



ANALYSIS OF CUSTOMER INTERACTION VIA SOCIAL MEDIA AND OTHER ONLINE PLATFORMS

Deepika Sihmar

Research Scholar, Department of Commerce, Kurukshetra University,
Kurukshetra, Haryana

Cite This Article: Deepika Sihmar, "Analysis of Customer Interaction Via Social Media and Other Online Platforms", *International Journal of Current Research and Modern Education*, Volume 4, Issue 1, Page Number 78-82, 2019.

Copy Right: © IJCRME, 2019 (All Rights Reserved). This is an Open Access Article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract:

In today's networked 21st century, Social Media has changed the environment in which business operates and has reinstated the way in which organizations communicate and engage with their stakeholders. Simultaneously, Social Media has given opportunities to customers for expressing their opinions and sharing their experiences related to a brand's product. At the outset, it is essential for businesses to know and understand how customers see their products, what they feel about their products and how customers feel entitled to a product's brand. Thinking from a customer's perspective, social media networks like Facebook, Twitter, Instagram etc. have become an integral part of their daily life; which has transformed the method in which consumers assimilate information about a product, consumers communicate with each other on product queries, consumers share their opinions about their experiences of the product used.

Key Words: Social, Media, Opportunities, Consumers

Introduction:

Social media can be defined as "A group of 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 & Haenlein, 2010). Also, social media has reformed the manner in which organizations engage their customers, markets and the society; giving another mode of communication and accessibility to huge quantum of data in social media (Kohavi et al., 2002). This data can include customer preferences, customer experiences, feelings towards products etc. which are of significant value to businesses (Koudas, 2009).

During the recent decade, a rising interest in Social Media Analytics (SMA) can be seen from researchers, industry experts and practitioners. SMA is a potential area of research that has obtained huge focus from different sectors. SMA utilizes advanced techniques to assay the patterns in social media data in order to enhance an organization's decision making process. It yields organizations with new methods to create values and acquire competitor's ascendancy. SMA enables a strategic approach while making business decisions; by giving the opportunity to analyze the insights and predictions obtained from real-time social media users. SMA has the power to enable businesses to discern how customer interaction can be done effectively on different social media platforms. SMA is done primarily by assimilating data from social networking sites and then, this data is analyzed as per the user-generated data, customer's behavior and customer's activities when they are online. (Bekmamedova & Shanks, 2014). Such data is stored and retrieved in various depositories or servers like social news websites (Digg), blogs or micro-blogs (Blogger/Twitter), social networks (LinkedIn, Facebook), review websites (Yelp), wikis (Wikipedia), media broadcasting sites (YouTube) etc. The fundamental reason for growing interest and research in SMA is the depth, swiftness and reach of social networks to share user's variety of contents.

Social media analytics aids businesses to gather and analyze information to understand and predict consumer's behavior, their gratification, consumer life-cycle, creating new markets, and building consumer loyalty. SMA is very helpful in intensifying customer engagement and business's values (Cognizant, 2014; EY, 2013; SAS, 2011). The prime use of SMA can be stated as developing customer engagement and building customer loyalty. Customer engagement can be referred as the nature of intense relationship between a customer and business's product. Customer engagement can happen in different stages of the customer life cycle like customer acquisition, customer development and customer retention. Social media platforms are able to increase the customer engagement level and benefit businesses that implement appropriate social media analytic techniques. Adding to effective management of customers and engaging them, social media makes it easier to market and publicize a brand; eliminating high costs. Although, there are finite studies in the literature exploring about the impact of social media on businesses; the different techniques of social media analytics used by businesses haven't been discussed to a great extent. So, the question addressed in this chapter is "How do organizations practice on building customer engagement and will elaborate on the benefits, drawbacks and barriers of social engage customers through social media analytic tools?" This chapter will elucidate the social media analytics.

