

## Behavioral Patterns on *WhatsApp*

### AMELIA REGINA ALVES

Institute of Psychology - IP, University of Brasília  
National Telecommunications Agency – ANATEL, DF, Brazil  
E-mail: [amelia.alves@gmail.com](mailto:amelia.alves@gmail.com)  
Tel: +5561999814109

### JEFERSON NACIF

National Telecommunications Agency – ANATEL, DF, Brazil  
E-mail: [jefersonnacif@gmail.com](mailto:jefersonnacif@gmail.com)  
Tel: +5561993086114

### EMMANUEL GONÇALVES

Faculty of Economics, Business and Accounting – FACE, University of Brasília, DF, Brazil  
E-mail: [emmanuelgoncalves@gmail.com](mailto:emmanuelgoncalves@gmail.com)  
Tel: +5561984266515

### MAYAN SANTANA

Faculty of Agronomy and Veterinary Medicine - FAV, University of Brasília, DF, Brazil  
E-mail: [mayan.mms@gmail.com](mailto:mayan.mms@gmail.com)  
Tel: +5561983018525

### BERNARDO CARVALHO

Technology College - FT, Electrical Engineering Department, Universidade of Brasília, DF, Brazil  
E-mail: [bernardo.9632@gmail.com](mailto:bernardo.9632@gmail.com)  
Tel: +5561981104931

### LUANA ZUVANOV DE FARIA

Institute of Psychology - IP, Universidade of Brasília, DF, Brazil.  
E-mail: [zuva13@gmail.com](mailto:zuva13@gmail.com)  
Tel: +5561982378080

### LAIS SOUZA SILVA

Faculty of Economics, Business and Accounting – FACE, University of Brasília, DF, Brazil  
E-mail: [lais.lsss@gmail.com](mailto:lais.lsss@gmail.com)  
Tel: +5531988627766

### Abstract

*This paper seeks to understand the impact of Informational Technical-Scientific Revolution on the various aspects of global society. The studies and references used herein, demonstrate how the new digital economy tools were incorporated into the dynamics of both organizational and personal relations, by institutionalizing current prevailing social practices in everyday life increasingly modified by modern information and communication technologies (ICTs), in particular by WhatsApp. Recurrently, the term*

*Liquid Modernity is used to make reference to the current period of Post-Modernity, in reason of the fluidity and volatility of labor and affective bonds that time caused. The technological tool WhatsApp and its leverage on the new established social conduct is the object of analysis of this study. Throughout the work, several facts and assumptions are presented about the emergence of new patterns of behavior due to the investigated software, the WhatsApp.*

**Key Words:** *Modernity, Dynamics of Relationships, Patterns of Behavior, WhatsApp.*

## Introduction

The rural exodus bolstered by technical-scientific revolutions is an important milestone in the formation of contemporary Western societies, since it has resulted in the increasing density of urban centers and, consequently, of social relations. The various changes that have taken place since then have led to the formation of a connected reality, with an intense flow of instantaneous and fleeting information. This reality is called the information age.

The Industrial Revolution, dating to the end of the 18<sup>th</sup> century, triggered a series of changes, turning mostly agricultural societies into industrialized ones, drastically changing the way of life in such cultures. Evidence shows that the development of communication and subsequently of language was not linear throughout human development and as such the last decades feature a new type of socialization and economy: one based on information (Defleur, Ball-Rokeach, 1993).

The rise of mass media we experienced in the twentieth century was also a crucial factor for that new economy. Both material and political production became subjected to the review of large communication companies and thus the information itself became an asset with market value (Defleur, Ball-Rokeach, 1993).

In an attempt to build a communication network between bases during the Cold War, ARPAnet, internet's first designation, was developed. During this same period, three independent processes occurred simultaneously, originating a networked society and a globalized economy. All these events triggered the emergence of a "Fourth World" (Castells, 2001).

In the 1990s, the internet was redirected from the military field to the socio-professional sphere. Its popularization took place in the 2000s, with the emergence of social media, which would only take hold after 2004.

Enter WhatsApp, a mobile application (for mobile phones, smartphones and others) created in 2009 by Brian Acton and Jan Koum, which has been expanding and incorporating an increasing number of users, becoming, according to surveys conducted by Opinion Box in 2016, a market research platform, one of the most used apps in Brazil.

WhatsApp has been gaining popularity in Brazil since 2010 and its growth has been steady and intense. The instant messaging application is increasingly embedded in the most varied scopes and habits of society. It has become an indispensable tool for both professional and social life.

The first consideration to be made in order to understand the innumerable influences and changes in social dynamics is the analysis of the importance of language and communication about personality, behavior and personal relationships. The capacity for abstraction presented by people is unlimited. Human language is fluid and gains complexity as it comes into contact with new situations. The mass insertion of new interactive technologies into people's daily lives modifies them and shapes them proportionally to the

presence and necessity of these informational tools. The incorporation of habits resulting from the innovations of information technology in the personal relations are object of study. It is argued that commercial relations are asymptotes of current personal relations (BAUMAN, 2001).

## **Discussion**

The second half of the 20<sup>th</sup> century is marked by major changes, especially in the economic-industrial sector: technology advances and simultaneously the style of the consumer in relation to the new capitalist line of production also changes.

The “civilization of desire” emerges, characterized by the constant improvement of living conditions, by hedonism and by the pleasures of instantaneous consumption. The incorporation of the new capitalist dynamics not only to lifestyle and personal relations, but also to the management of organizations is then observed. The hyperconsumer faces the paradox of the new condition of well-being and happiness: on the one hand, the consumer feels “flattered” by everything that the market offers them and feels powerful facing so many options. On the other hand, the access to these options define their happiness. The consumer no longer acquires a product for the product itself; they acquire emotional comfort, success, self-esteem, culture and wisdom.

