

# A SWOT Analysis of the Romanian Food Industry's Approach to Innovation

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## Abstract

Innovation, the engine of well-developed economies, is crucial worldwide. Even in times of disruption, as the last years confirmed, the companies that continued to have innovation in the focus were better prepared for facing challenges and identifying new opportunities for future positive development. Innovation can make the difference between a well-run business and one that is driven by inertia. It is obvious that innovative activities can improve business development, but it is unclear how to build an efficient innovation system or strategy.

In order to study the way innovation is approached in food organizations, in Romania, we have conducted an exploratory research, structured on 5 important topics: how organizations are defining innovations, what kind of innovations are developed, how innovation is implemented and managed, what measurement methods are used, and which is the strategy for innovation management. An additional topic was focused on companies' concerns towards sustainability.

After conducting the exploratory empirical research, a SWOT analysis was developed, to uncover the strengths, weaknesses, opportunities, and threats in the Romanian food industry's approach to innovation.

The aim of the paper is to point out the opportunities and beneficial elements of innovation management in Romania's food sector, but also the weaknesses and threats in order to identify ways of surpassing them. The purpose of the research is answering the following questions: What is the importance of innovation management, sustainability, and quality management in the Romanian food companies? Is there a common definition and a common approach for innovation management in food industry? What measurement methods are used for measuring the impact of innovation? Which is the strategy for innovation management? The structure of the research, with practical implications, offers an additional novelty and originality approach for studying the innovation management in Romania's food sector.

According to National Statistical Institute Innovation data, big organizations are driving the most consistent part of the economic growth, therefore, in the present paper, the authors could reveal important aspects to be considered for an Innovation Management Model which could fit all food companies, no matter the size.

## Keywords

Innovation management, SWOT analysis, product innovation, process innovations, business development

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## Introduction

Romania is a moderate innovator, with an immature National Innovation System and a low proportion of innovative businesses (Adams, 2014). Still, according to the published data of Romanian Statistical Institute, regarding innovation in enterprises, during 2016-2018, after analyzing the existing databases, the innovative companies hold a consistent share of 82%, in total companies' turnover increase in 2018 (Iacobescu, 2021). At country level, more businesses may benefit from successful innovations, whether they are products, processes, or products and processes, if an innovation management model is developed.

This should take into consideration the unique characteristics of each nation and coordinated with the key country innovators.

Innovation is a mandatory activity for companies' positive development. As stated in the Information Technology and Innovation Foundation (McKinsey, 2015), the companies must move forward from the industrial age to the information age by embracing a management based on strategic innovation. This will generate longer-term development, if the management will adopt measures for developing strategic innovation management, even this will require additional capital allocation.

According to the company profile, each organization can use and choose from a variety of development models. Corporations are very interested in implementing models that can foster creativity and a motivational orientation to succeed through innovation, even though innovation management and strategic management procedures can be defined through organizational change (Wrigley and Straker, 2016).

In terms of definition, international standard ISO 56000:2021 *Innovation management - Fundamentals and vocabulary* refers to innovation as new or changed entity or realizing or redistributing value. While national standard SR 13547-1:2012 *Model of business development by means of innovation* defines innovation as an activity resulting in obtaining of a new product/service/process, or a new marketing method or a new method of business organization, including significant improving of the existing ones.

In the present paper, the authors intend to deep dive into the management of innovation in Romanian food companies and for that, a complex questionnaire was developed. It was addressed to all size food companies pursuing whether there are differences in innovation approach in different organization. Was tracked the level of understanding of innovation definition in companies, the implementation in the market, the strategy for innovation management and measurement in post-launch.

The paper is structured into three sections. We start with the details of the research and the literature review. In the second part, we detail the findings with important aspects for defining, managing, and measuring innovation in food businesses and develop a SWOT analysis about the way Romanian food companies are approaching innovation, implement and measure it. Finally, we conclude in the last section with the main findings, important outlooks to be considered for a Model of Innovation Management.

