



POLITECNICO DI TORINO

Master Degree in Engineering and Management

Master of Science Thesis

**SOCIAL IMPACT ANALYSIS ON THE B2B
PLATFORMS IN THE HO.RE.CA. MARKET: AN
ENTREPRENEURIAL FOCUS**

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INTRODUCTION

The scope of this work is the social impact analysis of the emerging B2B platforms in the Ho.Re.Ca. market in Italy, with a specific focus on the contribution to the diffusion of sustainable products and at the same time to the evolution of the role of the restaurant owner toward a more responsible and efficient entrepreneur.

Starting from an overview of the social impact analysis methods present in literature, the focus is then placed on the social responsibility in the food industry.

After an analysis of the market trends in the Ho.Re.Ca. in Italy, it is investigated the phenomenon of the growth in the consumptions away from home in contrast with the high failure rate of enterprise in this sector.

The work has been, then, focused on two contributions that the intermediation platforms could bring in the foodservice industry: in the first part the attention will be on the entrepreneurial role of the restaurateur as fundamental actor in the success and unsuccess of the business, investigating the nexus between the managerial decisions and efficiency of the enterprise in the long run, and how the digitalization is currently shaping the sector.

In the second section the social impact analysis will be focused on the sustainable practices in the foodservice industry and how they could represent the foundation for a more socially and environmentally oriented market.

Finally, it will follow a study conducted on a sample of enterprises in the HO.RE.CA segment. With the collaboration of a young start-up that operates in the B2B restaurant intermediation with an ambivalent nature of entrepreneurial management software and a digital marketplace oriented towards local producers, has been conducted a survey examination aimed at understanding how this new digital means are perceived among the entrepreneurs, the possible social impact that this kind of platforms could have on the foodservice sector and how/if they could shape the future of the intermediation.

1. SOCIAL IMPACT - LITERATURE ANALYSIS

1.1. Social impact overview

Different organizations create different kind of impact. The first difference is in the type of company: no-profit or for-profit. No-profits mostly aim to create an impact through their products and services, while for-profits focus on their operations, they tend to create impact from the way they act and the way they develop the services more than from the use of the services themselves.

Another difference is based on the fact that social based organizations pay more attention on the primary impact, the one that they can control and the one that they actively pursue, however all the companies create secondary impact in various fields. This kind of impact involves people, employees, the environment, the society and all kinds of outputs.

For this reason, also companies and start-ups that pursue a positive social impact must keep under control the secondary effects of their acts, a balance between the impact they seek and the potential negative impact is fundamental.

When involved in an organization, a deep understanding of the kind of impact it is pursuing is very important. The positive or negative nature of an impact is often something that is impossible to evaluate objectively, this happens because the effects of some decisions can be positive for somebody and the opposite for other people involved in the company. The outcomes are judged in a very subjective way, so every stakeholder will decide if those objectives are conforming with his own personal values.

For the stakeholders the evaluation process is easier if the social mission of the organization is transparent and clearly stated, so the first step to create a social impact is to have a strong set of social goals expressed through a mission. This mission is more important in no-profit organizations because of their intent in pursuing a primary social impact, however all type of companies should have some form of mission because all of them create an impact.

Having a mission makes also the company be perceived as stronger and more durable, it gives the organization an identity that can last longer and can better survive moments of difficulty.

Moreover, having a strong mission functions as a guidance for all the people involved in the organization: if everybody knows what the social objectives really are, all the small decisions made at all levels inside the company are more likely to be consistent with the general direction, also when the company grows and becomes more difficult to control.

Social change can be created acting on two principal levers (Epstein and Yuthas, 2014):

1. Products and services;

2. Operations;

- Human resources management, social inclusion and working environmental impact;
- Product design and production processes;
- Supply chain management;
- Infrastructure;

1.1.1. Impact from products and services

Social impact through products and services involves their direct use by the beneficiaries. This kind of products are actually made to have an impact so the primary effect is always clear to the organizations and also to the users, however, as has been stated before, the secondary impact can be also negative, in fact must be taken into considerations the effects that come from what that goes beyond customers, the safety of the products and their disposal.

Social purpose organizations can provide help through products if the market has a particular need that has to be satisfied, but also can provide the delivery of products that already exist but are difficult to be reached. This happens very often in developing countries with no-profit organizations that provide the channels of distributions where they still don't exist (often in the healthcare and pharmaceutical field).

The third way through which social organizations create an impact with product and services is by making products more accessible to customers. Even in this case, however, the indirect impact must be considered, for example giving access to subsidized products may change the markets and the equilibrium in a certain sector.

Another problem is that often the products create a secondary impact because of the misuse by the beneficiaries. This leads to a new set of difficulties in creating the right impact that the organization sought in the first place, it becomes evident the need for a culture and education of the customer that has to be paired with the use of the product itself. The same education of the beneficiaries is fundamental for the problem of the disposal of the products. The countereffects caused by an incorrect disposal of the packaging or of the batteries and electronic components can often outclass the benefits of the mass diffusion of the product, causing so a negative net impact.

LCA

As has been stated before, every product has a continuous impact during all its life cycle, for this reason in 2009 the United Nations Environment Program (UNEP) has published the guide for the Social Life Cycle Assessment (sLCA).

LCA is a technique to assess environmental impacts of products and services over their life cycle on the environment, society and on the human wellbeing.

“Because it is holistic, systemic and rigorous, Life Cycle Assessment is the preferred tool when it comes to access information about potential and real impacts of products life cycle. Life cycles of products involve material, energy and economic flows They are also made of stories about production and consumption impacts on the workers, the local communities, the consumers, the society and all value chain actors” (Andrews, E. S. et al., 2009, p.5).

LCA procedures and methods must be conform with the international normative reference ISO 14040 (2006) and ISO 14044 (2006). The standards describe the required elements of LCAs and identify four phases for conducting a Life Cycle Assessment:

- Goal and scope: in this phase are specified the reasons of the study and the methodologies that are going to be used, as well as the modelling approaches.

- Life Cycle Inventory (LCI): the processes and the product system are described, the relationships and the exchanges between the product system and the environment are compiled and evaluated. Then the exchanges are called elementary flows, they are the basic inputs and outputs from nature, for example raw material extracted and emitted back in the environment.
- Life Cycle Impact Assessment: in the third phase the impacts listed in the previous phase are evaluated in their significance and magnitude. The LCI inventory results are associated with the respective environmental impact categories and indicators. Classification and characterization of the results are mandatory, and the categories and indicators are standard, while other elements such as normalization and weighting are optional.
- Life Cycle Interpretation: the initial goal is compared with the results obtained in the phase two and three of the LCA analysis.

LCC

An important instrument for the assessment of Life Cycle Impact of product and services are the Life Cycle Costing and Environmental Life Cycle Costing. Together with the LCA methodologies, they are listed in the Guidelines for social LCA.

LCC is a compilation and assessment of all the costs related to a product, over its entire life cycle (Andrews, E. S. et al., 2009). It was developed in the sixties for evaluating the cost impact of big projects and objects, such as trucks, railways, trains, because of their requirement for big investments, but in the years, it resulted to be suitable for basically all type of goods.

SETAC working group has listed a set of methodologies for environmental LCC in their book *Environmental Life Cycle Costing* (2008). It is important to distinguish LCC and E-LCA because they often operate in the same fields, so the effects analysed by both of them can be mistakenly overlapped. LCC can address the economic impact of a product whose environmental performance is scrutinized in an E-LCA (Andrews, E. S. et al., 2009).

1.1.2. Impacts from operations

The social impact caused by operations and choices made in the conduction of a company often is more influent than the primary impact itself. For this reason, is very important to give since the beginning a sustainable orientation to the company, starting from the managers to all the employees, everyone involved must be conscious of the values that are important for the organization.

Human resources management, social inclusion and Working Environmental Impact

The decisions taken at the managerial level involve both the education of human resources and policies of inclusion of minorities as a way to create positive social impact on society. Many big for-profit companies in the last years have included policies of employment of workers coming from impoverished areas or with a difficult past, as former felons. This kind of policies often must be followed by training of the resources to let them be ready for the occupation.

Strategies of social inclusions are a very much needed intervention when the economic and social forces are not able to grant the adequate social inclusion. This can happen because of four main reasons linked to a social exclusion phenomenon (Barca, 2009).

1. The first reason is about an under-utilisation trap: history related factors characterize a certain area and prevent the development of a whole region/nation.
2. Habits and culture related factors are transmitted from a generation to the next creating the same negative results in a circumscribed area, while the whole region can experience a certain growth.
3. An outcome-dependent trap: new outcomes are linked to past ones. Efforts that produce insufficient outcomes are vanished because of the strict dependency with older outcomes.

4. Political choices often tend to reinforce the strong classes with an unfair distribution of resources: also, public institutions can depend on past outcomes. This last factor influences also the previous ones: institutions have a fundamental role in the shaping of society. If political decisions don't follow an integration path, the other three drivers are not willing to change. Radical interventions are needed to not fall in the same patterns of exclusion.

A product system can have substantial working environmental impacts on humans. Working Environmental Life Cycle Assessment are methods to better understand this type of impact. Even if WE-LCA can be grouped together with LCA and E-LCA methods for its connection with product life cycle, for the sake of this work it will be debated in this section, for its dependency from choices at the operational level.

A WE-LCA allows to examine whether environmental product improvements are implemented at the expense of a deteriorated working environment. WE-LCA assesses notably the impacts of emissions in the working environment. For this scope three methods exist (Andrews, E. S. et al., 2009).

- Screening: this method is used to understand what the main areas of interest in the cycle of a product are, most of them are chemical screening methods.
- Sector: it is used to address working environmental issues in a specific line, department or business at a broad level. Often the sector method can exploit statistical instruments.
- Process method: based on process specific information, often is utilized inside a particular company in parallel with a E-LCA.

Product design and production processes

The social impact coming from the use of products and services has been described in the section above, but the whole process of designing and producing a good can be classified as impact from operations.

In the last years the focus on the sustainability of products has grown consistently, due to a bigger sensibilisation towards the environment and society. If from one side the role of governmental institution contributes to the feasibility of the change toward a society with better distributed resources, from the other side designers, engineers and organizations have been viewed until now as responsible of a certain kind of vision that has favoured a negligent consumer-led design (Whiteley, 1993) that is incompatible with a positive impact.

The biggest problem is that is still unknown if the principles of sustainability can be applied to mass production consumer goods (Diegel and Singamneni, 2010).

Unfortunately, planned obsolescence is a common practice in today's objects design, especially in the technological field, where batteries and electronical components make the biggest part of consumer goods. This phenomenon has been at the centre of debates because it is considered unethical by many, in fact it creates the so called "throw away mentality" (Diegel and Singamneni, 2010) that is a serious menace for the sustainability.

Planned obsolescence has been used since the diffusion of the mass production, where the supply started to outweigh the demand, and will not be easy to eradicate the habits it has brought to consumers. Only in United States every year are discarded about 100 million mobile phones, 300 million personal computers and 20 million TVs (Aladeojebe, 2013).

More importantly it brings so many added profits to companies that has been even excluded from the topics of discussion of the manifesto of eco-friendly practices of the World Business Council for Sustainable Development (Aladeojebe, 2013).

When a product is designed, the aimed effect on sustainability should include the "triple bottom-line" solutions. In this way the sustainability is divided into three areas: environmental, economic and social sustainability (Elkington, 1997). An ideal product is able to satisfy all the three requirements: environmental sustainability, social development and economic profits for the company.

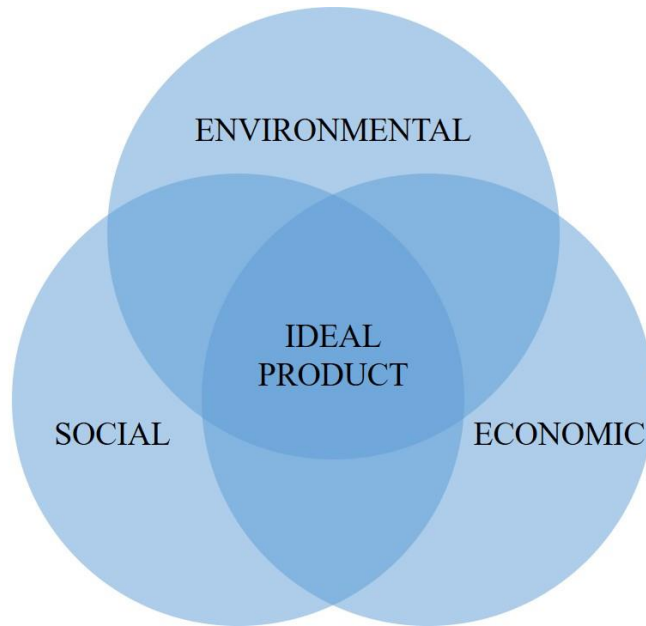


Figure 1: Triple bottom-line product design, adapted from (Diegel, O., Singamneni, S., 2010)

This task is quite difficult to achieve and not all the companies give it the right attention. Many of them tend to maximize the economic profits as first objective, with a secondary focus on the environmental aspect, sacrificing the social issue of the product (Charter and Tischner, 2001). Another problem is linked to the fact that the social and environmental impact at the design level are not always easy to measure because of the subjective interpretation of design quality.

One of the most important features on which designers can operate is the longevity of products, in contrast with the growing trend of planned obsolescence of the goods, as stated before.

A product that lasts longer has lower impact and is perceived as more appealing and desirable by the customers, as argued by Govers and Mugge in 2004.

Materials that make the products have a great influence on both the durability of the goods and on environmental sustainability at the end of their lifecycle. Today many products are built to be easily disassembled and reused, and the utilizations of common platforms is a way to increase standardization and compatibility between components, as for example happens in the automotive industry.

Using materials with high recyclable properties is a growing trend in the manufacturing industry but it still doesn't assure a low impact from the operations, it must be taken into consideration also the provenience materials.

Importing resources from countries where the human rights are not granted or where the power is in the hands of dictators and warlords, contributes to the empowering of such organizations. It is common to refer to some materials that come from these troubled areas as "conflict minerals", and once again the protagonists are minerals used in the technological field as tantalum, tin, tungsten (Epstein and Yuthas, 2014), essential for the production of batteries and electronic components.

Linked to this aspect of production there is also the delocalization of the industrial plants where the labour is cheaper. Low cost manpower often is found, once again, in countries where the workers' rights are not respected or totally absent. Neglecting the human resources safeguard or exploiting human resources that are not protected by working rights creates a huge negative social impact, while employing workers from countries in way of development can represent a big social achievement for a company that aims to create a positive social impact.

Sustainable supply chain management

Supply chain management has a big role in creating a social impact, as it easily comprehends the three big areas that have been identified as primary drivers in sustainability: economic, social and environmental.

Before understanding how supply chain management can be shaped according to sustainability standards it is important to deeper understand what the supply chain really is.

A supply chain is "*a set of three or more entities (organizations or individual) directly involved in the upstream flows of products, services, finances, and/or information from a source to a customer*" (Mentzer et al., 2001, p. 4).

In the same paper the supply chain is divided into three categories, according to the degree of complexity, as it follows:

- Direct supply chain

- Extended supply
- Ultimate supply chain

Direct supply chain is the simplest, and it involves a company, a supplier and a customer, all three in the upstream and/or downstream flows of products, services, finances and information. An extended supply chain involves the immediate suppliers and customers after the main suppliers and customers, all involved in the upstream and/or downstream flows of products, finances and information. An ultimate supply chain, finally, includes all the suppliers and customers involved in the upstream and/or downstream flows of products, finances and services (Mentzer et al., 2001), as shown in figure below.

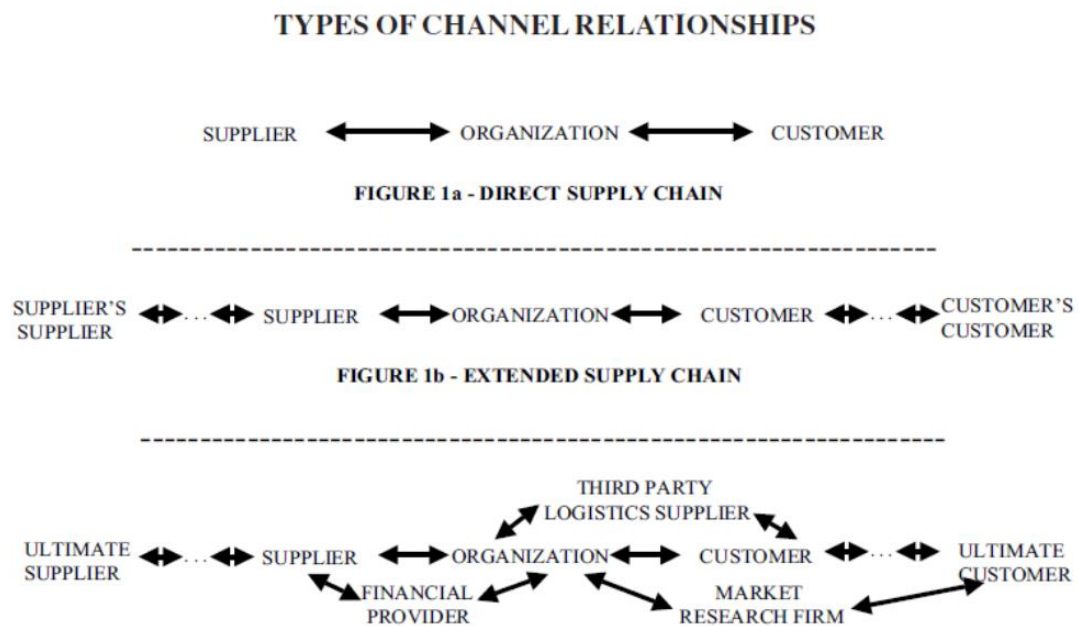


Figure 2: Types of channel relationships, source: Mentzer et al. (2001)

The definition of Supply Chain Management (SCM) is more complex and often creates confusion between readers because of the different approaches that authors have in its regards, but all the definitions can be classified, according to Mentzer et al., into three main categories:

- A management philosophy

- An implementation of a management philosophy
- A set of management processes

In the following table are listed a few definitions present in literature.

DEFINITIONS OF SUPPLY CHAIN MANAGEMENT

| | |
|--------------------------------------|---|
| Monczka, Trent, and Handfield (1998) | SCM requires traditionally separate materials functions to report to an executive responsible for coordinating the entire materials process, and also requires joint relationships with suppliers across multiple tiers. SCM is a concept, “whose primary objective is to integrate and manage the sourcing, flow, and control of materials using a total systems perspective across multiple functions and multiple tiers of suppliers.” |
| La Londe and Masters (1994) | Supply chain strategy includes: “... two or more firms in a supply chain entering into a long-term agreement; ... the development of trust and commitment to the relationship; ... the integration of logistics activities involving the sharing of demand and sales data; ... the potential for a shift in the locus of control of the logistics process.” |
| Stevens (1989) | “The objective of managing the supply chain is to synchronize the requirements of the customer with the flow of materials from suppliers in order to effect a balance between what are often seen as conflicting goals of high customer service, low inventory management, and low unit cost.” |
| Houlihan (1988) | Differences between supply chain management and classical materials and manufacturing control: “1) The supply chain is viewed as a single process. Responsibility for the various segments in the chain is not fragmented and relegated to functional areas such as manufacturing, purchasing, distribution, and sales. 2) Supply chain management calls for, and in the end depends on, strategic decision making. “Supply” is a shared objective of practically every function in the chain and is of particular strategic significance because of its impact on overall costs and market share. 3) Supply chain management calls for a different perspective on inventories which are used as a balancing mechanism of last, not first, resort. 4) A new approach to systems is required—integration rather than interfacing.” |
| Jones and Riley (1985) | “Supply chain management deals with the total flow of materials from suppliers through end users...” |
| Cooper et al. (1997) | Supply chain management is “... an integrative philosophy to manage the total flow of a distribution channel from supplier to the ultimate user.” |

Table 1: Definition of supply chain management, source: Mentzer et al. (2001)

As Seuring and Müller stated in their literature review to a conceptual framework for sustainable supply chain management (2008), the definition of sustainable supply chain

management (SSCM) can be expressed as follows: *“Sustainable SCM is the management of material, information and capital flows as well as cooperation among companies along the supply chain while integrating goals from all three dimensions of sustainable development, i.e., economic, environmental and social, which are derived from customer and stakeholder requirements. In sustainable supply chains, environmental and social criteria need to be fulfilled by the members to remain within the supply chain, while it is expected that competitiveness would be maintained through meeting customer needs and related economic criteria.”*

A more evident triple bottom line approach is evident in the definition of Carter and Rogers: *“the strategic achievement and integration of an organization’s social, environmental and economic goals through the systematic coordination of key inter-organization business processes to improve the long term economic performance of the individual company and its value network”*.