Similarly to the scheme of this new capitalist model, companies are also marked by competitiveness, in tandem with the advent of Fordism, which aimed at the diffusion of standardized products, the efficiency of workers in the execution of their specific tasks and the economy. The area of communication is developed to be able to follow the rhythm of high scale production. Moreover, it seeks more than ever to reach the consumer at deeper and more subjective levels, not for the product itself, as previously proposed, but for the idea and the ideal of the life this product brings with it (Lipovetsky, 2007).

Therefore, along with globalization, capitalism changes its market structure, placing the consumer on a sort of pedestal, selling the idea that all of their desires and expectations in relation to the products are always satisfied. The market needs to reach the consumer of other cultures, to penetrate the client’s values of life, so that this customer also needs this market. To that end, companies adapt to the consumer’s constantly changing and disposable desires: they reduce the product lifecycle, stimulate relentless innovations and product launches and open up space and opportunities for customers by offering credit and loyalty. As a consequence of this phenomenon, the salaried class, the unions and the state are all subjugated by the financial and the consumer market (Lipovetsky, 2007).

In this phase of hyperconsumption, in which the ideal of comfort and leisure is already hegemonic, access to products that are constantly innovated has become trivial. Consumers have been shown to be even more volatile, while looking for products that meet increasingly more personal criteria. The very idea that a product should represent status now represents satisfactions geared specifically to the subjectivity of the consumer: emotional, aesthetic, physical and relational satisfaction. Consumption became intimate (Lipovetsky, 2007).

The observation is banal: as our societies grow rich, new desires to consume are constantly arising: the age of abundance is inseparable from an indefinite expansion of the sphere of desired satisfactions as well as from an inability to eliminate appetites of consumption, with every saturation of a need being immediately accompanied by new searches (Lipovetsky p. 38, 2007).

This style of emotional consumption focuses on marketing that operates to ensure the merit of products presented through the provision of sensory, sensitive and emotional experiences. Although the new consumer model is linked to “being” and no longer obviously related to “appearing”. It is observed that in the past the focus was the dependence of maintaining an image of purchasing power and social status

before other people. But this dependency has only recently been reallocated and now the incessant quest is focused on stimuli that keep the client's imagination and sensory system at high levels.

The question of the market has also turned more to the representation of the brand than to the merchandise itself: the impulse to be different and snob has not disappeared, it is just no longer restricted to the desire for social recognition. The narcissistic pleasure brought by the top brands is now measured by the distance between the consumer and most other consumers. This sense of detachment leads to a positive self-image and consequently an idea of relative individuality, in which it is no longer affirmed by the other, but by the sum of the satisfactions acquired for oneself.

The acquisition of a positive self-image also implies exposure to uncertainties raised by the numerous references presented and how they influence the perception of aesthetic or sanitary security individuals have of themselves. In addition, references were more contained and generally shared in order to reach an entire audience in the past. Thus, everyone was under the same consumerist rules and concepts, sharing the same social norms. The point is that this hierarchical order is currently deregulated and it evidences disparity due to the plurality of lifestyles and consumption, inciting anxiety and doubts that affect all consumers eager for "happiness pills" (Lipovetsky, 2007).

The Third Industrial Revolution, also known as the Technical-Scientific Information Revolution, marked this transition from the 20th to the 21st century. Its impact restructured the capitalist model and incorporated new social practices.

The introduction of the term Information Age brings with it the main changes brought about by the inclusion and subsequent dissociation of technology in all spheres of a society (Castells, 1999):

What characterizes the current technological revolution is not the centrality of knowledge and information, but their application to the generation of knowledge as well as information processing/communication devices in a cumulative feedback cycle between innovation and its use (Castells, 1999).

Knowledge production and application form the greatest paradigm of the Information Age, while it becomes the main raw material of the new capitalist dynamics, characterized by the global integration of financial markets and by flexibility, that is, the capacity of an organization to restructure and readapt. High competitiveness governs the economy on a global scale now, not only in the organizational sphere but also in the workforce, now multifunctional and individualistic, adapted to the new economic model.

Productivity is decisive in establishing a country's purchasing power and it is precisely technology that engenders economic development. The advent of Industry revolutionized the production process and between the 1950s and the 1970s there was a remarkable increase in the quantity of products on the market, given the technological and informational progress over that period.

During the 1970s, a change occurred in the economic scenarios of companies worldwide, redirecting their profit strategies, such as organizational decentralization, market expansion, a large-scale, cost-effective transnational production, as well as the acceleration of capital turnover. Therefore, an organizational transformation took place in order to adapt to the constant changes in the operational scenario, adopting flexible strategies: the emergence of a new technology, for example, might mean the replacement of labor and costs reduction.

The structural implementation of technologies in organizations does not necessarily entail unemployment, but forms of employment are constantly changing both in quantity and in quality, as well as in the essence of execution of designated activities.

Finally, the flexibility of processes and labor markets, induced by a networked and IT-enabled company, profoundly affects the industrial relations inherited from industrialism, introducing a new flexible working model and a new type of worker: the flextime employee (Castells, 1997, p.285).

This new model entails creating a corporate management with a lean production that is more efficient than economical, suggesting that the company itself develop network procedures. Given the complexity of decentralized global market interactions, it is now necessary to use networks to keep interdependent organizations connected. It was at that moment that there was an ample diffusion of computers in network and the directing of software to corporate management systems.