Customer Engagement & Social Media Analytics:

Customer engagement is highly imperative for the success of a business. The buyer and seller need to be in a dyadic relationship in order to progress further by any organization. Customer engagement helps businesses to interact with their customers and influence them to become a loyal ambassador of their brand. Also, effective to big brands. Customers who use such products engage in displaying their pride by sharing it in social media and again (Carr, 2017). On an individual's perception, it is a psychological pleasure to use products that belong customer engagement establishes customer's support for a brand and makes them to buy the same product again networks (Lin & Lu, 2011; Araujo & Neijens, 2014). Customer engagement is remodeled and built again during every interaction made by a customer. This can happen when the customer makes a purchase or reads a social is referred to a set of customer behaviors that are of transactional and non-transactional nature; which promises media post about the product or obtains any exposure of the brand's products. Therefore, customer engagement future revenues, good brand image and positive publicity. The transactional nature may include loyalty of customers, their desire to purchase an item or repurchase intentions; while non-transactional nature may consist of customer's word of mouth publicity, positive blog articles, referrals etc. (Cambra-Fierro et al., 2013). It is complex for organizations to understand customers with the onset of multifarious online social networks. Customer engagement is primarily focused on customer's willingness to participate and be in touch with the organization. This will decide how committed a customer is towards the brand he/she uses. Customer interactions can take place through significant contributions customers make by comments, like, shares, subscribes etc. on online networks. Engaging a customer will go beyond the reach and will measure people's true feelings/sensations. The ability of internet and social media platforms have become a channel to provide customers with access to online content and communication (De Valck et al., 2009). Customer engagement is highly crucial for businesses because it inculcates a close relationship between the organization and the customer. Through engaging with customers in an interactive manner and on regular basis; organizations will be able to gather real-time data and understand how this data can be utilized appropriately for the growth of business. So, SMA acts an effective tool that enables the organization to build a significant relationship between customer engagement and its own performance in the market. SMA has capability to aid businesses in discerning their audience using social data (Quantzig, 2019).

Techniques of Social Media Analytics:

Social media has increased at a dynamic pace and it has become a pre-requisite to understand and analyze the ways in which people communicate their experiences. It has changed the way in which customers engage with organizations, its products and services (Kaplan & Haenlein, 2010). Social media has become a powerful tool in shaping customer's perception and buying decisions. It has taken the role of a new and low cost marketing channel that nurtures and enhances customer's knowledge of new launches and existing products. This social media not only enables businesses to speak to their customers; but also enhances the business's understanding of customer behavior and customer's preferences. Brands and businesses have recognized that generic analysis won't effectively solve unique business problems specific to different market segments. This led to the burgeoning need to develop social media analytics practices. SMA plays a key role in assimilating disseminating information in different areas of business (Stieglitz et al., 2013). It accumulates and observes data from blogs, forums, Facebook, Instagram, YouTube, Twitter etc. that consists of valuable information about customer's experiences, thoughts and perceptions. Organizations make use of this data gathered from online sources to take significant business decisions (Umar, 2014; Anjanita, 2017; Sivarajah et al., 2019). S practices enables organizations to strengthen their customer relationships by engaging customers on a real-time Wide Web (Yang et al., 2011). SMA practices have resulted in improved customer engagement, enhanced basis. SMA develops and assesses customer services, effective marketing strategies and business process improvement. Certain techniques of SMA include Sentiment Analysis, Natural Language Processing, Big Data Analysis, Data Mining, Topic Modeling, Social Network Influence Analysis etc. A brief description of these techniques are given below.

