The study aims at demonstrating how social communication has changed in terms of flows and content in the different phases of the COVID-19 pandemic to get to the fact that public administrations have embarked on a path of rapprochement with the citizen that starts from the methods of communication and interaction. This article presents an exploratory and multidisciplinary study conducted through the analysis of the Facebook page of the Italian municipalities with the highest Covid19-induced mortality rates (Piacenza, Bergamo, Lodi, Cremona, Brescia, Pavia, Parma, Mantova, Alessandria, Lecco and Sondrio). Fanpage Karma has been used to conduct the investigation and get the analytics. Local governments are implementing a process of gradual approach to the needs of the citizen and learning new ways of communication. In the conclusion of our study – conducted at the time of the pandemic – we can affirm that local governments are in an early stage of the process both for the acquisition of skills for social communication and for the definition of a communication strategy to strengthen their social identity aware of the fact that the agile and lean communication makes the citizen much more informed and involved in city life than traditional communication. This paper analyses a social network like Facebook as a not common tool for local government's communication in a period of severe emergency. A multidisciplinary approach is adopted as a distinctive factor. The focus is on the contribution of social communication on citizens' engagement.

1 | INTRODUCTION

According to the report "Digital in 2020 Global Overview", digital, mobile and social media have become an indispensable part of everyday life for people all over the world. Across mobile devices and computers, GlobalWebIndex reports that people around the world spend an average of 2 hours and 24 minutes per person, per day using social media, up by 2 minutes per day since this time last year. In Italy, the average is of 1 hour and 57 minutes per day using social platforms. As far as social media platforms are concerned, despite various challenges over the past few years, Facebook is still in the top of the pops when it comes to social. These trends on the spreading of the Internet and social media and the fact that mobile phones are the most common device are greatly influencing communication strategies of companies and public services.

Regarding our field of investigation, some studies have concluded that Facebook (FB) is the most used social network as a means of participating in local government issues (Bryer & Zavattaro, 2011; Haro-de-Rosario, Sáez-Martín, & Caba-Pérez, 2018; Hughes, Rowe, Batey, & Lee, 2012) and that the agile and lean social communication makes the citizen much more informed and involved in city life than a traditional communication that is not always easily accessible, allowing, at the same time, public communication to be more transparent (Lee & Neff, 2004; Lovari & Parisi, 2015).

The aim of the paper is to understand how social government communication through FB has changed in terms of flows and contents during the different phases of the COVID-19 pandemic to meet the needs of citizens and bring them closer to local governments.

Italy represents a case of interest as it is one of the first countries to register one of the highest numbers of infected in the world and it is also among the first to respond positively to the pandemic.

The Italian public administration has no formal obligation to use social media to communicate to citizens, however, it is legitimated by
many laws of the regulatory system, starting from Law 150/2000 that states that public administration’s communication and information activities can be carried out through any tool suitable for ensuring the transmission of messages.

Thus, our research has been conducted on the Facebook page of the Italian areas with the highest cumulative mortality rate (Piacenza, Bergamo, Lodi, Cremona, Brescia, Pavia, Parma, Mantova, Alessandria, Lecco and Sondrio). Fanpage Karma has been used to conduct the investigation and get the analytics concerning the Facebook official pages of the 11 municipalities.

The paper is structured in five paragraphs. In Par. 2 the evolution of the Public sector institutional communication is analysed while in Par. 3 social, institutional communication is distinguished in ordinary and extraordinary times from that carried out in additional or crisis times. From the authors’ point of view, the crisis can be divided into a sequence of phases and as a consequence communication should be aligned. The spread of COVID-19 in Italy is explained in Par. 4. Par. 5 describes the methodology and the research hypotheses while Par. 6 is dedicated to the case analysis. Conclusions will follow.

2 | “TRADITIONAL” AND “SOCIAL” GOVERNMENT COMMUNICATION

In this paper, the term “government communication” is used to describe the apolitical and non-partisan communication activities of governments (Glenny, 2008) about policies, institutional activities and services. It can take place following two channels, the “more traditional” physical channel and the virtual one, by means of web communication.

Traditional government communication – both inward and outward – has been organized by administrative procedures in line with the bureaucratic nature of governments (Meijer, 2008; Yates, 1989). The main features of traditional communication are centralization of external relations offices and institutional websites – typically public relations offices and institutional websites – formalization and the definition of clear organizational boundaries and internal processes to manage information (Bekkers, 1998; Egeberg, 2003).

In some cases, the use of the institutional websites to publish official documents, information and online services has become mandatory (e.g., the establishment of the Telematic Notice Board for Italian public administration). Even not prescribed by law, in recent years, social networks have entered the public administration, representing a new evolution in public sector communication (third way of communication).

