Can WhatsApp be Approached as a Creative Product?

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Keywords: creativity, innovation, communication, WhatsApp

Abstract

This article presents research on WhatsApp, one of the most popular apps in mobile telephony. The authors intended to answer the following question: Is WhatsApp a creative product? By applying creativity and innovation concepts of the systems approach to creativity, the authors analyzed whether the product is actually creative or merely an innovation. Initial results based on the data received from studying WhatsApp users in Brazil and analyzing creativity-related concepts showed that the app may be considered creative. However, more issues around its creativity need to be analyzed in greater depth.



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Introduction

Nowadays mobile telephony users whose smartphones run on operating systems like Symbian OS, iPhone OS, BlackBerry, Windows Mobile, Linux, Palm WebOS and Android are increasingly familiar with the features the technology provides. Excessive cellphone usage while spending time in bars, waiting on benches, in family gatherings, work meetings, elevators, receptions and even in traffic has become quite common. Mobile platform apps attract people of all ages offering the ability to interact with others. With over 1,2 billion users, WhatsApp is currently among the apps with the greatest user base worldwide. For instance, in Brazil, according to Nielsen and the Mobile Marketing Association, 74% of smartphones have this application installed, which means 120 millions of mobile devices have WhatsApp.

Ever since it was created five years ago, the app went through several innovations and updates governed by its creators and is currently considered the most popular messaging apps in the world. WhatsApp was designed to establish communication with users listed on the cell phone's telephone book after an automatic synchronization. Communication occurs through text messages, voice messages, photos, videos, audio and video calls. This information begs the following question: Is WhatsApp really a creative product or is it iust an innovation? This reflection is driven by the app's popularity and innovations, since not all innovative things are creative, but all creative things are innovative.

Having this technology available encourages users to expect immediate communication and requires information to be transmitted more efficiently. Information becomes communication when the receiver triggers an activity to decode (reading, hearing

or watching) and interpret the message. Users live in the now, requiring immediate messaging and information exchange based on a simple click. Young people take the greatest advantage of this technological era. With the creation of WhatsApp and its constant updates they are abandoning social media like Facebook looking for a more private, immediate and independent alternative. According to the survey by Mobile Marketing magazine the app is used most by people younger than 25. Constant access to a mobile device enables rapid agile use of its features. According to a survey by Mobile Youth, a company specialized in youth, WhatsApp users also use the app extensively to take "selfies", a term that refers to photographs taken by a person who appears in a picture using his/her cell phone with a built-in camera.

Based on this information, the purpose of this article is to reflect on whether WhatsApp is a creative product. In order to answer this question, a theoretical base formed by authors discussing creativity and innovation will be used. Other reflections include: What is the application's repercussion? Why is it attractive to the public? Why has it gained such visibility? What is the verdict on the application?

What is WhatsApp?

Known as app*s*, applications technological devices have widespread in the digital era. Apps are used extensively in smartphones with operating systems like Symbian OS, iPhone OS, BlackBerry, Windows Mobile, Linux, Palm WebOS and Android. Apps can be free or proprietary. WhatsApp can be downloaded and used for free in the first year. The term WhatsApp is a pun with the question What's Up. Developed by Brian Acton and lan Koum, two former Yahoo staffers, the

application was launched in August 2009 in California. In 2014 WhatsApp was sold to Facebook for 22 billion dollars.

Acton and Koum were motivated to create WhatsApp after having worked for 20 years collecting data from users who accessed the Yahoo website and using this information to develop targeted ads. As they described it, they got tired of doing what they did and decided to design something innovative. According to Alencar and Fleith (2003, p. 162) "innovating means introducing novelties and innovation involves generating, accepting and implementing new ideas, processes, products and services."

Acton and Koum's goal was to create a service to meet users' needs that could also be used to charge those who installed the app directly. Both programmers said they could do what most people intended to do every day: avoid advertisements. Lubart (2007) believes that evaluating ideas and choosing which ones to follow and which ones to discard are important steps in the act of creation. The creators assessed how they might create something that would allow users to avoid advertisements while still meeting their expectations. It resulted in an open platform – an app. According to Jan Koum (2013), WhatsApp does not focus on user information and even less on shared photos. They wanted to invest their time in a service that would work well.

