Supply Chain Competences: The Case of the Traditional Food Sector in the EU

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1 Introduction

Since over the last twenty years the reduction of trade barriers, the increasing liberalisation, the advancement in ICT have determined a growth in the horizontal and vertical competition among firms in the chain. Therefore, today more than ever they are pressured to develop appropriate strategies in order to become more competitive (Montgomery and Porter, 1993; Grant, 1996; Porter, 1996). However, firms nowadays no longer compete as independent entities, but as chains (Fearne, 1998; Van der Vorst et al., 1998; Sahay, 2003; Green and Inman, 2005; Green et al., 2006; Hult et al., 2007; Ketchen and Hult, 2007; Sezen, 2008) and consequently, the dynamic and mutually dependent character of relations in these chains cause a challenge for these firms towards the development of strategies that ensure competitiveness**.** One of the key success factors for facing this challenge is the proper management of these relations (accompanying products, services, finances, information and/or knowledge flows), focusing on harmonizing the use of resources, capabilities and core competencies along the entire chain (instead focusing only on individual firms only) to deliver higher added value. The notion on harmonizing the use of resources, capabilities and core competences along the entire chain is supported by the following arguments: 1) In a dynamic context, resources, capabilities and deriving core competences of each firm are stable points of reference for setting competitive strategies (Cool and Dierickx, 1989; Ford and Mahieu, 1998; Grant, 1996). 2) Although in contemporary supply chain management literature, there exists a general agreement on the shift towards chain level analysis from firm level analysis (Fearne, 1998; Van der Vorst et al., 1998; Sahay, 2003; Green and Inman, 2005; Green et al., 2006; Hult et al., 2007; Ketchen and Hult, 2007; Sezen, 2008), still, most of the empirical studies have been focused on individual firms in a chain (while claiming to carry out chain level analysis). Concluding, there is a need to focus on the use of resources, capabilities, core competences along the chain[1] to accomplish common and independent goals of its members (Ketchen and Giunipero, 2004). The shift in focus from individual firms to the entire chain extends traditional theories of competitive advantage, such as the resource based view (RBV), offering an innovative analytical framework. Therefore, the objective of this paper is to develop a theoretical framework for identifying strategic resources, capabilities and core competencies in chains. This framework will merit from the RBV, Relational view (RV) and Competence-Based Perspective (CBP) of strategic management on the one hand, and network theories (Industrial Network Approach (INA) and Social Network Theory (SNT)) and Supply Chain Management (SCM) on the other. Based on this theoretical framework we will analyze the use of resources, capabilities and core competences in traditional food chains.

[1] We refer to chains as "a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer" (Mentzer et al., 2001).

The structure of the paper is as follows: First, in methodology chapter theoretical framework is conceptualised and methodology of the case studies elaborated. Afterwards, in the results chapter, following the structure of the theoretical framework and the case study methodology, results are presented (per country at both traditional manufacturer and chain level). Finally, at the last chapter results are discussed and conclusions drawn.

2 Methodology

The proposed research is carried out within the EU-project TRUEFOOD (Integrated project in 6th Framework Programme; Contract n° FOOD-CT-2006-016264). To meet research objectives of this paper secondary and primary data were collected. For the development of the theoretical framework secondary data, from various existing literature, were used. Subsequently, the theoretical framework was tested by case studies (collecting primary data during in-depth interviews with traditional food manufactures) (as focal firms[2] of the chains). First the theoretical framework will be elaborated followed by the methodology of the case studies.

2.1 Theoretical framework

As the objective of this paper is to identify strategic, resources, capabilities and core competencies in chains, which can subsequently be a source of competitive advantage, we base our framework on strategic management and supply chain management theories.

The main underlying theories utilized for the analysis of sources of competitive advantage are the Resource-based View (RBV) (Barney, 1991) and the Competence-based Perspective (CBP) (Prahalad and Hamel, 1990), however further underlying theories are used as well, such as Industrial Network approach (INA), Relational View (RV) and Social Network Theory (SNT). We start with presenting the main characteristics of the above underlying theories. Since the choice of a particular theory implies the choice of particular constructs to be investigated, this consideration serves as the basis for determining which constructs to include in the subsequent case studies. After presenting the main characteristics of the selected underlying theories the main constructs of this paper are synthesized into a conceptual framework used for the subsequent case studies.

