



Web 2.0 Technologies and Banking Management: the Portuguese context

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Abstract

The present research intends to analyze the maturity of the use of Web 2.0 technologies in the Portuguese bank sector, trying to determine which one of these institutions is more present in social networks and best practices. Technological change is the major cause of most of the changes that have taken place worldwide, from cultural, social, political, economic, personal and even psychological changes. It was determined as a general objective: to identify what is the information that different institutions put in the most popular social networks (i.e. Facebook, LinkedIn and twitter). In order to integrate research in the field of study, the several interactions of the institution and the clients in the Web 2.0 were regularly analyzed; in this case, the Facebook official page of the institution and the aggregated pages of the same social network that can assume the same role of direct contact between the institutional image and the clients and users. The observation was carried out for two weeks: from the last week of May 2017 (22nd to 26th) to the first week of June 2017 (5th to 9th). The difference between the two institutions is in the degree of specialization carried out on thematic pages.

Keywords: Social Networks, Banking, Social Media, Technologies

Introduction

The world has undergone major changes in recent years at all levels. In fact, from 60 years to the present, paradigm shifts have been constant. The world has evolved in political, social and economic terms. There was a technological boom that greatly contributed to further development and, at the same time, greater instability in the immutability of beliefs or trends (Macedo & Sousa, 2019). The truth is that all the above phenomena, allied and combined with others, such as terrorist acts, economic, financial and even social crises have significantly changed the modus operandi of the business world. In a short time, information and communication technologies took root in our society, and then the internet came into being, and it gradually covered the vast majority of the population, especially the western population. In the early days of its existence, the Internet has already changed the way brands communicate with their consumers, however, only in 2005 it began to develop more closely to what we know today. Technological change is the major cause of most of the changes that have taken place worldwide, from cultural, social, political, economic, personal and even psychological changes (Vilas Boas & Sousa, 2019). The emergence of the internet brings with it web 1.0, whose main feature was the availability of content built by a specialist, who also had the function to acquire and maintain the space destined for that content. In 2005, the web 2.0 emerged, which according to Nueesch and Puschmann et al. (2012), raised communication to a level never seen before. What is currently happening is not just the availability of content as happened on web 1.0. With web 2.0, the paradigm became a network collaborated with the creation of network knowledge. Briefly, web 2.0 allows interaction between the creators of existing contents on the internet and their readers, thus creating a communication route that until now did not exist, which can be characterized as extremely dynamic and, above all, permanent. Indeed, as stated by Wirtz and

et al. (2010), sharing has become indispensable and inherent in today's life, opening the door to a world of rapid paradigm shifts that would take years to change in the past. Thus, over the last few years, web 2.0 applications and services have proved to be extremely important tools for companies, especially social networks that, according to Oliveira (2013), have revolutionized corporate communication strategies, either through better identifying needs of consumers, whether by implementing measures to encourage loyalty, or even by a marketing tool, which proves to be quite powerful and cost-effective.

Literature Review

According to O'Reilly (2005), the concept attributed to web 2.0 has no defined and rigid limits. Instead, it has a gravitational core where there is a set of principles and practices that unite a kind of solar system of sites that respect these principles. O'Reilly (2005) also mentions that web 2.0 is the move to an internet seen as a platform and an understanding of the rules to succeed in this new platform. The most important rule is to develop applications that take advantage of network effects to become better for the people who use them, thus leveraging collective intelligence (Malheiro, Sousa & Ferreira, 2019).

According to Sakal, Matkovic and Tumbas (2011), the concept of web 2.0 stems from the interactive character that the internet has gained from the emergence of participatory and collaborative tools by users. Wirtz et al. (2010) consider that the most obvious example of the above statement is the emergence of social networks. Thus, the main "assets" of web 2.0 are the ability of the user to be able to produce content and participate in the exchange of information, and the internet, besides being a source of information; it also becomes a social environment.