In other words, through the interaction between organizational crisis and transformation and new information technologies, a new organizational form emerges as a characteristic of the informational / global economy: the networked company. Simultaneously with the implementation of these new market strategies, there must be a demand of a consumer market. Thus occurs the expansion of organizations to a global scope, organizations which are highly flexible and with considerable power of informational and communication reach. High-tech companies are the best fit in this context, while there is a significant shift in financial firms: they are not only globally interdependent but can also be managed at any time in real time, facilitating million dollar deals in a matter of seconds.

This financial market rearrangement was possible thanks to the advancement of technology that allowed the implementation of complex connectivity and communication systems, as well as the change of business tactics within this sector, such as the speculation of financial flows with swift movements to enter a market with profit potential or to abandon it in time to avoid investment loss. Castells (2001) argues that this entrepreneurial culture is, above all, "a culture of money [...]" but it is also a culture of work, compulsive and incessant work".

In "*The Protestant Ethic and the Spirit of Capitalism*", Weber (1920) referred to the Protestant worker, who gives up the enjoyment of money and pleasure, accumulating most of his capital for investment in order to make a profit. Conversely, the worker of the current model of capitalism seeks mainly the immediate pleasure that their salary and the market can offer. This fact has direct repercussions on the cultural issue, in which behavioral consumer practices based on immediate satisfactions emerge. Instead of conspicuous consumption, we observe a pattern of superfluous consumption, the purchase of consumer items that have little use for their owner, but provide satisfaction for their brief shelf life. Even though the information economy is designed by a set of distinct cultures, this does not preclude its development from being structured in a matrix that has the same organizational patterns regarding production and consumption strategies (Castells, 2001).

The countries seen as major world powers are the main influencers in the process of globalization of information technology, since all activities become increasingly integrated. One might therefore infer the institutionalization of the culture of those countries as prevailing in the current context of communication of other countries. Technology production and its utilization for economic and social purposes is also a cultural manifestation and, as such, based on paradigms that are reflected in certain cultures to a greater or lesser extent (Takahashi, 2004).

Thus, cultural hegemony takes place worldwide, especially where communication technology is concerned, since it is a low cost way to disseminate cultural content on a global scale: "The first item on the US export agenda is not currently manufactured goods, but culture and entertainment". In other words, culture has become more of a product in the international market due to the consolidation of information technology. In addition, the current model of technological communication allows very broad interaction among the population, not only in the cultural context but also in the political one (Takahashi, 2004). As pointed out in "*Convergence Culture*" (JENKINGS, 2008): "*Traditional media are passive. Current media are participatory and interactive.*"



Therefore, the power of social intervention conceived by social networks is notorious, as well as its power of mobilization, such as the Arab Spring youth uprisings in 2011 or the protests that happened in Brazil in 2013, both coordinated through social media.

The dynamics of capitalism incorporates the dynamics of social relations: interactions become flexible and reversible and can be structurally modified. For Sennett (2011), individuals are living in a short-term society in which enduring relationships become scarce and give way to flexible and fragmented relationships.

After this brief introduction to the changes affecting the current socioeconomic context, we move on to this research's subject matter: the new patterns of behavior observed with the incorporation of technology in everyday social practices, specifically in social media and the WhatsApp tool.

This society requires tools that keep relations fragmented and that is when the so-called "social media" step in. The "social media" is a virtual communication medium that interconnects people through an electronic device. Thus, social media are "[...] those systems that allow i) the construction of a persona through a personal profile or page; ii) interaction through comments; and iii) public exposure of each agent's social media" (Boyd, Ellison & Recuero, 2009, p 102).

According to Castells, a network is "a set of interconnected knots. A knot is the point at which a curve intersects. Concretely, what a knot is depends on the type of tangible networks we speak of" (Castells, 1999, p.498). It is from this notion of network that WhatsApp will be examined.

The interconnected knots that Castells (1999) presents would be the virtual connections between WhatsApp users. These "people knots" are built anywhere and at anytime, that is, social relations established in WhatsApp do not require physical and geographical spaces, they no longer depend on space and time. The virtual relations mediated by WhatsApp are made indirectly, that is, direct communication (face to face) is not necessary, physical presence is not necessary since the individual does not have to be "present with their heart and soul" in space for relationships to happen.

This ease of communication allowed socialization without the imperative to share the same physical space, information technology transcending geographical barriers. Because of these features, WhatsApp makes it possible to turn any place into a meeting place.

Bauman (2001) discusses this interconnection: "you remain connected – even while in constant motion – and yet the invisible senders or recipients of received and sent messages are also in motion, each following their own trajectories". Bauman (2003) makes a considerable contribution when reporting on the impact of modernity – which he characterizes as liquid, because of its fluidity and its volatility established in all spheres of society.

More specifically, the author discusses in that work how this liquid modernity, a fruit of the new capitalist dynamics, has affected human ties. Not unlike the economic model, relationships become flexible, people are seen as investments in stock exchanges and they can no longer be maintained for the long term. Any type of bond goes through speculation, insecurity becomes one of the greatest evils of the day. After all, investing time, affection and dedication into something that can easily break down has become one of the biggest insecurities today.

The advent of social media has displayed their users as merchandise in shop windows. The search for partnerships has become a habit but, as already described above, they are of a volatile nature, possibly only on occasion, when insecurity entails a duality between the desire for commitment and the craving for freedom.

These two stimuli merge and blend in the extremely engrossing and exhausting work of “weaving nets” and “surfing them”. The ideal of “connectivity” struggles to grasp the difficult and irritating dialectic of these two irreconcilable elements. It beckons with a safe (or at least non-fatal) navigation between the reefs of loneliness and commitment, of the scourge of exclusion and the iron clutches of overly close ties, of irreparable detachment and irrevocable attachment (Bauman, 2003).

