

Virality as a paradigm of digital communication. Review of the concept and update of the theoretical framework

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How to cite this article:

Arjona-Martín, José-Borja; Méndiz-Noguero, Alfonso; Victoria-Mas, Juan-Salvador (2020). "Virality as a paradigm of digital communication. Review of the concept and update of the theoretical framework". *Profesional de la información*, v. 29, n. 6, e290607.

<https://doi.org/10.3145/epi.2020.nov.07>

Manuscript received on April 27th 2020

Accepted on July 14th 2020



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Abstract

Viral communication has experienced noticeable changes since its first definition by Rushkoff in 1994. Some changes have been of such a nature that they have rendered the notions employed at the end of the last century and at the start of the 21st century obsolete. This present article tries to update and synthesize the concept of virality as the backbone of the current forms of communication and, especially, those that are born and triggered in social networks. For this we will use a classic bibliographic review methodology, which will try to investigate the background, the elements and the foundations of the concept. As a result of this revision, we will extract a new concept of viral communication, as a form of integration between the media and their messages or, also, as a form of global hybridization. In this context, the article will try to establish the theoretical foundations of virality as a paradigm of digital and connected communication. Personal communication, originally developed from leader theory and personal influence starting with contacts in close proximity (word-of-mouth), is redefined by the Internet and by the application of marketing (which has developed it under the name of permission or relational). With its rapid expansion in the early 1990s, the phenomenon of personal influence took on a new dimension. This happened mainly because the Internet is essentially a decentralized structure, where the nodes and points of influence are crucial for the flow of information. So we must think of network-based communication as a collaborative process. These forms of communication stand out for requiring personal information and allowing segmentation of the public and personalization of communication related actions.

Keywords

Virality; Concept; Communication; Advertising; Marketing; Internet; Word-of-mouth communication; Buzz marketing; Literature review; Theoretical study.

1. Introduction

In the last decades, the adjective viral applied to communication has been referred to the techniques that try to exploit social networks, mobile telephony and other electronic means in order to produce exponential increases in notoriety (awareness), through processes of self-replication analogous to the expansion of a virus. Nevertheless, some studies proved that diseases and behaviors disseminate differently (Weng; Filippo; Ahn, 2013). Already prior to the introduction of digital technology, in the academic and the professional field, it had been referred to as mouth to mouth or mouth-to-ear (word of mouth), alluding mainly to analogue and even face-to-face processes that used to cite the six-degree theory as a reference (Helm, 2000; Watts, 2004; Kaikati; Kaikati, 2004).

Viral communication can be analyzed as a form of integration between media and messages, that is, it can be understood as a means of global hybridization. As Chadwick (2013, p. 207) stated,

“the hybrid media system is based on conflict and competition between older and newer media logics but it also features important pockets of interdependence between these logics”.

For these reasons –and some other reasons that we will analyze in this paper– we think of virality as a paradigmatic example of current forms of communication.

The first viral campaigns (as well as the current ones till date) are born to generate media coverage through real and unusual stories. Specifically, viral advertisement is based on the idea that the audiences will become prescribers of content of their interest, and therefore of the implicit persuasive communication within them (Van-Noort; Marjolijn; Van-Reijmersdal, 2012). Hence, the new role that Dafonte-Gómez and Martínez-Rolán (2016) assign to the readers of the online press: “from view to share”. Today, the so-called influencers constitute a clear example of prescribers or opinion leaders born under the shelter of social networks obviously resulting in a good targeting along with a high and elevated response rate.

“Viral communication can be understood as a means of global hybridization”

2. Objectives and methodology

From this first definition of the objective of the study, and in view of the growing bibliography on the subject, we set out a review of the *Status questionis* (status question) and the consequent update of the concept as the main objective. To achieve this, we have also considered these 6 secondary objectives:

- To determine the foundation of viral communication.
- To identify the configuring elements of the concept of virality and the principles that govern its persuasive effectiveness for a viral strategy campaign.
- To define/demarcate the similarities and differences with other forms of communicative self-replication: *word-of-mouth*, *buzz marketing*.
- To establish a more or less definitive typology of viral communication.
- To study the incidence of some psychological aspects, such as empathy between contacts, trust in the issuer, leadership in the source of information or the generation of emotions as a part of this phenomenon.
- At last, to investigate transversely the background of the research in virality in order to discover the most relevant milestones in bibliography and its progressive configuration as an objective of study.

The methodology has followed the classic parameters of bibliographic review (Icarty; Canela, 1994; Fernández-Ríos; Buela-Casal, 2009). Firstly, a systematic tracking/search of documents was carried out in the *Google Scholar* search engine. The choice of this scientific search engine as a bibliographic source –instead of *WoS* or *Scopus*– was determined by the evidence that

“Scholar provides citations counts that are broader than those covered by controlled databases” (Halevi; Moed; Bar-Ilan, 2017).

We assumed that the number of citations allows us to identify those most influential documents:

“The strong correlation between a document’s citations and its position in the search results ($r = -0.67$) led us to conclude that Google Scholar is able to identify highly-cited papers effectively”

and

“makes the academic search engine an invaluable tool for bibliometric research relating to the identification of the most influential scientific documents” (Martín-Martín *et al.*, 2017).

So, we introduced in *Google Scholar*, in both English and Spanish, the following keywords: Concept of virality, viral communication, viral marketing, viral advertising, viral strategy, typology of virality, fundamentals of virality, psychology of virality, virality 2.0, internet word of mouth, buzz marketing.

After a first search, there were some concepts to limit exaggerated samples. For example, “viral strategy” (1,700,000 references) was replaced by “viral strategy communication”, and “viral advertising” (726,000) by “viral advertising on social networks”. Then, the search string was improved by excluding the repetitions and selecting only those articles

that contain the keywords in the title and / or the abstract. This provided an initial listing of 6,147 references. From this database, a filter was applied according to the influence of the article: all those who have obtained less than 50 citations (those in the English language) or less than 25 (in Spanish) will be eliminated. The total, excluding repetitions, it offered a list of 577 articles. The abstracts of these papers were analyzed and those that only tangentially alluded to the desired approach or the ones that did not contribute any meaningful elements to those already known were rejected. After this selection, a list of 123 papers remained, which has been the sample of this research.