The first group of definitions in the table is formed by the SCM as a philosophy vision. According to this view, the supply chain is seen as a single entity from the top to the bottom. The philosophy of supply chain management extends the concept of partnerships into a multi-firm effort to manage the total flow of goods from the supplier to the ultimate customer (Ellram 1990; Jones and Riley 1985). In other words, all the firms involved in the supply chain act as a whole, so the performances of the single unit influence the ones of the group. *“SCM as a management philosophy seeks synchronization and convergence of intrafirm and interfirm operational and strategic capabilities into a unified, compelling marketplace force”* (Ross 1998).

According to this logic, customer value is created with the synchronization of the efforts of the firms in the SCM, not only in the logistic department but, more importantly, in the strategic one. SCM philosophy is at the base of a conception of the supply chain members with a profound customer orientation (Mentzer et al. 2001).

According to Mentzer et al., this theory of SCM has the following characteristics:

- The supply chain seen as a solid unit, with a focus on the total flow of goods from the supplier to the customer;
- A high degree of strategical orientation and synchronization inside the firm, that make possible a better functioning as an entity;
- Attention towards the needs of the customers and their satisfaction.

SCM as an implementation of a management philosophy

According to this view of SCM the members of the firm management must acquire the right practices and habits to follow the philosophy of the supply chain.

It is evident how the activities that form the SCM are the base on top of which the management practices are built.

Mentzer et al., in their research, have collected a set of key activities for the development of a successful SCM philosophy (Table 1).

SCM ACTIVITIES

| |
|---|
| 1. Integrated Behavior |
| 2. Mutually Sharing Information |
| 3. Mutually Sharing Risks and Rewards |
| 4. Cooperation |
| 5. The Same Goal and the Same Focus on Serving Customers |
| 6. Integration of Processes |
| 7. Partners to Build and Maintain Long-Term Relationships |

Table 2: Key SCM activities source Mentzer et al. (2001)

1. Integrated behaviour: the firm must pursue a coherent behaviour across all the supply chain through external integration, with a consistent effort by all the members of the chain, from suppliers, carriers and manufacturers, directed towards the ultimate needs of the customer (Greene 1991).
2. Mutually sharing information is “the willingness to make strategic and tactical data available to other members of the supply chain” (1995, Global Logistics Research Team at Michigan State University). This activity is directly related to the previous one and is fundamental to grant benefits to final customers. The information flow

among all the members of the chain must be proficient in order to minimize the risk of uncertainty and misalignment of intents. Information is mostly related to technical indicators of the ongoing process as well as strategic and marketing strategies.

3. Mutually sharing risks and rewards in another activity required to fully synchronize the efforts in the SCM. It is important for long-term focus and cooperation among the supply chain actors (Cooper et al., 1997; Cooper, Lambert, and Pagh 1997; Ellram and Cooper 1990; Novack, Langley, and Reinehart 1995; Tyndall et al. 1998).
4. Cooperation has a central role and refers to similar or complementary, coordinated activities performed by firms aimed to produce superior mutual outcomes that are mutually expected over time (Anderson and Narus, 1990). Cooperation must be present at all levels over time (Cooper et al., 1997), from the inputs, such as initial decisions and strategies, to outputs control and performance evaluations. According to Drozdowski (1987), SC members must collaborate in the development of the product across all its life as well as in deciding successful product portfolios.
5. The same goal and the same focus on serving the customers can sum up the whole concept of SCM as a management philosophy. Maintaining a solid focus on the customer serves as a guidance for a consistent and unidirectional development. This can happen across the SCM as a form of policy integration (Mentzer et al., 2001), with resulting reduced redundancy and overlapping as well as better efficiency at lower costs.
6. As suggested by Cooper et al., integration of processes can be accomplished through cross functional teams, in-plant supplier personnel and third-party providers. Sourcing, manufacturing and distribution must all be integrated across the supply chain, and, as argued by Stevens in 1989 this can happen through four stages:
 - I. Base line case: the operations are fragmented transversely the SC, all independent and separated between each other.
 - II. Internal integration starts to move the first steps, with a more focused direction towards cost reduction rather than true performance improvement.

- III. It is developed a better strategic and tactical planning; efficiency is improved, and internal corporate integration is reached.
 - IV. Customers and suppliers are integrated into the supply chain.
7. All the activities above are supported by a net of partners to build and maintain long-term relationships (Cooper et al., 1997, Ellram and Cooper 1990; Tyndall et al., 1998). Partners can be found in suppliers, intermediaries and even customers - argue Cooper et al. – and the relationship with them can endure also the timespan of the contract, and hopefully will indefinitely.

SCM as a set of Management Processes

In their bibliographic research of 2001, Mentzer et al. have gathered a series of definitions of Management Process in the supply chain.

According to Davenport (1993), processes are a set of activities, structured and measured and designed to produce specific outputs for a particular customer market.

La Londe and Bernard gave their definition in 1997, explaining the SCM as process of managing relationships, information and material flows across the enterprise in order to deliver enhanced customer service and economic value.

Finally, according to Ross, the SCM is the actual physical business functions, institutions and operations that characterize the way a particular supply chain moves goods and services to market through the supply pipeline.

To sum up it is possible to see the SCM in the literature to take the shape of two different aspects. The first sees the coordination of a supply chain from an overall system perspective, with each of the tactical activities of the of distribution flows seen within a broader strategic context is called Supply Chain Orientation (Mentzer et al., 2001).

It is defined as “*the recognition by an organization of the systemic, strategic implications of the tactical activities involved in managing the various flows in a supply chain*” (Mentzer et al., 2001).

The second concept is the implementation of the actual supply chain orientation (SCO). This implementation is the real Supply Chain Management, and only the firms that can do so at all levels and understand the deep implications of managing the upstream and downstream flows of products and services, are putting into practice the SC management philosophy.

Unfortunately having only an economic perspective of the efficiency through the supply chain is not enough, and the practices of a firm must also take into consideration the social aspect of the SCM to be sustainable in the long run.

While the economic impact is easy to measure by calculating inputs and outputs, social impact of the supply chain is still today difficult to be quantified.

To assess social impact from SCM, Santiteerakul et al. in 2011 have categorized a series of social indicators into three categories, following the Corporate Social Performance concept treated in the works of Carroll (1979), Wartick and Cochran (1985), Wood (1991), and Clarkson (1995).

According to a definition by Wood, 1991, the author that created the most solid and used concept of CSP, corporate social performance is “*a business organization’s configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm’s societal relationship*”.

The three categories found by Santiteerakul et al. are:

1. **Principle of social responsibility:** following the guidelines of the work of Wood (1991), the first set of indicators is listed following three principles: legitimacy, public responsibility and managerial direction.

According to the principle of legitimacy, “*society has the right to establish and enforce a balance of power among its institutions and to define their legitimate functions. Society has available refusal that can be used when business’s obligations as a social institution are not met.*” (Santiteerakul, S., Sekhari, A., Ouzrout, Y., & Sopadang, A., 2011). *Social Indicators for Sustainable Supply Chain Management*. University Lumière Lyon2 – Lyon, France. Chiang Mai University - Chiang Mai 50200, Thailand)

The principle of social responsibility is the organization's duty to act affirmatively for social well-being (Wood, 1991). It is so stated that a company operating in a certain field has the obligation to fulfil its social responsibilities.

Finally, the principle of managerial discretion states the individual will of managers, acting according to their personal decisions and the power they possess. *"Managers are moral actors. Within every domain of corporate social responsibility, they are obliged to exercise such discretion as is available to them, toward socially responsible outcomes"*. (Wood, D. (1991). *Corporate Social Performance Revisited. The Academy of Management Review*, 16(4), 691-718). The indicators for this section are listed in the table below.

| Sub-Category | Indicators |
|-----------------------|---|
| Legitimacy | <ul style="list-style-type: none"> • Total number of standard or guideline involved employment and labor management. • Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes • Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations. |
| Public Responsibility | <ul style="list-style-type: none"> • Level of management effort to improve an employee well-being • Level of management effort to concern about health and safety impacts from product and Service • Public policy positions and participation in public policy development and lobbying. |
| Managerial Direction | <ul style="list-style-type: none"> • Level of management effort to involve a local community • Level of management effort to recognize an ethical issue in organization • Percentage of employees trained in organization's anti-corruption policies and procedures. • Level of management effort to concern about human rights policy • Percentage and total number of business units analyzed for risks related to corruption. |

Table 3: Social responsibility indicators. Source: Santiteerakul et al., 2011

2. **Processes of social responsiveness:** according to Fredrick (1978), social responsiveness is the capacity of a company of reacting to social pressure. It comprehends three main areas: environmental assessment, stakeholder management and issues management (Santiteerakul et al., 2011). It is basically how the managers of a company act materially in response of an external stimulus or change. The indicators that can be unified under this macro-category are the following (Table ?).

| Sub-Category | Indicators |
|---------------------------------|--|
| Environmental Scanning | <ul style="list-style-type: none"> • Total workforce by employment type, employment contract, and region. • Total number and rate of employee turnover by age group, gender, and region. |
| Stakeholder Management | <ul style="list-style-type: none"> • Benefits provided to employees • Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases. • Average hours of training per year per employee by employee category. • Level of commitment with supplier on social and public policy in supply chain. • Total number of incidents when contracts with business partners were not renewed due to violations related to corruption. • Level of commitment with customer on social and public policy in supply chain. • Practices related to customer satisfaction. |
| Issues/Public Affair Management | <ul style="list-style-type: none"> • Assessment/risk management costs (The cost of risk assessment and management activities for a specific area, supplier, product, etc.) • Nature, scope, and effectiveness of any programs and practices that asses and manage the impacts of operations on communities, including entering, operating, and exiting. |

Table 4: Processes of social responsiveness indicators. Source: Santiteerakul et al., 2011

3. Outcome and impact of performance are the consequences of the behaviour of the firms on people and organizations, natural and physical environment, social systems and institutions. Santiteerakul et al. have focused their work only on the effects on the people and organizations, being this a work that aims to assess the principal social impact phenomena that are in the supply chain area. The subsequent set of indicators chosen is listed in the table below.

| Sub-Category | Indicators |
|--|--|
| Effects on People and Organization | <ul style="list-style-type: none"> • Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region. • Employee training satisfaction (level of satisfaction) • Employee job satisfaction (level of satisfaction) • Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations. |
| Effects on Social Systems and Institutions | <ul style="list-style-type: none"> • Result of life cycle assessment in which health and safety impacts of products and services. • Supplier satisfaction. • %of suppliers meeting labor and human rights screening criteria. • Total number of compliance related with product safety, information transparency, child labor, human rights which caused by supplier's operation. • Results of surveys measuring customer satisfaction. • Total number of compliances related with safety recalls, false advertising, and product-related regulatory violations. |

Table 5: Outcome and impact of performance indicators. Source: Santiteerakul et al., 2011

Impacts from infrastructure

One of the most important aspects to be analysed when making a social impact assessment is the role of infrastructure and buildings.

Impact from infrastructure comes in different ways, for example the location of buildings, the materials used during the construction, the noise and the lighting as well as energetic factors.

Often companies try to balance the impact they create with opportunities given to the community, as possibility of employment, energy services, water.

In the latest years the attention to social impact has grown rapidly and with it the number of companies that aim to create a positive impact with their infrastructures.

The difficulty that firms with a social orientation encounter in their path is to be able to satisfy the needs of a large number of stakeholders, while also respecting the social goals and objectives that are at the base of the organization.

Traditionally stakeholders are considered a group or single individuals that can influence or be influenced by the activities, actions, and objectives of a firm (Freeman, 1984).

Another substantial distinction that can be made is between primary and secondary stakeholders.

Primary stakeholders are usually shareholders, employees, providers and customers. For this group of stakeholders exists a consistent number of studies and well-defined frameworks that regulate and explain the relationships that exist between them and the firm, and among each other. They usually are given the greatest part of the attention because they constitute, for most of the cases, the biggest influence on the decisions of the firms.

According to Freeman (1984), secondary stakeholders are those that are not directly involved with the firm and are not engaged in direct economic exchange but who are affected by the firm and indirectly may influence it.

An interesting challenge is to link secondary stakeholders to the interests of the firms and creating a method to make easier the decision making in the infrastructure field for firms with social responsibility. Giving secondary stakeholders the right consideration can result in a great opportunity for the firms, as they can represent a source of innovation for the companies as well as an agent of change for the internal culture (Álvarez, M et al. 2013).

There are still some obstacles in the diffusion of this new model, that must substitute the classical approach based on a risk management policy, however, according to Zink (2005), a secondary stakeholder orientation can represent a precondition for sustainability.

This new approach can be well correlated to corporate social responsibility (CSR) and tries to understand the risks and the opportunities underlying stakeholders' relationships (Álvarez, M et al., 2013). Corporate social responsibility can be summarized according the definition of Carroll (1979) in the picture below.



Figure 3: Corporate Social Responsibility pillars, Carroll (1979). Source: www.thecsrjournal.in, by Thacker, H., 2019, Retrieved from <https://thecsrjournal.in/understanding-the-four-levels-of-csr/>

A difficult task is to provide efficient mathematical methods to measure the level of CSM in corporations, while the companies need instruments to assess the social impact of their projects in collaboration with their stakeholders.

In this sense Álvarez, M., Moreno, A., & Mataix, C. have studied in 2013 an analytic hierarchy process (AHP) to support decision-making processes in infrastructure projects with social impacts. This can be a way to assign numerical values to the social characteristics of projects, in collaboration with the local stakeholders.

As they explain in their work: *“the AHP splits a complex multi-factor problem into a hierarchy. It uses hierarchic structures and linear algebra to understand better the problem and to support the final decision. The AHP determines weights for each criteria and alternatives by analysing the judgmental matrices and by applying the mathematical theory of eigen values and eigenvectors. The AHP combines both subjective and objective judgments in an integrated framework based on ratio scales from simple pair wise comparisons”* (Álvarez, M., Moreno, A., & Mataix, C., 2013. *The analytic hierarchy process to support decision-making processes in infrastructure projects with social impact*. Total quality management & business excellence, 24(5-6), 596-606). This study was achieved with the collaboration of the Spanish company REE, that is a leader in the electricity sector and has the objective of integrating its projects both socially and environmentally.

The AHP model was applied for four rounds in a pilot project and was compared with the process that REE already used to prioritize and evaluate the social feasibility of its projects (Álvarez et al., 2013). The different levels of applications of the AHP model were used to measure:

1. The acceptability of the projects
2. To study, jointly with stakeholders the factors that influence the acceptability of the projects
3. To assess the acceptability of different alternatives for the project
4. Decide how much of the stakeholders' preferences must be integrated

The AHP model was found to be useful in order to calculate more accurate weights for the criteria of evaluation of the factors of the projects, was used to build a new criteria tree that takes into consideration the needs of secondary stakeholders, making possible the shaping of a new, positive social impact of infrastructure.

1.2. The food industry and corporate social responsibility

The social impact analysis treated in this work will be focused, in this second section, on the food sector. The main area of interest will be the corporate social responsibility in the food industry, with a study on the local food production impact and how the small producers can create social benefits in the community.

In the latest years the sensibility to the social cause in the food industry has grown consistently. This happened for a series of reasons: firstly, the customers' awareness has increased as consequence of a perceived lack of regulations by the governmental organisms, as well as in consequence of the rapid growth and accessibility of the mass media information (Moon and Vogel, 2009; Bè nabou and Tirole, 2010). The concept of Corporate Social Responsibility finds good application in the food industry field and here appears natural the idea of firms finding a balance between economic profits and social awareness. Following the definition of Friedman (1970), a firm must increase its profits as long as it stays within the legal framework.

Moreover, CSR has remarkable weight in the food industry because of the peculiarity of this sector. Customers are very sensitive to the food topic because it is a basic human need and linked to it there are several requirements and branches that touch different fields on which a positive or negative social impact has great consequences. In fact, the food industry has serious repercussions on the welfare of animals, on the environment because of pollution, wastes and water use, and finally on the human society, by means of labour conditions and the quality of products (Maloni and Brown, 2006).

In the general discussion about whether firms must undergo CSR campaigns, some authors suggest that companies that are able to integrate a higher level of CSR are also able to maximize profits at the same time. The two aspects can be seen as linked together when it's possible to consider a market made of sensible customers, employees and supply chain partners, that are attracted by companies with higher CSR record, contributing so to the serious decrease of agency and transaction costs (Jones, 1995; Frank, 2004).

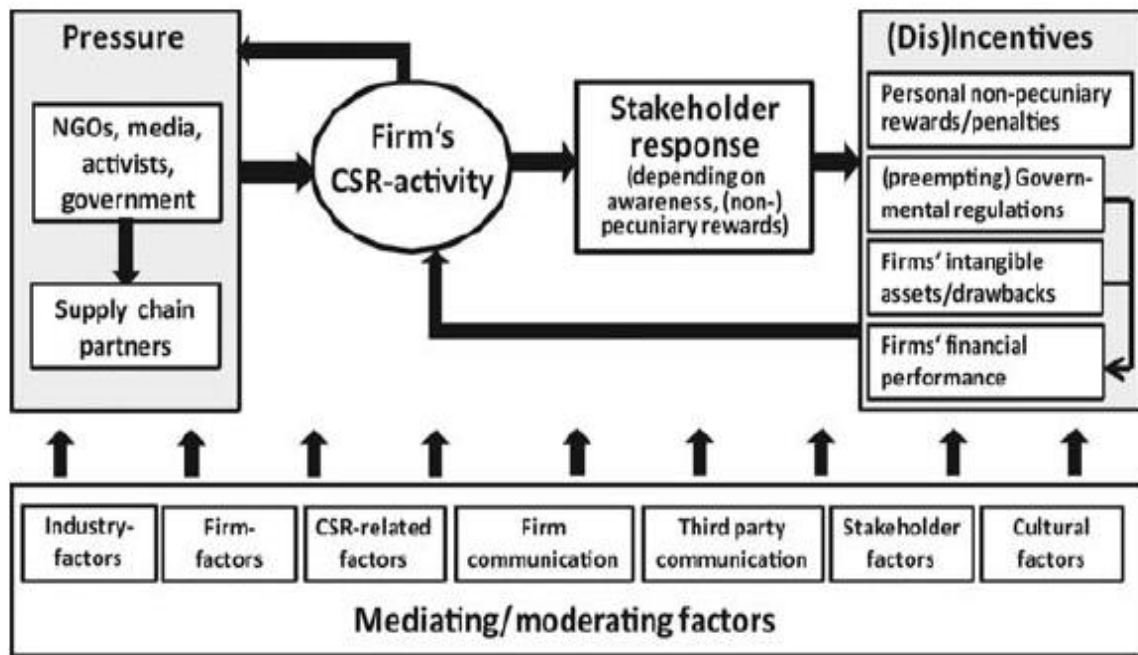


Figure 4: Firms' decisional framework for CSR engagement. Source: Hartmann, M. (2011)

The figure above (Fig. 4) illustrates the decisional framework for firms whether engage or not in CSR activity. It's possible to see the factors that incentive the choice, such as the pressure that companies may feel from NGOs, media, government and activists, as well as the disincentive factors and the mediating/moderating factors. The pressure coming from organizations, activists and the government has grown in recent years because of the aforementioned repercussions that the food industry has on many aspects of the society.

One of these is the consequence of the strong bargaining power of companies over the suppliers, that, in many cases, are located in third world countries and are not in an equally strong position.

As suggested by Hartmann (2011), the pressure on the companies is not the same for all the realities that operate in the food market. The main concern is on the biggest groups because they are seen as the most accountable for the negative effects on the environment and society that a neglecting CSR strategy may bring.

1.2.1. Corporate Social Responsibility and Corporate Financial Performance in the food sector

In literature it's possible to find several studies that connect CSR with corporate financial performance (CFP).