Whatsapp is currently present in over 180 countries and leads the market in countries like Brazil, Mexico, Argentina, India, Holland, Spain, Germany and Italy. In July 2017, the app totaled 55 billion messages exchanged by its users across the world. Initially, the application's popularity can be explained by the growing number of mobile platform

users interested in instant communication. The numbers continue to grow among those who have access to technologies. According to Castells (2008, p. 17), the restructuring of capitalism and the information technology revolution gave rise to a network society, fostered by a virtual culture built on a ubiquitous, interconnected and diversified media system. For the author, this new form of network communication incorporates users from all levels of society helping to expand their social interaction.

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The WhatsApp application is constantly updated. Initially designed exclusively for text messaging, its popularity and success led its creators to introduce new capabilities on a regular basis. On the 25th of August 2011, the website *Exame Informática*³ announced that WhatsApp was the best texting app that allowed messages to be sent through a data package or *wi-fi*, with its last update having occurred on August 3rd 2011.

After WhatsApp was created many other apps were launched, including Kakao Talk (2010), Viber (2010), ChatON (2011), Wechat (2011), Line (2011), Telegram (2013) and ZapZap (2014). These apps provide the same features as WhatsApp and even more. Apart from these apps, Facebook - which was launched in 2004 and incorporated WhatsApp keeping its owners - , and Skype, launched in 2003, updated their messaging features to keep their position in the messaging market. In 2013 Google launched its Hangouts app with messaging, video and photo capabilities.

^{3 -} Best Apps: Whatsapp Messenger. Available at http://exameinformatica.sapo.pt/melhores-apps/apps_android/2011-08-25-melhores-apps-whatsapp-messenger-android-e-ios.

WhatsApp has a policy of not showing advertisements. After announcing its sale to Facebook news sites reported that users feared what might happen to the app, including to their privacy, but it was informed that WhatsApp would remain the same. After registering, users receive free service for one year, followed by an annual subscription for a fee of one US dollar. However, users have reported using the service for over a year without beeing charged; therefore, the application just continues to be free.

WhatsApp in Brazil

According to Nielsen Company⁴ and the Mobile Marketing Association⁵, WhatsApp is the most used app in Brazil and can be found on 94% of all smartphones in the country. A survey by the European OnDevice showed that 86% of Brazilians use this messaging app at least once a day, while 67% send and receive messages more than ten times a day. WhatsApp's main rival in Brazil is Telegram, which works as an alternative when WhatsApp broadcast falls down. Viber, an App which came to Brazil in 2014, is also a competitor of WhatsApp.

Mobile messaging apps gain more popularity and are used more intensely as the number of users with internet access on their phones increases. Another app that came to Brazil to compete with WhatsApp is Line, which provides a unique feature: eight thousand animated stickers that work like *emojis*. Line, as well as Wechat, believe they can beat WhatsApp by providing services that their competitor does not have yet. As to calls, although the

three apps above offer voice messages, only Line, Viber and WeChat allow real time conversation. However, in February 2014 WhatsApp's co-founder Jan Koum announced the app would start offering voice calls in the second quarter of the same year, and this is still a work in progress in parallel to other app improvements.

Is WhatsApp a Creative Product?

Ever since the arrival of mobile platform apps different companies have strived to invent a model that attracts the public. One of the things that make these apps important is that they allow users to communicate through messages as a means of interaction. According to Castells (2005), all processes of individual and collective existence are directly shaped by the new technological media. To reflect on whether or not WhatsApp is a creative product, it is fundamental to conceptualize creativity.

Various authors put forward different definitions of creativity, others believe that creativity should not be defined. For the purpose of this article, the definition of creativity was taken from the *Houaiss* dictionary (2013, p. 1): [quality or characteristic of someone or something that is creative; inventiveness, intelligence and talent, innate or acquired, to create, invent, innovate, whether in the arts, science, or sports, etc.]. For researchers of the subject there are several other concepts of creativity in the literature. According to Stein (1974), creativity is a process resulting in a new product which

^{4 -} Nielsen Company is a German American company headquartered in New York, United States of America. The company offers a variety of information and market research using its own methodologies.

