

Analysis of user participation in the contents of institutional sites from the levels of interactivity

DOI: 10.1590/1809-5844201717

Victor Nassar

Milton Luiz Horn Vieira

(Universidade Federal de Santa Catarina, Centro de Comunicação e Expressão, Programa de Pós-Graduação em Design. Florianópolis – SC, Brasil)

Abstract

This paper presents the results of a study which goal is to analyze how users can deal with the contents of institutional websites in different categories. To do this, nine institutional websites were analyzed, divided into three categories: those prioritize functional aspects, those of hedonic aspects and websites of a specific market segment (of footwear). It was also considered the division of the categories according to the levels of low, medium and high interactivity. The theoretical approach is about the content of an institutional website, the classification of levels of content interactivity and the concepts of collaborative content. After the application of the analytical study, we can understand about the type of action that the users have in the content of institutional websites and the relationship with different segments of companies.

Keywords: Interactivity. Collaborative content. Institutional site. Marketing. Analytical study.

1. Introduction

The internet provides several layers to the relationship between companies and consumers. One of the factors that add to the communication process established in institutional sites is the use of community power to create content, the collective intelligence (O'REILLY, 2005). By enabling users to contribute, the company may gain different benefits to their business, such as improvements to the site or suggestions for their services. Thus, collective intelligence acts directly influencing clients' perception of the company's image, since it represents a link between the institution and the consumer (TAPSCOTT; WILLIAMS, 2007; PRAHALAD; RAMASWAMY, 2004).

From this dialogue established between company and public, one can build a relationship of trust and transparency, opening channels of feedback and consolidating a community focused on loyalty (VAZ, 2011). According to Kotler (2010), this collaboration is the basis of the concept of Marketing 3.0, which aims to include the public as a part responsible for creating the culture and values of the organization.

In this context, including a participation in the content of the institutional site can represent an important element to bring the company closer to its public, and can be established in different ways. Nassar and Padovani (2011) classify this action of the user with the content of a website in three levels of interactivity, starting with the so-called low interactivity – when the user receives the information and interacts with the elements without issuing their own content – until the high interactivity – when it is possible to build or share content with other users in the site interface.

Thus, this paper presents the results of an analytical study that sought to analyze how users can relate to the contents of institutional sites of different categories, from low, medium and high levels of interactivity. In order to do so, we have divided the institutional sites into three categories: those that prioritize functional aspects, those of hedonic aspects and sites of a specific market segment (of footwear). The research begins with a theoretical foundation on the content of an institutional website. Next, we discuss the classification of levels of content interactivity that was used in the article. The following is a review of collaborative content, addressed by the perspectives of Web 2.0 and Marketing 3.0 concepts.

2. The content of an institutional site

The main characteristic of an institutional site is the promotion of a company or organization and its products and services provided. Thus, the institutional site aims to be the company's internet address, the point of contact with the public, in which the company can reflect its identity.

The content of an institutional site consists of all the information that the company will present in its environment, such as: the detailed divulgation of what the company does; the products and services it offers its customers; an explanation of its area of action; contact information; map where the company is located; commercial videos or subjects related to the area of activity; among others. In addition, the content in the institutional site may be all the information that is sent by the public itself and that is disclosed in the interface.

Although the institutional site may present characteristics of other categories of sites, what differs it from others is the theme and purpose of existence. For example, social networking sites aim to be a people-friendly environment; the e-commerces have the objective to realize the sale of products on the internet; the portals seek to offer a set of services, such as news and forums; the hotspots are planned for a specific project, such as for launching a product. Although they are part of distinct categories, these sites may also contain some institutional content, without necessarily being considered as an institutional site.

In the same way, some institutional sites can aggregate characteristics of different categories of sites, but for the purpose of communicating something related to the company. If the company only has, for example, a page in a social network, but does not have a website of its own, it is considered that the company does not have an institutional site, since it uses a site of another company to divulge its information.

For the company to define the content of its institutional site, it is important to identify what are the goals for the website, what it wants to display and what it intends to achieve with it. The company can define whether it will focus on winning new customers, increasing current customer loyalty, fortifying the brand, or reducing customer support costs, for example (KALBACH, 2009). According to the type of participation desired for the consumer in the content of the site, one can classify the interactivity at different levels, which are discussed below.

3. The levels of content interactivity

Different perspectives are adopted for the definition of interactivity. Depending on the analysis adopted, certain criteria will be more determinant than others to establish a classification into levels, such as the division into quantitative and qualitative aspects:

- Quantitative criteria:
 - Number of actions (RAFAELI, 1988; LAUREL, 1991; STEUER, 1992, MACIAS, 2003);
 - Storage of actions (RAFAELI, 1988; JENSEN, 1999; KIOUSIS, 2002);
 - Response speed (RAFAELI, 1998, STEUER, 1992);
- Qualitative criteria:
 - Responses visibility (RAFAELI, 1988; JENSEN, 1999; LEVY, 2000; KIOUSIS, 2002; PRIMO, 2007);
 - Content manipulation (RAFAELI, 1988; JENSEN, 1999; LEVY 2000; LEMOS, 2004; PRIMO, 2007);
 - Content construction (RAFAELI, 1988; JENSEN, 1999; LEVY, 2000; KIOUSIS, 2002; MACIAS, 2003; LEMOS, 2004; PRIMO, 2007).

As the aim of this paper is to analyze a qualitative perspective, which is the influence that a user can establish in the content of a site and in the relationship with the other users, the interactivity classification of Nassar and Padovani (2011) will be adopted, divided into three levels (low, medium and high), whose criteria for level differentiation are the quality

of actions (divided in manipulation and construction) and the responses visibility (divided into restricted or total).

Manipulation occurs when the user performs actions that are predetermined by the system, without issuing their own responses. The construction takes place from the moment the user can issue his own content. You have total visibility when the responses you send are shared to other users on the network. Restricted visibility occurs when the response is viewed only by the user at his or her interface. The classification is shown in Frame 1, with the description of the levels of Nassar and Padovani (2011).