Hartmann, M. (2011) classified different papers that found a positive connection between the two indicators: the works of Frooman (1997), Orlitzky et al. (2003) and Margolis et al. (2007) evidenced a small but sensitive correlation that varied depending on the area of CSR and on the type of indicator used (Hartmann, 2011).

The study of Orlitzky and Benjamin (2001) focused on the correlation between CSR and firm risk, finding that engaging in social responsibility significantly lowers the market risk as well as the accounting risk (Hartmann, 2011).

From the studies is possible to assert that firms that behave without considering CSR or act irresponsibly in this sense incur in consequent costs, but at the same time the social responsibility can go alongside firms' financial performances without the need of sacrificing one of the two. Discrepancies in the works, though, let open the possibility that not all the firms that act in favour of positive CSR necessarily have positive financial returns.

The biggest influence on the positive outcomes of companies seeking a social effect are still in great part dependent on their main stakeholders, as is possible to see in Fig. 4.

As argued by Hartmann (2011), they are the real shapers of performances and may have contributed to the increasing trend of Socially Responsible Investments (SRIs) in the last years.

1.2.2. Influence of stakeholders: consumers and employees

Consumers and employees are two of the main stakeholders that interact with companies, and several studies have found that the influence they have on financial performances is significant.

Acting according to the principles of social responsibility can create a positive outcome on factors such as: customer loyalty, product and company consideration, purchase intentions and willingness to pay (WTP) (Hartmann 2011).

The correlation between positive and negative perception of firms' behaviour by customers, though, is not equally corresponded in their reaction.

Evidence has proven that the consumers' good evaluation of companies that behave responsibly is significantly less than the corresponding bad evaluation when the same companies act without social consideration (Creyer and Ross, 1996; Folkes and Kamins, 1999; Sen and Bhattacharya, 2001; Klein and Dawar, 2004; Mohr and Webb, 2005).

This asymmetrical behaviour can be explained looking at the human psychology, that in this case tends to attribute a "due" nature to the ethical behaviour and strictly punish an opportunistic/profit-oriented one.

It is still difficult to assess when and how consumers respond to social responsibility; the phenomenon is still difficult to measure even if it exists for sure, but is possible to assert that for firms that are facing a crisis, the unethical behaviour can cause them some serious trouble (Hartmann, 2011; Klein and Dawar, 2004; Eisingerich et al., 2011).

A study from Lev et al. (2010) gives an interesting cue about the fields in which CSR has more impact on consumers: according to this work, the sectors in which this correlation is more evident are those where customers can directly benefit from the produced goods and external influence by governmental institutions is less present.

The food sector clearly happens to be greatly supported by this latest definition, being a market where customers are very sensitive and close to the experience in the use of products (Hartmann, 2011).

How it's possible to see in the next figure (fig.?), the food industry comes first when concerning the need to respect the CSR targets according to customers, as emerged by a study made by Clutch in 2019.

The graph clearly evidences the theory expressed by Hartmann above. Food and grocery, fashion and health and beauty are all strictly related to our body, so it comes naturally to be very aware of the effects brought by them in our lives

Technology seems to be unrelated with the rest of the group, but, in reality, it became a sort of extension of ourselves, for how much we are interconnected today.

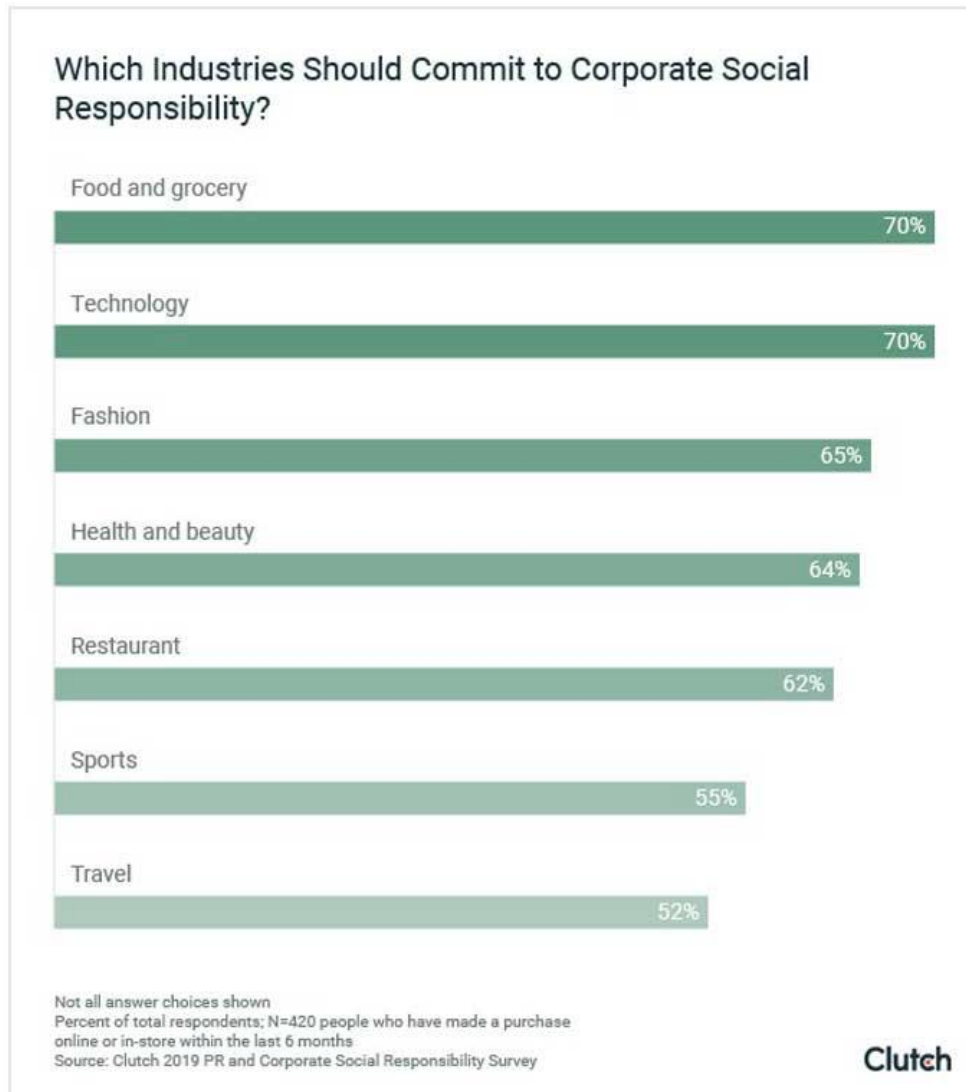


Figure 5 Which industries should commit to CSR according to consumers. Source: [www.clutch.co](https://clutch.co/pr-firms/resources/how-businesses-approach-corporate-social-responsibility-pr), by Cox, T., 2019. <https://clutch.co/pr-firms/resources/how-businesses-approach-corporate-social-responsibility-pr>

Another interesting correlation that authors have tried to quantify is the one between CSR degree and employees' perception and influence.

In fact, employees constitute the other significant part of the most important stakeholders in a company. According to Hartmann (2011) employees that positively evaluate social conduct are more willing to engage with the philosophy of the firm, they feel better connected with its values and experience a familiarity and identification feeling.

Several studies have found evidence in the good perception by employees that are sensitive to the CSR topic and that are able to work in a company that cares about its social responsibility.

The consequence that employees are induced in performing better and staying longer in the company is a big economical advantage for the firm itself.

Some mediating factors are found to be the demographic of the workers, personal perception and attributed relevance of CSR (Brammer, 2007; Evans et al., 2011; Peterson, 2004), as well as the level of employment choices available for the employees (Freeman, 2000).

According to this latest study, in fact, employees with fewer options tend to evaluate CSR less when they face the need for a job.

Another important aspect emerged from the studies by Frank (2004) and later by Nyborg and Zhang (2011), is the willing to accept a compromise in the monetary utility – wages – in favour of benefits derived from being employed in a socially responsible working environment.

Considering all the factors that positively link CSR to customers and employees behaviour we can assert that companies that are able to exercise a high level of social responsibility are more willing to experience better competitive advantage because of their ability to build solid roots made by consumers' and workers' fidelity. This is very important in a seriously competitive market that is the food industry (Hartmann, 2011).

However, the perception of stakeholders of the social activities of the firms often is dependent on the means of communication that the firm itself can have, it happens that most of the times the stakeholders don't have the information needed to correctly evaluate CSR on their own, so they only can build their assumptions on trust (Hartmann et al., 2011; Simons et al., 2011).

For this reason, in recent years, the presence of external organizations that evaluate the social conduct of the firms has grown consistently.

1.2.3. CSR in the food industry: differences between large corporations and small enterprises

As stated before, the pressure that companies in the food market feel differs according to their dimension. The larger firms are those that have to bear more pressure by NGOs and institutions, but also smaller enterprises and little producers are becoming more sensible towards the social issue. The differences between the two cases lie in the characteristics of the businesses and more importantly in their supply chain. Because of the constant attention risen on the moral conduct of the actors of the food sector, big corporations have acted accordingly, focusing on social campaigns that involve both the social integration of local human resources as well as the adoption of environmental-friendly measures for packaging and production. For big enterprises the social responsibility topic has taken a wider form, in fact the engagement that stakeholders expect is extended to all the supply chain.

From raw materials to production, distribution, transportation and selling, large companies are subjected to serious standards of CSR and must report their operations in a formal way, respecting international regulations.

Neglecting the social practices or acting in an irresponsible way may cause some serious damages to the reputation of the brand, as happened in some famous cases that resulted even in the boycotting of the products by the users.

Small enterprises are in a different spot concerning social responsibility. SMEs differ from big corporations for their financing, that is mostly internal, for their management and their reputation. Even if the attention is more focused on larger firms, SMEs tend to be sensible to the social/environmental problem, however their contribute is rarely quantifiable and often is not officially communicated by the enterprises themselves (Hartmann, 2011).

According to Bader (2011), from a survey made in Germany emerged that among 142 SMEs only one published an official report about corporate social responsibility.

The data suggest an average 12% of the firms publishing CSR reports to be small-medium enterprises, and this percentage goes down to 6% when talking about the food sector, as is possible to see in Table 6 (Hartmann, 2011).

| Sector | Reports according to GRI guidelines | | | | |
|--|-------------------------------------|-----------------|----------|-----------------------|--------------------------------|
| | Total reports | All GRI reports | Of which | | |
| | | | SMEs | Third party assurance | SME with third party assurance |
| All sectors | 4,864 | 1,793 | 212 | 857 | 103 |
| Food and beverage producers/processors | 252 | 108 | 6 | 39 | 2 |

Table 6: Companies officially reporting CSR in 2010. Source: Hartmann, M., 2011

So is possible to assert that smaller businesses are subjected to less pressure from the stakeholders with respect to multinationals, even if in general SMEs are seriously concerned with social responsibility and sustainability.

2. Foodservice Analysis

In the following chapter, the role of away from home consumptions will be analysed and discussed, with particular attention to the Italian market. Within the following sections, the results provided in the “Rapporto Ristorazione Fipe – Federazione Italiana Pubblici Esercizi (Fipe, Rapporto Ristorazione 2019), considered more relevant for this document will be presented. This report issued annually has the aim of providing a wide picture of the sector.

2.1. Definition of the Foodservice Industry

The away from home consumption market is commonly referred using the term "Foodservice Industry".

This term can be used interchangeably with other terms, such as "Catering Industry", "Food Service Industry" or "Hospitality Industry"; however, it is necessary to underline that different terminologies, depending on the location considered, can delimit the boundaries of the industry in a different way: it is in fact possible that similar terms are used to indicate the whole industry (therefore considering all the companies involved in the production, distribution and administration of food for away from home consumptions) or, alternatively, the only activities in direct contact with final consumers.

It is therefore necessary to consider the presence of different meanings of the terms, deriving from linguistic and semantic differences (Journal compilation © 2009, Wiley Periodicals, Inc. Journal of Foodservice, 20, pp. 1–3).

The difficulties in correctly delimiting the boundaries of industry also arise from the difficulty of clearly defining which commercial activities are involved within the distribution of food involved in the away from home consumptions.

In general terms, however, it is possible to provide the following commonly accepted definition of "Foodservice Industry": "The [serviced] provision of food and beverages [meals] away from home (Davis et al. 1998)".

The previous definition focuses on the presence of the service in the provision of consumption away from home; this service is commonly satisfied by activities such as hotels, restaurants and cafés and related businesses; for this reason, it is customary to refer

to the industry foodservice using the term Ho.Re.Ca industry, acronym for Hotellerie-Restaurant-Cafeterias.

Although hotels, restaurants and cafeterias represent the main channels for the distribution of food products for away from home consumption, it is useful to underline how different types of activities are involved within the distribution process; it is therefore possible to consider the industry more broadly by recalling the importance, for example, of the health, military and educational system in the distribution of meals for away from home consumptions. (Journal compilation © 2009, Wiley Periodicals, Inc. Journal of Foodservice, 20, pp. 1–3).

2.2. Analysis of the Foodservice Industry in Italy

The away-from-home consumption sector represents an important cost item for Italian families.

In 2018, Italian families spent a total of around 1077 billion euros. However, analysing the variation in consumption in the period between 2008 and 2018, it is possible to observe an overall reduction in consumption equal to 7872 million euros. As illustrated in the following figure, few items were able to register an increase in the period analysed.

In particular, it is useful to underline the increase recorded in the expenditure of Italian families in hotel and restaurant services, equal to 8898 million euros, of which 4980 million euros for expenses inside restaurants.

| Capitoli di spesa | mln. di euro |
|---|---------------|
| alimentari e bevande non alcoliche | -8.654 |
| bevande alcoliche, tabacco, narcotici | -6.111 |
| vestiario e calzature | -2.178 |
| abitazione, acqua, elettricità, gas ed altri combustibili | 8.755 |
| mobili, elettrodomestici e manutenzione della casa | -5.345 |
| sanità | -86 |
| trasporti | -17.889 |
| comunicazioni | 3.875 |
| ricreazione e cultura | 3.126 |
| istruzione | 430 |
| alberghi e ristoranti | 8.898 |
| - servizi di ristorazione | 4.980 |
| beni e servizi vari | 5.675 |
| Totale | -7.872 |

Fonte: elaborazione C.S. Fipe su dati Istat

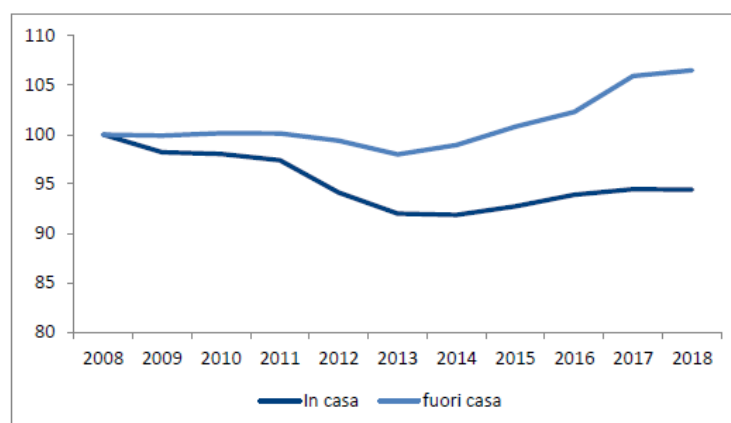
Table 7: Consumptions variations in families between 2008/2018. Source: FIPE, 2020

It is also interesting to observe how the consumption of food and non-alcoholic beverages decreased by 8654 million euros.

This result can be partially justified considering therefore an increase in away from home consumptions, to the detriment of those for domestic use.

In fact, by analysing the trend of consumption, it is possible to see how away from home consumption has increased by about 6% (5.7%), while consumption at home has decreased by about 5% in the period between 2008 and 2018.

Fig. I2 - Alimentari: in casa vs. fuori casa
(Spesa delle famiglie - N.I. 2008=100)



Fonte: elaborazione C.S. Fipe su dati Istat

Figure 6: food industry: home and restaurants consumption. Source: FIPE, 2020

In 2018, consumption away from home recorded an expenditure of around 84 billion euros; they therefore represented around 36% (35.59%) of total consumption, equal to 236 billion euro. Consumption for food products at home was around 152 billion euro, equal to about 64% (64.41%).



Figure 7: Food consumption in Italy. Source: FIPE, 2020

Consumption away from home therefore represents an important percentage in consumption dedicated to foodstuffs for Italian families.

The catering sector plays an important role in almost all the countries belonging to the European Union. In 2018, consumption for food in Europe amounted to a total of 1649 billion euros; on average, consumption was divided between the domestic channel of 63.5% and that of consumption outside the home, of 36.5%.

In Italy, therefore, consumption was spread almost similarly to the European average.

Tab. I2 - La variazione dei consumi alimentari nel periodo 2008-2018
(prezzi costanti – valori in milioni di euro)

| | Alimentari e bevande non alcoliche | Ristorazione | Totale alimentari |
|---------------------------|---|---------------------|------------------------------|
| Unione Europea (28 paesi) | 61.915 | 27.291 | 89.205 |
| Area Euro (19 paesi) | 26.022 | 21.428 | 47.450 |
| Belgio | 2.681 | 1.553 | 4.235 |
| Bulgaria | 956 | 395 | 1.351 |
| Repubblica Ceca | 2.670 | 592 | 3.263 |
| Danimarca | 1.538 | 829 | 2.366 |
| Germania | 9.294 | 6.488 | 15.781 |
| Estonia | 262 | 155 | 416 |
| Irlanda | 1.054 | 3.101 | 4.155 |
| Grecia | 2.359 | -610 | 1.748 |
| Spagna | -433 | -7.158 | -7.591 |
| Francia | 12.020 | 8.385 | 20.405 |
| Croazia | -158 | -12 | -170 |
| Italia | -8.727 | 4.980 | -3.747 |
| Cipro | -21 | 248 | 227 |
| Lettonia | 2 | 135 | 136 |
| Lituania | -918 | 159 | -758 |
| Lussemburgo | 246 | 81 | 327 |
| Ungheria | 1.373 | 1.336 | 2.709 |
| Malta | -56 | 396 | 340 |
| Olanda | 2.946 | 1.444 | 4.390 |
| Austria | 418 | 2.248 | 2.666 |
| Polonia | 917 | 3.106 | 4.023 |
| Portogallo | 2.642 | 788 | 3.430 |
| Romania | 9.193 | -383 | 8.810 |
| Slovenia | -7 | 190 | 183 |
| Slovacchia | 1.544 | -117 | 1.428 |
| Finlandia | 1.198 | -49 | 1.149 |
| Svezia | 4.108 | 2.646 | 6.755 |
| Regno Unito | 14.814 | -3.635 | 11.180 |

Fonte: elaborazione C.S. Fipe su dati Eurostat

Table 8: Variation in food consumption in the period 2008/2018. Source: FIPE, 2020

As illustrated in the previous table, it is useful to consider how, within the period between 2008 and 2018, Italy was the third nation in terms of absolute growth in consumption outside the home, thus recording an increase expenses of 4980 billion euro, as already described above. Better results in terms of growth were obtained only from France and Germany, with increases of 8385 and 6488 billion euro respectively.

In general terms, moreover, it is possible to underline how consumption increased by an amount equal to 27291 billion euros considering all the countries belonging to the European Union, confirming, once again, the general growth of the sector.

2.3. Failure rate of food enterprises in Italy

An interesting point in the analysis of the Ho.re.ca. sector in Italy is the natality and mortality of the enterprises as an index of the health of the market.

The closing of an activity can be due to a lot of different causes, but would be interesting to find some links between the early failure of restaurants and the lack of managerial ability of their owners, moreover would be important to assess whether technology could help the entrepreneurs in better managing the enterprise.