On the one hand, the RBV as the currently perhaps most dominant strategic management theory argues that firms are heterogeneous to one another due to possessing some strategic resources and capabilities, on which consequently competitive advantage is acquired (Barney, 1991; Wernerfelt, 1984)). Thus, competitive advantage is acquired by accumulating strategic resources and capabilities. On the other hand, the CBP explores the development of core competences as a source of competitive advantage (Prahalad and Hamel, 1990), and argues that core competencies of a firm are sources of competitive advantage.
Till now, most empirical studies, applying these theories, have been focused on individual firms in a chain. Therefore, we shift the focus from firm level analysis towards the entire chain. This is also in line with the Industrial Network approach (INA) and the Relational View (RV). INA argues that firms are interrelated through resource ties (and activity links) (Axelsson and Wilson, 1992; Moller et al., 2005), while RV - as an extension of RBV incorporating Social Network Theory (SNT) (Burt, 1992; Eisenhard and Schoonhoven, 1996) - suggests that firms can obtain extra relational rents from strategic alliances (Vanpoucke, 2009). Therefore, our theoretical framework starts from a premise

[2] In general, focal firm is a firm that is identified by the consumers as being "responsible" for the food product, e.g. food manufacturers in the case of a producer brands and food retailers in the case of private labels (Gagalyuk and Hanf, 2008).

that the combination of complementary resources and capabilities of firms in the chain can be a source of "collaborative advantage" (Vanpoucke, 2009), which may consequently lead to a competitive advantage of the entire chain.

In summary, our paper is positioned within the framework of strategic management (RBV, RV, CBP) and supply chain management. We propose on the one hand that resources, capabilities and core competences of each firm can be a source of competitive advantage at firm level (firm level analysis). On the other hand, that combination of resources from one chain member and capabilities of another chain member (and vice versa) may form a basis for a core competency of their relationship, consequently serve as a basis of competitive advantage of the entire chain (chain level analysis). In our theoretical framework we define resources as inputs into a firms' production process (e.g. physical, organizational/cultural, human etc.) or anything "tangible" as well as "intangible" owned or acquired by a firm. In fact, in a chain, this definition includes all those resources which a firm could employ or have an access to (via other chain members) in order to achieve common goals shared by these chain members (Hafeez et al., 2002). Capability is a capacity to deploy resources that have been purposely integrated to achieve a desired end state or "the ability to make use of resources to perform some task or activity (Hafeez et al., 2002)". While resources could exist on their own, capabilities cannot. They are deeply embedded in the organizational routines, practices, and business activities (Nanda, 1996).

Resources and capabilities can serve as a source of competitive advantage, but having a strong capacity for deploying resources (i.e. a capability) does not instantly imply to be a source of competitive advantage. Some resources have more important role in realizing the business objectives of a firm than others (importance for competitive advantage). These are the *strategic* resources. Furthermore, neither every capability has the same importance. Only those capabilities which are relatively unique in competition (uniqueness; comprises aspects like rareness, inimitability and nonsubstitutability) (Barney, 1991; Hafeez et al., 2002), and highly collective in operation (collectiveness; comprises aspect like across-function, across-product, and across-business) are likely to form core competencies (Hafeez et al., 2002). These capabilities are the key capabilities. CConsequently, core competencies are the firms' innovatively bundled and leveraged resources and unique and collective capabilities, which create and deliver a fundamental customer benefit (Hamel, 1994).

2.2 Case studies

This paper uses case studies with 30 traditional food manufacturers from 3 European countries. First, resources and capabilities of traditional food manufacturers are investigated, and core competencies are underlined. Second, the core competencies of the entire chain of the interviewed traditional food manufacturers are studied, by looking at the most relevant resources and capabilities of the suppliers and customers of the interviewed traditional food manufacturers.

2.2.1 Product and Sample selection

Firstly, members of selected traditional food chains were identified and approached via in-depth interviews. Altogether 30 traditional food manufacturers from three European countries (Belgium, Italy, Hungary) representing nine traditional food product (TFP) categories (cheese (Belgium, Italy), beer (Belgium, Italy), dry ham (Italy), dry sausage (Hungary), bakery products (Hungary), frozen products (Hungary), salad mixture (Hungary), confectionery (Italy), spirits, liqueurs and syrups (Italy)) participated (Table 1).

