Convergence of Social Media and E-commerce in today’s online world

Sharath Shruthi
shruthis@iastate.edu

Follow this and additional works at: https://lib.dr.iastate.edu/creativecomponents

Part of the Business Administration, Management, and Operations Commons, Business Analytics Commons, E-Commerce Commons, Management Information Systems Commons, and the Marketing Commons

Recommended Citation
Sharath Shruthi, "Convergence of Social Media and E-commerce in today’s online world" (2019). Creative Components. 347.
https://lib.dr.iastate.edu/creativecomponents/347

This Creative Component is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Creative Components by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Convergence of Social Media and E-commerce in today’s online world

by

Shruthi Sharath

Creative Component submitted to the graduate faculty in partial fulfillment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION (MBA)

and

MASTER OF SCIENCE (MS)

Major: Business Analytics (MBA) and Information Systems (MS)

Program of Study Committee:
James A Davis, Major Professor
Russell N Lacziak

The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this creative component. The Graduate College will ensure this creative component is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University
Ames, Iowa
2019

Copyright © Shruthi Sharath, 2019. All rights reserved.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>3</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>4</td>
</tr>
<tr>
<td>CHAPTER 1. INTRODUCTION</td>
<td>5</td>
</tr>
<tr>
<td>CHAPTER 2. LITERATURE REVIEW</td>
<td>9</td>
</tr>
<tr>
<td>CHAPTER 3. RESEARCH DISCUSSION</td>
<td>15</td>
</tr>
<tr>
<td>CHAPTER 4. EXPECTED RESULTS</td>
<td>17</td>
</tr>
<tr>
<td>CHAPTER 5. FUTURE SCOPE</td>
<td>19</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>21</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

I would like to express my sincere gratitude to the Department of Supply Chain and Information Systems, Ivy College of Business, Iowa State University for providing me with an opportunity to work on my research study.

I would like to thank Dr. Russell N. Laczniak and Dr. James A. Davis for their guidance and support for this research study.

I would also like to thank Dr. Anthony M. Townsend and Dr. Abhay Mishra for their involvement and guidance throughout the course of this study.

Last but not the least, I would like to thank all of them who have directly or indirectly contributed towards the completion of this creative component.

In addition, I would also like to thank my friends, colleagues, the department faculty and staff for making my time at Iowa State University a wonderful experience.
ABSTRACT

Social media marketing is the use of social media platforms to market products and services to the intended consumers. It involves the process of tailoring the marketing content to the needs and preferences of the target consumers. With most social media platforms having in-built data analytics tools, it enables businesses to build marketing content according to the users’ preferences and track and monitor the marketing campaigns to gauge the popularity, user engagement and the success rate. This also helps businesses plan future marketing campaigns based on past consumer preference data.

With the rise of social media as a highly viable platform for introducing and marketing products and services to consumers across product lines, demographics and geographies, this paper aims to analyze how different factors such as industry and firm size affect the rationale behind various social media strategies that are being devised and implemented by businesses. This paper studies the existing literature in this area of research and examines the impact of social media in business marketing strategies and in turn the impact on the firm’s equity value.
CHAPTER 1. INTRODUCTION

With the growing relevance of social media, it has emerged as one of the most prominent mediums for businesses to market diverse products and services. A recent market study by Hoot Suite, a market research firm, showed that as of January 2018, there were 4 billion internet users across the world of which 3.2 billion are active social media users. Though many of these users are present in the world’s developed countries, the rest are catching up at a rate faster than before and quicker than expected. As of 2017, 1.7 billion users made online purchases amounting to $2.3 trillion. This is expected to touch $4.5 trillion by 2021. Despite all these staggering numbers, current social media spending by businesses amount for just 9%.

Another phenomenon to have engulfed today’s technology world across geographies, industries and communities is e-commerce. Today, any business can sell products and services to a consumer sitting in any corner of the world with the power of internet. Additionally, the advent of m-commerce, e-commerce on mobile devices, has removed every remaining limitation of geography.

