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## Article

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RESEARCH

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# Customer involvement through social media: the cases of some telecommunication firms

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## Abstract

This study highlights the contribution of the role of social media in supporting customer involvement for service innovation.

It is commonplace that many service firms and processes have characteristics that differ from manufacturing. Analyzing the literature, we note that there are many contributions on innovation in the manufacturing industry while few researches are concentrated on the service industry. Hence, we chose to deepen the analysis on marketing innovation, with specific reference to the involvement of the customer, through social media, in service firms.

One of the key aspects of many service activities is the high involvement of the client/customer/user in the production of the final service. Without this coproduction process (i.e. interactivity of service production), the service would have often not been created. This customer involvement, together with the intangibility of many service products, leads service innovation to assume characteristics that are different from those learned by studies on manufacturing innovation. Service innovation is hard to capture in traditional categories like product or process innovation: the coproduction process and the interactions between the service provider and his client originate from so many touch points that it becomes difficult to identify what is the focus of innovation in service firms.

Hence, the focus is on the role of innovation in marketing activities in favoring the customer's involvement in the service creation process through web tools, stimulating a closer relationship between the firm and its customers.

The study develops into the following steps: we start from the objectives and the definition of the research question through the study of the literature; we try to find some assumptions that can be useful to analyze the selected case studies. Results help us to discuss the analysis and to get to some conclusions.

**Keywords:** Open innovation; User innovation; Interactive marketing; Telecommunication sector

## Background of the study and objectives

The aim of this paper is to investigate about the role of innovation in favoring the creation of a closer relationship between the firm and its customers by the use of the web and its tools, considering the importance they have gained in the latest years.

The choice of studying marketing innovation in service firms comes from the analysis of the literature, in which we found a huge number of contributions on innovation in the manufacturing industry while there are few researches that focus on the service industry. Furthermore, the studies converge on the technological dimension

and do not consider that ICT can be a tool for other forms of innovation that can be deepened, here including marketing innovation. Hence, the focus is on the role of innovation in marketing activities in favoring the customer's involvement in the service creation process, stimulating a closer relationship between the firm and its customers. Web can constitute a valid tool in supporting decision makers since it allows accelerating this process.

Theories on innovation have been developed within the huge field of contributions on innovation in the manufacturing industry (Audretsch 1995; Becker & Dietz 2004). Looking at the service industry, there is a lack of contributions on the role of innovation in enhancing firms' offer.

The first contribution on the innovation in the service industry refers to Barras (Barras 1986) and his "reverse product cycle", according to which innovation in services takes place through three main phases (Gallouj & Weinstein 1997):

1. the incremental process innovation, that aims at increasing the efficiency of delivery of existing services;
2. the improvement of service quality that comes from more radical process innovations;
3. the emergence of product innovations, which favor the creation of new services or the whole transformation of the existing ones.

This contribution sheds light on the technological dimension of innovation. Further studies on the theme open the boundaries of the research, identifying other fields of study on innovation in the service industry. Within them, the marketing and the relationship with the customers gain increasing attention from the scholars.

