Social Media Advertising Platforms: A Cross-cultural Study

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Abstract: The advent of social media tools has led to a new era in advertising theory and practice. However, scant amount of research addresses the ways in which social media are used in different countries to convey corporate image. The purpose of the present study is to increase our understanding of the adoption of social media for external communication purposes. Based on a content analysis of 250 websites of the “Fortune 500” companies in the USA and 265 websites of the “Strongest Companies in Greece”, the study performs a cross cultural comparison of issues and trends in the use of social media advertising techniques in the USA and Greece. The findings show that US advertisers tend to use social media for advertising purposes more frequently than their Greek counterparts. In fact, the use of social media as an element of the promotional mix is still at an early phase in Greece, since Greek practitioners seem to have underestimated the importance of this source of corporate communications. Though significant differences between the U.S.A. and Greece seem to exist, there are, also, some critical similarities between the two environments. In particular, business to consumer (B2C) enterprises focus mainly on the use of Twitter and Facebook, while business to business (B2B) emphasize YouTube and RSS. Moreover, it seems that high tech companies are pioneers of the use of Web 2.0 tools for advertising purposes, while traditional firms seem to lag behind such practices. The present study contributes to the relevant literature by analyzing the use of social media in a cross cultural environment. In that manner, significant strategies for more effective exploitation of social media advertising both in countries that are early adopters (as the U.S.A.) and countries that are late adopters of innovations (as Greece) emerge.

Keywords: social media, cross-cultural, U.S.A., Greece, corporate communications.

1. Introduction

The advent of social media has led to substantial changes in the communication process. Social media represent a significant challenge for businesses, as a lot of existing marketing strategies are considered insufficient and incompatible with an era when consumers appear to be more empowered than ever before [1] [2] [3].
In this era of the global network, companies need to consider both social and traditional media as an ecosystem in the pursuit of common goals. These goals may be, among others, the promotion of a product/service, the disclosure of a new initiative by the company and consumers’ commitment to a rich, substantial, and interactive dialogue [2] [4].

To date, research in marketing, relates to the study of media adoption in the social global network, mainly on an intercultural level [5] [6] [7] [8]. The present study employs a cross cultural approach. It focuses on the level of adoption of social media, for marketing purposes and corporate websites promotion in Greece and the USA. Hence, the objective of the present study is to record and interpret the use and significance of web 2.0 tools in culturally diverse environments such as Greece and the U.S.A, based on Hofstede’s [9] cultural dimensions.

2. Theoretical Background

2.1. Social Media for Marketing Purposes

The evolution of technology, the appearance of web 2.0 tools and the social media seem to redefine the economy and the communication process between companies and their customers and stakeholders [10]. Constantinides and Fountain [11, p. 231] defined Web 2.0 as:

"collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes ... [supporting] the creation of informal users’ networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing/refining of informational content."

Hence, it could be argued that web 2.0 technologies signify an innovation in communication. According to Damanpour and Gopalakrishnan [12], the environment has great influence on the decision making process on the adoption of the innovation. The degree of innovation also seems to affect its rate of adoption [13].

In the new era of the social web, the industrial period communication model - dominated by the centrally controlled, top down, mass communication- is replaced by a novel, well placed and incorporated information system, based on qualities that comply with a free, open and consumer-centered market [14]. The traditional communication approach in marketing, where the company in collaboration with its representatives (advertising agencies, public relations consultants, market research companies) developed the marketing communication strategy, (controlling and defining themselves the content, the range, the timetable and the means of communication), has been seriously “corroded” [15] [16].

Marketing is gradually developing the element of engagement and involves two-way, many-to-many and multi-modal communication [17]. Marketing communication, once controlled by distinguished and recognizable corporate representatives, gives its place to a disorderly cluster of communication that is based on the market and is performed by numerous participants, such as the consumers, rivals, employees, observers, and stakeholders [15] [18]. It seems that, the advent of social media has led to democracy in communication. Power is not held by marketing professionals and public relations, but by individuals and the communities they create [1] [11].

Social media represent a hybrid element of the promotional mix. They combine the features of the traditional tools of Integrated Marketing Communications (B2C) and a significant channel of word of mouth communication (C2C) where marketing professionals cannot control the type, the range and the distribution of information. These media are notably important and powerful to every company that acknowledges and at the same time makes use of them, as consumers seem to gradually distance themselves from the traditional promotional approaches (e.g.
limited trust towards traditional advertising as a source of information affecting consumer decisions) [15]. In their study of the adoption of social media by fast growing companies in the US, Barnes and Jacobsen [13] report that almost half of the companies examined (Inc.500) considered social media to be very important for their business/marketing strategy. Firms used social media not only to communicate with their customers but also with vendors and partners.