The term web-based “social media” here refers to “a group of internet-based applications built on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, p. 62).

Social media government communication has different features in terms of obligatory/voluntary nature, tools, content, purpose and recipients if compared to traditional web-based government communication (see Table 1).

Although the purpose of both ways of communication is substantially the same, social media appear to be particularly well-suited for public communication but also to promote e-democracy and stakeholder engagement (see, e.g., Kent, Taylor, & White, 2003; Park & Reber, 2008; Porter, 2001; Unerman & Bennett, 2004), as they make it possible to increase and differentiate public administration’s listening skills and interact with large groups of people in a virtual place, allowing them to share ideas, opinions, pictures, videos, web links and other contents (Bekkers, 2013; Manetti, Bellucci, & Bagnoli, 2017). This is because traditional institutional communication is addressed to everyone but concretely reached only by those people who look for the specific information; on the contrary, social communication reaches a wide audience, including those who are not looking for information.

For the same reason, social media allow public organizations to exploit people, information and other sources of data that are present

### Table 1 Features of government communication

|                        | Traditional web-based communication | Social communication |
|------------------------|------------------------------------|----------------------|
| **Obligatoriness**     | Both mandatory and not mandatory    | Discretionary        |
| **Tools**              | Institutional websites              | FB, Twitter, Instagram, Telegram and other social networks |
| **Purpose**            | • Provide information and educating citizens/users about services, policies, rights, entitlements and obligations; | • Build consent; |
|                        | • Activate virtual services or channels for managing customer satisfaction or quality control; | • Improve administrative transparency, simplification and organizational re-engineering; |
|                        | • Open new spaces for participation and community consultation; | |
|                        | • Improve administrative transparency, simplification and organizational re-engineering; | |
| **Content (text form)**| Full text, long descriptions        | Short messages, photos, videos, wall postings, notifications, current activities, events, widgets, etc. |
| **Recipients**         | All, but it arrives to a few        | All and arrive to almost (widespread) |
| **How to find it**     | Need to look for it (pull)          | It arrives to you (push) |
| **Design style**       | Normative or technical form (i.e., public act, etc.) | Informal; Short messages with essential points, visual (storytelling, advertising campaign) |

Source: Authors.
on the Internet too, by bringing them together to address specific goals or problems.

In order to reach wider number of citizens, the content of messages needs to be adapted to the tool used and to the users that public officer wants to communicate with. In fact, traditional web-based communication reports longer and more complete information and is usually presented in a legal or technical form, following formalized administrative standard stated by the law, while social communication tends to use more informal messages with essential points, visual methods of communication such as the story telling, but also photos and videos characterized by a more direct and impressive approach (White, Plotnick, Kushma, Hiltz, & Turoff, 2009).

The users' behaviours enabled by Web 2.0 architecture have shifted the boundaries between experts/information-providers and laypeople/information-consumers: information is increasingly “...created and cocreated by users in a dynamic, collective manner” (Turnbull et al., 2009, p. 57).

Social channels enable citizens to become potential producers and disseminators of information via social media. In this context, Arvidsson (2013) termed citizens as prosumer. This represents a profound transformation of the media ecosystem in which we are witnessing a process of growing disintermediation, which, on the one hand, favours a more direct relationship between public administration and citizens, bypassing traditional media, on the other hand, exposes public administrations to responsibility and control by citizens (in a positive and negative way) much more than in the past (Lovari & Valentini, 2020).

Another important consideration concerning the recipients is that social communication (somehow web-based communication tool) is addressed to “digital citizen/consumer” that is persons with at least a basic level of digital skills. In this sense, statistics make clear as the profile of the social communication beneficiary is often a young or adult individual, so age could become as a source of discrimination in having access to public authority information. This consideration opens the field to new solutions in order to make public administration really inclusive.

It is clear that smart technologies have the potential to foster co-creation of public services and the generation of public value in management processes (Criado & Gil-Garcia, 2019), and that social media may represent both a crucial opportunity and a challenge to reform the relationship between government and citizens even in times of crisis, allowing to shift from a mono or bidirectional information exchange to a many-to-many communication process (Agostino, 2013) and finally to become citizen-centric enhancing public engagement (Kutsikos & Kontos, 2011).