With the final selection of articles, a thematic grouping was carried out around the aforementioned objectives. The resulting spheres were:

- Theoretical background,
- Fundamentals of viral communication,
- Concept of virality,
- Typology of virality, and
- Psychology of virality.

Finally, the epigraphs were drafted keeping in mind the updated bibliographic criterion and a review of the concept and *status quaestionis* (status question).

3. Foundation of virality

As a known fact, towards the end of the 1940s, **Lazarsfeld, Berelson and Gaudet** (1948) demonstrated the inconsistency of the bullet theory or hypodermic needle theory, which attributed a direct, powerful and universal influence on the audience to the messages emitted by mass media. Their research showed that the opinions and attitudes of the individuals emerge, primarily, filtered by the social circle to which they belong, and that mass media do not directly influence the audiences, rather they do it through a small group (influential people) or opinion leaders who interpret those messages from the media and disseminate them in their environment. Thus, the theory of the two steps (two-step flow in the effect of media) was established. Years later, **Lazarsfeld and Katz** (1955) investigated the role of *personal influence* in daily shopping decisions, and discovered that the members of interpersonal communication networks (family, friends and co-workers) were the most important source of influence in the purchase decision of household items (**Túñez-López; Sixto-García; Guevara-Castillo**, 2011; **Gunawan; Hwang**, 2015).

On the basis of these investigations by Lazarsfeld, **Merton** (1968) coined the term word-of-mouth to define such a process of personal influence which is more decisive than the direct influence of the *mass media*, and in which factors such as: the credibility of the source, their physical and emotional closeness to the receiver, the intermediary role they play and screening of media messages, etc., intervene.

Since the 1970s, numerous studies have documented the importance of word-of-mouth in the behavior of viewers, readers and consumers (**Dawkins**, 1976). Since then, more attention has been paid to personal recommendations than to those coming from conventional advertising (**Torrado-Morales; San-Nicolás-Romera; Gómez-Baceiredo**, 2011), since they perceive issuers (friends, relatives, colleagues, etc.) as a doubly reliable source of information: because they have no personal interest in the promotion of the product or brand, and because they do have it in which we make the purchase decision (**Chevalier; Mayzlin**, 2006).

With the arrival of the Internet and its rapid expansion in the early 1990s, the phenomenon of personal influence took on a new dimension. This happened mainly because the Internet is essentially a decentralized structure, where the nodes and points of influence are crucial for the flow of information.

“Virality is an important characteristic pertinent to the process of social information flow” (**Wang; Liu; Gao**, 2016, p. 850).

In this way, starting from the research on the word-of-mouth (**Sarmiento-Guede; De-Esteban-Curiel; Antonovica**, 2017; **Kozinets et al.**, 2010; **Al-Rawi**, 2019), a new term was coined that more clearly illustrated the speed, reduplication and contagion of the messages received through a personal recommendation: that term was of virality.

Douglas Rushkoff is almost unanimously recognized, as the first person to develop the concept of virality in his book *Media virus: hidden agendas in popular culture*. **Rushkoff** (1994) studied the spectacular implementation of the platforms that offered free email services. His thesis was that if a viral communication reaches a sensitive user (interested in the product), that user “will get affected” and will then be able to continue affecting other sensitive users. As long as each infected user sends, on average, the mail to more than one user, the standard results in epidemiology indicate that the number of infected users grows exponentially.

One of the first credible demonstrations of this viral communication took place in July of 1996, with the market launch of *Hotmail*, the famous email service founded by Sabeer Bhatia and Jack Smith. It was the users themselves who recommended the brand while sending their emails with the postscript “Get your free email account with *Hotmail*”. *Hotmail*, in such a way, reached 12 million users in just 18 months. Based on this experience, Steve Jurvetson and Tim Draper, owners of *Draper Fisher Jurvetson*, a venture capital firm that funded the launch of *Hotmail*, coined the more specific term of “viral marketing” and disseminated it at various conferences in 1997 (**Jenkins; Ford; Green**, 2013).

A few years later, several works tried to systematize the elements and characteristics of viral communication. **Wilson** (2000) established the six principles of viral marketing, once again using *Hotmail* as a case study. Later, **Rosen** (2001) developed the theoretical fundamentals of viral communication and marked out its main characteristics:

- simplicity of the message,
- ease of replication,
- confidence in the prescriber,
- their proximity to the recipient, and
- speed of the message searched from the origin.

Finally, Carl Welker designed the paradigm of viral communication, defining it as the set of

“strategies that allow easier, accelerated, and cost reduced transmission of messages by creating environments for a self-replicating, exponentially increasing diffusion, spiritualization, and impact of the message” (**Welker**, 2002, p. 4).

Much later, **Lippman** and **Reed** (2003) explored the connections of virality with one-to-one communication and developed a viral architecture, from a technological perspective. **Dellarocas** (2003) analyzed word-of-mouth networks in its adaptation to a digital and online environment, comparing Internet-based feedback elements from conventional word-of-mouth communication logics. **Porter** and **Golan** (2006) studied the main differences between viral advertising and traditional advertising (mainly television advertising). And **Leskovec**, **Adamic** and **Huberman**

“ We must think of network-based communication as a collaborative process ”

(2007) carried out an extensive study based on 16 million online recommendations made by 4 million people. The generated model (recommendations in cascade) showed that the effectiveness of viral communication grows over time, depending upon the structure of contacts, and that it is especially useful for products that are little known or are difficult to sell. However, **Ienco**, **Bonchi** and **Castillo** (2010) analyzed memes propagation in microblogging sites and determined that time can negatively affect to their diffusion probability. As they proved,

“in most cases over 80% of the reposts of a meme are done in the first 10 days. (...) This can be explained by constraints in the screen space of the user interface: after some time all memes are eventually moved to the second page, which is rarely visited.” (**Ienco**; **Bonchi**; **Castillo**, 2010, p. 330).

Bampo et al. (2008) studied the mediating effects of digital networks on viral campaigns. They distinguished three main elements within a viral process: the social structure of the network, the behavioral features of the individuals and the seeding strategies for viral campaigns. A seeding strategy involves the initial selection of a target group of consumers (**Hinz et al.**, 2011).

