# Submitted for the Special Theme: 'The Big 5 Trends in ICT'

# An Examination of Social Media Practices that Improve Customer Satisfaction in the B2B Market in the ICT Sector in India

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DOI: 10.34190/EJISE.19.22.2.006

Abstract: Recent developments in Information and Communication Technology (ICT) have initiated significant transformation in the way in which B2B firms interact with existing and potential customers. These advancements have a profound impact on the marketing practices of firms. Social media is one of the most important information technology tools which have a transformative impact on business enterprises. It has dramatically influenced businesses and industries in this era. Social connectivity through this online platform has become a key to marketing in firms. Given the exponential increase in the use of social media, firms need to be present where their customers are in order to know the needs of their customers and to satisfy them. The use of social media as a component of a firms' marketing strategy is widely recognised by marketing practitioners. Also, marketers have embraced the abilities of these online platforms to assist in marketing practices in firms. However, there is limited research that explores the influence of social media usage on customer satisfaction in the B2B sector. This study seeks to fill this gap and examines the influence of social media practices adopted by the ICT firms on customer satisfaction. A web based survey was used to collect data from a sampling frame of ICT firms in India. Analysis shows that social media practices have a positive and significant influence on customer satisfaction. This research makes a distinct contribution to social media literature. It addresses the gap in literature by providing an understanding of the effective use of social media for marketing purposes by the B2B firms in the ICT sector in India. It provides empirical evidence to support that these effective social media practices improves customer satisfaction in these firms.

Keywords: Social media, B2B Marketing, Customer satisfaction, ICT

#### 1. Introduction

The rapid technological advancements in the world since the 1990s have led to the emergence of the information age in the 21st century. In this information age, the world has experienced unprecedented changes. The changes have been accelerated by the rapid developments in the scope of access to information and the speed of information exchange which is predominantly fostered through the extensive use of information and communication technologies (ICTs). These technologies have brought together countries and societies by transforming the interactions between people, governments and firms all over the world. ICT is considered a major driving force of international integration that facilitates globalisation through deeper intensity of interaction and interdependence among the different economies of the world (Borghoff, 2011).

India is widely recognised as one of the fastest growing economies in the world, with significantly increasing economic growth rates over the last 20 years. This surge in economic growth rates is fuelled in part by the intensified growth in the ICT sector. India is well-known as a global leader in the ICT sector and has witnessed exponential growth in this sector since the turn of this century. Technological innovations in ICT have accelerated dramatically and have propelled the country into the global arena.

# 1.1 ICT Sector in India

The ICT sector in India has emerged as one of the fastest growing segments of the economy (Kuriyan, Ray and Toyama, 2008; Das and Narayanan, 2005). According to Malik and Ilavarasan (2011), the Indian ICT sector has

ISSN 1566-6379 142 ©ACPIL

Reference this paper: Moses, T., Peter, R., and Peter, V., 2019. An Examination of Social Media Practices that Improve Customer Satisfaction in the B2B Market in the ICT Sector in India. *The Electronic Journal of Information Systems Evaluation*, 22(2), pp. 142-162, available online at www.ejise.com

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evolved in three phases. The first phase of this sector was the pre-1984 period wherein there was minimal difference between the sector's software and hardware divisions. In this phase, the Government of India attempted to run the industry, as the ICT sector was not established as a commercial sector in the country. The second phase (between 1984 and 1990) emerged when the Indian government realised that the software industry was a practical and sustainable option for income generation and technological capability enhancement and hence established the industry as a commercial sector.

It was during the third phase - post 1990s that the software export industry emerged in India. The government proposed an export driven growth model for the software industry and the sub-national governments aggressively promoted software exports. Since then there has been a phenomenal surge in the ICT sector which has resulted from the country's economic progress and export demand for IT products/services. In a report prepared on this sector by the Ministry of Statistics and Programme Implementation (MOSPI) on "Value addition and employment generation in the ICT sector in India", ICT firms are defined as those firms that are "primarily intended to fulfil or enable the function of information processing and communication by electronic means, including transmission and display" (p. 6). Thus, the ICT industries in the country include telecommunication services, information technology services and information technology-enabled services (ITeS). India is regarded as a pioneer in software development and a prominent provider of IT-enabled services (ITeS). Additionally, the competitive advantage created by the talented pool of professionals in this sector and the hugely supportive government policies were other factors that contributed to this growth (Malik and Ilavarasan, 2011).

The Indian ICT sector has emerged as a major contributor to the GDP of the country. This sector plays an important role in driving economic growth in the country through employment and exports. According to the information technology annual report issued by the Department of Electronics and Information Technology (2018), it has been estimated that the IT industry's contribution to India's GDP has increased from 7.1% in 2010-11 to 8.0% in 2017-18. This growth is remarkable considering that it contributed merely 1.5% to GDP in 1990-91 (MOSPI, 2011). The total revenue earned by the IT sector is estimated at USD 151.5 billion in 2017-18. This represents a 7% increase over the revenue of USD 140 billion in 2016-17. Further, it has increased substantially from the 2013-14 earnings of USD 106.3 billion. Similarly, export earnings for 2017-2018 is estimated at USD 125.6 billion as compared to USD 87.3 billion 2013-14. Although the industry is export driven, the domestic market earnings has also increased from USD 19 billion in 2013-14 to USD 26.5 billion in 2017-18. The IT and the IT enabled services (ITes) sector in India are the biggest employment generators in the country. The direct employment in this industry was at 3.27 million in 2013-2014 and is estimated to be 3.97 million in 2017-2018. The phenomenal growth in the IT and the ITeS sector has also spawned the explosion of several ancillary industries. It is estimated that these ancillary industries provided indirect employment to over 10 million people in 2017-2018.

# 1.2 Emergence of Social Media

The advent of the World Wide Web in the late 1980's accelerated rapid technological developments in the Information and Communication Technology (ICT) sector around the globe. These unprecedented technological advancements continue to exert a significant influence on the marketing practices of firms (Jain and Yadav, 2017; Brady, Saren and Tzokas, 2010; Rust and Espinoza, 2006). Marketing is context dependent and when a contextual element like the technological element changes, it reshapes and realigns the nature and the scope of the discipline itself (Brady, Saren and Tzokas, 2010; Moncrief and Cravens, 1999; Sheth and Sisodia, 1995). Over the last ten years, the web-based ICT technologies have transformed marketing rules, market dynamics and heavily impacted marketing activities of firms.

Technological developments like Web 2.0 technologies have introduced profound changes in the marketing practices of firms. The term "Web 2.0" officially coined by O'Reilly Media in 2004 (O'Reilly, 2005) was first used to describe the innovative way in which software developers and end-users utilised the World Wide Web to continuously modify contents and applications in a participatory and collaborative fashion (Kaplan and Haenlein, 2010; Paroutis and Saleh, 2009). Thus, the advent of web 2.0 created a new way to create, communicate, collaborate and share content which provide a platform for the evolution of many online applications. These technologies improved collaboration and communication with the existing and prospective customers of firms. Consequently, the marketing function has become more efficient and effective in terms of the interaction between firms and its customers (Brink, 2017; Agnihotri, et al., 2016; Siamagka et al., 2015).

The most prominent group of internet-based applications that are built on the ideological and technological foundations of Web 2.0 are the social media applications (Varini and Srisi, 2012; Kaplan and Haenlien, 2010). Social media applications enable the creation, editing and dissemination of user-generated content, thus supporting marketing activities in firms (Lacka and Chong, 2016; Constantinides, 2014; Mangold and Faulds, 2009). It includes a variety of online information sharing platforms covering all social networking sites (for example, Facebook, LinkedIn etc.), creativity work-sharing sites (for example, YouTube and Flickr), collaborative websites such as Wikipedia and microblogging sites (for example, Twitter) (Mangold and Faulds, 2009). These social media platforms have revolutionised the ways in which firms relate to the market place thereby creating a new world of possibilities in all marketing practices in firms (Aral, Dellarocas and Godes, 2013; Schultz, Schwepker and Good, 2012).

Social media has dramatically influenced businesses and industries in the current internet era. Social connectivity through this online platform has become a key to marketing in firms (Geho and Dangelo, 2012). Firms have adapted themselves to harness this web technology and have adopted strategic approaches to use this online tool for the benefit of the firm. There has been an increased interest among researchers and practitioners to understand the potential use of the social media platforms as a marketing tool (Siamagka et al., 2015), as numerous benefits are derived from their use for marketing purposes (Michaelidou, Siamagka and Christodoulides, 2011). Existing research on social media usage by firms, focuses on business to consumer (B2C) marketing contexts (Salo, 2017; Lamberton and Stephen, 2015; Wang, Yu, and Wei, 2012). There is limited research in understanding the use of social media in business to business (B2B) markets (Brink, 2017; Salo, 2017; Järvinen, et al., 2012). According to Siamagka et al. (2015, p.89) "research on the adoption and use of social media channels by B2B organisations is still in its embryonic stage". Further, research on the impact of social media usage on customer satisfaction in B2B markets is also limited (Agnihotri et al., 2016).

Organizational buyers are vastly different from customers in consumer markets. They demand superior performance, do not accept risk and more people are involved in buying decisions (Homburg, Klarmann and Schmitt, 2010). Relationships between buyers and sellers are both collaborative and long-term in nature. Product offerings in B2B markets tend to have a strong technical dimension in addition to the utilitarian function. Therefore, the buying process is often long drawn and formal (Swani et al., 2017). Corporate brands assume greater importance than individual product brands (Kotler and Pfoertsch, 2007; Mudambi, 2002).