According to the FIPE report, in 2019 10.231 enterprises were opened, while 19.674 closed, with a negative balance of 9443.

| Regione | Iscritte | Cessate | Saldo |
|------------------|---------------|---------------|----------------|
| Piemonte | 893 | 1.675 | - 782 |
| Valle d'Aosta | 37 | 49 | - 12 |
| Lombardia | 1.786 | 3.130 | - 1.344 |
| Trentino A.A. | 186 | 323 | - 137 |
| Veneto | 834 | 1.547 | - 713 |
| Friuli V. Giulia | 203 | 429 | - 226 |
| Liguria | 400 | 715 | - 315 |
| Emilia Romagna | 720 | 1.523 | - 803 |
| Toscana | 686 | 1.265 | - 579 |
| Umbria | 125 | 238 | - 113 |
| Marche | 241 | 497 | - 256 |
| Lazio | 801 | 1.883 | - 1.082 |
| Abruzzo | 271 | 521 | - 250 |
| Molise | 61 | 103 | - 42 |
| Campania | 979 | 1.947 | - 968 |
| Puglia | 683 | 1.390 | - 707 |
| Basilicata | 75 | 146 | - 71 |
| Calabria | 481 | 617 | - 136 |
| Sicilia | 476 | 1.156 | - 680 |
| Sardegna | 293 | 520 | - 227 |
| Italia | 10.231 | 19.674 | - 9.443 |

Fonte: elaborazione C.S. Fipe su dati Infocamere

Table 9: Food enterprises natality/mortality in Italy in 2019. Source: C.S. FIPE, 2019

If we consider the number of enterprises that can survive the first five years since the opening, the data suggest a decreasing trend, in fact, the businesses that are still operating after the first year are over the 70%, after three years the number decreases to 50%, to touch the 40% after five years since the opening.

For sole proprietorships the numbers are respectively 75,1%, 54,5% and 43,1%, while the percentages are slightly more optimistic for the limited societies, as is possible to see in the table below (data from Fipe report 2019).

| | | anni | | |
|----------------------------|--|------|------|------|
| | | 1 | 3 | 5 |
| società di capitale | Ristoranti ed attività di ristorazione mobile | 86,1 | 64,8 | 51,4 |
| | Fornitura di pasti preparati (catering) ed altri servizi di ristorazione | 85,7 | 61,9 | 57,1 |
| | Bar ed altri esercizi simili senza cucina | 83,8 | 63,2 | 51,6 |
| società di persone | Ristoranti ed attività di ristorazione mobile | 80,5 | 60,8 | 49,5 |
| | Fornitura di pasti preparati (catering) ed altri servizi di ristorazione | 81,8 | 45,5 | 36,4 |
| | Bar ed altri esercizi simili senza cucina | 82,5 | 60,4 | 47,6 |
| imprese individuali | Ristoranti ed attività di ristorazione mobile | 73,5 | 53,0 | 42,1 |
| | Fornitura di pasti preparati (catering) ed altri servizi di ristorazione | 62,0 | 41,8 | 30,4 |
| | Bar ed altri esercizi simili senza cucina | 75,1 | 54,5 | 43,1 |

Table 10: Survival rate of enterprises in the food sector in Italy in 2019. Source: infocamere C.S. FIPE, 2019

According to Parsa et al. (2005), restaurants fail because of three factors: economic, marketing and managerial.

An economic failure occurs when an enterprise fails because it was not able to keep up with the costs, or because of the decrease of revenues. This can happen because of changes in the market or from poor controls. The result is the bankruptcy of the enterprise.

The marketing perspective concerns all those aspects of closing an activity because of a specific decision, maybe to change location, responding to a change in the demographics or to better exploit market opportunities elsewhere.

Finally, the category of more interest for this work, the managerial perspective. Restaurants cease to operate also because of lack of management skills and incompetence of the entrepreneurs. It is fundamental that the restaurant owner evolves toward a more managerial

figure, developing the abilities to become a true entrepreneur. Managerial fails could occur if the owner is unable to react to legal, technological and environmental changes (Parsa et al., 2005), or if he can't efficiently keep track of expenses, losses, inventory and wastes.

Both Makridakis and West and Olsen agree on the role of the restaurant manager as the central cause for the success/unsuccess of the business in the long run.

As Lee argues: *“The most important criterion for success . . . is management. Managers . . . direct the marketing, oversee product quality and standardization, and decide when and how adapt”*.

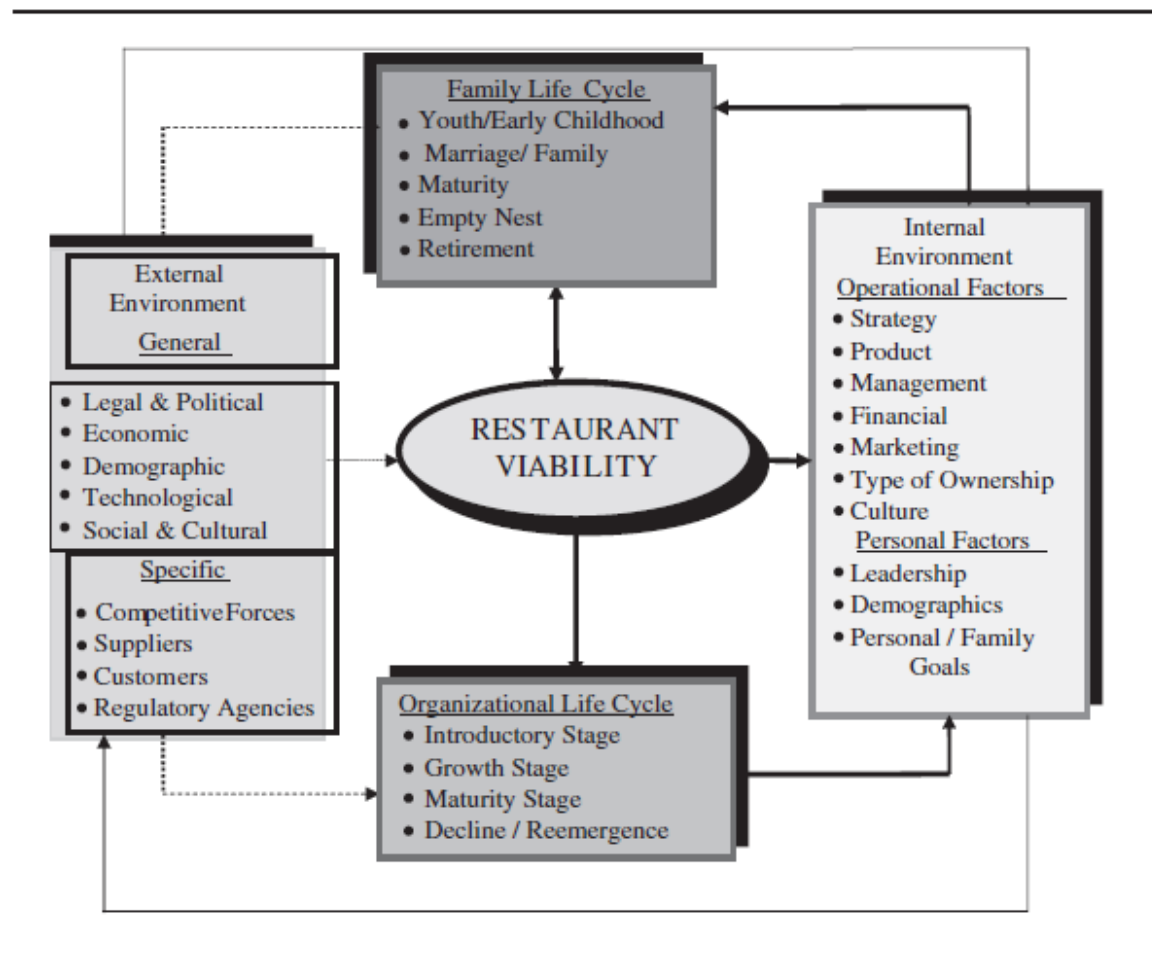


Figure 8: Restaurant Viability. Source: Parsa H. G., et al., 2005.

As is possible to see from the figure above, the first activity to be performed is the strategy formulation: it is the starting point of the planning, includes the internal and external analysis of the enterprise and it has the scope of dictating the guidelines for the next phases. The implementation is the second step: in this phase the theoretical formulation starts to be put into practice and resources are allocated. Finally, in the third phase, the strategy is evaluated and are given feedbacks for future applications (Koutromanis D., 2011).

Performances and success of a restaurant depend on the degree of innovation that the entrepreneur is able to sustain inside the business. Innovation has many facets, but, in the tourism and hospitality, as argued by Lee et al. (2016), it is able to shift the preferences of consumers towards new products, and the ideas, concepts and inventive of the entrepreneurs are crucial factors in a competitive environment.

Moreover, the food industry is characterized by the difficulty in keeping invention secret or protected by copyright, so it is key to continue to push innovation forward to be ahead of competition (Agarwal et al., 2003).

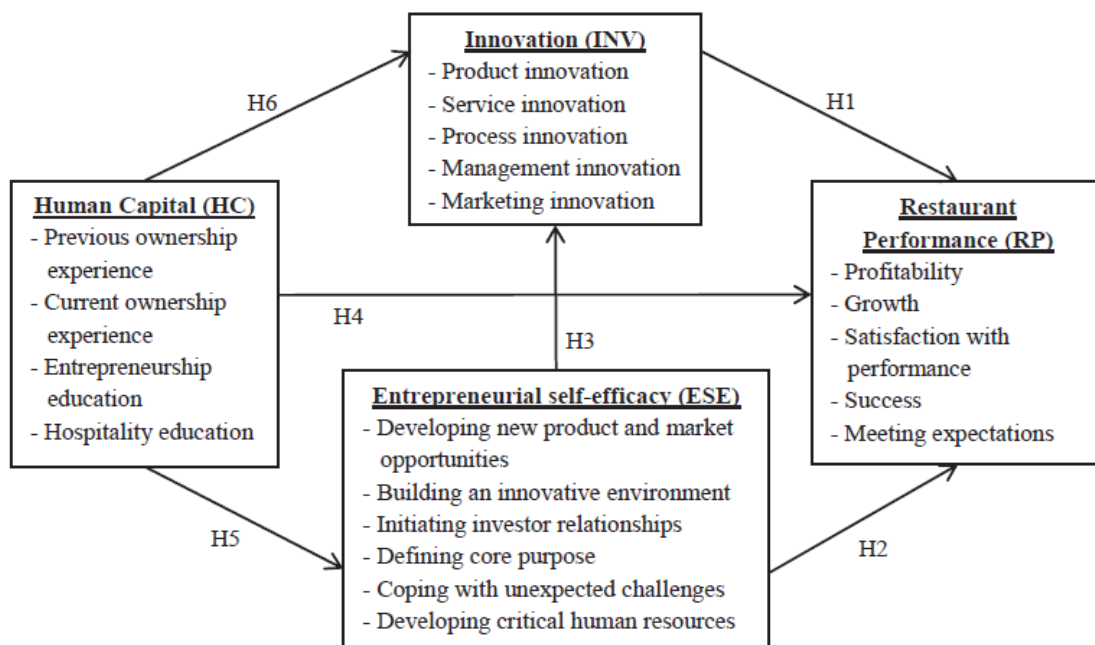


Figure 10: Conceptual model of restaurant performance. Source: Lee et al., 2016.

As is possible to see in the figure above, restaurant performance is related to the different fields of innovations.

Product and service innovation in this sector are all the newness brought to the market by innovative products and services, it can comprehend new raw materials, resources and new features, as well as new methods for the realization of the final good (Camisòn and Monfort-Mir, 2012; Hall, 2009).

Marketing innovations include all those operations that are aimed to produce a better marketing strategy and methods, concerning also relations with other stakeholders, such as the government and customers (Camisòn and Monfort-Mir, 2012).

Finally, management innovations are all those practices that let the organization evolve, both internally and externally, as well as the management of human resources, staff and workers' careers (Hall, 2009; Hjalager, 2010; Ottenbacher & Gnoth, 2005).

3.2. Entrepreneurial self-efficacy (ESE)

As suggested by Lee (2016), one critical element for the success of a foodservice enterprise is the entrepreneurial self-efficacy. It includes six dimensions through which the owner is able to increase the profitability of the restaurant.

Entrepreneurial self-efficacy is the ability of transferring the self belief in one's own capabilities into actions, and, according the definition of De Noble et al. (1999), includes the tasks of *“developing new product and market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with unexpected challenges, and developing critical human resources”*

The ESE dimensions are (Lee 2016):

- Developing new product and marketing opportunities
- Building an innovative environment
- Initiating investor relationships
- Defining core purpose
- Coping with unexpected challenges

- Developing critical human resources

In 2016 Lee performed an analysis on entrepreneurial self-efficacy, and, more importantly, he found the values of correlation between ESE dimensions and restaurant performance. The more significant dimension, as is evident from the table below, is ‘*developing new products and marketing opportunity*’, with the highest correlation factor equal to 0.380; the least significant dimension, instead, is ‘*coping with unexpected challenges*’, with a correlation of 0.186.

| Dimensions | Correlations (Bootstrapped ^a) |
|--|---|
| Developing new product and market opportunities ↔ Restaurant Performance | 0.380 |
| Building an innovative environment ↔ Restaurant Performance | 0.249 |
| Initiating investor relationships ↔ Restaurant Performance | 0.255 |
| Defining core purpose ↔ Restaurant Performance | 0.285 |
| Coping with unexpected challenges ↔ Restaurant Performance | 0.186 |
| Developing critical human resources ↔ Restaurant Performance | 0.238 |

^a 5000 resamplings.

Figure 11: Correlation between the ESE dimensions. Source: Lee, 2016

| 95% confidence intervals | |
|--------------------------|-------------|
| Lower bound | Upper bound |
| 0.245 | 0.502 |
| 0.113 | 0.379 |
| 0.103 | 0.400 |
| 0.153 | 0.413 |
| 0.053 | 0.318 |
| 0.105 | 0.370 |

Figure 12: Lower and Upper bounds. Source: Lee, 2016

It is evident that the role of the restaurateur has currently evolving towards a more complex and responsible entrepreneurial behaviour. The qualities that an owner must develop are now becoming more essential to survive among competition.

As evidence showed, building an innovative environment is also very important for the performances of a restaurant, so being able to cope with the increasing level of technology is now a task that can't be underestimated.

3.3. Technological revolution in the food industry: digital management

The innovative environment described before can't be created without the use of the instruments of technology that are diffused today.

Even if the food industry is behind the other industrial sectors for what concerns the technology use, the future we could expect is characterized by an increasing penetration of the digital platforms and instruments (Shahi, 2017).

The main features that are currently revolutionizing the foodservice industry are many, some of them are suggested by Shahi (2017), and concern the future of payment, customers' satisfaction and kitchen efficiency:

- **New payment choices:** the use of credit cards and other electronical means of payment are spreading quickly in food enterprises, progressively replacing cash as it is happening in other industrial sectors. Cryptocurrency is also a phenomenon on which must be paid attention, even if it is still marginally diffused in particular in this sector
- **Better customer experience:** with the advent of social networks, nowadays customers are more and more connected, so restaurants must keep up with the trend to grant a more immersive and customized experience. The attention to customers must be endured not only during the dining but also before and after, connecting with them using social networks and digital platforms, where enterprises and clients interact directly.

- **Electronic receipts:** to make the billing process quicker and easier, some enterprises are currently adopting a digitalized receipt for the customer. This system lets the customer pay with an app on the phone and immediately the billing is delivered to him electronically. This simple system is preferred by customers because it shortens the waiting and the cues, moreover it can reduce significantly the quantity of paper used for receipts.
- **Kitchen display screens:** the digitalization is extended from the tablets used by waiters to take the orders to the staff in the kitchen. With a smart technology that lets the employees at the tables and those in the kitchen interact instantaneously, the errors in the orders are drastically reduced. The efficiency of the restaurant is increased because of the better communication and because of the information given to chefs about the time of the cooking line.

Main restaurant management software

A restaurant that is unable to pursue an efficient strategy of innovation and management is destined to fail in a short time because of the high degree of competition in this market.

The main technology services that entrepreneurs are currently using today help them to keep track of the performances of the business at 360 degrees. A research by Alnasur in 2019 collected the main software and technology that are now becoming essential for the successful foodservice businesses.

POS systems

The first management technology that started to become popular is the Point of Sale System (POS). The POS was initially developed in the eighties, to help the staff of restaurants in taking the orders quicker and without having to memorize and report the prices of the items on the menu at the moment of the check. This system evolved quickly, and already in the nineties it was able to handle accounting and payroll functions (Rubistein 1997).

Today the POS is still the most used mean of managing transactions, orders and billings; it became a very intuitive and easy to use instrument that is able to interface itself with kitchen and inventory software. Nowadays POS systems are lightweight and versatile, they can run easily on tablets and iPads (Alnasur 2019).

The main features of modern point of sales software are the possibility to calculate cashflows, keep record of payments, keep track of sales metrics and also give statistics on sales for different periods of time (Alnasur 2019).

The costs of integrating a POS system are variable, they can come as a monthly subscription, a fixed cost for the instalment or also as a fixed percentage of the restaurants transactions.

An example of POS software can be seen in the figure below.

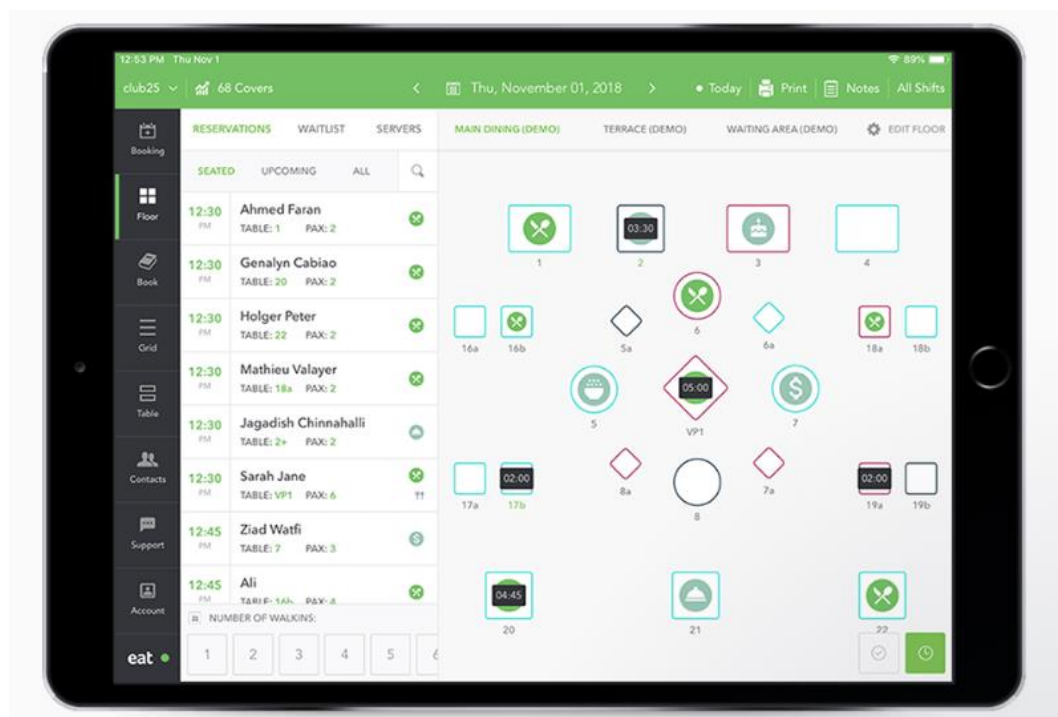


Figure 13: A POS system. Source: Alnasur 2019, retrieved from <https://restaurant.eatapp.co/blog/ultimate-guide-to-restaurant-management-software>

Restaurant Reservation Software

Another digital software that is currently spreading in the foodservice sector is the Restaurant Reservation Software or Table Management System. The big advantages of this system include the easiness of online booking, there is no more the need for employing a human resource for answering the phone and taking notes on paper of the reservation.

In addition, the user experience is improved, the customer can fill the reservation format online, and with this practice the feeling of customization and participation are enhanced.

A good reservation software provides the entrepreneur with data collected on the reservations, letting him better allocate the raw material for the next days as well as manage more efficiently the human resources employed. Moreover, it collects data for future reference, useful for statistics and predictions (Alnasur 2019).

Most of the latest reservation software include also marketing tools that make easier the process of customer's profiling: using the history of bookings and the possibility for the customer to leave feedbacks, the entrepreneur can always focus on the client's satisfaction.