## 1. Review of the scientific literature

Innovation in the food sector is a complex process that requires employee empowerment, interaction between firm units, and a high level of involvement from senior management. Along with a clear strategy, a tracking system of key performance indicators (KPIs) for continuous improvement, could pave the path for an effective journey (Becheikh, et al., 2006). According to some authors (Takács, 2018; Koc 2007), a successful innovation management should invest in strategic thinking techniques and support diverse cultures to bring together individuals with various points of view to share ideas and strategies while combining entrepreneurial mindsets with functional expertise. Forsman, another important author that studied innovation, also mentioned internal resources, research and development expenditures, the ability to use dynamic knowledge and skills, to engage with others, to take risks, to be customer- and market-oriented, and to have management abilities to act quickly for achieving change (Forsman, 2011). Deeper in the management of innovation we could also consider the following components: project management for design, integrated approach, portfolio management for projects, suitable description of the organization, management of competence, morale support, knowledge management, technical intelligence, network administration, collective education, innovation and creativity and the management of customer relationships (Boly et al. 2014).

In society, innovation takes the form of new approaches and initiatives that address a variety of social needs, from the labor market and working conditions to education, health, and community development. By concentrating on capitalizing on external innovation resources and implementing innovation principles, organizations can improve the performance of their innovation processes (Olaru et al., 2015). In contrast to the usual revenue growth rates of between 5% and 10%, innovation initiatives contribute between 6 and 30% of additional revenue, on average close to 20%. This is an important benefit offered by good innovation management (Maier, et al., 2019).

By distinguishing its production and enhancing the quality and diversity of its products through product innovation, the business can gain a competitive advantage, increase demand, and create opportunities for further development. (Suzianti, 2005; Brad, 2010; Camisón et López, 2010).

We are in a period of accelerated transition, one that is characterized by significant and complicated changes across many areas of activity. The importance of innovation is demonstrated by the rapid development of new products and technology, but the changes go beyond material goods (Pamfilie and Croitoru, 2018). By

streamlining processes, lowering production costs, and producing goods with high quality and reasonable prices, the philosophy of "high class with low cost" could be promoted. Keeping in mind that execution is the most important factor, this might be a useful strategy for securing local enterprises and innovations (Doerr, 2018).

In the present research, for the definition of innovations, in the following empirical research was used, the OSLO Manual definition, which after 2018, divided innovation into two categories: 1) Innovation in products; 2) Innovation in processes (OECD, 2018). Process innovations includes organizational, marketing, and process innovation from the previous guidebook. Before 2018, according to OSLO Manual innovations were classified into four categories: 1) product innovation, 2) process innovation, 3) marketing innovation, and 4) organizational innovation (OECD, 2005).

Next to the way innovations are defined in the food Romanian industry, another investigated aspect was related to the measurement of innovations impact in businesses. Measuring innovation impact requires a combination of quantitative and qualitative metrics that are tailored to the company's specific goals and objectives. Therefore, one of the innovation metrics used by academics, business managers, and innovation policy makers is measuring innovation capacity. Innovative performance is used to define innovative capacity. It is a current innovation process output that combines efficiency and resources (Vasin and Gamidulleava, 2015). According to Solomon (2016), a suitable metric for quantifying innovation should also include the following characteristics: comparing, setting goals, identifying vulnerabilities, including existing data and current inputs, and measuring innovation across all dimensions.

By tracking these metrics over time, companies are able to determine the impact of their innovation initiatives and make informed decisions about future investments in innovation.

## 2. Research methodology

In order to study how innovation is approached in organizations in the food field in Romania, exploratory research was carried out, starting with December 2022. The data was collected during three months until March 2023, from 54 enterprises. The questionnaire was addressed to 320 enterprises from food industry, comprising 26 questions. The method used for sampling was by sending e-mails with the questionnaire link to 320 companies from food industry. The main purpose of the research was to address all company types, to better understand how innovation is understood and implemented in Romanian companies and explore the similarities and differences in innovation management approach between the large and small companies.

**The purpose of the research was answering the following questions:**

- **What is the importance of innovation management, sustainability, and quality management in the Romanian food companies?**
- **Is there a common definition and a common approach for innovation management in food industry?**
- **What measurement methods are used for measuring the impact of innovation?**
- **Which is the strategy for innovation management?**

The research was structured in 5 sections:

- Defining innovations: how innovation is defined in companies
- Types of innovations: what innovations have been implemented in organizations.
- Innovation management: how it is managed and implemented
- Measuring innovations: what measurement methods are used.
- The strategy used in innovation management.

