derived from such a study. Researchers may look into organisations which have a propensity to develop long-term relationships with customers with a view to building loyalty and retention. Coupled with this is the desire to meet the needs and wants of these customers and stakeholders.

Introduction

The rise of the internet and website technologies has resulted in widespread advancement of e-businesses and online trade. The websites create a source of knowledge enabling users to browse for the necessary information and at the same time benefitting firms to acquire a huge amount of information on users' usage forcing businesses to develop efficient and effective means for analysis of web log data.

Traditional approaches to web log data focused on number of visits or hits to a specific website. Now, the websites being themselves connected to a variety of networks can be explored in a manner suitable for the user trying to understand not only the number of visits but also the demographic characteristics of the users, the time they spend on specific pages, the shares of the pages that they make in social media websites, and so on (Park, Kim, and Koh 2010). This data helps businesses to formulate strategies to respond to customers and of the website users (Plaza 2011)

Using technology is a widely implemented means for interaction with customers, clients and other stakeholders (Harrigan et. a. 2011). Website analytics can provide leveraging communication technologies to maintain the lifetime value of firms with individuals (Kumar and Reinartz 2005; Reinartz, Krafft, and Hoyer 2004). In this study, we use Facebook insights to see how organizations with social media presence enable to achieve customer relationship management that is, to cater to the needs of the customers to retain and nurture a profitable relationship.

CRM and Social Media

For the purpose of this paper, we define customer relationship management as "a comprehensive strategy and process that enables an organization to identify, acquire, retain and nurture profitable customers by building and maintaining long-term relationships with them" Sin et al (2005, p. 1266). There has been considerable

research on various aspects of customer relationship management (CRM), but the applications of social media as a tool for implementing CRM is new and under exploration. Social media technologies are Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User-Generated Content' (Kaplan and Haenlein 2010, p. 61). These technologies enable firms to engage with customers via marketing communications, go further and co-create products, services and value, and access vast amounts of data and insight on customers (Hoyer et al., 2010; van Doorn et al., 2010). There has been seen exponential growth in recent years on use of social media— there are 955 million Facebook users and over the past few years there has been an increased rise of businesses to have a Facebook page. The usage of social media among consumers have increased over recent years as now there are around 2.09 billion people who use the internet, around 3 million English articles on Wikipedia, and 20 hours of video is uploaded to YouTube every minute of every day (Shepherd 2011).

Previous researchers (e.g. Choudhury and Harrigan 2012; Jayachandran et. al. 2005) have identified two facets of CRM in social media: customer engagement and relational information processes. Customer engagement can be defined as the "behavioural manifestations that customers have towards a brand or firm focus, beyond purchase, resulting from motivational drivers" (Van Doorn et al. 2010, p. 254). The value of customer engagement is comprised of four core dimensions; customer purchasing behaviour, customer referral behaviour, customer influencer behaviour through customers' influence on other acquired customers as well as on prospects, and customer knowledge behaviour via feedback provided (Kumar et al. 2010). Working research by Harrigan and Choudhury (2012) have found how customer engagement is enabled in the organisation and particular in CRM through social media. On the other hand, the concept of relational information processes have been raised by Jayachandran et. al. (2005) in their research in 2004 in the Journal of Marketing. There are five dimensions of relational information processes: information reciprocity, information capture, information integration, information access, and information use. Information reciprocity relates to the processes that make customers to intermingle and apportion information with the firm and that enable the firm to respond to customers (Jayachandran et al. 2005). Informationcapture is derived from market orientation literature (e.g., Kohli and Jaworski 1990) and in case of social media technologies it refers to collection of tremendous amount of data, most of which is both real-time and indefinite (Hennig-Thurau et al., 2010; Konus, Verhoef, and Neslin, 2008). Information integration requires the assimilation of customer information from all interactions to develop a detailed history of customer relationships (Jayachandran et al. 2005). This leads in to information access, which implies providing the customer information in a usable and timely manner to both customer-facing employees and strategic marketing decision makers (Kaufman et. al. 2006). Lastly and linked to information access, information use refers to the actual usage of customer information within the organisation by marketers (Jayachandran et al. 2005).