The selection of these countries was motivated by the objective to incorporate a wide geographical diversity across Europe (Belgium: Western Europe, Italy: Southern Europe, Hungary: Central Eastern Europe). The selection of the TFP categories was based on their socio-economic importance (number and size of enterprises, employment rates, value added, turnover, investments, import/export, and consumption rates). TFPs are defined according to four criteria: (1) the key production steps are performed in a recognizable national, regional or local area, 2) the product is authentic in its a) recipe and/or b) raw material and/or c) production process, 3) the product is commercially available for at least 50 years and (4) the product has a unique and memorable gastronomic identity based on which the product is part of the gastronomic heritage. These criteria were developed by the researchers of the TRUEFOOD project based on definitions of PDO, PGI, TSG, regional, local, typical, terroir etc. food products purely for the purpose of harmonized selection of respondents. According to this definition, a database of traditional food producers was established. Next, in each country traditional food manufacturers were randomly selected for interviews from the established database. As in the European agri-business sector in general, and in the traditional food sector in particular there is a large number of SMEs (small and medium sized enterprises[3]) it is not surprising that 27 out of 30 selected companies were SMEs. In order to identify members at the chain level each traditional food manufacturer was asked, during the interviews, to identify their currently most important suppliers and customers.

Table 1. Overview of in-depth interviews

Country	**Product**	**Participants**
Belgium		
	Cheese	5 micro dairy firms
	Beer	3 micro brewery 1 small brewery 1 medium-sized brewery
Hungary		
	Meet	3 small meet processing firms 2 large meet processing firms
	Bakery products	2 medium sized bakeries
	Frozen products	2 medium-sized frozen products firms
	Fresh, chilled salad mixture	1 medium fresh, chilled salad mixture producing firm
Italy		
	Cheese	2 small goat milk derivatives producers 3 cow milk producers
	Dry Ham	1 small Parma ham PDO producers 1 medium-sized Parma ham PDO producers
	Beer	1 micro-brewery
	Confectionery	1 large confectionery firm (case 9)
	Spirits, liqueurs and syrups	1 small producer of spirits, liqueurs and syrups
TOTAL		**30 participants**

Micro sized enterprise: <10 employees, maximum annual turnover 2 million €
Small sized enterprise: >10 and <50 employees, maximum annual turnover 10 million €.
Medium sized enterprise: >50 and <250 employees, maximum annual turnover 50 million €

[3] Firms that employ less than 250 people and have a maximum annual turnover of 50 million euro and a maximum annual balance-sheet total of 43 million euro.

2.2.2. Procedure

The topic list for the case studies (in-depth interviews) was developed in English and translated into the national languages using the procedure of back-translation (Brislin, 1970). Following back-translation, the topic list was pre-tested by the researchers through 3 in-depth interviews (one respondent in each country) in order to identify and eliminate potential problems and to ensure linguistic equivalence. Afterwards, the topic list has been edited, corrected and pre-tested once again. The topic list has been structured following the logic of the theoretical framework described above. The topic list had two main parts: 1) *Resources, capabilities and core competences of the traditional food manufacturers (firm level analysis) and 2)* Core competences (*competitive advantage) of the chain* (combination of resources from one chain member and capabilities of another chain member (and vice versa)).

1. *Resources, capabilities and core competences of the traditional food manufacturers:* referring to our theoretical framework, firms' strategic resources are considered as inputs to key capabilities, which subsequently may form firm core competencies. Therefore, in this section, traditional food manufacturers (in our case focal firms) were asked to identify and rate the importance[4] of the resources (importance for competitive advantage) and capabilities (uniqueness and collectiveness) of their firm (see theoretical framework). Further, they were asked to explain why resources and capabilities that scored at least 4 on the importance evaluation[4] are so important for their business. At the end, traditional food manufacturers were asked to uderline their core competencies, and what combination of resources and capabilities allow them to achieve outstanding results and to outperform its rivals.

2 *Competitive advantage of the chain*: our framework is also looking for complementarities of resources and/or capabilities combination along the chain level as a source of competitive advantage. Therefore, in this part, we referred to the chain, namely to customers and suppliers. However, the same structure of the previous section has been maintained. The firm had to communicate us which were the strategic resources and key capabilities of its customers and suppliers which are mostly relevant for its success, coming then up with the core competencies of the whole chain.

[4] five point Likert-scale was used, varying from 1 (not at all important) till 5 (very important)