Convergence of social media and e-commerce, two of 21st century’s biggest game changers, is being viewed as a global phenomenon that will power the thought processes of businesses across the world. As this convergence grows stronger, it is becoming more and more visible to the lay man’s eyes. Users of social media platforms see advertisements on their Facebook or Instagram pages for products they had searched on Amazon or Walmart. And this is the brainwork of complex machine learning algorithms working tirelessly in the background.
This helps businesses like Amazon market its products and services to its customers with great levels of efficiency. Businesses across industries and sizes pump in millions of dollars into social media marketing strategies with the intention of reaching as many customers as possible and serving their needs efficiently. Social media platforms create virtual customer environments through which companies and customers can interact with each other based on common topics of interest such as brands, products and services. Efficient use of such platforms has helped organizations reach their customers based on their needs and preferences. These platforms are also used by customers to interact with each other and share their reviews, recommendations and experiences. The real value does not come from the platform itself but from how and for what the platform is being used. These platforms have the power to change brand images, drive sales and engage in customer service and support on an ongoing basis.

Unfortunately, the downside of this kind of consumer targeting and online interaction is dark, intrusive and concerning. There is a fine line between effective online marketing and privacy intrusion. Popular social media platforms such as Facebook, Instagram and Twitter have faced huge amount of criticism over their customer targeting engines used for advertising based on the data being collected with and without the users’ knowledge. There have also been issues regarding illegal discrimination against certain types of people. Though social media platforms aim to be sensitive to its users, they end up with conflicting interests between the platform users and the advertising agencies. It becomes difficult to balance the needs of both, especially when there is a large financial incentive. This leads to huge amounts of data being collected and possible misuse of the collected data causing privacy intrusions and identity thefts.
Some major aspects of consumer online identity that are commonly collected by social media platforms are name, gender, location, likes and dislikes, preferences and product needs. Such data help businesses in understanding their customers and designing business models to build effective business strategies. All social media platforms are built with user data and can have impacts far more than one can imagine. With extensive use of artificial intelligence and targeted machine learning approaches to analyze consumer data, businesses can develop marketing strategies that are effective and highly targeted.

More and more businesses are looking at social media as a strong marketing tool to target their customers effectively. Engaging with users on social media platforms helps organizations reach out to customers at the convenience of their homes and understand their needs. It also helps businesses build brand awareness, showcase their products and services, communicate promotions, discounts and offers, and grow sales affordably.

Social media marketing strategies encompass all the marketing plans that businesses incorporate on social media to sell their products and services. It is a set of guidelines that helps in providing the required direction and purpose. It lets businesses know whether they are succeeding or failing with their efforts. More specific the strategies become, more effective will be the execution of those strategies. If consumers are unaware of a product or a service, they will never think of buying it. Creating awareness about a brand is the first step towards customer engagement on social media. And the biggest advantage of social media is the scale of outreach it provides at considerably low costs.
Communication with the customers must provide clarity and authority about the brand to show that the business is trustworthy. Building customer trust helps in retaining them in the long run. With every passing day, marketing costs are going up and not every business can manage large scale marketing campaigns. But the value for every dollar spent on social media campaigns can increase exponentially if the right strategies are implemented effectively. This paper is an attempt to understand social media as a marketing platform and analyze the implications of social media strategies on business performance and in turn, on the equity value of the business.
CHAPTER 2. LITERATURE REVIEW

As defined by Kaplan and Haenlein (2010), social media is a group of internet-based applications that build on the ideological and technological foundations of Web 2.0 and allows the creation and exchange of user generated content. With explosive growth in less than five years since its birth, social media has established itself as the media of choice for businesses across the world (Dong-Hun, 2010).

In the last couple of years, there has been considerable amount of research in the area of social media marketing. Existing research work has touched upon various aspects of this area and it gives us a fair amount of understanding of what is already known. Some commonly discussed research themes talk about the different strategies for social media marketing (Ashley, C., et al., 2015), how social media has emerged as a key strategic marketing tool (Constantinides, E, et.al, 2008; Mangold, W. G., et al, 2009; Tsimonis, G., et al, 2014) and how social media marketing impacts brand loyalty (Erdoğmuş, İ. E., et al, 2012; De Vries, L., et al, 2012).

