

## Exploring the Development of Agricultural Commodity Sourcing Strategies

- A Case Study on Coop Trading -

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## Master Thesis in Supply Chain Management

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#### **Executive Summary**

The increased strategic importance of the purchasing function has led to the creation of various frameworks and tools to aid practitioners in developing sourcing strategies that not only are more cost efficient, but that are also aligned to the objectives of an organization. Nonetheless, literature fails to address the application of such frameworks and tools in the agricultural industry. Given the fact that agricultural commodities can be just as important in terms of spend as non-commodities and commodities, this thesis seeks to explore the matter further. The frameworks of the strategic sourcing process outlined by Handfield, Giunipero, and Patterson (2011), the purchasing portfolio matrix founded by Kraljic (1983), and the Supplier Dutch Windmill model developed by Van Weele (2009) were identified as relevant frameworks and tools used for the development of sourcing strategies. Thus, the purpose of this thesis is to explore the theoretical roles that these frameworks and tools can play in determining sourcing strategies for agricultural commodities.

Reviewing the literature led to the creation of a theoretical framework, in which the step of strategy development within the strategic sourcing process outlined by Handfield et al. (2011) was extended. The theoretical framework was then compared to the strategic sourcing process done in practice by Coop Trading. Coop Trading has only recently started using similar natured frameworks and tools and this enabled the motivations, advantages, and disadvantages of using these models to emerge. Findings reveal that Coop Trading does not fully utilize its version of the purchasing portfolio matrix to determine sourcing strategies and the general purpose of the matrix is unclear. This also applies to how the company links the product portfolio matrix to its version of the Dutch Windmill model. The mismatch between theory and practice could serve as a basis for the challenges that Coop Trading is facing in developing sourcing strategies for complex categories. Furthermore, the manner in which these models are applied largely changes on a buyer basis. Consequently, recommendations are given to Coop Trading in order to optimize the application of the framework and tools. Moreover, this thesis recommends that further research is conducted on the development of sourcing strategies for agricultural commodities in addition to how the application of similar natured frameworks can change on a buyer basis.

#### **1. Introduction**

#### **1.1 Background and Motivations**

Over the past decades the purchasing function has outgrown its former operational and supportive focus and has gained a more strategic outlook. The reasons for this includes increased spending on the acquisition of goods and services and competitive advantages emerging through the strategic understanding and exploitation of the purchasing function (Monczka, Trent & Handfield, 1998; Gelderman & Weele, 2005).

In fact, reducing purchasing expenditures can lead to substantial improvements of profit margins, however this also requires a greater synchronization of the purchasing function with the rest of the operations of an organizational structure (Agndal, Axelsson & Melin, 2005). More specifically, a shift from procurement to supply management implies that purchasing is viewed as a strategic unit that needs to be aligned to the overall corporate strategy and objectives of an organization.

Due to the increased strategic importance of purchasing, it can generally be assumed that purchasing, business, and, corporate strategies are interrelated (Apostolova, Kroon, Richter, & Zimmer, 2015). This means that the purchasing strategy can trigger changes in the other strategies and that an alignment is not solely determined in a top-down manner, but rather cross-functionally (Apostolova et al., 2015). Thus, achieving such an alignment can be challenging to implement and there is no dominant framework outlining how this can be accomplished. Consequently, although purchasing as a strategic function has gained significant importance, literature mainly highlights generic sourcing strategies and decision-making processes for non-commodities and commodities, which purchasing managers can rely on.

Great focus has been given to the purchasing of non-commoditized goods within procurement literature. Jones, Raper, Whipple, Mollenkopf, and Peterson (2007) define noncommodity goods as products that are characterized by value-added elements and are highly differentiated and distinguishable. On the other hand, commodities are often regarded as products that are interchangeable, uniform and meet standard grading requirements when traded (Jones et al., 2007). The authors claim that non-commoditized goods usually receive greater attention, due to increased complexities and costs (Jones et al., 2007).

Specifically, within the agricultural industry, the lack of decision-making frameworks for the development of clear-cut sourcing strategies for agricultural commodities is even more apparent. Nonetheless, agricultural commodities may also be equally as important especially in terms of spend, depending on the buyer and company in question. Furthermore, ensuring that agricultural commodities are delivered at the right time, place, and price has never been more pressing and challenging, since buyers often source huge shares of their products from markets that are not only consolidated, but also highly competitive (Da Silva & Rankin, 2013). Overall, in an agricultural commodity industry, buyers face the pressures and tradeoffs of securing supply and improving profits, service, and quality, while maintaining stable and reduced prices (Jones et al., 2007; Da Silva & Rankin, 2013).

Nonetheless, several step by step frameworks are available for the development of commodity and non-commodity sourcing strategies. Specifically, Handfield, Giunipero, and Patterson (2011) propose a five-step decision-making process that entails conducting market research for identifying potential suppliers, determining which sourcing approach to utilize, and the measurement tools needed to evaluate the performance of suppliers. However, the authors stress that the strategy development process can vary to a large extent and that it depends upon specific supply markets (Handfield et al., 2011).

Literature further proposes various tools that can specifically be used for the strategy development step in the strategic sourcing process outlined by Handfield et al. (2011). An approach, which has emerged over the years is of the purchasing portfolio matrix, which can contribute to the strategic segmentation of goods and services by differentiating the way products are treated, usually based upon importance and supply risk. More specifically, purchasing portfolio matrices combine "two or more dimensions into a set of heterogeneous categories for which different strategic recommendations are provided" (Gelderman & Van Weele, pg. 19, 2003). Ultimately, a purchasing portfolio matrix prescribes a set of strategic guidelines for each given group of products usually in

terms of the number of supply sources, management of supplier relations, and exploitation of buying power (Kraljic, 1983). Furthermore, Van Weele (2009) identified certain shortcomings of the purchasing portfolio matrix including its lack of focus on how supplier perceptions affect buyer and seller relationships and ultimately the development of sourcing strategies. To compensate for this, Van Weele (2009) developed the Dutch Windmill model, which takes into account a buyer's attractiveness in the eyes of supplier and relative value of the product being sourced.

However, literature largely fails to cover the application of the strategic sourcing process including the purchasing portfolio matrix and the Dutch Windmill model in determining the most optimal sourcing strategy within the agricultural industry. Furthermore, the conditions that lead to the application of such decision-making frameworks and tools for buyers purchasing agricultural commodities is unclear. Consequently, the underlying reasons and factors for choosing one sourcing approach over another is also ambiguous.

#### **1.2 Research Purpose**

Taking into consideration the deficiencies and ambiguities mentioned above, the purpose of this master thesis will be to explore the theoretical role that the strategic sourcing process, especially in terms of the purchasing portfolio matrix can play in determining sourcing strategies in an agribusiness context. More specifically, this master thesis seeks to utilize literature and theory to extend the strategy development step within the strategic sourcing process, so that it can can be used by buyers in developing appropriate sourcing strategies for different agricultural commodities. This will explicitly concern the usage of the purchasing portfolio matrix.

To test the relevance and robustness of the contributions made to theory, the extended strategy development step will be compared to the recent implementation CT's version of the purchasing portfolio matrix and Dutch Windmill model in determining sourcing strategies for two different agricultural product categories. These two categories will be delimited to frozen potatoes and dairy items, since these categories each differ in terms of spend and agricultural specific characteristics and such significant differences should in theory affect the manner in which sourcing strategies are determined. Furthermore, the motivations, advantages, and disadvantages for adopting a strategic sourcing framework by CT will be explored.

CT is a sourcing company that serves the retailers of Coop Norway, Denmark, SOK Finland, and Sweden. CT operates in a market that not only is price sensitive, but also quality driven and differentiated in terms of customer demands and preferences. Thus, CT must ensure the competitiveness of the purchasing function, while ensuring harmonization in terms of efficiency, customer preferences, and product design. Overall, it is hoped that the differences and similarities that emerge as a result of the comparison will serve as valuable recommendations for CT and similar natured companies when developing sourcing strategies for agricultural product categories.

#### **1.3 Research Questions**

- 1. How can the strategic sourcing process including the specific tools of the purchasing portfolio matrix and the Dutch Windmill model theoretically contribute to the determination of sourcing strategies within the agricultural industry?
- 2. How does Coop Trading utilize product portfolio and supplier view matrices to determine strategic sourcing strategies and how does it compare to theory?
  - a. What has motivated Coop Trading to implement a strategic sourcing framework in developing sourcing strategies and what are the advantages and disadvantages of applying theoretical models to practice?
- 3. To what extent can the outcomes of comparing theory to practice be used to optimize the strategic sourcing process and serve as recommendations for companies sourcing agricultural commodities?