The ICT sector is an emerging and important sector in contemporary India. It contributes significantly to the economic growth and development of the country. This study seeks to enhance the understanding of social media usage in B2B marketing in the ICT sector in India. Firstly, the study identifies the social media practices used by firms in the B2B sector. It then examines the influence of these practices on customer satisfaction in the ICT sector in India. Thus, the aim of this paper is to: Examine as to how the Social Media Practices of the ICT firms improve Customer Satisfaction in the B2B context in India. The findings of this research will contribute to understanding the social media usage in the ICT sector and the social media practices that contribute to improving customer satisfaction in the B2B sector in an emerging economy.

# 2. Literature Review

#### 2.1 Social Media

There are numerous descriptions and definitions for social media in literature. In a broader sense, social media has been defined as the digital content and the network based interactions which are developed and maintained by and between people (Cohen, 2011). Kaplan and Haenlein (2010) defined social media 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" (p.61). Web 2.0 facilitates participation through invitation within communities (Berthon, et al., 2012). User generated content describes the various forms of media content that are created by the end-users and are made publicly available. Thus, Social media "is seen as an advanced collaborative and communicative user application" (Brink, 2017 p.58).

Social media constitutes both the conduits and the contents that are disseminated through interactions between individuals and firms (Kietzman, et al., 2011). The contents comprise of texts, pictures, videos and networks; and the conduits, an array of channels through which the interaction between individuals and firms is facilitated and disseminated (Berthon et al., 2012). The above mentioned definitions and descriptions of social media highlight two primary themes of social media use - digital content creation and network-based

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interactions. Many authors observed that the technological developments relating to social media has led to a paradigm shift that has enabled a new culture of participation, primarily based on the users interacting and collectively creating and sharing knowledge over the internet (for example: Vuori, 2012; Schneckenberg, 2009).

Social media technologies have initiated significant transformation in the way in which B2B firms interact with existing and potential customers (Lacka and Chong, 2016; Siamagka, et al., 2015). According to Sashi (2012), "The interactive nature of social media with its ability to establish conversation among individuals and firms in communities of sellers and customers, and involve customers in content generation and value creation has excited practitioners with its potential to serve customers and satisfy their needs" (p.254). Hence businesses are increasingly learning to exploit the potential of social media. Use of social media in the commercial context is widely recognised as an effective and powerful business tool because of the valuable benefits it offers to organisations (Hutchings, 2012).

Being present in these socially active networks provides significant benefits for firms (Lacka and Chong, 2016; Agnihotri, Kothandaraman, Kashyup and Singh, 2012). They acquire privileged access to customers, early discovery of customer needs and customer referrals resulting in increased revenue generation. Social media presence also provides close proximity to customers thereby facilitating inter-organisational efforts to coordinate value co-creation and to deliver superior value through customer relationships (Plouffe and Barclay, 2007). B2B firms form long term relationship with their customers (Kaplan and Sawhney, 2000), engage in co-creation of mutual value and have long, complex and multifaceted sales cycles (Vargo and Lusch, 2011), which are facilitated through social media.

As the number of people and businesses using social media is rapidly increasing, it is inevitable for firms to be present where their customers are, in order to know the needs of their customers and to satisfy them. Rafiee and Sarabdeen (2013) stated that in recent years "companies have realised the importance of utilising social media as an important tool to enhance their marketing effectiveness and to improve their marketing activities" (2013, p. 933). It is considered as an influential strategic tool to reach customers.

Social media has evolved over the years and has an increasingly significant impact on the marketing environment. The use of Social media as a component of a firms' marketing strategy is widely recognised by marketing practitioners (Akar and Topcu, 2011). As the potential use of this online platform is becoming evident, marketers have embraced the abilities of social media to assist in marketing practices in firms (Andzulis, Panagopoulos and Rapp, 2012).

The emergence of literature in the use of social media for marketing purposes in firms underscores the reality that social media is becoming a mainstream marketing strategy of firms. However, research on social media marketing largely focusses on B2C contexts rather than B2B contexts (Salo, 2017; Siamagka et al., 2015; Wang, Yu and Wei, 2012). Brink (2017) argued that the use of social media in B2B markets is far less researched than in B2C markets. This study addresses this gap and as a first step it identifies the social media practices of B2B firms in India.

Naudé and Holland (2004) argued that marketing has moved from the transactional approach, through the relationship approach, into a new era where information exchange is facilitated by the use of online tools. In this new era the successful acquisition, analysis and deployment of information is the key to marketing success. The most successful marketing organizations in this era will be those that effectively use information technology tools in developing their marketing strategy (Brennan and Croft, 2012; Naudé and Holland, 2004).

A review of the studies on the usage of social media in B2B firms suggests that the employment of social media to reach B2B clients is relatively a new phenomenon and remains largely unexplored in literature (Järvinen, et al., 2012; Schultz, Schwepker and Good, 2012). ICT firms have the technological competency to use online networks and their customers are proficient in internet use. These firms rely on the internet more than any other firms in the business sector. Hence engagement in social media platforms has become a strategic choice for the success of these firms.

Social media allows rapid and simultaneous engagement with customers as well (Lacka and Chong, 2016). This online engagement with the customers, which facilitates two-way communication, (Wang, Pauleen and Zhang,

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2016) is recognised as the key to building long-term advocates of the firms, who not only purchase for themselves but also recommend to others. It is contended that social media is a significant tool that could help firms to sustain relationships with their customers (Alalwan, et al., 2017; Agnihotri et al., 2016). Social media tools have facilitated firms and their customers to co-create their experiences (Simula, Töllinen and Karjaluoto, 2013; Trainor, 2012). According to Moen, Madsen and Aspelund (2008) the internet is used to develop projects with customers. Thus social media strengthens and enhances customer relationships by fostering meaningful interactions between the firm and its customers (Agnihotri et al., 2016).

Social media is advocated as an important online tool for information search and provides access to knowledge for firms in the B2B sector (Fisher, 2009; Smith, 2009; Moen, Madsen and Aspelund, 2008). Clients in B2B markets have progressed from being passive consumers of information to active participants in creating and sharing information through social media, which have brought customers closer to the firms (Trainor, 2012). Such close proximity to customers has allowed marketers to discover customer needs and to identify market opportunities in user generated blogs in online communities (Moen, Madsen and Aspelund, 2008). Firms use market research information to categorise profitable and unprofitable customers, to provide customised service and to achieve greater customer retention (Trainor, 2012).

Through social media firms constantly monitor the reviews of their own products and services and check on competitor's offerings as well. Smith (2009) suggested that social media platforms are embraced as research platforms as they have become platforms for collecting opinions, content and data. Social media is identified as a low-cost platform through which a firm can build its reputation (Moen, Endresen and Gavlen, 2003). Shultz. Schwepker and Good, (2012) also indicated that social media tools are important to build brand awareness and firm's reputation.

#### 2.2 Customer Satisfaction

Customer satisfaction is widely recognised as the central tenet of marketing thought and practice (Churchill and Surprenant, 1982). In literature customer satisfaction is established as a major outcome of all marketing activities. It is central to the marketing exchange process as it is acknowledged that profits are generated through the satisfaction of customer needs and wants (Martin-et al., 2007). Also, the firm's ability to satisfy customers provides a sustainable competitive advantage which is necessary to operate in today's dynamic and competitive global environment (Kotler, 2012; Smith and Wright, 2004). Hence managers are keen to discover ways to improve customer satisfaction in firms (Westbrook, 2000; Piercy and Morgan, 1995). Providing an understanding of social media as an antecedent of customer satisfaction will have significant practical implications for firms in the B2B sector. It is extensively used by firms for building relationships with customers. Interaction with customers and continuous engagement with customers helps firms to know the customer better and strengthens the relationship with their customers. The ability to discover the needs of the customers through online platforms and to satisfy their needs is expected to influence customer satisfaction. Hence, this research examines as to how social media practices adopted by the ICT firms on improve customer satisfaction in these firms.

In summary, this research seeks to identify the full scope of social media practices that are used by the ICT firms for marketing purposes in B2B contexts in India. The objectives of employing social media practices in firms are in line with marketing objectives, which are acquiring new customers and developing current customer relationships. Hence it is posited in this research that the social media practices of ICT firms improves customer satisfaction. Social media practices are used as the independent variables (IVs) and customer satisfaction is postulated as the dependent variable (DV) in this study. The next section presents the methodological aspects of this study.

# 3. Methodology

This section discusses the research design, data collection and sampling methods employed in this research. Sub-sections which describe the questionnaire design, sampling design, instrumentation and survey implementation are included in the discussion.

Descriptive research design was used in this research to obtain insights into the social media marketing practices of the ICT firms in the Indian context. To achieve this, survey method of data collection was used for the study (Malhotra, 2010; McDaniel and Gates, 2010). The choice of the suitable survey method depends on

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the context of the specific research and the advantages of the chosen method over the other options. This study includes ICT firms and so the sample population has access to the internet. Hence web survey method was adopted for the study as it facilitates speedy data collection, geographical flexibility, less cost and there is less interviewer interference (Zikmund and Babin, 2013).

