

Empirical study on digital storytelling as a communication strategy among Algerian social network users

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Received:05/09/2022

Accepted:02/02/2023

Published:01/03/2023

Abstract:

Facing a major growth in social networks use in Algeria, companies are increasingly resorting to digital strategies. Digital storytelling, consisting of relating facts in narrative forms, is one of the communication strategies adopted nowadays, aiming at capturing online consumers. To measure the success of this strategy in terms of appreciation and usefulness, we conducted a quantitative study with a sample of 204 Algerian social network users. The findings led us to the conclusion that digital storytelling could be a valuable approach to build an online communication strategy.

Keywords: internet users, digital storytelling, social networks.

JEL Classification: M31

Introduction

With the emergence of digital in the last few years, marketing strategies have evolved and changed as the consumer is more and more online. Companies tend to focus on attracting customers through high quality content that informs, educates and inspires the target audience using various channels such as blogs, search engines or social media (Truphème & Gastaud, 2017).

According to the latest statistics of Global Digital Report 2020, active internet users represent more than 51% of the world's population with an estimated annual growth of 10% due to the intense presence of social networks in the daily life of all, especially institutions and scientific collaborations that prove day by day their presence on digital platforms with the aim of generating audience due to the positive impact that these platforms can provide in influencing the communication messages (Scotti, 2021). Nowadays, social networks are new chances for communication professionals; they may represent a successful tool for companies of any type and any nationality (Bensmain & Benbouziae, 2020).

In January 2022, the number of internet users in Algeria reached 27.28 million, with a penetration rate of 60.6% of the total population. The Kepios analysis indicated a growth of 1.8 million or 7.3% from 2021 to 2022. As a result, the amount of social network users has reached a rate of 59.1% (*Digital 2022*, 2022).

Storytelling is one of the most used forms of communication; the technological growth has to upset the world stories in the way of production and reception (De Fina, 2016). Thus, narratives allow speakers to express themselves differently (Martínez-Borda et al., 2021). Digital platforms, particularly social networks, have given rise to new forms of communication, participation, and interaction between consumers by encouraging the sharing of content related to consumer experiences (Pera & Viglia, 2016).

Social networks can be successful storytelling spaces; multiple identities and brands come together and influence values and perceptions (Lund et al., 2018) since the models lead to a relationship of enhancement between the media and the story (Vizcaíno-Verdú et al., 2021).

(Meadows, 2003) described digital storytelling as a revolution. It's broadly defined as a method of telling a story through the interaction of images, text, sounds and digital elements, it is increasingly used by brands in the field of social work (Chan & Sage, 2021).

This study focuses on identifying whether the use of digital storytelling is a successful communication strategy on social networks in Algeria and

whether it could be useful to attract internet users. Therefore, we will try to provide answers to the following research questions:

- RQ1. Does the frequency of navigation on social networks determine the appreciation of digital storytelling?
- RQ2. Which of digital storytelling components, if any, contribute the most to attract internet users?
- RQ3. Does the preference of one component over another contribute to product distinction in the market?
- RQ4. Does digital storytelling facilitate product distinction in the market?

1- Literature review

We can admit that the 21st century has introduced people in a technology-saturated atmosphere generated by the media and marked by a diversity of information in abandon access. Digital storytelling has been the subject of several research studies. One of these researches has particularly addressed the capacity of digital stories to increase visibility as a tool of expression and recognition (Truchon, 2016). This study is a part of the same field of research; it focuses on the role that digital storytelling plays on social networks and its usefulness among Algerian network users.

1-1- What is digital storytelling?

Before defining digital storytelling, it is vulnerable to explain what storytelling means. According to (Bordeau, 2013), storytelling is a discourse built from the collection of testimonies, experiences, trials, and exploits of every day's life. Storytelling is the art of telling stories to convey ideas or messages; it allows to stage the brand or the product according to the communication objectives.

For its part, digital storytelling has several meanings. For some, it refers to the dissemination of life stories on digital media: websites, blogs, social networks, e-books, etc. For others, it is about telling participative stories via digital media or through any digital technology (Alexander, 2011). It is the modern name for the ancient art of storytelling that appeared after the emergence of digital technology, which was able to combine storytelling and digital content, including images, sounds and videos, whose main objective is to create an emotional or communicative effect of the message to be transmitted (Malita & Martin, 2010).