Facebook as a Social Media

Facebook provides posting of content in form of stories, pictures, videos, as well events to link up with users and customers or businesses. To analyze the user log data for Facebook pages as well as websites of organizations, Facebook itself has developed its Application Programme Interface (API) namely, the Facebook insights. Facebook insights enable to provide a better understanding of what users find interesting on a websites and hence let the firms capitalize on that content. Facebook insights can be integrated to the websites of the organization through social plugins. Therefore, likes and comments of users can be viewed in a summary form through the visual presentation of these activities in in this social media.

Facebook insight is a free tool that provides statistics on the posts of contents provided on the web pages. Further, such tool offers information on the demographic characteristics of the users, their locations, and how many times they have shared, liked and commented on content, and from what device they have accessed to the web page. Furthermore, it provides statistics on what contents are being talked about, how many people have shared it, and the number of impressions that have been made in respect to the content. Such data if analyzed can provide immense possibilities for the firm to cater to the needs of the businesses. Hence, it can lead to achieving social CRM and thereby build customer engagement and relationship information processes between the stakeholders (clients of the business in the social media and the business in large

Methodology

In this study, we would take into a university for the study which has students, staff, and external bodies including government regulatory bodies, funding bodies and donours, and alumni who are the stakeholders of the university. Since the researchers are based in University of Dhaka and due to the accessibility of data, the study will be conducted in the said university. The Facebook page of the University of Dhaka will be used to understand how an educational institution contributes to implementing CRM using social media with its stakeholders. Educational institutions in the UK contribute to £3.3 billion of the GDP as per 2010-2011 statistics. Moreover, a university Facebook provides clear evidence of CRM features and is rich in information for its users (Verhoef et. al 2010). Further, as the researchers are based in the same university, it will be beneficial for them to access the data from the marketing team.

A mixed method research will be adapted for this study. For the purpose of understanding whether the content and posts on the Facebook pages and the websites of the University contribute to creation of social CRM, content analysis will be done on a period of 1-3 years. Content analysis attempts to quantify content in terms of pre-determined categories in a systematic and replicable manner (Bryman and Bell 2011). Since the Facebook page of University of Dhaka will be explored, a semiotics approach will be used, where the deeper meaning of the contents in the page and what effect they may have on present and prospective users (Bryman and Bell, 2011). The users will be both the stakeholders and the feedback of the university on the social media website enabling the researcher to determine the presence of certain words or concepts within texts or sets of texts.

Content analysis has several advantages of which one is it can track changes over time. Moreover, it is an unobtrusive method, where participants are not taken into account (Webb et. al. 1966 in: Bell and Bryman 2011). Furthermore, it enables to gather information on social groups that are difficult to gain access to (Bryman 1974). In this study, the researchers will attempt to look into the engagement and information usage of stakeholders of the University of Dhaka. Computer aided software like TextSTAT will be used to analyse the data. The findings will provide inferences which will be discussed in the next section.

As a second stage to the analysis, the data of the Facebook insights will be downloaded. Facebook insight provides time series data. The patterns of the data will be explored along with other tests such as Dickey–Fuller test; Breusche Godfrey Serial Correlation LM Test to check serial autocorrelation, the White Test is used to test heteroskedasticity, and the JarqueeBera statistic to test normality.

Theoritical and Practical's outcomes of the Research

This research aims to have several contributions. Theoretically, it will provide insights of what features and trends in the contents of the Facebook page of the

university can enable to build social CRM and what new avenues can be derived from such a study. From the managerial point, researchers may look into organisations which have a propensity to develop long-term relationships with customers with a view to building loyalty and retention. Coupled with this is the desire to meet the needs and wants of these customers and stakeholders.