With respect to network structure some studies analyzed how social networks influence the spread of information or behaviors (**Centola**, 2010; **Túñez-López**; **Sixto-García**, 2012; **Goel et al.**, 2015; **Larsson**, 2017). For example, **Weng**, **Filippo** and **Ahn** (2013) studied how strongly clustered groups of people (traditional communities) affect the diffusion of memes. They proved that memes propagation depends on homophily and social reinforcement and, thus, in some many cases, communities can act as a trap for memes.

Varis and **Blommaert** (2015) and **Miller** (2008) carried out some studies focused on content communications through social media. They observe how ‘phatic’ forms of communication prevail in many social media interactions.

More recently, **Kim** (2018) examined the effect that the metrics associated with virality and the analysis of social networks (likes and shares) may have on the perception of users about the influence of messages on issues related to health. The results of the study show that the high values in these metrics increase the perception of the influence of the messages and also increases the predisposition of the users to take preventive measures.

In this line, **Alhabash** and **McAlister** (2015) explored the possible definitions of virality and highlighted three important dimensions from them: reach (viral reach), which refers to the actions of the users to share and disseminate a message; the affective/emotional evaluation of the contents, that is, the emotional or rational expression (of judgment) on the part of the users; and the public opinion that netizens create on the messages through comments. On the other hand, **Berger** (2014) synthesized the previous research and pointed to future lines of research in viral communication. And **Petrescu** and **Korgaonkar** (2011) analyzed the concept of viral advertising and offered a definition based on five aspects: platforms used, vehicle of communication (conventional or digital), objectives pursued, type of message and communication orientation.

Also in relation to the study of social networks or media, but this time applied to political communication, **Klinger** and **Svensson** (2015) published an extensive theoretical review about the media logics theory in relation to the study of networks or social media, but this time it applied to political communication. This theory was reconceptualized under a society that is found primarily structured by networks of communication. This is how they incorporated the concept of network to speak then of a *network media logic* that allows to discover

“the norms, rules and processes that structure communication.” (**Klinger**; **Svensson**, 2015, p. 1244)

to this theory. The logistics (production, distribution and media usage) of these network structures are interrelated and collide with traditional logistics, those of the classic mass media. For these authors, virality defines especially the logistics of distribution of information in social media.

“Virality thus employs conceptual tools intended to focus the reader’s attention on a world made up of all kinds of things brought in to relation with one another” (Sampson, 2012).

4. Concept, principles and basic requirements for a viral strategy campaign

Boase and **Wellman** (2001) conducted a study to identify the similarities and differences between biological viruses, computer science and marketing communications in relation with the type of networks through which one could propagate communications. They distinguished between two basic types of networks: dense networks and branched networks. The dense ones comprise of a limited number of members, known to each other and who usually are in touch/contact with each other. In these networks the virus (of the messages) evidently spreads to a smaller extent but it is compensated by its rapid transmission and by the increase in the expectations of contagion. Branched networks, on the other hand, enable the spread of viruses to people outside our closest circle. In this way, a message can spread between different environments.

The basic principle is therefore quite predictable: the most advisable solution for the optimal progress of viral communication is to combine the use of dense and branched networks. Dense networks in order to penetrate the public and generate credibility on our messages, and branched networks in order to expand our influence.

“Our concept of viral communication refers to the professionalization of a common social practice, already described by Lazarsfeld and Merton: the phenomenon of the word-of-mouth”

From this understanding of the environment, **Wilson** (2000) established six principles in order to develop a viral communication strategy. With these premises he produced some conceptual mechanisms which are capable of obtaining the highest possible output/performance to the campaign:

- Provide your audience with free and good quality products or services. As we said earlier, free-of-charge can be powerful “bait” in the markets. Once the company attracts the attention of the users and obtains a certain level of recommendation, the public will begin to focus on other messages, products or services of the same company.
- Simplicity, both in terms of the medium of dissemination as well as in the creation of the message, will favor the speed with which the “snowball” effect is formed, if such is the case. As a result, the viral communication strategy must allow the replication of our message with relatively little effort.
- For our messages to flow quickly through the network, the dissemination method must be easily scalable from the most closed to the widest circles. For **Boase** and **Wellman** (2001, pp. 43-44) this would mean effective communication between the dense and branched networks.
- It is advisable to plan the strategy based on the motivations and common behavior of the public (**Botha et al.**, 2016). That is, to monitor the wishes of the majority and to provide them a means through which they can be satisfied. As **Nikolinakou** and **King** state:
 “engagement is key to virality and that ads that become viral have the ability to create a strong emotional connection with their target audiences” (2018, p. 715).
- It is estimated that each of us has a network of friends, family and work colleagues that comprises between eight and twelve people. These relationships are extended to the network, through which we must learn to situate our message within the communications that people establish among themselves.
- Finally, it recommends considering the possible ways in order to benefit from external resources. For example, it is a common practice to copy the *embed* code or *embedding a video* to insert it in any other web. Similarly, an author can offer free distribution of his articles in order to obtain positioning. It tries, therefore, to optimize our economic and human efforts by pressing the key that will activate the interest of the public and of the media for our content.

5. Conceptualization and design of viral strategies

So, considering Wilson’s principles, we must think of network-based communication as a collaborative process (**Golan; Zaidner**, 2008; **Payne**, 2012; **Ventsel**, 2017; **Hemsley; Kelly**, 2019). Similarly as demonstrated by an empirical study, carried out by **Sánchez-Herrera y Pintado-Blanco** (2010), these forms of communication stand out for requiring personal information and allowing segmentation of the public and personalization of communication related actions. But the most important characteristic, which underlies all these types of communication techniques, is the rapid propagation (**Poon; Lam**, 2020) of the message as if it were about a rumor. **Szabo** and **Huberman** (2010) estimated that the first two hours (on average) since any content is published on the network are fundamental for its options/possibilities to viralize or get viral. This is derived from

“The novelty of viral communication is that it mimics the process of spontaneous recommendation”

the continuous need of Internet users to be updated. This can be observed with greater clarity in social networks, where content, messages or comments, traverse through fast-paced attention spaces. Actually, according to **Bruni, Francalanci and Giacomazzi**

“virality has both a volume and a time speed dimension.” (2012, p. 282).