Frame 1 – Interactivity Classifications

CLASSIFICATION	Low	Medium	High
CRITERIA			
Visibility	Restricted	Restricted	Total
Quality	Manipulation	Construction	Manipulation or Construction

Source: Adapted from Nassar e Padovani (2011)

a) Low interactivity: users only manipulate the elements of the interface, without participating in the construction of the content itself. All links, buttons or images on the sites will be for user viewing only and will provide predetermined interface responses to user actions. There is no possibility of sharing actions with other network users. Sites with low interactivity may have multiple internal pages [...], but do not allow the user to output their own content, such as texts, videos, or photos. [...]

b) Medium interactivity: in addition to simple navigation - where users only respond to the default interface options - content is also built, although no user action can be viewed by other users on the network. The construction of content on sites with medium interactivity can be established [...] when there is some kind of tool that allows the user to draw or write texts, for example, but without sharing anything with other users. [...]

c) High interactivity: in general, what differs the high interactivity from the low and medium is the total visibility of user actions at the interface. You have high interactivity when you can build some kind of content (such as texts, photos or videos) and share it (full visibility) with other users in the interface itself. High interactivity happens even when user actions have the quality of manipulation (when the user only responds to the default interface options) as

long as they are shared with other users. (NASSAR and PADOVANI, 2011, pp.163-164 – Our translation).

This classification of Nassar and Padovani (2011) was chosen because it represents a perspective that addresses the influence that a user can establish in the content of a site and in the relationship with the other users. In this way, the type of collaboration that a company will try to establish with its public can be distinguished in levels of more or less intensity. Thus, it is important to understand the role that the collaborative content will play for the company's pretensions, both in affirming its values and in the intended engagement.

3.1. Collaborative content

One of the characteristics highlighted by Web 2.0 is the active participation of the user, who stops being just a spectator to become a producer of content. Coupled with the ability to produce content, Web 2.0 also highlights the intense formation of relationships between users.

Social networks, as well as blogs, forums and other collaborative sites, create a cultural phenomenon that is constantly increasing and transforming, integrating communities and creating a sense of closeness among all. For the collaborative aspect, in which the users construct the contents together, there is the tendency of constant construction (TORRES, 2009).

To achieve this collaborative character, sites provide high interactivity in their systems, allowing users to actively participate in some form in the content itself, either directly with the site or with other users. Thus, the application of high interactivity can help to create a network of relationship in the websites, providing the formation of communities.

Tapscott and Williams (2007) argue that inviting users to participate in the content starts a cumulative innovation process. According to Catmull (2008), by stimulating collaboration, generation of value is allowed, since it allows the proliferation of new ideas that had not been imagined in the design of a project. Thus, it is understood that companies can use the skills and abilities of users so that the site also presents innovative and differentiated content.

Under these circumstances, companies no longer have full power over content and brand, since they compete with the capacity and collective power of users, which Kotler (2010) conjectures as one of the pillars of Marketing 3.0. Thus, consumers are involved not only in product development but also in company communication. It is also agreed by Prahalad and Ramaswamy (2004) that the role of these consumers is not simply a matter of passivity, and connected to other individuals, can participate actively and with informed decisions that can reach the community with relevant and accessible content.

The possibility of creating collaborative content can be encouraged by the institutional site in different ways and it is a quality present in high interactivity. In order to do so, the site must provide some necessary tools so that the users themselves can build or share content among themselves, which can be fields of comments to the news, videos or photos displays, systems for service evaluation, among others. According to Gabriel (2010), the idea of opening the possibility of knowledge sharing represents the effort of companies to add value to their products and services, and to take advantage of the benefits that the collaborating community has to offer.

Therefore, some concepts of collaborative innovation have been developed, such as the co-creation and the phenomenon of crowd-based business models. Prahalad and Ramaswamy (2004) have adopted the term co-creation as a business model based on the collaboration of outsiders, as consumers or suppliers, who contribute with ideas, content or actions, and receive in return the benefits in conjunction with the company. The practice is similar to the use of the “aggregation of collective intelligence” concept, proposed by O’Reilly (2005) in Web 2.0.

Similarly, the crowd phenomenon seeks to harness the power of mass collaboration to achieve a goal and generate mobilization by engaging the individuals involved. This proposed creative “democracy”, which aims to establish connections between people and offer a way to express themselves, has value for users (TAPSCOTT; WILLIAMS, 2007). It is also what Kotler (2010) argues, by designating participation and creativity as factors that boosts Marketing 3.0, proposing that people tend to accept the stimuli of companies and offer solutions, feeling part of the collaborative community.

4. Research method

In this stage, the objective was to present how different institutional sites provide low, medium and high interactivity. With this, one can have a clearer view on the division of content interactivity at the proposed levels and show different ways of how companies use their institutional sites to establish a relationship with the public. The collection technique used was systematic observation.

In order to perform the analysis, we observe the criteria used by Nassar and Padovani (2011) to establish interactivity levels based on the Responses Visibility (Restricted or Total) and Quality of User Actions (Manipulation and Construction).

Thus, there are the levels:

- **Low interactivity:**
 - Response visibility: Restricted.
 - Quality of action: Manipulation.

- **Medium interactivity:**
 - Response visibility: Restricted.
 - Quality of action: Construction.
- **High interactivity:**
 - Response visibility: Total.
 - Quality of action: Construction.

To do so, the companies were chosen from three categories:

- **Functional Aspects:** Sites that use a formal language, with the expectation of a low interactivity. Thus, were chosen the companies “Gerent Advocacia”, “Contabilivre” and “Clínica Sim”.
- **Hedonic Aspects:** Sites that use an informal language, for which one expects a high level of interactivity. In this way, were chosen the companies “Heads”, “Giraffas” and “Ubisoft”. The sites that prioritize functional and hedonic aspects are chosen to present a counterpoint of applications of the levels of interactivity for opposing goals of communication and interaction with users.
- **Footwear:** In order to establish a comparison with the sites in the same area of performance. The footwear theme was chosen because it is a site genre that has a lot of variability in the level of interactivity and in what they offer users. Thus, the sites chosen are the companies “Bout’s”, “Molekinha” and “Melissa”, which are prominent in the national and international scenario.