Marketers across the world are trying to understand their target audience better in order to develop effective marketing strategies that provide the highest possible return on investment. With studies focusing on consumer engagement, brand loyalty, return on investment and social media content, there is an in-depth understanding of how different social media marketing strategies lead to different outcomes based on the areas of focus. Studies that have focused on social media content from various top brands have revealed that different platforms respond to consumer engagement differently. Past research has also indicated that brands should maintain
a focus on brand presence across different social channels with fresh content and provide motivation for user participation to increase consumer engagement. Multiple studies have confirmed the importance and effectiveness of keeping the content on social media updated. Social media platforms are amplifying consumer to consumer engagement enabling users to interact with others across the world with very little effort. And this has been studied by multiple researchers thereby establishing the importance it holds in today’s marketing world. Another important focus area for social media marketing has been building brand loyalty and it has been studied in-depth by researchers to understand the impact social media has on consumers and how it helps in establishing brand loyalty effectively.

Culnan et al. (2010) focuses on how companies can derive business value with the use of social media. This paper focuses on understanding the importance of customer interaction on social media platforms and devising the right implementation strategy for social media marketing. Virtual Customer Environments (VCE) are online customer communities created to support marketing functions such as branding, product development, customer service and support and product sales. All these functions add immense value in deriving business strategies from social media platforms. The 3-point approach (Mindful adoption, Community Building and Absorptive Capacity) to implementation of strategies for customer engagement on social media provides a comprehensive framework to navigate through the complex web of social media networks and enhance the business value that can be derived from it (Culnan et al. 2010).
With the increase in the prevalence of social media, organizations tend to feel an urgency in jumping on the bandwagon particularly given the ease and low initial costs of rolling out most such applications. But it is important for businesses to understand the market, the customer needs and the business value that can be derived from the use of social media platforms before implementing them. Adoption of any new technology needs to be mindful by weighing all the consequences. Mindful adoption starts with making a good decision about which platform(s) to adopt and how those platforms should be used. The next step is to assign responsibilities for governance of corporate communications, marketing strategies, customer service and handling complaints and content creation and consumption. Businesses should also identify appropriate metrics to measure the value derived from their social media presence – objectives met, return on the investments made, reduction in costs realized, market share gained and increase in customer satisfaction achieved. Though getting large participation is one of the important goals, a good online community requires quality participation as well.

With increase in participation comes increase in risks such as security breaches, data loss and customer identity thefts. These have now become important aspects of focus for all businesses. Organizations need to put in sustained efforts to build an online community because the users are the ones who determine the quality of engagement and involvement on the online platforms. Organizations must build the requisite infrastructure to create and maintain their presence on social media platforms to ensure effective community building. Finally, absorptive capacity determines how well the organizations can recognize and acquire knowledge about market demands and customer requirements and eventually use the gained knowledge to improve their business performance. The papers discusses case studies on three
diverse firms in three completely different industries and analyzes how they function on social media. The three firms are Walmart, Hewlett Packard (HP) and Coca Cola. Walmart uses a centralized governance approach, has a strong social media presence, is highly responsive to customer engagement, has high absorptive power and uses its social media presence mainly for branding and sales. Hewlett Packard, being the technology giant that it is, has a different approach. It uses social media platforms mostly to engage with customers as a medium for customer support and has a strong presence on IT blogs and forums for customer interactions about their products and services. Social media governance for HP is a mix of centralized and decentralized approaches based on their product lines. On the other hand, Coca Cola has a widespread presence on social media with a completely decentralized approach. They run multiple pages of social media platforms for their different product lines and these platforms are primarily used for branding.

Adoption of social media as a platform to reach out to customers varies largely based on the industry of the business. Industries such as IT, retail, banking and insurance tend to have stronger social media presence when compared to industries such as energy and distribution mostly because of the nature of the business. Business-to-Business (B2B) firms tend to directly interact with other firms and do not find social media as an appropriate channel for communication. However, Business-to-Consumer (B2C) firms heavily depend on social media to stay in touch with their customers and understand their needs and preferences. Another online mode of interaction between firms and its customers is online blogging forums. This is a common medium of communication for most IT and e-commerce businesses because it provides their customers a platform to share their views and opinions as well as interact with
other customers and learn more about the products and services being offered. The case studies of three diverse firms: Walmart (a B2C retailer), Hewlett-Packard (HP, a B2C and B2B IT firm), and Coca-Cola (a consumer goods manufacturer) are an eye-opener on how businesses function and how social media marketing means different things to different firms (Culnan et al. 2010). These case studies show the importance of understanding the size and nature of businesses and leveraging social media platforms effectively to reach out to customers with the right marketing strategies. A large part of the success from social media marketing depends on how well firms can attract customers to interact on their business pages and how effectively they can learn about their customers and channelize the gained knowledge into business value.