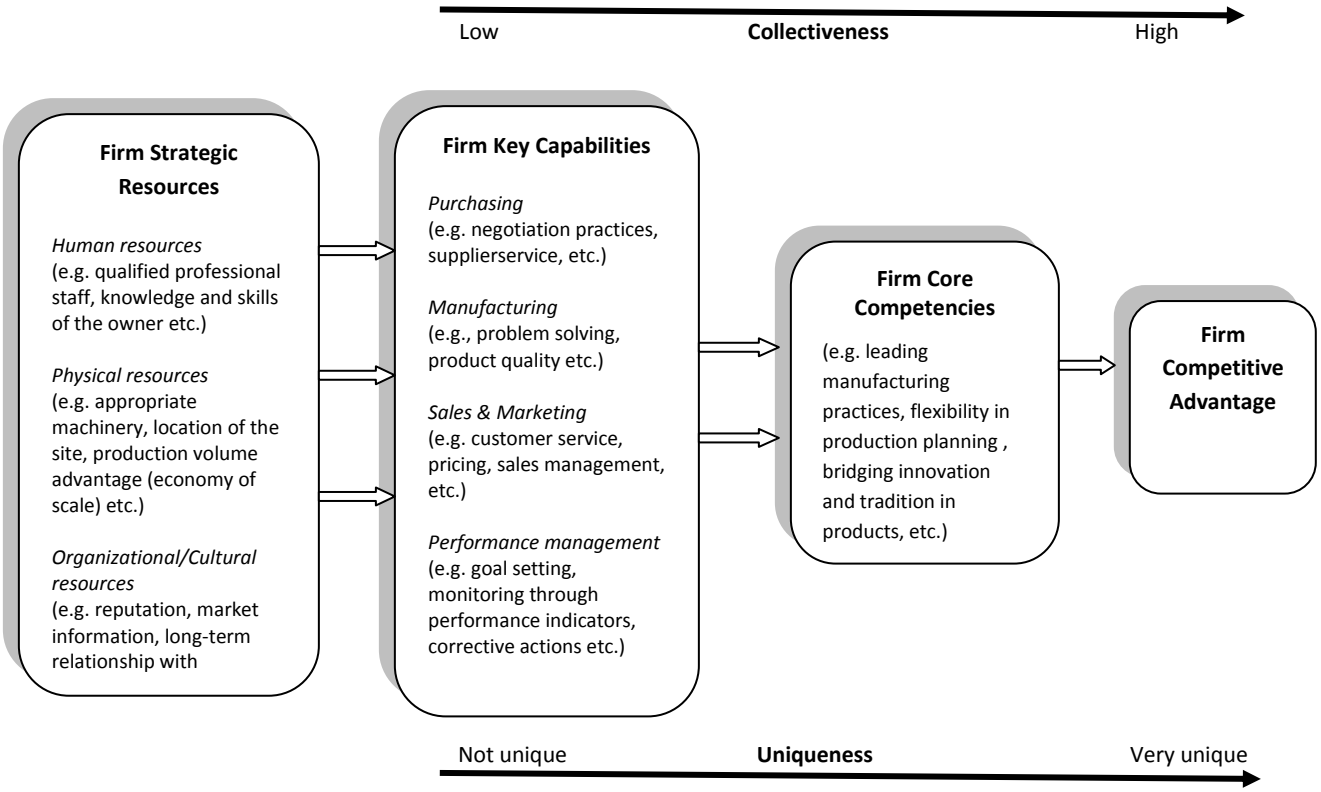

Figure 1. Framework for identification of firms (chain members) strategic resources, key capabilities and core competencies, and relation among them. Adapted from Hafeez et al., 2002