In the new communication model, information about the products and companies originates from the market itself and disseminates through the traditional and social media avenues. Marketing professionals, accustomed to controlling the provider initiated communication messages, have to switch over to the consumers and employ the social media communications path [15]. Companies ought to consider social media as a comprehensive communication strategy that places emphasis on consumer's experience, and works in conjunction with traditional media. Social media broaden marketing's potential beyond the level of keeping the consumer informed, and expand it to the level of commitment, consideration, loyalty and customer support [2] [19]. Marketing professionals rely on both individuals and social media in order to develop consumer experiences that accomplish attention and influence. While the use of the traditional media results in a compromise between the approach and commitment of consumers, social media, enable the simultaneous approach and commitment of consumers [2].

Despite the obvious impact of social media, a significant number of marketing professionals seem to ignore them, either because they are unaware of their importance for a company's promotional activities, or because they lack the required knowledge and guidance in order to incorporate them into their strategies and actions, or even because they are afraid of losing control [1] [20] [21] [22]. Subsequently, companies often ignore or mismanage the opportunities or threats that come from creative consumers with preference in the new interactive media [23].

3. Hypotheses Development

3.1. The Adoption of Social Media in Greece and U.S.A.

The adoption and use of the social web by companies could be considered a constant procedure of adopting an innovation [24] [25]. The acceptance of a technological trend may be a time-consuming procedure, which depends, among others, on several cultural factors [26]. According to Rogers [26] there are five attributes upon which an innovation is judged and incorporated: triability, observability, relative advantage, complexity and compatibility. Social media is a form of communication whose sole purpose is to provide open communication between individuals, companies, consumers and everyone in between. Therefore, it has to be easy to use and the set-up or creation of a blog, Facebook page or twitter account has indeed remained straightforward and fast [13].

A number of studies have focused on the relationship between the adoption of a new technology and several cultural aspects [27] [28] [29]. However, cross-cultural studies on the use of web 2.0 technologies [5] [6] and the social media [7] [8] have only recently started to emerge and remain scant.

In Greece, several cultural factors concerning mainly technological and behavioural difficulties, (lack of information and relevant knowledge, limited technical support, conflicts between several departments and the department of information technology) hindered the expansion and wide use of the internet [24]. Tsatsou [29] claims that the persistently low level of internet adoption in Greece could be attributed to a traditional uncertainty-avoidant and novelty-resistant culture that discourages technological development and innovation. Hence, Greece seems to lag behind the other countries-members of the European Union, and other countries around the world [24].
Despite the existence of numerous theoretical models in intercultural research literature [30] [31] [32], the study focuses on Hofstede’s [9] cultural dimensions for the comparison of the USA and Greece. Hofstede’s framework has provoked a series of discussions and debates about the cultural profiles of countries around the world and whether culture can or should be quantified and measured [29]. It is a framework widely used and applied in scientific research to examine individual and collective trends and the related cultural drivers [33] [34] [35]. Hofstede’s framework has also been used for the hypotheses formulation in comparative intercultural studies [36]. Hence, this study employs Hofstede’s framework to complement existing approaches to the study of social culture focusing on Greece and the USA and to provide the theoretical ground for an empirical examination of the role of culture in the adoption of web 2.0 technologies in these countries.

Hofstede [37] introduced five cultural dimensions that explain the differences among cultures, namely Power Distance (PDI), Individualism - Collectivism (IDV), Masculinity - Feminity (MAS), Uncertainty Avoidance (UAI), Long vs. Short Term Orientation (LTO).

Greece has the highest score in the world (UAI 112) concerning Hofstede’s cultural dimension of Uncertainty Avoidance, unlike the USA, where citizens appear to be more tolerant towards vagueness and uncertainty (UAI 46). The high rates on the Uncertainty Avoidance Index indicate that Greece is intolerant of opinions and practices different from those that Greeks are accustomed to. It also demonstrates a negative predisposition to new technologies and their significances [29].

According to Hofstede [37] and Shane [38], societies with high tendency for Uncertainty Avoidance are more difficult to adopt an innovation, the new media and use the Internet. Following and reinforcing the same view, Shane [38], who conducted the first intercultural study on the adoption of web 2.0 technologies based on Hofstede’s model, concluded that societies which feel threatened by the unknown and the unstructured conditions are less likely to adopt web 2.0 technologies. Hence, it is believed that in Greece, marketing professionals will be reluctant towards the adoption of social media, as the new media empower consumers and marketing professionals are afraid of losing control [39].

Furthermore, previous studies [37] [40] suggest that societies that are described as individualistic are more likely to use new technologies and adopt innovations compared to societies that are described as collective. Greece is considered a collective society, (IDV 35) where individuals belong to close groups that they look after, with the mutual commitment and devotion of their members. On the contrary, the USA is considered an individualistic society (IDV 91) where people take care of themselves and their close relatives. As a consequence, it is expected that in the U.S.A there will be a positive attitude towards the adoption of web 2.0 technologies.