Additional questions targeted the extent to which companies in Romanian food sector use standards in their activity and how sustainability is integrated in companies' strategies.

Greater importance was given to large companies, because in the previous study published in 2021, the important contribution of large innovative companies in the development of the total number of companies in Romania was highlighted (Popescu (Iacobescu), eds. 2021). Large companies are the most innovative and best use innovation management for their development.

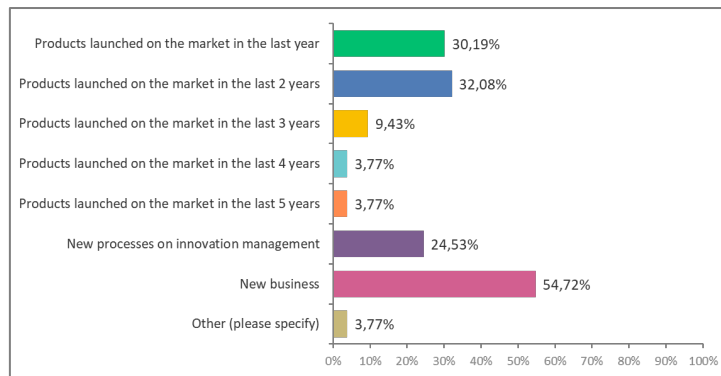
### 3. Results and discussion

The study was based on the answers received from 54 enterprises out of which, 18,5% were micro enterprises (fewer than 10 employees), 22,2% were small enterprises (10-49 employees), 31,5% medium-sized enterprises (50-249 employees) and 27,8% large enterprises (more than 250 employees). Regarding turnover, 48% from the questioned companies have more than 2 mil. Euro and the rest of 52% have less than 2 mil. Euro.

The interest in sustainability, innovation, and quality management was reflected in the companies' answers: 85% of the interviewed companies consider themselves innovative, 69% have implemented a quality management system and 91% have sustainability integrated into their business strategy.

#### *Definition of innovations/innovation*

Out of all the respondents, 79% of the companies consider innovation to be new products launches, 55% consider innovation as new business divisions and 25% consider implementation of new processes as innovation. Going deeper into the definition of new products, the situation becomes rather fragmented: 32% consider innovation products launched in the last 2 years, 30% consider innovation products launched in the last year, 9% consider innovation products launched in the last 3 years, 4% consider innovation products launched in the last 4 years, 4% consider innovation products launched in the last 5 years.

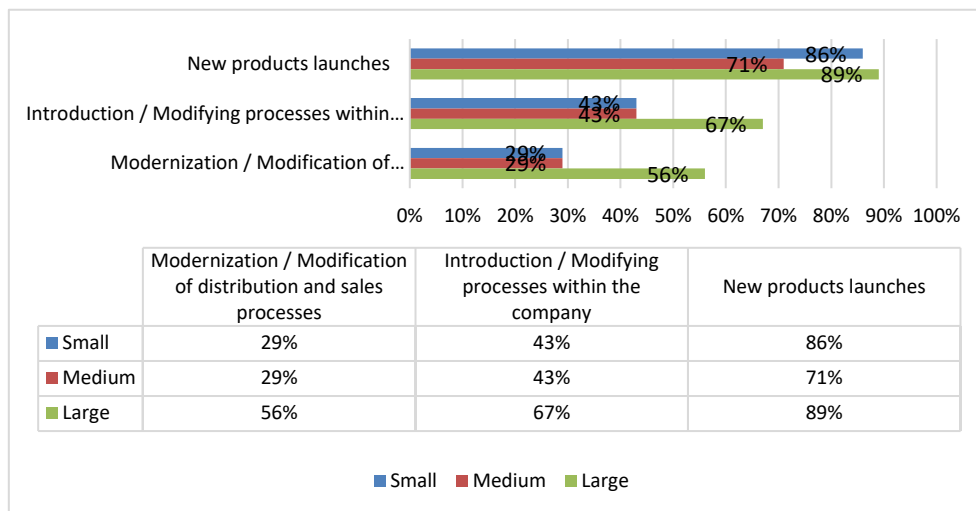


**Fig. no. 1 Definition of innovations**

*Source: authors' data processing study*

#### *Types of innovative activities important for companies:*

- The launch of new products - (86% of small companies, 71% of medium-sized companies, 89% of large companies)
- Introducing / Modifying processes within the company (43% of small companies, 43% of medium-sized companies, 67% of large companies)
- Modernization / Modification of distribution and sales processes (29% of small companies (29% of medium-sized companies, 56% of large companies)