The network and the rumor mill follow some common principles, supported by the need for an optimal circulation of information, in the form of a spherical communication model (**Sivera-Bello**, 2008). This makes it possible for the consumption of messages by means of viral campaigns to be defined as participative or social consumption (**Gentilviso; Aikat**, 2019). Therefore, one of the main keys for success in the persuasion of a message lies in the trust that is placed on the one who recommends or prescribes it (**Aguado-Guadalupe; García-García**, 2009; **Seo et al.**, 2018).

Viral communication was gaining popularity in the advertising industry because a message can be easily spread through social networks in a peer-to-peer communication form (**Daif; Elsayed**, 2019). In that line, **Borges-Tiago, Tiago and Cosme** (2019) tried to determine the factors that influence users' willingness to share viral content. **Eckler and Bolls** (2011), **Botha and Reyneke** (2013) and **Dafonte-Gómez, Míguez-González and Corbacho-Valencia** (2020) went one step further and explored the emotional aspects linked to the process of sharing messages between peers. And **Sabri** (2017) analyzed how advertisers are using provocative and taboo topics to increase the effectiveness of ads through a viral communication context. However, this study demonstrates that

“viral controversial advertising does not help to build favorable brand attitude and positive purchase intention” (**Sabri**, 2017, p. 243).

In this line, **Hansen et al.** (2011, p. 2) stated that

“the link between affect, defined as the capacity for sentimental arousal on the part of a message, and virality, defined as the probability that it be sent along, is of significant theoretical and practical importance, e.g. for viral marketing.”

As stated above previously, the starting point of our concept of viral communication refers to the professionalization of a common social practice, already described by Lazarsfeld and Merton: the phenomenon of the word-of-mouth, which leads people to recommend or censor those messages with which you have had relevant experience, be it either positive or negative. But there is a difference. What before did not go strictly beyond the personal sphere (influence over friends, colleagues or relatives), now with the Internet it can have farther reaching effects turning it into an epidemic (**Campos-Freire**, 2008; **Stephen; Berger**, 2010).

The key to any viral communication strategy remains being in the same elements as before: the credibility of the source and the emotional closeness to the receiver. But, unlike the previous model, now the Network keeps us all interconnected (we are close to each other), and exponentially increases the chances of spreading “the virus” to other users, and these in turn to others, and to others. As **Watts** (2004) stated in his famous theory of six degrees of separation, any person on Earth can be connected to any other through a chain of acquaintances that has not more than five intermediaries: six degrees of separation, which can be easily saved thanks to the Internet. With this premise, a single personal recommendation, with enough strength, could virtually reach the farthest corner of the planet in a matter of seconds.

Until just a decade ago, the companies acted in the field of word-of-mouth recommendation only in a passive form: they tried to leave behind a unique good experience, because they considered that the only valid spokesperson for them was someone who was “trustworthy”. In this way, a circle of indeed restricted and totally reliable prescribers was sought, to communicate these good experiences to a circle –also restricted– of family and friends. Over time, the companies incorporated other strategies which they called “earning loyalty”: such as prizes or bonuses to those who incorporate friends to the Club of company partners, but this was no longer a natural recommendation, but “forced” by the promise of a gratification.

The novelty of viral communication is that it mimics (**Marino**, 2015) the process of spontaneous recommendation that occurs in a person's primary groups, that is: their co-workers, their friends, their family members; those that are in their address book. Add to this the “contagion process”, due to an element of interest, which sets in motion a process of viral self-replication, analogous to the expansion of a computer virus. This is what allows viral communication a never imagined projection in extension and speed, the two points that make this phenomenon something radically different from the original “mouth-to-mouth”.

Some researchers, distrusting of the negative connotation of the term virus, tried very soon to rename the phenomenon. Thus, **Thomas** (2004), in the field of marketing, ruled that the expression “viral marketing” was already “outdated”, and in its place proposed the term “buzz marketing”. His argument was that “buzz” alluded to a compliment that usually awakens “something of exceptional value”. However, this proposal posed two problems. On one hand, it left out products of daily use, those with low involvement/importance and those that, ultimately, cannot offer a “distinctive advantage” over their competitors: because not all products or services have truly differentiating characteristics. On the other hand, buzz marketing means generating rumor, notoriety and conversation. That term alludes to everything that is rumored: for and against; and this does not have as much to do with reputation as it does with the volume of noise.

Thus, despite of all the reluctance, the term “viral communication” was definitely imposed.

In viral communication, the messages that are exchanged can vary: an ingenious spot, an interesting video, an animated gif, a funny meme or simply a text message. In general, the online video has seen a new golden era and is currently one of the elements with the greatest viral potential (**Nahon et al.**, 2011; **Shifman**, 2012; **Sumner**, 2019).

At the same time, any communication campaign that intends to become viral must be strategically planned, exactly like a conventional campaign. **Godin** (2001, p. 64) and **Del-Pino** (2007, p. 69) point out the four basic requirements that every viral communication strategy must fulfil:

- Free message. This is an indispensable condition, because the Internet is a world where one can find a lot of things free of cost and the recipient is used to receiving a lot of content at no cost: knowledge, information, services, software... As eye-catching and fun as the message that I am going to launch is, if it requires even a minimum cost, it will lose out on its possibility/opportunity of reduplication.
- Click friendly. Access to the message should be easy, fast and simple. The Internet is a world of short-lived and instantaneous, of immediate gratification, of curiosity and immediacy. If the receiver must think, wait or overcome some difficulty to access the message (e.g., ask him to fill in a form), they will leave without any hesitation. This is not the time to build a database.
- Obvious reward: No matter how small it is, the gratification that comes with the message must be clearly announced. The receiver must know, at the beginning of the communication, what kind of satisfaction lies at the end: is it a joke, an unheard video, a funny parody or something about which everyone is talking. They will only access the message and forward it to others if they know from the beginning what benefit they will get in exchange for devoting part of their time reading it.
- Prior research. As in any communication campaign, the viral action must also come from a careful research of the target audience. In order to develop a viral communication campaign, the agency must study what type of messages the audience to which your message is directed is usually reading, which ones are more likely to be discussed and shared, what topics the audience spends time browsing through, or what elements ensure that the audience will click on a certain message.