#### 1.4 Master Thesis Design and Overview



### 2. Literature Review

#### 2.1 The Purpose of the Literature Review

The overall objective of the literature review is to establish the significance of the general field of study and to identify a place where new contributions could be made. More specifically, this literature review firstly seeks to highlight the definition of strategic sourcing and how it how it has developed over time. Due to the fact that the purchasing function has received more strategic attention, managers are increasingly relying on frameworks to develop their sourcing strategies. As a result, the strategic sourcing process proposed by Handfield et al., 2011 will be outlined.

Specifically, purchasing portfolio matrices within the third step of strategy development can be used to determine different sourcing strategies. Thus, the conditions, applications, disadvantages, and advantages of different purchasing portfolio approaches will be reviewed. Finally, literature presents various sourcing approaches that can be used within the agricultural industry and these will be outlined in order to serve as the foundation for the theoretical framework where the purchasing portfolio matrix will be extended.

#### 2.2 The Definition of Strategic Sourcing

In literature the term "strategic sourcing" is complex and widely defined. It has emerged over time as a response to ongoing technological developments and market competition. One of the earliest definitions of strategic sourcing is found in Walker's article from 1988 where strategic sourcing is stated to be "an approach to the make versus buy decision, based on transaction cost theory, where the focus is on the strategic nature of the asset and the level of specialization in determining the outcome of the decision."

Monczka and Trent, pioneers of strategic supply management and purchasing, wrote the article "Evolving Sourcing Strategies for the 1990s" in 1991 in which they propose a number of different sourcing strategies. According to these authors the need for strategic sourcing has resulted from the evolvement of the purchasing function (Monczka & Trent, 1991). As firms continuously strive to improve quality and service while reducing product cost and enhancing value, the strategic

importance of purchasing cannot be overlooked (Monczka and Trent, 1991). In fact, Monczka, Trent, and Handfield (1998) claim that an average manufacturer spends 55 cents out of every dollar earned on the acquisition of goods and services. It can thus be concluded that not only has the sourcing function outgrown its former operational focus, but that it clearly contributes to a company's corporate competitive advantage (Schneider & Wallenburg, 2013).

Monczka and Trent (1991) continuously back up this statement by emphasizing that the role of the supplier has shifted from simply providing operational support to the buying firm to becoming a critical source contributing to the firm's overall performance objectives. Furthermore, Monczka and Trent (1991) argue that the role of purchasing has similarly shifted from being a passive function to one that supports the strategic objectives of the firm and thus greater emphasis is place upon the supplier and the development of sourcing strategies.

Anderson and Katz (1998) also attempt to define the concepts of strategic sourcing. Initially these authors deem that a sourcing strategy answers the fundamental question of how to buy and that it must be aligned with the company's capabilities. For some companies that have the capabilities to make or provide the service internally, the sourcing strategy considerations are closely intertwined with the make or buy decision (Anderson and Katz, 1998). When exploring the literature about strategic sourcing, it becomes clear that the range of strategic options is wide and in order to overcome the different dimensions of strategic choices Anderson and Katz (1998) propose categorizing the company's buys into four potential levels of procurement pathways namely, buy for less, buy better, consume better, and sell better.

Strategic sourcing can furthermore be viewed as an expression that has gained foothold in the light of managerial trends and has drawn attention towards core competencies and outsourcing other activities in order to gain and retain competitiveness (Sislian and Satir, 2000). In addition, Quinn and Hilmer (2004) highlight the significance of taking core competences into account when making strategic sourcing decisions. Thus, the authors have developed a strategic sourcing framework that resolves around a decision matrix based on (1) competitive edge derived from the activity, (2) strategic vulnerability introduced by outsourcing, and (3) transaction cost incurred due to outsourcing (Quinn and Hilmer, 2004). The objective of such a sourcing matrix is to identify the level of control the organization needs to exercise on the particular activity. Literature has presented similar strategic sourcing frameworks over time and three out of four frameworks reviewed by Sislian and Satir (2000) consider competitive advantage as a crucial factor for making sourcing decisions. Another recurring factor is the organization's capability of performing the activity versus that of the suppliers or competitors (Sislian and Satir, 2000). Consequently, Sislian and Satir (2000) have developed their own strategic sourcing framework as an attempt to incorporate all of the crucial factors. The framework considers the factors of competitive advantage, demand flexibility, process capability and maturity, as well as strategic risk (Sislian & Satir, 2000).

More specifically, Rendon (2005) describes strategic sourcing as taking an approach to the selection of suppliers while considering the alignment of the sourcing strategy with the corporate strategy. According to Rendon (2005), the concept of strategic sourcing takes point of departure in supply management. Supply management has been described as a new management concept that integrates the company's purchasing, engineering, and quality assurance functions with the supplier, working together as one team early in the procurement process to further mutual goals (Rendon, 2005).

Furthermore, Rendon (2005) points out that strategic sourcing is the aspect of supply management which provides some of the most value-added benefits to the organization. In his article, Rendon (2005) deals with one specific example of strategic sourcing, namely the development of a commodity sourcing strategy, and emphasizes that this is just one application of strategic sourcing. In general, it is implied in literature that the application of strategic sourcing ranges widely depending on different industries and company specific factors.

Overall, it has proven to be challenging to determine one general application of the functions of strategic sourcing and thus the term strategic sourcing has been left broadly defined to the reader. Moreover, when reviewing the literature on strategic sourcing it is evident that the concepts and definitions have emerged over time as a response to a constant development.

Additionally, Schneider and Wallenburg (2013) claim that the definition and progression of sourcing as a strategic function has been slow and unclear. Johnson and Leender (2001) assert that

this is primarily because of the challenge in aligning sourcing functions with corporate and other functional strategies. Additionally, the fact that the role of procurement has advanced from assuming a more singular and financially driven shareholder view to an increasingly multi-stakeholder and resource based focus, has dramatically increased the variables needed to be considered when aligning the procurement function to a firm's corporate strategy (Schneider & Wallenburg, 2013). Overall, Schneider and Wallenburg (2013) deem that an alignment is necessary in order to fulfill both functional and corporate objectives and that this requires an effective and efficient organizational setup of the purchasing function.

Kocabasoglu and Suresh (2006, pg. 4) further state that "although the concept of strategic sourcing is fairly recognized, managers are still challenged by the roadblocks of implementation." Additionally, Kocabasoglu and Suresh (2006) point out that strategic sourcing is a multidimensional concept. This relates to the preliminary statement of this section that the term "strategic sourcing" is complex and widely defined and thus the objective in the following sections are to present and discuss some of the frameworks and tools that can be used to develop specific sourcing strategies. As a point of departure the strategic sourcing process proposed by Handfield et al. (2011) will be elaborated upon.

#### 2.3 The Strategic Sourcing Process

The process of sourcing is deeply rooted in the initial decision faced by many companies about whether to make or buy. Once it is decided to buy, different considerations regarding the sourcing process arise. Handfield et al. (2011) refer to the process of deciding where to source from, as well as decide the structure and type of relationship that should be established with the supplier as strategic sourcing. Handfield et al. (2011) argue that a sourcing strategy is typically focused on a category of products or services.

Firstly, it can be outlined that the strategic sourcing process is a decision-making framework used to identify which suppliers should provide a group of products or services (Table 1). Additionally, the strategic sourcing process identifies the type of contract that should be included, which performance measurement tools to deploy for evaluating suppliers, and the proper level of price, quality, and delivery arrangements (Handfield et al., 2011).

Over the past decade literature has presented several different frameworks defining the steps in the strategic sourcing process. This thesis will take point in the most recent framework by Handfield et al. (2011) which has also been employed throughout the Supply Chain Management Master program at the Copenhagen Business School (CBS). According to Handfield et al. (2011), a strategic sourcing process or category strategy is a five-step procedure to developing a sourcing strategy that includes:

- 1. Build the team
- 2. Market research
- 3. Strategy development
- 4. Contract negotiation
- 5. Supplier relationship management

Table 1: Strategic Sourcing Process



Source: Handfield et al. (2011)

#### Step 1: Build the Team and the Project Charter

According to Handfield et al. (2011), the strategic sourcing process commences with the action of building a team. Handfield et al. (2011) propose that a category team can comprise of personnel from operations, product design, process engineering, marketing, finance, and purchasing departments. Personnel from different departments can cross-functionally add to the versatility and

thus enable the team to make more comprehensive sourcing decisions. It is emphasized that an important task when forming a sourcing team is to critically consider who to engage in the team, as well as develop a compelling reason for why each member should be involved in the project.

Handfield et al. (2011) emphasize that the personnel involved should have a stake in the project and furthermore be familiar with the commodity being evaluated. In order to properly manage the range of stakeholders, it is suggested to map out their needs and success criteria (Handfield et al., 2011). Once established, the sourcing team should then define the scope of the category strategy, publish a project charter, and develop a work plan and communication plan.

