Combining tradition and innovation in food companies' business models.
An empirical study on Italian food firms

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ABSTRACT

Firms' strategic choices have a significant impact on economic and financial performance. The links between strategic choices in terms of innovation and tradition and companies' growth and profitability performance have gathered increasing interest in recent research. Starting from a sample of 306 firms operating in the Food and Beverage sector included in the "Food Industry Monitor" database, we collected financial data over a period of nine years, which allowed us to define the companies' performance with respect to growth and profitability. The database was integrated with information from a questionnaire administered to the companies of our sample, which provided us with both quantitative and qualitative data. Key characteristics associated with innovation and tradition were linked to firms, investigating whether they are associated with better growth and profitability, as well as a competitive advantage in the sector. We identified five factors as explanatory variables: Tradition, Territorial Connection, Innovativeness, Craftsmanship, and Corporate Social Responsibility (CSR). Firms were then attributed to five clusters based on the association with the aforementioned factors. An ANOVA test on the dependent variable's variance allowed us to analyze the association between firms belonging to specific clusters and economic performance. Companies with a strong orientation towards *tradition* exhibit a stronger growth performance and profitability (ROS). Additionally, innovation-oriented firms show a higher profitability in terms of Return on Sales (ROS).

Le scelte strategiche delle imprese hanno un impatto significativo sulle performance economiche e finanziarie. I legami tra le scelte strategiche in termini di innovazione e tradizione e le performance di crescita e redditività delle aziende hanno suscitato un crescente interesse nelle recenti ricerche. Partendo da un campione di 306 aziende operanti nel settore Food and Beverage, inserite nel database "Food Industry Monitor", abbiamo raccolto dati finanziari nell'arco di nove anni, che ci hanno permesso di definire le performance delle aziende in termini di crescita e redditività. Il database è stato integrato con le informazioni provenienti da un questionario somministrato alle aziende del nostro campione, che ci ha fornito dati sia quantitativi che qualitativi. Le caratteristiche chiave associate all'innovazione e alla tradizione sono state

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collegate alle imprese, indagando se sono associate a una migliore crescita e redditività, nonché a un vantaggio competitivo nel settore. Abbiamo identificato cinque fattori come variabili esplicative: Tradizione, Connessione Territoriale, Innovatività, Artigianalità e Responsabilità Sociale d'Impresa (CSR). Le aziende sono state poi attribuite a cinque cluster in base all'associazione con i fattori sopra citati. Un test ANOVA sulla varianza della variabile dipendente ha permesso di analizzare l'associazione tra imprese appartenenti a cluster specifici e performance economiche. Le aziende con un forte orientamento alla *tradizione* mostrano una performance di crescita e una redditività (ROS) più solide. Inoltre, le aziende orientate all'innovazione mostrano una maggiore redditività in termini di ritorno sulle vendite (ROS).

1 – Introduction

The need for agri-food companies to innovate while simultaneously remaining traditional and connected to the territory is more central than ever today. It is widely demonstrated that innovation, for example in product development, is a source of competitive advantage for companies (Calantone, Chan & Cui, 2006). On the other hand, empirical studies, such as those by Sgroi, Donia, and Mineo (2020), have shown that Italian agri-food companies carry values of traditional culture that constitute a distinctive element of their production and enable processes of regeneration of the value of food products. Meeting the need of companies to innovate while maintaining a connection with the territory and their tradition has led to questioning the methods and benefits derived from combining strategic choices related to innovation and tradition.

In recent years, literature has shown a considerable interest in studying these strategic choices. It is widely demonstrated that agri-food companies that have pursued IT innovation strategies while maintaining a strong connection with tradition (Cosentino, Paoloni, Iannone & Temperini, 2021) have achieved positive effects in terms of efficiency, product quality, business relationships, and environmental sustainability. Additionally, authors such as that of De Massis *et al.* (2016) have focused their studies on the link between tradition and technological innovation in family businesses, conceptualizing a new strategy called "Innovation Through Tradition" and demonstrating how companies that build lasting and intimate connections with their traditions can be extremely innovative while remaining firmly grounded on their heritage.

However, while numerous contributions have shed light on various aspects related to the combinations of innovation strategies in specific organizational areas (such as IT) and tradition, there is still a need to broaden the analysis to combinations of strategies that involve the entire business complex rather than specific organizational areas. It is necessary to further explore the real impact of "innovation-tradition" combination strategies on the performance, even in the long term, of companies in the Food and Beverage sector.