“When quality disappoints you, you seek salvation in quantity. When duration is not available, it is the speed of change that can redeem you” (Bauman, 2003, p 78). From this statement, one can refer back to the idea of social media users as commodities: social media allow a wide range of people to be on the “friends” list. Probably people with whom one has had little contact, but still enough contact to send a friend request. You just have to click on one of these contacts to start a conversation and establish a virtual relationship. If there is a face-to-face meeting because of this socialization and a relationship develops, it is expected to have an expiration date due to the considerable supply of “goods” in the contact list. There is no reason to establish deep and lasting connections when there are so many other connections – perhaps even better quality to explore. The agility with which one navigates and permeates relations is what enables this market to work, while it proves to be a behavior derived from the real globalized trade relations.

The literature on fluid modernity does not address interpersonal communication tools. However, if the fluidity of relations is defined as the tendency to become more practical, efficient, less risky, more volatile and superficial and, especially, less costly, it is observed that some of these aspects are enhanced by the WhatsApp app, seeing as it promotes the instantaneity and coexistence of innumerable interactions.

The situation of virtual conversations, or chats, and social media in general, makes it possible for shy people to express themselves more easily: it is notorious that written communication is easier for shy people. It is also necessary to analyze whether the lack of oral communication of “shy” people accentuates their level of socialization in WhatsApp groups, for example.

The Internet and its social ramifications have changed the perspective of society and consequently patterns of behavior. The emergence of a new style of communication and language as well as new social practices is observed. This type of technology has the ability to amplify people’s personality, which is related mainly to the characteristics of assertiveness and shyness, but aspects such as affinity for controversial subjects and social need are also very evident, since notoriously the tool facilitates the propagation of blunt messages.

WhatsApp is one of the best examples to demonstrate the internalization of new attitudes in society. While there is a sense of safety due to its virtual nature, the exchange of instant messages and the ease with which they circulate between groups allow for a greater number of discussions and sharing of opinions. That is why this tool can amplify the subject’s personality, as well as their participation as a citizen. However, communicating through WhatsApp can be too simple and generate conflict, triggering interpretive verbal misunderstanding caused by a distortion of emotions. In addition, this software’s communication also presents communication distortion due to the use of emojis, tools to replace or to emphasize expressions.

During the popularization of cell phones and the advent of social media, it became clear that there were adjustments regarding both the communication system and the forms of relationships, adjusting to the very idea of instant messaging. One of the possibilities of this adaptation is to observe how face-to-face dialogue makes it evident when one person is paying attention to another. Therefore, questions or rhetorical information does not require feedback. Hence follows a relative dissonance between the person who sent the message and the receiver, since it is believed the delay in offering the response often causes a sense of negligence on the part of the sender. Another point to present is that because of the transcendental character in relation to the virtual medium that WhatsApp acquired, when a member leaves a group (regardless of the pertinence of the themes to the individual), it is as if he leaves a physical environment where the people belonging to the group would be.

WhatsApp groups are an important theme in relation to new social behaviors. A low rhetorical index is observed in WhatsApp conversations, while a great volume of positions put forward in the groups is noted. From these facts, two hypotheses arise: either the opinions are homogeneous among the participants of certain groups or they are reluctant to oppose what has been stated. It is to be expected that there are no great differences in the mindset of people who have gathered in a chat group. However, it is known that not all groups are formed as a conversation, they are often groups with a formal purpose (not necessarily excluding intimacy among participants) and in this case the lack of heterogeneity of opinions (or at least of what is expressed by members) is surprising. Therefore, it is inferred that there is a certain characteristic predominance of the opinions that were previously exposed. It could be argued that people feel intimidated to oppose ideas, especially if there is no certainty of support from other members. Based on that, it is assumed that the discussion takes on a new nature in WhatsApp, not prioritizing the classical Durkheim's triad (thesis, antithesis, synthesis), but focusing instead on the propagation (or indoctrination) of the ideas of the individual. It is believed this phenomenon can be attributed to the timeless nature of the app, since the conversations do not have an end, so the rhetoric could extend indefinitely. In addition, the interlocutor does not have access to only his theoretical framework, since they have much more time, and, one may infer, resources (smartphone) to weave his criticism. Here the need arises for a consensus (or not) or for either party to abandon their thesis and thus the urgency of a predominance of one of the propositions (or, rarely, a synthesis of them all).

Another issue elaborated as a result of these hypotheses would be the use of the option to silence a conversation in situations of groups perceived as inconvenient. The moral obligations that are acquired in relation to close people (family or friends) makes leaving a group (even though it is irrelevant to the individual) cause an impression of indifference and apathy, that is, there is a misinterpretation by group members.

In this context, the possibility of the group administrator playing the role of a moderator is verified. It is known that the use of the tool is not only recreational, there are several other utilities (and more and more new ones) for the use of the application, such as work and academic purposes. Therefore, there are not only rules of propriety to be followed in these functional groups, but there are also matters of efficiency and productivity. Given the recreational possibilities of WhatsApp, there is a need for some sort of control to maintain the focus and objectivity of these groups. Therefore, it is inferred that someone (usually the administrator) acquires the role of moderator of the group so that it does not deviate much from the initial purpose, whether or not it is a work group. In addition, it is known that the administrator has the power to remove people from the group. Therefore, they can administer the maximum possible penalty in the application (institutionally), so that the other members are not entirely free in relation to the conversations.