Understanding that business value that can be derived from social media technologies can help businesses transform their organizational performance to enhance the firm’s equity value and ensure there is a logical return on the investments made. For organizations to be able to justify the use of all the resources and investments in social media marketing, it is essential to quantify the financial value derived out of every social media marketing activity. Metrics based on social media-activities can be used as leading indicators of a firm’s equity value (Luo et al. 2013). Data collected through social media platforms and online customer interactions are termed as “wisdom of the crowd” and such data helps organizations understand their customers better and this in turn drive’s the firm’s bottom line and eventually the firm’s equity value. Interactions with customers on social media platforms help organizations to gather information about their preferences, likes and dislikes. This data can then be used to drive business strategies. In turn, drive firm’s equity value. Treating social media as an investment cost will not help organizations derive firm equity through online customer interactions.
Instead, social media must be viewed as an indicator of the firm’s equity value and drive future IT initiatives and investments (Luo et al. 2013).

There has been a lot of research conducted to understand the benefits of social media and measure the impact of social media consumer buzz, which is customer engagement in information sharing, on the firm’s market value. Researchers in the field of information systems have for years tried to establish the relationship between different online activities undertaken by businesses and customers and the firm performance. Chevalier and Mayzlin (2006) analyzed consumer review ratings and concluded that they increase the product sales while Liu (2006) studied the impact movie ratings have on the box office collections of the movies. Senecal and Nantel (2004) investigated how consumers use online product reviews and recommendations in their purchasing choices. Experiments on hundreds of customers showed that those who checked online product recommendations and reviews selected the recommended products twice as often as the customers who did not check the recommendations. Morgan and Rego (2006) studied the various commonly used metrics for customer satisfaction and loyalty and how such metrics can be used to define standards for business performance. This study provided conclusive evidence to prove the power of word-of-mouth publicity among the user community. It also showed a positive correlation between customer interactions and market share. Research such as those by Tellis and Johnson (2007) has shown that product reviews and ratings have a huge influence on the way shareholders view a brand and this in turn has significant impact on the valuation of the business and the stock prices.
CHAPTER 3. RESEARCH DISCUSSION

Considering all the prior research conducted in the area of social media marketing, this research study intends to focus on how social media marketing helps organizations improve their business performance metrics with a focus on the below two research questions.

RQ1: What are the effects of factors such as (a) industry and (b) firm size on social media strategies?

RQ2: How does return on investment from social media strategies impact a firm’s equity value

This is a qualitative study that uses existing research in the area of social media marketing strategies (paper publications, research articles and blog posts from industry experts and business consulting firms) and personal observations and experiences as secondary sources of data to formulate the research propositions. The aim of the propositions is to further breakdown the research questions and develop possible answers from the knowledge gained through the literature review conducted. This research is an attempt to study the existing practices in the area of social media strategies, online customer engagement and analyze the impact of online activities on firm equity value. The above two research questions address the area of study, but the research propositions being discussed below further narrow down the focus of the study.

Below are the Propositions that have been framed to focus on the research questions identified in the above section.
Propositions for RQ1:

- Organizational factors such as firm size and industry impact the effectiveness of social media strategies positively
- Success of social media strategies is independent of the size of the organization
- An organization’s industry determines the rationale behind implementing every social media strategy

The above three propositions address the first research question. The aim here is to identify how organizational factors such as size and the industry of a business impact the marketing decisions. The first proposition states that the aforementioned factors have considerable impact on the marketing decisions. The next two propositions focus on how these organizational factors impact an organization’s social media strategies.