#### Step 2: Conduct Market Research on Suppliers

The second step when developing a sourcing strategy encompasses understanding the market and its suppliers and Handfield et al. (2011, pg. 209) state the purpose of this step is "to fully understand the purchase requirement relative to the business unit objectives." This step implies collecting different types of information, however before the actual research process is initiated, Handfield et al. (2011) suggest performing a thorough supplier spend analysis to determine past expenditures for each commodity and supplier, as well as the total expenditures for the commodity as a percentage of the total. The spend analysis should in this case be performed on a category basis enabling the sourcing team to drill down to a more granular level and identify the specific business units that are purchasing the products or services, and which suppliers they are currently using (Handfield et al., 2011).

Once the category spend analysis is in place, the team should proceed with collecting information about the marketplace, as well as the requirements of their internal customers. According to Handfield et al. (2011), this includes external market research identifying information on key suppliers, available capacity, technology trends, price and cost data, environmental and regulatory issues. Also, interviews with stakeholder to determine their forecasted requirements is recommended as a part of this research process.

Handfield et al. (2011) highlight that data can be collected in numerous ways and that there are multiple sources of market and supplier information available in order to acquire good market

intelligence. However, the key to collecting accurate information is to triangulate, which implies exploring, comparing, and contrasting data from multiple sources before validating it (Handfield et al., 2011). Lastly, Handfield et al. (2011) present different data representation tools useful for the category team to portray and explain the current situation as a visual stepping-stone for the final sourcing decision. These representation tools can include Porters Five Forces, SWOT analysis, and Supplier Analysis.

#### Step 3: Strategy Development

Once the purchasing team has collected adequate information about the supply market, the forecasted spend, and the stakeholder requirements it is ready to proceed with the third step of the strategic sourcing process (Handfield et al., 2011). In order to ultimately be able to make an effective decision, the team needs to convert all of the data into valid knowledge and apply some meaningful tools to structure the information accordingly (Handfield et al., 2011).

Handfield et al. (2011) state that the specific goal of the strategy development step is to classify the suppliers and define a sourcing approach. Particularly the action of defining a sourcing approach is essential to the development of a sourcing strategy for a specific commodity. Subsequently, it is highlighted that one of the most commonly used tools in this process is the purchasing portfolio matrix which will be thoroughly reviewed in a separate section.

Once having completed the portfolio analysis, the sourcing team must engage in the category and evaluate individual suppliers in relation to their suitability in order to narrow down the list of suppliers. In addition, Teng and Jaramillo (2005) sustain that the way existing suppliers are evaluated becomes critical in the management and implementation of supply chain operations. Ultimately, the objective of a supplier evaluation is to make supplier recommendations and identify opportunities to leverage the category.

In addition to the models described above, Handfield et al. (2011) identify different criteria that companies may use to assess potential suppliers for a successful match. Firstly, Handfield et al. (2011) advise companies to be aware of the process and design capabilities possessed by a potential

supplier. One way to reduce time required to develop new products is to use qualified suppliers that are able to perform product design activities themselves.

Secondly, management capability is highlighted as a valid feature with the supplier and according to Handfield et al. (2011, pg. 218), "assessing a potential supplier's management capability is a complicated, but an important step." More evident is the need to assess a potential supplier's financial condition and cost structure and this usually occurs during the evaluation process. By assessing different financial ratios that determine whether a supplier can invest in resources, pay its own suppliers and workforce, and continue to meet its debt and financial obligations, the company will be able to determine if the supplier can be financially trusted as a continuously source of supply (Handfield et al., 2011).

As the last part of step three in the strategic sourcing process Handfield et al. (2011) argue that once the different suppliers are evaluated, it is necessary to develop a supplier selection model. Such a model provides the company with the ability to rank supplier across multiple of the proposed criteria above and it can be especially helpful in identifying which suppliers are providing superior performance, and which are not (Handfield et al., 2011). One main supplier selection method is the analytical hierarchy process model (AHP) (Teng et al., 2005). The AHP model is a robust and simple model that defines hierarchical relationships among factors chosen by decision makers such as flexibility, quality, and cost.

#### Step 4: Contract Negotiation

The fourth step in the strategic sourcing process includes implementing the strategy developed in step three and negotiating win-win contracts with the selected suppliers. The negotiation process is initiated with an analysis of market and pricing issues so that a fair price for both parties can be agreed upon (Handfield et al., 2011). Before going into the actual negotiation with a supplier, the sourcing team should have prepared a negotiation plan and an ideal contract template. In case the negotiation process with the recommended supplier does not progress as planned, the buyer should also have a contingency plan. Finally, the negotiation is conducted, and the contract is signed (Handfield et al., 2011).

In some cases, companies have drafted a list of preferred suppliers who have the priority of receiving new business opportunity before others. According to Handfield et al. (2011) a preferred supplier has previously proven its performance capabilities and therefore this particular supplier receives preference during the supplier selection process. The book distinguishes between competitive tendering and negotiation as methods for final supplier selection when there is not a preferred supplier. Competitive tendering will be addressed in the subsequent section when discussing specific strategies that can be applied within the agricultural industry. Handfield et al. (2011) allude that the negotiation process is a more expensive and interactive approach compared to competitive tendering. Conclusively, it is emphasized that negotiation with a supplier should only be conducted when the buyer feels confident about the level of planning and preparation put forth (Handfield et al., 2011).

#### Step 5: Supplier Relationship Management

One might be led to believe that the strategic sourcing process ends once the contract is signed, however according to Handfield et al. (2011) that is insufficient. Typically, one member of the initially assembled sourcing team will continue to work with the supplier assuming the role of a supplier relationship manager (Handfield et al., 2011). It the buyers job to make sure that the sourcing strategy is continuously reviewed and updated so that it is remains aligned with the stated objectives and potential changes in the market. In addition, the buying firm should aim to monitor the performance of suppliers based on predetermined and agreed upon criteria such as quality, delivery performance, and continuous cost improvement (Handfield et al., 2011). Handfield et al. (2011) propose using a supplier scorecard as a tool for monitoring supplier performance, so that deficiencies in performance can be noted, discussed, and acted upon.

Conclusively, the strategic sourcing process is a theoretical tool proposed to develop a sourcing strategy that enables companies to manage the supply for a specific category of products or services. However, Handfield et al. (2011) highly emphasize that this step-by-step approach is relatively general and that it describes the actions to follow only when proposing and executing a strategy. Lastly, it is stressed that "the actual outcomes of the commodity strategy development

process may vary considerably, depending on the specific commodity and the supply market" (Handfield et al., 2011, pg. 232).

#### **2.4 Strategy Development through the Purchasing Portfolio Matrix**

As previously mentioned, in the third step of strategy development, data is converted into meaningful knowledge and structured through the usage of tools such as purchasing portfolio matrices to enable sourcing managers to make effective decisions.

#### 2.4.1 Theoretical Objectives of Purchasing Portfolio Matrices

Purchasing portfolio matrices are 2X2 matrices that can serve as a starting point in positioning commodities in different segments and when elaborated and tailored can provide sufficient guidance for developing effective purchasing and supplier strategies (Gelderman & Van Weele, 2003). This is due to the fact that not all products and buyer-seller relationships will be treated and managed the same way and thus purchasing portfolio matrices are tools that enable managers to cope with segmentation as a basis for designing commodity strategies for differentiated product categories (Gelderman & Van Weele, 2002).

The following section will firstly outline the background, application, conditions, advantages, and disadvantages of the founding purchasing portfolio matrix developed by Kraljic in 1983. Subsequently, alternative applications of the purchasing portfolio model by Van Stekelenborg and Kornelius (1994), Olsen and Ellram (1997), and Gelderman and Van Weele (2002; 2003) will be presented. This selection of studies derives from combining the overviews on purchasing portfolios developed by Dubois and Pedersen (2002) as well as Gelderman and Van Weele (2005). The alternative approaches will be aggregated and illustrated in Appendix 1. By chronologically examining these various studies it is hoped that literature sheds light on the development and applications of the purchasing portfolio matrix.

The founding matrix developed by Kraljic (1983) as well as the most prominent purchasing portfolio models which literature has presented over time will be utilized as the theoretical foundation for this paper. To take into account buyer perceptions of suppliers and interdependencies

between the two parties, the Dutch Windmill model developed by Van Weele in 2009 will also be outlined. Lastly, the purchasing portfolio matrix developed by Kraljic (1983) will be extended by taking into account the elaborations proposed by Gelderman and Van Weele (2002; 2003) as well as the specific sourcing approaches that can be used to purchase agricultural commodities.