- Big Data Analysis - Big data is attributed by a huge volume and variety of data that is in motion at a high speed. It involves data storage, analysis, management and visualization of extensive and complex data sets (Russom, 2011). It comprises of using different techniques to analyze and interpret unstructured texts and unpattern data for getting contemporary insights. Big data focuses on new and effective techniques to manage data that exceed traditional and complex systems.
- Natural Language Processing - NLP is a technique that comprises analysis of words used in a language. The best example of NLP can be seen in word clouds which demonstrates the most common words used by people in their day to day life. NLP is a branch of Cognitive Science and Artificial Intelligence (AI) that aims to read, decipher, discern and sense the words spoken by humans. It is a proven method to draw insights from people by businesses.
- Sentiment Analysis - This is a sub-branch of NLP where the content is examined and analyzed by software applications. The applications identify if the words are positive, negative or neutral while being expressed by customers. For eg. When a customer types the sentence in Facebook that "I'm

delighted with the launch of your latest smartphone"; the AI software perceives it as a positive response from the customer. Similarly, with the help of AI software, businesses try to understand the emotions, feelings, sensations and experiences of customers through Sentiment Analysis. A study in 2019 conducted sentiment analysis through Twitter to understand people's perception on clothing brands like Nike and Adidas. After observing and inferring around 31,000 tweets using AI software; the researchers discovered that Adidas had more positive sentiments than Nike and over 50% of the Twitter posts had a neutral sentiment (Josh Miramant, 2019). Data Mining - Social media data mining is used to discover hidden patterns and trends from social media platforms. This is performed through mathematical computations, machine learning, statistical tools etc. Publicly available data like age, sex, race, geographic location, profession, designation, schools attended, languages known, friends you know, networks you belong, mutual contacts etc. are collected and processed. After this data is mined, the results are transferred to social media analytic softwares to infer and visualize the outcomes. Data mining techniques consist of:

- Trend Analysis: Trend analysis is a highly pivotal metric for businesses who use social listening. Businesses can examine what keywords, mentions, topics, tags on social media are trending during a point of time. Further, they will apply data mining to discern why this specific trend is happening. This can give lot of insights to business to take suitable decisions. For E.g. Simply Measured conducted a survey for mining the user's opinion on U.S Presidential Elections 2016. They mined data from social networks like Twitter, Facebook etc. and accurately predicted the results. Many traditional polls that year forecasted Hilary Clinton to be the winner; whereas the trend analysis depicted Donald Trump in a more negative sentiment than Clinton going into the Election Day (Devin Pickell, 2019). Thus, trend analysis enables businesses to view a different picture and discover hidden facts.
- Social Heat Mapping: Also called as event detection, it is a vital technique for researchers who monitor social media frequently. This method is deployed to identify where heated events took place. During early 2016, ORNL researchers mined and tried to map the social data from Twitter to identify power failures across the United States. By visualizing the images and the data, they paired it with information on the geospatial location from where it was coming from. This enabled them to visualize and identify where there were major power-cuts in real-time across the country.
- Social Spam Detection: Online networks are prone to spams and fake bots that find their way to the users. They catch the loopholes by any means and thrash the users with disgusting, monotonous messages and rubbish contents. Spam detection can be generated by excess number of followers in a very short duration of time or by repetitive tweeting / commenting / tagging etc. on specific social media posts. To reduce social spamming, Twitter took its step in reducing the number of accounts a user can follow to 400 only. Due to the ascent in powerful automations, detecting these spasms and bots takes little effort and time. With social data Topic Modeling - This technique is a powerful method to project text documents into topic space. Topic model algorithms are used to identify the keywords from social media posts and comments across different locations within a specific time period. Topic models are a class of statistical algorithms that summarizes, that identifies several topics arising from social media discussions. These models help to understand what explores, and indexes huge amounts of text documents. It comprises Latent Dirichlet Allocation approach (Dominika Sagan, 2019). Topic Models can find the invisible patterns hidden within the data without a customer's talking about; without needing any distinctively tailored datasets with predefined topics external intendance. This feature makes this method as an unsupervised machine learning method; which makes it easy to develop a model for customer problems.
- Social Influence Analysis - Social influence analysis is one of the pivotal technologies in the modern world of getting instant information. It is an essential mechanism to carry out complex analysis of social networked big data. Customer's behavior can be understood by analyzing the way in which they are influenced and the way in which they share their thoughts. This is possible by assaying the level of social influence. The goals of this method are to answer questions like "Who can be influenced, Who are vulnerable to influence, How can they be influenced, Why is a user specifically attracted to a group, Who are the influential users?" etc. (Peng et al., 2016). So, the prime notion of this method is to quantify the impact of each user and to recognize the high influencing users in social networking platforms. This will aid in understanding how ideas, experiences, emotions, information, innovations dissolve in social networks. These are certain techniques used in Social Media Analytics.

