The Unfortunate Decline of Blogging Among the Fortune 500: The Downside of Adopting Substitute Innovations

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This study follows the adoption of blogging by the Fortune 500 and its eventual decline. Through the use of Roger's diffusion theory (1963), the process of adopting a newer more exciting innovation in the place of blogging is discussed. Despite the interesting capabilities offered by microblogging, we argue that newer tools such as Twitter, or Instagram do not offer the key benefits that blogging allows. This makes microblogging a new innovation, however not a suitable substitute or a relevant next generation of blogging. Practitioners should reconsider discontinuing their use or adoption of blogs in favor of these newer tools.

INTRODUCTION

Social media has rapidly changed the way businesses operate. Consumers have much more say in the conversation, and have access to more information and opinions than ever before. It is for this reason that major corporations have adopted social media tools as an integral part of their marketing strategy. Social media have been recognized as a technological phenomenon that facilitates communication and collaboration that is embedded in humans' lives (Aakhus et al. 2011). Given the new communications tools available, firms have adopted policies and plans to achieve business goals in which information exchange supports the decision making process (Holsapple and Singh 2000). Many firms have ventured into the world of social media in hope of generating greater revenues and profits as well as increased market share (Amit and Zott 2001). Social media platforms are more frequently used as strategic marketing tools and channels to promote new products or services (Kwak, 2010), reach, observe, and get closer to customers (Boyd and Ellison 2007; Woodcock, Green and Starkey 2011), and to better understand their individual preferences (Li and Shiu 2012). Further, these platforms provide stakeholders with several benefits and services including location based recommendations (Zhao and Lu 2012), user reviews (Hoehle, Scornavacca and Huff 2012), and development of personal and company brands, which is likely to result in greater incremental value.

Researchers have discussed the adoption of specific products (Herzenstein et al, 2007; Ma et al, 2014), however to our knowledge, little research has been done to look at not only the adoption, but also the replacement of a social media tool with a substitute or newer generation. It is important for scholars as well as practitioners to understand how these tools are being utilized by businesses, and how they are being adopted. Understanding the life cycle of social media tools and their propensity to introduce new

tools will be instrumental in selecting and adopting the best approach for a specific company and target audience. It will also demonstrate the application of diffusion theory to social media tools in the business environment.

This study will focus on the Fortune 500. Fortune Magazine annually compiles a list of America's largest corporations, aptly named the "Fortune 500" (F500) given their size and wealth. Due to the hugely influential role that these companies play in the business world, studying their adoption and use of social media tools offers important insights into the future of commerce. These corporations provide a look at emergent social media trends among America's most successful companies which are then emulated by other businesses.

This article discusses the longitudinal adoption pattern of major social media tools over the last several years among the Fortune 500. Specifically, blogging is focused on as one of the first tools to be adopted by businesses in the late 1990's. We predict that blogging is currently declining and that newer tools are emerging to take its place. Due to the labor intensive and time-consuming nature of blogging, it is likely that it will be slowly replaced by a newer generation of tools called microblogs. Unfortunately, in contrast to a typical substitution, microblogs cannot offer many of the core benefits of blogging and therefore businesses may be abandoning an important tool too soon.

Next, we present a short history of the diffusion and adoption of innovations, and the growth of microblogging, as well as our hypotheses. The methodology and results of our longitudinal study on the adoption of social media tools by Fortune 500 companies follows. We conclude with managerial implications, limitations and suggestions for future research.

Diffusion and Adoption of Innovations

Diffusion research has a long and rich history (Barnett, 1953; Rogers, 1962; Bass, 1969; Brown, 1981; Norton and Bass, 1987; Mahajan, Muller, and Wind, 2000). Rogers defines the diffusion of innovations as "the process by which an innovation is communicated over time among the members of a social system" (Rogers, 1995). Researchers have defined innovations as typically resulting from a change to or the elimination of product attributes or features within an existing category (Goldenberg, Mazursky and Solomon, 1999; Moreau, Lehmann and Markman, 2001).

Since its start in the 1960s, diffusion research has focused on the entire life-cycle course of an innovation, specifically from the perspective of communications. Traditionally, its origin is traced back to a model developed by Bass (1969), which focuses on first-purchase demand and models the timing of adoption of an innovation. Rogers (1983), delineates five attributes that explain the rate of adoption of an innovation: Relative advantage, compatibility, complexity, trialability, and observability. Ostlund (1974) added another attribute, the perceived risk of an innovation.