**Fig. no. 2 Innovative activities by type**

*Source: authors' data processing study*

In terms of product types the companies developed in the last three years::

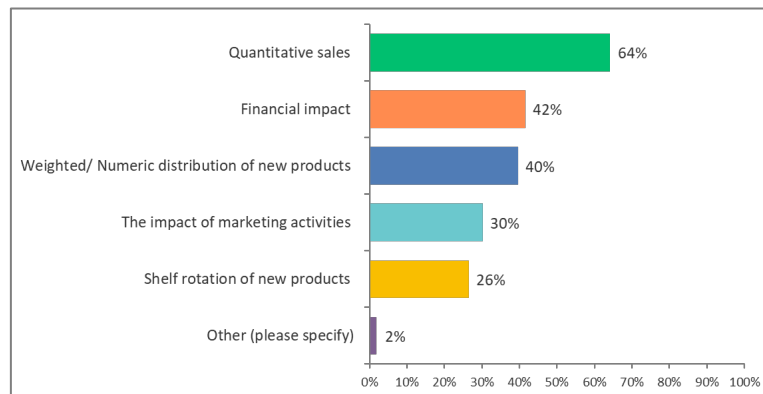
- 55% of the questioned companies offered standardized products, offered in the same way to different consumers (mass customization)
- 49% of the companies offered products created to meet the needs of certain consumers (personalization)
- 17% of the companies offered products co-created with the help of consumers.

According to companies' management, innovation is considered:

- Strategic, included in the planning activity, by 34% of the companies.
- A permanent activity, by 45% of the companies
- A sporadic activity /from time to time, without planning by 21% of the companies.

*Management of innovations/innovation*

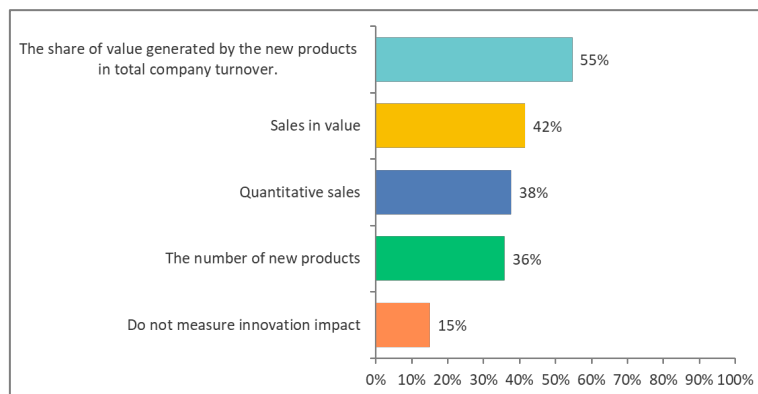
Following new products launches, the companies are tracking the performance of their new products implementation, using the following indicators: quantitative sales, information about the new products distribution, shelf rotation, the impact of marketing activities or financial impact. Out of these post-launch activities of new products, the most important one for the questioned companies were chosen: quantitative sales (64%), financial impact (42%) and distribution of new products (40%).



**Fig. no. 3 Post-launch activities of new products**

*Source: authors' data processing study*

Out of the responses received, 85% of the participating companies at the study, use to measure the innovations impact in their businesses. The key performance indicator preferred by 55% of the questioned companies is the share of value generated by the new products in total company turnover. This indicator is considered important by 92% from the questioned companies.



**Fig. no. 4 KPI for the innovations impact in business**

*Source: authors' data processing study*

The activities to measure the impact of innovation were carry out mainly annually, based on planning, by 43% of the questioned companies, 36% were tracking the impact of innovations monthly.

Regarding the benchmark against which the questioned companies measure innovation impact, the most used one is the value calculated in the previous period, used by 68% of the respondents. Another benchmark is the value calculated by a research organization for the share of innovation in the relevant market, used by 6% of the questioned companies. The rest of 28% did not report having any benchmark.