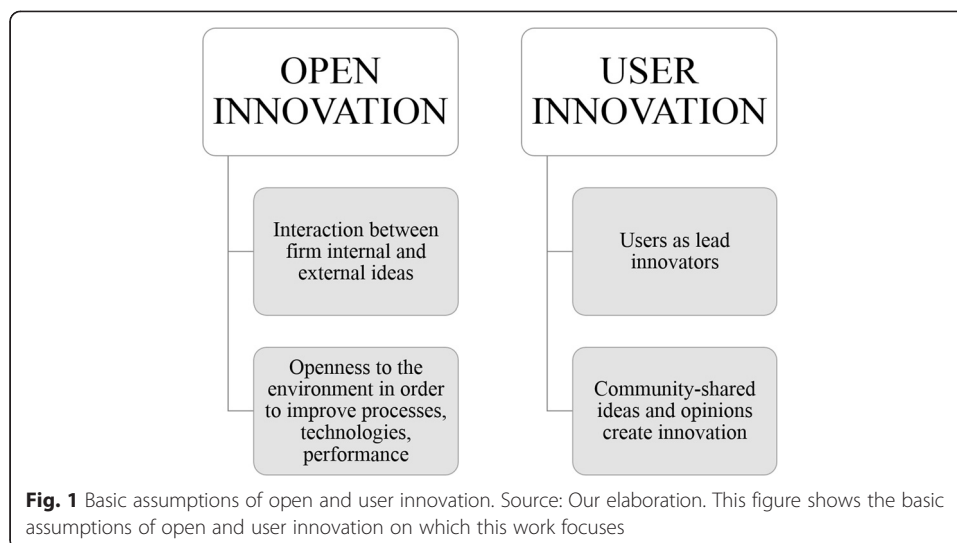
Our study is articulated as follows: in the first section, we analyze the literature on the issue, trying to find some assumptions that can be useful to gain evidences. In the second section, we explain the methods used to collect and analyze the data. Among the service firms, we focus on the telecommunication sector, investigating on firms' initiatives in identifying web tools that are able to favor customer involvement. The reason why we chose to examine firms operating in this sector is that it is high-tech based and with a strong competitive need of innovation. We then conduct our analysis trying to answer to the main research question, that is:

"How and to what extent are firms able to use web tools in order to favor the customer involvement in the service creation process?"

In the third section, we describe the results that help us to answer to the research question and to get to some conclusions, explained in the fourth section. The limits we encountered during the study are discussed at the end of the article.

### **Theoretical framework**

In order to study the innovation in the service industry and the role of this phenomenon in focusing the attention on the customer and his key role in producing new innovation, the theoretical framework is concentrated on two streams of research, that are the open and the user innovation (Fig. 1).



Open innovation emphasizes the role of the interactions between external and internal ideas in creating value (Chesbrough 2006), while user innovation focuses on the role of users (individuals as well as firms – (von Hippel 2005)) as leading innovators since their skills and competences have a key role in the creation of innovation. The competitive scenario imposes firms to change their business models, searching for new ideas that can come from the outside world and assuming new internal processes and technologies to improve their competitive position (Chesbrough 2007).

Hence, firms can develop and implement innovative ideas based on the opinions and comments the costumers express using the online communities.

A community can be defined as an organization that includes individuals with diverse backgrounds and preferences: their interaction generates fresh and complementary resources, knowledge and competencies (Bossink 2002; Oliver & Ebers 1998).

Therefore, customers can actively contribute to firms' innovation processes through the sharing of their opinions and ideas. The so-generated innovation can lead to a better performance and value creation, not just for the firms but for the customer as well, since the service/product is built with the purpose of answering to the needs of the demand (democratized innovation – (von Hippel 2005)).

In the telecommunication sector, van Cuilenburg and Slaa (van Cuilenburg & Slaa 1995) provide a definition of process and product innovation that is useful to reach the objectives of this study, stating that process innovation refers to the improvement of efficiency in production, while product innovation refers to the availability of new choices and opportunities of information and communication for customers (product differentiation).

According to the aim of this paper, we focus on the first aspect of innovation related to the service industry, investigating on how the customer can favor the creation and the development of new products becoming part of the co-creation process.

As previously said, in order to obtain sustained advantage for a company operating in the field of telecommunications, it is important to innovate constantly service offerings, possibly up to individual customers (Kristensson et al. 2008). In order to

achieve this goal, it is desirable to involve customers in the innovation process to make them co-creators of the value, which is provided to them in the immediate future.