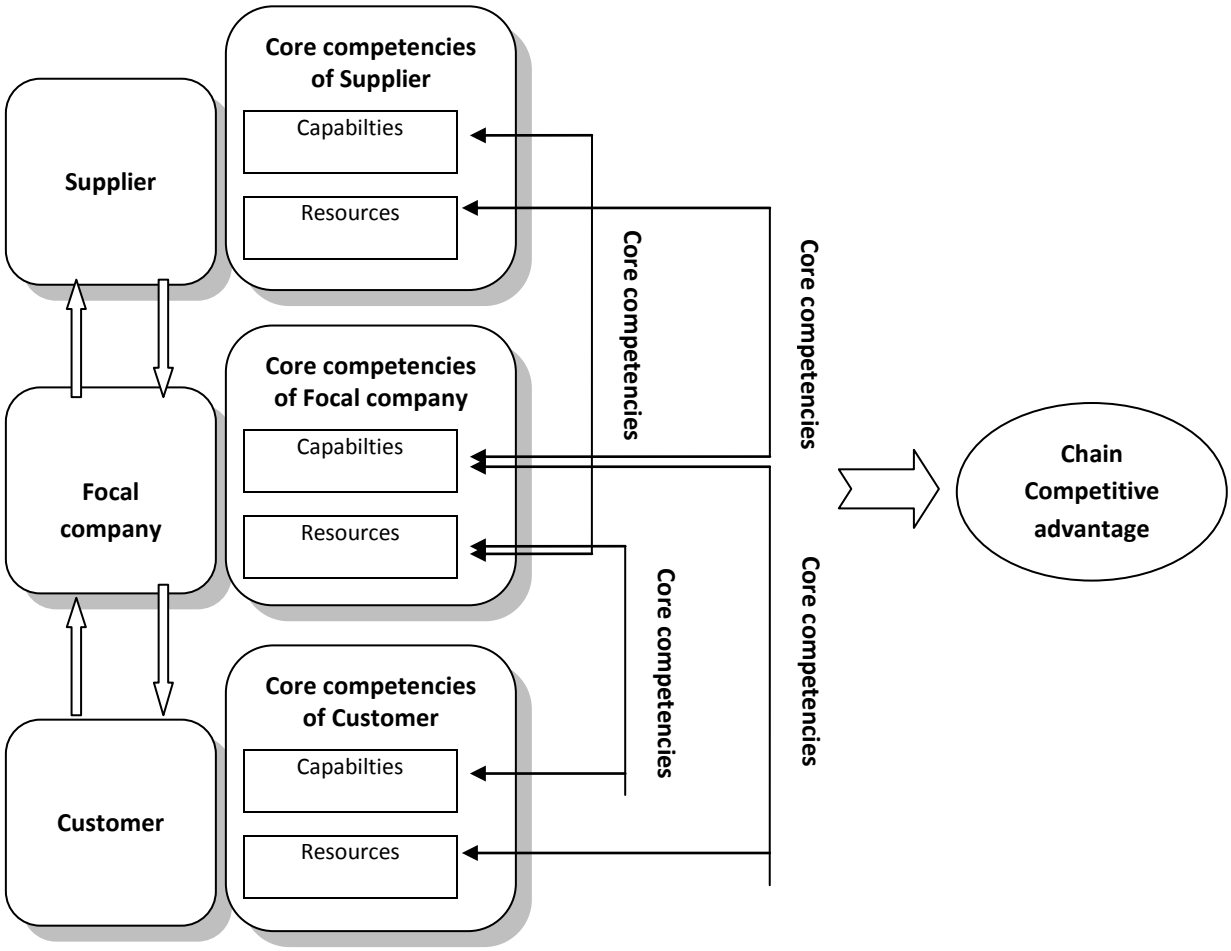

Figure 2. Framework for identifying chain core competencies

The in-depth interviews were guided by a moderator. Each in-depth interview lasted for approximately 2-2.5 hours. The in-depth interviews have been carried out between December 2007 and June 2008 and they were all audio-taped for the purpose of later analysis.

3 Results

Results will be presented in two parts. First, based on the theoretical framework described in the methodology section we present strategic resources and key capabilities of the traditional food manufacturers, followed by their core competencies. Second, we focus on the core competencies of the chain (combination of resources from one chain member and capabilities of another chain member (and vica versa)).

3.1 Resources, capabilities and core competencies of the traditional food manufacturers

A case study analysis regarding strategic resources, key capabilities and core competencies of the traditional food manufacturers reveals lots of similarities among the three countries, while at the same time also some differences. Therefore a brief overview of the most frequent strategic resources, key capabilities and core competencies will be presented (Table 2,3 and 4). For the reason of clarity and easier understanding of connection between strategic resources, capabilities and core

competencies we present case study examples, from each country, regarding formation of traditional food manufacturers' core competencies by combining their strategic resources and key capabilities.

The *Belgian* cases reveal that the most important resources of the traditional food manufacturers to reach competitive advantage –strategic resources– are the knowledge and skills of well qualified stuff, new equipment (technology) and long-term partnership with suppliers and reputation. Especially breweries made a strong accent on maintaining their reputation related to their historical image. Key capabilities–which are directly linked with the above mentioned resources–, are mainly linked to production and sales management (based on capabilities of supplier selection and customer service) and product innovation. Subsequently, these capabilities lead to core competencies at the level of the traditional food manufacturers. In the case of Belgium, the most often mentioned core competencies of traditional food manufacturers are the quality level of their products, the understanding of market requirements and in some cases the development of successful product innovations.

We take for example one micro traditional beer manufacturer of regional beers, whose strategic resources are manufacturing technology, knowledge and experience of the owner related to special beer production, and local reputation of the brewery. Furthermore, its strategic capabilities are manufacturing capabilities of special regional beers, production flexibility, personal customer service and suppliers' selection. Based on these traditional food manufacturers' resources (knowledge and experience of the owner as well as manufacturing technology) and capabilities (manufacturing capabilities, production flexibility and suppliers' selection) core competency of this brewery is created; **production management** resulting in a high quality regional beer.