#### **2.4.2 The Kraljic Purchasing Portfolio Matrix**

In 1983, Kraljic questioned the routinized purchasing function of companies, which had been shaped during a relatively stable era and environment. More specifically, Kraljic (1983) deemed it necessary to re-evaluate and change the purchasing of non-commodity and commodity materials and components from an operational to a strategic perspective. Making the purchasing function strategic would enable the purchasing department to mitigate against supply chain disruptions, take advantage of technological opportunities, and contribute to sustained advantages in competitive markets (Kraljic, 1983).

In order to accurately develop supply strategies Kraljic (1983) prescribes managers to follow

a four step approach, which will also enable the identification and collection of relevant data and the development of future supply scenarios. Specifically, the first step entails the classification of purchasing materials in terms of (1) profit impact: volume purchased, percentage of total purchase cost, or impact on product quality or business growth and (2) supply risk: availability, number of suppliers, competitive demand, make-or-buy opportunities, storage risks, and substitution possibilities.



Figure 2: Strategic Quadrants

Such a classification will yield non-critical, bottleneck, strategic, and leverage categories, for which managers can use to segment differing types of materials to be purchase (Figure 2) (Kraljic, 1983). Kraljic (1983) deems that such a segmentation will enable managers to discern attractive novel opportunities and critical vulnerabilities and thus improve their understanding of the

appropriateness of differing supply strategies for commodity and non-commodity materials and components.

Step two entails an assessment of the supply market in terms of the "availability of strategic materials in terms of both quality and quantity, and the relative strength of existing vendors" (Kraljic, 1983, pg.113). The buyer then evaluates its own requirements and ability to obtain desired supply terms through firstly, supplier capacity utilization, that is the risk of supply bottlenecks and its suppliers' breakeven stability (Kraljic, 1983). Other factors such as the uniqueness of what a supplier has to offer, which has implications upon supply scarcity and number of substitutable suppliers, as well as annual volume purchased and expected growth in demand should be considered (Kraljic, 1983). Past variations in capacity utilization of main production units to judge the flexibility of existing suppliers and the potential costs in the case of non-delivery and inadequate quality should also be taken into account.

The third step requires managers to Figure 3: Kraljic Purchasing Portfolio Matrix position the segments and materials into the purchasing portfolio matrix (Figure 3). Kraljic (1983) deems that the matrix plots will enable a company to determine its purchasing strength vis-a-vis the supply market and key suppliers. Accordingly, when a company has a dominant market stance and the suppliers' strength ranges from medium to low, a purchasing strategy





based on exploitation should be pursued through favorable pricing and contract agreement (Kraljic, 1983). However, excessive aggressive exploitation might lead to damaged supplier relationships and cause unfavorable counter-reactions on the part of the supplier (Kraljic, 1983).

On the other hand, if suppliers are in a stronger position than the buyer, then the buyer should diversify its supply options by for instance considering backward integration or investing more in supplier research and relationships (Kraljic, 1983). However, if the stronger position of the supplier presents limited risks and benefits, a defensive strategy would be costly and not particularly

useful. In such cases, Kraljic (1983) recommends a balance strategy, where aggressiveness is used in a careful and calculated manner. Ultimately, the strategies that emerge from Kraljic's purchasing portfolio matrix are to a large extent based upon the power positions of both parties involved, in other words the more dominant party will and should bargain for preferential treatment and the weaker counterpart will most likely have to give in, in order to obtain what is required (Kraljic, 1983).

The last step considers specific action plans based upon the generic strategies outlined above for the materials plotted in the portfolio matrix. The action plans for each strategy are the following (Kraljic, 1983):

#### I. Diversification:

- A. **Short term:** consolidate supply position by concentrating fragmented purchased volumes in a single supplier, accept high prices, and cover full volume requirements through supply contracts;
- B. Long term: reduce risk of single-sourcing by searching for alternative suppliers and/or materials and consider backward integration.

#### II. Exploit:

A. Spread volume over various suppliers, exploit price advantages, increase spot purchases, and decrease inventory levels.

Additionally, Kraljic (1983) through this step also urges managers to map out a range of supply scenarios to ensure both short term and long term strategies. This step also prescribes managers to "define respective risks, costs, returns, and strategic implications" as well as the objectives, steps, responsibilities, and contingency measures of each supply scenario (Kraljic, 1983, pg. 115). Overall, Kraljic (1983) deems that the ultimate result will be a "set of systematically documented strategies for critical purchasing materials that specify the timing of and criteria for future action" (Kraljic, 1983, pg. 115).

The Kraljic purchasing portfolio matrix is considered to be the foundation of purchasing strategy and is still regarded as the dominant approach in operational professionalism (Gelderman & Van Weele, 2003). In fact, as highlighted by Syson (1992), Kraljic's matrix represents the 'the most

important single diagnostic and prescriptive tool available to purchasing and supply management" (Gelderman & Van Weele, 2003). Gelderman and Van Weele (2002) further highlight that Kraljic purchasing portfolio is utilized by large companies such as Shell, Alcatel, Philips, Akzo Nobel, Océ, and Siemens. In a survey on Dutch companies it is discerned that 50 percent of the responding managers in small companies claimed to be utilizing the purchasing portfolio matrix and 85 percent of the managers for the larger companies (Gelderman & Van Weele, 2002).

Although Kraljic (1983) does not explicitly apply the purchasing portfolio model, he does highlight the significant implications that various established companies experienced when strategically analyzing and changing their purchasing strategies. The firms used in his study include office equipment and auto manufacturers as well as petrochemical, welding materials, and electrical equipment producers.

Kraljic also (1983) outlines some conditions which need to be met in order to effectively develop appropriate sourcing strategies. Such conditions include, greater integration through cross-functional relations, top-management involvement, systems support, and the upgrading of staff and skill requirements (Kraljic, 1983). Additionally, Gelderman and Mac Ronald (2008) highlight that the Kraljic purchasing portfolio model has been developed from the point of view of a well-developed industrialized logistics infrastructure.

Overall, the generic nature of the model has resulted in its wide application both in terms of industry and for commodity and non-commodity goods. Nonetheless, research does allude to the fact that users of the matrix are usually well established buyers that can rely on adequate systems and capabilities in order to implement the model. The main advantage of the matrix is that it is relatively simple and straight-forward and its generic nature allows customizability.

#### 2.4.3 Limitations of the Kraljic Purchasing Portfolio Matrix

Despite the widespread usage and importance of the Kraljic purchasing portfolio matrix, Gelderman and Van Weele (2003) outline a number of limitations of the matrix. Firstly, the authors question the dimensions of profit impact and supply risk and specifically the measurement of these dimensions through factors and weights (Gelderman & Van Weele, 2003). Their research alludes to

the importance of weighing each factor, but that this can also result in high levels of subjectivity (Gelderman & Van Weele, 2003). Gelderman & Van Weele (2003) then evince the issues related to demarcation and question the distinction between high and low supply risk. Overall, besides the issues related to measurement, the authors challenge the appropriateness of making simple recommendations by decompressing an array of complexities into two dimensions.

Next, Gelderman and Van Weele (2003) claim that the Kraljic purchasing portfolio matrix largely disregards the suppliers' intentions, reactions and possible strategies. Consequently, the matrix is prone to cause mismatches between buyers and sellers and that partnerships are only possible if the strategic intent of both parties is clear and taken into account when devising a strategy (Gelderman & Van Weele, 2003).

Additionally, the matrix lacks insights on the effects that power dynamics in buyer and seller relationships can have upon strategies (Gelderman & Van Weele, 2003). Lastly, the matrix does not prescribe any guidelines for movements within the matrix and specifically if the given strategies allow such movements (Gelderman & Van Weele, 2003). The matrix also does not outline the conditions and the manner in which such movements should be implemented (Gelderman & Van Weele, 2003).

#### 2.4.4. Alternative Purchasing Portfolio Models

#### Van Stekelenborg and Kornelius

According to Van Stekelenborg and Kornelius (1994), literature fails to provide guidelines for the application of sourcing strategies in various supply situations. Previous literature on purchasing and supply has mainly been focused on identifying ideal types of buyer-supplier relationships. However, Stekelenborg and Kornelius (1994) imply that these ideal types of relationships lack the inclusion of a link to specific situations and thus cannot be used to determine which purchasing principles to apply in what supply situation.

Stekelenborg and Kornelius (1994) highly claim that there is a need for prescriptive models and as a result present a framework that consists of different types of supply situations in which each type is linked to a specific purchasing strategy. The aim of such a framework is to support decision makers in coping with the diversity in supply situations. Stekelenborg and Kornelius (1994) emphasize that even though the framework is originally developed for the use in an industrial environment, it can just as well be useful in other fields where purchasing is important.