“Power Distance” describes the degree up to which the less powerful members of organizations and institutions accept and expect that power will be distributed unequally. According to Hofstede [37], societies that tend to put great emphasis on equality and justice and are described as of short distance from power (like the USA (PDI 40)) use technology to a greater extent in comparison to countries that accept greater distance from power (like Greece (PDI 60)). The high rates of the Power Distance Index indicate that in Greece there is a high degree of inequality of power distribution with centralized decision structures and authority discouraging advances in technology. At the same time people are less active and likely to take initiatives because they lack autonomy and fear depreciations [29].

Finally, male dominated societies, in which the acquisition of material goods and the achievement of work goals are of great importance focus on financial growth, competitiveness and technology [37]. The U.S.A is considered a relatively more masculine society (MAS 62) compared to Greece (MAS 57) [37]. Hence, the following research hypothesis is formulated:

H1: Corporate websites in the USA will employ web 2.0 technologies for the promotion of products or services to a greater extent than corporate websites in Greece.
3.2. The Adoption of Social Media Depending on the Type of Company

Social networking environments have become significant and supportive for both B2C and B2B markets [41]. A lot of researchers support that social media are of great influence and importance to B2C companies [42][43][44][45]. However, there are several researchers who claim that these new media are also very effective and efficient as cooperation and communication tools of B2B companies [46][47][48].

To date, there are few studies on the adoption of social media depending on the market the companies address [49][50][51]. They have been conducted by companies and do not observe significant differences between B2B and B2C companies. The small differences between B2B and B2C companies in the adoption of the new media for marketing purposes may be mainly due to the fact that the theories on consumer and industrial marketing converge to a great extent [52].

Nonetheless, perhaps B2C companies put greater emphasis on the use of the social media and web 2.0 tools that focus on the user. According to a study conducted by the Association of National Advertisers and B2B Magazine [53], only 10% of marketing professionals for 2 companies view the social media as effective communication tools whereas in B2C companies 36% of the marketing professionals share this view. Moreover, there seems to be a widely-shared belief that especially in the technology sector, social media are of relevance only to consumer brands [54]. Similarly, while Agresta, Bough and Miletzky [55, pp. 58-61] point out that B2B companies can and do use social media tools, their research focuses almost entirely on B2C (sited in Brennan & Croft [56, pp. 102]).

The significance of social media for B2C companies is further supported by Peters & Salazar [57] and Messerschmitt et al. [58], who claim that social networking sites were originally developed as sites for the communication and the exchange of views between individuals and not groups of people, as businesses are considered to be. They consider that social networking sites target primarily B2C companies and to a less extent B2B companies. Thus the adoption of social media by B2B companies remains in its infancy. What is more, according to Li and Bernoff [59], there are not 2 social networks, since individuals and not businesses interact in social networks and it is thus suggested that B2B companies could benefit from the ideas of B2C companies that lead the way in the adoption of social media.

Social media can be considered as virtual communities [60][61][62]. Virtual communities are groups of consumers, who are connected and interact with each other through the web, in order to achieve personal and common goals [63]. Viewing social media as virtual communities signifies that B2C companies which are already familiar with the development of virtual communities, will take advantage of the opportunities the social media and web 2.0 technologies present, in targeting the user. Thus, the following hypothesis is suggested:

H2a: Web 2.0 technologies that focus on the user (Twitter, Facebook, LinkedIn, YouTube, Flickr, Tagging) are more likely to be used by B2C companies rather than B2B companies.

On the other hand, 2 companies, compared to B2C companies, show an increased tendency towards the use of blogs, podcasts and the media in general that focus mainly on the content and not on the users [49][50][51][53]. This may be due to the fact that most buying decisions on 2 products may be considered as high-involvement purchases, as opposed to buying decisions on 2C products and the purchase of industrial products entails great risk, without this always being true [64].

On a related theme, Brennan and Croft [56] examined whether social media could be used to facilitate the development of trusting relationships between buyers and sellers. They claim that “in business-to-business sectors the audience for social media conversations is invariably small, with many of the parties involved known personally to each other. Such social media conversations reduce perceived risk when buyers and sellers are at an early stage of their business relationship” (p. 111). Therefore, B2B companies may use web 2.0 tools that focus on the content in order
to give customers more information about the products/services and in this way reduce the perceived risk entailed in their buying decision.

Social media could also be used as a significant component of a brand strategy in high-technology B2B markets. This could be achieved by building knowledge leadership through a sustained application of social media, particularly the use of content-rich materials such as white papers, blogs and podcasts [56]. It appears that the more innovative users of B2B social media are striving to position themselves as experts and seeking to influence the direction in which markets evolve by providing content-rich social media material.

Moreover, there is a dominant view that B2B companies use social media and other types of web 2.0 technologies within their companies, for inner purposes too (internal communication and cooperation of staff) [65]. Tsironis and Dimitriadis [66] claim that a firm’s overall social media presence may result among others in the company revising its strategy in terms of “internal factors” and adjusting its current social media activities or designing new ones. However, the present study focuses on web 2.0 technologies that address the general public for marketing and promotional purposes and therefore does not take into account the media that companies may use for internal purposes. Hence, the following hypothesis is suggested:

H2b: Web 2.0 technologies that focus on content (Blogs, Podcasts, Wikis, RSS) are more likely to be employed by B2B companies than B2C companies.