3 | SOCIAL COMMUNICATION IN COVID-19 EXTRAORDINARY TIMES

When external and extraordinary risks happen, governments have a greater responsibility in the dissemination of accurate, reliable and timely information and this requires out of the ordinary communication approaches. In the last years, social media have played an increasing role in managing emergencies and disasters; in that, they can offer the opportunity for real-time updates of situations to obtain exceptionally rapid and effective response to changing conditions (Coombs, 2016). A study commissioned in 2009 by the American Red Cross found that social media are the fourth most popular source to access emergency information. As people continue to embrace new technologies, the use of social media will likely increase.

Social media have been used by individuals and communities before, during and after various events to warn others of unsafe areas or situations, inform friends and family that someone is safe, but also to engage volunteers and raise funds, make disaster reliefs, track victims and recovery after crisis (Lindsay, 2011; White et al., 2009; Yates & Paquette, 2011). Citizens seek information and check with family and relatives on social media during crisis; yet, they also may be discouraged by the information overload during such situations (Austin, Liu, & Jin, 2012).

Social media also allow public sector organizations to collect requests for rescue and assistance to enhance public order during emergency, to reduce uncertainty and to raise civic support (Sutton et al., 2014; White, 2011).

Moreover, digital volunteers can offer relevant help for disaster response (Lovari & Bowen, 2020; Park & Johnston, 2017). Lindsay (2011) conceptualized two approaches to using the social media during emergencies and disasters. First, social media can be used somewhat passively to disseminate information and receive users' feedback via incoming messages, wall posts and polls. For instance, many emergency management organizations provide citizens with preparedness and readiness information through social media because social networks lend themselves to providing a wide variety of capabilities, such as having a mass notification system: “...the thought of creating an emergency alert system for the digital world” (The Sydney Morning Herald, 2008, p. 2). The “wall” becomes a way to notify of on-going events. Secondly, social media can be used in a systematic mode as an emergency management tool such as using the platform for community outreach on public safety-related topics or to conduct emergency communications and issue warnings, using social media to receive victim requests for assistance when they could not use a phone – recovery purposes – monitoring user activities to establish situational awareness, communicate upcoming training events and exercises, estimate damages through photos and “geotag,” assist people, among others.

In addition, social media could be used to alert emergency managers and officials to certain situations by monitoring the flow of information from different sources during an event. This could help establish “situational awareness” (Wukich, 2015). Finally, the presence of official social media channels can help public administration to counteract the information overload produced during emergencies and prevent or contrast faulty information (Acar & Muraki, 2011; Mendoza, Poblete, & Castillo, 2010).

The role social media can play during a disaster depends on many factors that are not the subject of this study. However, some clarifications are necessary. Regarding the time duration of the exogenous shock that can occur, we can distinguish (Sornette, 2002):
• one-shot (e.g., earthquake, flood, railway accident, terrorist attack) shocks;
• continuous (e.g., a war or a pandemic) shocks.

Even if the careful analysis of the data disclosed by the World Health Organization (WHO) since January 21, 2020 processed with mathematical algorithms had given clear signals of a wide and rapid spread of COVID-19, it appears clear the difficulty in the complete control of the pandemic, due also to the little knowledge on how to handle it. For these reasons, according to Kaplan and Mikes (2012), the COVID-19 pandemic can be classified as an exogenous and continuous shock and its management must focus on the mitigation of its inescapable impact.

When a shock is continuous, the overall picture is difficult to describe as it is constantly evolving in the negative sense. In the case of the pandemic, some episodes are first felt, which then spread to the mass uncontrollably: contagion first rises in a large territory of a country, then affects a large portion of the world population and finally decreases. Several stages can be identified accordingly (Mitroff, Shrivastava, & Udwadia, 1987; Tokakisa, Polychronioua, & Boustras, 2019). Depending on the more or less episodic duration of the exogenous shock and the phase we observe, different communication methods and styles need to be adopted.

Talking about “communication” in a broad sense without, therefore, considering the nature of the exogenous shock would, therefore, be very reductive.

Our research is based on the main hypothesis that – from the authors’ point of view – communication changes during the phases of the crisis: as we consider the crisis in procedural logic, communication must follow.

If the crisis can be divided into a sequence of phases, communication can be aligned in terms of quantity/frequency of posts, object of the content of the communication, impact on citizen’s behaviour and communication style to get to the fact that the public administration learns to interact/engage with citizens and use social media more to be less self-referential.

Our proposition is to understand how FB communication changes during the phases of the crisis and to test the proposition presented in Par. 3.

4 | COVID-19 PANDEMIC: THE SPREAD PHASES IN ITALY

The Covid-19 pandemic first manifested as a cluster of mysterious, suspected pneumonia cases in Wuhan, the capital city of Hubei province, China. A Wuhan hospital notified the situation to the local centre for disease control and prevention (CDC) and health commissions on December 27, 2019. Then, after an escalation of cases, the WHO declared the outbreak a “Public Health Emergency of International Concern” (PHEIC) on January 31, 2020. After the spreading of the infection in other countries, especially South Korea, Iran and Italy, on March 11, the COVID-19 pandemic was declared.