Ultimately, Stekelenborg and Kornelius (1994) use the need for internal market demand control as well as the need for external supply market control to distinguish between four types of supply situations. The axes in this matrix have been slightly remodeled compared to the original purchasing portfolio matrix proposed by Kraljic. The need for control of the internal market demand is deployed on the vertical axis, while the horizontal axis represents the level of control needed in the external supply market (Stekelenborg and Kornelius, 1994). The four types of supply situations are referred to as: (1) Plain supply, (2) Internally problematic supply, (3) Externally problematic supply, and (4) Complicated supply. The authors allude that by positioning purchased goods or services in the matrix, it is possible to develop a purchasing strategy for each supply situation highlighted. As a result, the organization is able to identify which purchasing activities to focus on and the actions of controlling "can be directed towards the characteristics of the supply situation that are causing a high control need" (Stekelenborg and Kornelius, 1994, pg. 315).

Lastly, it is emphasized by Stekelenborg and Kornelius (1994) that positioning purchased goods and services require thorough insight in almost all processes within the buying firm and thus it is recommended that the purchasing department is not assigned with the task of performing the purchasing portfolio analysis alone. Furthermore, Stekelenborg and Kornelius (1994) highlight some of the different factors underlying the need for both external and internal market demand control. These factors are compiled and presented in Appendix 2.

#### **Olsen and Ellram**

The purchasing portfolio model proposed by Olsen and Ellram (1997) builds upon an identified scarcity in literature with regards to buyer-supplier relationships in relation to strategic sourcing. More specifically a normative portfolio model has been developed to assist the management of different types of supplier relationships (Olsen and Ellram, 1997).

Olsen and Ellram (1997) emphasize that many versions of the purchasing portfolio model have been presented over time and that the general concepts of the model have suffered from much criticism. Especially the complexity of the dimensions used to categorize the elements in the portfolio has been heavily discussed and Olsen and Ellram (1997) emphasize the importance of the portfolio model's capability to incorporate all important variables. Furthermore, it is highlighted that portfolio models can have a tendency to result in strategies that are independent of each other and in general portfolio models fail to depict the interdependencies between two or more items. Lastly, it is emphasized that portfolio models have been criticized for lacking guidance on how to choose among resulting strategies (Olsen and Ellram, 1997).

Olsen and Ellram (1997) recommend a multi-step approach to analyze a company's supplier relationships. The aim of this section is not to go into depth with the different steps, but rather the alternative application of purchasing portfolio models and thus only the first step will be elaborated upon. The first step includes an analysis of the company's purchases as well as the application of a portfolio matrix. The matrix specifically considers the strategic importance of the purchase (x-axis) and the difficulty in managing the purchase situation (y-axis) (Olsen and Ellram, 1997). Olsen and Ellram (1997) have identified and assessed some of the underlying factors relative to each dimension chosen and these are presented in Appendix 3.

In order to categorize the purchases in the portfolio model Olsen and Ellram (1997) propose to assign weights to each of the factors in Appendix 3 based on the perceived importance of the factor to the company's operation. Overall, the model focuses primarily on manufacturing companies purchasing a variety of products and services and that such specific conditions are viewed as a current limitation to the model. Also, the model cannot evade the general weaknesses of portfolio models with regards to the risk of dimension complexity, lack of focus on the interdependencies between the products categorized, and shortcomings in providing guidance on how to choose which products to focus on.

# 2.4.5 The Purchasing Portfolio Matrix through the Perspectives of Gelderman and Van Weele

In relation to the abovementioned limitations of the Kraljic purchasing portfolio matrix, Gelderman and Van Weele (2003) propose a set of additional practical considerations, which they deem should be incorporated into purchasing portfolio matrices. The authors explicitly highlight which measurement methods are possible and which supplier strategies are feasible, including additional strategic movements of commodities within the matrix (Gelderman & Van Weele, 2003).

Based on an in-depth multiple case study on three Dutch industrial firms, Gelderman and Van Weele (2003) firstly found that the generic nature of the Kraljic approach allows for customization and that measurement issues are handled in a variety of ways. Specifically, that measurement or positioning methods and the selection of supply purchasing strategies can vary in accordance to differences in supply chain positions, market conditions, customer requirements, and overall business strategies (Gelderman & Van Weele, 2003). Overall, the authors found through the case studies that the positioning of items is succeeded by a review process and a reflection of the consequences and that whichever measurement method is chosen usually leads to subjectivity and limitations.

#### **Measurement Methods**

Nonetheless, the authors evince that the measurement approaches of the consensus, one-byone, and weighted factor score methods can be used (Gelderman & Van Weele, 2003). The consensus method is considered to be a process of discussing and reasoning in order to reach a consensus on the prioritization of the variables and factors to be measured and ultimately the positioning of items in the matrix. The consensus method has proven to be popular since it allows for critical discussions and differences of opinions to emerge (Gelderman & Van Weele, 2003). However, such a method might not be the most suitable approach in terms of replicability and it can be argued that discussions should be done in a cross-functional manner so that holistic and sustainable outcomes can be generated. On the other hand, the one-by-one method entails the selection of one key variable per dimension. For instance, in terms of profit impact, financial value is often used and regarding supply risks, the number of possible suppliers is considered (Gelderman & Van Weele, 2003). This method has also gained popularity, since it can be used in a fast, unambiguous, and simple manner and this is due to the fact that extensive quantitative data and advanced information systems are often not necessary (Gelderman & Van Weele, 2003). Another advantage is that it allows for comparability between other categories and matrices that utilize the same variables selected and thus the one-be-one method can easily be used for the identification of possible strategic movements within a matrix (Gelderman & Van Weele, 2003). However, additional information in terms of products, suppliers, and markets is often required in order fully taken into consideration potential opportunities and threats (Gelderman & Van Weele, 2003).

The last measurement method considered by Gelderman and Van Weele (2003) is the weighted factor score, which allows for complete customization in terms of factors, weights, and scores. Specifically, the authors explain that total scores per dimension are calculated in an additive model and that the multiplication of scores and weights leads to the generation of sub-scores, which are added to a single value (Gelderman & Van Weele, 2003). It is assumed that a lower





Source: Gelderman & Van Weele, 2003

score on a factor can be compensated by a higher score of another factor, however practitioners need to question whether this is appropriate especially in terms of risk through the availability of a single supplier (Gelderman & Van Weele, 2003). Additionally, a large number of quantitative data, that can be hard to obtain might be necessary (Gelderman & Van Weele, 2003). Lastly, a large number of factors and weights may blur the overall picture and objectives to be reached (Gelderman & Van Weele, 2003).

Overall, despite the limitations and advantages of each measurement method, Gelderman and Van Weele (2003) propose a set of key questions that practitioners need to ask themselves when deciding which approach to use. This includes the level of objectiveness required, the number of key factors to consider, the available time at disposition, and the level of customization, and flexibility needed.

#### 2.4.6 Strategic Movements within the Matrix

In addition to the measurement and positioning of items, Gelderman and Van Weele (2003) outline what commodity and supplier strategic movements are feasible and the conditions that should be met in order to make such movements happen. As a first step, the authors find that portfolio-based objectives can be set on the item, category, and matrix level but that the cases studies reveal that objectives are most commonly formulated on the item level.

However, formulating objectives on a category level directly applies to the four quadrants and managers can for instance, seek to decrease the number of items in a bottleneck quadrant or instead seek to increase the value of all leverage items by reducing the value and number of strategic and non-critical items (Gelderman & Van Weele, 2003). In order to determine such strategic directions additional information in terms of an overall business strategy, supply market conditions, and performance capacities and intentions of suppliers is often required (Gelderman & Van Weele, 2003).

Overall, the objectives above imply the pursuit of either holding the current quadrant positions of items or shifting to other positions within the matrix. Gelderman and Van Weele (2003) in general deem that holding a position "implicitly means that current circumstances are taken for granted" or because the buyer is convinced that this is currently best position. In other cases, holding a position "might be accepted, because there are no realistic possibilities for change" (Gelderman & Van Weele, 2003, pg. 213). Nevertheless, the strategic implications for either holding or moving between quadrants usually varies in terms of current quadrant positions, the quadrant being pursued, and certain conditions (Figure 4).

Regarding, bottleneck items, the question of whether standardization is possible or not is an important consideration. For instance, the authors deem that if standardization is not possible then a capacity deal should be pursued where purchases are concentrated to an approved supplier and thus an improved bottleneck position can be achieved through reduced supplier risk and a better negotiation position (Gelderman & Van Weele, 2002).

However, if standardization is possible then a shift from the bottleneck to non-critical quadrant can be attempted through standardization and pooling of purchasing requirements, which leads to the de-complexed products and enhanced buying power (Gelderman & Van Weele, 2002). Overall, such changes should lead to lower level of supply risk and supplier dependence and thus a shift to the non-critical quadrant or to the leverage quadrant, depending on the increase of buying power.