Thanks to a newly collected database within the Food Industry Monitor research observatory, we aim to examine the strategic combination of "Innovation-tradition" and its impact on economic performance. More specifically, we will help clarify whether and how it is possible to reconcile innovation and tradition, consequently achieving positive economic performance.

The paper is structured as follows: the next paragraph (Section 2) will present our database and main variables, while Section 3 will discuss the results of the interviews conducted on a sample of food and beverage firms representative of the Italian-specific industry. Empirical analyses and results are shown and discussed in section 4. Section 5 suggests future developments and concludes.

2 – Data

Food Industry Monitor is an observatory on the Italian food & beverage sector that analyzes the performance of 850 companies operating in fifteen sectors. It covers about 71% of the Italian companies operating in the food & beverage sector. Each year, it collects data regarding the performance of food industry companies, medium-term growth and profitability prospects, the determinants of operating profitability, productivity and growth, information about companies' business models, and their link with economic performances.

Starting from this database, ten subsectors were selected, namely: canned goods, coffee, olive oil, flour, wine, cured meats, milk, pasta, spirits, and confectionary. Firms' financial data were collected from 2009 to 2017, covering a time span of nine years.

We focused our attention on companies that appeared steadily in our database, following the growth of the sector and got rid of outliers. More specifically, we computed median turnover at the subsector level for each year and discarded firms with an average turnover belonging to the first and fourth quartiles, i.e., only the values between the 25th and 75th percentile were considered. The resulting sample encompasses 306 companies with a total turnover of 9 billion, corresponding to about 10.5% of all Italian companies in the industry. Selected firms were then interviewed via phone call with a focus on the topics of tradition and innovation, reaching a response rate of 40% (Table 1) summing up to a total of 123 responses. The respondents' sector breakdown is very similar to the one of the original 306 sample, which reassures us about the representativeness of our final sample.

Table 1 – Composition of interviewed firms by sector

Sector	Number of firms	% of total sample surveyed
Wine	27	22.0%
Canned goods	18	14.6%
Coffee	16	13.0%
Oil	16	13.0%
Flour	11	8.9%
Cured meats	9	7.3%
Milk	8	6.5%
Pasta	8	6.5%
Spirits	7	5.7%
Confectionary	3	2.4%
TOTAL	**123**	**100%**

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The data were collected in the period March–May 2019. The questionnaire consisted of 21 questions and aimed to analyze companies' perceptions on various issues, including tradition, innovation, craft processes, employee training, downstream and upstream integration, using a 1 to 7 Likert scale. The questionnaires were filled out by a team of researchers who collected the data through telephone interviews and public sources (websites, annual reports) to ensure consistency in the completion process.

3 – Firms' tradition and innovation attitudes

The choice between a traditional and innovative business model configuration requires developing a certain set of strategic resources, which influences the competitive positioning of companies. Food companies that choose to develop an offer oriented towards tradition rather than innovation can outperform the industry and build a solid competitive advantage (Barney, J. 1991). Our survey aims specifically to shed light to the firms' attitude towards tradition and innovation, taking into account their specific characteristics. More than 80% of respondent companies in the sample are family-owned, 13% are owned by one or more Italian investors, 7% are cooperatives, and just 1% are foreign-owned (Figure 1). The average export share on total turnover is 33.6% and for more than 70% of total turnover for the most export-oriented ones, which are about 18% of the respondents (Figure 2).
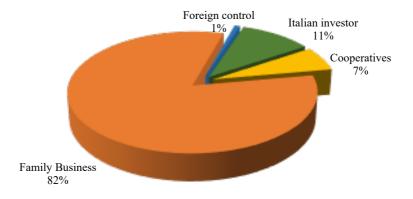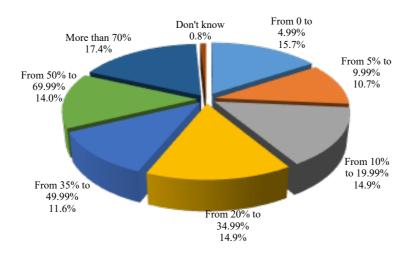

Fig.1 – Ownership structure of the sample

Fig. 2 – Export share of total turnover

Our data show that an increasing number of companies in the food industry adopt development strategies that embrace the combination of two apparently antithetical philosophies: tradition and innovation. In the Italian market, food and beverage companies, and in particular family-owned businesses, have successfully integrated a strategy known as "Innovation Through Tradition" (ITT) (De Massis *et al.*, 2016). While the concept of tradition implies processes, know-how, and memories of the past, innovation often entails radical change, resulting in disruptive and original solutions. Nevertheless, Italian food and beverage companies have managed to internalize and reinterpret their traditional know-how, thereby enhancing innovation and value creation.

