

# Chapter 80

## Communicating Natural Calamity: The Sentiment Analysis of Post Rigopiano's Accident

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### **ABSTRACT**

*This chapter aims at understanding the dynamics that led to the exchange and value co-creation/co-production in the interaction between P.A. and citizens during natural calamities. In addition, it proposes a horizontal communication model in which both actors cooperate to respond to crisis, a semantic and semiotic space on the net able to satisfy their information needs. When natural disasters occur, citizens' primary need is to reach as much information as possible about the status of loved ones possibly involved in the accident, road traffic, how to give an effective contribution to the cause without hindering, etc. On the other hand, P.A. and rescuers need to know as much information as possible about the reports, on the site of the disaster so as to intervene promptly to help the population in danger. Therefore, P.A. and citizens are called upon to cooperate to guarantee crisis containment, crisis management, and also future crisis prevention.*

### **INTRODUCTION**

When natural disasters occur, citizens primary need is to gather as much information as possible (relatives involved in the accident, road traffic, how to give an effective contribution to the cause without hindering et al). On the other hand, Public Administration and rescuers need to know as much information as possible about the reports, on the site of the disaster to intervene promptly to help the population in danger.

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## ***Communicating Natural Calamity***

In this scenario, all the actors involved in this dynamic interaction tends to create a system in which value is seen as a systemic process generated/produced as a consequence of that dynamical relation. Accordingly, appeared particularly relevant to the author to make a distinction between the concept of generating and co-producing value. By addressing the most relevant literature in this field, they found both interesting correlation and even consistent differences. As a matter of fact, the review pointed out that authors such Whitaker (1980), Levine and Fisher (1984) associate the term ‘co-production’ to citizens active participation in improving public services. On the contrary, ‘*co-creation*’ – according to Gebauer H. (2010) is due to the involvement of customers, and in this case the producer is asked to ‘*create value*’. Therefore, co-production is an active process of citizens’ involvement in improving - together with public administration - public services to promote a better experience of their daily life. Value co-creation, instead, is a natural propensity to interact to achieve needs, as Vargo and Lusch (2008) suggest: the customer is ‘always a co-creator of value’.

Co-creation is a spontaneous process which benefits the players involved in the dynamic interaction that occur when P.A. and citizens went to communicate. Public administration needs are to manage logistically and communicatively the phenomenon to avoid daily life challenges (live time traffic information, hospital structures available etc.), to better coordinate volunteers and provide as much as possible effective services for citizens, to favor a long-lasting trust. Citizens, on the other hand, when facing a catastrophe, must be aware of the risks they are going through, specific information on facilities, unavailable services, and so long. They both have to cooperate to achieve their survival by exchanging information with each other, so to improve all the processes available in those situations.

It follows that the active players are called to cooperate to establish a horizontal communication model in which they can talk to each other to satisfy their information needs.

Social media, nowadays, allow the community to be active part of the current crisis communication response. As a matter of fact, the social network Twitter was mostly used to quickly share information and updates during the 2007 and 2008 California wildfires, 2008 Mumbai massacre, 2009 crash of US Airways Flight 1549, 2010 Haiti earthquake and so long (Veil S.R. et al., 2011).

The effort that this work wants to produce and the contribution that it aims to give to literature and to the academic community is, therefore, to connect the theoretical framework of value co-creation (once its distance from the concept of co-production of value has been marked) to the constant dialogue between public administration and citizens during natural crisis, analyzing it through the use of Sentiment Analysis on Twitter. Authors will use Twitter because tool to set the communication model. As a matter of fact, thanks to its immediacy and syntax, it represents the most suitable tool to build and strengthen the link between citizens and relief efforts.

The chosen case study – that of post-Rigopiano’s accident – it is important to verify authors assumption:

- To what extent sentiment analysis allows both practitioners and scholars to understand citizens/P.A. interaction?

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