6. Similarities and differences with other forms of communicative self-replication

In spite of the prior mentioned relative conceptual confusion, we could highlight certain differences of principles among the mentioned terms. While with buzz or word of mouth we encourage the community and mass media to talk about a particular story, a person, a company, a brand, a certain product or a service, with viral communication (observed in a more global way) the community not only speaks, but also helps spread a specific message, specially designed in order to be propagated interpersonally (**Ali et al.**, 2019) and which can adopt various formats (mainly video, but also audio or images accompanied by text) among its contacts, through online networks. Nevertheless,

“by tuning the advertisements and changing product designs, one may improve virality” (**Hoang et al.**, 2011).

Also, it is an unpaid and better targeting communication in which users are encouraged to share commercial messages (**Dobele; Toleman; Beverland**, 2005; **Borges-Tiago; Tiago; Cosme**, 2019). According to **Bampo et al.** (2008, p. 274)

“there is a natural selection process embedded in the way the message is propagated. This reduces redundancy in the sense that communication is more targeted”.

Other marketing related terms considered buzz marketing as promotion achieved through conversations as a collection of comments that people exchange about a given product (**Paquette**, 2013). The general conclusions of aforesaid conversations can be positive or negative with respect to the company or the brand (**Tarczydło; Kondak; Konior**, 2018). Therefore, with buzz or word of mouth marketing the meaning of the original message must be subject to major modifications, due to re-interpretation of the same (given the very nature of the rumor). Viral communication, on the other hand, reduces re-interpretation and guarantees, to a greater extent, that the original meaning of the message reaches to almost all of those who receive it which is a direct consequence of users collaborating in the dissemination of the content in which we insert the message (video, images or texts).

According to **Sánchez** (2009), the concept of word of mouth represents the global paradigm of marketing based on communication that is transmitted from person to person, so the said notion would include buzz concepts and viral communication. In this way, word of mouth would represent what **Kirby and Mardsen** (2006) understood as connected marketing. **Sánchez** (2009, p. 155) highlights as the main quality of viral communication its ability of

“exponential contagion by making it easier for influenced people to pass information as simply and quickly as possible”.

Despite the fact that the use of Internet and other technologies are at the bottom of all these forms of communication, **Sivera-Bello** (2008, p. 53) specifies it in her definition of viral communication:

“develop campaigns that take advantage of word of mouth connections on -line, through persuasive messages designed to be spread from person to person.”

Likewise, **Sivera-Bello** (2008, p. 17), referring to the concept of connected marketing of **Kirby** and **Mardsen**, places ICT as the means that allow marketing plans to detect and

“recruit consumers who represent the 10% that influence the rest in majority of the purchasing decisions”.

The propagation of the message can be carried out exponentially, in the event of having achieved theoretical results of viral communication. In fact,

“spreadability and propagativity are the two cornerstones of viral marketing in social media.” (**Mills**, 2012, p. 167).

However, if the messages reach the public and the public begins to own these messages, we will lose partial control of our campaign. But it is a consequence inherent to virality, despite which, and as we will point out later, it will be essential to draw up a clear criteria for monitoring and measuring the development of the campaign, in such a way that the viral power of our communication would allow us.

7. Typology of viral communication

And the fact remains that in all viral communication, the content is as important as the reaction of the recipient prior to receiving the message. In a research carried out on the motivations/incentives that lead people to forward emails (**Phelps et al.**, 2004) it was discovered that the most active netizens felt almost obligated to propagate those messages they considered relevant, and experienced a high level of satisfaction when they re-sent something of great value. In addition, they claimed to have previously thought about the interests of the recipient before passing the message on; which indicates that not only do they take into account the content, but also the tastes and interests of their contacts or friends.

In the bibliography of recent years, different classifications of viral messages have proliferated. We could synthesized in six categories the different types of viral messages:

- Pass it on: A message that encourages the user to pass it on to others. The most elementary and basic form is the message chains, which include a request to the user to forward the message. The most effective messages are videos with humorous content, which people spontaneously forward.
- Incentivized viral: In this case an explicit reward is offered for forwarding the message to the contacts or for giving the email address of someone else. It is somewhat an artificial way of increasing the possible database of contacts, although in certain cases it can be effective. However, it gives better results when the offer requires a third party to do something.
- Undercover marketing: It is a viral message that is presented as a page, an activity or news of interest, without clear references to put a link or pass it (**Bene**, 2017; **Grossmann**; **Hopkins**, 2018). In this type of viral, it is not obvious to the user that a marketing campaign is being carried out, and the marketers make a special effort in order to make it appear that the discovery is spontaneous and informal. “Clues” in the real world, such as *graffiti* that appear in cities with viral keywords, are often used to tempt people into investigating the apparent “mystery”. This can be the most sophisticated form of viral marketing and more difficult to identify as that, due to the large amount of unusual content that exists on the Internet, and also because the messages try to imitate the style and content of amateur websites.
- Fan clubs or friends associations: It entails a movement like that of “fan clubs” of singers, actors or athletes in the world of companies or of any of their products. In this strategy, the company or any committed user creates the entire environment of a fan club (web page, forum, *micro blogging* channel, etc.) in order to comment on the promotions of the company / product, channel criticisms and arouse positive comments. In this way, it seeks to derive an image of the information that comes from the users and not from the same company, which is especially valuable when it comes to justifying deficiencies or explaining the concealed/discreet aspects or terms in some promotional campaigns.
- Marketing rumor: These are advertisements, news or messages that give notorious prominence to the promoted product, although often at the expense of the fame or privacy of some key personnel. For example, coinciding with the release of a movie, some Hollywood stars get married, get divorced, make spectacular statements or are involved in some controversy that makes them especially notorious at that moment. That controversy is transferred to the media and generates *publicity* in the form of rumors and scandalous news. In most of the cases, these are unethical actions that are considered not in good taste.
- User-managed databases: Users create and manage their own contact lists using a database offered by an online service. By inviting other members to participate in their community, the users are creating a viral and self-replicated chain of contacts that grows naturally and encourages others to get registered.

