Original Paper

The Importance of Human Domain Knowledge and Business Data Analytics to Support Modern Financial Decisions

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Abstract

The purpose of this study is to identify how importance is human domain knowledge and business data analytics to support modern financial decision. Understanding whether social media narratives could provide a value-add to current customer relationship management practices could be quite valuable. Design/methodology/approach-An analysis of the literature was undertaken and based on an assessment of the literature, conceptual states and pragmatic approaches as well as existing theoretical understandings and frameworks. An explorative case study approach based on Yin's design will be utilized as a framework as well as a demographic survey to distill even further the characteristics of the sampling from a customer, management and social media user perspective. Furthermore, a customer relationship management framework which would include the adjoining of data analytics and social media narratives will be discussed in context of the research findings. This will help researchers and practitioners more readily explore the shared value framework which the study will be based and contribute to a more fulsome consideration of customer relationship management practice shifts within a technological and social media-oriented age. The contributions of this research will also help reiterate the importance of context in data management as well as the importance of the paradigmatic power shifts reflected in consumer usage of social media, product or service offerings, social consciousness and ethical practice as it relates to the influence of consumer intentions and subsequent purchasing intentions.

The purpose of this qualitative exploratory case study was to gain common understandings of how importance is human domain knowledge and business data analytics to support modern financial decision. In order to support reliable and valid research, a purposive sample of customer relations managers, business analysts who have customer relations management (CRM) roles, and customers who utilize social media for the purposes of product or service development was attained.

1. Background

For this study, I chose a qualitative research method. According to Yin (2011), qualitative case study research is exploratory and can result in discovering people's experiences and perspectives in order to have multiple understandings of an experience. In qualitative research, the researcher is part of the instrument and engages in comprehension of the phenomena which includes interpretive approaches in order to decode, explain and provide greater insight into the meaning of the phenomena of study (Patton, 2014). To reiterate, semi structured interviews were conducted with participants from across United States. This sample aligned with a qualitative research method as the study was about gaining the understandings of those sampled in order to develop more responsive and agile practices within a burgeoning social media era (Barratt, Thomas, Choi, & Li, 2011).

Comparatively, a quantitative research method was more applicable for the analysis of systemic challenges through statistical evaluation as well as relational facets between variables (Echambadi, Campbell, & Agarwal, 2012). A quantitative research method is deductive and requires hypotheses testing; however, I did not choose a quantitative method because there would be a lack of ability to extract more individual perspectives of the three groups within a social media and data analytics frame (Frels & Onwuegbuzie, 2013). Additionally, I decided not to use a mixed method design as exploring the understandings managers may have in the digitized era were more conducive to a strictly qualitative methods design.

An exploratory case study design was more beneficial with a phenomenon of study that is continuing to evolve from management perspectives and related to the problems that were identified in the research (Eshlaghy, Chitsaz, Karimian, & Charkhchi, 2011). Moreover, an exploratory case study design in relation to findings could have a richness that can support the probative and appreciative inquiry underpinnings for this research (Yin, 2011). An explorative case study design was conducive to this study as it included more than one single case, so customer relations managers, business analysts that were engaged in CRM and customers or consumers that utilize social media will each be treated as single cases (Woodside, 2010). Using single cases contributed to understanding the business context of each cohort and their professional competencies within a social media and big data frame. This design was best for this research because it afforded the researcher the ability to more comprehensively explore multiple perspectives and cases (Yin, 2011).

Other designs such as grounded theory evolved out of the systemically developed theory as the data is analyzed, which was not a part of this study (Cho & Lee, 2014). A phenomenological study related more to participants' lived experiences; an ethnographic study could be observational and cultural in nature; however, the latter was not appropriate as this study was not designed to provide the context of the phenomenon in these ways (West, 2017).

2. Research Question

What are the common understandings of how essential human domain knowledge and business data analytics are to support modern financial decisions?

3. Data Analysis

In consideration of the seven interview questions, six (86%) were intended to gain the understanding of the implications of managing related to the use of social media and customer relations management and the understanding consumers have within the context of using social media and the opportunities and constraints therein. The remaining one question (14%) was intentionally designed to elicit feedback for the competencies that may be needed to successfully engage in customer relations management within a social media environment. The responses from the interview questions were analyzed using descriptive coding to identify common themes.

4. Data Collection

The data collection process had many steps. This section includes information about how research participants met the inclusion criteria for the study and how the research population was identified, as well as the recruitment strategies and procedures for data collection and analysis. During the interviews, an interview script was used to welcome each research participant, overview the interview process, and engage in the questions and subsequent responses. Research participants were also made aware that throughout the interview they could recuse themselves if they did not want to continue with the interview.

To confirm, the member check process was shared in the informed consent document and discussed during the interview arrangement interchanges. After the interviews were concluded, member checking was completed. 15 (100%) of the research participants were sent their transcripts for the intended accuracy check or option to add content 48-hours after the interview with a four-day response time. Each of the 15 (100%) research participants agreed to the transcriptions without changes.

5. Credibility

In order to support the credibility of the research, semi structured interviews were used among the three case groups to gather the data. In addition, member-checking or inclusion validation was done to confirm the accuracy of the data as the interview data was collected. Transcriptions were completed and sent to each participant to provide an opportunity for correction or changes to their responses within a four-day period. All of the research participants confirmed that the transcriptions were accurate. Consistency was also reinforced by following the same interview protocol for each participant. Every effort was made to ensure that the environment in which the interviews were done was comfortable in terms of an honest and trusting intent. For example, a friendly rapport was fostered during the initial

communication and throughout the interview as well as, interviewees were informed that they could recuse themselves from the interview at any time if they believed they could not continue.

6. Transferability

Throughout the data collection process, the intention was to recruit participants from across United States. Accordingly, the research participants had to meet specific criteria to participate in the study, which supports in many ways the replication or extension of the study if another researcher decided to follow suit (Carcary, 2009). This aspect of transferability is important within qualitative research as the research, data collection process and consistency of interviewing are integral for a valid and reliable data collection process. The research participants locations ranged from the west coast of United States to the maritime region of the far east coast. This geographic diversity ensured that the results would show multiple perspectives and serve to eliminate the potential regionalized skewing that could occur, even with a smaller sample of research participants.

7. Significance to Practice

Based on the research, many companies have not harnessed the true power of social media for many reasons which, in the context of data analytics, can impinge on the more fulsome picture of consumer purchasing intentions (Abdullah, 2016).

8. Significance to Theory

As social media proliferates, companies are faced with realities such as the need for infrastructure changes, strategy augmentation, and communication approaches that are more dynamic (Papagiannidis & Bourlakis, 2015). The results of this study could add to the communications theory and customer relationship conceptualization that linked processes at a management and customer level and could facilitate social change (Killian & McManus, 2015).

9. Significance to Social Change

The relationship of social change included that customer relations managers could utilize the interview feedback from customers in order to understand how an organization's product and service offerings were being applied and how they could improve (Orenga & Chalmet, 2016). Customer relations managers could gain needed insight as to how best support or apply aspects of the triple bottom line in their own organizational mandate (Connelly, 2012; Abdullah, 2016). Furthermore, this study could help identify an understanding of the increasing socially conscious consumer behaviors such as choosing fair trade products or backing companies that engage in social enterprise (Dominici, 2015).

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