### 3.3. The Adoption of Social Media Depending on the Technological Level of Companies

Firms vary in their timing of innovation adoption and could be classified as, early adopters, early majority, late majority, and laggards [26]. Organizations that are innovators or early adopters seek to realize competitive advantages or gain capabilities and are more likely to be driven by efficiency and profit gains [67]. High-tech companies present incredible ingenuity and innovation indicators, as well as high rates of adoption of innovations [68]. Regarding the adoption of social media by businesses, previous research indicated that while many companies viewed positively the web 2.0 as a new phase in the evolution of the web, others simply rejected it as a new high-tech trend of the era [11].

Bughin and Manyika [69], recorded a trend in the vast majority of high-tech firms (74%) to invest in web 2.0 technologies. In industries such as telecommunications and pharmaceuticals the rate is 70% and 53% respectively. Indeed, the adoption of web 2.0 is more prevalent in high technology companies, telecommunications and mass media [70]. For instance, technology companies such as Oracle and Cisco have themselves spearheaded new Web 2.0 business models [71], as well as enabling the whole social media phenomenon to develop through incremental improvements in connectivity [56]. Additionally, Bughin, Chui and Miller [72] argue that high-tech companies, compared to more traditional companies are more likely to report measurable benefits from using web 2.0 in all fields.

In their study of the adoption of social media among the fastest growing small companies (Inc. 500) in the U.S.A, Barnes and Jacobsen [13] indicate that these companies are innovators utilizing all new communications tools to help their business to continue to grow and thrive and have developed their own channels to share information with their customers and with other businesses due to the fact that they have the ability to think differently, and let the tools work for them. In a similar vein, Kelleher’s research [73] found that high-tech companies consider their blogs as key tactics of their communication strategy, unlike traditional companies. Furthermore, Davidson and Vaast [74] suggest that it is mainly high-tech industries that create the fast-growing world of technology blogs. Thus the following hypothesis is developed:

3: Web 2.0 technologies are more likely to be used by high-tech companies than traditional companies.
4. **Methodology**

4.1. **Sample**

Content analysis was employed in order to test the research hypotheses. Content analysis forms a scientific, objective, systematic, quantitative and generalized description of communications content [75]. Two discrete cultural environments (USA and Greece) form the context of the study based on Hofstede's [9] cultural dimensions that specify Greece and the United States of America as two countries with significant cultural differences.

Two samples were generated by the best practice companies in the USA and Greece. The sampling frame used the "Fortune 500" in 2012 for USA, and "Strongest Companies in Greece" publicized by the ICAP Group in 2010 for Greece. The best 250 companies in the ranking list "Fortune 500" were sampled in the USA [76] (CNNMoney.com 2012) and the best 265 companies from the list "Strongest Companies" were sampled in Greece. The list of "Fortune 500" includes the largest companies in America according to the annual revenues and profits they have and are the building blocks of the U.S. economy. The "Strongest Companies in Greece" is the community of businesses operating in Greece and have been highly rated based on the evaluation ICAP Rating Score. The best companies in both lists were opted for instead of a random sample by both environments as the study’s objective was to monitor the use and adoption of web 2.0 tools by the best practice companies.

4.2. **Coders**

Corporate websites of the samples were randomly assigned to two researchers, graduates of Aristotle University of Thessaloniki, aged 25 and 26 years old. They were trained over a week, through the analysis of 50 corporate websites and were handed written instructions as a reference point. Emphasis was given on the identification of the research variables in the corporate websites and the comprehension of the classification systems of the companies used in this research (B2C, B2B, B2C & B2B; traditional, medium-tech and high tech). Reliability among researchers was at 0.89 on average.

4.3. **Procedure**

To avoid the complexity of corporate legal structures, the research focuses on the corporate level and each partner website was the unit of analysis (n = 515). With respect to the Greek sample of companies, the study focused on the companies that have a country specific website (a website that is written in Greek). The two researchers visited the corporate websites between November 29th and December 19th, 2012 and analyzed 250 corporate websites from the USA and 265 from Greece.

It should also be noted that the present study focuses on the use of social media that address the general public. There is evidence for the use of web 2.0 tools within large companies that do not intend to involve the public, but these are impossible to identify through the web content analysis.

In order to identify the variables of the study (Blog, Twitter, Facebook, LinkedIn, YouTube, Flickr, RSS, Podcast, Wiki, Tagging) the researchers followed a predetermined process [77]. First, corporate websites (the analysis focused primarily on the home page and links to the main menu of every corporate website) were examined for links with, or references to the web 2.0 tools under study. Second, each site map was examined in order to record any reference to the variables being analyzed. Third, in the websites where internal search was possible research was performed using each variable as the keyword. Otherwise, the Google advanced search for each corporate website with each variable as the keyword was used.