A formal, well-structured questionnaire was used to obtain specific information from the representative sample. Structured questions were used in the questionnaire. Fixed alternative questions were used because it was easier for the respondents to answer and it enabled comparability of answers, facilitated coding, tabulation and interpretation of data (McDaniel and Gates, 2010; Hair, et al., 2010). In order to minimize the risk of comprehension and misinterpretation problems, definitions of key question concepts were made available to the web survey respondents (Peytchev et al., 2010). This helped to communicate the intended meaning of the key concepts in the questionnaire to the survey respondents, thereby increasing the accuracy of the responses. All key concepts were clearly defined in the questionnaire to improve the accuracy of the survey results.

Likert scales were used in this study to evaluate the items. Accordingly, a series of statements that expressed either a favourable or an unfavourable attitude were employed to assess the concept under study. The respondents were asked to indicate their level of disagreement or agreement with each statement. The anchor points were, 1 = strongly disagree and 7 = strongly agree with 4 being the neutral point. Both constructs, social media and customer satisfaction, were measured with a number of items and therefore a multi-item scale was used in this study. Using different items to measure the same concept provides a more accurate cumulative measure than single-item estimates.

#### 3.1 Measurement scales for social media practices

Social media practices refer to the web based technologies that enable individuals in the firm to mutually interact and communicate with customers. The scale items for this construct were drawn from literature. In this research the items that were used to measure social media practices captured the potential use of social media that were beneficial to the B2B ICT firms in India.

The identified scale items (SM1 to SM11) are:

**SM1**: Managers in our firm actively participate in professional social networks (like Linked In) (Smith, 2009).

**SM2**: Our firm actively searches for market opportunities in user generated blogs in online communities (Smith, 2009; Moen, Madsen and Aspelund, 2008).

**SM3:** Our firm constantly monitors social network sites for reviews of our products and services (Fisher, 2009; Moen, Endresen and Gavlen, 2003).

**SM4:** In our firm, we constantly check online networks to know about competitor's products and services (Moen, Madsen and Aspelund, 2008).

**SM5:** We encourage our customers to participate in live and interactive discussion forums in our website (Moen, Madsen and Aspelund, 2008; Deans et al., 2003).

**SM6:** Our firm has increased efficiency in developing products due to online customer interaction at various stages of product development (Fisher, 2009; Moen, Madsen and Aspelund, 2008; Deans et al., 2003).

**SM7:** Our constant interaction with customers through online networks has improved our customer relations (Moen, Madsen and Aspelund, 2008; Deans et al., 2003).

**SM8:** There is a reduction in online customer support because of the information we provide through our online discussion forums (Fisher, 2009; Deans et al., 2003).

**SM9:** We use our online networks to explain our products/services to customers (Deans et al., 2003).

**SM10:** We use our online networks to facilitate endorsement of our product/services by customers (Pfeiffer and Zinnbauer, 2010).

**SM11:** Our engagement in the online social networks help build our firm's reputation (Pfeiffer and Zinnbauer, 2010; Fisher, 2009; Moen, Endresen and Gavlen, 2003).

#### 3.2 Measurement scales for Customer Satisfaction

In this research study customer satisfaction was measured from the firm's perspective. Nine items (CS1 to CS9) were used to assess customer satisfaction. These items include both the firm's assessment of customer satisfaction and the practices that they use to enhance customer satisfaction. The items are:

**CS1:** We get more clients/business through positive word of mouth from our existing customers (Szymanski and Henard, 2001).

**CS2:** Our customers frequently return for additional business to our firm (Makarem, Mudambi and Podoshen, 2007).

CS3: All departments are responsive to, and are integrated in serving customers (Hung and Wong, 2007).

**CS4:** We deliver the offering in the time frame that the customer desires or needs (Boyd, 2002).

CS5: We respond to customer complaints and suggestions without delay (Hung and Wong, 2007).

CS6: We have a system of conflict resolution that is fair to the customer and to us (Boyd, 2002).

CS7: Our firm responds quickly to changing customer requirements (Hung and Wong, 2007).

**CS8:** Our firm obtains feedback from our customers through formal review meetings (Makarem, Mudambi and Podoshen, 2007).

**CS9:** We often rely on informal networks to assess the satisfaction of our customers with our products and services (Makarem, Mudambi and Podoshen, 2007).

Once the questionnaire was developed, it was pre-tested with a small group of respondents as suggested by Zikmund and Babin (2013). This facilitated pre-testing the questionnaire for clarity of questions, relevance and completeness which improved the face validity of the survey questionnaire. Further modifications to the questionnaire content, format, wording and response alternatives were made based on the results of the pre-test. Also, every effort was undertaken to develop the final questionnaire more respondent friendly.

#### 3.3 Sampling design

Sampling is one of the important components of any research design. It involves identifying the subgroups of the elements or the respondents of the population selected for participation in the study (Hair et al., 2010; Jonker and Pennink, 2010). The first step in any sampling design process is to identify the target population. Malhotra (2012) defined target population as "the collection of elements or objects that possess the information sought by the researcher and about which inferences are to be made" (p. 315). "Element" referred to the respondents from whom the information was desired. The element of the target population for this research involved senior employees in ICT firms who play an active role in making marketing related decisions in those firms. This included marketing managers, owner managers or other functional managers who were responsible for the marketing related decisions in the ICT firms in India.

Sampling unit refers to a single element or group of elements subject to selection in the sample to gather information of the whole (Zikmund et al., 2010). This research was undertaken to enhance the understanding of the marketing practices of ICT firms in India. Hence, the sampling unit in this study is the individual ICT firm in India.

In order to facilitate clear understanding of the definition of ICT firms in India, International Standard Industrial Classification (ISIC) codes were used in this study. Table 1 specifies the code and its description.

Table 1: International Standard Industrial Classification (ISIC) codes

ICT Services Industries			
Sr.no.	ISIC code*	description	
А	61	Telecommunications Services	
В	62	Information Technology service activities	
1	6201	Computer programming activities	
2	6202	Information Technology Consultancy activities	
С	631	Web Portals, data processing, hosting and related activities	

 $Note: Downloaded \ and \ adopted \ from \ Ministry \ of \ statistics \ and \ programme \ implementation \ (MOSPI), \ India.$ 

The sampling frame for this research comes from the list of registered online panel members of a reputable market research agency who provided the data collection services for this research. The survey was sent to all the elements or respondents in the sampling frame identified for this research. Screening questions were used

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<sup>\*</sup>International Standard Industrial Classification (ISIC) Rev. 4.0 released in 2008

in the survey to overcome the sampling frame error (that the list might contain more than the desired population). All those ICT owner managers/managers/functional managers, who did not participate in making marketing decisions in the firms, were screened from participating in the survey. The next sub-section presents a detailed discussion on the survey method of data collection that was adopted for this research, including the sources of errors in web surveys and how it was overcome in this study.

#### 3.4 Survey method

In order to obtain the primary data for this study, a self-administered web survey method of data collection was used. The major advantage of web surveys is instant access to a high number of potential respondents, irrespective of their geographical locations (Braunsberger, Wybenga and Gates, 2007; Duffy, et al., 2005; Ilieva, Baron and Healey, 2002; Couper, 2000). Other advantages include the low cost associated with implementing the survey, better display of the questionnaire (in terms of design tools, interaction and clear presentation) and shorter response times (Van Selm and Jankowski, 2006; Evans and Mathur, 2005; Ilieva, Baron and Healey, 2002; Couper, 2000). Also, in a web survey the respondents are free to complete the survey at their convenience which increases the likelihood of participation (Sax, Gilmartin and Bryant, 2003).

Since web surveys are self-administered it provides privacy to the respondents and encourages them to complete the survey without any inhibition. Braunsberger, Wybenga and Gates (2007), contend that this reduces response errors in web surveys. It provides an option to programme the questionnaire so that the responses can be fed automatically into data analysis software like SPSS and Excel. This saves time and helps to improve the quality of the data (Ilieva, Baron and Healey, 2002). Questions can be designed with built-in question branching, skip patterns and forced answer prompts to guide the respondents through survey completion (Schillewaert and Meulemeester, 2005).

Many empirical studies have demonstrated that web surveys are viable alternatives that allow a researcher to conduct high quality research (Braunsberger, Wybenga and Gates, 2007; Schillewaert and Meulemeester, 2005). The web survey method was found to produce more reliable data than other methods of data collection. For example, in their study on the response characteristics from web and telephone surveys, Roster, et al. (2004) found that web survey respondents produced data that were more reliable than telephone survey respondents. Kiernan, et al. (2005) studied the effectiveness of web surveys over mail surveys in terms of response rates among computer users. Their study indicated that web surveys were as effective as mail surveys if the sample population was defined to have access to the World Wide Web. Further web surveys were found to elicit higher response rates than other survey methods, if the population sample was computer savvy.

#### 3.5 Survey Implementation

The web survey was designed by using the Qualtrics survey tool and the data for this research was collected through a reputable market research agency, which has offices all over the world. The survey designed in Qualtrics was integrated into the research agency's system and fine-tuned to collect relevant data for this research. An option called "prevent ballot box stuffing" was activated in Qualtrics, to keep people from taking the survey more than once. Activating this option helped in preventing multiple responses from a single individual, by installing a cookie on their computer thereby preventing access to the survey a second time.