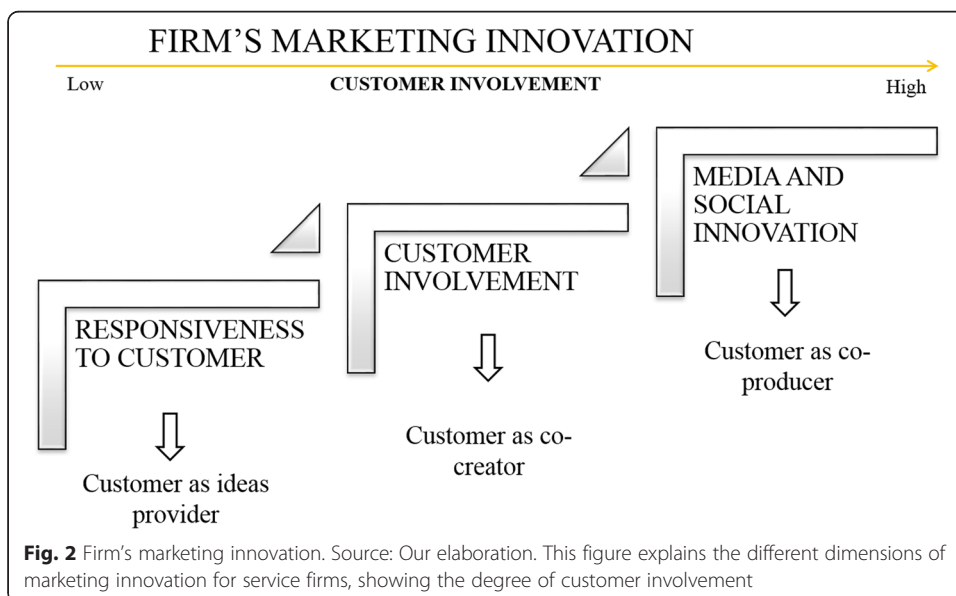
In order to study the degree of innovation, recalling some works on innovation in other sectors (Della Corte 2014), we propose some variables that explain the level of innovation a firm can show (Fig. 2).

**Responsiveness to consumer**

In the telecommunication industry, quality is a key factor in influencing customer satisfaction. In the field of marketing activities, firms can get a deep sense of customers’ needs and expectations in order to align their products/services quickly. The key success factor in the implementation of innovation of telecommunications services is information, with specific reference to the wishes and requirements of the customers as well as to the form of the competition offer. The Customer Relationship Management (CRM) activities include the understanding of customer satisfaction or dissatisfaction, matching their expectations and answering to their compliances, enhancing the service quality and the customer care (Akroush 2011). Innovation can be introduced both at the induced and at the organic level of the service creation process, with the purpose to reach a greater comprehension of customers’ needs and create a mutual value for firms and consumers (Vargo & Lusch 2004).

**Customer involvement**

At this second step, the customer is directly involved in the process of service creation: the firms enquire about their necessities and preferences and incite for innovative proposal and initiatives that can improve the offer. Customer involvement in the innovation process permits the creation of more customized services that encounter the target expectations, dedicated offers and activities, which enrich the demand satisfaction and retention.



**Media and social innovation**

The experiential component of the service fruition makes the media and social innovation tools crucial to guarantee the consumer’s enjoyment and contentment. This dimension represents the highest degree of engagement of customers.

At the first stage - the responsiveness one - firms establish their propositions of value and receive feedback after the consumption phase.

At the second stage - the customer involvement - there is the co-creation between the firm and its customers through the participation at the production phase.

At the third stage - the media and social innovation - since the customer share his ideas, needs and suggestions, he almost becomes a “producer” and makes the firm able to create highly customized products and services. This is the case of crowdsourcing activities, in which users create network and share knowledge through the web. Firms can use this collective intelligence opening an online contest, a sort of competition between freelancer working for a specific project, product launch, etc. Hence, firms looking for intellectual capital and professionalism on the web can use the networked knowledge to carry out important marketing strategies (Della Corte et al. 2013).