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1 Data for 2012 was not available. The closest year with available data was 2010.
The results of the searches performed were evaluated according to the following established criteria. If the research variable was not detected by any of the above steps, then the company was recorded as not making use of the variable. For the purpose of the study a blog was considered active if it had a new post during the last twelve months. With respect to their Twitter and Facebook accounts, pages were considered active as long as any activity was recorded within the last six months.

5. Results and Discussion

Results on the use of all ten web 2.0 tools studied reveal statistically significant differences between the U.S. and Greece, thus confirming the first hypothesis of the study.

Table 1. The use of Web 2.0 tools in corporate websites in the U.S.A, compared to Greece

<table>
<thead>
<tr>
<th>Tool</th>
<th>U.S.A. % (250)</th>
<th>Greece % (265)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blog</td>
<td>35.6***</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>(89)</td>
<td>(9)</td>
</tr>
<tr>
<td>Twitter</td>
<td>66.4***</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>(166)</td>
<td>(14)</td>
</tr>
<tr>
<td>Facebook</td>
<td>60.0***</td>
<td>10.2</td>
</tr>
<tr>
<td></td>
<td>(150)</td>
<td>(27)</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>18.4***</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>(46)</td>
<td>(1)</td>
</tr>
<tr>
<td>YouTube</td>
<td>53.2***</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>(133)</td>
<td>(31)</td>
</tr>
<tr>
<td>Flickr</td>
<td>18.8***</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>(47)</td>
<td>(0)</td>
</tr>
<tr>
<td>RSS</td>
<td>82.8***</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>(207)</td>
<td>(17)</td>
</tr>
<tr>
<td>Podcast</td>
<td>48.8***</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td>(122)</td>
<td>(15)</td>
</tr>
<tr>
<td>Wiki</td>
<td>7.2***</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>(18)</td>
<td>(0)</td>
</tr>
<tr>
<td>Tagging</td>
<td>12.0***</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>(30)</td>
<td>(5)</td>
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*p<.05, **p<.01, ***p<.001

More specifically, 35.6% of corporate websites in the United States use blogs, compared to only 3.4% of corporate websites in Greece (X² = 86.585, df = 1, p = .000) (Table 1). In terms of the use of Twitter an even greater difference was recorded, 66.4% in the U.S. as opposed to a mere 5.3% in Greece (X² = 211.349, df = 1, p = .000). Moreover, although one would expect a relatively high rate for the use of Facebook by corporate websites in Greece, the figure only amounts to 10.2% whereas in U.S.A the respective figure is 60% (X² = 141.501, df = 1, p = .000). The use of blogs, Twitter and Facebook in the U.S. sample follows the pattern (blogs (23%), Twitter (60%), Facebook (56%)) identified in Barnes’ study (2010) of the top corporations listed in Fortune 500. Differences in rates could be attributed to the ranking of companies concerning the adoption of these media, as the first companies in ranking are also the pioneers in the use of web 2.0 technologies [77].
Table 2. Comparison between the use of Web 2.0 tools in corporate sites in the U.S.A and that in Greece, according to the market they address

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<td>(96)</td>
<td>(66)</td>
<td>(88)</td>
<td>(66)</td>
<td>(165)</td>
<td>(34)</td>
</tr>
<tr>
<td>Blog</td>
<td>37.5</td>
<td>31.8</td>
<td>36.4</td>
<td>4.5</td>
<td>2.4</td>
<td>5.9</td>
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<tr>
<td>(36)</td>
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<td>(32)</td>
<td>(3)</td>
<td>(4)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Twitter</td>
<td>74.0*</td>
<td>53.0</td>
<td>68.2</td>
<td>13.6***</td>
<td>1.8</td>
<td>5.9</td>
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<tr>
<td>(71)</td>
<td>(35)</td>
<td>(60)</td>
<td>(9)</td>
<td>(3)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Facebook</td>
<td>70.8***</td>
<td>40.9</td>
<td>62.5</td>
<td>24.2***</td>
<td>3.6</td>
<td>14.7</td>
</tr>
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<td>(68)</td>
<td>(27)</td>
<td>(55)</td>
<td>(16)</td>
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<tr>
<td>LinkedIn</td>
<td>16.7</td>
<td>19.7</td>
<td>19.3</td>
<td>1.5</td>
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<td>0.0</td>
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<td>(16)</td>
<td>(13)</td>
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<tr>
<td>YouTube</td>
<td>55.2</td>
<td>48.5</td>
<td>54.5</td>
<td>22.7**</td>
<td>7.3</td>
<td>11.8</td>
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<td>(53)</td>
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<tr>
<td>Flickr</td>
<td>20.8</td>
<td>18.2</td>
<td>17.0</td>
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<td>(20)</td>
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<tr>
<td>RSS</td>
<td>85.4</td>
<td>77.3</td>
<td>84.1</td>
<td>9.1</td>
<td>6.1</td>
<td>2.9</td>
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<td>(82)</td>
<td>(51)</td>
<td>(74)</td>
<td>(6)</td>
<td>(10)</td>
<td>(1)</td>
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</tr>
<tr>
<td>Podcast</td>
<td>34.4</td>
<td>48.5</td>
<td>64.8***</td>
<td>7.6</td>
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<tr>
<td>Wiki</td>
<td>3.1</td>
<td>4.5</td>
<td>13.6*</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>(3)</td>
<td>(3)</td>
<td>(12)</td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
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<tr>
<td>Tagging</td>
<td>12.6</td>
<td>7.6</td>
<td>14.8</td>
<td>3.0</td>
<td>1.8</td>
<td>0.0</td>
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<td>(12)</td>
<td>(5)</td>
<td>(13)</td>
<td>(2)</td>
<td>(3)</td>
<td>(0)</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