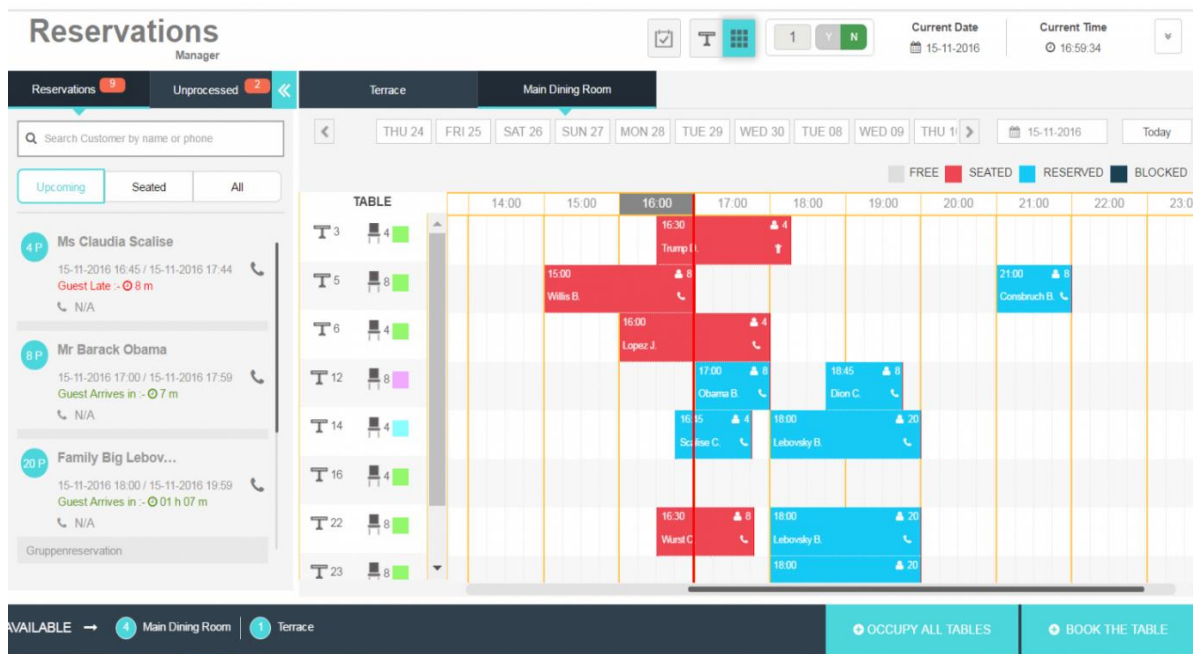


Figure 14: A Restaurant Reservation Software. Adapted from www.besttable.net.
<https://www.besttable.net/en/page/restaurant-table-booking-system-features>

Inventory Management Software

For a restaurant manager it is fundamental to keep track of the inventory in any moment. This perspective is even more important when talking about social impact and sustainability. Being able to know exactly the state of the inventory can significantly reduce the expenses and the wastes related to unused food. To always be updated a restaurateur must provide himself an Inventory Management Software. This tool reduces the time dedicated to the inventory check and to stock tracking, it automates the process and gives accurate data, minimizing the errors related to human control. One useful feature is that this software can be integrated with POS systems, making the enterprise a more efficient digitalized environment (Alnasur 2019).

Inventory management software can be also integrated with Food Costing Software, a more specific tool that calculates the use of raw material in the dishes on the menu.

Knowing what dishes are related to the highest profit margins and what are the statistics on the best-selling food courses is the key to run a successful food business.

Restaurant Accounting Software

To keep track of all the expenses and revenues over time, restaurant owners rely on restaurant accounting software. The most used software is Microsoft Excel, it is very widespread for its general capabilities as a generic calculus sheet. Anyway, some specific software exist, developed for restaurants, that are better integrated with POS systems.

One of the most popular is QuickBooks, it calculates all the profits and costs of the business and is useful to generate reports periodically.

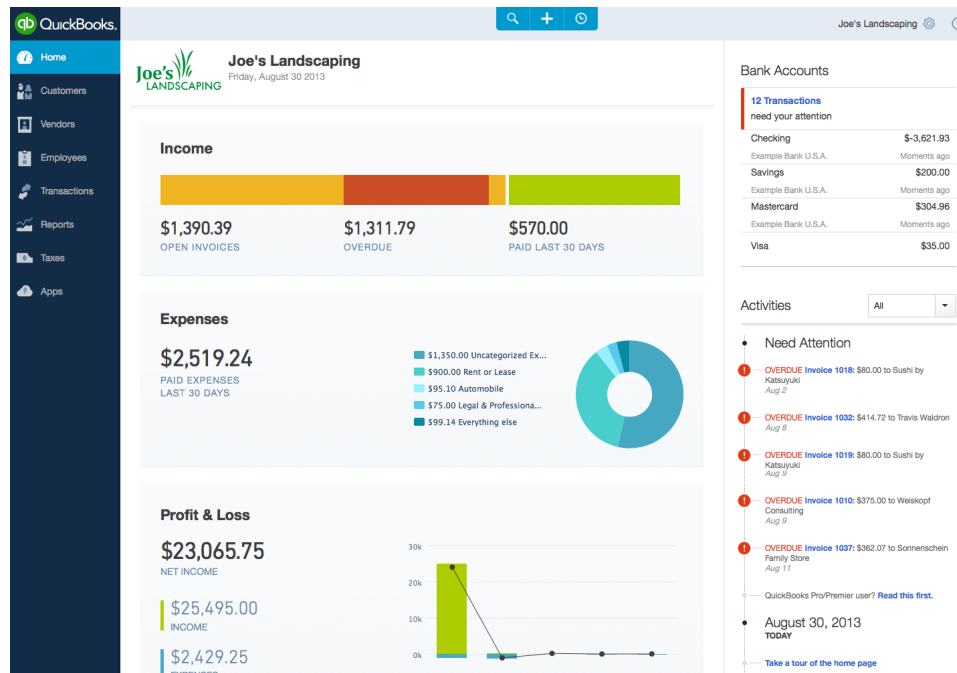


Figure 15: QuickBooks accounting software. Source www.quickbooks.intuit.com

Cash Flow Management Software

Directly related to the accounting software there is the Cash Flow Management Software. This is a very useful technology that accounts the daily, weekly and monthly inflows and outflows, to manage the level of liquidity of the business in any moment.

Often the cash flow management software is underrated among entrepreneurs, that prefer investing in other technologies that they consider more important, so it is reckoned as marginal with respect to the others (Alnasur, 2019).

- Multiple cash flow views to monitor flow on a monthly, weekly, or even daily basis
- Ability to connect to your accounting software for seamless viewing of data
- Project future cash flow
- Export data to process externally

Figure 16: Functionalities of a Cashflow Management Software. Adapted from <https://restaurant.eatapp.co/blog/ultimate-guide-to-restaurant-management-software>

Restaurant Analytics Software

Surviving a in a very competitive and growing market as the foodservice market needs a deep analysis of all the opportunities, strengths and weaknesses of the running business.

Restaurant analytics software does exactly this. It provides the entrepreneur the right suggestions about changes in the enterprise management that would result in increased profitability (Alnasur 2019). Modern analytics can be integrated with the POS system as well as communicate with smartphones and tablets in real time. They can collect data on customers and their preferences as well as on the performances of the employees, tracking their productivity over time.

4. SUSTAINABILITY IN THE HO.RE.CA. MARKET

The Ho.Re.Ca. sector is currently undergoing a period of evolution and change, thanks to technology and the internet also the competitiveness is increased.

As stated by Iraldo et al. (2017), the effects of the development of the hospitality sector must be controlled to ensure that the change is going through the right direction, because improper planning and management choices can destroy what is the most important foundation of this industry: resources.

The progress must happen in a sustainable and controlled way because the businesses are currently the main actors that can shape the future of the sector, given the strong impact that their policies can have on natural heritage and environment.

The sustainability in the restaurant and hotel market can bring several positive effects on the enterprises that apply its principles correctly.

1. Increase the interest in customers sensible to the environmental and sustainability causes (Chen et al. 2016, Chan 2005, Moeller et al. 2011)

2. Positive impact on the environment, such as limited plastic use, less paper consumption
3. Reduce technical and organizational costs (Chan 2005)
4. Reduce energy and water cost and consumption (Chan 2005)
5. Increase customers' willingness to pay (Singal 2014, Schubert et al. 2010)

As has been discussed before, management practices have the biggest influence on corporate performance, and, as a consequent effect, on social and environmental impact.

The choices taken at the managerial level have serious repercussions on the whole market, but the social sustainability awareness that should guide these choices started to be considered by entrepreneurs only recently. Iraldo et al. (2007) argue on the fact that this latency in adopting a more sustainable behaviour by restaurant and hotel owners lies in the fact that they are often guided by growth opportunities rather than sustainability, and they don't see the link between these two aspects. Secondly, it can happen that restaurateurs are afraid that the initial investment needed to follow a "greener" path – cost of high-quality biologic and organic resources – is not worth the subsequent earning. This aspect emerges also in the survey that has been conducted for this work: often the entrepreneurs are sceptical in adopting more sustainable strategies because of the high costs that they immediately occur.

Another problem is the common belief among restaurateurs that customers must be won exploiting traditional qualities, such as prices, offer, comfort etc. (Kasim and Ismail 2012). In their research in 2017, Iraldo et al. evidence how often there is also a gap between attitude and behaviour among the entrepreneurs that start moving in a more sustainable direction. This means that even if they start adopting more sustainable strategies, they fail in the practical behaviour of everyday work.

There is, in fact, evidence that the internal practices strongly determine the final effect of the pro-environmental strategy (Chan, 2008); for example, the neglected use of management software for the implementation of environmental strategies can result in the final failure of the scope itself.

The positive input often comes from customers. The increased awareness for social and environmental sustainability is reflexed in a growing number of clients that are sensible to organic and km-0 products and that choose the restaurants and hotels consequently.

In this way entrepreneurs are pushed from the market and must adapt to the increasing request for a certain type of food.

4.1. Sustainable practices in the foodservice industry

As has been stated before, the implementation of a more social and sustainable orientated philosophy can be done at different levels and with different dimensions.

For the scope of this work, the discussion will be focused on small and medium enterprises, because the great part of the Italian foodservice is formed by SMEs.

The first practice that will bring positive effects is the waste management. Waste management practices gained a lot of attention during the last years, they include the solid waste management and the wastewaters management (Iraldo et al. 2017), and, especially for restaurants and hotels, food wasted management.

According to a research by Parfitt et al. (2016), the food wastes management practices could reduce up to the 75% of food wasted in the UK. The reduction of waste is a consequence of a correct behaviour at the managerial level. As already discussed, the decisions taken by restaurant managers should first of all include all the staff of the enterprise, creating a solid entity that follows the same path and practices. Less food waste comes with a better organization; this means a more accurate forecast of clients needs and consumptions as the first step to reduce unsold food at the beginning of the chain.

The second activity, instead, comes at the end of the chain: how to reuse the leftovers.

Thanks to the advent of technology and the internet, today there are a lot of digital applications and software that prevent the waste of leftovers by restaurants, creating in this way a positive social impact on the community and at the same time reducing environmental pollution. Some services provide customers the possibility to buy at discounted prices, at the end of the day, from restaurants that agree to participate in the initiative. Food that otherwise should have been disposed is sold at discount (Wong 2017).

An interesting app is *Winnow*, active in all Europe, Asia, UAE and Australia, it provides the restaurant managers with food wastes tracking over time, suggesting methods and strategies to significantly decrease unused food (Wong, 2017).

4.2. Green practices and enterprise performance

There is strong empirical evidence that correlates the adoption of green practices by restaurant managers and positive enterprise performance.

In a study conducted by Iraldo et al., (2017), were tested the connections between green practices adoption by restaurants in Italy and their relative business performances.

The dimensions of competitiveness that were tested were:

- Competitive advantage over different competitors
- Customer satisfaction
- Employee motivation

While the respondents were interviewed about the practices that they included or were willing to include in their business strategy. The initiatives investigated were:

- Resources savings
- Waste reduction and chemicals
- Reduction of the environmental footprint of food and non-food products
- Customer information practices
- Environmental performance monitoring
- ISO 14001 and Ecolabel certifications
- Environmental commitment taken into consideration

The test resulted in a strong correlation between green and socially responsible practices and enterprise performance. The positive effects can be due to a series of different reasons.

The first factor is the communication that the enterprise is able to give to customers. If the restaurant is strongly motivated in environmental and social responsibility, it will be easier to carry on a competitive strategy, also because if the intention are clear, also the customer feels involved in the project and is happy to be in an environment that is in line with his preferences. An imperfect communication of the scope of the business can result in negative feedbacks from customers. Some clients can perceive some green choices, as for example

the use of biodegradable cutlery, or the reuse of paper, limitation of plastic use, as a cost cutting strategy rather than a sustainable and responsible one.

Moreover, the restaurant environment is a very close and familiar one, so there are also the benefits of an easier communication with the customer as well as a better possibility to influence his preferences, increasing his sensibilization and at the same time building a strong positive image of the restaurant (Iraldo et al., 2017).

The same connection that can happen externally, must also be present internally. In fact, the integration of employees in green practices is a solid foundation for the success of the business: it builds a solid entity moved by the same scope, whose actions are unidirectional and coordinated towards a more positive impact.

One of the most important findings of the study was the positive effect on the performances of the restaurants that were more sensible to local and organic products choice. *“Customers tend to interpret sustainability in terms of dimensions that are very close to their personal sphere: green customers mostly focus on health-related dimensions such as organic food, seasonal food and local food coming from small producers adopting traditional cultivation methods so-called proximity effect of green consumerism, Edwards-Jones et al., 2008). Our study clearly shows that HORECA SMEs focusing on the sustainability of foods and beverages, with a purchasing policy based on domestic, organic and traditional food products, can better respond to customer expectations exploiting the potential of the proximity effect.”* (Iraldo, F. et al., 2017. *Greening competitiveness for hotels and restaurants*, p. 617. 2 - 9).

The effort required to move towards a business whose mission is sustainable impact, and focusing on the local, organic products, entails high initial expenditures.

In fact, this radical change requires a deep reconsideration of the food offer but also of all the supply chain management. Both the raw materials and the suppliers have to be modified to be in compliance with the management choices. Anyway, this demanding initial effort seems to pay off well (Iraldo et al., 2017). The results are positive also in this case, the positive connection with firm performance are consistent.

The variable that seems to be not much correlated with good enterprise performance is the energy and wastewater monitoring. This seems to be contradictory, but the data that emerge from the study suggest that the actions that are part of a broader integrated framework are more willing to be successful in the long run. Even if energy saving and wastewater

management do have positive economic benefits, managers seem to not clearly see the entity of these effects in the short run. The perceived competitive and economic advantage is weak, even if there is a diffused general awareness associated with the sustainability and social commitment (Iraldo et al., 2017).

The final result that emerges from the studies conducted on the integration of sustainable practices in restaurants is that a strong connection exists with better firm performance and better environmental and social responsibility. Is possible to obtain both the positive effects without compromising the economic and reputational dimensions of the business. The most important foundation, though, is still the managers' ability to build a successful business. The strategy dictated by the entrepreneurs is the most important vector of performance, confirming the evidence discussed already in the chapter 3 of this work.

5. B2B INTERMEDIATION PLATFORMS IN THE HO.RE.CA. MARKET: RESEARCH AND ANALYSIS IN ITALY

The scope of this work is to assess the social impact of emerging B2B platforms that are currently growing in the foodservice industry, focusing on the entrepreneurial and managerial effects they can bring in Italy, as well as the consequences related to the diffusion of sustainable and ecological products.

Intermediation platforms are already spread in the business-to-customer market, they focus in particular on the possibility to buy food online, for example the delivery systems that already deliver dinner to millions of customers around the world.

In this chapter will be introduced the start-ups' business models that operate in the business-to-business sector, with a deeper focus on a young enterprise that I had the opportunity to collaborate with for the scope of this work. Will, then, be explained the analysis that has been performed in the area of Torino and Milano, to assess the social and environmental sustainability in this sector as well as the role of the restaurateur as a more responsible and aware entrepreneur.

5.1. Business models of B2B intermediation platforms

An increasing number of start-ups is trying to create a new market segment made of digital platforms that serve the business-to-business market.

The growth of this phenomenon is still at his initial stage in Italy but is reasonable to think that in the next years it will establish itself as a solid reality, as it happened for the business-to-customers digital platforms.

The start-ups that have been analysed in this work can be divided into two groups according to their business model: the first is a *disintermediation marketplace model*, the second is a *suppliers' aggregation business model*.

The platforms that operate according to the first model offer a service that aims to substitute itself to the existing intermediation actors across the supply chain. The producers are available on the platform and offer their products in a digital marketplace. Restaurateurs

have so the possibility to buy directly on the platform, shortening in this way the supply chain. The main advantages for the entrepreneurs are the reduced costs due to the lack of wholesalers and distributors, and the increased transparency on the origin of products.

The second business model is based on the digitalization of the existing supply chain, offering a digital platform that gathers all the producers in the same place but without the intention of directly connecting customers and producers. Intermediaries are still present in the supply chain, but the restaurateurs now have the possibility to compare products offers and prices in a quicker way, and, more importantly, can place orders all in the same platform. The aim of this second group of start-ups is to simplify the relationship between customers (restaurant owners) and producers, digitalizing the whole process but without changing the equilibria of the foodservice sector.

5.2. Gustavo B2B

A distinctive case is formed by a young start-up founded in Milano in 2017, Gustavo B2B. I had the opportunity to collaborate with its team in order to better understand the growing phenomenon of B2B platforms.

The business model of Gustavo is quite unique because it can be categorized in the middle between the two models described above. The first scope of this platform is to digitalize the current transactions in the foodservice sector, without changing the role of distributors or producers. To do so, the team of Gustavo uses a method to maintain the existing relationships across the supply chain, more specifically the restaurateur will see all his suppliers and distributors in the platform, and can continue the commercial process of supply that he was pursuing before, but in a more organized and digitalized way. All the transactions and invoicing are performed in the same place without the need for the entrepreneur to make orders by phone or to employ a resource for the same scope.

Another critical aspect of the business model of Gustavo is the introduction of small producers on the platform, giving them, in this way, the possibility to have access to a bigger catchment area, with the direct consequence of the increasing of the diffusion of local, sustainable products.

The second aim of Gustavo is to provide the restaurateurs a digital mean to control and keep track of the performances of their enterprise. With the possibility to collect data on the performances and then provide statistical analysis on orders, cashflows, customers, the platform becomes a management software that helps entrepreneurs to keep the pace of the growing foodservice industry.

5.3. Market research: impact of b2b platforms in Italy

The ambivalence of the Gustavo platform perfectly fits the scope of this work, offering a double service and trying to create its own niche of market.

To assess the impact that this type of service could have in Italy has been conducted an analysis by a survey in the area of Torino and Milano.

The first scope of the research is to estimate how restaurateurs interviewed value the benefits of the platforms, and if they think the digital systems will quickly spread in the foodservice market. The analysis tries to assess if a complete digital mean can improve the entrepreneurial role of the restaurateurs and, at the same time, can push the diffusion of sustainable products, with the combined positive effect on the social responsibility in the foodservice sector. The full questionnaire can be found in Exhibit 1, it is formed by general segmentation questions in the first part, then by questions on the restaurant management and on the sustainability and propensity of entrepreneurs in adopting sustainable solutions.

The classification of the interviewed restaurateurs is shown below.