Still regarding WhatsApp groups, it is noticed that not all the participants of a group necessarily know each other. It is observed that for groups with well-defined purposes, prior knowledge is unnecessary, what instigates the creation of these groups is a common goal. Hence follows a relative heterogeneity of the participants. Another aspect that is observed is that in most of these groups, no matter how well-defined a purpose has been established, there are still impertinent messages of recreational nature, which agrees with the theory that the tool serves much more than the circulation of messages. It is notorious that new, unprecedented behaviors have also emerged, such as the "good morning" messages. Previously to WhatsApp, it was not observed (or expected) that people would send good-day texts or e-mails to all their acquaintances or even that they would greet everyone who physically crossed their path. However, there is a certain, almost secularized, recurrence of "good morning" in a large number of groups. This type of emerging behavior supports the theory that WhatsApp is not only a means of communication but also a tool that modifies the structure of rituals and signs of language.

It is necessary to emphasize that the meaning of knowing someone has undergone certain changes due to virtual communication. More specifically, the meaning of being a friend or an acquaintance is confusing in comparison to former concepts. This is due in large part to social networks (not only because there is no



distinction between friends or acquaintances in networks), because the experiences, from the most intimate to the most ordinary, are shared and visualized by all “friends” (and others). It is noted that in the past, this sharing (celebrities apart) was restricted to a delimited circle of people and reproduced almost exclusively in person. Not only was there an exponential increase in this circle (as well as the disappearance of the delimitation) but also the inevitable liquefaction of the relations it concerns (Bauman, 2000).

Messages exchanged in WhatsApp boast security technology for the confidentiality of the information. However, encryption technology is known to be ambiguous in this sense, since it develops knowledge capable of protecting, but also of invading privacy. This concern was exposed by Castells (2001):

Encryption is a fundamental technology for protecting the messaging privacy (although not the sender’s, since the source computer will be identified by its entry point into the electronic network) (LEVY, 2001). This is partially true of public key cryptography with two decryption keys, one of which is privately preserved. However, as Lessig (1999) shows, encryption is an ambiguous technology because, while it can preserve confidentiality, it is also the basis for advanced identification technologies (Castells, 2001, p. 142).

This passage warns of an often overlooked problem: the possibility of invasion of privacy and leaking of sensitive information. These events are not uncommon to observe and in the current Brazilian context several examples can be pointed out.

As a new social etiquette derived from the patterns of behavior institutionalized by social media is incorporated, old habits and practices arising from interpersonal relationships are perceived to be gradually attenuated. That is, the tool not only modifies behaviors that are observed through its use, but it also affects the behavior and, especially, the personal relationships that take place outside the app (Bauman, 2000).

According to Bauman, we live in an era of liquid modernity. This modernity contrasts times of rigid, immutable and robust structures with liquid, dynamic and volatile structures. This shift, which was believed to reach only the economic sphere, completely changed personal relationships and the contemporary individual’s conceptions of priority. Prior to this modernity, there was a concern to maintain ties, there was a decorum to start and to end a relationship. Today, the beginning (or termination) of affective bonds is extremely trivialized, as are the ties themselves. The fluidity of the market, of information and of trends make one look for the same characteristics in relationships. That is to say, they have become somewhat speculative and comparative, since, however gratifying a relationship is, there are (apparently) others more rewarding or less costly. So, clicking add is enough to have some kind of contact with someone, while just clicking the delete button is enough to get rid of a relationship. Finally, it is understood that:

The more human attention and learning effort are absorbed by the virtual variety of closeness, the less time will be devoted to the acquisition and exercise of skills that non-virtual proximity demands. These abilities fall into disuse – they are forgotten, they are not even learned, they are avoided, or are relied upon only reluctantly if at all. Their development, if required, may present an uncomfortable, perhaps insurmountable, challenge. This increases the charms of virtual closeness. Once opened, the passage from non-virtual to virtual proximity takes on its own impetus. It seems to be self-perpetuating and it is also capable of self-accelerating (Bauman, 2003).

The presence in relationships has always been measured by proximity, interaction and absence. The dilemma of today is to understand the meaning of distance or presence, considering being in a network means being accessible at all times. A conversation initiated by chat, for example, may never have a particular purpose as in a traditional telephone conversation, it is possible to resume the subject based on the history of the last dialogue. This virtual model of closeness can facilitate the loosening and disrupting of social ties, which demonstrates the fragility with which they were tied.

Human ties tend to become increasingly trivialized: just like information on the internet, they come in great quantity and intensity and end before they can even be remembered. That is why interaction has been so fragile, there is no depth where there is no dedication and consequently there is no real appreciation of what is known so superficially.

Given that old relationship habits have been replaced by a new coexistence archetype, it is observed that the conventional face-to-face affective relationship has also been replaced by a new model: virtual encounters. Undoubtedly, with all the changes that took place over the last decades, there are not as many resources as before (i.e., social skills). For this reason, internet dating was also a way of adapting to the current social behavior. This type of practice features an unprecedented attribute to relationships: unrestricted choice. Just as the consumer enters a store and chooses the product that is more suitable to them, the individual can choose the partner that best suits their (not only aesthetic) parameters. The profiles of participants in these online relationships often contain a brief description of their personality, that is, there is a starting point for the subject in terms of what personality traits he or she desires. After starting a conversation, there is a lot of time to decide if the product is suitable or, if not, whether the consumer in just a few clicks is testing another one (it is emphasized that this works both ways).

As previously discussed, it has become much easier to extricate oneself from a failed relationship. Not responding or deleting a contact is enough to announce the end of an obligation. In addition, going back to the analogy of people in the contact lists as products on shelves, Internet users feel secure in losing a purchase, as there are so many other goods available.

Internet users are nothing but consumers, in whatever context they are inserted, the realization of their immediate desires is their priority. Freud (1920), in his work "*Beyond the Pleasure Principle*", presents the concept of sublimation, a strategy to redirect human instincts towards a harmonious interaction in society. So sublimation would be the displacement of pleasure drives to invest in activities and the development of behaviors that are socially appreciated and satisfying.