5. Analytical study

In Frame 2, there is a compilation of the companies chosen in each category of site, with the respective criteria (visibility and quality of actions). After that, the sites chosen for the analytical study are presented in more detail.

Frame 2 – Compilation of the sites according to the visibility and quality of the action

SITE CATEGORIES	VISIBILITY		QUALITY OF ACTION	
	Restricted	Total	Manipulation	Construction
Gerent Advocacia	X		X	
Contabilivre	X			X
Clínica Sim		X		X
Shoes	Restricted	Total	Manipulation	Construction
Bout's	X		X	
Molekinha	X			X
Melissa		X		X
Hedonic Aspects	Restricted	Total	Manipulation	Construction
Heads	X		X	
Giraffas	X			X
Ubisoft		X		X

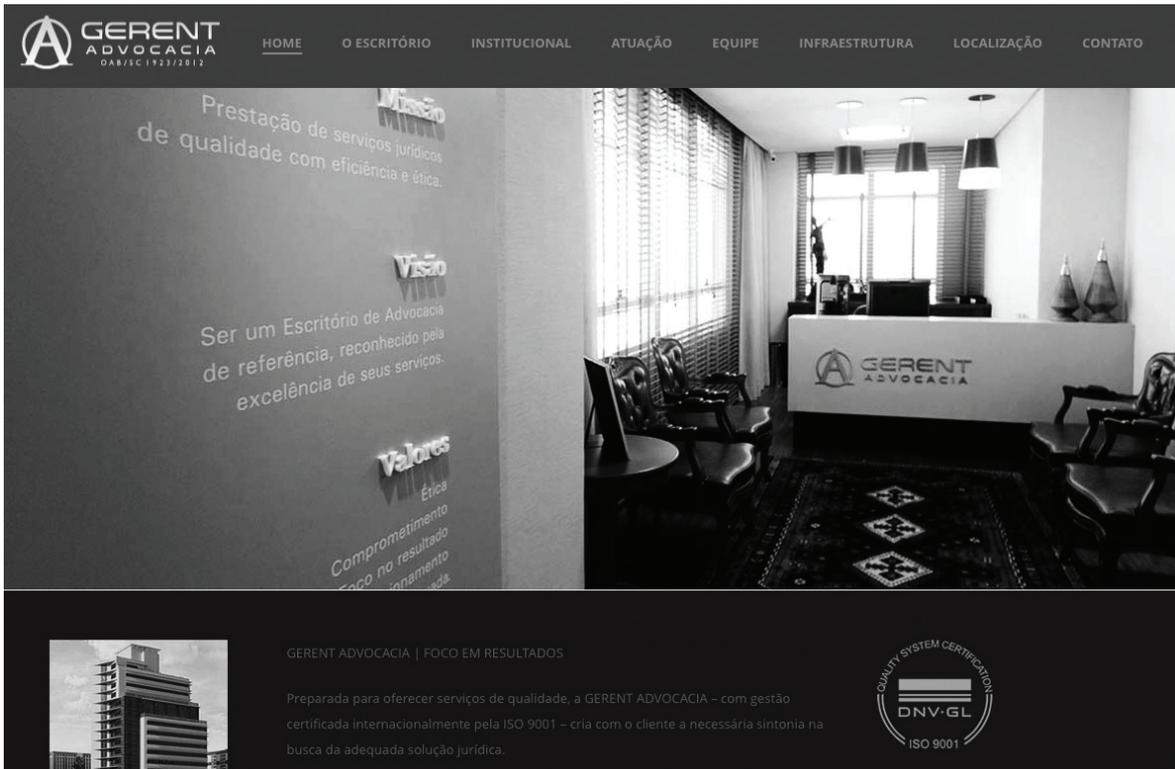
The sites were divided according to the level of interactivity: Low interactivity (restricted visibility and manipulation), Medium Interactivity (restricted visibility and construction) and High interactivity (total visibility and construction). Thus, the tools of each site that meet these criteria are presented and explained, according to the operation and interaction with the users.

Institutional Sites with Low Interactivity

The following are the institutional websites of the “Gerent Advocacia” companies, the advertising agency “Heads” and the shoe company “Bout’s”, which have low interactivity in the categories of functional aspects, hedonic aspects and footwear.

a) Functional aspects: The institutional site of the company “Gerent Advocacia” (Figure 1) has information in images and texts about the area of activity of the office, the services it offers, lawyers who are part of the team of associates, infrastructure, among other pages with details of the company. In the “location” section, a map with the headquarters address is available. There are also phone and email information on a contact page. In this way, the site does not present any tools available to encourage customers to participate in content construction, such as comment fields, configuring “quality of action” with just “manipulation”. There is also no sharing of actions with other users, evidencing the criterion of “restricted visibility”.