The situation for *Hungarian* traditional food manufacturers is similar to that of the Belgian ones. Qualified personnel and long term partnership with suppliers and customers are considered as the most important resources which lead to key capabilities, such as supplier selection, product management, and product innovation. Consequently, the core competencies underlined by the respondents are quality management and product innovation, which are directly linked to qualified professional staff and the long term contracts with suppliers and customers (mostly retailers).

An example from Hungary is a medium traditional food manufacturer (fresh, chilled salad mixture producing company), whose strategic resources are well qualified personnel, new manufacturing equipment, and its reputation. Furthermore, its strategic capabilities are quality management, process and product innovation capability and suppliers' selection. These strategic resources and capabilities leads to TF manufacturers' core competencies which are in this case quality management and product innovation. They are achieved by combining well qualified personnel's knowledge, new manufacturing equipment (resources), and its capabilities for managing quality and innovation.

Another Hungarian example is a small traditional food manufacturer (meet processor) whose resources are well qualified personnel, new equipments and long-term contracts with suppliers. Furthermore, its strategic capabilities are process innovation, suppliers' selection, production and quality management capabilities. Consequently, traditional food manufacturer core competency is production and quality management which is based on its well qualified personnel (resource) and manufacturing equipment (resource) as well as on production and quality management capabilities.

Regarding *Italian* traditional food manufacturers, strategic resources underlined by the respondents are knowledge and skills of professional stuff (the unique know-how of the entrepreneur), reputation, market information and its transmission within a company. The most important capabilities are the suppliers election, problem solving and product management. Consequently,

these resources and capabilities allow development of the following core competencies at the level of the traditional food manufacturers: flexibility, monitoring and adaptation of processes following market exigencies, customer relationship management and strict relation with the final consumer.

An example from Italia is one small artisanal traditional food manufacturer (dairy processor), whose strategic resources are qualified personnel, appropriate machinery, long-term contracts with suppliers and customers, and finally its reputation. Furthermore, its strategic capabilities are production management able to maintain traditional image of their products, good customer service, problem solving skills and supplier selection. These resources and capabilities leads to traditional beer manufacturers' core competency, which is ability to achieve high quality level of their products. High quality level of their products is achieved by combining resources as knowledge of qualified personnel, appropriate machinery with capabilities as ability for managing the production by maintaining its traditional image and problem solving ability.

Next example of traditional food manufacturer from Italy is a small family business (dairy firm), whose strategic resources are qualified personnel, appropriate machinery, standardised procedures (e.g. in production or information transmission within a firm). Furthermore, its strategic capabilities are ability to adapt production processes to satisfy different production volumes, marketing capabilities (e.g. ability to understand market needs and ability to set lower prices than large industrial groups), innovation capacity, and ability to perform appropriate corrective actions. Consequently, core competency of this traditional beer manufacturer is production flexibility allowing to produce both large volumes with low fixed costs and small quantities to meet specific customers' requirements. Production flexibility is obtained by combining resources, such as qualified personnel and machinery, and capabilities as ability to adapt production processes to satisfy different production volumes and ability to perform appropriate corrective actions.

Table 2. Overview of the most frequent strategic resources of the traditional food manufacturers per country

Resource categories		Belgium	Hungary	Italy
Human resources				
	Qualified professional stuff (knowledge and skills)	**X**	**X**	**X**
Physical resources				
	New equipment (technology))	**X**		
Organisational/cultural resources				
	Reputation	**X**		**X**
	Market information			**X**
	Information transmission within a firm			**X**
	Long-term partnership with suppliers	**X**	**X**	
	Long-term partnership with customer		**X**	

Table 3. Overview of the most frequent key capabilities of the traditional food manufacturers per country

Capability categories		Belgium	Hungary	Italy
Purchasing				
	Supplier selection	**X**	**X**	**X**
Manufacturing				
	Production management	**X**	**X**	**X**
	Problem solving			**X**
Sales and marketing				
	Customer service	**X**		**X**
	Sales management	**X**		
Innovation				
	Product innovation	**X**	**X**	

Table 4. Overview of the most frequent core competencies of the traditional food manufacturers per country

	Core competencies
Belgium	Quality level of the products, Understanding of market requirements, Product innovation
Hungary	Quality management and Product innovation
Italy	Production flexibility; monitoring and adaptation of production processes following market exigencies and Customer relationship management

3.2 Chain core competencies

Under this section, we give a brief overview of the most frequent core competencies of the traditional food chains per country. Furthermore, we analyse some case studies more in depth from each country that combine resources (R) from one chain member and capabilities (C) of another chain member (and vice versa) forming a base for chain core competencies, consequently leading to competitive advantages of the entire chain.