**Methods**

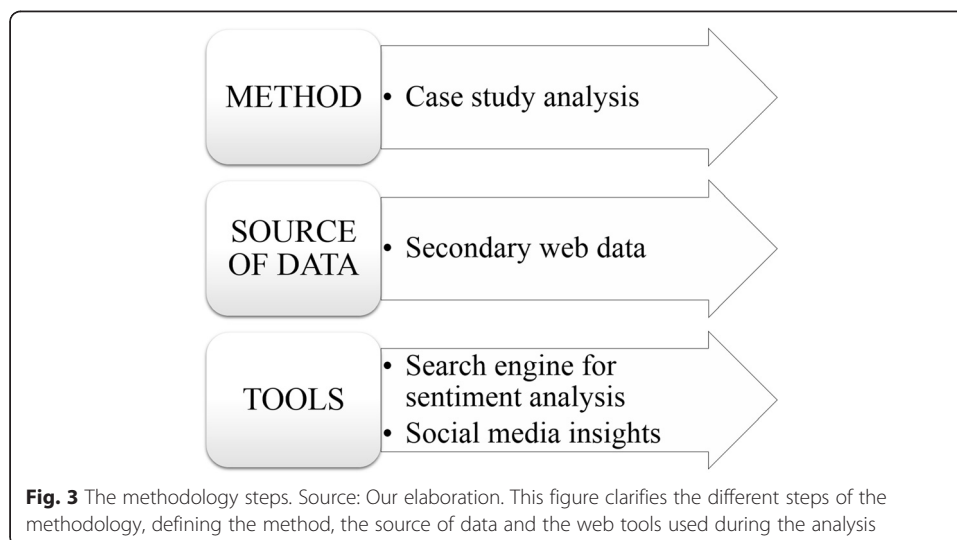
The methodology we implement in order to conduct our research is developed in the following steps as shown in the Fig. 3.

In order to answer all the research it is suggested to conduct case study research when the research questions are how and what (Yin 2009).

According to Aarikka-Stenroos and Sandberg (Aarikka-Stenroos & Sandberg 2012) two case studies “allow rich description and comparison” as well as to proceed with a cross-case comparisons ((Eisenhardt 1989), 2007).

The research methodology uses a comparative case study approach and discusses about the relative qualitative results.

Furthermore, the case study methodology is in line with the exploratory nature of this paper since it is able to capture contextual richness and complexity of research



**Fig. 3** The methodology steps. Source: Our elaboration. This figure clarifies the different steps of the methodology, defining the method, the source of data and the web tools used during the analysis

issues (Yin 2003) and to understand the social structures ((Bonoma 1985), p. 204; (Riege 2003; Yin 2003)).

The case study methodology is applied in order to describe the two undisputed leaders of the European telecommunication sector. Vodafone is one of the world's most powerful telecommunication brands: it operates in 21 countries worldwide and the company covers the 72 % European 4G population and its percentage of customers in Europe has grown from the 35 % in 2012 to 52 % in the first months of 2015 (Vodafone Annual 2015). As regards Telecom Italia Group, the company operates in 24 countries worldwide; its 4G European population have increased from 8,677 in the first months of 2014 to 10,480 in the first months of 2015 (Telecom Italia Group – 1Q'15 Results).

Collecting secondary web data from the analysis of the web and the social networks related to the two companies, we try to apply a “sentiment analysis” and to collect social media insights to support our research. In order to achieve this goal, we draw upon Social Mention, a search engine and analysis platform for social media. It works by searching content from comments and blogs to news, videos and events thereby allowing users to easily monitoring what people are talking about them, their company or their products and services.

This platform keeps track of more than 100 social media properties including Facebook, Twitter, YouTube, Google and Digg among others. Apart from its search and analysis service, it also features daily social media alerts and API.

Social Mention also uses several tools to come up with accurate results. These include sentiment that determines whether mentions are positive, negative or neutral, top users (who is talking about the subject the most), top hashtags (popular hashtags associated with your search query), post rank which measures social engagement and sources which indicate where blog sources come from.

## Results

The empirical analysis is conducted in order to understand: the level of marketing innovation achieved by the firm using web and social media tools. The initiatives of customer involvement through web tools; the level of participation of the customer in the innovation process.

In order to evaluate the responsiveness, it is necessary to monitor what people spontaneously say about the brand or about a specific service. The information are collected according to four parameters:

- *strength*, defined as the likelihood of a search term being mentioned;
- *sentiment*, that is the ratio of positive to negative mentions;
- *passion*, that means the likelihood that the people talking about a search term will do so frequently;
- *reach*, which is the depth of a search term's influence, in terms of the ration of unique authors referencing a brand to the number of mentions.