Nowadays, there is a certain regression in relation to the human capacity of the supposed sublimation. The present fluid model previously defended by Bauman incites the urgency of satisfying personal desires, what Freud would call narcissism. And this act of restoration is necessary for the survival of the postmodern economic complex, since, in theory, the individuals themselves had to restructure their way of living in order to adapt to the current system.

Not only does WhatsApp have a broad reach in the social context. This software also migrates to the organizational scope, becoming an increasingly used tool, just as efficient if not more so than the other means of communication in the management of business processes.

The use of the internet and computers gradually grows in the workplace in order to optimize time, improve organization and expand connectivity, streamline processes and accelerate inter and intra-sector communication and integration. With WhatsApp, the move was reversed. First, the app comes with a recreational purpose, available in the application stores of various mobiles and operational systems. However, this tool's usefulness in the resolution of tasks, objective communication and debates in the workplace soon became evident. Since telephone plans in Brazil are currently making Internet use cheaper than calls or text, WhatsApp has presented itself as the cheapest and most effective option to support communication that is able to keep pace with the speed and density of organizations.

Currently, according to the Brazilian media research (PBM) conducted in 2015 by the Secretariat of State for Communication of the President's Office, WhatsApp is the second most used social network for instant messaging: 58% of users, right behind Facebook with 83% of the respondents' preference. This use is not restricted to interactivity with friends and family, but also extends to working groups.

For Ritz (2014), WhatsApp is a great way to communicate, fast and free. However, the appropriation of this tool in the workplace implies risks to labor rights and to fees. That is, it is an increasingly common practice (accentuated in Brazil by WhatsApp) to do (often unpaid) work outside the work environment. Therefore, organizations that are using this application as a communication tool should clarify very well the usage, rules and implications before implementing the tool. When something is agreed between the parties, the tendency is for there to be fewer conflicts. That is, although WhatsApp has the potential to accelerate and facilitate work, consideration should be given to the possibility of demand unpaid work hours.

Prohibiting the use of communication app such as WhatsApp in companies is therefore a way to avoid potential productivity gains. Not only do the collaborators (in Brazil) have a great deal of familiarity with the application but it is difficult to compete with other organizations that adhere to the method. Several self-employed professionals (doctors, traders, psychologists etc.) also make use of the application to improve and broaden their network of contacts and capture potential prospects.

The use of WhatsApp in the workplace is common in Brazil, it is an extremely efficient form of communication to align demands and make important announcements. However, this tool must be used carefully. After all, work often accompanies the individual in their free time. You can see the extent to which work goes when people start to solve work-related problems from home or in their free time.

The use of the app in schools is increasingly common, many students communicate with each other and with teachers, increasing learning and making it more efficient. It is possible to identify groups of the most varied types, such as for competitions, college subject groups, school groups, among others. As such, it is inferred that WhatsApp can facilitate and improve teaching if administered correctly.

Many studies are developed regarding the use of the internet as a support in the question of learning in Brazil, as pointed out previously, the growth in the number of WhatsApp users is expressive and consists mostly of young people and adolescents. However, several educational institutions prohibit the use of electronic devices within their respective campuses. This is due to a philosophy that these resources disperse students' attention. However, it should be pointed out that before the technological devices of today, other things or other technologies distracted students. In contrast, the widespread technology in teaching and the inclusion of technological resources in many classrooms are already a reality. Therefore, IT is understood to be an unstoppable tendency in schools and it is up to the teachers to accept the challenge of adapting it to the academic environment.

Some also argue that the Internet allows access to inappropriate material or makes room for a series of violations both to the moral values of Brazilian society and to the law itself. However, it is essential to emphasize that ethics and values are transdisciplinary contents that must always be present in teaching, even when dealing with new technologies, and once again, it is up to the educator to shoulder that responsibility.

A social application of these new technologies is also possible, so that students who do not have access to printed textbooks could access them digitally. Knowledge sharing is one of the observed ways of using the app.

The emerging form of communication through text messages in various contexts, especially in Brazil with WhatsApp, has made studies look for ways to standardize use, such as a code of ethics. Still on academic issues, some proposals for better use of the application are presented, such as: proposing activities that involve the use of the app for groups of students; allowing students to learn how to use the app before proposing it as part of an activity; discussing the ethical and moral issues involved in the use of images and records, as well as the misuse of smartphones and tablets; clearly stating in the planning of your activity, and describe in detail in your lesson planning the objectives of using the application in the proposed

activities; clearly stating the rules for using WhatsApp at school in general, and in particular using the app as part of a lesson.

A study published in the *Estação Científica* magazine by Neri in 2015 brings statistical data on the public and private schools of the State of Minas Gerais. According to the study, in the public system 87% of public school teachers interviewed believe that WhatsApp can be used as a pedagogical tool, against 80% in the private system. The same study points out that in the public system, 40% of teachers are over 40 years old as opposed to 44% in the private system. This shows that app adherence within the school environment is not exclusive to younger professionals, as some people argue. This study points out that, regarding the two schools studied, teachers are generally more aware of technological tools that can aid in student learning, as well as understanding that the old teaching methods can no longer motivate or stimulate students in the classroom.

Still on Neri's (2015) article, it was observed that in the private school 73% of teachers believe that WhatsApp can be used by all subjects, 7% by specific subjects and 20% do not believe in WhatsApp as a pedagogical tool. In the public system, 81% of teachers believe in WhatsApp can be used by any subject, 6% only by specific subjects and 13% do not believe in WhatsApp as a pedagogical tool.