1-2- Digital storytelling for a communication purpose

Digital storytelling is a research method based on the simplification of complex narratives in a compelling way in order to increase the engagement of digital users, thanks to its significant potential that lived experiences of participants proceed to the in-depth examination of the message. The objective is to rely on events experienced or felt in order to involve a part of oneself in the creation of the digital story and thus bring an emotion (Karamagioli & Laborderie, 2019). This allows to create a link between the digital narrator and the receiver leading to a certain interactivity between the two. It is now practiced in many fields, in diverse contexts; since it represents a sort of social movement, and occupies a prominent place in consumer-generated media (Hartley & McWilliam, 2009).

People are increasingly communicating their lives on social media, whether it's a personal accomplishment, a lived experience, or passed on virtual presence, via email, Instagram, Facebook and Twitter which are the main digital mediums used over the past two decades (Rieger et al., 2018).

The use of social media for sharing content enabled to transform the way of description and recitation for a better assimilation (Casillo et al., 2016). Digital storytelling leads to a better understanding of the experience (Sawyer & Willis, 2011); that's why it could be a great communication strategy online.

To sum up, digital storytelling is a practice based on the recitation of stories and events to be disseminated on different digital platforms in order to attract internet users. Its purpose is to involve social participation to empower the communities in the engagement of social network users through the process of creating digital content based on stories from the world that surrounds them (Spurgeon et al., 2009).

1-3- Digital storytelling components

The information to be introduced in the message is not randomly generated; companies collect via listening or speaking workshops, consumer experiences, testimonials and anecdotes (Bordeau, 2013). Digital storytelling has seven components (Lambert, 2018); we summarized them as follows:

- Self-revelation: storytelling narratives give the impression that the author is realizing a new vision through the shared story, which evokes a sense of immediacy and discovery.
- Personal or first-person voice: stories are personal reflections on a topic known to convey deep emotional meaning for the author.

- Lived experience: storytelling narratives can be derived from the author's lived reality with multiple scenes in time
- Images and motion: while many stories use moving images, the most dominant approach is to use images in small numbers to create focus to the visual elements.
- Soundtrack: relies on music or voice recording added to the visual content to give meaning to the story
- Length and design: digital stories should be short and simple, ideally between two and three minutes. However, their design requires an emphasis on aesthetic and panoramic effects (colors, zooms, special effects...) to better convey the message on the media.
- Intention: this one is a function more than a form, these stories must allow an awareness and a certain self-expression in the product or service (or brand), by allowing the consumer to ideally access the world to which he has no access but valued by this story.

3- Research methodology

Based on the literature review that included the main points related to digital storytelling, as regards definitions, components and as a communication strategy as a whole, and in view of answering the four research questions previously mentioned in the introduction, we carried out a quantitative study via an online questionnaire addressed to Algerian social network users.

To subtract the sample corresponding to our study, we opted for the non-probabilistic method (non-random) following a sample of convenience, and that, by questioning the most available and accessible Internet users on social networks. Our survey was undertaken for a duration of two months (April and May 2022).

Due to the inability to interview the entire population, we performed this research on the basis of a convenience sample consisting of 204 users, of which 186 have already encountered digital storytelling on social networks. The questions were conceived in a simple way in such a way to ensure that they are understandable by all age and socio-professional categories. In addition to the clarity of the questions, we tried to give brief definitions to the terms that may appear to be technical and out of routine for the respondents.

To ensure the accuracy of this survey, the response link was first sent to five (15) people (students and family members) before being launched on the mentioned networks. As a sign of comprehension and easiness of the

questions, prejudged by the participants of this test where none pointed out a problem, we distributed the questionnaire.

The collected data was analyzed in view of replying to the research questions in flat sorting and in cross sorting using the SPSS version 21 software package in which we performed several tests (Chi-square, cross tabulation, correlation and one factor ANOVA).

4- Results

4-1- Sample profile

Table number (1): Respondents' profile

	Characteristic	Pourcentage	Frequency
Gender	Male	54.9%	112
	Female	45.1%	92
Professional statut	Student	49.5%	101
	Employee	33.4%	68
	Retired	1%	2
	Unemployed	16.1%	33
Age	Less than 20 years	10.3%	21
	Between [21-30] years	70.1%	143
	Between [31-40] years	13.2%	27
	Between [41-50] years	4.9%	10
	More than 50 years	1.5%	3

Source: Survey outputs

Table (1) shows that the sample was composed of 204 respondents, of which 45.1% were female and 54.9% were male. The majority of them were students and employees with respective rates of 49.5% and 33.33%. This implies that the majority of Internet users surveyed are young people. The results showed that 70.1% were between 21 and 30 years old. 13.2% are between 31 and 40 years old. However, 10.3% are under 20 years old.