Relevant screening questions at the beginning of the survey helped in preventing individuals outside the population of interest from taking the survey. All members in the population were invited to participate in the survey. Managers were used as proxies for firms and thus managers from all 2983 firms were invited to participate in the web survey. Respondents had to provide the name of their company in the survey. Only those responses from the target population where valid ICT company names had been provided were used for data analysis. However, the names of the companies were kept confidential. A thorough check of the company names helped not only to ensure that the respondents were from the ICT firms but also to avoid duplication of responses as well. Only 187 respondents had provided this information and completed the questionnaire yielding a response rate of 6.3%.

# 4. Analysis and Discussion of Results

The authors employed descriptive analysis to enhance the understanding of the use of social media practices by ICT firms. Stepwise regression analysis was used to test the relationship between social media practices and customer satisfaction. The results of the analysis are presented in this section.

#### 4.1 Details of survey respondents

Tables 2 to 4 presents an overview of the respondents. The statistics pertaining to the type of firm, respondents' position in the organisation and their length of service in the current organisation, as indicated by the respondents are presented in these tables.

Table 2 shows the type of firms that participated in this study. It can be seen that 45.65% of the respondents were from registered incorporated private companies; 33.15% were from partnership firms; 14.13% were from firms owned by sole proprietors and 7.07% were from public listed companies. Thus a range of companies representing a cross-section of ICT firms participated in this research.

Table 2: Type of firms

	N*	%**
Sole proprietor	26	14.13
Partnership	61	33.15
Registered Incorporated private company	84	45.65
Public listed company	13	7.07

Note. N\* Number of responses; %\*\*Percentage of responses; N= 184

As can be seen from Table 3, 26.74% of the respondents are General Managers in these ICT firms. 25.67% are Marketing Managers; 13.37% are Chief Executives officers; 11.76% are Sales Managers and 6.42% are Owner Managers. Thus, 84% of the respondents who participated in the survey are clearly senior managers. The other 16.04% of the respondents included Chief Technology Officers (CTO), IT/ICT team leaders, Project Managers, Administrators and Senior Software Consultants.

Table 3: Position in the organisation

	N*	%**
General Manager	50	26.74
Marketing Manager	48	25.67
Chief Executive Officer	25	13.37
Sales Manager	22	11.76
Owner Manager	12	6.42
Others	30	16.04

Note. N\* Number of responses; %\*\* Percentage of responses; N=187

An examination of Table 4 reveals that 84.95% of the respondents have been working with their respective organisations for more than two years. Only 15.05% of the respondents were working with the firm for less than two years. 55.38% have been with the firm for a period of 2 to 5 years; 25.81% have been with the firm for a period of 6 to 10 years and 3.76% have been with the organisation for more than 10 years.

Table 4: Length of service in the organisation

	N*	%**
Less than 2 years	28	15.05
2 to 5 years	103	55.38
6 to 10 years	48	25.81
More than 10 years	7	3.76

Note. N\* Number of responses; %\*\*Percentage of responses; N= 186.

### 4.2 Social media Practices

As can be seen in Figure 1, the mean values of ten of the eleven items are >5.25. This indicates that the respondents agreed to the ten items measuring the social media construct suggesting that these social media practices are used by the ICT firms in India. The respondents agreed that their firms constantly check online networks to know about competitors' products and services (SM4:  $\bar{x}$  = 5.70); their firms' constant interaction with customers through online networks has improved their customer relations (SM7:  $\bar{x}$  = 5.66); managers in their firms actively participate in professional social networks (SM1:  $\bar{x}$  = 5.61) and their firms' engagement in

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Strongly 7.00 Agree 6.00 5.00 4.00 3.00 2.00 Strongly Disagree 1.00 SM4 SM7 SM1 SM11 SM5 SM3 SM10 SM2 SM6 SM9 SM8 5.70 5.47 4.27 Mean 5.66 5.61 5.60 5.55 5.52 5.44 5.42 5.26

online social networks help build their reputation (SM11:  $\bar{x}$  = 5.60). It is evident that these items have very close mean values, indicating that these practices are adopted by the ICT firms.

Figure 1: Social Media practices

The mean scores for the next six items range from 5.26 to 5.55, reflecting a strong consensus among the respondents for those statements. They agreed that customers are encouraged to participate in live and interactive discussion forums in their websites (SM5:  $\bar{x}$ = 5.55); they have increased efficiency in developing products due to online customer interaction at various stages of product development (SM6:  $\bar{x}$ = 5.52); they constantly monitor social network sites for reviews of their products and services (SM3:  $\bar{x}$ = 5.47); they use online networks to explain their products and services to customers (SM9:  $\bar{x}$ = 5.44) and to facilitate endorsement of their product and services by customers (SM10:  $\bar{x}$ = 5.42). The mean rating for SM2 also has a high score of  $\bar{x}$ = 5.26, which shows that these firms actively search for market opportunities in user generated blogs in online communities.

SM8 has the lowest mean value of  $\bar{x}$  = 4.27. This indicates that the survey respondents neither disagreed nor agreed as to whether there is reduction in online customer support because of the information the ICT firms provide through online discussion forums (SM8). However, the high mean values for the remaining ten items offer evidence that the social media practices are adopted by the ICT firms in India and provide insight into the purposes for which social media is used by these firms.

Table 5 presents the frequencies and the percentages for all the 11 variables used to assess the social media practices adopted by the ICT firms in India. The percentages of two items are slightly more than 80% indicating that managers in firms constantly check online networks to know about competitor's products and services (SM4) and they actively participate in professional social networks (SM1). Eight of the remaining nine items range between 74% and 79%. Approximately 79% of the respondents agreed that the firm has increased efficiency in developing products due to online customer interaction at various stages of product development (SM6) and their firm constantly monitors social network sites for reviews of their products and services (SM3). Roughly the same percentage of survey participants (78.6%) also agreed that engagement in the online social networks help build their firm's reputation (SM11). Close to 78% of the respondents agreed that their constant interaction with customers through online networks has improved customer relations (SM7) and 77% indicated that they encourage their customers to participate in live and interactive discussion forums in their website (SM5).

The other three items whose percentages are higher than 74% are: firms use online networks to facilitate endorsement of their product/services by customers (SM10 - 76.5%); firms use online networks to explain their products/services to customers (SM9 - 74.9%) and firms actively search for market opportunities in user generated blogs in online communities (SM2 - 74.3%). The high percentages for all the ten items show that the respondents acknowledge the use of social media by the ICT firms in India for the purposes defined by the

statements. However, the percentage of respondents who agreed with SM8 is only 48.66%. It suggests that the respondents neither disagreed nor agreed to whether there is a reduction in online customer support because of the information the firm provides through their online discussion forums.

Table 5: Social Media practices: frequencies and percentages

Items	Disa	agree	Agree	
	N*	%**	N*	%**
In our firm, we constantly check online networks to know about competitor's products and services (SM4)	14	7.49	150	80.21
Our constant interaction with customers through online networks has improved our customer relations (SM7).	12	6.42	145	77.54
Managers in our firm actively participate in professional social networks (like Linked In) (SM1)	15	8.02	153	81.82
Our engagement in the online social networks help build our firm's reputation (SM11)	16	8.56	147	78.61
We encourage our customers to participate in live and interactive discussion forums in our website (SM5)	15	8.02	144	77.01
Our firm has increased efficiency in developing products due to online customer interaction at various stages of product development (SM6).	17	9.09	148	79.14
Our firm constantly monitors social network sites for reviews of our products and services (SM3)	20	10.70	148	79.14
We use our online networks to explain our products/services to customers (SM9)	14	7.49	140	74.87
We use our online networks to facilitate endorsement of our product/services by customers (SM10)	18	9.63	143	76.47
Our firm actively searches for market opportunities in user generated blogs in online communities (SM2)	21	11.23	139	74.33
There is a reduction in online customer support because of the information we provide through our online discussion forums (SM8)	62	33.16	91	48.66

Note. N\* Number of responses, %\*\* Percentage of responses

# 4.3 Customer Satisfaction

A close examination of Figure 2 shows that all mean scores are ≥ 5.50 which reflects the agreement among the respondents with all these measures. Item CS5 has the highest mean value of 6.03. The survey respondents agreed that their firms respond to customer complaints and suggestions without delay. Seven of the nine items have very close means ranging from 5.78 to 5.92 showing strong agreement for these items. The items and their mean values are: we deliver the offering in the time frame that the customer desires or needs (CS4:

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 $\bar{x}$ = 5.92); we have a system of conflict resolution that is fair to the customer and to us (CS6:  $\bar{x}$ = 5.87); our firm responds quickly to changing customer requirements (CS7:  $\bar{x}$ = 5.84) and all departments are responsive to, and are integrated in serving customers (CS3:  $\bar{x}$ = 5.78). It is evident that the ICT firms intentionally engage in these activities that result in better customer satisfaction.

The means for the items CS2:  $\bar{x}$  = 5.82 and CS1:  $\bar{x}$  = 5.80 show that the firms' customers frequently return for additional business (CS2) and they get more clients/business through positive word of mouth from existing customers (CS1). Further, respondents agreed that their firms tend to obtain feedback from customers through formal review meetings with customers (CS8:  $\bar{x}$  = 5.80) and rely on informal networks to assess the satisfaction of their customers with their products and services (CS9:  $\bar{x}$  = 5.50).