Social Media Analytics - Pros & Cons:

In order to gain an edging advantage over competitors, businesses need to monitor and assay customer-generated contents on multifarious social media networks. For this purpose, SMA enables organizations to

enhance and build their customer relationships and market intelligence. Further to the limited space available, the advantages of SMA have been briefly discussed below.

- Improved Marketing Strategies: SMA provides important insights and predictions for creating or rebuilding marketing strategies. Customer-generated content generally consists of valuable data about experiences of customers relating to products/services used. This kind of information is also visible during user reviews in Facebook, Amazon, Epinion, Yelp, Blogs etc.
- Better Customer Engagement: SMA identifies and focuses on building customer values. It intends to create a dyadic communication between the business and customer. So, when there is a two-way channel of communication, better customer engagement is highly possible in a dynamic global environment.

Conclusion:

This chapter began with the introduction of social media analytics and progressed with the notion of customer engagement. It is further elucidated about the techniques which business deploy in social media analytics for developing customer engagement. The pros and cons of social media analytics is also discussed above. Strategic use of SMA can help organizations to discern and evaluate customer's expectations, interactions, feedback and timely responses which are prerequisites for a better customer engagement. Customer engagement has gained high significance in the recent decades due to a competitive business environment. It has enabled businesses to earn a cutting edge over competitors, enhance customer loyalty, build brand images and manage operational costs. Customer engagement is a continuous process that involves frequent interactions with customers. Social media analytics enables customers to regularly interact with businesses, give timely feedbacks and clear customer queries as and when they emerge. SMA techniques helps businesses to deliver consistent and satisfactory customer experiences by implementing data driven strategies for engaging customers. SMA enables to understand what type of media and what kind of content can drive customer engagement. It also gives prediction clues about how customers will react and the future trends that will take place. This helps the marketing teams to build effective customer retention strategies, customer loyalty programs, pricing strategies and customer support activities. This ensures that SMA aligns the market strategies with customer relationship management and measures the overall strategic development of an organization. Henceforth, it is essential for businesses to observe and capture consumer data from social media networks so that customer engagement can be effectively implemented and reputation of businesses can be increased. In a nutshell, Social Media Analytic techniques should be implemented by businesses to engage customers effectively, to enhance business growth, to reduce operational costs and to gain competitive advantage.

References:

