Innovation in the Food Industry: A Comparison Between New and Traditional Categories of Foodstuffs

Abstract

According to a recent Accenture survey, "Stepping off the crazy train" (2017), a total of 80% of companies still use an outdated approach to innovation, based on incremental tweaking (Holman et al., 2017). The empirical analysis showed that, in the Italian food sector, innovation adoption follows different patterns when product or process innovation is considered.

On the other hand, Capitanio et al. (2009) show how the probability of introducing product innovation is influenced by the quality of human capital, the geographical context and, to a lesser extent, the company age.

The more a sector is characterized by the presence of small or medium enterprises (SMEs), and so by a poor internal availability of qualified competences and capitals to invest, the more the innovation comes from outside. Indeed, SMEs are not normally able to generate innovations and are therefore willing to adopt them by borrowing from other sectors, which might present different characteristics. Consequently, these innovations often have to be readjusted, as they have been conceived for different scopes and applications at the moment of their development.

Thanks to the economic growth in Italy, companies such as Ferrero, Barilla and Parmalat have established themselves as major business centres in the development of innovation, and were capable of driving the entire context characterized by the presence of SMEs. Cooperation is particularly important for innovation in the food industry, which is traditionally considered a "low technology" sector (Trott and Simms, 2017).

Nowadays, the food industry is facing technical and economic changes of society, manufacture and food processing that affect the whole supply-chain. This fact forced companies to pay great attention in food products, in order to meet the consumer's demand for a healthier lifestyle. As a consequence, innovation in the food industry does not only appear as an opportunity, but also as a prerequisite to stand out from the competition, apply specific pricing policies, penetrate new markets and ensure sustainability of the food sector (Galanakis, 2016).

The innovation in the food industry and its drivers

In the last decade, several factors have led to a substantial change in the way companies approach innovation. The difficulties in blocking the knowledge and talent within the company, the market development of capital and increasing investments on knowledge-based businesses, and the emergence of production chains and horizontal relationships between several companies have led them to open outwards in order to create new paths of innovation. This different approach has been defined by Chesbrough "open innovation" understood as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of information respectively. Open innovation is a paradigm that assumes that companies can and should use external ideas as well as internal ideas, and internal and external paths to market as they look to advance their technology" (Chesbrough, 2006). Accordingly, the company's ability to build a network (with universities, spin-offs, start-ups, public and private institutions, external suppliers and consumers) becomes crucial to access a constant flow of information and skills that are able to meet the needs of the moment. This model assumes greater value in an economy increasingly dominated by the tertiary sector, where the possibility of creating new services can become an opportunity to differentiate and innovate companies in any sector (Chesbrough, 2011, Lombardi, 2017).

The key to the success of innovation lies in the ability of a company to combine the essential sources of internal and external knowledge (Kogut and Zander, 1992), which traditionally belong to different sectors (Bierly and Chakrabarti, 1996).

There are many drivers that can affect the innovative processes and Table 1 renders a review of the literature aimed at aggregating the most important drivers for companies operating in the food sector. Starting from the studies of Capitano et al. (2009), we try to represent an overview to identify the different factors that can affect innovation paths taking into account the internal and external factors that define the company's organizational model and its development strategies.

Table 3.1 analyses the drivers of innovation gradually, examining the criteria of 'type', 'factor', 'variable', 'determinants' and 'potential impact on innovation'. In the 'type' category, innovation drivers are identified, differentiating between internal and external to the company. The category 'factor' instead, distinguishes the drivers that characterize the company in relation to its intrinsic or extrinsic elements such as: size, corporate legal form, age, financial capacity and internal human capital, while for the external aspects we have focused on the presence of external links, whether they be due to exports or local networks. The various factors have been broken up into variables capable of differentiating the characteristics of the factors themselves, while the determinants assemble the different characteristics of each variable of the company.

In order to better understand the drivers, it is important to thoroughly analyse the determinants. Regarding the variable 'dimension', the large one corresponds to a complex organization, with a strong market power and a conservative nature. Small and medium-sized enterprises, on the other hand, are determined by flexibility, low-cost agencies and high potential for innovation incentives. As for the corporate legal form, Investor-Owned companies are closely linked to managerial power and a hierarchical structure, while Cooperatives are structured according to bureaucratic decisions, common cultures and partnership opportunities. With reference to the age, start-ups are 'open minded' companies, dynamic, oriented towards a specific market, but limited by financial resources. On the other hand, large companies have a strong know-how combined with a bureaucratic decision-making process and a very structured hierarchy. As for the financial capacity, the most important determinants are linked to the relationships between ownership and management. With reference to the human capital variable: the education and experience levels combined with the values and culture of the company are the main elements. Finally, as far as external connections are concerned, the most important determinants are linked to market dynamics, export strategies and geographical and institutional matters that may emerge during the course of business activity.

The most significant part of the table is the 'potential impact on innovation' aiming to identify the positive and negative impacts that individual innovation drivers can have on companies.

TABLE 3.1. The innovation drivers (SOURCE: rielaborazione di Capitanio et al., 2009)