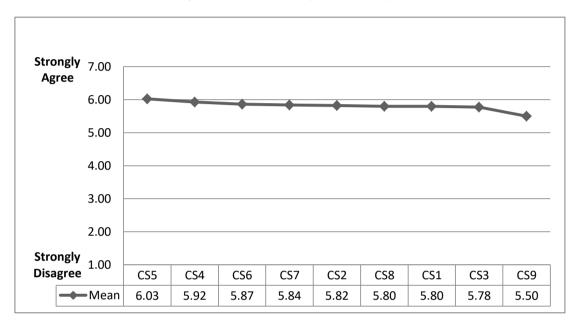


Figure 2: Customer Satisfaction

Table 6 shows the frequencies and the percentages of all the nine measures used to assess Customer Satisfaction in the ICT firms in India. It can be seen that more than 80% of the respondents agreed to all nine statements. This high level of agreement reveals the variety of Customer Satisfaction practices adopted by these firms to ensure that their customers are satisfied. A huge proportion, close to 90% of the respondents agreed that their firm delivers the offering in the time frame that the customer desires or needs (CS4) and has a system of conflict resolution that is fair to the customer and to them (CS6). Around 89% agreed that their firm responds to customer complaints and suggestions without delay (CS5) and 86.6% agreed that their customers frequently return for additional businesses to their firms (CS2).

The respondents suggested that their firm responds quickly to changing customer requirements (CS7 - 85.03%) and they obtain feedback from their customers through formal review meetings (CS8 - 85.56%). Nearly 83% of the respondents indicated that all the departments in their firms are responsive to, and are integrated in serving customers (CS3) and they get more that clients/business through positive word of mouth from our existing customers (CS1). Roughly 81% indicated that their firm relies on informal networks to assess the satisfaction of our customers with our products and services (CS9).

**Table 6:** Customer Satisfaction: frequencies and percentages

Items	Disa	Disagree		Agree	
·	N*	%**	N*	%**	
We respond to customer complaints and suggestions without delay (CS5)	4	2.14	166	88.77	
We deliver the offering in the time frame that the customer desires or needs (CS4)	4	2.14	167	89.30	
We have a system of conflict resolution that is fair to the customer and to us (CS6)	6	3.21	167	89.30	
Our firm responds quickly to changing customer requirements (CS7)	11	5.88	159	85.03	
Our customers frequently return for additional business to our firm (CS2)	10	5.35	162	86.63	
Our firm obtains feedback from our customers through formal review meetings (CS8)	8	4.28	160	85.56	
We get more clients/business through positive word of mouth from our existing customers (CS1)	13	6.95	155	82.89	
All departments are responsive to, and are integrated in serving customers (CS3)	9	4.81	155	82.89	
We often rely on informal networks to assess the satisfaction of our customers with our products and services (CS9)	13	6.95	152	81.28	

Note. N\* Number of responses, %\*\* Percentage of responses

These descriptive statistics show a high level of customer satisfaction across a wide range of measures.

#### 4.4 Regression Analysis

The estimation technique that was employed in this research to estimate the regression model was stepwise regression. By using stepwise regression a small subset of variables that explains most of the variation in the dependent variable was obtained from a large number of predictor variables (Field, 2013). Thus it limits the number of predictors to a few that will make the most important contribution in explaining the variance in the dependent variable. A single composite measure was computed for customer satisfaction the dependent variable (DV), by using the average or typical response to each of the variables used to measure customer satisfaction. As recommended by (Hair et al., 2010), the means of all the items used to measure customer satisfaction was summated, to represent customer satisfaction in a single measure or as a composite variable. This was used in subsequent regression analysis which examined the influence of the eleven different social media practices, the independent variables (IVs) on customer satisfaction the dependent variable (DV).

In a stepwise regression the IVs are entered into the regression equation one at a time based on statistical criteria. The IV that has the highest absolute correlation with the DV and contributes the most to the DV in terms of increasing the multiple correlation coefficient is entered first in the analysis (Brown, 1976). In the next step, the variable entered will be the one with the next highest partial correlation (correlation between two variables when effects of other variables are removed) after accounting for the previously entered variable. This process is continued until the additional variables do not add anything statistically to the regression equation. The analysis stops when no additional predictor contributes to the regression equation.

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Hair et al., (2011) have recommended the following steps to evaluate the results of the regression analysis: examine if the overall regression model is statistically significant using the F-statistic; evaluate R<sup>2</sup> which indicates the strength of the relationship between the independent variables and the dependent variable; examine each of the regression coefficients and their t-statistic to identify the independent variables which are statistically significant and examine the beta coefficients to determine the relative influence of each of the independent variables. Thus, in addition to looking at R<sup>2</sup> the strength of the relationship between the independent variables and the dependent variable, it is also necessary to examine the statistical significance of the overall regression model as well as each one of the regression coefficients.

The results of this analysis are presented in Table 4. The analysis yielded a highly statistically significant regression model with p = .000 (F (4, 179) = 58.561). The F test is a significance test of the  $R^2$ . The F-statistic indicates whether a significant amount (significantly different from zero) of variance is explained by the model. As can be seen, the results indicate that the F test is highly significant. Hence, the predictor variables collectively account for a statistically significant proportion of the variance in the dependent variable.

According to Hair et al., (2011) the amount of variation explained by the regression model should be more than the variation explained by the average. Thus,  $R^2$  should be greater than zero. The adjusted value of  $R^2$  = .467 indicates that approximately 47% of the variability in customer satisfaction in the ICT firms is influenced by four of the eleven social media items used as the predictor variables in the analysis. Since the adjusted value of  $R^2$  is very close to .5, the strength of the relationship between the social media variables (IVs) and customer satisfaction, the dependent variable is moderate.

As a next step, each one of the independent variables and their regression coefficients were examined to see if they are statistically significant. An advantage of stepwise regression analysis, is that it includes only those independent variables that are statistically significant in the regression model. If any of the regression coefficient is not significant it is not a good predictor of the dependent variable. Stepwise regression removes insignificant independent variables from the regression model. Thus stepwise regression analysis identifies a parsimonious set of statistically significant independent variables that predict the dependent variable. These variables and the related statistics are shown in Table 7.

Table 7: Regression Analysis

Model	В	Std. Err	β	t	Sig.
(Constant)		.209		13.379	.000
<b>SM1</b> : Managers in our firm actively participate in professional social networks (like Linked In)	.203	.031	.354	6.608	.000
<b>SM9:</b> We use our online networks to explain our products/services to customers	.136	.034	.226	3.943	.000
<b>SM7:</b> Our constant interaction with customers through online networks has improved our customer relations	.122	.036	.189	3.365	.001*
<b>SM4:</b> In our firm, we constantly check online networks to know about competitor's products and services	.087	.039	.134	2.235	.026**

a: Dependent variable: Customer Satisfaction

A closer examination of the significance values indicates that 4 of the 11 items that assess social media practices significantly influence customer satisfaction. All four items have high  $\beta$  values ranging from 0.134 to .354. The relative influence of each independent variable is indicated by the  $\beta$  values with higher  $\beta$  values implying stronger influence. With a t-value of 6.608 and a  $\beta$  value of .354 **SM1**: Managers in our firm actively participate in professional social networks is the strongest predictor of customer satisfaction; **SM9**: We use our

<sup>\*, \*\*:</sup> significant at p $\leq$ .001 and p<.05 respectively

 $R^2 = .477$ ; adjusted  $R^2 = .467$ 

online networks to explain our products/services to customers is found to be the next best influencer customer satisfaction (p = .000 and t = 3.943); **SM7**: Our constant interaction with customers through online networks has improved our customer relations, has the next highest t-value of 3.365 and a  $\beta$  value of .189 indicating that it has a strong positive influence (p = .001) on customer satisfaction. A t-value of 2.235;  $\beta$  value of .134 and a p value of .026, indicates that **SM4**: In our firm, we constantly check online networks to know about competitor's products and services also significantly influences customer satisfaction. The results demonstrate that these 4 social media practices of the ICT firms have a strong positive influence on customer satisfaction.

Although the R-squared value is moderate, stepwise regression analysis reveals four statistically significant predictors that enable the researchers to draw important conclusions about how changes in these four social media predictor values are associated with changes in customer satisfaction, the dependent variable. The significant regression coefficients still represent the change in customer satisfaction for one unit of change in the predictor while holding other predictors in the model constant. This type of information is extremely valuable to the decision makers in these ICT firms

# 5. Contributions of the study

The aim of the research is to identify the social media practices that are adopted by the ICT firms for marketing purposes in the B2B sector in India and to examine as to how these social media practices improve customer satisfaction in these firms. This is important since the ICT sector contributes significantly to the development of India, an emerging economy. This sector contributes to 8% of India's GDP. It is a USD 151.5 billion industry which employs nearly 4 million people. This study is unique as it is among the first to empirically examine the social media practices of the ICT firms in India and its contribution to improving customer satisfaction. The contributions of this research are discussed below.

Burati, Parola and Satta, (2018) have pointed out that most research on social media practices have been undertaken in developed countries. Hence there is a need to examine these in emerging markets. They also address the need for more research on the use of social media in B2B contexts and specifically in dynamic service industries such as the ICT sector. Flanigan and Obermier (2016) observed that "research has been slower to help define how B2B companies in specialised markets can best use this media" (p.19). This study focuses specifically on the ICT sector in India. To our knowledge no study has investigated the social media practices in the service sector in a developing economy. The novelty of this study is that it enhances the understanding of social media practices used by ICT firms in B2B contexts in a sector that contributes to 8% of the GDP of a large emerging economy.