4-2- Reliability

Before proceeding to the analysis of the questionnaire according to the objectives, we proceeded to the test of reliability of the questionnaire using Alpha of Cronbach test for the whole items (13 items). The result showed that the questionnaire is reliable, we can henceforth carry out various tests.

Table number (2): Reliability test

Cronbach's Alpha	,838
Cronbach's Alpha based on normalized items	,876
Number of items	13

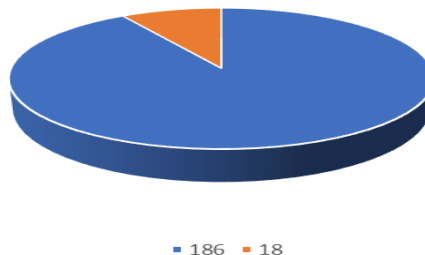
Source: SPSS outputs

4-3- Findings

To answer RQ1, a cross tabulation and a chi square test analysis were carried out.

Before testing whether the appreciation of digital storytelling is determined by the frequency of use of social networks, we asked the respondents if they appreciated the use of this particular technique. The results showed that a percentage of 93.1%, i.e., 190 Algerian internet users appreciate digital storytelling when the remaining 14 do not. On the other hand, 91.2% of the respondents (186) have already encountered it technique on social networks as is shown in figure (1)

Figure number (1): Digital storytelling encounter on social networks



Source: Survey outputs

To examine the relationship between the frequency of use of social networks and the intersection of digital storytelling on social networks, we conducted a Chi-square test.

Table number (3): Cross-tabulation of the frequency of use of social networks and digital storytelling encounter

		Storytelling encounter		Total
		No	Yes	
Frequency of use of social networks	Once a day	5	5	10
	Twice a day	4	26	30
	Three times a day	3	78	81
	Several times a day	6	77	83
	Total	18	186	204

Source: SPSS outputs

The results of the cross-tabulation showed that the chance of encountering storytelling on social networks goes up with the increase in the frequency of use of social networks. We can see that the intense use of social networks (several times a day) allowed 77 of our respondents to encounter storytelling when only 5 respondents were able to cross it with a very low daily use of social networks (once a day).

Table number (4): Chi-square test

	Value	df	Asymptotic significance (bilateral)
Pearson's Chi-square	24,735 ^a	3	,000
Likelihood report	15,595	3	,001
Linear-by-linear association	9,974	1	,002
Number of valid observations	204		
Notes	a. 0 cells (0.0%) have a theoretical number less than 5. The minimum theoretical size is 5.81.		

Source: SPSS outputs

The significance of the Chi-square test is equal to 0; it is lower than 0.05. It refers to an association between the frequency of use of social networks and the encounter with storytelling. Thus, we conclude that the frequency of use of social networks determines the degree of crossover in digital storytelling.

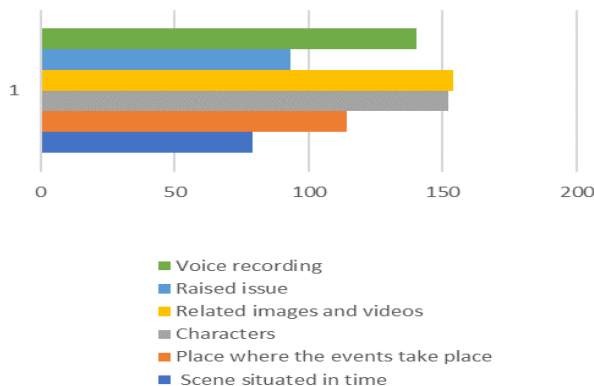
To address RQ2, we asked respondents who have encountered digital storytelling when browsing on social networks. Among the 186 respondents, 58.6% of them find that digital storytelling is useful in terms of facilitating the recognition of a product/service/brand while 41.4% find that this technique contributes to change the behavior or the attitude towards products/services/brands.

Table number (5): Digital storytelling utility

	Frequency	Percentage
Change in behavior or attitude towards a product/service/brand	77	41,4
Ease of product/service/brand recognition	109	58,6
Total	186	100,0

Source: Survey outputs

Figure number (2): The interest on digital storytelling components



Source: Survey outputs

On the other hand, respondents to this survey are interested in almost all components of digital storytelling at more or less similar rates. Interest in the images and videos associated with the story as well as the characters comes in first place with rates that exceed 80%, followed by the voice recording and the location of the events of the story told on social networks. The raised issue and the scene located in time occupied the last place with respective rates of 50% and 42% as is shown in (Figure 2).