#### *Strategies and business environments*

Regarding the changes in strategy, about 74% from the questioned companies implemented changes related to innovation or sustainability in their strategy: 26% had strategy changes in the last year, 26% had strategy changes in the last 3 years, 11% from the questioned companies had strategy changes in the last 5 years and 11% in the last 10 years.

The most important types of strategies used in the last 3 years by the questioned companies were:

- Strategy aimed at improving existing products (43%)
- Strategy oriented to the introduction of new products (52%)
- Strategy focused on solutions specific to consumer needs (52%)

Regarding the preferred type of organization when it comes to innovation, the companies' choices were splitted between regular brainstorming sessions with the aim of generating improvements within the business (41%), multifunctional working groups or teams (56%) and the rest preferred the job rotation (3%).

In terms of mid-term plans, 74% of the companies questioned indicate they plan to invest in sustainable innovation during the next five years.

After analyzing all answers, we could develop a SWOT analysis on how the Romanian food companies tackle innovation in their business strategies:

#### *Strengths*

- Sustainability, quality management and innovations are integrated in the company's strategy
- New products launches are the most important activities related to innovation.
- Regarding the management of innovation, innovation is a permanent activity and for big companies it is strategic, included in the planning process.
- The measurement of the innovation impact in business is considered important by almost all companies.
- Almost all companies have a measurement system for innovation.
- Almost all medium and large companies are using the share of innovation in total turnover as a KPI for innovation measurement. Almost all companies have a benchmark when it comes to innovation measurement.
- The companies' development strategies are focused mainly on improving the existing product portfolio and launching new products.

#### *Weaknesses*

- New processes are considered important innovation activity mainly by the big companies.
- New businesses are considered innovation mainly by the big companies.
- The definition of products innovation in the market is not aligned. The period in which a product is considered new is different and varies from 1 to 5 year.
- The measurement of the innovation impact in business is done mainly by the measurement of sales generated by the new products. Only few companies are tracking the distribution, shelf rotation, the impact of marketing activities or the financial impact.

#### *Opportunities*

- To develop a common definition of innovation
- To track the results of innovation at a preestablished period with certain periodicity
- To develop a model for tracking the innovation implementation. To set more KPIs for innovation impact measurement
- All companies should use the share of innovation in total turnover as main KPI for innovation measurement.
- To create industry benchmark for main KPI for innovation measurement

#### *Threats*

- Difficult to implement an aligned system of innovations business impact measurement.
- Because of the different companies' goals it is difficult to track more KPIs for innovation, therefore the innovation implementation image is not clear

- Long-term business development is linked to innovation. If innovation is not prioritized, development may be slowed.

## Conclusions

The main objective of the article is to investigate the innovation approach in Romanian food companies, beginning with how innovation is defined, managed, and measured, and then developing a SWOT analysis to identify the main strengths, weaknesses, opportunities, and threats to innovation.

From the analyzed data, we can conclude that innovation management, sustainability and quality management are integrated into the strategy of the Romanian food companies, that new product launches are the most important innovation activity and that measuring the impact of innovation in business is important to almost all companies.

The main weaknesses revealed after the analysis, are that there isn't a common understanding of innovation in the market, a relevant benchmark, or a common Innovation Management Model.

In order to improve the management of innovation in food industry in Romania, the following opportunities were identified: the creation of a common definition of innovation, finding a way to tracking the outcomes of innovations, over a predetermined period at a certain frequency, the development of a model for tracking innovation implementation, the development of additional KPIs for measuring the impact of innovation and establish an industry baseline for the primary KPIs for measuring innovation.

Long-term business development is linked to innovation, therefore if innovation is not prioritized in the business strategy and processes the development may be slowed. In the present paper the authors reveal important opportunities for the innovation management and pointed out important aspects to be considered for an Innovation Management Model which could fit all food companies, no matter the size.

In the future, in addition to measuring past innovation-related activities, projects for promoting the importance of innovation in businesses, as well as a model for innovation planning activity, should be considered. Furthermore, the study will explore and outline how management systems, standards implementation and sustainability are embedded in companies' strategies.

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