The research addresses a gap in literature for more research into contemporary practices of firms competing in diverse market and sector contexts (Palmer and Wilson, 2009; Webster, 1992). This study profiles the social media practices used by the ICT firms in India and developed an empirical understanding of the contribution of these practices to improving customer satisfaction. There is consensus in the marketing literature that the most successful firms in the current era will be those that effectively use information technology tools. Social media is a contemporary information technology tool and very few studies have explored the intricate role of social media in B2B contexts (Rodriguez, Peterson and Krishnan, 2012). The results of the research support the premise that social media practices form an integral part of the contemporary practices that were used by firms in the ICT sector. Thus, this study broadens the marketing scope in this digital age to include the technological advances to support other marketing strategies.

Customer satisfaction is widely accepted in literature as one of the major outcomes of all marketing activities. Product and service providers earnestly pursue strategies and practices that help achieve the goal of maximising customer satisfaction (Oliver, 1999). However, most empirical research supporting this proposition was conducted in developed countries and in other conventional industries. This study extends the existing body of knowledge to include the ICT firms in the Indian context by providing evidence in understanding how social media practices significantly improve customer satisfaction.

This research makes a distinct contribution to social media literature. The need to identify the social media practices that are employed by firms to reach B2B clients have been pointed out by scholars and academicians, as it remains unexplored in literature (for example, Flanigan and Obermier, 2016; Järvinen, et al., 2012;

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Schultz, Schwepker and Good, 2012). This study addresses the gap and provides empirical evidence to support that social media is effectively utilised for marketing purposes in these firms. The results identified the important dimensions pertaining to the use of social media in the ICT firms in India.

Managers in these firms constantly check online networks to know about competitors' products and services; their constant interaction with customers through online networks has improved their customer relations; they actively participate in professional social networks and their firms' engagement in online social networks help build their reputation. Further, ICT firms encourage their customer to participate in live and interactive discussion forums; ICT firms have increased efficiency in developing products due to online customer interaction at various stages of product development; they constantly monitor social network sites for reviews of their products and services; firms use online networks to explain their products and services to customers and to facilitate endorsement of their product and services by customers. These firms actively search for market opportunities in user generated blogs in online communities. Thus, this study's contribution is the evidence and the insight that it provides into the purposes for which social media is used by the ICT firms in India in the B2B context.

Specifically, the study highlights those social media practices that significantly improve customer satisfaction in these firms. We found evidence to support that manager's participation in professional social networks (like Linked In); their use of online networks to explain the firms products/services to customers; their constant interaction with customers through online networks and constantly checking online networks to know about competitor's products and services contribute positively to improving customer satisfaction. The statistical significance of these social media practices as evident from the analysis suggests that these social media practices are important contributors to improved customer satisfaction. This in turn leads to the long term success, competitive advantage and fulfilment of the business needs of the ICT firm's customers.

Practitioners need to encourage their firms to engage diligently in social media since these practices significantly improve customer satisfaction in the ICT firms. Therefore, marketing practitioners should increasingly advocate the use of social media technologies to improve customer satisfaction in their firms. In this digital era, the unparalleled speed of information diffusion through social media undoubtedly improves and enhances the success of firms that take advantage of social media technologies. Hence it would be advisable for managers in ICT firms to prioritise and use various social media platforms to enhance, increase and improve customer satisfaction.

# 6. Limitations of this research

This study provided relevant and interesting insights into the social media practices used by the ICT firms in India and their influence on customer satisfaction. However, it is important to note its limitations. The first limitation is regarding the study's geographical context. The data for this research was obtained from the ICT firms in India. The social media practices identified in this research are adopted by the ICT firms that exist in an environment which is unique to India, where ICT contributes significantly to the economic development of the country. Therefore the results may not be generalizable to other country environments or other industry segments.

In this research customer satisfaction was assessed from the firms' perspective as it was not practical to obtain information from all the customers of the firms who participated in the study. Also firms in the B2B sector seldom disclose information about their customers because of the confidentiality agreements. Even if data were obtained from customers, there are practical difficulties in marrying the two different sets of data obtained from the ICT firms and from their customers. In view of the complexities involved, customer satisfaction was measured from the firm's perspective.

In the current study, the measures for both the dependent and the independent exploratory variables were obtained from the same respondents. According to Chang, Witteloostuijn and Eden (2010), in any self-reported survey respondents have the inclination to provide consistent and rational responses to questions that are otherwise not related, resulting in biased correlations between variables. Thus these surveys were shown to be influenced by common method variance which either inflates or deflates the observed relationships between the constructs (Chang, Witteloostuijn and Eden, 2010; Podsakoff and Organ, 1986).

#### 7. Directions for research

The current research provides a foundation for significant research endeavours to advance the field of study on social media practices of other high technology products and services in general and ICT products and services in particular. The empirical results presented need to be understood as the initial findings of a study primarily aimed at understanding the social media practices adopted by the firms in the ICT sector in India and its influence on customer satisfaction.

The social media practices identified in this research are adopted by the ICT firms that exist in an environment which is unique to India, where ICT contributes significantly to the economic development of the country. Studies may also be conducted in other countries where the environment, which is an intersection of the technological, competitive and market volatility, of the ICT firms may significantly differ from that of India. Further research could investigate how the relationships identified in this research may vary across other contexts, like other emerging economies and developed countries. Comparative studies between countries can also be conducted to understand the similarities and differences in the social media practices adopted by the firms in the ICT sector. Future research could also take a longitudinal approach to understand the influence of the social media practices on customer satisfaction over time.

Another avenue for future research is extending and confirming the results of this current research. Replication of this study in other contexts and in other high technology sectors is expected to yield a more comprehensive framework of the social media practices adopted by the firms in the high technology sector. Alternatively, a qualitative and/or a mixed method study could provide deeper insights with the use of either interviews or focus groups.

#### 8. Conclusion

ICT sector is a priority sector in India and is clearly of growing importance in many economies. This study focuses specifically on the ICT sector in India. A cross-section of decision makers from a range of ICT firms with differing lengths of service in their respective firms participated in this study. This study profiles the social media practices used by ICT firms in the B2B context in India. This research developed an empirical understanding of the contribution of these social media practices to improving customer satisfaction.

To our knowledge no study has investigated the social media practices in the service sector in a developing economy. The study assumes significance in that it identifies and documents those social media practices that are adopted by the ICT firms in India. It provides insights into the social media practices used by ICT firms in B2B contexts. Given the importance of the ICT sector for the global economy, insights into their social media practices enhances the understanding of both their usage and their contribution to customer satisfaction.

This research is a response to the call for more research into contemporary practices of firms competing in diverse market and sector contexts. The results of the research support the proposition that social media practices form an integral part of the contemporary practices that are used by firms in the ICT sector. Thus, this study broadens the scope of marketing in this digital age to include technological advances to support other marketing strategies.

This research also makes a distinct contribution to social media literature. The need to identify the social media practices that are employed by firms to reach B2B clients have been pointed out by scholars and academicians, as it remains unexplored in literature. This study addresses the gap and provides empirical evidence to support that social media is effectively utilised for marketing purposes in these firms. The results identified the important dimensions pertaining to the use of social media in the ICT firms in India. Specifically, the study highlights those social media practices that significantly improve customer satisfaction in these firms.

This research highlights important implications for managers in the ICT sector. Marketing practitioners should increasingly advocate the use of social media technologies to improve customer satisfaction in their firms. Specifically, the study identifies those social media practices that significantly improve customer satisfaction in these firms. We found evidence to support that manager's participation in professional social networks (like Linked In); their use of online networks to explain the firms products/services to customers; their constant interaction with customers through online networks and constantly checking online networks to know about competitor's products and services contribute positively to improving customer satisfaction. The statistical

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significance of these social media practices as evident from the analysis suggests that these social media practices are important contributors to improved customer satisfaction.

This in turn leads to the long term success, competitive advantage and fulfilment of the business needs of the ICT firm's customers. In this digital era, the unparalleled speed of information diffusion through social media undoubtedly improves and enhances the success of firms that take advantage of social media technologies. Hence it would be beneficial for managers in ICT firms to prioritise and use various social media platforms to enhance, increase and improve customer satisfaction. This research also highlights the need to explore more fully, the contribution of social media practices of firms in the ICT sector, not only in India, but also in other countries where ICT contributes significantly to their respective economies.