To verify whether the preference of one component over another in digital storytelling contributes to product distinction in the market (RQ3), we opted for a Pearson correlation test between "image over sound preference" and "product distinction in the market".

Table number (6): Correlation test

		Preference of image to sound	Product recognition
Preference of image to sound	Pearson Correlation	1	,400**
	Sig. (bilateral)		,000
	N	186	186
Product recognition	Pearson Correlation	,400**	1
	Sig. (bilateral)	,000	
	N	186	186
	Notes	**The corrélation is significant at the 0.05 (bilatéral).	

Source: SPSS outputs

The results of the correlation test between preference of image to sound and product recognition indicate that the Pearson correlation is 40%. It refers to a weak association between the preference for the image and the ease of recognition of the product on the market. In other words, the recognition of a product on the market is not associated with the preference of one component over another.

From the results of the interest on digital storytelling components and the correlation test, we conclude that all the components are important to enable the Internet user to recognize the product/service/brand on the market.

The survey results showed that 80 respondents agreed with the statement: "digital storytelling drives product/service/brand research in the market" at the same time as 30 strongly agreed. While only 20 of them disapproved and strongly disapproved.

In terms of checking if digital storytelling facilitates the recognition of the product on the market (RQ4), we conducted a one-factor ANOVA test between the intersection of digital storytelling on social networks and the ease of product recognition. The results showed that the significance of the one-factor ANOVA test is equal to 0.000; it is less than 0.05. Thus, digital storytelling drives product recognition and digital storytelling on social networks.

Table number (7): Anova test

Title	Sum of squares	df	Mean square	F	Sig.
Between groups	47,370	1	47,370	50,061	,000
Within groups	191,140	202	,946		
Total	238,510	203			

Source: SPSS outputs

5- Discussion

The results allowed to notice that digital storytelling is an appreciated technique among Algerian internet users touched by this study. Among the 204 internet users questioned, 190 expressed their positive assessment towards digital storytelling at the same time that 186 of them revealed having encountered an advertising story while surfing on social networks. This work implies that the more our respondents are on social networks, the more the chance of encountering digital storytelling increases. Therefore, the use of digital storytelling in the development of a communication message could be a great path for companies using digital channels for communications purpose.

With regards to digital storytelling components, the survey shows that almost all components are relevant to network users with more or less

similar rates. The associated videos and images are the elements that attract greater attention in a storytelling passage, as well as the voice recordings, implies that in absence of images and videos the emphasis will be on this component. It is possibly due to the ease of understanding the message that this minor difference takes place. However, the findings showed a weak association between the preference of one component over another and the recognition of the product on the market, which is one of the finalities of digital storytelling. Thus, when creating an online storytelling message, it is necessary to carefully craft it in a way that provides interest to all components while focusing on videos, images and voice recordings.

Finally, the results highlighted that the use of digital storytelling contributes to the recognition of the product/service/brand on the market; it is maybe due to the memorization capacity that this communication technique generates.

Conclusion

The aim of the study was to investigate whether digital storytelling could be an appropriate communication strategy among Algerian social networks. To this end, we carried out a survey among Algerian social network users to provide answers to the research questions. The results indicated that digital storytelling is a favorite tool for most of the respondents. Moreover, the carried-out tests have shown that digital storytelling components do not differ from each other; they all represent a point of interest. Digital storytelling contributes positively to the recognition of products/services/brands on the market; therefore, it could be an added value for companies.

The findings of the present research can provide useful insights for Algerian companies using social networks in the constitution of their digital communication strategy. In addition, it may help social media managers to count the components to focus on when developing a story-based message. However, this research is only an introduction to a large field of research; the results are modest and have been generalized from a small sample in a short period of time. One of the limitations is that the data gathering remains quite challenging; certain Algerian internet users preferred to keep their comments to themselves. Thus, to achieve a large relatively sample size and more significant results it would be preferable to conduct further studies on provided databases by companies, digital institutions or to have data gathering conduits dealing with social network users destined for the academic research which requires efforts on the part of government. Besides, this research has been performed in a general way, no specific activity sector has been targeted, whereas certain companies could have a

strong presence on social networks as their work quality demands it, others not.

Farther, it will be interesting to conduct a study among a larger sample to provide more effective results. In the absence of past studies dealing with digital storytelling among Algerian social network users, this study only touched on the essential points, it might therefore represent several research axes for researchers interested in this particularly interesting technique. Likewise, it is important to perform a study among companies operating on social networks to identify their degree of familiarity and areas of use of storytelling as a digital communication new approach.

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