According to Costa et al (2009), web 2.0 presents, among others, very own characteristics, such as:

- Rich and easy to use interfaces;
- A very participatory structure - aims to encourage users to participate in information networks in order to further enrich the system, i.e. the larger the number of users, the greater the success of the application;
- The fact that most of the services and applications provided are completely free of charge;
- Continuous update - applications no longer have new and "overlapping" versions and are constantly updated, also known as "perpetual beta";
- Multiple users can precisely access the same page and can edit their information;
- Easier data storage and online page creation;
- The sites themselves are associated with other applications, making them richer and more productive as they work on a joint platform;
- Software works online or offline with the ability to export information quickly and easily to the web;
- Creation of large communities of people interested in a particular subject;
- Information is updated collaboratively, thus becoming more reliable due to the increasing number of people who access, validate and update it;
- Using tags in almost every application is one of the first steps towards creating a semantic web and correctly indexing the content provided.

With the change of view about web 2.0, it is no longer just a means of social interaction between users, but a medium with a high opinion transformation potential and, therefore, a very strong potential as a marketing tool. Thus, it is of paramount importance for companies to be present on

the Internet, not only because they can shape the opinion of their customers, but also to maintain a closer relationship with them, and can also use various strategies to build customer loyalty. This need to be present is not only limited to having a website but, more importantly, having a page on social networks, preferably on various social networks in order to reach more customers and, taking into account the specifics of each social network, have access to what the customer seeks differently and appropriately.

Harris and Era (2009) state that the internet influences business innovation, expanding the scope of action of the implemented strategies and minimizing the time lag in the market. This means that it is essential to include social networks in the organization's strategy planning, as more than a marketing tool, it can become a benchmarking tool in the face of competition and even in fostering creativity and innovation. To reinforce the idea that social networks are an extraordinarily powerful marketing tool, Malthouse and et al. (2013) report that the emergence of social networks has made consumers themselves provide a whole new source of information about themselves; free of charge and available to everyone. According to Nueesch and Puschmann et al. (2012), interaction with consumers via social networks aims to be able to align the organization's activities as efficiently as possible with the needs and wants of the consumers.

In short, social networks have created a whole new form of customer relationship, that is much closer to what it was before, which makes it possible to evaluate customers in another way. It is true that until then there was already a customer evaluation system, known as Customer Relationship Management, however, this change in the relationship paradigm also changed the name given, so customer evaluation was renamed through the information obtained from social networks into, Social Customer Relationship Management (Sousa & Rocha, 2019). Briefly, the change is about adapting existing systems to accommodate a component obtained through social networks, with the

aim to create methods for collecting, analyzing and sharing customers information. Therefore, it can be concluded that the banking sector is a conservative sector that deals with very sensitive information and even has some legal limitations that do not allow it to be present on social networks without any kind of "strings attached". It also has a difficult and increasingly public demand as well as competition that oblige it to thrive in an extremely competitive and constantly evolving market. Knowing that competition is a vehicle of innovation, it makes perfect sense for banks to be present in web 2.0 tools and use them in an innovative way, so that they can eliminate or mitigate the possible negative effects of their presence and get the positive ones to overlap, thus, making the institution's brand and robustness grow, not only with regards to the present, but also ensuring the future.

Methodology and Results

The data that is collected during a netnography, as in other types of methodology, consists of the researcher's field notes about his cybercultural field experiences associated with artifacts of the culture or community itself. The data presented will be essentially textual and some image files. Netnographic data are therefore particularly focused on textual data and the limitations and requirements of production and communication (Altheide and Johnson 1994 and Van Maanen, 1988). All ethnographies of online cultures and communities extend through traditional notions of field study, as well as ethnographic culture, analysis and representation, from observing co-located interactions, to technologically mediated interactions in online networks and communities line and shared culture (or cyberculture) between them (Kozinets, 2010). Several researchers have done ethnographies of online cultures and communities that are purely observational, in which the researcher is a specialized type of Lurker (Kozinets, 2010). However, other researchers emphasized a more participatory approach in which the researcher fully participates as a member of the online community. This latter

approach is closer to traditional ethnographic patterns of participant observation, prolonged adjustment and deep immersion. In many of them, ethnography maintains the values of traditional ethnography. In order to integrate research into the field of study, the various interactions of the institution and clients in a Web 2.0 environment were regularly analyzed, in this case the Institution's official Facebook page and the aggregate pages of the same social network assuming the same role of direct contact between the institutional image and its customers and users. Thus, the observation was made during two working weeks, that is, five days from Monday to Friday of the last week of May 2017, (22 to 26) and another in the first week of June 2017, (5 to 9). In this period of analysis, all the publications made on the Facebook page of the institutions analyzed were registered, i. e. what are their nature, comments, user shares, likes and answers to presented customers questions, through registration for 24 hours. The results obtained from this analysis are presented below for each of the institutions under study. The business environment is currently dynamic and experiencing rapid change as a result of innovation, creativity, technological change and greater awareness of customer needs. The 21st century banking sector operates in a complex and competitive environment characterized by these changing conditions and a highly unpredictable economic climate.