#### References

- Agnihotri, R., Kothandaraman, P., Kashyap, R. and Singh, R., 2012. Bringing "social" into sales: the impact of salespeople's social media use on service behaviours and value creation. *Journal of Personal Selling & Sales Management*, 32(3), pp.333-348.
- Agnihotri, R., Dingus, R., Hu, M.Y. and Krush, M.T., 2016. Social media: influencing customer satisfaction in B2B sales. Industrial Marketing Management, [e-Journal] 53, pp.172-180. https://doi.org/10.1016/j.indmarman.2015.09.003
- Akar, E. and Topcu, B., 2011. An examination of the factors influencing consumers' attitudes toward social media marketing. *Journal of Internet Commerce*, [e-journal] 10(1), pp.35-67. http://dx.doi.org/10.1080/15332861.2011.558456.
- Alalwan, A.A., Rana, N.P., Dwivedi, Y.K. and Algharabat, R., 2017. Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34, pp.1177-1190.
- Andzulis, J. M., Panagopoulos, N. G., and Rapp, A., 2012. A review of social media and implications for the sales process. *Journal of Personal Selling and Sales Management*, 32(3), pp.305-316.
- Aral, S., Dellarocas, C. and Godes, D., 2013. Social media and business transformation: a framework for research. *Information Systems Research*, 24(1), pp.3-14.
- Berthon, P. R., Pitt, L. F., Plangger, K. and Shapiro, D., 2012. Marketing meets Web 2.0, social media, and creative consumers: implications for international marketing strategy. *Business Horizons*, [e-journal] 55, pp.261-271. http://dx.doi.org/10.1016/j.bushor.2012.01.007
- Borghoff, T., 2011. The role of ICT in the globalization of firms. *Journal of Modern Accounting and Auditing*, 7(10), pp.1128-1149.
- Boyd, A., 2002. The goals, questions, indicators, measures (GQIM) approach to the measurement of customer satisfaction with e-commerce web sites. *Journal of Information Management*, [e-journal] 54(3), pp.177-187. http://dx.doi.org/10.1108/00012530210441728
- Brady, M., Saren, M. and Tzokas, N., 2002. Integrating information technology into marketing practice the IT reality of contemporary marketing practice, *Journal of Marketing Management*, 18(5-6), pp.555-577.
- Braunsberger, K., Wybenga, H. and Gates, R., 2007. A comparison of reliability between telephone and web-based surveys. *Journal of Business Research*, 60(7), pp.758-764.
- Brennan, R. and Croft, R., 2012. The use of social media in B2B marketing and branding: An exploratory study. *Journal of Customer Behaviour*, 11(2), pp.101-115.
- Brink, T., 2017. B2B SME management of antecedents to the application of social media. *Industrial Marketing Management*, 64, pp.57-65.
- Buratti, N., Parola.F, and Satta, G., 2018. Insights on the adoption of social media marketing in B2B service. *The TQM Journal*, 30(5), pp.490-529.
- Brown, D. L., 1976. Faculty ratings and student grades: A university-wide multiple regression analysis. *Journal of Educational Psychology,* [e-journal] 68(5), pp.573-578.
- http://dx.doi.org/10.1037/0022-0663.68.5.573
- Chang, S.J., Witteloostuijn, A. and Eden, L., 2010. From the editors: common method variance in international business research. *Journal of International Business Studies*, 41(2), pp.178-184.
- Churchill Jr, G. A. and Surprenant, C., 1982. An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(4), pp.491-504.
- Cohen, C., 2011. Interconnections: brand reputation and free online monitoring tools. *Franchising World*, 43(7), pp.18-19. Constantinides, E., 2014. Foundations of social media marketing. *Procedia Social and Behavioural sciences*, 148, pp.40-57.
- Couper, M. P., 2000. Review: web surveys: a review of issues and approaches. *The Public Opinion Quarterly,* [e-journal] 64(4), pp.464-494. https://doi.org/10.1086/318641.
- Das, D. K. and Narayanan, K., 2005. Information and communication technology (ICT) and India's development: achievements and challenges ahead. *Journal of Services Research*, pp.93-108.
- Deans, K. R., Gray, B. J., Ibbotson, P., Osborne, P. and Knightbridge, K., 2003. Web marketing practices of service providers. *Service Industries Journal*. 23(3), pp.82-102.
- Duffy, B., Smith, K., Terhanian, G. and Bremer, J., 2005. Comparing data from online and face-to-face surveys. *International Journal of Market Research*, 47(6), pp.615-639.

- Evans, J. R. and Mathur, A., 2005. The value of online surveys. *Internet Research: Electronic Networking Applications and Policy*, [e-journal] 15(2), pp.195-219. https://doi.org/10.1108/10662240510590360.
- Flanigan, R.L. and Obermier, T.R., 2016. An assessment of the use of social media in the industrial distribution Business-to-Business market sector. *Journal of Technology Studies*. pp. 18-29
- Field, A., (2013). Discovering statistics using IBM SPSS statistics. . 4th ed. Los Angeles: Sage.
- Fisher, T., 2009. ROI in social media: a look at the arguments. *Journal of Management*, 16(3), pp189-195.
- Garver, M. S., 2003. Best practices in identifying customer-driven improvement opportunities. *Industrial Marketing Management*, 32(6), pp.455-467.
- Geho, P. R. and Dangelo, J., 2012. The evolution of social media as a marketing tool for entrepreneurs. *Entrepreneurial Executive*, 17, pp.61-68.
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E., 2010. *Multivariate data analysis*. 7<sup>th</sup> ed. Upper Saddle River, N.J.: Prentice Hall.
- Hair, J.F., Celsi, M.W., Money, A.H., Samouel, P. and Page. M.J., 2011. Essentials of Business Research Methods. 2<sup>nd</sup> ed. New York, M.E.Sharpe
- Hutchings, C., 2012. Feature: Commercial use of Facebook and Twitter risks and rewards. *Computer Fraud & Security*, [e-journal] 2012, pp.19-20. http://dx.doi.org/10.1016/s1361-3723(12)70065-9
- Hung, H. and Wong, Y. H., 2007. Organisational perception of customer satisfaction: theories and evidence. *Service Industries Journal*, [e-journal] 27(4), pp.495-507.
- http://dx.doi.org/ 10.1080/02642060701346540
- Ilieva, J., Baron, S. and Healey, N. M., 2002. Online surveys in marketing research: pros and cons. *International Journal of Market Research*, 44(3), pp.361-376.
- Jain, E. and Yadav, A., 2017. Marketing and technology: role of technology in modern marketing. *Journal of Business and Management*, 19(5), pp.49-53.
- Järvinen, J., Tollinen, A., Karjaluoto, H. and Jayawardhena, C., 2012. Digital and social media marketing usage in B2B industrial section. *Marketing Management Journal*, 22(2), pp.102-117.
- Jonker, J. and Pennink, B., 2010. The essence of research methodology: a concise guide for Master and PhD students in management science. Berlin; London: Springer.
- Kaplan, A. M. and Haenlein, M., 2010. Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53, pp.59-68.
- Kaplan, S. and Sawhney, M., 2000. E-Hubs: The new B2B marketplaces. Harvard Business Review, 78(3), pp.97-103.
- Kiernan, N., Kiernan, M., Oyler, M. and Gilles, C., 2005. Is a web survey as effective as a mail survey? A field experiment among computer users. *American Journal of Evaluation*, 26(2), pp. 245-252.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P. and Silvestre, B. S., 2011. Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, [e-journal] 54, pp.241-251. http://dx.doi.org/10.1016/j.bushor.2011.01.005
- Kotler, P. and Keller, K. L. 2012. Marketing management. 14th ed. Upper Saddle River, N.J.: Prentice Hall.
- Kotler, P. and Pfoertsch, W., 2007. Being known or being one of many: the need for brand management for business-to-business (B2B) companies. *Journal of Business and Industrial Marketing*, 22(6), pp.357-362.
- Kuriyan, R., Ray, I. and Toyama, K., 2008. Information and communication technologies for development: the bottom of the pyramid model in practice. *Information Society*, [e-journal] 24(2), pp. 93-104. https://doi.org/10.1080/01972240701883948.
- Lamberton, C. and Stephen, A.T., 2016. A thematic exploration of digital, social media, and mobile marketing research's evolution from 2000 to 2015 and an agenda for future research. *Journal of Marketing*, 80(6), pp.146-172.
- Lacka, E. and Chong, A., 2016. Usability perspective on social media sites' adoption in the B2B context. *Industrial Marketing management*, 54, pp.80-91.
- Luo, X. and Homburg, C., 2007. Neglected outcomes of customer satisfaction. Journal of Marketing, 71(2), pp.133-149.
- Makarem, S. C., Mudambi, S. M., and Podoshen, J. S. (2009). Satisfaction in technology-enabled service encounters. *Journal of Services Marketing*, [e-journal] 23(2-3), pp.134-143. http://dx.doi.org/10.1108/08876040910955143
- Malhotra, N. K., 2010. *Marketing research: an applied orientation*. 6th ed. Upper Saddle River, N.J.: Pearson Education. Malik, P. and Illavarasan, V., 2011. *Trends in Public and Private Investments in ICT R&D in India*. Luxembourg: European Union.
- Mangold, W. G. and Faulds, D. J., 2009. Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), pp.357-365.
- Martin-Consuegra, D., Molina, A. and Esteban, Á., 2007. An integrated model of price, satisfaction and loyalty: an empirical analysis in the service sector. *Journal of Product & Brand Management*, 16(7), pp.459-468.
- McDaniel, C. D. and Gates, R. H., 2010. Marketing Research Essentials. 7th ed. Hoboken, N.J.: John Wiley and Sons.
- Michaelidou, N., Siamagka, N.T. and Christodoulides, G., 2011. Usage, barriers and measurement of social media marketing: An exploratory investigation of small and medium B2B brands. *Industrial Marketing management*, 40(7), pp.1153-1159.
- Ministry of Electronics and Information Technology, India. 2018. Electronics and Information Technology Annual Report 2017-18. [Online]. Available at: <a href="http://meity.gov.in/writereaddata/files/Annual Report 2017-18.pdf">http://meity.gov.in/writereaddata/files/Annual Report 2017-18.pdf</a> [Accessed 17 January 2019].