Propositions for RQ2:

- Social media strategies assist businesses in personalized customer targeting
- Social media strategies are effective in reaching large number of customers and aid in boosting the brand image of the business and in turn the firm equity value

The above two propositions aim to address the second research question. The focus here is to understand the impact of social media outreach and analyze how they impact the outcome of the marketing strategies and eventually the firm’s equity value. With the onset of social media as a marketing tool and the reach that it has established as a medium, online customer engagement adds to the dynamics of marketing and these two propositions aim to address the additional impact that social media has on the effectiveness of the marketing strategies in driving business value.
CHAPTER 4. EXPECTED RESULTS

As discussed in the earlier sections, this research study aims to address the factors that influence the outcome of social media strategies and identify factors that drive successful campaigns. Considering existing research work and the literature review conducted for this research study, below are the results expected for each of the propositions developed:

**Expected Results for RQ1’s Propositions:**

Organizational factors such as firm size and industry impact the effectiveness of social media strategies positively - *I fail to reject this proposition as organizational factors will have a significant impact on the overall outcome of social media strategies and customer outreach engagements of a firm.*

Success of social media strategies is independent of the size of the organization - *I fail to reject this proposition because multiple research studies have shown that the power of social media outreach is highly significant irrespective of the size of the firm.*

An organization’s industry determines the rationale behind implementing every social media strategy - *I fail to reject this proposition because a single marketing campaign cannot be equally successful across all industries. Hence different organizations approach social media marketing differently and the success of the strategy is dependent on the nature of the product or service being sold.*
Expected Results for RQ2’s Propositions:

Social media strategies assist businesses in personalized customer targeting - *I fail to reject this propositions because social media has been a huge driving factor in recent times to understand customers with greater focus and tailor products and services based on the identified needs.*

Social media strategies are effective in reaching large number of customers and aid in boosting the brand image of the business and in turn the firm equity value – *I fail to reject this proposition because multiple organizations across industries have shown the power of social media in reaching out to customers, understanding their needs and preferences, enhancing brand image and driving sales. All these factors eventually result in improving the performance of the business thereby increasing the firm’s equity value.*

The expected results are based on the understanding of the literature review conducted. Existing research, in specific, Culnan et al. (2010) and Luo et el. (2013) provide comprehensive understanding of the topic and aid in concluding on the expected results described above.
CHAPTER 5. FUTURE SCOPE

Social media is the current buzzword and it has proved that it is here to stay and grow stronger. With businesses realizing the power and extent of reach that social media can achieve, there is constant increase in the use of social media platforms to engage with consumers, market products and advertise services across industries. Social media has provided a platform for real time interactions between businesses and its customers. So, it is very important for businesses to leverage current trends and anticipate any new ones to be able to act as per consumer requirements.

Today, it is no longer enough to just maintain a social media presence. Businesses need to engage with their customers across multiple platforms and build an identity for every social media channel. The future will only see an increase in investments towards social media strategies with focussed use of advanced artificial intelligence to improve the understanding capabilities of social media engines. Understanding consumer needs can be a highly complex process and it requires businesses to develop the right level of sophistication to coordinate all their business operations with the knowledge gained from customer interactions on social media.

Continued growth in the use of smart speakers such as Alexa and Google Home is expected to provide personalized consumer data to develop consumer focused marketing strategies and reach the target audience with greater effectiveness. Smart speaker systems across homes, cars and offices will help provide comprehensive data about a user needs and preferences. Use of Chatbots provides ease of communication between businesses and its
customers. Businesses are now striving to make user experience with chatbots highly personalized and creative to ensure customers receive the required information and assistance in a timely fashion.

Growing use of private messaging services such as Messenger and WhatsApp will encourage marketers to data mine consumer information from these sources as well. With increased amounts of consumer data such as user identities, tastes and preferences being collected, this opens new areas of focus - data privacy and consumer identity protection. Though these aspects are already being talked about with a lot of concern, there needs to be increased focus on these aspects for businesses to continue using social media as a key marketing tool.

For a more data focused approach, social media strategies can be studied with the use of data from different social media platforms. Performance reports from social media sites help to track the performance of the strategies. Businesses are now looking at marketing & social media analytics (likes, shares, views, click-throughs, impressions, conversions, etc.) to analyze consumer engagement on the platforms. Multiple marketing analytics databases (E.g.: MarketingCharts.com) provide market data for study. Another growing area of focus has been sentiment and emotion analysis of user generated content from different social media platforms through artificial intelligence powered analytics approaches (E.g.: Crimson Hexagon). A more quantitative research can help quantify the performance measures and provide a numerical framework to the research.
REFERENCES


Digital in 2018, Essential Insights into Internet, Social Media, Mobile, And Ecommerce Use around the World, Hoot Suite 2018 Market Report