Buyers may also face the case of having to hold the position of bottleneck items when no other options are feasible and this essentially entails accepting the dependence of a supplier through supply assurance (Gelderman & Van Weele, 2003). Some actions in holding such a position can include combining risk analyses with contingency planning, long-term contracting, and the usage of safety stocks (Gelderman & Van Weele, 2003).

Similarly, non-critical items can be shifted to the leverage quadrant if standardization is possible and thus the pooling of large quantities can be achieved through for instance a vendor managed inventory system or an e-auction process (Gelderman & Van Weele, 2003). This should result in an overall reduction of costs and an increase of buying power. However, if a product is unique to a business unit then pooling should not be pursued and instead a form of individual ordering through for instance a purchase card is more appropriate (Gelderman & Van Weele, 2003). This will result in a holding position of the non-critical quadrant, but the possibility of a reduction of individual of the purchasing costs (Gelderman & Van Weele, 2003).

In terms of the leverage quadrant, the holding position is pursued when available suppliers do not possess the required capabilities and qualifications for co-design and thus a partnership of convenience based on efficiency and supply chain optimization is developed (Gelderman & Van Weele, 2002). However, holding a leverage position could also entail aggressive supplier management via approaches such as competitive bidding (Gelderman & Van Weele, 2003). On the other hand, if a limited amount of suppliers do possess the required capabilities for co-design and there is a presence of a sufficient level of trust between both parties then strategic partnerships may be developed (Gelderman & Van Weele, 2002). This entails the identification of key buying criteria as well as the performance of suppliers on the criteria identified meet external benchmarks in terms of price.

Lastly, in terms of the strategic quadrants, if current suppliers do meet price performance criteria and co-design requirements, then a holding position is maintained in the form of maintaining strategic partnerships. It must be underlined that strategic partnerships should only be maintained if they ensure competitive advantages and if there is a form of mutual commitment and trust between the two parties (Gelderman & Van Weele, 2003). However, in some cases the holding position in a strategic quadrant is pursued due to involuntary locked-in situations, as a result of monopolistic supply market and high switching costs (Gelderman & Van Weele, 2003). On the other hand, if such conditions do not exist and current suppliers do not meet required performance standards a process of reducing dependence, terminating the partnership, and searching for new suppliers might be necessary (Gelderman & Van Weele, 2003).

Gelderman and Van Weele (2003) deem that a portfolio approach can be extremely useful in positioning commodities in different segments and in developing differentiated purchasing strategies, but that such an approach should be supplemented by continuous critical reflections and discussions, as well as additional information when required. Ultimately, although the authors evince the usefulness of a portfolio approach they also highlight that there is "no simple, standardized blueprint for the application of the portfolio analysis" (Gelderman & Van Weele, 2003, pg. 215).

The advantages of Gelderman and Van Weele's extended purchasing portfolio model is that it prescribes the additional information which is often required by managers to fully exploit the model and the measurement methods which can be used when prioritizing the factors within each dimension. Their model also highlights the necessary conditions for strategic movements, which can take place within the matrix. However, the model still does not fully take into account the positions and intentions of suppliers.

Lastly, the conditions that apply to the Kraljic purchasing portfolio matrix are still valid for this matrix, although this extended model does require greater sophistication of the purchasing function in terms of professionalism and exposure of the purchasing domain within the overall company (Gelderman & Van Weele, 2005). Specifically, the authors deem that the application of the purchasing portfolio model requires "skills extending beyond traditional administrative competences" and that the position of purchasing function within the organization needs be clear (Gelderman & Van Weele, 2005, pg. 25). On the other hand, the study questions whether the purchasing portfolio matrix could serve as a catalyst for spurring greater sophistication and increasing the strategic nature of the purchasing function through cross-functional acknowledgement of the challenges and opportunities of purchasing and supplier management (Gelderman & Van Weele, 2005).

# 2.5 Analyzing Buyer-Seller Interdependencies through the Dutch Windmill Model

Building upon the analysis done by Kraljic in 1983, Van Weele (2009) concludes that four generic supplier strategies emerge from the purchasing portfolio analysis. The strategies include partnership, competitive bidding, securing supply, category management, and e-procurement solutions and are summarized in Appendix 4.

However, Van Weele (2009) deems that the purchasing portfolio alone is not sufficient in developing buying and supplier strategies and that in order for buyers to effectively implement the strategies mentioned above, buyers must firstly acknowledge their relative position and attractiveness in the eyes of the suppliers. Accordingly, Van Weele (2009) firstly, categorizes suppliers in terms of each quadrant and claims that when dealing with strategic suppliers a balance of power may differ among buyer and suppliers, but that a partnership can be achieved. In terms of leverage suppliers, since products are substitutable and there are often many alternative competing suppliers that a buyer can rely on, a buyer of leverage items usually retains a dominant position.

Regarding routine suppliers, Van Weele (2009) does not explicitly highlight a position but claims that buyers can choose between many dependent suppliers and thus the buyer has an opportunity to reduce its supply base. Lastly, Van Weele (2009) deems that for bottleneck items, there are usually few if no alternative suppliers and such suppliers are usually technology leaders. Consequently, suppliers usually dominate the market for items situated in the bottleneck quadrant.

Nonetheless, Van Weele (2009) evinces the importance of considering the supplier's side, in order to achieve a good fit between the position of the product into the buyer's purchasing portfolio and the position of the product in the supplier's customer portfolio. To illustrate the interdependencies between both parties Van Weele the Dutch Windmill model (Figure 5) by combining the portfolio approaches of both the buyer and seller. The Dutch Windmill Model

enables buyers to mirror their views with respect to the views of suppliers involved and can lead to lead to "more realistic expectations and plans with regard to future buyer-seller relationships (Van Weele. 2009). Overall, the model outlines forty-four different set of actions that result from perceived interdependencies and that most buyer-seller relationships will result in either the supplier or buyer





Source: Van Weele, 2009

retaining a dominant position (Van Weele, 2009).

Specifically, the model outlines the four different scenarios of core, development, nuisance, and exploitable. The set of actions applicable to each scenario will depend upon if the item in question is either leverage, routine (non-critical), strategic, or bottleneck for the buyer and in turn

the previously mentioned scenarios will emerge as a result of the degree to which the supplier views the buyer as attractive or not. The specific set of actions are outlined in Figure 5.

#### 2.6 Defining Sourcing Strategies in the Agri-business Industry

Literature largely fails to define and outline clear-cut sourcing strategies within the agribusiness industry. Even more pronounced is the lack of using a strategic sourcing process and tools for developing sourcing strategies for agricultural commodities. However, some studies do specify in broad terms what an agri-food or commodity sourcing strategy entails. For instance, Monczka et al. (1998) deem that a commodity sourcing strategy provides the specific details and outlines the actions to follow in managing the commodity for the long term.

Other authors provide recommendations on how to formulate sourcing strategies within an agri-business context. Cantrell and Michels (2004) emphasize the importance of a buyer's agility in implementing changes based on market conditions in order to avoid erroneous actions based on market misconceptions, purchasing insufficient quantities at attractive prices, and conversely, purchasing volumes at higher prices.

The importance of selecting the suppliers and strategies that best meet the buyer's needs and are aligned to a firm's competitive strategy is outlined by Rendon (2005). However, Jones et al., (2007) note that there is often little consistency across buyers in the agri-business industry regarding the commodity procurement departments' strategic roles and objectives. In fact, the authors identified eleven different strategic objectives between three different buyers. Nevertheless, Jones et al. (2007) were able to categorize these strategic objectives into supply maintenance, profit-focused, and relationship-focused levels within a triangular framework. Specifically, the authors find that agribusinesses must firstly secure supply in order to proceed to the other levels and that procurement strategies often follow an evolutionary path through the levels outlined above.

Furthermore, Jones et al. (2007) deem that procurement decisions in each level are driven by different sets of constraints. For instance, decision-making at the supply maintenance level is primarily driven by product constraints, whereas procurement related decisions at the profit-focused level are most likely determined by company constraints. That being said, a tendency of sourcing

strategies within the agricultural industry being customized to specific constraints and objectives can be observed. It can also be argued that this need for customization contributes to a large extent to the difficulties of outlining sourcing strategies within an agri-business context.

# 2.6.1 Factors Mediating the Type and Level of Customization of Sourcing Approaches in Agricultural Supply Chains

Nevertheless, only a few studies have attempted to identify the explanatory factors the lead to the customization of sourcing strategies in the agri-business industry. Relevant to this topic, Hobbs and Young (2000) assume a transaction cost perspective in order to explain how sourcing strategies are selected in agricultural supply chains. Specifically, Hobbs and Young (2000) claim that regulatory, technological, and socio-economic drivers can shape the product characteristics of perishability, quality, and product differentiation which in turn determine the transaction characteristics of uncertainty, frequency, and asset specificity and that these characteristics mediate the contractual choice made.