Figure 17: Origin of the respondents

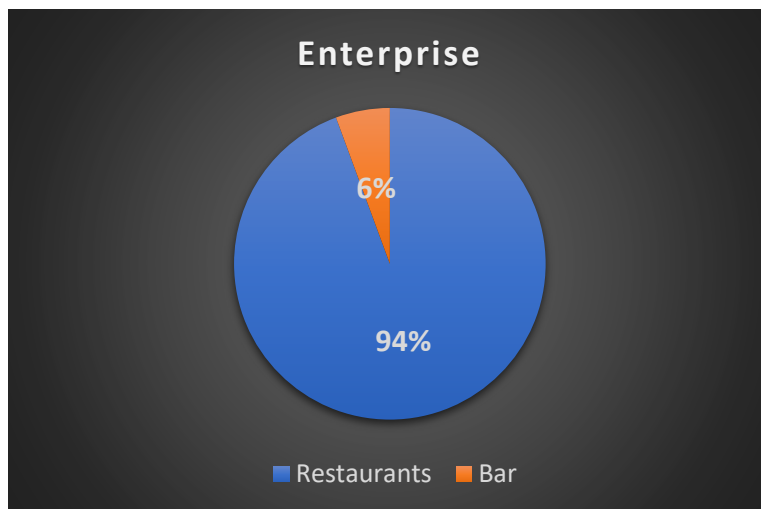


Figure 18: Type of enterprise

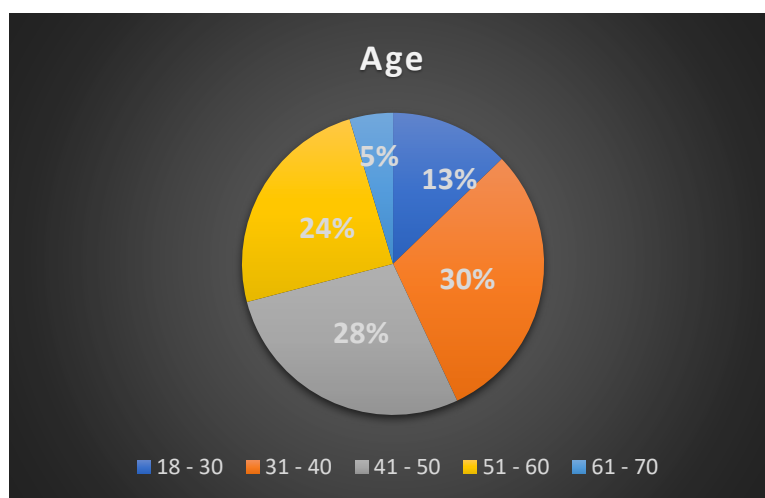


Figure 19: Age of the respondents

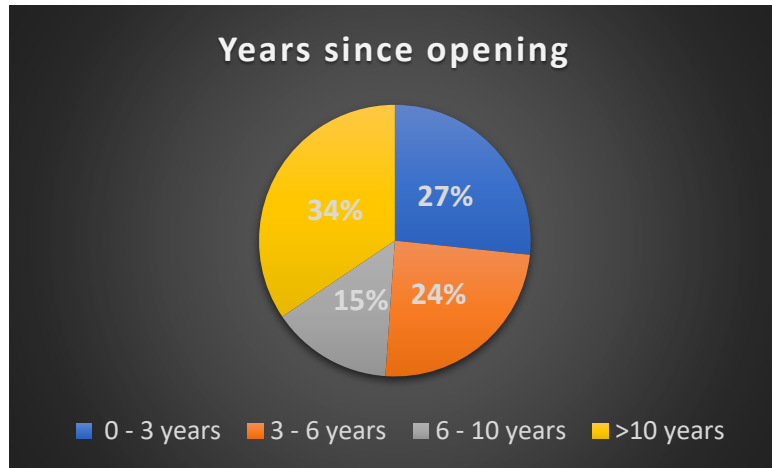


Figure 20: Years of activity

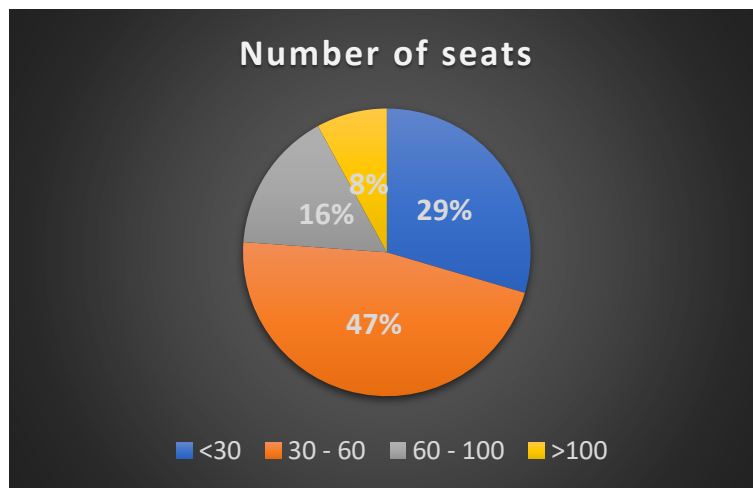


Figure 21: Number of seats

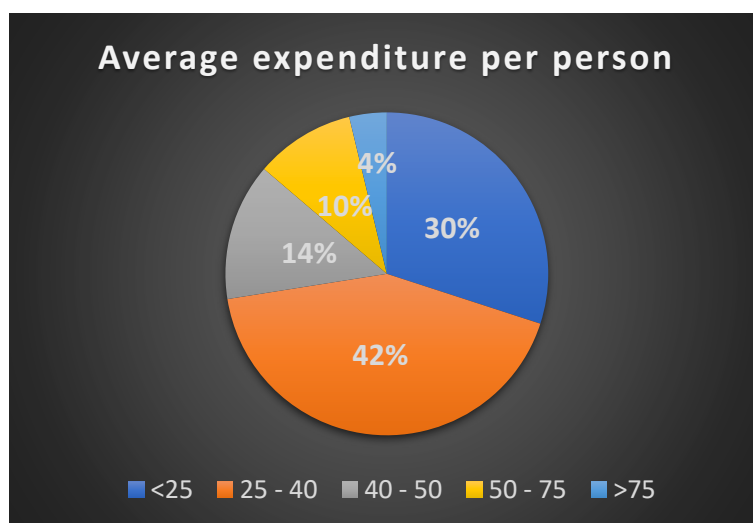


Figure 22: Average expenditure per person

After the initial segmentation of the restaurant and bar owners, the survey was focused on the perception that the entrepreneurs have of the small and medium producers.

Small and medium producers are often synonymous of controlled origin and sustainable products. Especially here in Italy the net of SMEs in the foodservice sector is quite dense, but at the same time, small producers are not as visible as the bigger distributors.

In the following question has been asked what are the benefits that restaurant owners attribute to small suppliers and to the relationship with them, the respondents are asked to choose from multiple answers.

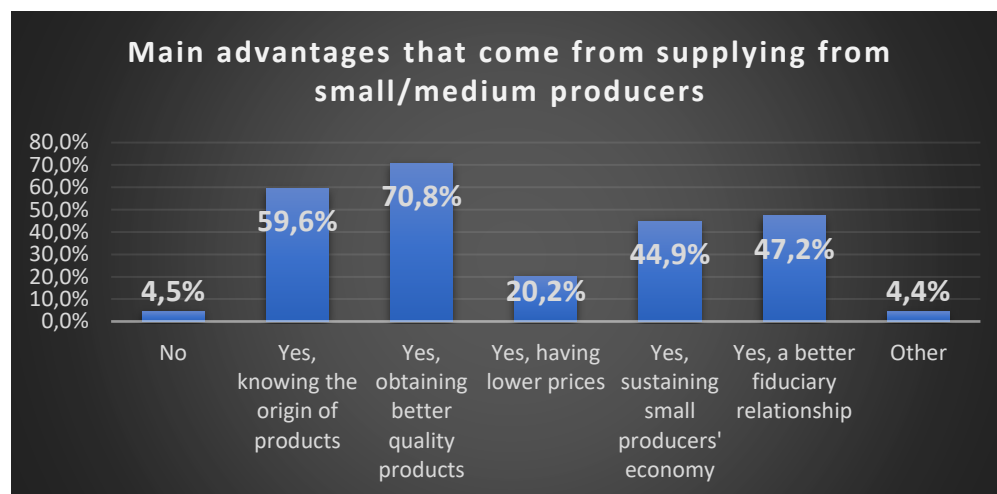


Figure 23: Main advantages that come from supplying from small/medium producers

As is possible to see in the graph, the better quality of the product is the main advantage that entrepreneur find in buying from small and medium producers. The focus on the high-quality food is the first step to satisfy the customer and to create a positive long-term reputation.

Quality for sure is directly related to the known and controlled origin. Most of the respondents (70.8%), in fact, think that this is a fundamental aspect that is granted with small suppliers while may not be equally understandable when dealing with big distributors. Finally, the other two advantages that restaurateurs stated were the contribution to the local economy (44.9%) and a better fiduciary relationship (47.2%). The factors that, instead, prevent the entrepreneurs from buying from small and medium producers are mostly related to insufficient logistic support, for example efficient delivery systems and customer service, as is possible to see in the graph below.

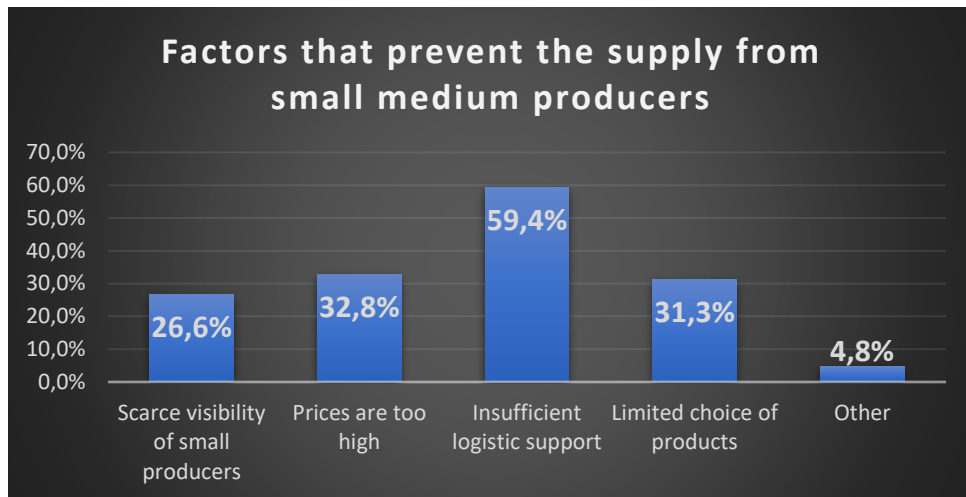


Figure 24: Factors that prevent the supply from small medium producers

The other fundamental obstacles are the limited choice of products (31.3%), the higher prices (32.8%), and the scarce visibility of the producers (26.6%).

All these factors could be reduced by a digital solution that helps the small producers to gain visibility, so to increase their market share and consequently grow. With a bigger share of the market, small and medium suppliers could earn more and perform better, reducing at the same time the costs and price of products.

As we can see in the figure below, the next question shows that exists a need among respondents for increasing the supply from small and medium producers.

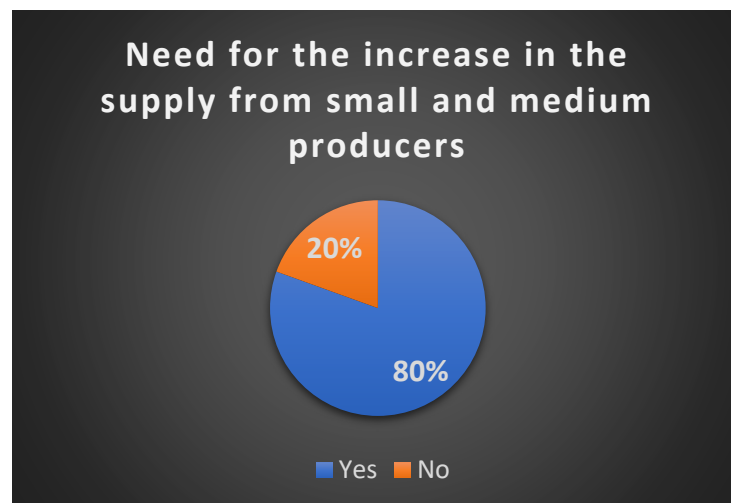


Figure 25: Need for the increase in the supply from small and medium producers

In the next question has been asked the respondents how much they are currently interested in biologic, sustainable and Km 0 foods for their restaurant/bar.

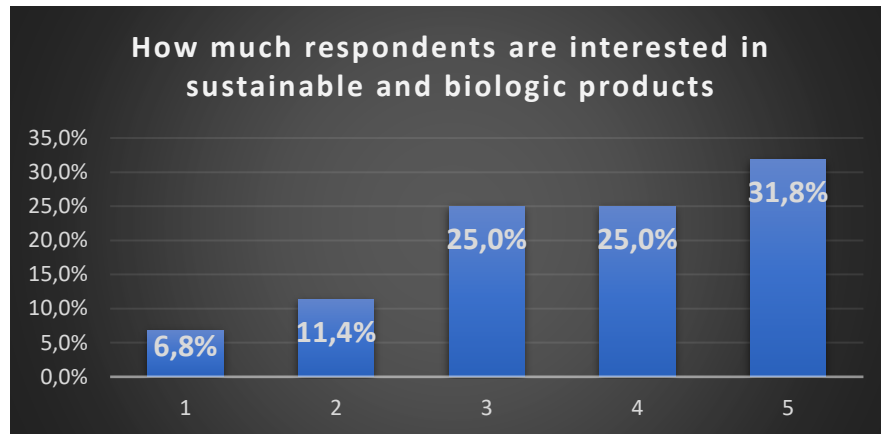


Figure 26: How much respondents are interested in sustainable and biologic products

The survey evidences a great interest from the entrepreneurs in the diffusion of sustainable and environmentally friendly products. The answers available ranged from the value of 1 – “Not interested at all” – to the value of 5 – “They are fundamental for my business”.

The 31.8% of the interviewed gave the maximal importance to biologic food, with the other 50% of the positive answers concentrated in the values of 3 and 4.

The sensible increase in social and environmental awareness among customers is transferred in the offers of the restaurants.

Many entrepreneurs declare that the organic food choice is “fundamental for the scope of their business”. In this way the foodservice market follows and adapts to the changing requests of the demand.

Only 11.4% stated that these products were of little importance and the 6.4% declared to be not interested at all. The main reasons that push restaurateurs in choosing sustainable foods are the following:

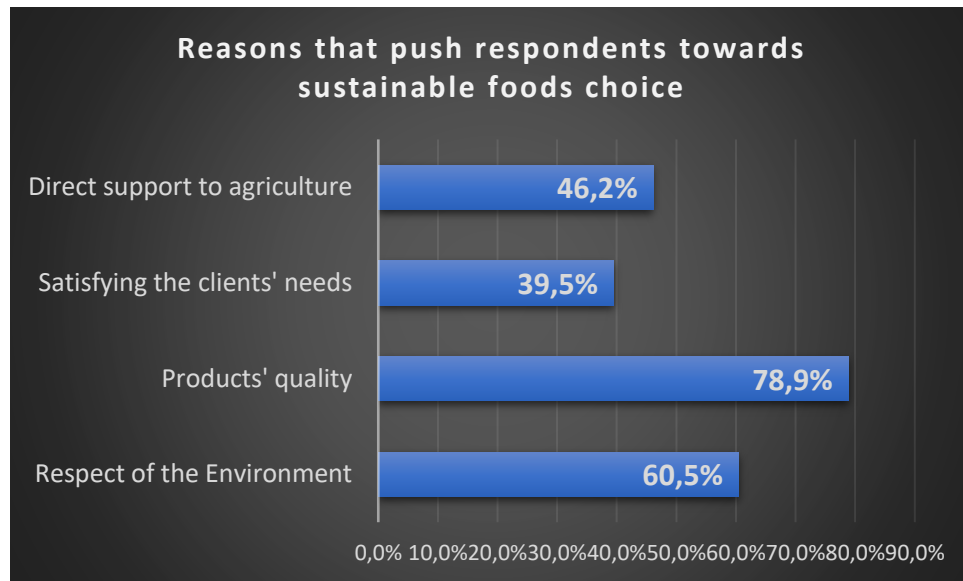


Figure 27: Reasons that push respondents towards sustainable foods choice

The data that emerges from the answers is the importance that is given to the quality of products. The quality aspect is the most valued when the respondents were asked the reasons for their orientation towards biologic, sustainable, km 0 products, with the 78.9% of the total. The quality was also the most chosen answer when the entrepreneurs were interviewed about the advantages of supplying from small and medium producers, so it is reasonable to think that a bigger market share of small producers could satisfy both these needs.

The second advantage emerged is the respect for the environment, with the 60.5% of the total, followed by 46.2% that indicated the direct support to local agriculture and, as the last reason, satisfying clients' needs, with the 39.5%.

Noticed the great interest in “green” foods, it has been asked what currently are the factors that prevent a larger use of these products. The results are illustrated in the following figure (Fig. 28).

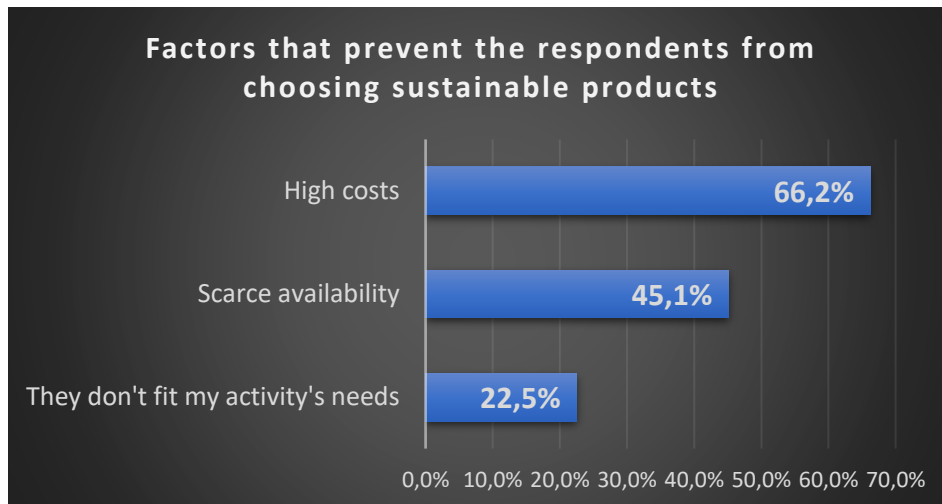


Figure 28: Factors that prevent the respondents from choosing sustainable products

The high prices of “green” products (66.2%) is found to be the most restraining factor, followed by the scarce availability (45.1%). As discussed before, the diffusion of a digital platform would increase the visibility of small producers, and would display in the same place all the offers from a larger number of producers; in this way the problem of the scarce availability would be reduced, as well as the high costs of quality products.

The minority of the respondents - 22.5% - answered that today the sustainability is not their priority, being the biologic food out of their activity’s needs.

The current suppliers of the respondents are sufficiently able to satisfy the needs related to biologic products, as emerged by the next question.

The 35% of the interviewed gave 4 in a scale from 1 to 5 to the level of satisfaction related to the availability of these products.

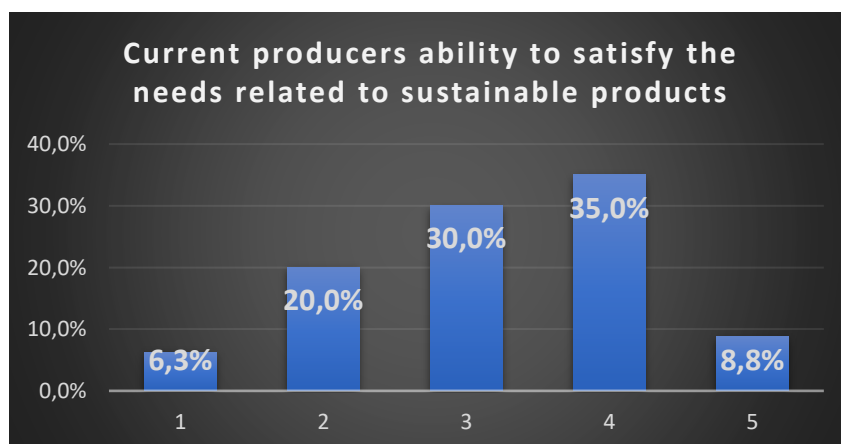


Figure 29: Current producers’ ability to satisfy the needs related to sustainable products

However, for the entrepreneurs was not always easy to find producers able to satisfy their needs for sustainable food choices. The larger part of them answered that it was quite difficult, on a scale from 1 to 5 the trend was 3, with 42.9% of the answers. The results were basically the same for the respondents that found very easily the right suppliers and those that had serious difficulty, as is possible to see by the graph below.