Italy represents a case of interest as it is one of the first countries to register one of the highest numbers of infected in the world and it is also among the first to respond positively to the pandemic. The declaration of the state of emergency in Italy has been issued on January 31 while the first positive case of COVID 19 was diagnosed on February 21, 2020. On February 23, the Government issued a decree law aimed at preventing and contrasting the further transmission of the virus and in the following 27 days the virus spread with a sharp increase mainly in Lombardy Region and in the rest of the North of Italy. On February 24, at the beginning of the epidemic, the new cases in 24 hr were 221. In almost 1 month, until March 21, 2020, the number of cases reached the peak with a very steep curve. The number of cases increased from 221 to 6,557 in 24 hr. This period represents the fast-growing part of the emergency period. Then, from March 21 to May 3, in 43 days, the curve decreases with a slower pace. On May 3, daily increase of case was +1,389 (Figure 1) and this date represented the end of the lockdown period too. On May 4, the second phase started with the opening of activities and with the possibility for citizens to move freely even if always according to security conditions. From May 18, the number of infected in 24 hr continued to decline and the Government continued to reopen activities and freedoms to move between regions and in the Schengen countries.

Figures 1 and 2 show the main trends of the pandemic in Italy. Overall, more than 240 thousand infections and more than 34 thousand deaths were recorded at the end of June 2020.

Following paragraph illustrates the methodology of the analysis and hypothesis to be tested.

5 | HYPOTHESIS AND METHODOLOGY

The research has been carried out on local authorities as they represent the level of government closest to the people having in charge the responsibility to provide the basic information required by its citizens, spread knowledge and awareness and promote participation.

Starting from the analysis of the data published by the Civil Protection and from the sites of regional institutions, relating to the provinces of Lombardy, Emilia-Romagna, Piedmont and Val d’Aosta, we selected the provinces with the highest cumulative mortality rate for the first 55 days (i.e., until April 17) of the pandemic. These are Piacenza (258.5 dead × 100,000 inhabitants), followed by Bergamo (255.9), Lodi (247.8) and Cremona (247.4). Among the provinces of Northern Italy with more than 100 deaths per 100,000 inhabitants are found in Brescia (170.9), Pavia (150.9), Parma (132.6), Mantova (114.1), Alessandria (108), Lecco (105) and Sondrio (100.8).

Our research took into consideration the official Facebook pages of the 11 capital cities of the above-mentioned provinces. Later, three of them (Mantova, Piacenza and Sondrio) have been excluded because, after a first observation, these municipalities did not set up an institutional Facebook page (apart from specific sectoral pages) or because data were not available during elaborations.

Our proposition is to understand how FB communication changes in the different phases of the crisis and to test the proposition presented in Par. 3.
In order to talk about the crisis, an antecedent and a consequent must be present. In detail, three phases have been declared by government decrees and seven sub-phases have been identified by analysing the pandemic development and the above-mentioned decrees:

- **Phase 0:**
  - Pre-alert [January 31–February 20]: in some geographically distant countries the virus is spreading. Some information is beginning to spread to which little or modest importance is given;

- **Phase 1:**
  - Alert [February 21–February 23]: the virus is fast-approaching, its spread is rapid and the infection occurs very easily;

- **Phase 2:**
  - Slope down [May 4–May 17]: the infections slow down and are reduced
  - Recovery [May 18–June 3]: the situation is returning to normal

- **Phase 1:**
  - Crisis peak [February 24–March 21]: given the ease of transmission, the infections spread extremely quickly. The situation gets out of control and seems very difficult to be managed and dominated. Considerable efforts are made in terms of coordination. The number of infections is very high and reaches its maximum expression;

- **Phase 2:**
  - Reaching the plateau [March 22–May 3]: the number of infected people stabilizes and seems unlikely to grow. Organizational and coordination efforts are guaranteeing the desired results;
The period considered goes from January 31 to June 3, from pre-alert to recovery.

Table 2 shows some general information in terms of number of inhabitants, number of fans and number of posts published in the period January 31–June 3 of the selected cities.

To measure social communication changes and the way public administration learns to interact/engage with citizens and use social media is not an easy task because adequate metrics for government impact in social media are lacking (Mergel, 2012). According to Fichter and Wisniewski (2008), both quantitative measures (such as site traffic and number of comments) and qualitative measures (such as the “tone” of the conversation and the degree to which readers and commenters are “engaged”) are equally important.