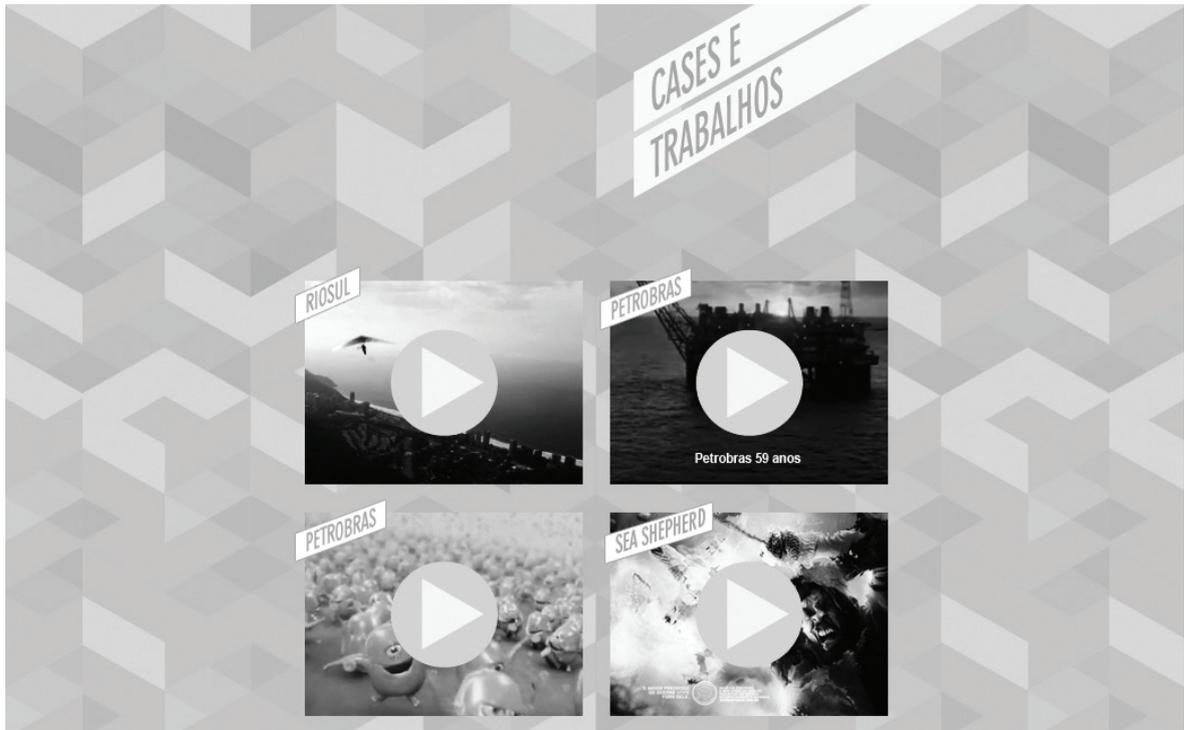
Figure 1 – Institutional site with low interactivity of the “Gerent Advocacia”



Source: Adapted from Gerent Advocacia (2017)

b) Hedonic aspects: The institutional site of the advertising agency “Heads” (Figure 2) has information about the company’s vision in the advertising market, clients served and staff. In the “cases” section, there are videos about work already developed by the agency. There are animated transitions between sections as well as elements that move according to user action. However, the site does not provide tools for building content or sharing actions with other users of the network, configuring “quality of action” as “manipulation” and “restricted visibility”.

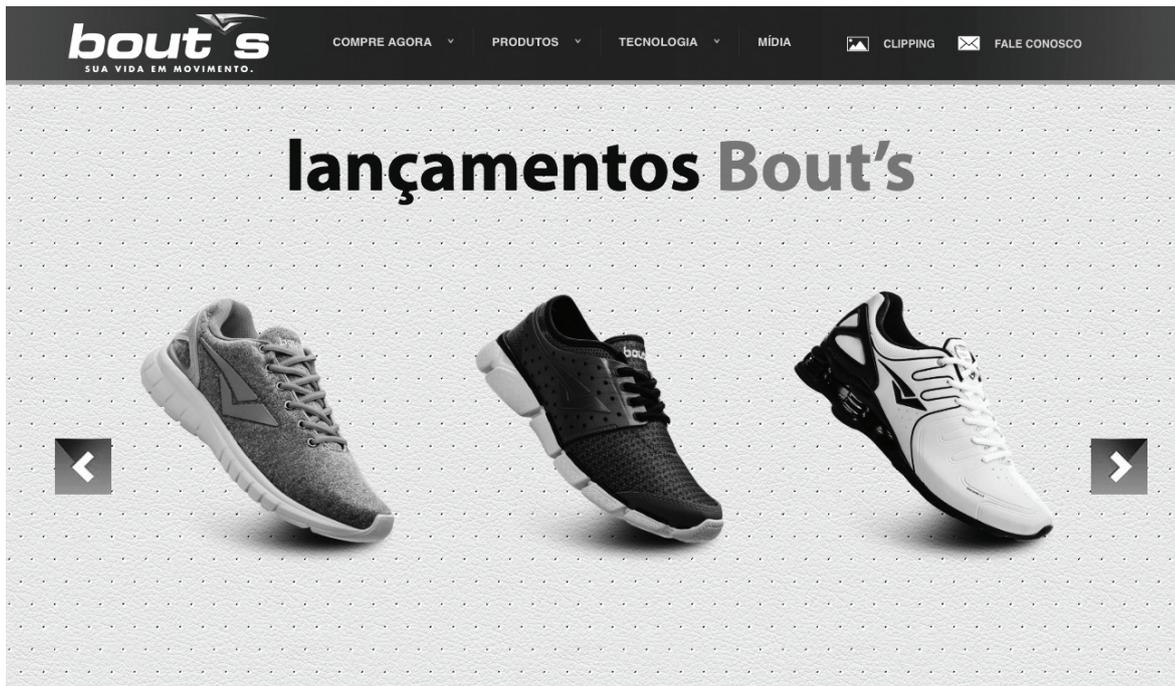
Figure 2 – Institutional site with low interactivity of advertising agency “Heads”



Source: Adapted from Heads (2017)

c) Footwear: The institutional site of the shoe company “Bout’s” (Figure 3) has a variety of information on the models of shoes, dividing into categories such as men, women, children and slippers. There is a section on the technology used in the manufacturing of shoes, with details in text and photos. The site also features commercial videos, contact information and stores where customers can find the products. Thus, the actions available on the site configure the “quality of action” as manipulation, as there are no tools for creating content. There is also restricted visibility of users’ actions, without the possibility of sharing.