The above mentioned drivers affect the product characteristics of perishability, quality, and product differentiation or might influence the transaction environment directly and these factors influence the complexity of transactions characteristics (Hobbs & Young, 2000). The extent to which the transaction characteristics increase the complexity of a transaction will determine which contractual mode or sourcing strategy to be employed.

Regulatory drivers can include competition and anti-trust policies, product standard regulations, as well as regulations influencing the access to financial capital (Hobbs & Young, 2000). According to Hobbs and Young (2000) the regulatory environment can alter the priorities and focus of a transaction. For instance, product liability laws can increase buyer uncertainty of product quality, since the consequences of not conforming to product quality standards are more severe (Hobbs & Young, 2000). Thus increased liability could lead to increased efforts pursued in achieving traceability, which will most likely raise information and monitoring costs and overall lead to closer relationships (Hobbs & Young, 2000).

Technological drivers affect the product characteristics of perishability and product differentiation by introducing novel technologies that limit alternative sources of input supplies and lead to transaction-specific investments. Technological drivers can also induce economies of scale or tighter control over product quality (Hobbs & Young, 2000). The extent to which technological drivers affect the factors above will mediate the uncertainty that perishability creates with respect to product quality and reliability and the extent to which products become differentiated (Hobbs & Young, 2000). On the other hand, socio-economic drivers can affect the demand for product characteristics. Consumer preferences and lifestyles can impact product quality and differentiation, which is signaled by a buyer's brand name. In order to protect brand names and reduce monitoring costs in guaranteeing the quality of inputs, buyers could seek to form closer relationships with suppliers.

Specifically, the authors find that the product characteristic of perishability creates uncertainty for the buyer with respect to the product quality, reliability, and timeliness (Hobbs & Young, 2000). The possible deterioration of the quality of a product imposes sorting and information costs on buyers in finding suitable suppliers and negotiation costs in deciding which party at what stage should assume responsibility for ensuring the quality of a product (Hobbs & Young, 2000). Perishability also affects uncertainty and sorting costs for the seller in terms of locating a buyer that can quickly move a product to the market, since a seller cannot incur the risk of storing a product that might deteriorate (Hobbs & Young, 2000). This also implies that transactions occur more frequently. Overall increased perishability would most likely lead to the need for a detailed contract and an increased number of contingencies that can address the additional dimensions of the transaction (Hobbs & Young, 2000).

The authors offer a continuum of possibilities from open market spot transactions in one extreme to full vertical integration at the other and offer intermediate alternatives such as contracts, strategic alliances, and quasi-vertical integration approaches (Hobbs & Young, 2000). Ultimately, the authors use the framework above to explain that changes in transaction characteristics can raise the costs of transacting on spot markets and that this in turn leads to closer forms of vertical coordination, such as contracting, strategic alliances, or full vertical integration in agricultural supply chains (Hobbs & Young, 2000).
Similarly, Jones et al. (2007) seek to better understand the nature of commodity-procurement decisions and thus the factors and constraints that mediate the type of sourcing approach chosen. The authors thoroughly reviewed the general procurement and commodity marketing literature and consulted with commodity professionals and academics in order to derive a broad set of characteristics and constraints. Accordingly, the authors identified the following constraints (Jones et al., 2007):

- I. **Product constraints:** are derived from the physical characteristics of the commodity or from the economics of the commodity's market. The subcategories of this constraint include:
  - A. Market efficiency;
  - B. Perishability;
  - C. Seasonality;
  - D. Storage requirements;
  - E. Commodity share in the final product.
- II. **Company constraints:** are the characteristics generated by the financial, managerial, and organizational factors of the firm and can be considered as:
  - A. Budget constraints;
  - B. Cooperative involvement;
  - C. Limited supply;
  - D. Price risk;
  - E. Sales forecast accuracy;
  - F. Storage availability;
  - G. Volume.
- III. Service constraints: constraints that are related to the buyer's relationships with its customers and suppliers and include the following aspects:
  - A. Promotional expectations;
  - B. Supplier service level;
  - C. Traceability.

These set of constraints were explicitly tested on three different buyers within the agribusiness context, however, their influence on a sourcing approach was delimited to spot-market transactions and forward purchasing mechanisms.

Overall, in terms of product constraints, the authors find that all purchasing managers highly value the impacts that perishability and seasonality have upon their sourcing decisions and that these managers favor forward purchasing mechanisms when both factors are pronounced. This is especially because perishability affects the unit costs for a firm especially in terms of storage requirements and transportation. The authors claim that spot markets for highly perishable products would entail high transaction costs, that a standard forward buy in terms of securing storage would also be inadequate, and thus a forward or future contract detailing specific delivery dates is the most appropriate form of purchasing (Jones et al., 2007).

The authors view seasonality in terms of historic and predictable price swings, which arise either from growing, production, or demand patterns (Jones et al., 2007). Seasonality in general not only affects commodity pricing, but also availability and thus the timing of the purchase. Consequently, Jones et al. (2007) deem that seasonal commodities will be purchased using forward purchasing mechanisms in order to take advantage of low prices and to ensure availability.

On the other hand, buyers apply the least weight to company constraints, but do deem that price volatility most often leads to the usage of forward purchasing mechanisms and that budget constraints encourage the reliance on spot market transactions. Lastly, in terms of service constraints, most buyers indicate that special promotions play a large role in determining the employment of a forward purchasing mechanisms, while supplier service level is a precondition for the formation of a business relationship with a supplier (Jones et al., 2007).

# 2.6.2 Sourcing Approaches and Vertical Coordination in the Agri-business Industry

As outlined above, literature presents a variety of purchasing approaches that are and can be employed in agricultural supply chains. Hobbs and Young (2000, pg. 131) deem that these sourcing approaches are considered as vertical coordination mechanisms, since vertical coordination refers to

the "means by which products move through the supply chain from production to consumption." Similarly, the United States Department of Agriculture (USDA) defines vertical coordination as the synchronization of successive stages of production and marketing, with respect to quantity, quality, and timing of product flows.

Vertical coordination encompasses a continuum of possibilities from open market spot transactions at one extreme to alliances and partnerships at the other and includes intermediate forms such as contracting (Hobbs and Young, 2000). Accordingly, the following section will present a vertical coordination continuum, in which the relevancies, advantages, and disadvantages of various sourcing approaches are outlined. The complete continuum is illustrated in Figure 7.

#### Spot market and Traditional Market Based Supply Approaches

Hobbs (1996, pg. 19) deems that spot markets are "where goods are exchanged between multiple buyers and sellers in a current time period" and that price is considered as the sole determinant of the final transaction. Ferris (1997) elaborates upon this definition by claiming that spot market transactions allow buyers to "purchase the commodity in a predefined, general quality category on the cash market, immediately take possession, and have no direct contact with the supplier" (Jones et al., 2007, pg. 39). Similarly, Hobbs (1996) claims that other aspects of the transaction are non-negotiable and that supply chain management considerations are entirely absent through a spot market transaction. That is, negotiation over for instance product quality and delivery schedules would entail a more formal exchange relationship.

A spot-market transaction can also sometimes be considered as a simple replenishment strategy where buyers monitor inventory levels and buy from the market whenever the inventory reaches an established reorder point (Jones et al., 2007; Xia & Wallace, 2014). Furthermore, Xia and Wallace (2014) claim that there are various motives for buyers to engage in spot-market purchases, one of which is taking advantage of falling prices in the market.

As previously outlined, Jones et al., (2007) noted that spot-market transactions are not particularly suitable for perishable products, since it entails high transactions costs for buyers with low storage capacities. The authors also noted that since a limited relationship exists between buyers

and sellers within such a strategy, that relying on spot markets is less appropriate when buyers require high service levels (Jones et al., 2007). Similarly, Hobbs and Young (2000) claim that spot markets are more efficient when purchasing homogenous commodities and are less so when commodities become differentiated, since this entails the requirement for improved information flows along the supply chain. Overall, through a transaction cost perspective Hobbs (1996) deems that spot market transactions are more appropriate when there are low levels of uncertainty and asset specificity.

Relying on the spot market will most likely also occur when transactions are carried out frequently, since frequent transactions provide greater information about buyers and sellers and since both actors in repeating transactions will be less incentivized to tarnish their reputations by acting opportunistically (Hobbs, 1996). Thus as transactions become more infrequent, buyers and sellers might become more incentivized to act opportunistically in exploiting information asymmetries (Hobbs, 1996).

Spot-market transactions generate various advantages. Firstly, spot-market purchasing entails simplicity, since it usually involves monitoring supply and reordering requirements (Jones et al., 2007). Spot purchases also minimize inventory costs if it is closely coordinated with production needs and such an advantage is more likely to be achieved if the commodity in question presents little if not price movement risks (Arthur, 1971). As a result, spot-market transactions are also especially suitable for agricultural commodities for which price forecasting is virtually impossible. Additionally, in an efficient market, spot-market transactions promote competition and economies of scale thereby allowing parties to be able to focus on core and value adding activities (Xia & Wallace, 2014).