According to these four parameters, results allow companies to understand users' perceptions of the brand and to monitor their comments on the web, analyzing how much they talk about an item and in which terms (positive/negative) and what is the level of commitment to the brand, seeing the “passion” and the “reach” parameters

(Fig. 4). However, this tool has two limits: first, it is impossible to set a specific range of time to collect data; second, the method used to collect the presented information is not clear.

For what concerns customer involvement, we analyze social media activities, in order to understand firms’ efforts in involving users. Results show that both companies are active on the social networks but users comment their posts asking for problem solving (Fig. 5).

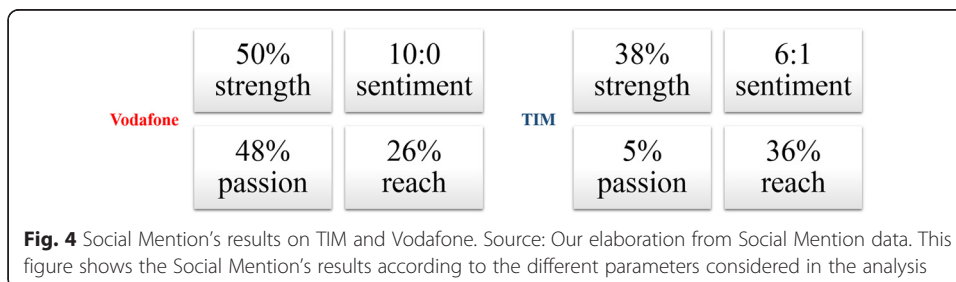
By looking at the different categories, it is clear that the promo posts reach a great number of users that interact with them, asking for more information. On the contrary, entertainment and engagement posts do not reach a great number of users, so firms might have to strengthen these forms of interaction in order to improve the interaction with the customers (Fig. 6). In the case of TIM, there is the “sport” category that catches the attention of lots of users, also thanks to the company’s investments as sponsor in the last Football World Cup.

For what concerns the media and social innovation, companies show a high degree of efforts in starting with high innovative activities of users’ involvement (Fig. 7). Thanks to a partnership with Crowdtech (a software house and web agency), Vodafone has developed a platform to collect customers’ views about a variety of topics. At a higher level of involvement, among the different R&D activities, Tim has developed in-house the “User experience lab”, that is a platform in which user is asked to provide ideas and design for new service or to test services they are being implemented.