Figure 3 – Institutional site with low interactivity of the “Bout’s”



Source: Adapted from Bouts (2017)

Institutional Sites with Medium Interactivity

In the section, we present the institutional sites of the accounting firm “Contabilivre”, the “Giraffas” snack bar and the “Molekinha” company, which have medium interactivity in the functional aspects, hedonic aspects and footwear categories.

a) Functional aspects: The institutional site of the accounting firm “Contabilivre” (Figure 4) presents information about opening a company, accounting plan values with the services they offer, as well as contact data. The application of “medium interactivity” is configured with the “online chat” tool, in which the user can talk to an attendant in real time, thus emitting their own content. Because messages are not shared with other users on the network, you have “restricted visibility”. In addition, users can fill out a form with data about the activity and the type of company they intend to open, the city in which it will be implanted and the activity to be executed, receiving information on accounting calculations later, with a restricted visibility of the user.

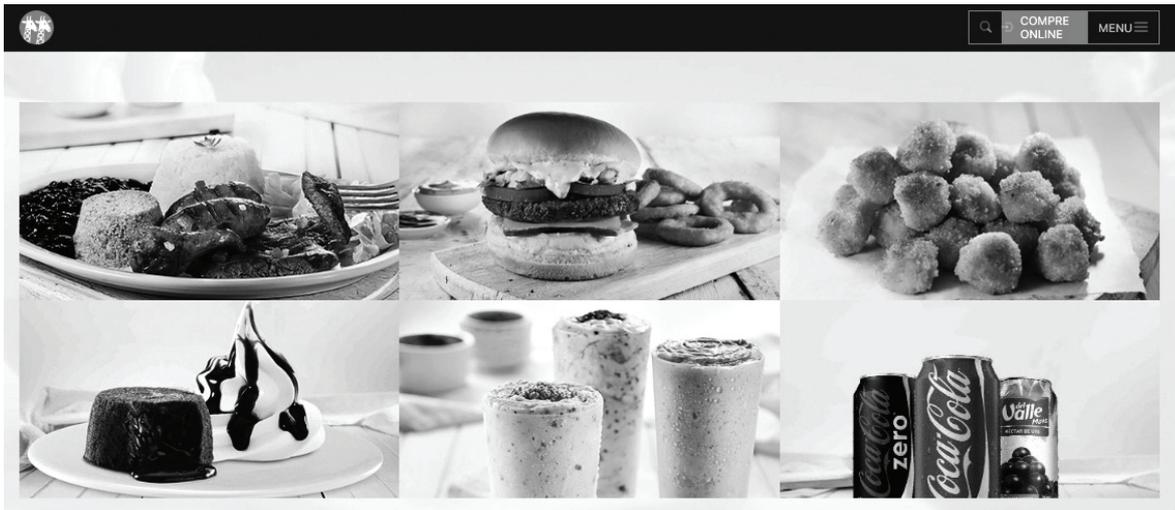
Figure 4 – Medium interactivity in the institutional site of “Contabilivre”



Source: Adapted from Contabilivre (2017)

b) Hedonic aspects: The institutional site of the company “Giraffas” (Figure 5) presents information about the history of the restaurant, the menu with details of the meals served, sections with the special offers and gifts offered with snacks, among others. It has the presence of “medium interactivity” with the application of a tool that allows the sending of customer comments about the company, indicating data for contact, questions and location where they attended. In this way, the user can build their own content, but without the possibility to share it in the site interface, thus configuring the “quality of action” as “construction” and “restricted visibility”.

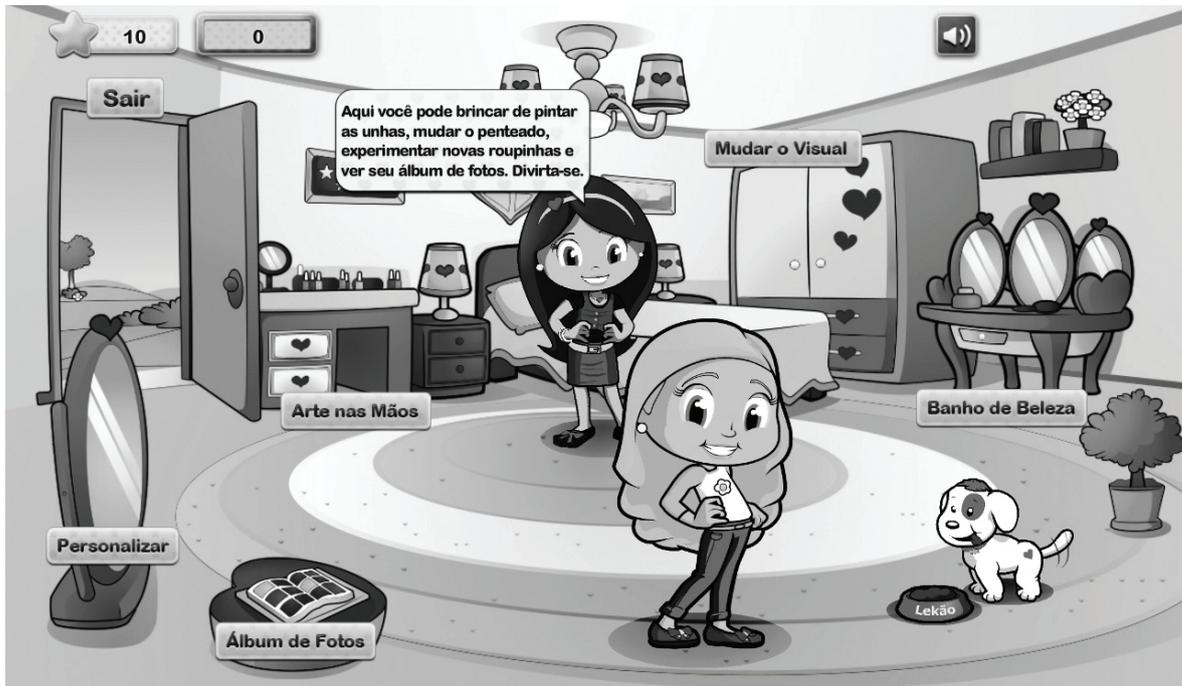
Figure 5 – Site with medium interactivity of the company “Giraffas”



Source: Adapted from Giraffas (2017)

c) Footwear: The institutional site of the shoe company “Molekinha” (Figure 6) has information about the brand, details of models of children’s shoes, with photos and divisions by categories, as well as data about the stores where the customer can find the products and images of advertising campaigns. In the “fun” section, there is a game called “Clube da Molekinha”, in which there is the application of “medium interactivity”. In the game, the user can create drawings, such as the personalized makeup for the character, the decoration of cakes and also the painting for the nails. In this way, the user can build their own content and not just manipulate actions in the interface. However, there is no possibility to share this content with others, characterizing the site as “restricted visibility”.