^{5 -} The Mobile Marketing Association (MMA) is nonprofit association established to foster the sustainable development of mobile marketing and associated technologies across the world.

is accepted as useful and/or satisfactory by a significant number of people at a certain point in time. Creativity is the ability to produce work that is both novel and adapted to the context in which it is produced (Amabile, 1996; Barron, 1988; Lubart, 1994; Mackinnon, 1962; Ochse, 1990; Sternberg; Lubart, 1995). According to the authors, this production can be an idea, a musical composition or a story, among others.

Ostrower (2012) conceptualizes creativity in an elucidative manner: "To create is basically to shape. Being able to give shape to something new. No matter what the field of activity, it is about the new, new consistencies that become established in the human mind, phenomena associated in a new way and understood in new terms. Hence, the creative act encompasses the ability to understand, which in turn includes the ability to associate, arrange, configure and find new meaning. (p. 9)"

For Whatsapp's more than 1,2 billion users worldwide its most attractive characteristics are its interface, user-friendly design, instant and group communication, multimedia, privacy and the absence of any type of advertisement.

According to Alencar and Fleith (2003), the terms "creativity" and "innovation" are often used as synonyms. The authors define innovation based on other authors like West and Farr (1990). In their opinion "innovation is an intentional introduction within a group of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to benefit the individual"

(Alencar, & Fleith, 2003, p. 163). Bruno-Faria (2003), on the other hand, believes creativity can contribute to innovation and thus enable it. According to the author, a creative idea does not always produce an innovation, since barriers or difficulties may hinder the implementation of ideas, making it impossible to develop them. This was not the case with WhatsApp, however. Although other apps with the same features were already available on the market, its creators innovated by introducing a simple and easy to handle product, among other aspects. This distinguishing feature is aligned with Lubart (2003, p. 17) who states that "a technically well-done job is better able to highlight the novelty and value of an idea than a job done carelessly".

Lubart (2003) shares the view that novelty and originality are ideas that exist in all social orders. WhatsApp reformulated an idea which already existed. Facebook and Skype are messaging programs that existed before WhatsApp. The difference is that the latter's creators designed an app initially for cell phone users. For Whatsapp's more than 1,2 billion users worldwide its most attractive characteristics are its interface, user-friendly design, instant and group communication, multimedia, privacy and the absence of any type of advertisement.

According to Csikszentmihalyi (1989), it is impossible to distinguish between something creative and something merely unlikely or intriguing unless there is a group to judge or confirm the product's adaptability. According to the WhatsApp blog, the app was assessed by a group of people for a period of time and approved for use in *iPhones*, the first model to enable WhatsApp. Brian Acton and Jan Koum planned to provide a big mobile messaging system for a global market regardless of the user's device, which is what made the application so popular.

Why did the App Gain Such Visibility?

As mentioned above, WhatsApp has more than 465 million active users worldwide. Its visibility is the result of the popularity it acquired throughout its five years of existence. Messaging applications tend to be seen as entertainment tools. Their playful side is truly their main purpose, fueling access and relationships developed through these apps. Its growing number of users shows how much WhatsApp is present in people's daily lives, and consequently in their opinions. Messaging apps do more than promote or improve social interactions: they create bonds, transform and expand communication.

Users increasingly augment their power as emitters by participating, interacting and communicating more. It becomes evident in social media and online news, where users participate by leaving comments, hence becoming active subjects. In WhatsApp the situation is no different. The creator of the app announced in his blog, on July 2017, that it broke a new record: 55 billion messages, 4.5 billion photos and 1

billion videos shared by day. The number of messages received is much higher because the app considers many posts to be sent to groups, which allows them to be seen by more people. Companies with the same characteristics as WhatsApp attempt to adjust to this new reality by looking for something that sets them apart and allows them to compete with the app. The democratization of the media is clear in mobile messaging apps; it is a natural trend of current times. According to Csikszentmihalyi (2006), to be creative one needs to adapt to its social environment: it must be able to be transmitted through time. This interpretation of the author allows us to return to our research question: Is WhatsApp a creative product or not?