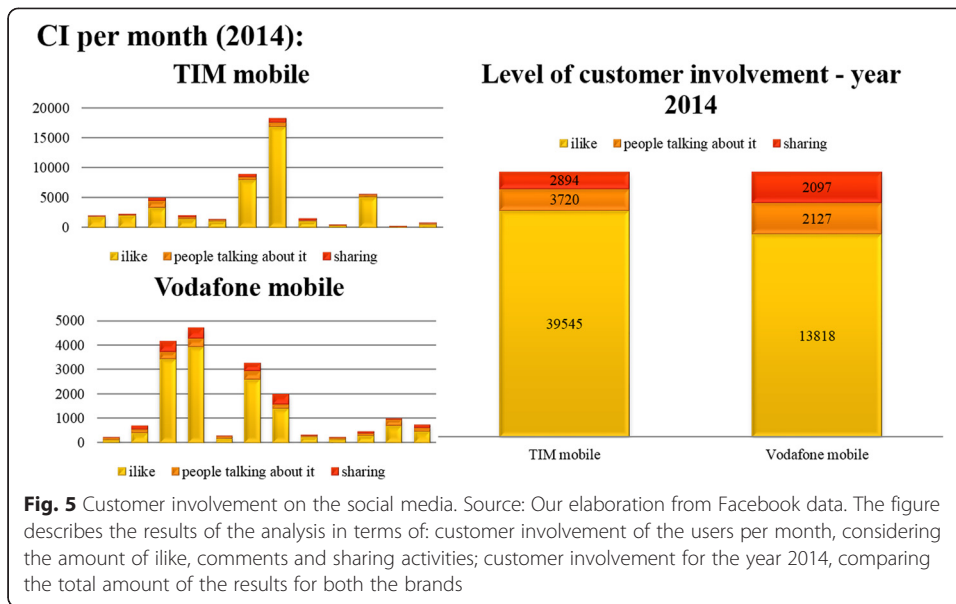
**Discussion**

Results show that TLC firms do not make a full use of the web tools to enhance their relationship with customers. For what concerns the responsiveness, the web tools represent very useful mean for firms to obtain information about customer satisfaction or evolution in their needs. Otherwise, they are used from users to express their complaints, so firms have to concentrate their efforts on managing customers’ requests.

Looking at the social activities of Telecom on Facebook, for example, it is clear that customers use the Telecom and Vodafone fan pages as customer care, asking for solutions and obtaining responses or expressing their complaints. Vodafone, in particular, received awards in the “Management of Year in a large company customer service”, “Team of the Year: Complaint Management” and the “Innovation in customer service” for Usage Control. It means that in order to improve the service quality and strategically focus their objectives, telecommunications companies can use these tools to investigate the degree of customers’ sensitivity and expectations, in order to improve responsiveness.



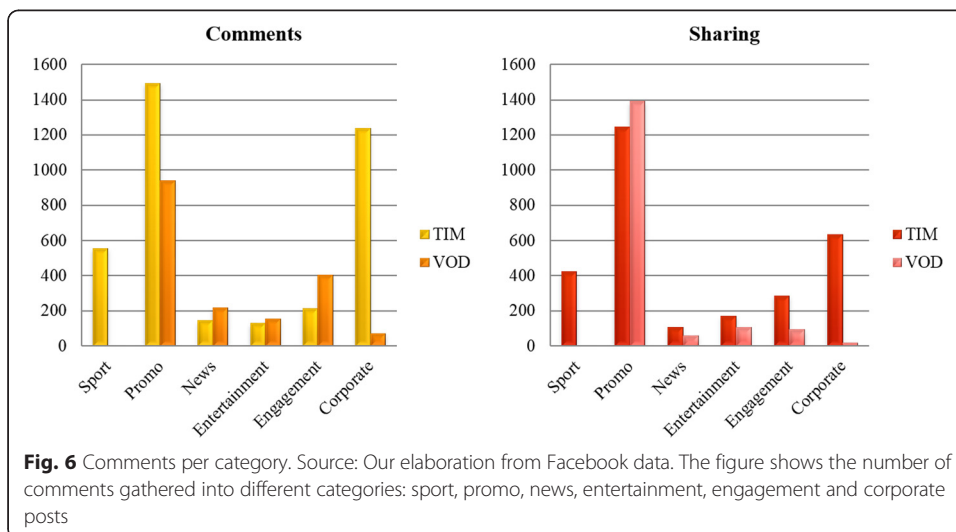




The companies build a constant relationship with the customers by creating entertainment activities on the social networks and in introducing innovative activities in their business models, even if at different levels of involvement.

As regards customer involvement in the innovation process, it requires commitment to the relationship from both customer and supplier. Users can be instructed to elaborate upon the provided tools in their own settings of use to meet their own needs. Telecommunication companies can use this method to create a “needs-based” and truly personalized approach in the service creation (Magnusson et al. 2003).

Telecom and Vodafone, in fact, build a constant relationship with the customers by creating entertainment activities on the social: funny questions and posts about customers’ everyday life create one to one relationships with the users and increase the brand attachment. Furthermore, these relationships help firms in better understanding customers’ behaviors and improving their business processes in a co-creation approach.