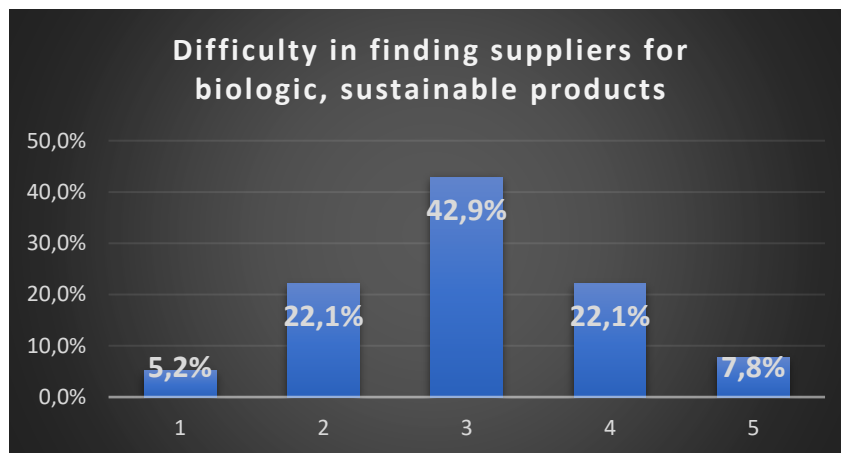


Figure 30: Difficulty in finding suppliers for biologic, sustainable products

It is interesting to assess whether the increase in the demand for a more socially responsible consumption was focused only at the entrepreneurial level or was a broader phenomenon that comprehends also the personal choices of the restaurateurs.

There is a clear evidence that this trend doesn't concern only the foodservice industry, but the sensibility towards the environment and a positive impact through the choice of what we eat is spreading also in personal consumption.

This is, once again, an important index of the global change that is happening towards a more sensible food choice.

The following figure depicts this increasing interest.

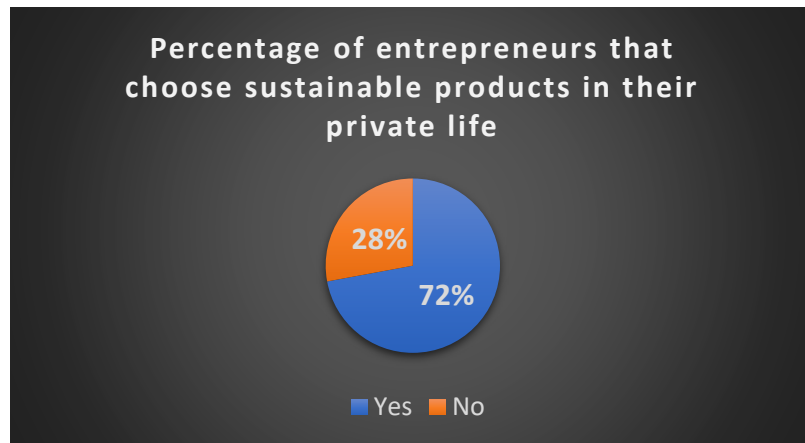


Figure 31: Percentage of entrepreneurs that choose sustainable products in their private life

The next section of the survey was focused on the level of management skills of the restaurateurs and was studied for assessing how important is to be a responsible entrepreneur to run a successful business in the foodservice industry.

It was investigated if the entrepreneurs successfully exploit the modern digital technologies to support this role of increased responsibility.

The first question of this section concerned about the number of transactions for the orders from suppliers they manage in a week.

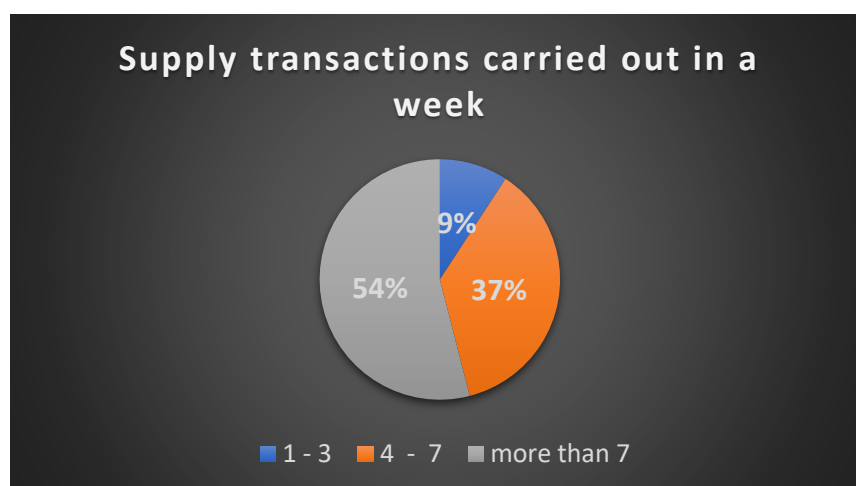


Figure 32: Number of transactions carried out by restaurateurs in a week

The 54% of the interviewed declared to carry out more than 7 transactions per week with their suppliers, 37% from 4 to 7, and only the 9% answered to manage from 1 to 3

transactions. The latter respondents carried out fewer transactions because they are supplied mainly by big distributors, so it is more likely for them to order the great part of the food stock from the same intermediary. In a hypothetical future scenario where the smaller producers would increase their market share, also the number of transactions would increase, and with it also the time spent for the administration of orders and payments.

The more the time dedicated to the administration of transactions, the less is left for the actual focus on the enterprise itself.

In most of the restaurants and bars the owner manages the orders and payments and at the same time decides the strategies to adopt to make his business grow. In bigger restaurants there may be an employee that carries out the administrative stuff for the employer, but also this solution comes at a cost: the cost of the human resource employed.

As is possible to see in the figure below, many of the interviewed declared to spend a lot of their time to carry out the administrative activities.

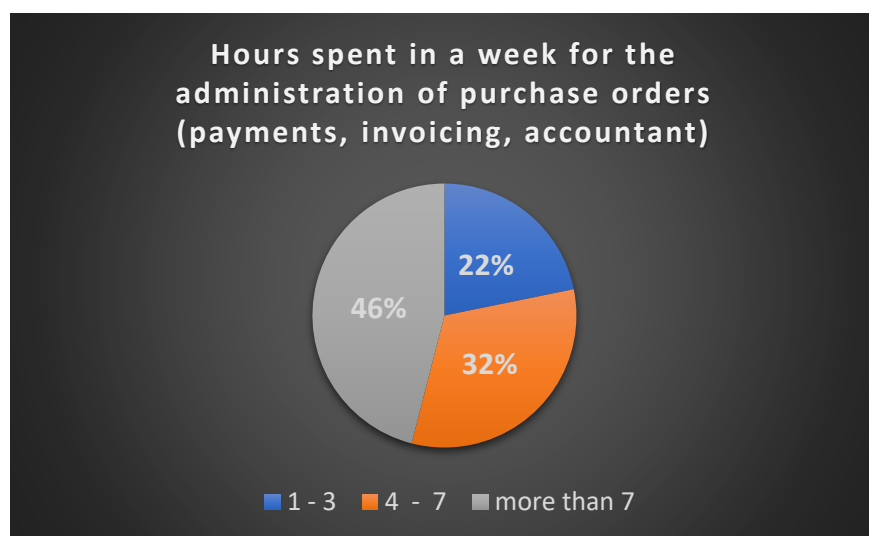


Figure 33: Hours spent in a week for the administration of purchase orders

The 46% of the interviewed spent more than 7 hours a week for the purchasing order transactions, while the 32% ranged from 4 to 7 and only the 22% declared to spend less than 4 hours per week.

It is understandable that currently the supplying process is quite complex and demanding, and moreover, it is carried out for the great part by phone calls.

The inefficiencies in restaurants are one of the main causes for the early failures of the enterprises. As has been discussed before in this work, the entrepreneurial vision of the restaurant owner is the foundation for a competitive business in the long term.

To investigate this aspect, firstly was asked the respondents the entity of the food wasted in their enterprise. Waste of products can be the consequence of an insufficient planning and forecasting, but also of a bad management of resources.

If the owner doesn't efficiently keep track of the resources used, he will for sure encounter serious problems in the long run. The food wastes in restaurants are depicted in the figure below.

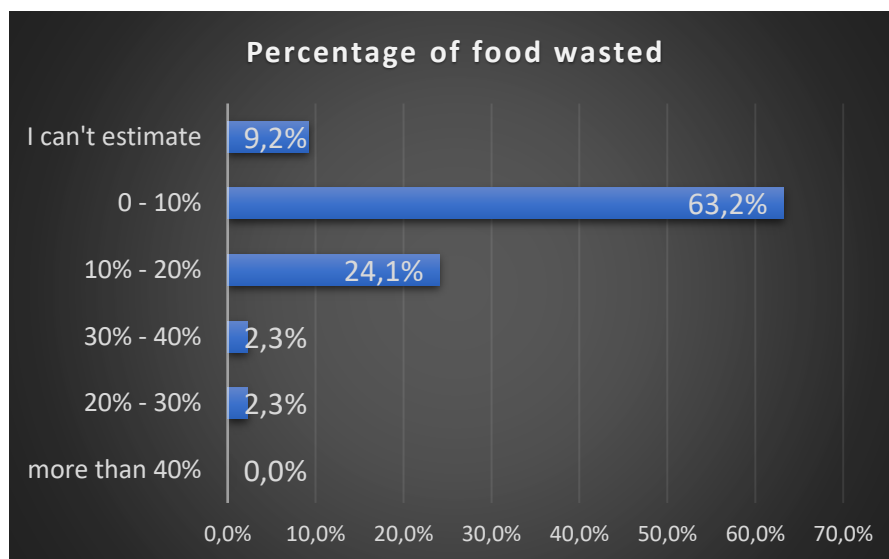


Figure 34: Food wasted in restaurants

In general, the total waste is around the 10%, with a minor percentage indicating a waste of food between the 10% and 20%. Fortunately, higher quantity of waste is rare, but still exists a minority that is totally unable to manage resources, the 2.3% wastes up to 40% of the raw material. Maybe the most significant statistic is represented by the 9.2% of the respondents that is totally unable to estimate what they waste. This can be due to the lack of skills of the restaurateur or a neglected use of technological means of enterprise management.

Wasted food can create a heavy negative social impact on the community as well as on the environment, but currently there are means that help reuse the food unsold. Asking the restaurateurs, the three most used ways are the following.

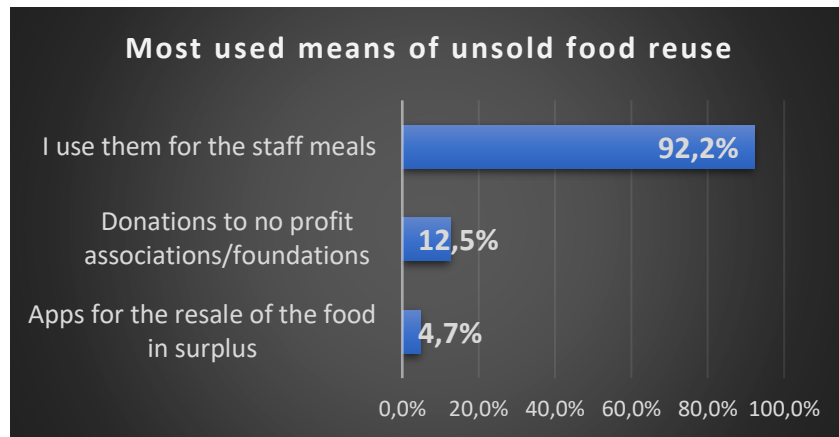


Figure 35: Most used means of unsold food reuse

The next section of the survey was focused on the penetration of the management software technologies in the foodservice industry, and on how the digital diffusion is perceived by the restaurateurs.

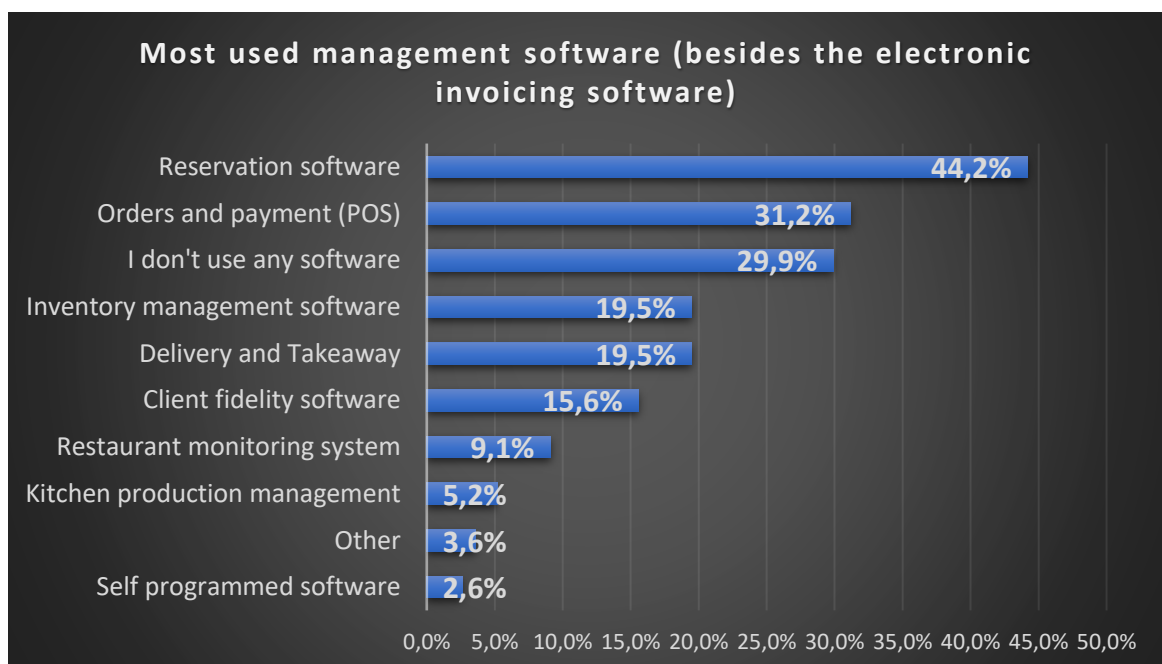


Figure 36: Most used digital technologies for restaurant management

The reservation software resulted to be the most popular management software among the interviewed, chosen by the 44.2% of them, followed by software for orders and payments (31.2%). Inventory management and delivery software resulted to be at the same level of diffusion, implemented by the 19.5% of the respondents, while the 15,6% affirmed to use in

their enterprise a client fidelity software. Is interesting to see that the inventory management software is often underestimated when it has to be made a choice among the software in which invest in, while it should be more considered because it can be a game changer in the field of resource management.

The less used software are the restaurant monitoring system and the kitchen production management, respectively indicated by the 9.1% and the 5.2% of the entrepreneurs.

The most considerable data, anyway, is the 29.9% of restaurant owners that don't use any management software in their restaurant. The main reasons related to the choice of not adopting any technological service can be identified analysing the answers of the next question.

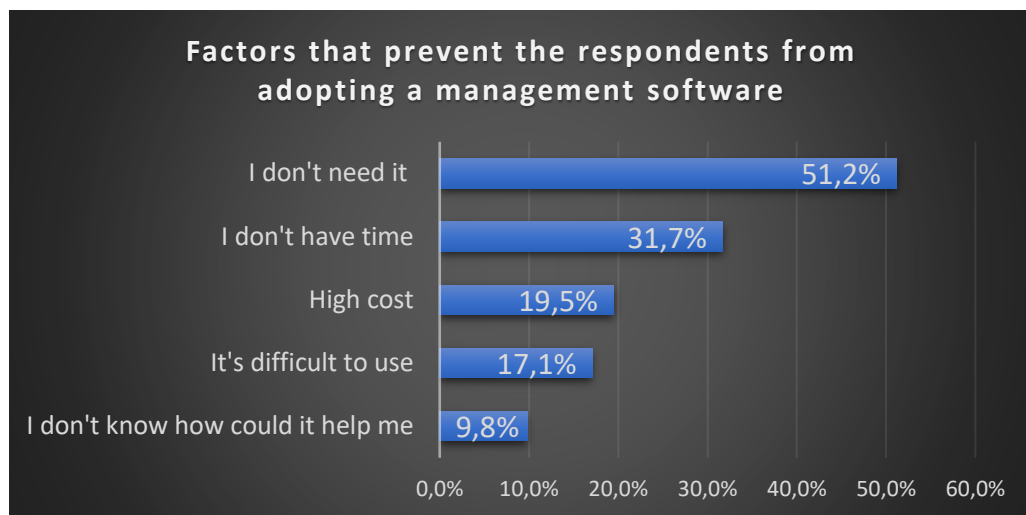


Figure 37: Factors that prevent the respondents from adopting a management software

Some of the respondents still are sceptical about the importance of a management software, while some others may own a small enterprise that is easily manageable without the help of a technological system. The totality of who declared that it was not needed is the 51.2% of the interviewed. The 31.7% said to not have the sufficient time at disposal to implement and learn the use of a management software, this can happen when the owner performs the great part of the decisional and administrative activities.

High cost of the system was indicated as the top third reason for not considering the adoption of a software, with the 19.5% of the respondents, while the 17.1% found it too difficult to use. Still almost the 10% of the restaurateurs doesn't know how technology could help them with the carrying out of the business.

A digital platform of intermediation that includes also management functions and performance statistics could be the winning choice for the restaurateurs that need a technological mean in their restaurant but don't have time to learn to use a difficult system and can't afford a multiple platform investment for all the different scopes of the business. So, it was investigated how they would perceive a new environment where orders, payments and administration happen all together.

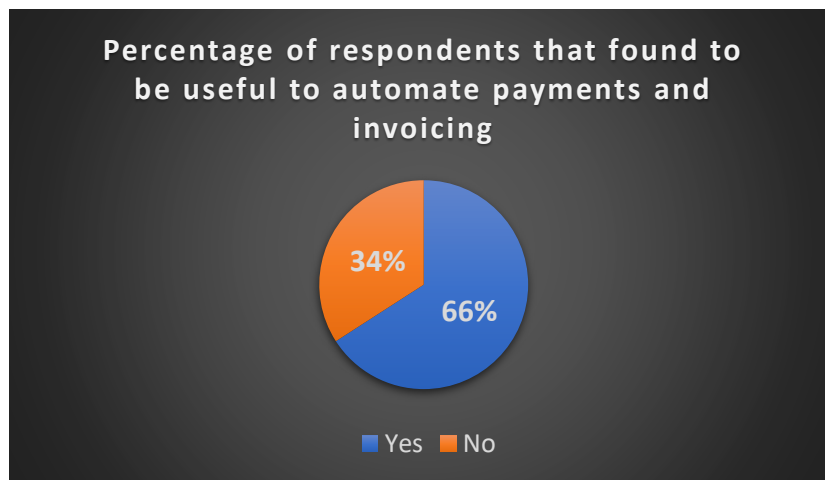


Figure 38: Percentage of respondents that found to be useful to automate payments and invoicing

It is evident that the greatest part of the restaurant owners currently feels the need for a system that helps them in automating payments and invoicing with suppliers. The digital solution would help the entrepreneurs because they would find all their transactions in the same digital space and they could buy at the same time from different producers on the same platform. The other important effect would be the considerable reduction in paper use, due to the digitalization of invoicing.

In the next question it was asked if they would perceive the usefulness in a more complete platform that would be able to manage supplies, online orders, and at the same time give performance analysis and statistics of their business.

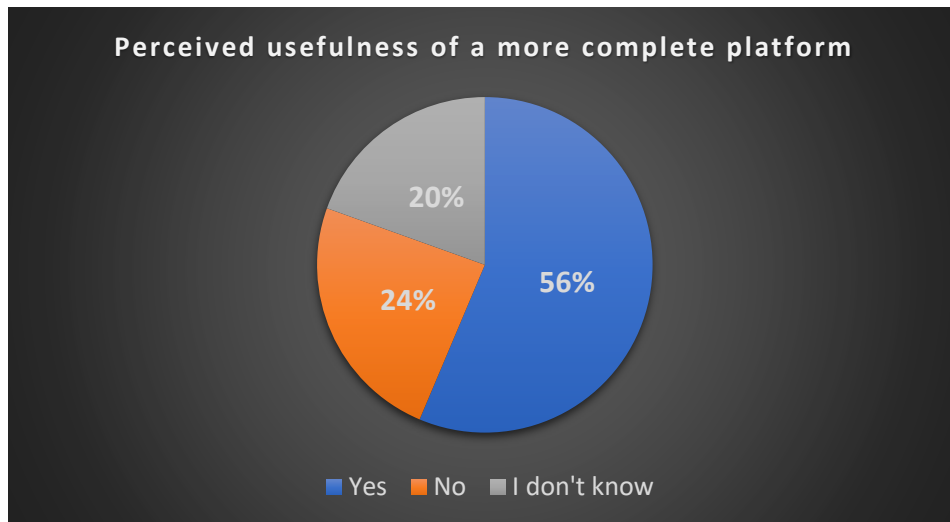


Figure 39: Usefulness of a more complete platform

Considering that the intermediation platforms are a new, emerging, reality in the foodservice sector, there is still some latency towards the idea of adopting this system. The 24% of the respondents declared that something similar is still not needed but is clear that a consistent portion doesn't know what to expect, with the 20% of the answers being "I don't know" if it would be useful. The remaining 56%, the majority, was interested in the platform; a good step forward the digitalization of the intermediation.