As a result, 70% of Italian F&B companies believe to be very tradition-oriented, and 63% of surveyed companies produce products based on traditional recipes.

Although they are industrial (i.e., large-scale) food production companies, they claim to adopt production processes that can be described as handcrafted and unsophisticated because they are carried out with a moderate level of automation.

Table 2. Firms' self-assessment with respect to a set of production and logistic characteristics

Phone interview self-assessment	Low	Moderate	High
Tradition-oriented firm	4%	26%	70%
Products based on traditional recipes rooted in company legacy	7%	30%	63%
Production of craft products	21%	52%	27%
Innovative company	3%	41%	55%
Usage of innovative production processes	3%	28%	69%
Importance of raw materials selection	0%	7%	93%
Usage of artisan or farmer suppliers	30,9%	0%	69,1%
Strong link with local suppliers	7%	24%	68%
The firm supports local suppliers	9%	31%	60%
Collaboration with suppliers to develop new products and processes	5%	46%	50%

As highlighted by Rezaei *et al.* (2016), the selection of the supplier is a critical step in developing a competitive supply chain. Based on this assumption, we sought to study the methods of procurement of raw materials and semi-finished products needed to meet production requirements. In fact, it is important to understand whether this phase of the production process is carried out using artisan or farmer suppliers in the area where firms operate.

It emerged that for almost the entire sample (93%), the selection of raw materials is a fundamental part of the production process and, as such, must be approached with particular care and attention to quality. More than 68% of companies use local artisans or farmers as suppliers and entertain long-term commercial relationships with them.

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Moreover, more than 50% of firms implement policies to support their suppliers, for example, through multilateral agreements, training, and incentives of various kinds. Finally, 50% of responding firms collaborate with their suppliers to develop new products and processes.

Communication is at the core of Italian food companies' strategies, with more than 70% of firms leveraging on the link with the Italian or local gastronomic tradition to enhance the value of their products on the market. The desire to emphasize the origin of the product and highlight its link with a specific territory has not only been declared in our interviews but also emerged from an analysis conducted on their websites. In fact, more than 50% of companies in our sample make extensive use of *Denominazioni d'Origine* (Designations of Origin) (Figure 3) or Slow Food Presidia (Figure 4) to promote their products on the market. An increasing number of companies are transforming the tradition of the territory in which they operate into an integral part of their corporate culture. As suggested by Sgroi, Donia and Mineo (2020), this integration is expected to initiate processes of "value regeneration" for food products and plays a critical role in the success of individual firms.
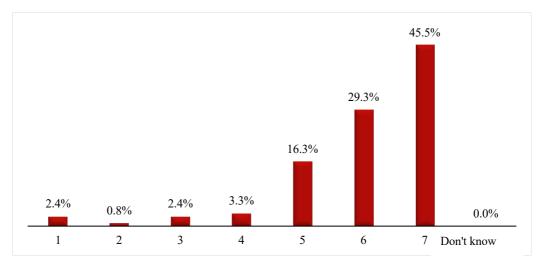

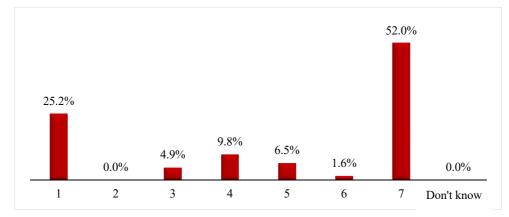**Fig. 3 – Tradition-oriented communication strategy, scale 1-7**

Fig. 4 – Communication strategy based on Denomination of Origin and/or Slow Food Presidia certification, scale 1-7

As a result, to promote their products on the market, about 45% of companies make use of handicraft themes, a complex topic that almost always implies "handmade" without any

industrial aids (Figure 5). 63% of the respondents claim that their communication strategy is in line with the latest health trends, i.e., referring to aspects of health and wellbeing that can potentially be achieved by the food product. Accordingly, great attention is devoted to ecology and respect for the environment, with 50% of the respondents declaring to be particularly mindful on the topic.
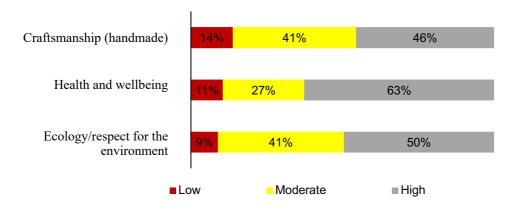