In addition to these attributes, Rogers also explains other variables that can affect the rate of adoption such as (1) the type of innovation-decision, (2) the nature of communication channels diffusing the innovation at various stages in the innovation-decision process, (3) the nature of the social system in which the innovation is diffusing, and (4) the extent of change agents' promotion efforts in diffusing the innovation (Rogers, 1983). Notably, he suggests that the "relationship between communication channels and the attributes of the innovation often interact to slow down or speed up the rate of adoption" (Rogers, 1983).

Another issue that the literature has considered when explaining product adoption is the influence of substitutions. Typically, it is believed that a new generation of a product will eventually replace the older generation. However, for many products, old and new generations may coexist for a long period of time (Peres, Mahajan and Muller, 2009).

A significant and frequently-used model of technological substitution was proposed by Fisher and Pry (1971). Their model purports three assumptions. The first of these is that "many technological advances can be considered as competitive substitutions of one method of satisfying a need for another." Second, that new technologies often completely supplant older ones. Third, they expressed their market share model in terms of Pearl's Law: "The fractional rate of fractional substitution of new for old is proportional to the remaining amount of the old left to be substituted" (Norton and Bass, 1987). The subject of technological substitutions and new technological generations has been of interest to scholars over the last

several decades (Pae and Lehmann 2003; Kim Chang and Shocker 2000; Mahajan and Muller 1996; Bayus 1994; Norton and Bass 1992).

The adoption of social media tools by the Fortune 500 has been looked at longitudinally for almost a decade (Barnes and Jacobsen, 2013). What tools companies have chosen to use and how newer generations or competitive platforms have been adopted can be seen to have dramatic effects over a short duration of time. Despite key differences in the online environment, recent research has shown that the life-cycles of social media platforms do not differ from those of durable consumer goods (Franses, 2014).

Even more notably, the same study found using the Bass Model that, on average, the popularity of any given form of social media peaks after 4 years. Based on the knowledge that blogs are one of the most mature social media tools, we believe that blogging is now declining, and primed to not become extinct, but be slowly replaced by a substitute or newer generation.

In 2007, Tumblr was created as the first major site to offer a variety of different post types, unlike that of traditional blogs (WebdesignerNews, 2011). Today, Twitter has become a dominant force as one of the most widely recognized microblogs, allowing users to share information, pictures, and links with a limited amount of text. Despite allowing users to share content, microblogs function in a remarkably different manner. Where as typical blogs allow for more text and information, as well as offer better search optimization and branding options, microblogs offer short and more visual alternatives of sharing information. We argue that, while meeting all of Rogers (1983) criteria for adoptability, microblogs are not appropriate substitutes for blogs. Tversky (1977) evaluated substitutes by looking at the number of similar features compared to the number of distinct features. Of importance for substitute products is that they are capable of providing the core benefits required by consumers (Shocker et al, 2004). Despite involving information, the number of distinct benefits offered by blogs that are not offered by microblogs makes microblogs unacceptable substitutes.

The unique benefits of blogging have been the subject of many news and practitioner publications including Forbes, Hubspot and books on corporate blogging (Weil, 2014). There is agreement on at least three major advantages of traditional blogging that do not typically result from microblogging tools. (DeMers 2015, Eridon 2015) These include:

Thought leadership. The discussion of topical industry issues, answers to significant product/industry questions or taking positions of more complex topics like sustainability, global threats, health and safety or clean water/food.

Driving traffic to the website. Blogs cue search engines that a website is active and provide opportunity to show up in organic searches. This not only brings in traffic, but potential leads and sales.

Serving as a repository of content. The blog can inform other social media and they in turn can point back to the blog. This relationship unifies the message and supports the brand.

Knowing this, it is beneficial to evaluate how the most successful companies are adopting and utilizing these formats. If blogs are no longer thought of as being effective tools, despite the specific benefits that only they offer, the decline of blogging may have a serious impact without a suitable substitute. Based on this, we propose the following hypotheses:

H1: The adoption rates for blogging among the Fortune 500 have been and will continue to decline.

H2: The decline in blogging among the Fortune 500 will be contrasted with higher adoption rates of a newer "generation" of tools that allow for microblogging.

H3: Despite the decline in blogging, the Fortune 500 uses blogs to accomplish goals that they believe cannot yet be met with newer tools.