8. Psychological aspects of viral communication

Gladwell (2000), under the concept *interactional synchrony*, studied the state by which, through empathy, different people can connect emotionally. In this way the individualities adhere to an unbreakable whole, in which each one is the reflection of the others, both in their verbal and non-verbal language, and in the emotions that they experience (**Berger**; **Milkman**, 2010; **Guerini**; **Staiano**, 2015; **Heimbach**; **Hinz**, 2016). This contagion constitutes in itself a form of communication; a means to transmit our message through a deep involvement with the public (**Gallardo**, 2016; **Storrod**; **Densley**,

2017; Miles, 2019). Berger and Milkman (2012) found significant relationships between the content's ability to generate emotion and its ability to go viral. And on that same line, Dafonte-Gómez (2014; 2018) has demonstrated with evidences the impact of motivation and emotions in the effectiveness of a viral campaign.

We must add another vital ingredient that we mentioned earlier: trust. This characteristic stands as the essence of the whole process in these types of communicative approaches. This trust or credibility is perceived thanks to the motivation of the person who transmits the message. It is a motivation without any commercial purposes, political purposes or purposes of any other nature but that ultimately transfers part of the intentions of the sender of the message.

At the same time, virality is limited by the economic and demographic conditions that cause different technological gaps. Therefore, certain barriers that slow down its spread at a certain point and time are implicit in the concept of virality.

It is worth reflecting on the role of the public or users in the process of spreading a message through the network. Gladwell (2000) proposes an interesting definition for the users of viral communication. It speaks, first of all, of a *connector* user, that is to say, a person with great social power that has very extensive social relations. What makes this type of user really influential is not the number of contacts that he can get, but the natural way in which he establishes a link with them. Generally, a *connector* user fixes a link or a weak link with another user, that is, an unusual, although friendly, meeting (digital in this case). From this statement it could be deduced that the weak link would be an inconvenience for the viral propagation of a message. However, a weak link offers the advantage of establishing a quick and convenient/comfortable connection, which would be ideal for more branched or dispersed networks.

Secondly, Gladwell (2000) highlights the work of the *maven*¹, people capable of accumulating large amounts of information to become true specialists of a subject. But, in addition, they have a great social ability, which leads them to advise other people.

However, an excessive growth of this type of messages can bury the effectiveness of the entire communication process. We could observe this saturation in television advertising, so the Internet and social networks became a response for advertisers in their need for differentiation and notoriety. Therefore, the first error to be avoided, both by issuers as well as users, is not accelerating the communicative processes, nor intervening in an abusive way in the natural evolution of a viral communication campaign.

9. Conclusions

Since the formation of the two-step flow theory by Lazarsfeld, Berelson and Gaudet, it was proved the effectiveness of personal relationships in the making of decisions. The term "word-of-mouth" served to define the relevance of personal influence processes in the spreading of information, political ideas, stories, ads or consumption behaviors. "Word-of-mouth" theory has evolved towards establishing the appropriate framework to develop a more complex theory: viral communication.

With regard to the foundation of virality, the author and critic Douglas Rushkoff is almost unanimously acknowledged as the first to develop this concept in his book *Media Virus: hidden agenda in popular culture* (Rushkoff, 1994). Rushkoff studied the spectacular implementation of the platforms that offered free email services.

According to the literature reviewed, viral communications could be defined as a form of individual exchange of messages or information through social networks with the intention of achieving a persuasive communication. Viral communication has been widely studied and developed from the field of marketing for the potential benefits exhibited in this work (Petrescu, 2016; Rodrigues; Fonseca, 2016; Rabidas; Bowen, 2019). In the North American sphere, the concept of virality was initially developed by Welker (2002), who identified four principles or requirements of the concept:

- 1) Interactive technology platform;
- 2) Emotional incentive that involves the receiver;
- 3) Desire to communicate something positive to the contacts;
- 4) The recipient becomes an indirect "ambassador" of a message and the institution that promotes it.

Subsequently, Lippman and Reed (2003) explored the connections of virality with *one-to-one* communication, and Porter and Golan (2006) studied the main differences between viral advertising and traditional advertising (mainly television advertising).

We also found several similarities and differences with other forms of communicative self-replication. In the field of Internet, various terminologies are used and certain conceptual differences can be seen: while with buzz or word of mouth we encourage the community and the mass media to talk about a specific topic, with viral communication (observed more globally) the community not only speaks but also participates in the dissemination of a message, specially designed to be propagated interpersonally and which can adopt different formats.

In viral communication, the messages that are exchanged can vary: a funny spot, an interesting video, a gif or a meme. We could synthesized in six categories the different types of viral messages: Pass it on; Incentivized viral; Undercover marketing; Fan clubs or friends associations; Marketing rumor; and User-managed databases. In general, online video is

considered to be the king of these formats. It becomes necessary to investigate the reasons for the success of the most widespread virals. The topics and their treatment could lead to “profiles” of successful viral communications (Nguyen; Chaudhuri, 2019).

“With viral communication (observed more globally) the community not only speaks but also participates in the dissemination of a message”

Among the fundamentals of effectiveness around virality, the simplicity of the message (which accentuates the aspect of creativity), the medium prone to replication and multiplatform, the trust and credibility of the prescriber based on the common experience between source and destination, the involvement of the “receptors” and the speed of the message intentionally sought from the source are highlighted.

Personal communication, originally developed from leader theory and personal influence starting with contacts in close proximity (word-of-mouth), is redefined by the Internet and by the application of marketing (which has developed it under the name of permission or relational). The context is about dense and branched networks, and would reach the status of buzz when it comes to content of exceptional value. According to the ‘cascade’ recommendations model (Rafailidis *et al.*, 2014; Susarla; Oh; Yong, 2016; Liang, 2018), the definition of the messages would follow a simple stochastic design (especially useful for products that are little known or difficult to sell). And in it we could find three dimensions: the scope, the actions of the users to share and affective evaluation and public assessment.