Limitations of the Study

The authors presume that the data collected would be generalizable or not. In essence the researchers would look forward to every step which will try to ensure that such limitations are ensured. Secondly, since this will be study for a universities which are higher education corporations with Charity status as Charities Act 1993, the findings of the study would differ from actual business concerns but would provide similar interpretations that can be achieved when profit making businesses deal with customers in social media.

References

Bryman, A. (1974). Sociology of Religion and Sociology of Elites. Archives de Sciences Sociales des Religions, 38, 109-121.

Bryman, A. and Bell, E. (2011). Business Research Methods, Oxford: Oxford University Press, 3rd Edition.

Choudhury, M. M., and Harrigan, P. (2012). Technology Acceptance Model and The Social CRM: A Model for Customer Engagement In: Academy of Marketing Conference, 2-4 July, 2012, Southampton, UK. ISBN: 9780854329472.

Jayachandran, S., Sharma, S., Kaufman, P. and Raman, P. (2005), "The Role of Relational Information Processes and Technology Use in Customer Relationship Management", Journal of Marketing, Vol. 69, No. 4, pp. 177-192.

Harrigan, P., Ramsey, E. and Ibbotson, P. (2011), "Critical Factors Underpinning the e-CRM Activities of SMEs", Journal of Marketing Management, Vol. 26, No. 13/14, pp. 1-27.

Harrigan and Choudhury, M. M. 2012 Social Media Technologies for CRM, Working Paper, University of Southampton .

Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., and Singh, S. S. (2010), "Consumer Cocreation in New Product Development", Journal of Service Research, Vol. 13, No. 3, pp. 283-296.

Hennig-Thurau, T., Malthouse, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A. and Skiera, B. (2010, "The Impact of New Media on Customer Relationships", Journal of Service Research, Vol. 13, No. 3, pp. 311-330.

Kaplan, A. M. and Haenlein, M. (2010), "Users of the World, Unite! The Challenges and Opportunities of Social Media", Business Horizons, Vol. 53, No. 1, pp. 59-68.

Kohli, A. and Jaworski, B.J., (1990), "Market Orientation: The Construct, Research Proposition, and Managerial Implications", Journal of Marketing, Vol. 54 (2), pp. 1-18.

Konus, Umut, Peter C. Verhoef, and Scott A. Neslin (2008), "Multichannel Shopper Segments and Their Covariates", Journal of Retailing, vol. 84 (4), pp. 398-413.

Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T. and Tillmanns, S. (2010), "Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value", Journal of Service Research, Vol. 13, No. 3, pp. 297-310.

Park, J., Kim, J., and Koh, J. Determinants of continuous usage intention in web analytics services. Electronic Commerce Research and Applications, 9, 1, 2010, 61-72.

Plaza. B. 2011. Google Analytics for Measuring Website Performance. Tourism Management, 32, 477-481.

Reinartz, W., Krafft, M. and Hoyer, W. D. (2004), "The Customer Relationship Management Process: Its Measurement and Impact on Performance", Journal of Marketing Research, vol. 41(3), pp. 293-305.

Shepherd, C. (2011), "Does social media have a place in workplace learning?" Journal of Strategic Direction, vol. 27 No. 2, pp. 3-4.

Sin, L.Y. M., Tse, A C.B., and Yim, F.H.K. (2005). CRM: conceptualization and scale development. European Journal of Marketing, Vol. 39 (11/12), pp. 1264-1290.

van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P. and Verhoef, P. C. (2010), "Customer Engagement Behavior: Theoretical Foundations and Research Directions", Journal of Service Research, vol. 13(3), pp. 253-266.

Verhoef, Peter C., Venkatesan, R., McAlister, L. Malthouse, Edward C., Krafft, M. and Ganesan, S. (2010). CRM in Data-Rich Multichannel Retailing Environments: A Review and Future Research Directions. Journal of Interactive Marketing, 24, 121–137.