METHODOLOGY

The following definition was used to locate 2015 F500 corporations with a social media presence: A company was counted as having a presence on each platform studied if the primary corporation had an active account (activity within the past 30 days). It is worth noting that there is evidence of usage of social media tools such as blogs inside these corporations. This research did not look at that subject, but instead focused on public-facing corporate blogs as a barometer of social media usage to engage the public.

All corporations were analyzed using multiple steps. First, working from the published 2015 F500 list, all corporate home pages were examined for links to, or mention of, social media accounts. If a link wasn't found on the company's home page a search was performed using search engines. Any links resulting from these searches were followed and evaluated using the established criteria. This proved to be an effective method since additional social media accounts were located. The process was repeated for each social media platform.

Results

H1: The adoption rates for blogging among the Fortune 500 will continue to decline.

In 2011 the leveling off of blogging began with only 23% hosting a public facing corporate blog. After that, things changed. In 2012, there was a leap forward and 28% hosted public facing blogs. That surge continued in 2013 showing 34% of these corporate giants creating and sharing content through blogs. A decline in blog use began in 2014 with a decrease of 3% from the 2013 numbers. The decline continued with the 2015 list: 103 (21%) of the F500 companies have blogs, or 10% fewer than 2014.

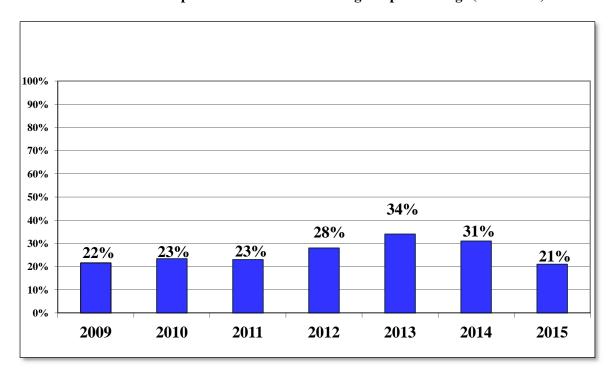


FIGURE 1 Fortune 500 Corporations with Public Facing Corporate Blogs (2009-2015)

H2: The decline in blogging among the Fortune 500 will be contrasted with an increase in the adoption of a newer "generation" of tools that allow for microblogging or a shorter and faster format.

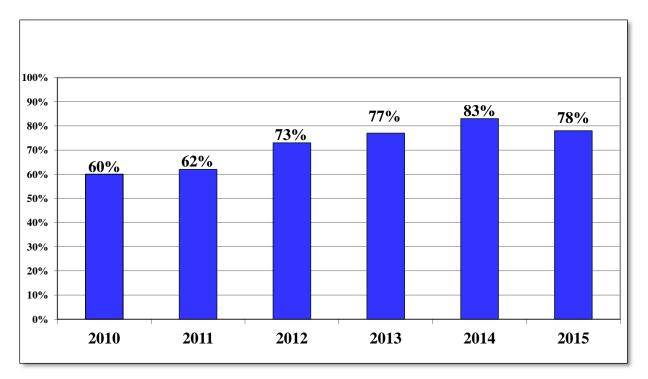
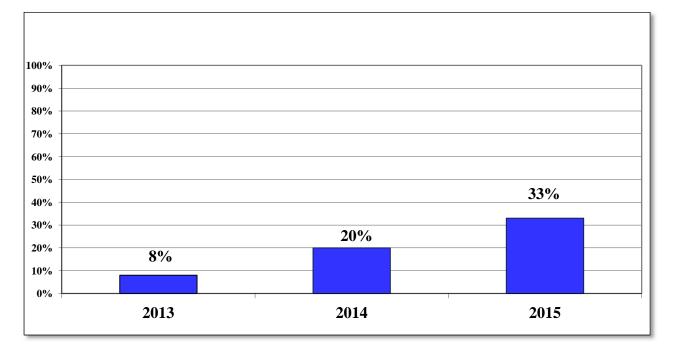


FIGURE 2 Fortune 500 Corporations with Public Facing Twitter Accounts (2010-2015)

FIGURE 3 Fortune 500 Corporations with Instagram Accounts (2013-2015)



As seen in the tables above, over three quarters of the Fortune 500 corporations have Twitter accounts and Instagram enjoyed a double-digit increase in adoption this year among this group. Twitter is an online social networking service that enables users to send and read short 140 character messages called "tweets". It was introduced in 2006 as a microblogging tool which allowed for short posts. It currently has over 300 million active users and has become a favorite tool among the Fortune 500. Instagram was introduced in 2010 as an online mobile photo-sharing and social networking service with blog-like features for short posts. It claims 78 million US users and is growing quickly among businesses. Now, one third of the Fortune 500 use this platform.