Fig. 5 – Topic-oriented communication strategy

4 – Empirical analysis and results

4.1 – *Financial dependent variables*

As variables of interest, we chose two financial measure to assess the performance of companies in terms of growth and profitability. The indices used to analyze growth performance were the rate of change in revenues and the return on sales (ROS), defined as follow:

- The rate of change in revenue is the percentage change in unit revenue from year t0 to year t1.

$$\frac{revenue\ (t1) - revenue\ (t0)}{revenue\ (t0)}$$

- ROS (return on sales) is the ratio of operating profit to sales revenue.

$$\frac{operating\ profit\ (EBIT)}{sales\ revenue} \times 100$$

Outliers and missing data were identified. The outliers were normalized using the winsorization methodology, i.e., all outliers were replaced with the 95th and 5th percentile values. Missing data were identified and individually replaced with the mean.

4.2 – *Qualitative independent variables*

Using a principal component analysis (PCA), we were able to synthesize the 19 items of the questionnaire (the first two refer to the ownership structure of firms and their level of export orientation, so they have not been considered in the PCA) into *6 factors* that we will consider

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as *explanatory variables* of our model. We interpreted and defined the selected factors as follows:

1. *link with the territory* defines whether there are links with local suppliers, whether the company uses local suppliers for procurement, and whether it supports suppliers.

2. *innovativeness* encapsulates the company's level of innovation in terms of product and process innovations.

3. *tradition* refers to the use of traditional recipes and production processes.

4. *CSR* (corporate social responsibility) considers whether the company promotes initiatives to protect the territory, also in cooperation with suppliers.

5. *craftsmanship* is associated with the use of artisanal production processes, the use of raw materials produced by artisans, and production processes involving work carried out 'by hand'.

6. *downstream and upstream integration* refers to the direct production of raw materials (upstream) and direct sale or direct control of sales channels to final consumers (downstream).

After rotating factors and analyzing the variance explained by each of them, given the low explanatory power associated with factor 6, we decided to discard the downstream and upstream integration from our set of explanatory variables.

4.3 – *Cluster analysis*

The association between the extracted factors and our sample's firms has been analyzed thanks to the computation of statistical clusters. More specifically, clusters of firms were obtained by studying the association between each firm and the factors previously identified, i.e., link with the territory, innovativeness, tradition, craftsmanship, level of social responsibility (CSR), downstream and upstream integration. Firms with a high association with a factor were assigned to the corresponding cluster. For example, firms with a high association with the tradition factor are defined as *Tradition-oriented*. Table 34 shows the share of companies exhibiting a strong association with each factor and the corresponding cluster.

Table 3 – Cluster of companies and relative frequencies

Firms' strategic orientation	Share of firms
A1. Territory-oriented	33%
A2. Innovation-oriented	26%
A3. Tradition-oriented	29%
A4. CSR-oriented	24%
A5. Craft-oriented	33%

Our analyses show that 33% of the total number of companies are territory-oriented or craft-oriented. Moreover, 29% are tradition-oriented. On the other hand, there is a lower

share of firms that appear to be innovation-oriented (26%) or CSR-oriented (24%). Downstream and upstream integration did not show a significant association with a set of firms and was then discarded.

To better understand the interaction between tradition and innovation, the five clusters were superimposed to identify subordinate frequencies (Table 4).

Table 4 – Subordinate cluster frequency table

Firms' strategic orientation	A1. Territory	A2. Innovation	A3. Tradition	A4. CSR	A5. Craft
A1. Territory		29.3%	24.4%	29.3%	36.6%
A2. Innovation	37.5%		18.8%	21.9%	31.3%
A3. Tradition	27.8%	16.7%		30.6%	38.9%
A4. CSR	40.0%	23.3%	36.7%		33.3%
A5. Craft	37.5%	25.0%	35.0%	25.0%	

Subordinate frequencies allow us to identify the percentages of companies that fell into two clusters simultaneously. Column variables show the secondary association of firms belonging to row variables, i.e., 36.6% of firms that are territory-oriented have a secondary association with artisanal practices.

Innovation-oriented firms also show a strong connection with the territory and craftsmanship processes. Tradition-oriented companies are very intertwined with craftsmanship processes (38.9%) and 40% of CSR-oriented companies are also highly linked with the territory. The overlap between tradition and innovation appears to be mediated by craftsmanship, CSR, and link with the territory. For example, around 31.3% of companies managed to combine an innovation orientation with artisanal processes, but just 16.7% of tradition-oriented companies showed a direct innovation orientation.