Regarding the psychological aspects, in viral communication, through empathy, different people can connect emotionally. Viral communication is a mean to transmit our message through a deep involvement and a deep trust with the public. This trust or credibility is perceived thanks to the motivation of the person who transmits the message. It is a motivation without any commercial purposes, political purposes or purposes of any other nature but that ultimately transfers part of the intentions of the sender of the message.

Note

1. The word maven comes from Yiddish mavin, meaning “he knows”, and is basically a synonym for “expert.”

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11. Annex. Classification and synthesis of the bibliography analyzed

Theoretical background	
Lazarsfeld; Berelson; Gaudet , 1948	They established the two-step flow theory and determined the concept "opinion leaders," Bullet theory or hypodermic needle theory were overcome.
Lazarsfeld; Katz , 1955	It was proved the effectiveness of personal relationships in the shopping decisions.
Merton , 1968	He established the term "word-of-mouth" to define personal influence processes.
Dawkins , 1976	A study of the relevance of word-of-mouth in consumers' behavior.
Rushkoff , 1994	Rushkoff set out for the first time the word-of-mouth term as a process of virality. Internet resized personal communication.
Gladwell , 2000	Gladwell's research is centered on the figure of the user. He analyzed empathy and social abilities as dimensions of interaction nature.
Rosen , 2001	Rosen developed the theoretical basis of the viral communication and established its main features.
Welker , 2002	The author defined the viral communication paradigm.
Lippman; Reed , 2003	They understood viral communication as a peer-to-peer architecture.
Dellarocas , 2003	It was analyzed the online feedback mechanism as the extension of former word-of-mouth networks, putting the focus not only on the dissemination of information but also in the ability to collect data about users' interactions.
Watts , 2004	Six degrees of separation theory was established. The author also analyzed traditional communication processes through word-of-mouth.
Campos-Freire , 2008	This study compares social networks influence over traditional media.
Sánchez-Herrera; Pintado-Blanco , 2010	Virality is a form of transmission that requires personal information and allows the companies, media or brands the segmentation of the users. Virality also encourages a personalized communication action.
Szabo; Huberman , 2010	The research studies users' attention over online content and the influence of time on this attention.
Payne , 2012	The author offers a reconceptualization of virality in order to show the theoretical transformations of the concept.
Shifman , 2012	It is analyzed the 'meme' concept in order to characterized virality in the video-sharing website YouTube. Six features were found: focus on ordinary people, flawed masculinity, humor, simplicity, repetitiveness and whimsical content.
Chadwick , 2013	The author established the hybrid media system theory, based on competition and tension among traditional and digital-social media.
Jenkins; Ford; Green , 2013	The authors proposed a theoretical framework to the creation of culture in a networked society.
Paquette , 2013	The author offers a literature review on marketing and social media from a retailer perspective.
Berger , 2014	Berger defined five key functions for word of mouth: impression management, emotion regulation, information acquisition, social bonding, and persuasion.
Dafonte-Gómez , 2014; 2018	The author has demonstrated with evidences the impact of motivation and emotions in the effectiveness of a viral campaign.
Guerini; Staiano , 2015	It is analyzed emotions as the driving force behind persuasive communication.
Dafonte; Martínez , 2016	The authors offer a study in which Iberoamerican online newspapers are analyzed in terms of social sharing functionalities.
Ventsel , 2017	The article examines virality from a semiotics perspective. The aim of this study is to establish the elements and functions of viral text.
Gentilviso; Aikat , 2019	They studied the viral communication with the purpose of defining news consumption habits in younger users.
Miles , 2019	The author examines the viral elements of propaganda through rhetorical criticism perspective.
Marketing and advertising approach	
Wilson , 2000	Wilson set out several viral principles from a marketing point of view.
Helm , 2000	Theoretical description of viral marketing strategies.
Boase; Wellman , 2001	Boase and Wellman carried out a study to identify differences and similarities between biological viruses, computer viruses and marketing communications with regard to the kind of network structures: dense or branched networks.
Thomas , 2004	Thomas considered that viral marketing was outdated for the current marketing scope. Instead, it would be more accurate the term 'buzz marketing' to characterize the extension of the marketing practices on digital and social media.

Kaikati; Kaikati , 2004	Authors have put the focus on viral marketing as a mean to increase persuasion without bothering consumers.
Phelps , 2004	A study focuses on motivations, attitudes, and behaviors of the users in relation to the diffusion of a message through social media.
Dobele; Toleman; Beverland , 2005	It offers a complete theoretical definition of a viral marketing strategy and differs to those theories that defined virality as a model based on chaotic structures.
Porter; Golan , 2006	The authors carried out a comparative study among traditional advertising and viral advertising.
Kirby; Marsden , 2006	They studied virality influences on marketing under the expression "connected marketing".
Leskovec; Adamic; Huberman , 2007	They developed a model called 'recommendations in cascade' which showed that the diffusion of messages follow a stochastic design.
Godin , 2001 Del-Pino , 2007	It provides a definition of viral marketing and its use for the development of a brand. Both authors highlighted the specific features for a viral communication strategy.
Bampo et al. , 2008	The authors studied the mediating effects of digital networks on viral campaigns. They distinguished three main elements within a viral process: the social structure of the network, the behavioral features of the individuals and the seeding strategies for viral campaigns.
Golan; Zaidner , 2008	Using Taylor's six-segment message strategy wheel the authors studied the content of hundreds of viral ads.
Miller , 2008 Varis; Blommaert , 2015	They developed critical studies about network communication forms and digital network culture. The current context is defined as purely phatic culture in which communications have only social (linking users) purposes.
Aguado-Guadalupe; García-García , 2009	Aguado and García studied the viral communication in the field of the new advertising formats.
Sánchez , 2009	The concept of word of mouth represents the global paradigm of marketing.
Sivera-Bello , 2008	The author put a lot of emphasis on technology essential for defining viral marketing. Information and communication technologies allow marketing plans to detect and recruit the most influential consumers.
Sánchez , 2009	The author holds that word-of-mouth concept represents the paradigm for marketing in a networked society. This concept will gather other notions such as virality or buzz marketing.
Berger; Milkman , 2010	Berger and Milkman studied how emotions can foster virality in a sample composed of New York Times articles. It is confirmed that positive stories are more viral than negative, but also results revealed that emotions (positive or negative) characterized by high arousal is more viral.
Kozinets et al. , 2010	It is studied WOM theory to analyze blogs as a marketing tool. From a narrative perspective the authors analyzed how marketing messages are transformed through social media.
Stephen; Berger , 2010	This work analyzes viral marketing from the perspective of social epidemics using psychological and sociological frameworks.
Hinz et al. , 2011	It is analyzed the relevance of seeding strategies for viral marketing campaign. Main results revealed that seeding to well-connected people is the most successful approach because these points are more likely to participate in viral marketing campaigns.
Hoang et al. , 2011 Túñez-López; Sixto-García , 2012 Klinger; Svensson , 2015 Larsson , 2017 Grossmann; Hopkins , 2018 Poon; Lam , 2020	Viral marketing, social media and politics. Network media logics. Mass media logics vs social network logics. The study of social network functionalities.
Petrescu; Korgaonkar , 2011	The authors develop a complete definition of viral advertising with respect to technology, content and communication model.
Torrado-Morales; San-Nicolás-Romera; Gómez-Baceiredo , 2011	Authors offer a study on viral marketing and its implications in the context of online journalism.
Túñez-López; Sixto-García; Guevara-Castillo , 2011	The research offers a study about virality from the relational marketing perspective.
Berger; Milkman , 2012 Heimbach; Hinz , 2016	They found significant relationships between the content's ability to generate emotion and its ability to go viral. Heimbach and Hinz replicated Berger and Milkman study for German press articles spreading on social networks. The results confirmed Berger and Milkman findings.
Mills , 2012	It is established four core elements in successful viral campaigns: spreadability, propagativity, integration and nexus.
Van-Noort; Marjolijn; Van-Reijmersdal , 2012	The authors examined the relationships among companies (brands) and users and how these relationships have an influence on the persuasive ability of viral campaigns.
Botha; Reyneke , 2013 Botha et al. , 2016	The authors examine motivational aspects and the process of sharing content through social media.
Gunawan; Huarng , 2015	It confirms social influence and perceived risk as essential variables in consumers' purchase intention.