1. Anjanita (2017). How to leverage Social Media Analytics for your business? <https://www.analyticsvidhya.com/blog/2017/02/social-media-analyticsbusiness/>
2. Araujo, T., & Neijens, P (2012), "Friend me: Which factors influence top global brands participation in social network sites", *Internet Research*, 22(5), 626-640.3.
3. Bekmamedova, N., & Shanks, G. (2014). Social media analytics and business value: A theoretical framework and case study. 47th IEEE Hawaii International Conference on System Sciences, 3728-3737.
4. Cambra-Fierro, J. J., Melero-Polo, I., & Vázquez-Carrasco, R., (2013). "Customer engagement: Innovation in non-technical marketing processes", *Innovation*, 15(3), 326-336.
5. Carr, P., (2017), "Whole enterprise social media for business performance", *Phantom ex machina*. Cham: Springer25-35.
6. Cognizant, (2014). "How banks can use social media analytics to drive business advantage", Retrieved from <http://www.cognizant.com/Insights/Whitepapers/How-Banks-Can-Use-Social-Media-Analytics-To-Drive-Business-Advantage.pdf>.
7. De Valck, K., Van Bruggen, G. H., & Wierenga, B., (2009), "Virtual communities: A marketing perspective", *Decision Support Systems*, 47(3), 185-203.
8. Devin Pickell, (2019), "Social Media Data Mining How it Works and Who's Using it",
9. Dominika Sagan, (2019), "Social media and topic modeling: how to analyze posts in practice", Retrieved from <https://towardsdatascience.com/social-media-and-topic-modeling-how-to-analyze-post-s-in-practice-d84fc0c613cb>
10. Dwivedi, Y. K., Kapoor, K. K., & Chen, H. (2015). Social media marketing and advertising. *The Marketing Review*, 15(3), 289-309.
11. EY, RAI, (2013), "Pulse of Indian Retail Market: A survey of India Retail CFOs", Retrieved from https://www.rai.net.in/EY_RAI_Pulse_of_Indian_retail_market_Final.pdf.
12. Josh Miramant, (2019), "Six steps to get insights from social media with NLP"
13. Sentiment%20analysis%20and%20natural%20language.you%20can%20make%20decisions%20faster
14. Kaplan, A.M., and Haenlein, M. (2010). "Users of the World, Unite! The Challenges and Opportunities of Social Media," *Business Horizons*, 53(1), 59-68.

15. Kohavi, R., Rothleder, N., and Simoudis, E., (2002). "Emerging Trends in Business Analytics," *Communications of the ACM*, 45(8), 45-48.
16. Koudas, R., (2009), "Social Media Meets Business Intelligence". Retrieved from http://www.sysomos.com/docs/CMA2009_Sysomos.pdf.
17. Lin, K. Y., & Lu, H. P., (2011), "Intention to continue using Facebook fan pages from the perspective of social capital theory", *Cyber Psychology, Behavior and Social Networking*, 14(10), 565-570.
18. Peng, S., Wang, G., & Xie, D. (2016). Social influence analysis in social networking big data: Opportunities and challenges. *IEEE network*, 31(1), 11-17.
19. Quantzig, (2019), "Social media analytics: Boosting customer engagement and marketing performance", Retrieved from <https://www.businesswire.com/news/home/20190228005704/en/Social-Media-Analytics-Boosting-Customer-Engagement-Marketing>.
20. Russom, P., (2011), "Big Data Analytics," TDWI Best Practices Report.
21. SAS, (2011), "Improving revenue and customer engagement with social media analytics". Retrieved from <http://beta.content4demand.com/wp-content/uploads/2012/12/Improving-Renueue-And-Customer-Engagement-with-Social-Media-Analytics-WPSAS.pdf>.
22. Shiau, W., Dwivedi, Y., & Yang, H. (2017). Co-citation and cluster analyses of extant literature on social networks. *International Journal of Information Management*, 37(5), 390-399
23. Shiau, W.-L., Dwivedi, Y. K., & Lai, H.-H. (2018). Examining the core knowledge on Facebook. *International Journal of Information Management*, 43, 52-63.
24. Sivarajah, U., Irani, Z., Gupta, S., & Mahroof, K., (2019), "Role of big data and social media analytics for business to business sustainability: A participatory web context", *Industrial Marketing Management*
25. Stieglitz, S., Mirbabaie, M., Ross, B., & Neuberger, C., (2018), "Social media analytics-Challenges in topic discovery, data collection, and data preparation", *International Journal of Information Management*, 39, 156-168.
26. Umar, R., (2014), "Social media analytics as a business intelligence practice: Current landscape & future prospects", *Journal of Internet Social Networking and Virtual Communities*, 2014, 1-12.
27. Yang, M., Kiang, M., Ku, Y., Chiu, C., & Li, Y., (2011), "Social media analytics for radical opinion mining in hate group web forums", *Journal of Homeland Security and Emergency Management*, 8(1).