H3: Despite the decline in blogging, the Fortune 500 uses blogs to accomplish goals that cannot yet be met as effectively with newer tools.

Primary Objective of Blog	Percent	Example
Thought Leadership	42%	Ford Motor Co., Cisco, Whole Foods
Branding	26%	Coca-Cola, Southwest Air, Disney,
		Starbucks
Informational	24%	Johnson & Johnson, Oracle
Other (Charity/Mascot)	8%	Progressive Insurance, Kellogg's

In this study, the Fortune 500 blogs were reviewed and classified by their typical postings. Most fell under the heading of "thought leadership". This is the positioning of the corporation as a leader in industry issues. For example, Ford Motor Company writes extensively about sustainability, safety and innovation. Whole Foods dedicates posts to sustainability, animal welfare and GMOs in food (Plutsky 2014). Others used their blogs predominantly to promote their brands. These include Coca-Cola and Starbucks who focus on logos, products and brand strength (Pacinelli 2014). Johnson & Johnson has long been know for disseminating consumer tips on health and wellness and uses its blog to provide information on topics ranging from flu shots to vaccinations. Some brands have mascots that are so popular, they have their own blogs. Kellogg's Tony the Tiger and Flo from Progressive are examples of corporate blogs using mascots.

MANAGERIAL IMPLICATIONS

The Fortune 500 are iconic in the business world, representing the wealthiest and most successful US corporations. As such, businesses look at trends among this group to emulate. This study documents that the Fortune 500 are moving away from traditional long form blogging and moving towards shorter, more nimble formats of microblogging sites like Twitter or using blog-like features on Instagram. But do these newer tools offer the same advantages as the more mature blog tool? Is this a trend that could negatively impact a business? There are implications for businesses that choose to follow the lead of the Fortune 500.

According to Forbes (Makovsky 2012) there are many good reasons for a company to employ a traditional blog. These include:

- Humanizing the company
- Enhancing visibility
- Building credibility and trust
- Establishing industry expertise
- Promoting products and policies
- Addressing important issues
- Generating leads ... and business
- Defending the company against its critics

All of these are best executed by the longer, more content rich format of the traditional blog. In addition, there is the issue of ownership. A blog on a corporate website is owned and operated by the company without restriction on length, content or tone. This is not true of the microblogging platforms which all impose restrictions. If businesses get caught up in what appears to be the decline of blogging and believe that Twitter, Instagram are new generation replacements, they could be negatively impacted.

LIMITATIONS

This study has several limitations. First, while this study is a statistically valid examination of Fortune 500 companies, these results may not apply to all organization. The most successful companies share many attributes that other companies may not, making these results less generalizable. Next, while we found proof that the adoption of blogging has decreased, this study did not delve into why companies were not adopting it, or why they had discontinued their use of this tool. Lastly, this study focuses on the use of social media tools by companies. In order to best understand why specific tools are being used, it may be important to study the consumers who are utilizing these tools. While we assume the most successful companies are utilizing tools that are beneficial, having a consumer perspective may help to increase our understanding of how or why certain methods of communication may be more effective. Future Research

Based on the limitations of this study, it would be beneficial to study other companies (ie. Not-forprofits, technology companies, companies with strong brand recognition) to identify key differences in how certain tools are used. When studying the adoption or lack of adoption of blogging, it would be important to ascertain why certain tools are being adopted. Despite Twitter and Facebook being popular platforms for consumers, are they the best platforms for generating sales, increasing brand recognition, or communicating with a target audience? Understanding why companies use these tools or why they stop or avoid using others may help to explain key differences in the adoption of specific tools. Lastly, a study comparing consumer use and recognition of social media utilization by brands with actual companies social media strategies may demonstrate a disconnect between theory and practice. If brands are trying to reach consumers in a comfortable setting, and yet, consumers do not appreciate this outreach, it is possible some tools may do more harm than good.

As social media continues to grow, and technologies quickly advance, these tools will be more important than ever for spreading information. New tools may come and go in accordance with wellestablished theories of adoption, but when it comes to blogging, companies should remain vigilant in utilizing a blog for information, and for securing a reputation of expertise and trust. Despite the decline in adoption of blogs, they still serve a greater purpose, and companies should think twice before jumping ship for a smaller and less substantive experience.

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