We developed a coding scheme based on the following hypothesis to be tested.

\[ H: \text{Communication changes in the phases of the crisis: as we consider the crisis in procedural logic, communication must follow.} \]

From here, four sub-hypotheses arise:

\[ \text{H1. Quantity and frequency of posts follows a growing flow in the early stages and then stabilizes to decrease;} \]

Key Indicators: quantity of posts; posts by daytime.

\[ \text{H2. Object of the content of the communication changes from informative and prescriptive to engaging.} \]

A manual review was realized to describe qualitative content.

\[ \text{H3. The impact on citizens’ behavior from modest it becomes growing to become high in the peak of the crisis and therefore consolidate in the slope down and recovery phases;} \]

Key Indicators: percentage growth of fans; engagement (reactions to the posts).

\[ \text{H4. Communication style is more empathetic in phase1 than other phases} \]

Key Indicators: multimedia features (picture, link or video posts, hashtags, storytelling).

In Table 3, the hypotheses are summarized together with Key Indicators.

Data were analysed via Fanpage Karma since it simplifies the retrieval of data (Araujo, 2018; Sánchez-Amboage, Ludeña-Reyes, & Viñán-Meréci, 2017). Fanpage Karma is a web tool that allows to measure and compare the performance of social networks pages.

The coding unit was a single post. Coding and analysis activities took place in July 2020.

6 | CASES ANALYSIS

\[ \text{H1. Quantity of posts and frequency follows a growing flow in the early stages and then stabilizes to decrease.} \]

As visible from Figure 3, the frequency and quantity of social communication by the municipalities do not follow the peaks identified in Par. 5 and summarized in Table 3.

This is even more evident if we extend the field of observation. As shown in Figure 4, it is not possible to confirm H1 as frequency and quantity of posts do not show a clear trend or increase compared to previous periods.

However, some specification must be made. After the crisis peak, the number of posts during pandemic phases decreases to lower levels than the pre-crisis ones, with the exception of three of the smaller municipalities (Lecco, Alessandria and Lodi) whose trend in terms of frequency and quantity of posts increases until the plateau of infections is reached.

Figure 5 shows the frequency of posts and reactions during the daytime (for simplicity, only the most significant graphs are shown). The bigger the dot, the more was posted. The greener the dot, the more reactions they got.

**TABLE 2** Number of inhabitants, number of fans and number of posts published in the period January 31–June 3 of the selected cities

| FB page | Inhabitants\(^a\) | Fans till June \(^3\) | % fans/Inhabitants | Number of posts in the period January 31–June \(^3\) |
|---------|-----------------|-----------------|-----------------|-------------------|
| Brescia | 199,579         | 37,035          | 18.6            | 578               |
| Bergamo | 121,781         | 31,974          | 26.3            | 442               |
| Parma   | 198,292         | 25,121          | 12.7            | 371               |
| Alessandria | 93,634     | 16,754          | 17.9            | 252               |
| Pavia   | 73,334          | 13,661          | 18.6            | 367               |
| Lodi    | 46,050          | 10,437          | 22.7            | 300               |
| Cremona | 72,672          | 4,783           | 6.6             | 265               |
| Lecco   | 48,173          | 2,509           | 5.2             | 178               |

\(^{a}\)Source: ISTAT [National Institute of Statistics]. Data as of December 31, 2019.

\(^{b}\)Source: Fanpage Karma.
**TABLE 3  Hypothesis and key indicators**

| H1: Quantity and frequency of posts follows a growing flow in the early stages and then stabilizes to decrease | Pre-alert | Alert | Crisis peak | Reaching the plateau | Slope down | Recovery |
|-----------------------------------------------------|----------|-------|-------------|----------------------|------------|----------|
| Scarce                                              | Increasing | Maximum and continuous | Stable and consolidated | High but tends to reduce | Regular and constant |

Key Indicators: quantity of posts; posts by daytime

| H2: Object of the content of the communication changes from informative and prescriptive to engaging | Pre-alert | Alert | Crisis peak | Reaching the plateau | Slope down | Recovery |
|-------------------------------------------------------------------------------------------------|----------|-------|-------------|----------------------|------------|----------|
| Informative Prescriptive, educational Prescriptive, Educational, empowering, fake news contrast | Empowering | Informative, search for proposals | Informative, search for proposals |

A manual review was realized to describe qualitative content.