The professional social networking site LinkedIn, is used by 18.4% of corporate websites in the U.S. but just one corporate website in Greece (0.4%) (X2 = 50.383, df = 1, p = .000). YouTube presents the highest percentage of use in Greece, which is approximately 11.7%, however, it falls short of the respective rate (53.2%) in the U.S.A (X2 = 102.089, df = 1, p = .000). The use of Flickr in America presents an 18.8% rate, while in Greece Flickr was not employed by any corporate site (X2 = 54.823, df = 1, p = .000). The use of RSS feeds holds the highest rate (82.8%) of use in the U.S.A among the web 2.0 tools studied, as most corporations employ them for staying informed and communicating with investors. The respective rate in Greece is only 6.4% (X2 = 305.399, df = 1, p = .000). The findings indicate a significant difference among the use of podcasts in the U.S.A and Greece (48.8% and 5.7% respectively) (X2 = 122.612, df = 1, p = .000). Wikis were not recorded in any corporate website in Greece. However, Wikis represent a low rate of use (7.2%) compared to the other web 2.0 tools (X2 = 19.771, df = 1, p = .000) even in the USA. This may be due to the fact that these cooperative tools are used primarily for internal purposes, such as internal communication and knowledge management that does not fall within the scope of this study. Finally, tagging services represent 12% and 1.9% of all the web 2.0 tools used in the USA and Greece respectively (X2 = 20.771, df = 1, p = .000).

User oriented web 2.0 technologies are mainly used by B2C corporations. Significant differences in the use of Facebook and Twitter were identified among B2C and all other types of companies considered in the study both in the USA and Greece, thus confirming Hypothesis 2a. In the U.S.A Twitter was used by 74% of B2C companies, 40.9% of B2B and 62.5% of B2C&B2B companies (X2 = 7.871, df =
Facebook was used by 70.8% of B2C companies, 40.9% of B2B and 62.5% of B2C&B2B companies \( (X^2 = 14.946, \text{df} = 2, p = .001) \) (table 2).

In Greece, the rate of use for Twitter was 13.6% for B2C companies, 1.8% for B2B and 5.9% for B2C&B2B companies \( (X^2 = 13.187, \text{df} = 2, p = .001) \). Following a similar trend, 24.2% of B2C companies in Greece use Facebook, as opposed to just 1.8% of B2B and 5.9% of B2C&B2B companies \( (X^2 = 22.745, \text{df} = 2, p = .000) \).

Moreover, in Greece the use of YouTube shows statistically significant differences between B2C, B2B&B2C and B2B companies, as 22.7% of B2C companies use YouTube, 7.3% of B2B and 11.8% of B2C&B2B.

Table 3. Comparison between the use of Web 2.0 tools in corporate sites in the U.S.A and that in Greece, related to the technological level of companies.

<table>
<thead>
<tr>
<th></th>
<th>U.S.A. (250)</th>
<th>Greece (265)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional</td>
<td>Medium Tech</td>
</tr>
<tr>
<td>Blog</td>
<td>29.9</td>
<td>36.4</td>
</tr>
<tr>
<td>(52)</td>
<td>(8)</td>
<td>(29)</td>
</tr>
<tr>
<td>Twitter</td>
<td>63.2</td>
<td>63.6</td>
</tr>
<tr>
<td>(110)</td>
<td>(14)</td>
<td>(42)</td>
</tr>
<tr>
<td>Facebook</td>
<td>58.0</td>
<td>50.0</td>
</tr>
<tr>
<td>(101)</td>
<td>(11)</td>
<td>(38)</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>13.8</td>
<td><strong>27.3</strong></td>
</tr>
<tr>
<td>(24)</td>
<td>(6)</td>
<td>(16)</td>
</tr>
<tr>
<td>YouTube</td>
<td>47.1</td>
<td>50.0</td>
</tr>
<tr>
<td>(82)</td>
<td>(11)</td>
<td>(40)</td>
</tr>
<tr>
<td>Flickr</td>
<td>13.2</td>
<td>27.3</td>
</tr>
<tr>
<td>(23)</td>
<td>(6)</td>
<td>(18)</td>
</tr>
<tr>
<td>RSS</td>
<td>79.9</td>
<td>81.8</td>
</tr>
<tr>
<td>(139)</td>
<td>(18)</td>
<td>(50)</td>
</tr>
<tr>
<td>Podcast</td>
<td>39.7</td>
<td>59.1</td>
</tr>
<tr>
<td>(69)</td>
<td>(13)</td>
<td>(40)</td>
</tr>
<tr>
<td>Wiki</td>
<td>1.7</td>
<td>9.1</td>
</tr>
<tr>
<td>(3)</td>
<td>(2)</td>
<td>(13)</td>
</tr>
<tr>
<td>Tagging</td>
<td>6.4</td>
<td>9.1</td>
</tr>
<tr>
<td>(11)</td>
<td>(2)</td>
<td>(17)</td>
</tr>
</tbody>
</table>