www.ejise.com 160 ©ACPIL

- Ministry of Statistics & Programme Implementation, India, 2011. Value addition and employment generation in the ICT sector in India. [Online]. Available at: <a href="http://mospi.nic.in/mospi\_new/upload/val\_add\_ict\_21june11.pdf">http://mospi.nic.in/mospi\_new/upload/val\_add\_ict\_21june11.pdf</a> [Accessed 20 October 2017].
- Mittal, V. and Kamakura, W. A., 2001. Satisfaction, repurchase intent, and repurchase behavior: investigating the moderating effect of customer characteristics. *Journal of Marketing Research*, 38(1), pp.131-142.
- Moen, O., Endresen, I. and Gavlen, M., 2003. Executive insights: use of the internet in international marketing: a case study of small computer software firms. *Journal of International Marketing*, 11(4), pp.129-149.
- Moen, O., Madsen, T. K. and Aspelund, A., 2008. The importance of the internet in international business-to-business markets. *International Marketing Review*, [e-journal] 25(5), pp.487-503. http://dx.doi.org/10.1108/02651330810904053
- Moncrief, W. C. and Cravens, D. W., 1999. Technology and the changing marketing world. *Marketing Intelligence & Planning*, 17(7), pp.329-332.
- Mudambi, S., 2002. Branding importance in business-to-business markets: three buyer clusters. *Industrial Marketing Management*, 31(6), pp.525-533.
- Naudé, P. and Holland, C. P., 2004. The role of information and communications technology in transforming marketing theory and practice. *Journal of Business & Industrial Marketing*, 19(3), pp.165-166.
- Oliver, R. L., 1999. Whence consumer loyalty? Journal of Marketing, 63(4), pp.33-44.
- Olsen, S. O., 2002. Comparative evaluation and the relationship between quality, satisfaction, and repurchase loyalty. *Journal of the Academy of Marketing Science,* 30(3), pp.240-249.
- O'Reilly, T., 2005. What is Web 2.0? [online] Available at <a href="https://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html">https://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html</a> [Accessed 10 September 2018].
- Palmer, R. and Wilson, H., 2009. An exploratory case study analysis of contemporary marketing practices. *Journal of Marketing*, 17(2), pp. 169-187.
- Peytchev, A., Conrad, F. G., Couper, M. P. and Tourangeau, R., 2010. Increasing respondents' use of definitions in web surveys. *Journal of Official Statistics*, 26(4), pp.633-650.
- Pfeiffer, M. and Zinnbauer, M., 2010. Can old media enhance new media? How traditional advertising pays off for an online social network. *Journal of Advertising Research*, [e-journal] 50(1), pp.42-49. http://dx.doi.org/10.2501/s0021849910091166
- Piercy, N. F. and Morgan, N. A., 1995. Customer satisfaction measurement: A processual analysis. *Journal of Marketing Management*, 11(8), pp.817-834.
- Plouffe, C. R. and Barclay, D. W., 2007. Salesperson navigation: The intra organizational dimension of the sales role. *Industrial Marketing Management*, [e-journal] 36, pp.528-539. http://dx.doi.org/10.1016/j.indmarman.2006.02.002
- Paroutis, S. and Saleh, A., 2009. Determinants of knowledge sharing using web 2.0 technologies. *Journal of Knowledge Management*, [e-journal] 13(4), pp.52-63. https://doi.org/10.1108/13673270910971824
- Price, L. L., Arnould, E. J. and Tierney, P., 1995. Going to extremes: managing service encounters and assessing provider performance. *Journal of Marketing*, 59(2), pp.83-97.
- Rafiee, V. and Sarabdeen, J., 2013, 'Social media marketing: the unavoidable marketing management tool'. 21st International Business Information Management Association Conference (IBIMA), pp.933-942.
- Rodriguez, M., Peterson, R. M. and Krishnan, V., 2012. Social media's influence on business-to-business sales performance. Journal of Personal Selling and Sales Management, 32(3), pp.365-378.
- Roster, C. A., Rogers, R. D., Albaum, G. and Klein, D., 2004. A comparison of response characteristics from web and telephone surveys. *International Journal of Market Research*, 46(3), pp.359-373.
- Rust, R.T. and Espinoza, F., 2006. How technology advances influence business research and marketing strategy. *Journal of Business Research*, 59, pp.1072-1078.
- Salo, J., 2017. Social media research in the industrial marketing field: Review of literature and future research directions. *Industrial Marketing Management*, [e-journal] 66, pp.115-129. https://doi.org/10.1016/j.indmarman.2017.07.013
- Sarin, S., 2012. My years with B2B marketing in India: reflections and learnings from a journey of 40 years. *The Journal of Business & Industrial Marketing*, 27(3), pp.160-168.
- Sashi, C.M., 2012. Customer engagement, buyer seller relationships, and social media. *Management Decision*, 50(2), pp. 253-272.
- Sax, L. J., Gilmartin, S. K. and Bryant, A. N., 2003. Assessing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education,* [e-journal] 44(4), pp.409-432. https://doi.org/10.1023/A:1024232915870.
- Schillewaert, N. and Meulemeester, P., 2005. Comparing response distributions of offline and online data collection methods. *International Journal of Market Research*, 47(2), pp.163-178.
- Schultz, R. J., Schwepker, C. H. and Good, D. J., 2012. An exploratory study of social media in business-to-business selling: salesperson characteristics, activities and performance. *Marketing Management Journal*, 22(2), pp.76-89.
- Schneckenberg, D., 2009. Web 2.0 and the shift in corporate governance from control to democracy. *Knowledge Management Research & Practice*, 7, pp.234-248.
- Sheth, J. and Sisodia, R., 1995. The productivity crisis in marketing. Marketing Management, 4(2), pp.9-23.
- Siamagka, N.K., Christodoulides, G., Michaelidou, N. and Birkbeck, A.V., 2015. Determinants of social media adoption by B2B organizations. *Industrial Marketing Management*, [e-journal] 51, pp.89-99. http://dx.doi.org/10.1016/j.indmarman.2015.05.005.

- Simula, H., Töllinen, A. and Karjaluoto, H., 2013. Crowdsourcing in the social media era: a case study of industrial marketers. *Journal of Marketing Development and Competitiveness*, 7 (2), pp.122-137.
- Singh, R. and Seshadri, D. V. R., 2012. Tiger, tiger, burning bright! Will India's tiger economy stimulate its business marketing space? *Journal of Business & Industrial Marketing*, [e-journal] *27*(3). https://doi.org/10.1108/jbim.2012.08027caa.001
- Smith, R. E. and Wright, W. F., 2004. Determinants of customer loyalty and financial performance. *Journal of Management Accounting Research*, 16, pp.183-205.
- Smith, T., 2009. The social media revolution. International Journal of Market Research, 51(4), pp.559-561.
- Sui-Hua, Y., 2007. An empirical investigation on the economic consequences of customer satisfaction. *Total Quality Management & Business Excellence*, [e-journal] 18(5), pp.555-569. http://dx.doi.org/10.1080/14783360701240493
- Swani, K., Milne, G.R., Brown, B.P., Assaf, A.G. and Donthu, N. (2017). What messages to post? Evaluating the popularity of social media communications in business versus consumer markets. *Industrial Marketing Management*, 62, pp.77-87.
- Szymanski, D. M. and Henard, D. H., 2001. Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, [e-journal] 29(1), pp.16-35. http://dx.doi.org/10.1177/009207030102900102
- Trainor, K. J., 2012. Relating social media technologies to performance: a capabilities-based perspective. *Journal of Personal Selling & Sales Management*, 32(3), pp.317-331.
- Vargo, S. L. and Lusch, R. F., 2004. Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), pp.1-17. Vargo, S.L. and Lusch, R.F., 2011. It's all B2B.. and beyond: toward a systems perspective of the market. *Industrial Marketing Management*, 40(2), pp.181-187.
- Varini, K. and Sirsi, P., 2012. Social media and revenue management; where should the two meet? *Journal of Technology Management for Growing Economies*, 3(1), pp.33-47.
- Van Selm, M. and Jankowski, N. W., 2006. Conducting online surveys. Quality & Quantity, 40(3), pp.435-456.
- Vuori, M., 2012. Exploring uses of social media in a global corporation. *Journal of Systems and Information Technology*, 14(2), pp.155-170.
- Wang, Y.C., Pauleen, D.J. and Zhang, T., 2016. How social media applications affect B2B communication and improve business performance in SMEs. *Industrial Marketing management*, 54, pp.4-14.
- Wang, X., Yu, C. and Wei, Y., 2012. Social media peer communication and impacts on purchase intentions: a consumer socialisation framework. *Journal of Interactive Marketing*, 26(4), pp.198-208.
- Webster, J. F. E., 1992. The changing role of marketing in the corporation. Journal of Marketing, 56(4), pp.1-17.
- Westbrook, R. A., 2000. Towards a managerial research agenda for customer satisfaction. *Journal of Consumer Satisfaction Dissatisfaction and Complaining Behavior*, 13, pp.17-25.
- Zikmund, W. G. and Babin, B. J., 2013. *Essentials of marketing research*..5th ed. Australia; [Mason, Ohio]: South Western/Cengage Learning.
- Zikmund, W. G., Babin, B. J., Carr, J. C. and Griffin, M., 2010. *Business Research Methods*. USA: South Western/Cengage Learning.

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