This survey revealed that in the private system 50% of teachers believe that the best use of WhatsApp will be the sharing of class content, 20% with text reading, 15% with spelling practice and 15% do not know how WhatsApp can be useful. In the public system, 48% think that the best way to use it is the sharing of class content, 24% with text reading, 20% with the spelling practice and 8% do not know.

When asked whether WhatsApp in and out of the classroom could improve student-teacher relationship, 67% of teachers in the private system said yes, and 33% said no. In the public system, 73% of teachers think so, compared with 27% who believe it does not. This again illustrates the framework in which public sector professionals are more receptive to the use of new technologies.

When asked if WhatsApp could strain the student-teacher relationship, the numbers were the same in the private system (67% for and 33% against). As for the public system, a shocking 80% of teachers think that using WhatsApp could be a strain. This is due to a concern about the lack of limits of the students, something that should also be worked in the school environment when implementing the new technology. It is observed that the use of WhatsApp is taking an increasingly larger dimension in many people's daily life. In addition to its academic and corporate use, the medical community's use of WhatsApp is a reality pointed out by a British agency specializing in health care research – Cello Health Insight, which has been operating in the market since 1983. However, since 2014 they have carried out annual researches on the debate about the insertion of the digital environment into human health. The agency interviewed 1,040 doctors in eight countries – the United Kingdom, France, Germany, Italy, Spain, the United States, China and Brazil.

According to the survey, 31% of doctors around the world today make use of WhatsApp to communicate with co-workers. In contrast, 15% use it to communicate with patients. In the survey, Brazil presented the highest number of patients that interact with their doctors, reaching thus 87% in comparison to other countries. Italy, which is in the second position with 61%, already shows a difference of more than 20% in relation to frequency of use. Third-ranked China has 50% of its doctors using WeChat, a local version of the application, for communicating with patients.

Therefore, it is possible to conclude that eight out of ten doctors in Brazil use the WhatsApp app to communicate with their patients. In contrast, only 2% in the UK and 4% in the United States do the same. The analysis done with this data is positive but only with caution, in particular because Brazil's Federal Council of Medicine (CFM) does not recognize medical care that is not face-to-face, something that has become more common with WhatsApp. That is despite the advent of telemedicine having been recognized



worldwide, beginning with NASA during space travel when one of the astronauts needed medical evaluation.

According to the doctor Renata Velloso, the reason for the great reception of the app for medical use is the speed and convenience when advice and medical information are necessary. The research also points to the increase in health monitoring applications, but the WhatsApp terms of use, which do not guarantee the privacy of the information put into the app's conversations, are not yet noted. That touches directly on one of the pillars of the code of medical ethics: medical confidentiality.

The app does not have a data protection guarantee and in 2015, for the first time, it was evaluated and disapproved by the Electronic Frontier Foundation (EFF), an American nonprofit organization that advocates for the right to internet privacy, publishing a yearly report evaluating several companies according to pre-established criteria. This year, the WhatsApp app was evaluated for the first time and it was harshly criticized for how it treats privacy and protects the data of its users. It was accused of massively monitoring user data in order to store them without discarding deleted addresses or content.

This becomes a problem when storing patient information because, according to the EFF, the app does not provide users with information regarding legal requests for breach of account content. This is in addition to not clarifying about its policy or the manner data retention and storage takes place, including registration of user deleted content, addresses and Internet Protocol (IP), the serial number each computer has to be identified and send and receive data.

The use of WhatsApp in both radio and TV journalism is on the rise. The need for innovation in traditional media has been growing over the years. Previously the internet, the radio and the television were the great vehicles of mass communication. Currently, much of the information is notably disseminated through the internet. Thus, strategies are set up to keep pace with the rise of social media and introducing WhatsApp among viewers and radio listeners is a way to establish more interaction.

The messaging app is used to inform about traffic, discuss editorial ideas, suggestions and complaints. From time to time, reports about events related to health, education and local infrastructure are based on complaints from residents shared via WhatsApp, mobilizing the press in the search for news. Innovation happens daily, as new technologies are supplanting the old media in the day-to-day life, prompting professionals to seek new ways of working, becoming more dynamic and interactive with the consumer.

Companies are creating positions to keep up with the growing demand of a market with demanding consumers, customers looking for speed, dynamism and quick solutions to problems or doubts. The WhatsApp Attendant role is a strategy for companies, such as the large shopping malls in Brazilian capitals, to assist clients in solving doubts, complaints and suggestions. The customer contacts the service by the number available on social networks and speaks with the attendant who is ready to serve them. Good communication and writing skills are necessary for the position. In addition to malls, medical and dental offices are implementing the app to give greater convenience to their patients, with the consultation scheduling and confirmation via WhatsApp.

Regarding WhatsApp, it is also attempted to relate sociological concepts to try to understand what maintains and builds affective ties in great urban centers. The answer to such questioning refers to the concept of "fidelity", elaborated and quoted in the work "*Simmel and the modernity*" (2005), which states that geographical proximity does not determine moral proximity. In other words, it is not just by physical proximity that friendships come about. Moreover, given that the media transcend geographical barriers, living in the contemporary world consists of the sequencing of interactions and interconnections, of exchanges and encounters both personal and through digital media. Through the contribution of Licoppe and Smoreda (2005), one can see how new technologies organize much of this rhythm of presence and absence, providing possibilities for new interactions that are leveraged and appropriate in the production of



sociability. According to Farman (2012), sociability is content generated in social media in both the physical and virtual environments. It is the record of human interaction. Thus, in WhatsApp, the narrative is what stands out as the main product.

Anthropologist Ingold (2015) contributes by showing that human relationships occur through “places of encounter” where individual trajectories intercept. With the advent of WhatsApp, every place is a potential meeting place, and the subject is always under the influence of others. A consequence of this is the confirmation of the app’s trivial use, even for sensitive subjects. It is common for interactions (groups or chats) to arise without the members having met in person, it is usually a form of contact between people who already know each other.