* \( p < .05 \), ** \( p < .01 \), *** \( p < .001 \)

With respect to the use of podcasts and wikis significant differences were observed only in the USA (Hypothesis 2b is supported only in the USA). Both podcasts and wikis were used in most corporate websites of B2C and B2B companies with rates 64.8% and 13.6% respectively.

High-tech companies seem to pioneer in the use of web 2.0 tools in both cultural environments. Hypothesis 3 is verified for blogs and podcasts both in the U.S. and Greece, for LinkedIn, YouTube, Flickr, wikis and tagging services in the USA alone and for Twitter, Facebook and RSS feeds only in Greece.

In the USA, the use of blogs by high-tech companies is 53.7%, while by traditional companies is 29.9% and by medium-tech companies is 36.4% \( (X^2 = 10.204, \text{df} = 2, p = .006) \) (table 3). The corresponding figures for Greece are 14.3% for high-tech companies, 2.5% for traditional companies and 11.1% for medium-tech companies \( (X^2 = 7.313, \text{df} = 2, p = .026) \). High-tech companies have a head start in the use of podcasts as well. In the U.S. 74.1% of high-tech companies, 59.1% of
medium-tech companies and 39.7% of traditional companies use podcasts ($X^2 = 20.562, df = 2, p = .000$). In Greece, the use of podcasts are 23.1% for high-tech companies, 5% for traditional companies and are not used at all by medium-tech companies ($X^2 = 7.282, df = 2, p = .026$).

Service tagging, in the U.S.A, represents 31.5% in high technology companies, but only 9.1% in medium-tech companies and 6.4% in traditional ones ($X^2 = 24.897, df = 2, p = .000$). Tagging services though in Greece, are used primarily by medium-tech companies (22.2%). High-tech companies indicate a significantly lower rate of use (7.1%) and traditional companies report less than 1% of use ($X^2 = 12.633, df = 2, p = .002$).

The use of Twitter, Facebook and RSS indicated statistically significant differences only in Greece. The, highest rate of use for Twitter (22.2%) was recorded in medium-tech companies, followed by high-tech companies (21.4%) and traditional companies with a low 3.7% ($X^2 = 13.637, df = 2, p = .001$). Facebook was used by all types of companies (28.6% for high-tech, 22.2% for medium-tech and 8.7% for traditional companies) ($X^2 = 7.198, df = 2, p = .027$). Similarly, the use of RSS feeds was 28.6% for high-tech companies, 11.1% for medium-tech and 5% for the traditional ones ($X^2 = 12.633, df = 2, p = .002$).

LinkedIn, YouTube, Flickr and wikis indicated statistically significant differences only in the USA (table 3). In particular, the rate of use of LinkedIn was 29.6% for high-tech, 27.3% for medium-tech and 13.8% for traditional companies ($X^2 = 8.149, df = 2, p = .017$). YouTube was used by 74.1% of high-tech companies, 50% of medium-tech and 47.1% of traditional ones ($X^2 = 12.119, df = 2, p = .002$). In Flickr, the corresponding rate of use was 33.3%, 27.3% and 13.2% for high-tech, medium-tech and traditional ones ($X^2 = 12.057, df = 2, p = .002$). Finally, wikis displayed a wide margin of use (24.1%) in high-tech companies, followed by 9.1% in medium-tech companies and only 1.7% in traditional companies ($X^2 = 30.938, df = 2, p = .000$).

6. Conclusions

The study provides empirical evidence of cultural differences reflected in the use of web 2.0 tools based on Hofstede’s cultural dimensions (individualism, collectivism, uncertainty avoidance, power distance, and masculinity/femininity). The analysis of over 500 corporations across the two cultures (the USA and Greece) indicates that the use of social media for communication purposes by corporations is not culturally neutral, but culture-bound. Such findings are consistent with previous cross-cultural research on consumer-generated brand communities in social networking [78] and internet usage patterns [35] [79].