One frequently asked question is why WhatsApp is so popular when there are many other apps with the same characteristics. Lubart (2007) believes that ease of access to information and communication means, especially through the Internet, contributes to the shifting view of what activities are considered creative. "The new technological possibilities caused various areas of notable change in terms of how to address a creative task. In addition.



new instruments have at times given rise to new scientific discoveries and new forms of expression." (Lubart, 2007, p. 88)

The creators of WhatsApp wanted to create a product that met the public's expectations. It was a new production that was and is regularly adapted to new user interests, and innovations introduced by the competition. It became popular because of its compatibility with various other *mobile* platforms and its user-friendly design. Throughout these five years of presence in the tech culture WhatsApp achieved global visibility. Its creators were able to increase social interaction through the app, a result favored by a tech culture characterized by the multiplication of smartphones and tablets among consumers around the world.

Its clean and simple display confirms the app's position as the most used product. WhatsApp is a product that has spiked an interest among tech-savvy users, and its creators continue innovating in the mobile communication department. This visibility is the result of the application's messaging popularity. Apart from its simple and objective interface, what calls users' attention to the app is how easy it is to send and receive messages, including texts, photos and videos, but also audio messages.

Public Viewpoint and Judgement

With the arrival of mobile platform messaging apps available on Android, iOS and Windows Phone, the public came to expect immediate service and ease. WhatsApp was able to meet those public interests. In the words of a communicator: With no more than a few clicks one can send messages, images and videos stored

in one's smartphone to friends and chat groups with varied content and subjects at a low cost compared to SMS. (Rabelo, 2013)

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The public that uses the app varies in age from teenagers to adults. A survey conducted in Brazil found that young people aged 16 to 24 would rather use WhatsApp than Facebook. They explained that youngsters prefer fast communication tools, but also the privacy of using something that is not visible to their families. Social media experts indicate that teens and pre-teens look for environments where they can interact with their friends without the presence of their family-members, and would rather stay away from other features that might hinder conversations through the app like games and offerings.

Another characteristic the users emphasize is simplicity. Friends do not have to be registered. Synchronization with the user's telephone agenda is automatic. Users also regularly use WhatsApp to send photos and audio messages, which they consider efficient. There are also groups formed by up to 256 people in which users communicate with many people at the same time and speak about various subjects. Several companies use WhatsApp as a work tool by creating a specific group of staffers used for professional dialogues. The Jovem Pan radio station from the city of Belo Horizonte, Minas Gerais, uses the app as a channel to interact with its listeners. The company's

marketing consultant explains how the product is used: The application makes it possible to explore new ways of relating to our listeners, which go from a quick conversation with the radio announcer to participating in our promotions, asking for a song, or sending traffic information. All this makes our listeners feel closer to our sender. This allows us to build more consistent relationships. (Primo, 2013)

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Another example of the app's repercussion in the corporate world is the Rio de Janeiro news article *Extra*, which uses WhatsApp to communicate with its readers. In six months, it received over 10 thousand photos and 100 thousand messages with suggestions and complaints. The project's originator calls this type of activity "hypercloseness".

The ways that the public uses WhatsApp and how its creators are innovating the app could be the object of a reflection based on the systems approach to creativity, which is presented in the three systems: the individual, the field and the area. For Csikszentmihalyi (1999), what is referred to as creativity invariably involves a change in a symbolic system; a change that may affect the thoughts and feelings of the members of a society that shares a certain culture. As such, creativity is not the result of an individual product, but rather of the social systems that judge the product (Csikszentmihalvi, 1999). In the systems approach, it is the individual who causes the changes and introduces variations in the area of knowledge. The second system is the field, also called the domain, which is

formed by the various people that control the area, pondering and selecting new ideas. The third system is the area, which according to the author is affected by cultural knowledge and encompasses creative productions that can be transmitted from one person to another.

WhatsApp's creators designed the product to satisfy the field. According to Alencar and Fleith (2003), creators are responsible for persuading the field that their work is significant and should integrate the domain. New ideas can also be prompted by the social system, as is the case of WhatsApp, a product that is constantly updated to improve its performance. For an idea to be adopted in a field it is essential for it to be socially accepted. In addition (Csikszentmihalyi, 1999), cultures consist of multiple domains. Innovations that result in creative contributions do not happen directly in the culture, but rather in one of these domains.