Figure 6 – Medium interactivity in the institutional site of the shoe company “Molekinha”



Source: Adapted from “Molekinha” (2017)

Institutional Sites with High Interactivity

The following are the institutional sites of “Clínica Sim”, “Ubisoft” and the company “Melissa”, which have high interactivity. The sites are divided according to the categories of functional aspects, hedonic aspects and footwear.

a) Functional aspects: The institutional site of the “Clínica Sim” (Figure 7) has different pages with content about the history of the company, the examinations that they carry out, the medical specialties, as well as the location of the clinics and other services. The site applies “high interactivity” in the “blog” section, where there are different posts updated per month, with the possibility for users to send comments, which are displayed to everyone who accesses the site. Thus, in addition to having the “quality of action” that allows the construction of content, there is also sharing, thus configuring the “total visibility”.

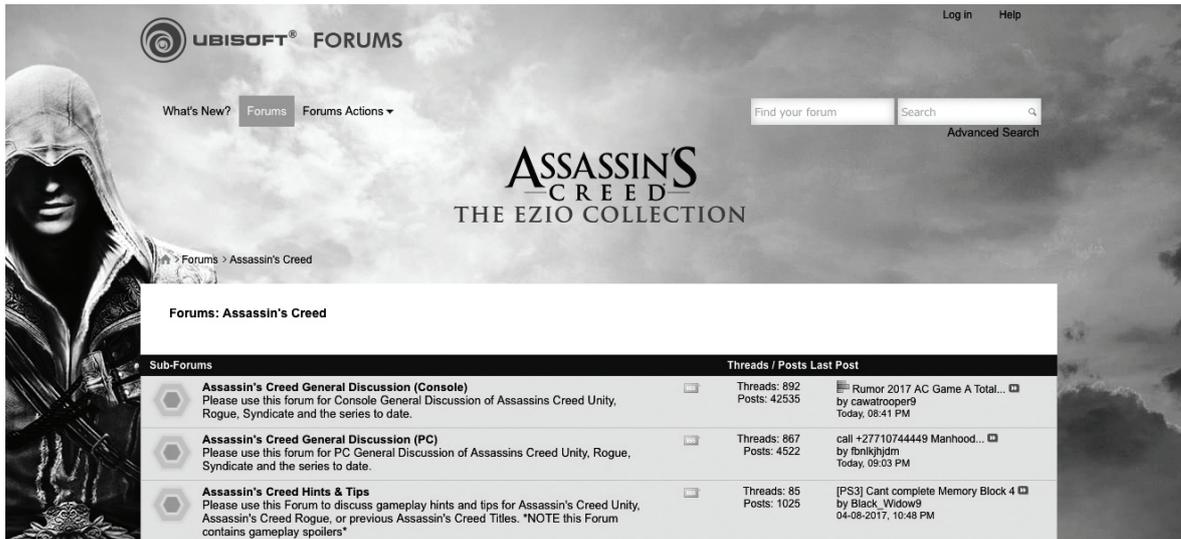
Figure 7 – High interactivity in the institutional site of “Clínica Sim”



Source: Adapted from Clínica Sim (2017)

b) Hedonic aspects: The institutional site of the “Ubisoft” presents detailed information about the company’s games, with synopses, images and videos, as well as places where the public can buy them. There are also “sections” on the company’s history, available job openings and contact details. The site applies “high interactivity” in the “community” section, providing a forum for debate on games, where the user has the possibility to interact with other members, send comments and photos. This way, one can collaborate with the construction of content on the site, sharing information in the own environment, allowing the “total visibility” of the actions.

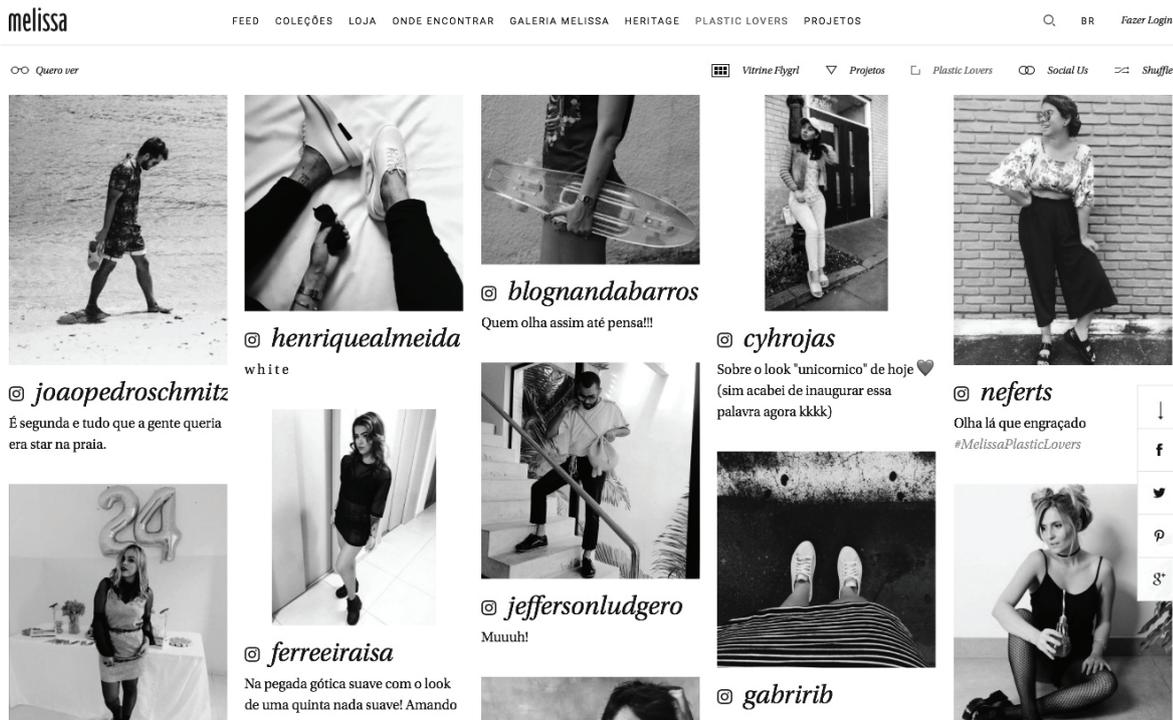
Figure 8 – High interactivity in the institutional site of the game company “Ubisoft”