Gallardo , 2016	The author provides an analysis of online communication from the perspective of the online public shaming. Online public shaming can serve as a mean to incentivize good behaviors, but also can be used as a form of social and public punishment.
Sampson , 2012 Petrescu , 2016 Rabidas; Bowen , 2019	These works established the basics of viral marketing, social networks and its influence on electronic transactions.
Rodrigues; Fonseca , 2016	The authors applied a mathematical model in epidemiology to the understanding of viral marketing campaigns.
Sabri , 2017	It is studied the use of provocative and taboo topics to increase the effectiveness of viral advertising campaigns.
Nikolinakou; King , 2018	It is explored emotional engagement as a mean to foster advertising virality.
Seo et al. , 2018	It confirms the relevance of personal ties between senders and receivers of messages in terms of virality.
Tarczydło; Kondak; Konior , 2018	The authors conducted a study to relate the viral marketing campaigns to brands. It is confirmed several benefits such as publicity, community exchange or brand engagement, among others.
Daif; Elsayed , 2019	It is analyzed the peer-to-peer communication form with respect to tourism marketing.
Nguyen; Chaudhuri , 2019	The authors explore eWOM (electronic-word-of-mouth) as a mean to predict success for new products.
Sumner , 2019	The author analyzes viral attributes of online videos and how this content promotes brand notoriety and marketing strategies in higher education.
Dafonte-Gómez; Míguez-González; Corbacho-Valencia , 2020	The authors conducted a study in which emotional features drive the spreading level of video content.
Virality and social media	
Chevalier; Mayzlin , 2006	The authors studied the role of personal recommendations on sales at websites such as <i>amazon.com</i> .
Centola , 2010 Goel et al. , 2015	It is studied the nature of network structure and its influence on behavior diffusion.
Hansen et al. , 2011	This paper revealed that negative sentiment enhances virality in the news segment, but not in the non-news segment.
Ienco; Bonchi; Castillo , 2010	The authors analyzed memes propagation in microblogging sites.
Bruni; Francalanci; Giacomazzi , 2012	This paper focuses on multimedia content and its ability to increase virality on social networks.
Weng; Filippo; Ahn , 2013	The authors provide a study focuses on network structures. They offered a method to predict the popularity of a meme by measuring the spreading pattern within community structures.
Rafailidis et al. , 2014 Susarla; Oh; Yong , 2016 Liang , 2018	Authors analyzed cascade diffusion model and new methods to boost information cascades in social networks.
Alhabash; McAlister , 2015	The authors highlighted three main dimensions of virality: viral reach, the affective/emotional evaluation of the contents and the public opinion.
Marino , 2015	From a semiotic approach it is analyzed memes as a paradigmatic form of collective communication within internet.
Wang; Liu; Gao , 2016	The research analyzes functions and roles of Twitter hashtag as a viral strategy.
Bene , 2017	It is analyzed citizens' political reactivity on social media by studying political content published on Facebook. Memes, videos, negative and personal contents facilitate virality transmission of messages.
Sarmiento-Guede; De-Esteban-Curiel; Antonovica , 2017	The paper identifies emotions, contents, influentials, media and realization as precedents with a great impact in the virality of a message.
Storrod; Densley , 2017	This study shows how gang bands use social media in order to communicate norms and behaviors within the bands.
Kim , 2018	The author examined the virality effects of metrics such as <i>likes</i> and <i>shares</i> and how these metrics can alter the user perception about certain messages.
Ali et al. , 2019	They analyzed social networks, fear-arousing sensationalism and user engagement regarding the 2016 Zika virus crisis. Results demonstrated a correlation between both variables (user engagement and fear-arousing sensationalism).
Al-Rawi , 2019	It is studied virality attributes on news stories from traditional newspapers in YouTube and Twitter. Results revealed that positive news, social significance and unexpectedness in news stories are the most appealing viral news elements.
Borges-Tiago; Tiago; Cosme , 2019	It was studied the factors that influence users' willingness to share viral content.
Hemsley; Kelly , 2019	This works focuses on niche social media site and concludes that the factors that drive virality on general social networks are the same on niche social media.