| H3: The impact on citizens’ behaviour from modest it becomes growing to become high in the peak of the crisis and therefore consolidate in the slope down and recovery phases | Pre-alert | Alert | Crisis peak | Reaching the plateau | Slope down | Recovery |
|-----------------------------------------------------------------------------------------------------------------|----------|-------|-------------|----------------------|------------|----------|
| Limited Increasing/high Very high Stable/consolidated Stable/consolidated Stable/consolidated |

Key Indicators: percentage growth of fans; engagement (reactions to the posts)

| H4: Communication style is more empathetic in phase1 than other phases | Key Indicators: multimedia features (pictures, link or video posts, hashtags, storytelling) |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------|

Source: Authors.
As general comment about the whole pandemic period, we can observe that public administration published posts mainly during working hours of the day; however, it does not fail to publish posts also on the weekend, especially in the alert sub-phase. Citizens react to posts mostly outside working hours and during the weekends, with exception during the crisis peak phase, when, probably, both worries and work stoppages make them more active throughout the week. In the peak period, we can observe a higher frequency of reactions mainly concentrated in the last days of the week.

H2. Object of the content of the communication changes from informative and prescriptive to engaging.

If we consider the content of messages, it is possible to identify some common features. In particular, the most intuitive is that communication during the most critical phase of the pandemic has been focused on information and advices about the ways to preserve citizens’ health (e.g., through social distancing, avoiding panic-buying behaviours) and the degree of virus spread in each town. Social media are often used by public authorities to communicate the latest news and regulatory updates.

Where there has been misinformation and fear on social media on one side, there has also been an abundance of vital, lifesaving information, connection with others and global unity on the other side. The ability to share experiences not only with family and friends but also with public...
officers and local government representatives could help to combat both literal and emotional isolation while also reminding citizens that there are not alone. COVID-19 has put many people in challenging situations, especially the elderly, those with disabilities, working parents who are losing childcare and those who are losing their jobs. In this context, municipalities, along with other entities of the third sector or charity associations, have used social communication to support organizations and individuals by sharing fundraisers with large audiences on social media. Their call has been directed to collect not only money, but also other kinds of resources, such as people’s time and participation to recovery and assistance to the more disadvantaged citizens, in any way they can, such as picking up groceries for individuals who are unable to leave home or sharing information on how to support local businesses who are struggling to pay their employees.

The content of messages during the different phases changed to adapt to the new situation in each phase. During the alert and the crisis peak, sub-phases messages concerned the diffusion of information on infection, norms on closure of activities like schools and municipal markets, answers to citizens’ questions on the virus, information on the hygienic measures and the most suitable behaviours to protect themselves from the virus. Other messages concerned donations, the search for doctors, nurses and volunteers. There was a constant information on Central Government decrees and an exhortation to maintain the most helpful behaviours like to stay home and to donate for public associations like the Red Cross or the Civil Protection to help people in great difficulties, for example, to buy medicines or food during the lockdown. Municipalities urged citizens to show solidarity to help facing the emergency.

After the peak was reached and during the slope down, FB messages started to announce the reopening of activities with suggestions on daily life as far as culture, sports and public services were concerned. From informative and prescriptive communication during phase 1, during the slope down and recovery sub-phases, communication...
returns to be informative. Citizen engagement and the search for proposals are still a missed challenge for social communication in the analysed cases.

H2 is therefore not confirmed.

H3. The impact on citizens’ behaviour from modest it becomes growing to become high in the peak of the crisis and therefore consolidate in the slope down and recovery phases.

Figure 6 clearly shows the extraordinary rising in the number of fans during the phases of the pandemic. The highest percentage increase in fans was recorded in the alert period (February 21–February 23) with a peak of +8% of fans in 2 days (Cremona), when the lockdown has been officially announced by the Italian Government. The number of fans could be considered as an indicator of the municipalities’ communication intensity and of the responsiveness of the citizens. Although the number of fans has increased in all the municipalities considered, in the cases of Lecco, Lodi, Brescia, Cremona and Pavia the increase has exceeded +30% of fans (Lecco registers the highest increase with +36%) since January 31 to the end of the observed period.

If we analyse the website and Facebook profile of these municipalities, it is possible to observe an intense communication activity,
aimed both to inform citizens of the sanitary conditions in the city, and to reassure them about services (and changes in services) provided by the municipality. The increased number of citizens interested in remaining connected and up-to-date with these institutions reveals that public administration is one of the actors of communication considered affordable by citizens. From the perspective of user/consumer behaviour, it is interesting to observe that the rise in the number of fans is continuous in the period analysed for all municipalities and this confirms the importance of the digital communication channels in bringing citizens closer to the public administration. The sharp and sudden rise seems to confirm that users were already digital consumer, not yet used to virtually interact with the public administration (before the pandemic, the number of fans of all the municipalities investigated was low), but immediately reactive if necessary, as in a context of emergency.