Belgium

The core competencies at chain level in Belgium are **high product quality**, **market orientation** (mostly on niche markets) and **product innovation**. They derive from long term partnership (C) with suppliers and customers. The partnership between the traditional food manufacturers and their suppliers enable access to raw materials (R), in some cases organic ingredients, at a sharp price. The partnership between the traditional food manufacturers and their customers allow the former to better understand the needs of the market through the upstream information flow (customers' capability) coming from customers.

A Belgian bio-cheese chain serves as a good example of combining resources and capabilities of both the supplier and the customer, and as a result creating chain core competencies. As the focus of this chain is on a high quality niche market it is not surprising that the chain core competencies are **high product quality** and prouct **innovation**. These core competencies derive from the supplier's capability to produce and supply high quality bio-milk that is subsequently processed using specific equipment (technology (R)) possessed by the traditional food manufacturer (cheese maker). Furthermore, production skills (R) and innovation capability of the traditional food manufacturer

(cheese maker) in combination with a market information (R) and reputation of the customer's brands (R) and names create a source of successful product innovation (chain core competency) along the entire chain.

A beer chain is another example of success in Belgium. Its' core competency is **product management**. With the help of successful product management, this beer chain is able to adapt production and marketing to the preferences of the consumer and new trends. It is possible due to the combination of the customers' resources in terms of information from the market, which is an input for production innovation and service, and the traditional food manufacturer's (brewery's) capability for flexible regional beer production. Therefore, production management is shaped both by the traditional food production capability and the customer's information (R) from the market regarding the preferences of the consumer and new trends.

Hungary

In most Hungarian cases, competitive advantage of Hungarian chains derives from well qualified personnel (R) of traditional food manufacturers, its suppliers and customers, leading to joint **product innovation**. Joint product innovation is often considered to be the core competence of Hungarian traditional food chains. In addition, sharing of promotion costs between traditional food manufacturer and customer (C), marketing skills (R)of mostly customer and information flows (chain capability) from the market represent a base for **market orientation** of chains. Market orientation of chains is referred to as another core competency of Hungarian traditional food chains.

Especially in the meet chains we find some successful examples of sharing resources and capabilities between the chain members. One of the core competences of these chains is **product innovation** which is jointly obtained by combining a product innovation capability of the suppliers and the traditional food manufacturers (meat processors) with the equipments (R) of the traditional food manufacturers where innovation trials are performed. The second chain core competency is **market orientation** which is closely complementary to the first one as product innovation should be in line with consumer preferences. Market orientation is achieved by combining customers' resource in term of market knowledge (information) with product innovation capability of the traditional food manufacturers (meat processors).

Italy

In the majority of the Italian cases, successful chains are characterised by successful **quality management** guaranteeing the product quality through severe controls and operational efficiency of all chain members. Success of chains could partly be attributed to a good chain balance, where all chain members perform their own role in a balanced system of reciprocal interest. The fact that the members of the analysed chains have common goals and no one has a dominating position over the other helps to understand the long run stability of the chain relationships. Moreover, we notice that marketing capabilities in the chains are well developed, which in combination with a long history of the product lead to a **good reputation**, mostly in niche markets. The reputation also contributes to taking action in jointly research projects that consequently lead to **product innovation**.

Examples of successful **quality management** that consequently guarantee a high product quality are dairy chains whose core competencies are based on combining resources and capabilities within the chain. A high quality product is achieved through quality management (C) of chain members as well as chain members' flexibility for cooperation and problem solving (C). Traditional food manufacturers are able to produce high quality products and simultaneously maintain traditional image of their products (C) while customers' qualified stuff with high product knowledge(R) can eventually identify and communicate problems back (C) to the traditional food manufacturer (upstream feedback) which

is useful for solving problems as part of production management. Furthermore, customers' resources, such as distribution, logistic and storage capacity, are important to maintain a high quality of the product till it reach the end consumer.

The Parma ham chain is another example of success in Italy. Its core competence is appropriate **product innovation**, which is the result of sharing resources and capabilities along the chain. The supplier contribute to product innovation by its capability to modify production process in order to meet the traditional food manufacturer's (Parma ham producer's)special requirements that are determined by high quality stuff (R) of the traditional food manufacturer having many years of experience and being able to mix formal and tacit knowledge (C). Furthermore, the supplier's reputation (R) also plays an important role in product innovation. It helps for example with joint research projects. Last, the customers' partner role in this is to offer innovative programs (C).