Source: Adapted from Ubisoft (2017)

c) Footwear: The institutional site of the shoe company “Melissa” has different forms of content, with texts, photos and videos, used to present information about the collections of sandal models, artistic projects that the company produces, as well as articles on fashion and news related to the brand. The “high interactivity” is present on the site from tools available in the section “plastic lovers” that allow the sending of photos and messages of customers, also integrating content posted on social networks. All content produced by users is served on the company’s own website. In this way, one can have “quality of construction” and “total visibility”.

Figure 9 – High interactivity in the institutional site of the shoe company “Melissa”



Source: Adapted from Melissa (2017)

Conclusions

The intention of this work was to analyze the participation of users in the contents of institutional sites from the levels of interactivity. Three distinct categories of sites were identified: those that prioritize functional aspects, those that focus on hedonic aspects and sites focused on footwear brands, so that a direct comparison can be made between them. From this, we tried to understand the possible actions for the users with the contents of these institutional sites, in the levels of low, medium and high interactivity.

In the category of sites that prioritize functional aspects, in which there is the expectation of treating the content of the companies in a formal way, different forms of application of the levels of interactivity are observed. The “Gerent Advocacia” website applies low interactivity by disseminating general information about the company to users. The accounting firm “Contabilivre” offers the medium interactivity, allowing the visitor to communicate in real time with an employee, from a chat tool. In turn, the “Clinica Sim” site applies high interactivity with the possibility of building and sharing content among users, including the comments function in different texts in the blog section of the site, which

provides a communication exchange on health issues. If the company knows the habits of its public of interest and considers that it has developed a site that reflects its characteristics, it can establish a relationship of trust with the client, regardless of the level of interactivity proposed. If there is a possibility of content sharing and this desire on the part of the users, there will be participation and involvement with the company's actions in a positive way (VAZ, 2011). At the same time, with the collective construction, the risk of collaboration is also considered, since the opinions of the public can reflect on the network in a positive or negative way, influencing the perceived image about the company.

In the category of sites that prioritize hedonic aspects, in which there is the expectation of treating content in an informal way, different possibilities of applying the levels of interactivity are also observed. The "Heads" advertising agency site focuses on delivering content with videos and animated transitions between sections, but with low interactivity. The company "Giraffas" seeks to disseminate information about the restaurant menu, with photos and details of the products, applying medium interactivity in a message sending tool, in which customers can communicate with the company about the service of the establishments, for example. The high level of interactivity is observed on the "Ubisoft" company site, with the presence of a forum for users to discuss games, share tips and eliminate doubts, using the Web 2.0 strategy on collaborative content discussed by Torres (2009), and initiating a cumulative innovation process addressed by Tapscott and Williams (2007), in which the community itself builds knowledge. By providing an environment that fosters trusted relationships and allowing users to participate in a community that encourages collective work, the company seeks to motivate its audience so that it feels part of a vibrant experience (CATMULL, 2008). Thus, Gabriel (2010) argues that the intended engagement can be achieved with the relevance of the tool to the user, if it makes sense and arouses interest in participating.

Among the sites of the same category, that of footwear, we could also observe the different levels of interactivity. The company "Bout's" publishes photos of the models of shoes and organizes the information in categories of use, applying the low interactivity in its institutional site. The company's site "Molekinha" offers medium interactivity from a game, to create a relationship with the children consumers of the brand, sought to be part of the context of games and fun activities. According to Tapscott and Williams (2007), by participating in a personalization process, users feel that their opinions have value to the brand and feel part of a positive context, influencing their perception of the company. The company "Melissa" proposes high interactivity on their site by inviting users to share their photos with their shoes, appearing in a specific section of the site for everyone who accesses, thus integrating a social networking feature. With the possibility of content production, the company adopts a communication process that stimulates active consumers,

encouraging mass collaboration and developing these values as important for the company (PRAHALAD; RAMASWAMY, 2004).

It is emphasized that classifications in interactivity levels are not intended to determine the success of communication in a site, but to help in understanding the possibilities of a user acting on the site content or with other users, functioning in this research as a criterion to establish a comparative analysis. With the adoption of low interactivity, a site may have the purpose of disseminating information to its customers. With high interactivity, the site may want to offer a dynamic of communication, aiming at the exchange of content between users. Regardless of the level of interactivity adopted in the institutional site, one must consider the company's goals for the relationship with its public and the trust it conveys in its communication.

Thus, the application of the analytical study allowed to observe how different segments of companies aim at the relationship with the public and the contextualization of their brands in their institutional sites. With the analysis performed at each site, it was possible to observe the tools that companies use to try to offer meaningful experiences to the public, regardless of the level of interaction of the users with the content. Finally, with this research, it was possible to use a criterion to analyze the communication proposals of the companies in their sites. The classification of interactivity levels can help companies to identify the type of user participation, analyzing if the practice corresponds to the intended in the planning, including the perception about the need to create a broadening of the communication process with its public.