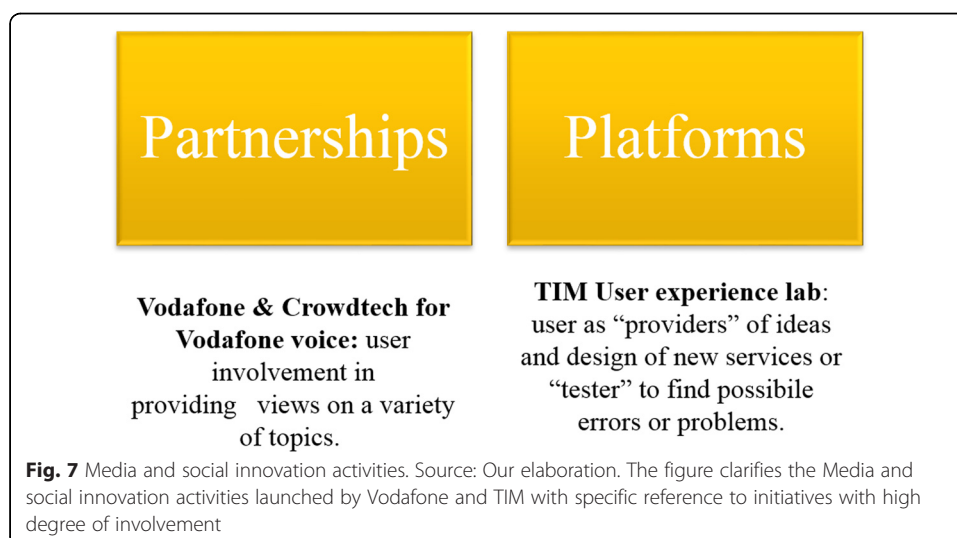
Looking at the media and social innovation, these two companies make strong efforts in introducing innovative activities in their business models (Fig. 7): Vodafone has activated a collaboration with Crowdttech in setting up a Panel Community for its customers, obtaining useful information about users’ perceptions and feelings on a variety of topics. At a higher level of involvement, among the different R&D activities, Tim has developed in-house the “User experience lab”, that is a platform in which user is asked to provide ideas and design for new service or to test services they are realizing. This process results in new, customer-centric products and services – under the motto “from customers for customers”.

### Conclusions and limits

To conclude, we find that the empirical analysis demonstrates that improving marketing innovation activities by the web tools can favor the customer’s involvement in the service creation process. The analyzed cases actually contemplate the use of web tools in their business models and recognize the importance of these tools in creating a closer and more valuable relationship with the customer and involving him in the service creation process.

The companies use web tools, such as social networks, blogs and online communication platforms to enhance the relationship with the customers through entertainment activities that see different levels of involvement of the customers.

For what concern the responsiveness, the web tools can allow obtaining information about customer satisfaction and their needs’ evolution. In some cases, customers use these tools to express their complaints, so cultural firms have to be able to manage them in order to avoid situations in which customers’ comments could negatively influence the brand reputation. As regards customer involvement, the firm-customer relationship helps firms better understanding customers’ behaviors and improving their service creation processes in a co-creation approach. In this way, cultural firms can also understand customers’ expectations before the service provision, thus creating fit offers able to determine customer satisfaction. Social and media innovation allows getting to



customer-centric services. Hence, they can really help creating high-personalized offers that positively affect customer satisfaction.

One of the main criticism is that the higher is the involvement of the customer in the service creation process, the higher will be the customer's expectations, but these findings can inspire telecommunication firms, as well as service firms, to improve their relationships with customers through the opportunities offered by the web.

Obviously, these reflections conduct to some limits. The research should be extended to other cases, in order to identify clear parameters able to compare firm-specific situations.

There are several tools for customer involvement that have not been contemplated in this study but that can favor the understanding of customer behaviors and their actual role in the service creation process. The application of the cited tools can generate higher expectations in the customer and consequently require more and more sophisticated tools.

#### Competing interests

The authors declare that they have no competing interests.

#### Authors' contributions

All authors made substantial contributions to the conception and design, acquisition and analysis of data and their interpretation. They all participated in drafting the article and revising it critically. In particular, VD wrote the paragraphs "Background of the studies and objectives" and "Theoretical framework"; AI and CD wrote the paragraphs "Methods" and "Results". VD, AI and CD wrote the paragraph "Discussion". VD wrote the paragraph "Conclusions and limits". All authors read and approved the final manuscript.

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