The USA being characterized as an individualistic society that largely tolerates the existence of ambiguity and uncertainty, has relatively low distance from power and is a relatively masculine society, seems to adopt innovations at a fast pace. According to the results of the survey, the USA shows significantly high rates of use for the majority of research web 2.0 tools. Also, as the companies studied were among the largest both in the USA and worldwide, it could be argued that this foreshadows a trend that will most likely be followed by other companies in the future.

On the other hand, it seems that Greece, being characterized a collective society that avoids uncertain and unstructured situations, has relatively high distance from power and is a less masculine society than the U.S., is at the infancy of social media use. According to the results of the survey, Greece has very low rates of use for all the web 2.0 tools studied, while it seems that Flickr and wikis are not used at all. Greek entrepreneurs seem to have not benefited yet from the opportunities for interactive communication and promotion, offered by such tools, mainly due to their fear of losing control.

Indeed, the new social media signify liberation, empowerment and interconnectivity for consumers. Nowadays, consumers define their own image for
companies and brands, often at odds with the image the companies themselves want to promote. This sudden upsurge of people, who use web 2.0 technologies in order to get what they desire from each other, rather than from companies, shifts the balance of power from companies to the consumers [80].

Additionally, B2C companies appear to be active in developing social networks and expanded virtual communities mainly through Twitter and Facebook. Thus, it is suggested that several companies have become aware of the change in market structure, where consumers create active communities/tribes and actively participate in discussions (word-of-mouth) via online communication channels. Therefore, not only B2C but also B2B companies are obliged to recognize the power of social media, and the new approach to relationship marketing and tribal marketing.

High-tech companies are forerunners on the use of web 2.0 technology. They seem to adopt innovation at a faster pace compared to traditional companies. The use of these media primarily by high-tech companies reveals a trend expected to prevail in the future. Many companies are regarding consumers not only as co-creators of value and meaning, but also as co-producers. They have turned to social media as environments of innovation and ingenuity and involved consumers in activities that up until recently were at the exclusive jurisdiction and control of companies.

Finally, the findings of this study seem to contradict ideas that support the development of an online virtual culture, one that challenges traditional cultural boundaries and promotes a community powered by the ability to communicate and share ideas globally [81] [82] [83] [84]. However, scholars suggest that organizations with significant social media adoption have a global strategy approach that combines global connectivity with local cultural differences [85] [86].

7. Managerial Implications

Many companies are attracted by web 2.0 tools and the benefits of their prudent and proper use. Hence they focus on immediate adoption for marketing communication purposes and value adding activities. On the other hand, many companies recognize the prevailing potential of the new media and the active and empowered role of consumers, but have no idea how to turn this consumer power to their own advantage. Behind all this lurks a cultural issue, the acceptance of the shift in the balance of power from companies to consumers [80]. This is a significant initial step for companies, especially Greek ones, in order to remain competitive and successful in the new environment.

In the age of social media, consumers with greater access to information and dominance in media consumption are in control [87]. Companies that continue to ignore the social media cannot overturn or evade this reality. On the contrary, they risk losing the new generation of consumers who express their strong predilection to social media, together with the potential possibilities and prospects that stem from these tools for any corporation.

Companies and more specifically marketing professionals should disregard the time when they had complete control of marketing activities and were not interacting with consumers, as getting feedback from consumers was almost impossible. In a “listening economy”, as defined by Smith [88, pp.560], companies that are indifferent for their surroundings and do not listen to their customers and stakeholders, will become laggards. The act of listening on the part of the company becomes an essential component of any business model that refers to marketing communications, the development of products and services and customer engagement.
8. Directions for Future Research and Limitations

The increased popularity of the social media on a global basis and the speed and magnitude of the development and influence of these tools have prompted ardent research interest in understanding the science behind social media and exploring the utility and opportunities they have for various business activities such as marketing.

Similar studies on the adoption of social media in various countries could help highlight the significance of these tools in the development of these business environments. Cross-cultural studies on the use of social media are to date very limited, even though the results of research so far indicate that cultural differences seem to play a vital role in the adoption of these tools.

Additionally, the ways in which companies use social media are an interesting direction for future research. The present study has not focused on specific uses of social media by companies, but only on the extent to which media, that address the general public are adopted. Hence, empirical and theoretical studies aimed at extending knowledge about the ways in which companies and consumers use social media as well as their potential uses in the future would be accommodating.

Finally a number of limitations constrain generalizability of the findings of this study. A major limitation originates from the inherent dynamic nature of the web. The corporate websites that were studied, as expected, are dynamic and constantly updated. This, combined with the rapid growth and penetration of new social media, could lead to results that, in a short time, may become obsolete.

Additionally, as pointed out, the study focused on identifying research web 2.0 tools that address the general public. However, many companies could make use of these tools within their internal environments or in networks with limited access. These were not accommodated in this study.

References


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