4.4 – *ANOVA tests and the impact of clusters on the dependent variables*

To test the association of the individual clusters on the dependent variables, an Analysis of Variance (ANOVA) was conducted. The aim is to understand whether the means of the dependent variables belonging to a specific cluster are significantly different from other clusters' means. More specifically, the variance of the dependent variables for each cluster gets decomposed into two components: the share of variance explained by the cluster and the share that is not explained by the cluster's specificities.
An F-test on the dependent variables means has then been performed to verify the significance of their differences.

We found that revenues and ROS growth (computed as CAGR), and ROS (in 2017, the last available year of observation) are explained by at least one of the identified clusters.

In particular, with respect to multi-year revenue growth, companies with a strong tradition orientation achieved higher revenue growth, averaging about 5.3% relative to 3.1% for lower tradition-oriented firms (Figure 6).
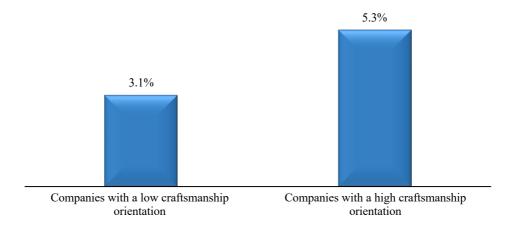
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Fig. 6 – Revenue CAGR (2009 - 2017)

Moreover, we observe that companies with weak ties to the territory show a decrease in multi-year sales profitability (Figure 7), while firms with a strong connection to the territory achieved a positive average growth in ROS of 1.4%.
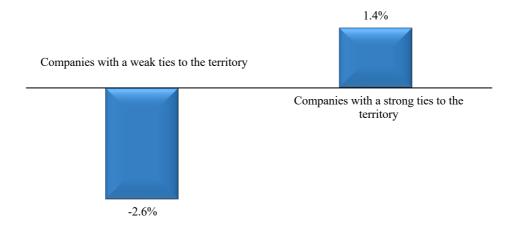

Fig. 7 – ROS CAGR (2009 - 2017)

Finally, highly innovation-oriented companies recorded a significantly higher average return on sales in 2017 of 6.4% (Figure 88).
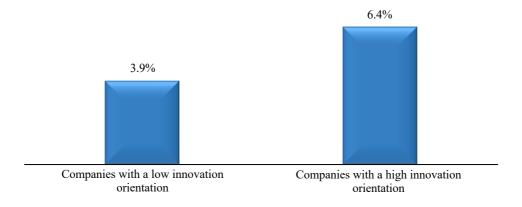

Fig. 8 – Trade profitability - ROS (2017)

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On the other hand, firms with a more restrained orientation towards innovation failed to record high earnings performance in 2017, with an average value of around 3.9%.

5 – Conclusions

The article highlights how specific business models adopted by companies in the food and beverage sector can blend innovation and tradition-oriented strategies to achieve positive growth performance. Companies with a clear craftsmanship orientation show more sustained revenue growth; furthermore, a strong link with the territory ensures positive ROS growth. At the same time, innovation is key for supporting a higher operative profitability.

On one hand, the market's push towards the introduction of product and process innovations places an exceptional burden on companies to be competitive both domestically and internationally. On the other hand, the connection with the territory of Italian companies represents an added value to preserve and consolidate.

In this context, companies in the Italian food and beverage sector face a "competitive challenge" in pursuing strategic choices that, albeit with difficulties, will lead to the adoption of a distinctive business model. Our analyses demonstrate that innovating and maintaining the connection with the territory is possible. Firms' structure business model can be reorganized accordingly, which allows, in the long run, to achieve positive results in terms of profitability and growth. In our sample, about 30% of territory-oriented companies show a strong innovative push, while more than 30% of innovation-oriented ones exhibit a high artisanal orientation. Meanwhile, the overlap between tradition, craftmanship, link with the territory and corporate social responsibility appears to be even stronger.

The successful adoption of such a business model unlocks a competitive advantage within the sector, especially if companies are willing, in the beginning, to make investments in product and process innovation, supported by marketing and communication, while strengthening relationships with local suppliers, thus supporting local community development.

Further research efforts should be devoted to analyzing the effects of certain socially responsible choices on the firm performance while combined with business models based on tradition and innovation.

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