Interesting information appears when looking at the engagement of fans during the pandemic. The indicator in Figure 7 expresses the average number of interactions, which are reactions (like, love, haha, thankful, wow, sad, angry, etc.) comments and shares, per day on posts of a day in relation to the number of fans of the same day in the selected period. As we can see from the graph, it tends to reflect the official announcements on the lockdown measures in consequences of the pandemic trend. In particular, a rise in the number of reactions happens when restrictive measures are increased as a result of worsening public health data. The continuity of communications seems to confirm the opportunity of social media in informing citizens on the municipality activities and affairs relating to city on a daily basis.

Citizens’ reactions from modest growing to become high in the peak of the crisis and, therefore, they are back to decrease when the plateau is reached and during the slope down and the recovery sub-phases. At the end of the crisis, the public administration can continue its communication activity by having a greater number of fans, but the reactions lose interest in the published posts.

H3 is, therefore, partially confirmed, for phases 0 and 1 but not for phase 2.

H4. Communication style is more empathetic in phase 1 than other phases.

We consider an empathetic communication as the way to gain the citizens’ attention trying to engage them through stories and a narrative style following the storytelling way of communicating. What we observe is that this method had not been adopted by the municipalities of our panel during the COVID-19 period in the different pandemic phases we considered. The style they use is simple, clear, direct and continual. During phase 1 posts were characterized by a short text, a link, for example, to Prime Minister’s decrees, images and sometimes videos. The content is descriptive and an informative style is used. The Municipality of Pavia uses an infographic in each post with a stylized image that represents a sort of brand that makes the municipality recognizable in Facebook. However, the urgency of posts during the first phase induced Pavia to avoid the use of the above-mentioned infographic. Hashtags are another aspect of posts communication style. Our analysis of the hashtags reveals that during the first phase, from February 21 to March 21, municipalities used very generic hashtags. The most diffused hashtags in that period were the name of the city or #coronavirus and #Covid19. Other hashtags were #stopittogether or #HelpBrescia.

Municipalities did not use visual storytelling even in the later stages. They still are in the first stage of the innovation process, moving from the informative aim to the objective of engaging the citizens in a relation that can last over time (Linders, 2012).

The municipality’s social page shows a communicative style different from the municipality’s official web site. It is more direct, informal, dynamic and with a language near to everyday way of speaking. In this way, local governments are nearer to citizens, which can find useful information in the FB page, especially when, like during the pandemic, many “fake” news are spreading on the web.

The communication style of the municipalities of our analysis during the COVID-19 period, as shown in Figure 8, is mainly based on pictures and videos. This makes the communication easy, direct and dynamic. This need is confirmed also by the fact that shorter posts are the ones that get the most reactions.

What is missing in the period we analysed is a communication strategy that moves the social pages content towards storytelling and a narrative style to create a link among posts that can grab the citizens’ attention and stimulate their engagement. H4 is not confirmed.

7 | DISCUSSIONS AND CONCLUSION

The analysis shows that local governments used social communication during the pandemic without having full knowledge of its potential.

Despite the emergency, we observed that governments’ communication did not show meaningful changes for published posts in terms of quantity and frequency. Organizational limits and capacity could be an explanation. Posts have mainly been published during working hours, sometimes in the weekend and rarely in the free time; however, indicating a willingness of public officials to dedicate a part of their free time to institutional communication, given the seriousness of the situation.

The path of fans growing seems to confirm the importance of digital communication channels in bringing citizens closer to the public administration. Users were already digital consumer, not yet used to virtually interact with the public administration (before pandemic the number of fans of all the municipalities investigated was lower), but immediately reactive if necessary, as in the context of emergency.

Municipalities’ communication changed in messages’ contents: in times of crisis, the social page is richer in content and less formal than in ordinary times, and this can be interpreted as an expression of a different way of communicating. Contents were adapted to the different contexts and phases as well the tone of the communication turned from prescriptive – during the high emergency – to informative as soon as the crisis became less severe.

On the contrary, the communication style has not changed along the different phases: posts were generally composed of a short text
and numerous links with a great use of images and videos to support. This makes communication dynamic and easy to use and has a bigger impact on citizens’ attention acting as stimulus for posts reaction and comment. All this acts as a driving force for the citizen’s engagement in the short term.

Governments’ experience in the use of social networks during the emergency period can become helpful for their future choices on how to maintain themselves in constant contact with their citizens. As Bonsón, Royo, and Ratkai (2017) have found in their study, at the same, we found that an increase in the number of government posts does not necessarily produce higher levels of citizen engagement. Nonetheless, the post-crisis communication can occur with a higher user potential to exploit. For this purpose, citizens must be encouraged to comment on government posts to social networks and perceive that they are an active part in the communication and decisional process.