Table 5. Overview of the most frequent chain core competencies per country

	Chain core competencies
Belgium	High product quality, Market orientation and Product Innovation
Hungary	Market orientation and Joint product innovation
Italy	Quality management guaranteeing the product quality, Good reputation in niche markets, Product innovation

4 Conclusion/Discussion

In general, results indicate that traditional food chains possess complementary resources and capabilities that can be combined and thus together create chain core competencies. Examples of chain core competencies in our case studies are *quality management guaranteeing high product quality, product innovation, market orientation, and long* term partnership with suppliers and customers. The successful examples focus mostly on both quality and have a market focus , confirming that attention to tradition and excellence of the products has to go along with strategic orientation on market development.

In this study, our focus was on combining resources from one chain member and capabilities of another chain member (and vice versa). We showed selected chains, in which such combination is successfully done creating a base for competitive advantage. On the one hand, the resources that are combined most often are *knowledge and skills* of entrepreneurs and personnel. In case of the suppliers and traditional food manufacturers this relates mostly to knowledge and skills in production while in case of the customers this relates mostly to knowledge and skills in marketing. Additional resources that are often combined relate to *production equipment/technology* (mostly at traditional food manufacturers), *market information* (mostly at customers), logistic resources (distribution, storage, mostly owned by customers), *reputation* (at suppliers, traditional food manufacturers and customers*) and long term partnership* with suppliers and customers. On the other hand, the capabilities that are combined most often are *product development/innovation capability* (mostly at suppliers and traditional food manufacturers), *product and quality management* (mostly at suppliers and traditional food manufacturers) and *marketing capabilities* (mostly at customers).

However, sometimes we have noticed that chain core competencies are formed by sharing resources and capabilities of all three chain members instead of two. For example in the case of the bio-cheese chain, successful product innovation as a chain core competency derives from the supplier's capability to produce high quality bio-milk, specific processing equipment of the traditional food

manufacturer (cheese maker) and the customer's market information, its brand and the reputation of its name. Thus, chain core competencies may derive from a combination of resources and capabilities along the entire chain rather than from the single combination of resources and capabilities between two chain members. The precondition for creating such chain core competences is long term partnership between chain members, which means that all chain members actively work together toward common goals (Balasubramanian et al. 2005). Further, sharing information, knowledge, risk and profits also characterize these chains (Mantzer et al. 2000).

Results also stress the importance of long term partnership with suppliers and customers, which is characterized by combining capabilities by close cooperation and reciprocal information sharing (Rackham et al. 1996). This allows, on the one hand, maintaining the good quality of the products, and, on the other hand, obtaining information from the market, useful to develop incremental innovations and to adapt products to the preferences of the consumer. Various researchers concluded that effective integration of suppliers into new product development can yield benefits, such as reduced cost and improved quality of purchased materials, reduced product development time, and improved access to and application of technology (Ragatz et al. 1997, 2002, Primo and Amundson, 2002). Therefore, collaboration with "strategic" suppliers and customers (in our case chain members) is considered as a promising way to create new core competencies and thus competitive advantage (Rackham and De Vincentis, 1999).

Furthermore, our study confirms the importance of inter-firm knowledge sharing routine and information exchange among the chain members. Various scholars argue that inter-firm learning is critical to competitive success (Levinson & Asahi, 1996; March & Simon, 1958; Powell et al., 1996). The Knowledge-based view (KBV) of strategic management argues that knowledge is the only resource that has longevity in achieving a sustainable competitive advantage (Grant, 1996), and note that chains will prosper with increasing degree of skilful knowledge exchange (Ketchen and Giunipero, 2004). Based on some shared (but not identical) knowledge, chains are able to build competitive advantage by recombining and quickly extending their capabilities (Teece et al. 1994). In some industries (e.g., scientific instruments) more than two-third of the innovations could be traced back to a customer's initial suggestions or ideas (Von Hippel, 1988). In some case studies we witness the same; customers' knowledge about the preferences of the consumer and new trends often represent an important input for product innovation process of TFMs and/or their suppliers. Similarly, in other industries (e.g., wire termination equipment) the majority of innovations could be traced back to suppliers (Von Hippel, 1988). In our cases we often see that innovations are jointly developed by suppliers and traditional food manufacturers sharing their resources and capabilities. Therefore, we argue that the locus of innovation is a chain as a whole rather than an individual firm. The same can be argued for quality management, where combining resources (e.g. market information, logistic etc.) and capabilities (e.g. product and quality management etc.) results in high quality products offered that are also in line with the preferences of the consumer and new trends.

In conclusion, based on analyzed case studies in the traditional food sector across three countries (Belgium, Hungary and Italy), we conclude that combination of resources from one chain member(s) and capabilities of another chain member(s) (and vice versa) may form a basis for a core competency of their relationship, consequently serve as a basis of competitive advantage of the entire chain.

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