References

CATMULL, E. **How Pixar Fosters Collective Creativity**. 2008. Available in: <http://cogsci.uwaterloo.ca/courses/Phil447.2009/pixar.pdf>. Accessed on: April 10th, 2017.

GABRIEL, M. **Marketing na era digital: conceitos, plataformas e estratégias**. São Paulo: Novatec Editora, 2010.

JENSEN, J. F. 1999. Apud: PRIMO, Alex. **Interação mediada por computador**. Porto Alegre: Sulina, 2007.

KALBACH, J. **Design de navegação web: otimizando a experiência do usuário**. Porto Alegre: Bookman, 2009.

KIOUSIS, S. Interactivity: a concept explication. In: **New Media & Society**. v.4. 2002.

KOTLER, P. **Marketing 3.0: as forças que estão definindo o novo marketing centrado no ser humano**. Rio de Janeiro: Elsevier, 2010.

LAUREL, B. 1991. Apud: VOS, L. **Searching for the holy grail: images of interactive television**. University of Utrecht, 2000. Available in: <http://www.globalxs.nl/home/1/1devos/itvresearch>. Accessed on: April 10th, 2017.

LEMOS, A. **Cibercultura, tecnologia e vida social na cultura contemporânea**. Porto Alegre: Sulina, 2 ed., 2004.

LEVY, P. **Cibercultura**. 2 ed. São Paulo: Editora 34, 2000.

MACIAS, W. A Preliminary Structural Equation Model of Comprehension and Persuasion of Interactive Advertising Brand Web Sites. In: **Journal of Interactive Advertising**. v.3, 2003.

NASSAR, V.; PADOVANI, S. Proposta de classificação para níveis de interatividade com foco na construção e no compartilhamento de conteúdo. In: Interaction South America 2011. **Anais do III Congresso Internacional de Design de Interação**. Belo Horizonte: IxDA, 2011.

O'REILLY, T. **What is web 2.0: design patterns and business models for the next generation of software**. United States of America: O'Reilly Media, 2005. Available in: <http://oreilly.com/pub/a/web2/archive/what-is-web-20.html?page=2>. Accessed on: April 10th, 2017.

PRAHALAD, C. K.; RAMASWAMY, V. **The Future of Competition**. Harvard Business School Press, Boston, Massachusetts, 2004.

PRIMO, A. **Interação mediada por computador**. Porto Alegre: Sulina, 2007.

RAFAELI, S. Interactivity: From new media to communication. **Sage Annual Review of Communication Research: Advancing Communication Science**. Sage: Beverly Hills, CA. 1988.

STEUER, J. Defining Virtual Reality: Dimensions Determining Telepresence. *Journal of Communication*, 42 (4), 73-93. 1992. Apud: MACIAS, W. A Preliminary Structural Equation Model of Comprehension and Persuasion of Interactive Advertising Brand Web Sites. In: **Journal of Interactive Advertising**. v.3. 2003.

TAPSCOTT, D.; WILLIAMS, A. **Wikinomics: Como a Colaboração em Massa Pode Mudar o Seu Negócio**. Rio de Janeiro: Nova Fronteira, 2007.

TORRES, C. **A bíblia do marketing digital**. São Paulo: Novatec, 2009.

VAZ, C. A. **Os 8 Ps do Marketing Digital: o seu guia estratégico de marketing digital**. São Paulo: Novatec, 2011.

Websites consulted

BOUTS. Available in: <http://bouts.com.br/>. Accessed on: April 10th, 2017.

CLÍNICA SIM. Available in: <http://www.clinicasim.com/>. Accessed on: April 10th, 2017.

CONTABILIVRE. Available in: <https://www.contabilivre.com.br>. Accessed on: April 10th, 2017.

GERENT ADVOCACIA. Available in: <http://gerent.adv.br>. Accessed on: April 10th, 2017.

GIRAFFAS. Available in: <http://www.giraffas.com.br/>. Accessed on: April 10th, 2017.

HEADS PROPAGANDA. Available in: <http://heads.com.br>. Accessed on: April 10th, 2017.

MELISSA. Available in: <http://www.melissa.com.br>. Accessed on: April 10th, 2017.

MOLEKINHA. Available in: <http://www.molekinha.com.br>. Accessed on: April 10th, 2017.

UBISOFT. Available in: <https://www.ubisoft.com/pt-BR/>. Accessed on: April 10th, 2017.

Victor Nassar

Doctoral student in Design at the Universidade Federal de Santa Catarina, with FAPESC scholarship and expected completion in June/2017. Master in Design by the Universidade Federal de Paraná (2012), with CAPES REUNI scholarship. Graduated in Publicidade e Propaganda from Pontifícia Universidade Católica do Paraná (2009). Participant of the Research Groups SCTIC – Structuring in Research for Santa Catarina, TECMÍDIA and TECSAUDE. Researcher of technologies for the health area. Areas of study: User Experience, Digital Design, RFID (Radio Frequency Identification), Interactivity, Human-Computer Interaction. Email: victornassar@gmail.com

Milton Luiz Horn Vieira

Graduated in Mechanical Engineering from the Universidade Federal de Santa Catarina – UFSC (1984). Master’s Degree in Mechanical Engineering from the UFSC (1991), Specialization in Chemical Engineering (ceramics) from the University of Valencia – Spain and Ph.D. in Production Engineering from the UFSC (1999). He is currently associate professor 3 at the UFSC. Has experience in the area of Design, with emphasis on Animation, Digital Design, Interaction Design, User Experience, Interactivity and Interface Design. He is the leader of the Research Groups SCTIC – Structuring in Research for Santa Catarina, TECMIDIA, TECSAUDE and Visual Communication. He is a researcher at the UFSC Digital Television and Media Group and is an AD-HOC Consultant at REBRATS/SUS. Email: milton.vieira@ufsc.br

Received on: 06.21.2016

Accepted on: 04.09.2017