The cases analysed have not showed the adoption of a structured communication strategy as posts were written accordingly to the day-by-day news and adapted to the situation, changing very quickly from one phase to the other. Social communication is dictated by poorly predefined needs due to the uncertainty of the pandemic propagation. On the contrary, communication with the citizens would need to be designed and built as a strategic objective to include in local governments’ development plans (Mergel & Bretschneider, 2013).

The analysis revealed that local governments have improved their degree of “interaction” with citizens, shifting from traditional and one-way communication tools, to interactive digital tools such as social media pages, but they are still in the first stage of the innovation process, moving from the informative to the engaging way of communicating in a lasting relationship over time. About this, the emergency can be considered as a learning period either for local governments and citizens as far as their mutual involvement is concerned. In this sense, the emergency period experienced could represent an opportunity to move towards more sophisticated/complex e-government model. The level reached by cases studied is of simple interaction, while the aim should be to reach the higher levels of active participation. In Gwanhoo and Young’s (2012) model, the desirable stage is defined as “open collaboration” where digitizing the existing governmental communication is not enough, but it is necessary to integrate vertical (i.e., governments in different levels) and horizontal (i.e., different departments or governments in different locations) sources of public information along with data produced by non-government entities. In this way, public and private sectors become co-creators of knowledge, finally defining a learning community/city. This conclusion represents an interesting basis for new future investigations concerning the most suitable model to enhance citizens’ participation and to foster social innovation through government communication.

AUTHOR CONTRIBUTIONS
This paper is the result of the joint work of the authors.

ORCID
Elisa Mori  https://orcid.org/0000-0002-0764-893X
Barbara Barabaschi  https://orcid.org/0000-0003-4254-8421

Franca Cantoni  https://orcid.org/0000-0001-6823-9518
Roberta Virtuani  https://orcid.org/0000-0003-0933-6427

ENDNOTES
1 The text is available in the web site https://datareportal.com/reports/digital-2020-global-digital-overview (consulted on May 2020).
2 The American Red Cross, Web Users Increasingly Rely on Social Media to Seek Help in a Disaster, Press Release, Washington, DC, August 9, 2009, http://www.redcross.org portal/site/en menuitem.94ae335470e233f6cf911df43181aa0/?vgnextoid=6bb5a96d0a94a210VgnVCMD1000808f070acRCDR.
3 The statistical survey by the Civil Protection starts on February 24, 2020.

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**AUTHOR BIOGRAPHIES**

Elisa Mori is a temporary research fellow at Università Cattolica del Sacro Cuore. She earned her Ph. D. in Labor Relations and Employment Law from Università di Modena e Reggio Emilia in 2013. She worked as a researcher and contract professor at the Università di Modena e Reggio Emilia. She conducts research on the following topics: public management and sustainability of public administration, public sector accounting and performance
measurement systems. She also collaborated with INVALSI (National institute for evaluation in education), municipalities and other Italian public entities.

**Barbara Barabaschi**, Ph.D. in sociology and social research methods at the Catholic University of Milan. Some of her Ph.D. research studies on innovation in public administration were carried out at OECD (LEED Programme) in Paris and at University Lion III. Currently, she is an assistant Professor, teaching “Economic Sociology” and “Sociology of Consumer Behaviour” at the Catholic University in Piacenza. She is a member of the Public Administration Strategic Committee of the Catholic University in Milan. Her research interests concern: activation policies, especially with reference to women and older workers; public administration role in local development, stakeholder management and communication in democratic participatory processes.

**Franca Cantoni** is Associate Professor in Business Organization. Following her degree in Economics from *Università Cattolica del Sacro Cuore*, she obtained her PhD in Business Information Systems from LUISS Guido Carli. The main research topics concern the micro and macro organizational impacts of change, outsourcing and organizational boundary choices. She is the author of several volumes, national and international publications; she has been a visiting researcher at the Department of Information Systems of the Siegen Universität and the Institut für Informatik of the Copenhagen Business School.

**Roberta Virtuani** is a lecturer and senior research fellow at the Faculty of Economics and Law at the *Università Cattolica del Sacro Cuore* in Piacenza. She teaches the course on “Personal Development.” Her main interest areas are Organization Theory and Human Resources Management with a special focus on the development of soft and digital skills. She has been a visiting scholar at the University of Amsterdam. She published on the topic of Outsourcing of Information Systems and of Individual Creativity Management to foster the innovation process.

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