In a consumerist culture like ours, which favors the product ready for immediate use, transient pleasure, instant satisfaction, results that do not require prolonged efforts, tested recipes, total insurance guarantees and refunds. The promise to learn the art of love is the offer (false, misleading, but one that is fervently longed for) to construct the “love experience” in the likeness of other commodities, which fascinate and entice exhibiting all these characteristics and promising desire without anxiety, effort without sweat and results without effort. (Bauman, 2003).

## Final Considerations

WhatsApp has notably changed people's behavior, the ways in which they communicate. The roles previously played in society are now also performed in messaging groups. The patterns people once followed have changed and new ones have emerged amid the rising tide of social media. Changes in behavior and ways of thinking and communicating have transformed and are constantly shifting as people follow the evolution of social media, especially those that help communicate at a low cost.

WhatsApp is a tool that has come into being trying to minimize distances and provide more effective and faster communication between people. The application has become a major attraction for all industries. With the advent of the Information Age and the need to adapt, people and companies immersed themselves in new technologies, tracking information, creations and finalizations. A time of programmed obsolescence, that is, new technologies have a certain span of existence.

Individuals communicate more quickly, subjects are endless, all places become meeting points, however, individuals still “behave” according to the group in which they are inserted.

## References

- “Atendente exclusiva de WhatsApp trabalha 8 horas e ganha até R\$ 2 mil.” G1.globo.com. Globo Notícias. Web. 4 May. 2006.
- Alencar, Felipe. “WhatsApp é o aplicativo mais usado do Brasil, segundo pesquisa.” Tech tudo.com.br. Globo Notícias. Web. 16 Dec. 2015.
- Bauman, Z. (2004). *Amor líquido: sobre a fragilidade dos laços humanos*. Zahar.
- Bauman, Z. *Modernidade líquida*. Rio de Janeiro: Zahar, 2000.
- Castells, M. (1999). *A sociedade em rede*, vol. 1. São Paulo: Paz e Terra.
- Castells, M. (1999). *A era da informação: economia, sociedade e cultura* (Vol. 1). Paz e terra.
- Castells, M. (2003). *A galáxia da Internet: reflexões sobre a Internet, os negócios e a sociedade*. Tradução: Maria Luiza X. de A. Borges. Ver. Técnica: Paulo Vaz. Rio de Janeiro: Jorge Zahar.
- D'Angelo, Pedro. “Panorama Mobile Time/Opinion Box: Com Whatsapp e Messenger, vai acabando o espaço das SMS.” Opinionbox.com. N.p., Opinion Box. Web. 14 July 2015.
- Daquino, Fernando. “A história das redes sociais: como tudo começou.” Tecmundo.com.br. Grupo NZN. Web. 26 Nov. 2012.

- DeFleur, M. (1993). *Teorias da comunicação de massa*. Zahar.
- Durkheim, É. (1999). As regras do método sociológico. [Tradução: Paulo Neves; revisão da tradução Eduardo Brandão].
- Farman, J. (2012). Introduction to the Social Transformations from the Mobile Internet Special Issue. *Future Internet*, 4(2), 545-550. Freud, S. *Além do Princípio do Prazer*: em obras completas: São Paulo: Cia das letras, 2010.
- Gomes, Helton Simões. “Jovens brasileiros trocam Facebook por aplicativos de mensagens.” G1.globo.com. Globo Notícias. Web. 25 Nov. 2013.
- Ingold, T. (2015). Estar vivo: ensaio sobre movimento, conhecimento e descrição. *Tradução de Fábio Creder. Petrópolis, RJ: Vozes*.
- Jenkins, H. (2015). *Cultura da convergência*. Aleph.
- Licoppe, C., & Smoreda, Z. (2005). Are social networks technologically embedded?: How networks are changing today with changes in communication technology. *Social networks*, 27(4), 317-335.
- Lipovetsky, G. (2007). A felicidade paradoxal: ensaio sobre a sociedade de hiperconsumo.
- Mans, Matheus & Sawada, Thiago. “Psicólogos já tratam ‘viciados’ em WhatsApp.” Link.estadao.com.br. Grupo Estadão. Web. 16 May 2016.
- Nakagawa, Fernando. “87% dos médicos no Brasil usam WhatsApp com pacientes, diz pesquisa inglesa.” Estadão.com.br. Grupo Estadão. Web. 17 Dec. 2015.
- Neri, J. H. P. Mídias Sociais Em Escolas: uso do Whatsapp como ferramenta pedagógica no ensino médio.
- Recuero, R. (2012). Redes sociais na internet, difusão de informação e jornalismo: elementos para discussão. *Metamorfoses jornalísticas*, 2, 37-55.
- Ritz, R, entrevista pessoal, 24 de setembro, 2014
- Sennett, R. (2011). *The corrosion of character: The personal consequences of work in the new capitalism*. WW Norton & Company.
- Simões Gomes, Helton. “Criado em 2009, WhatsApp cresceu mais rápido que Facebook em 4 anos.” G1.globo.com. Globo Notícias. Web. 20 Feb. 2014.
- Souza, J; Oelze, B. *Simmel e a modernidade*. Brasília: UnB, 2005.
- Takahashi, T. (2004). Diversidade cultural e direito à comunicação. *Pensar Iberoamérica: Revista de Cultura*, (6), 5.
- Weber, M. *A Ética Protestante e o Espírito do Capitalismo*. 2ª Edição Revista.
- Whithney-Smith, E, entrevista pessoal, 01 de novembro, 2011