Deterrents

Despite being the most accessed and popular messaging app, WhatsApp has strong competitors that are constantly doing something new to try to call the public's attention. One such example is Viber, which as we mentioned before is an app that introduced a new feature to distinguish it from WhatsApp. Other apps that would also like to rise to the most accessed apps ranking are Line and WeChat. These are free apps that sport certain features that WhatsApp lacks. Their revenue comes from selling stickers, virtual assets in games, and advertisement.

Although all this competition may motivate its creators, there are also limitations that can block creativity. Creativity in the app may

be inhibited by contrarian ideas, for instance. WhatsApp has two creators. If at any time they disagree on an innovation for the app, this may be found to deter creativity. Fear also hinders creativity. When people refuse to take risks for fear of failing or making mistakes, or even because they are afraid of how the public will react, these factors can become creativity deterrents. Lack of motivation and time to dedicate to the product are also considered creativity deterrents.

The above-referred examples that may compromise creativity remit to a research by Mariani (2005), who considers that factors that encourage individuals to oppose innovative conditions or prevent them from exposing their ideas or taking action function as barriers to creativity. Among the barriers described by Van Gundy (apud Alencar and Fleith, 2003) are structural, social and political, procedural, resourcerelated and individual factors. The creators of the app may at some point lose their motivation for the product, for instance if they fail to make enough money to be able to maintain their staff and the tool. They may also be affected by conformism and cease to innovate. Many factors may actually influence creativity. Although WhatsApp's creators faced obstacles like errors in the application, competition and reformulating the app's features and hoping users would approve them, its creators continue to be in the game and their product ranks first in global popularity.

Final Considerations

With the advances in technology and popularity of the Internet, a growing number of users communicate quickly and interactively through the app. This reflection allows one to infer that WhatsApp is an

increasingly popular product that is more and more part of people's daily lives. It has become quite common to hear people asking: "Are you on WhatsApp?" as they would "What's your phone number?"

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According to the references used and information about the app, its usage by the public, visibility and popularity across the world, it is clear that the research guestion "Is WhatsApp a creative product?" will remain to be studied in greater depth. Nevertheless, considering the data researched about the app and the conceptual base related to creativity, the app can be considered a creative product. One can initially affirm the product to be innovative and popular. Its creators had an idea that advanced throughout its eight years of existence, echoing the reflection that: "An idea can only be considered creative if it is judged to be so by a group of specialists (field). An idea or product can be considered not creative at one moment in time and creative at a later date (or vice-versa), since interpretation and judgment criteria can change from time to time. "(Alencar and Fleith, 2003)

Although it is not yet possible to state that WhatsApp was judged by a group of specialists, it was tested by many people for a period of time and later released for users to download. When it was first created it may have been judged like any other app, but throughout its many adaptations and corrections it came to be seen as an innovative application. As



Alencar and Fleith (2013) noted, "in this sense, a social environment that offers resources, recognition and opportunities increases the likelihood they will offer creative contributions."

As to public opinion and judgment, our study revealed that the app is approved, especially by people younger than 24. It also showed that companies are increasingly using WhatsApp as a work tool, particularly groups, which enable instant conversations among staff members.

Another important aspect to be noted is that companies fear the end of the SMS (Short Message Services). Sending videos, photos, audio messages and links via online tools such as WhatsApp increases user connectivity and enhances communication, which has led to a progressive decrease

in the use of text messaging. Doing away with SMS is a trend: the more people install messaging apps, the less they send text messages. According to a survey published by Bloomberg⁶, applications like WhatsApp have caused over US\$ 30 billion in losses to mobile phone carriers, a number likely to reach US\$ 54 billion in 2016.

While WhatsApp is still to be studied in depth, this article had the purpose of applying a theoretical reflection on creativity to an invention from the perspective of its current place in people's tech culture and what motivates its creators to introduce innovations to the product in order to meet the expectations of its users. In view of the above, although we believe that the goals of this study have been achieved, this article is merely the beginning of a broader study.

^{6 -} Global leader in the financial and business information market.

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