Managers cannot ignore information systems because they play a critical role in contemporary organizations. The application of information technology concepts, techniques and policies and banking implementation strategies has become a key issue and all banks have a prerequisite for local and global competitiveness. ICT directly affects the way managers decide, plan and determine which products and services are offered in the banking sector. The many studies on leadership styles have shown that the maturity of the leaders and the way they act with their employees determine the leadership style to follow. Thus, an effective leader can adapt a style or a

combination of leadership styles to suit the circumstances. In this context, the communication style chosen differs from one leader to another and from one project to another, although communication with people always remains an intrinsic part of leadership (Kerzner, 2001 and Ojo, 2007). Effective communication skills can be the most useful tool for handling organizational and personal conflicts. Fischer and Koue (1991) argued that "communication is inherent in almost all organizational conflicts" (P.145). Conflict is "the interaction of interdependent people who perceive the opposition of goals, objectives and values, and who see the other party as an interfering factor in achieving those goals" (Miller, 2006: 194). Regarding the work presented and the field analysis, it can be observed that both companies bet on efficient mobile applications, with diversification presented mainly in Facebook, followed by LinkedIn. Investing in institutional websites with increasingly customizable customer areas and with the ability to provide exclusive services to each user is an asset for successful communication and information.

Conclusions and Next Steps

It is noteworthy that there is a continuous search to listen to users of both Facebook and LinkedIn channels, and to provide answers that can fit the wishes, questions and complaints that are shown in both companies. By publishing and responding accordingly, a number of factors that demonstrate continuous learning with the audience are identified, as well as, the creation of new future practices on the web. In comparison between Millennium and CGD, it is noticeable that CGD is more visible in terms of views. Although it is Millennium BCP that presents the most active fan of the month every month on its Facebook pages, and, therefore, demonstrates a frequent monitoring of this social network.

Note that the difference between the two institutions is in the degree of specialization made in the thematic pages, that is, Millennium BCP has more specialized pages and CGD is more

committed to its constant updating. In this particular case, the daily publication of some information that attracts a large number of users, especially the younger ones, with music events and youth-related products, is displayed. On a more detailed analysis, it can be concluded that in the week of 22/05 to 26/05/2017, CGD deposits gave more emphasis to information about its products and services compared to Millennium BCP. And in terms of views, it may be noted that CGD has the highest number, although Millennium BCP has the most views in terms of advertising.

Another feature is organic reach, which is the number of people; fans and non-fans who have seen a particular post. In this case, like the fan reach metric, organic reach takes into account views that are not the result of a friend action. And for both companies, it included views from people who are not fans of the page but directly accessed or viewed their content. This research study shows that there is still a long work to be done in the presentation of content on social networks, especially regarding its measurement.

Given such a scenario, it would be interesting to create a cooperative information system for all. That is, the idea would be to create a group with several actors not only in the press, but in study with other associations and companies. In this way the participants would have the opportunity to carry out a cooperative self-training, through the practice reports, analysis and discussion of topics relevant to the group, etc., meeting their interests and needs. It would be interesting in future research to establish the link between the user's profile (gender, age, occupation...) and the type of interaction he develops with the banking institution. In the specific cases presented, the authors of this paper have not been allowed to make this distinction. Regarding the type of information provided, there is no identification of a complaints category because although sometimes comments suggest aspects for improvement (suggestions given by users), none of the comments translates into an effective complaint. In addition to the suggestions

for future studies, as previously mentioned throughout this text, it is considered interesting to develop a comparative study between several websites and companies, not only the existing financial and national sector, and to make a comparative analysis, in order to know the types of organization, the practices and the difficulties felt by the actors towards the target audience. It is important to deepen the study of this theme in order to contribute to a better training of the legislators, contributing to a better quality of life and a more adequate intervention through the development of meaningful learning, valuing the experiences of each individual and creating inclusive situations in a community where the person is given the opportunity to interact with others.

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