As is been assessed previously, inventory management software is still underutilized in modern businesses, so, for the scope of this analysis, it was asked to the respondents how they keep track of cash inflows and outflows. This is a fundamental index for the performance monitoring of the restaurant, and it was interesting to assess if inventory management software and cashflow management software could have the same diffusion.

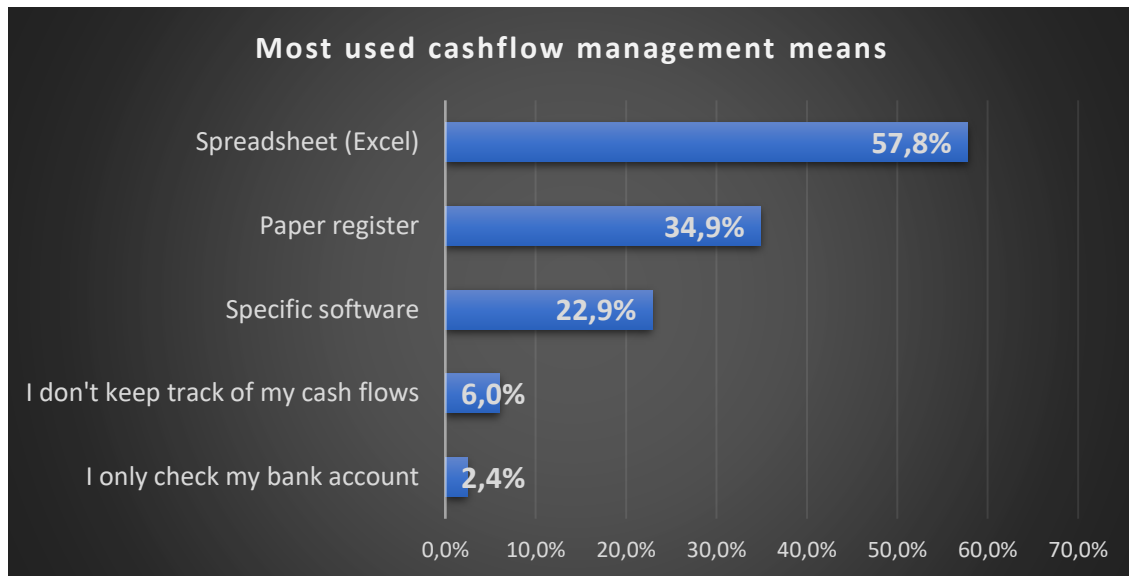


Figure 40: Most used cashflow management means

The perceivable analogy between the inventory management and cashflow management diffusion was confirmed by the resource results. The respondents indicated the spreadsheet (Microsoft Excel) as the most used system to keep track of cash inflows and outflows. This software is adopted by the 57.8% of the interviewed, while in second place there is still the paper register. It is possible to see how the technology is still behind in the foodservice compared to the other industrial sectors. Paper register, used by the 34.9% of the restaurateurs, is still more diffused than specific software (22.9%).

There is also a portion of users that don't even keep track of cashflows at all (6%), and summed to the paper register percentage, and the percentage of those that only check periodically their bank account, it results a total of 31.3% of restaurateurs that are not currently adopting a digital software for cashflows management.

Without a solid vision on the future of the business, supported by an accurate management and statistical analysis of performances and progress, is very difficult to survive in the long run in a sector that is evolving quickly and where innovation is not easy.

For this reason, has been asked the restaurateurs if they currently have an entrepreneurial project for their business that comprehended a long-term growth opportunity.

The results are depicted in the graph below.

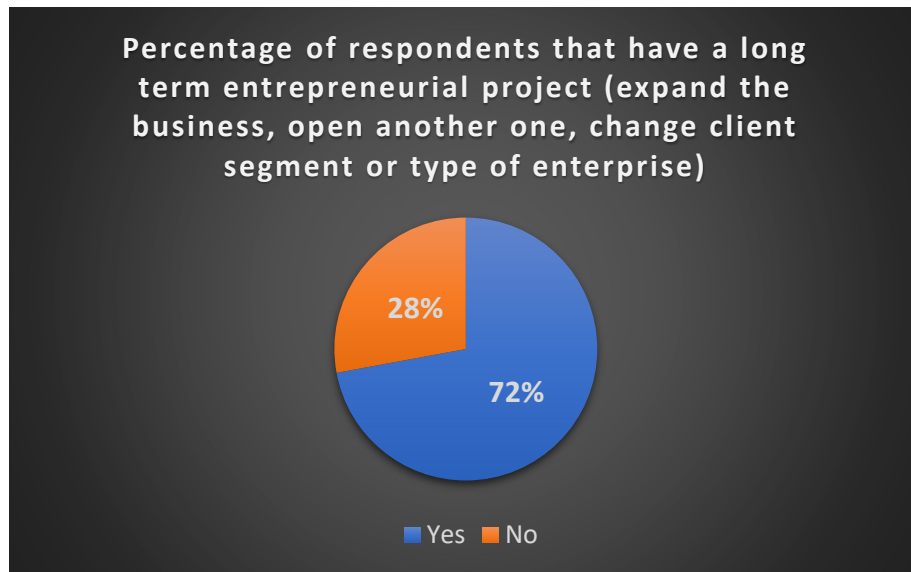


Figure 41: Percentage of respondents that currently have an entrepreneurial project for their business

Most of the interviewed have an entrepreneurial project for their business, in fact, 72% of them declared to be thinking of the evolution of their restaurant. The most common projects involve a future expansion of the current restaurant/bar, the acquisition of a new place to increase the number of businesses, the expansion of the client segments and the changing in type of activity. The 28% of the respondents currently don't have the idea of a future managerial planning. Finally, it was proposed a direct question on the diffusion of the technology in the foodservice sector, to assess the entrepreneurs' perception of the incoming digitalization. It was asked if they thought the digitalization will bring positive effects, negative effects, don't bring effects at all.

From the last question emerged that the 67% of the restaurant owners think that technology will definitely change the sector in the next five years. Their opinion was divided in two groups: the 44% think that the advent of technology in the foodservice industry will bring positive consequences. Among those they answered that a more digitalized environment will be perceived as more trustable and helpful in reducing wastes and inefficiencies

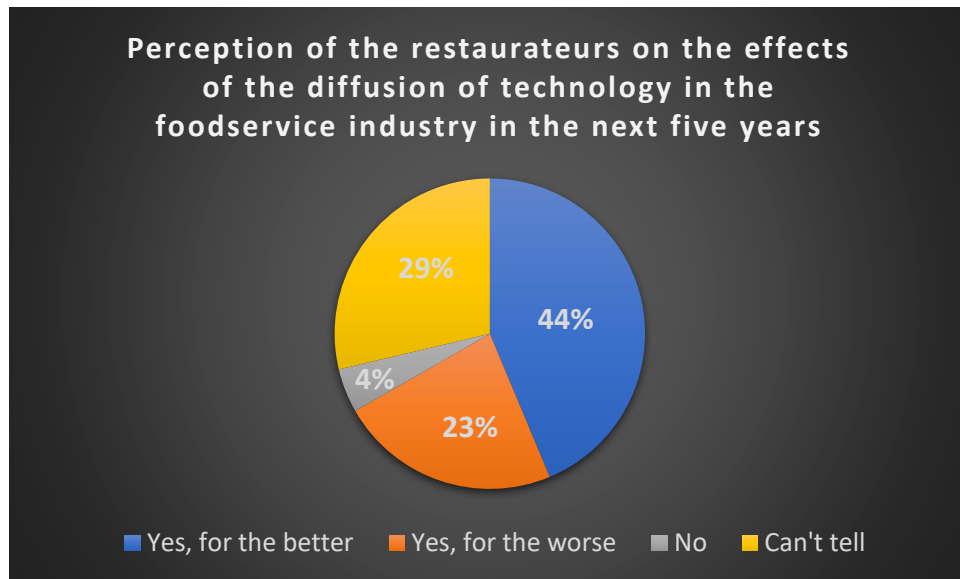


Figure 42: Perception of the restaurateurs on the diffusion of technology in the foodservice industry

The second group of respondents that affirmed that technology will revolutionize the sector was pessimistic on the effects that this change could bring. In fact, 23% of the total of the interviewed assessed that the digital transformation would eventually have negative consequences. From the opinions of this latter group of entrepreneurs emerges some degree of inertia in changing the routines that characterize working in this industry.

The pessimistic ones look at the technology more as an obstacle, something that would make them spend precious time to learn to use the new instruments, rather than a helpful mean of management and business analysis. Finally, the 4% answered that the digital transformation will not bring any effects at all, and the 29% could not answer.

6. CONCLUSIONS

In this work has been analysed the social impact analysis of the emerging business to business platforms in the Ho.Re.Ca. market in Italy, and the effects that this new intermediation systems could bring in the foodservice industry, in particular has been investigated the efficacy of the business model of Gustavo B2B, start-up with an ambivalent quality of digital marketplace and managerial orientation.

The approach followed in the study has been focused on two large dimensions of the phenomenon: the possible diffusion of organic and sustainable products as a solid vector of social and environmental sustainability, and the role of the restaurateur as a more sensible, aware and successful entrepreneur.

In the first chapter has been treated the literature on social impact analysis and social responsibility, followed by the application of the social principles to the food industry.

Analysing, then, the foodservice sector in Italy, and studying in depth the entrepreneurship in the Ho.Re.Ca. market and the green practices adoption by restaurateurs, have been laid the foundations for the final research purposes.

Has been investigated the feasibility of the emerging B2B platforms as efficient means of progress in the foodservice industry. The perception of the entrepreneurs was fundamental to understand the possible future implications of these emerging digital means.

From the study of the market in Italy emerged a picture of a very competitive and evolving sector, not free of contrasts. If from one side the consumptions away from home show an increasing trend in the last 10 years, and the observed growth of digital means of reservation and delivery suggest a solid progress in the sector, from the other side the failure rate of enterprises in Italy shows the other side of the coin, with a negative balance of 9443 between 2018 and 2019.

The most important factor that emerged from the literature analysis and was investigated in the research, was the role of the restaurateur as the first determinant of the success and unsuccess of the business in the long run. Management skills are perceived as the fundamental quality needed for the survival of the enterprise as well as for the compliance of the actions performed by the employees with the social responsibility objectives.

Neglecting the managerial part of the enterprise running can result in the unclear communication to customers about the social orientation of the restaurant, as well as in the

early failure of the business because of the inability to keep up with the changes in the market.

From the data collected emerged a minority of owners that doesn't keep track of their cash inflows and outflows at all, and the 28% of the respondents resulted in not having a long-term entrepreneurial vision for the enterprise.

The lack of dedication of restaurateurs to management practices that sometimes emerges from the resource can be explained by the fact that the owners have few hours spendable in this sense. This result can be deducted by the number of hours that the respondents declared to spend for the supplying phase and invoicing. The 54% of the total currently carries out more than 7 transactions per week, and the 46% answered to spend more than 7 hours per week for the administration of purchase orders.

For reducing the time dedicated to the administration and purchase, and, at the same time providing the restaurateurs a statistical analysis of the performance of the business, the B2B model that has been studied (the Gustavo B2B model) can be a solid support.

Assessing the level of technology adopted in restaurants was the next step to understand the potential diffusion of the emerging platforms.

Technology, in fact, constitutes a powerful instrument in the hands of the entrepreneurs if used correctly. A more efficient management, supported by the technology, would create a more socially responsible impact in the sector. Monitoring the performances of the business would give the restaurateurs an increased ability in reducing food wastes by efficiently forecasting raw materials consumption and customer needs.

From the data collected, it was evident that the foodservice sector in Italy is still behind the other industrial sectors when concerning the digitalization phenomenon. Even if reservation software, POS systems and the platforms used to interact with customers (social networks and online reviews platforms) are widely spread among restaurants, few enterprises integrate a digital system to monitor the business' performances (19.5% uses an inventory management and 9.1% a monitoring system) and still the 30% of the total doesn't implement any software.

From the research emerged that the perceived benefits of a restaurant management software are not clear (9.8%) or very weak among the respondents. The 51.2% of the total of respondents that don't use any software declared that they don't perceive its utility, while the 31.7% answered that they don't have the time to learn how to use it.

In general, there is still a portion of entrepreneurs (23%) that think that the advent of technology could eventually bring negative effects in the sector, and another percentage (29%) that could not answer about the effects of the digitalization in the Ho.Re.Ca.

The wide picture that was possible to capture displays a contrast between the apparently still existing inertia towards the digital platforms, and the consistent need for a system that can simplify the administration. Over the 66% of the interviewed were interested in a digital marketplace where payments and invoicing from all their different suppliers could be displayed in the same place, and the 56% found useful a more complete platform that would be able to manage supplies, online orders, and at the same time give performance analysis and statistics of their business.

In a sector where is still strong the imaginary of the hand-made, familiarity and the custom-crafted hospitality, especially in Italy, the technology is spreading at lower pace and sometimes can appear as a menace, but there are strong signals that the industry is moving towards the digitalization.

The entrepreneur is at centre of the debate also when concerning the social responsibility and sustainable impact. The choices at the managerial level dictate the path of positive impact to employees and the enterprise philosophy in general.

The second dimension of the managerial role of the entrepreneur is the sustainability in the hospitality sector. From the literature study evinced, in fact, a strong correlation between social and environmental practices adopted in restaurants and positive business performances. The restaurateur that is able to efficiently communicate the sustainable orientation of the enterprise will be able to gain a positive image among the customers sensible to the social and environmental topics.

Social responsibility and positive economic performances can be pursued in parallel, without the need of giving up one for the other, towards a more sustainability-oriented market model. The B2B Ho.Re.Ca. platforms aim at increasing the visibility of local producers, providing them a digital marketplace where they can better display their offers and gain a greater market share, promoting local, sustainable production.

To assess the feasibility of this intent, has been investigated the diffusion of the sustainability and social awareness in the foodservice industry. The results showed an increasing trend in the interest of customers and restaurant owners in biologic, organic and km-0 foods.

Customers respond well because they feel the social and environmental question closer to them when concerning what they eat. Customer satisfaction, in fact, is one of the top four reasons that pushed the entrepreneurs towards sustainable food choice.

The respondents resulted to be very sensible to the diffusion of organic products because of the benefits in increased product quality (78.9%), respect of the environment (60.5%) and direct support to local producers (46.2%). Moreover, the great majority of the interviewed (80%) assessed that they would like to increase the supply from local producers.

This result is in line with a supposed positive effect of the diffusion of the platforms. The sector operators find in local, small producers, a better quality of products (70.8%) and an enhanced trust in the origin of food (59.6%).

Considerable importance has given also to other two effects that come from supplying from small/medium producers: a better fiduciary relationship, suggested by the 47.2% of the respondents, and the support to local economy (44.9%).

The factors that prevent the increase of the supply from local producers are their scarce visibility, insufficient logistic support, and high prices.

It is very interesting to see how the barriers to the increasing of supply from local producers and the obstacles found in the adoption of organic and biologic foods are very similar. In both cases the entrepreneurs have difficulties in founding the right producers because of their visibility (26.6%) and the organic products they need (45.1%).

A greater diffusion of local production would entail a more equally distributed market among the small/medium suppliers, with the possible outcome of reduced prices as well.

The positive social impact of the B2B platforms can be seen in a possible future scenario of increased social and environmental sensibility awareness if the current barriers of the technological inertia of the restaurateurs can be overcome. The evolution of the foodservice industry towards a more social-oriented and digitalized market will be possible only if the single intentions of the entrepreneurs will be focused in this direction. The biggest barrier resulted to be the manager's skills to pursue a consistent strategy in both the fields of social responsibility and business performance.

Exhibit 1: Survey

Question 1: City

- Torino
- Milano

Question 2: Enterprise

- Restaurant
- Bar

Question 3: Age of the respondent

- 18 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 – 70

Question 4: Years since opening

- 0 - 3 years
- 3 - 6 years
- 6 - 10 years
- >10 years

Question 5: Number of seats

- <30
- 30 - 60
- 60 - 100
- >100

Question 6: Average expenditure per person

- <25
- 25 - 40
- 40 - 50
- 50 - 75
- >75

Question 7: Do you think there are advantages in buying from small/medium producers?

- No
- Yes, knowing the origin of products
- Yes, obtaining better quality products
- Yes, having lower prices
- Yes, sustaining small producers' economy
- Yes, a better fiduciary relationship
- Other

Question 8: What are the factors that prevent you from buying from small/medium producers?

- Scarce visibility of small producers
- Prices are too high
- Insufficient logistic support
- Limited choice of products
- Other

Question 9: Would you like to increase the supply from small/medium producers?

- Yes
- No

Question 10: On a 1 to 5 scale how much are you interested in bio, sustainable, Km 0 products?

- 1: Not interested at all
- 2
- 3
- 4
- 5: They are fundamental for my enterprise

Question 11: If interested, what are the reasons that make you chose bio, sustainable, Km 0 products?

- Respect of the Environment
- Products' quality
- Satisfying the clients' needs
- Direct support to agriculture

Question 12: What, instead, prevents you from choosing this type of products?

- They don't fit my activity's needs
- Scarce availability
- High costs

Question 13: Are your current suppliers able to satisfy the needs related to bio, sustainable, Km 0 products?

- 1: They are not able at all
- 2
- 3
- 4
- 5: They fulfil my needs perfectly

Question 14: Was it difficult to find suppliers that satisfy your need for bio, sustainable, Km 0 products?

- 1: I had serious difficulties in finding them
- 2
- 3
- 4
- 5: I found them very easily

Question 15: Do you buy bio, sustainable, Km 0 products outside your business? (in your private life)

- Yes
- No

Question 16: How many transactions do you manage weekly?

- 1 - 3
- 4 - 7
- more than 7

Question 17: How many hours do you spend in a week for the administration of purchase orders? (payments, invoicing, accountant)

- 1 - 3
- 4 - 7
- more than 7

Question 18: Can you estimate the percentage of food waste in your restaurant?

- more than 40%
- 20% - 30%
- 30% - 40%
- 10% - 20%
- 0 - 10%
- I can't estimate

Question 19: Do you currently use a system for the reuse of unsold food?

- Apps for the resale of the food in surplus
- Donations to no profit associations/foundations
- I use them for the staff meals

Question 20: Do you use some management software in your enterprise? (besides the electronic invoicing software)

- Self-programmed software
- Other
- Kitchen production management
- Restaurant monitoring system
- Client fidelity software
- Delivery and Takeaway
- Inventory management software
- I don't use any software
- Orders and payment (POS)
- Reservation software

Question 21: What are the factors that prevent you from adopting a management software?

- I don't know how could it help me
- It's difficult to use
- High cost
- I don't have time
- I don't need it

Question 22: Do you think it would be useful to automate payments and invoicing?

- Yes
- No

Question 23: Do you think it might be useful for you to manage your supplies, online orders, and at the same time get statistics on the performance of your business all in the same platform?

- Yes
- No
- I don't know

Question 24: How do you keep track of your cash inflows and outflows (except from the accountant)?

- I only check my bank account
- I don't keep track of my cash flows
- Specific software
- Paper register
- Spreadsheet (Excel)

Question 25: Do you have a long term entrepreneurial project for your enterprise, for example to expand the business, open another one, change client segment or type of enterprise?

- Yes
- No

Question 26: Do you think that in 5 years the foodservice sector will undergo a great change because of digitalization?

- Yes, for the better
- Yes, for the worse
- No
- Can't tell

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