#### Limitations

Although spot-market purchasing often entails a greater degree of simplicity and flexibility it also usually generates greater supply uncertainty, since buyers might not always be able to purchase the volume required on a spot market (Jones et al., 2007). Additionally, due to the fact that buyers are essentially market price takers, buyers might incur opportunity losses in not using other purchasing approaches that generate lower costs (Xia & Wallace, 2014). Thus, since spot buy

purchases can generate higher unit costs, buyers often have an incentive to minimize such transactions by having sufficient initial procurements (Xia & Wallace, 2014).

#### **Competitive Tendering**

In general, competitive tendering refers to the process where a company acquires a good or service by extending to suppliers an invitation to tender a proposal. Typically, the tender with the lowest price wins the order, although factors related to quality, shipping, timeliness and efficiency may also be considered. According to Domberger, Meadowcroft and Thompson (1986), the tendering process itself generates information about the relative efficiency of the operators who bid for the contract, assuming of course that the level of service is specified correctly and with precision.

Meanwhile, Domberger et al. (1986) emphasize that there are some potential problems associated with the tendering process. Firstly, it is implied that effective competition may not emerge during the tendering process as "sunk costs incurred in bidding or asymmetries in information between incumbents and entrants may discourage bidding" (Domberger et al., 1986, pg. 82). Secondly, the supplier's immediate focus on increasing profits may mislead the supplier in a more opportunistic direction and thus eventually fail to fulfill the contractual obligations (Domberger et al., 1986).

Furthermore, Rimmer (1991) claims that the theory of competitive tendering is incomplete and that the key concepts, principles, and issues are often misunderstood. As a result, the implementation of the concept has been erroneous and the monitoring and evaluation of competitive tendering has often been incomplete or biased (Rimmer, 1991). It is highlighted that the primary aim of competitive tendering "is to harness competition to provide effective incentives to good and service providers in order to increase productive efficiency" (Rimmer, 1991, pg. 292).

Both Domberger et al. (1986) and Rimmer (1991) state that the concept and application of competitive tendering emanates from the public sector and that it was originally only used by governments. Thus, Rimmer (1991) alludes to the fact that competitive tendering is used by governments for the procurement of goods and services, through a competitive bidding process

based on auction systems to decide who is the most efficient provider of that service or good. However, the author emphasizes that although tendering has been employed extensively by the private sector throughout the 1980s and 1990s, that the full extent of competitive tendering is still unknown (Rimmer, 1991).

King (1994), combines the term competitive tendering with the term contracting out and thus derives the united concept called competitive tendering and contracting out (CTC). According to King (1994) the potential benefits of contracting out include lower costs, improved service delivery and quality, and greater flexibility. It is also emphasized that one of the main advantages of using CTC is the opportunity of achieving cost savings (Rimmer, 1991; King, 1994).

However, King (1994) argues that while CTC may offer substantial savings, it also presents a range of pitfalls. For instance, the usage of market provision does not guarantee competition and reduced costs, and an ill designed tendering process may result in confusion and uncertainty (King, 1994). Furthermore, "it is commonly claimed by opponents of CTC that any observed cost savings merely reflect a decline in quality" (King, 1994, pg. 76). Generally, numerous studies have attempted to measure the potential cost savings of CTC, but the specific effect is still unclear.

Handfield et al. (2011) have addressed the concepts of competitive tendering as part of the strategic sourcing process and refers to it as "competitive bidding". More specifically the authors have established some conditions under which competitive tendering most effectively apply. Included in these conditions are that the buying firm is capable of providing qualified suppliers with clear descriptions of the products or services to be purchase, volume is high enough to justify the cost and effort, and that the firm does not have a preferred supplier in advance (Handfield et al., 2011).

According to Handfield et al. (2011) competitive tendering applies well when price is a dominant criterion and the required products or services have straightforward specifications. It is implied that the concept can be utilized on different levels and for instance Handfield et al. (2011) propose that competitive tendering can additionally be used to prequalify a pool of suppliers from which the firm can initiate detailed purchase contract negotiation.

The tendering process includes different stages typically referred to as requests, which can also be applied within the agri-business industry. The first stage, request for information (RFI), refers to the process of gathering information from potential suppliers of a good or service. An RFI is typically the initiating action in the tendering process which has the purpose of narrowing down the list of candidates that can be used to supply (Business Dictionary). Next stage is the request for tendering (RFT), which is a formal, structured invitation to suppliers, to bid in order to get the job of supplying a product or service (Business Dictionary).

RFT can also be referred to as a request for quotation (RFQ), as the term similarly covers the process of inviting suppliers into the process to bid on a specific product or service (Business Dictionary). In addition, Smeltzer and Carr (2001) state that in a traditional market, a seller responds to a RFQ and that the typical RFQ scenario includes eight basic steps: (1) write specifications, (2) identify suppliers, (3) qualify suppliers, (4) mail RFQs to suppliers, (5) wait for responses, (6) evaluate responses, (7) notify selected supplier(s) and (8) negotiate final terms and conditions.

The last type of request included in the tendering process is the request for proposal (RFP), which is a solicitation made by an agency or company interested in the purchasing a commodity, service or valuable asset to potential suppliers to submit business proposals (Investopedia). The RFP outlines the bidding process and contract terms and provides guidance on how the bid should be formatted and presented (Investopedia).

### **Reverse E-Auction**

Over the past twenty years, reverse auctions and e-auctions have gained significant popularity both in general, but also within the agri-business industry. In fact, Smeltzer and Carr (2001) estimate that in 2001, goods worth 50 billion USD were purchased through reverse auctions. A reverse auction is defined as when a "buyer initiates the sale to solicit sellers to make their products available for sale in a competitive market environment" (Smeltzer & Carr, 2001, pg. 481). A reverse e-auction entails the same process, but just through an electronic setting.

A traditional auction attempts to create a pure market with perfect information (Smeltzer & Carr, 2001). However, in addition to this, a reverse e-auction entails a buyer controlling the market

for a specific required product, since this needed product is offered by a number of known suppliers and the price of this item is subjected to dynamic pricing (Smeltzer & Carr, 2001). Dynamic pricing refers to the electronic instantaneous change of a price and the assumption is that the price for a product will continue to decrease, since sellers can observe the price change in real time, until a rational market price is established (Smeltzer & Carr, 2001).

The primary motivations for sellers engaging in reverse e-auctions includes the promise for market penetration and increased business opportunities through improved communication and market price transparency (Smeltzer & Carr, 2001). Reduced cycle time and better inventory management possibilities due to decreased time between the bidding and sale process also motivates sellers to participate in reverse e-auctions (Smeltzer & Carr, 2001). On the other hand, buyers are incentivized by the prospects of significantly reducing purchase prices and administrative costs as well as the ability to replenish inventory levels and thus decreasing safety stock levels (Smeltzer & Carr, 2001).

However, using reverse e-auctions also presents several risks for both sellers and buyers. Through e-auctions, sellers are especially concerned about buyers solely chasing the lowest price and thus might not be incentivized to make specialized investments needed to obtain the order (Smeltzer & Carr, 2001). Sellers also face the risk of buyers engaging in negotiation ploys, that is using bids to "determine the nature of the market and gain a position of power for subsequent negotiations" (Smeltzer & Carr, 2001, pg. 481). Lastly, sellers could get "caught up in the race" and offer un-reasonable prices, which then results in the seller ultimately trying to back out of an agreement made, undermining thus the ability to transact with the buyer in the future (Smeltzer & Carr, 2001).

In terms of buyer risks, reverse e-auctions might cripple the trust and ultimately the longterm relationships with certain suppliers (Smeltzer & Carr, 2001). Additionally, since contracts are renewed through auctions suppliers might not be incentivized to commit to capital investments, employee training, and tooling, which the buyer could benefit from. Lastly, buyers face to risk of too few suppliers participating in the reverse auction and thus a lack of a competitive environment (Smeltzer & Carr, 2001). In order to mitigate the above risks and generate effective reverse e-auctions, Smeltzer and Carr (2001) deem that buyers firstly need to clearly state commodity specifications, since confusion on required specifications will most likely lead to suppliers being reluctant to respond to solicitations. Accordingly, Goel, Zobel, and Jones (2005) evince the importance of considering various quantitative and qualitative parameters in addition to price, but also outline the difficulties and complexities in doing so through a B2B agricultural context. The authors specifically try to overcome this challenge by applying a combinatorial auction, which can deal with more than one parameter of interest simultaneously to electronic contracting (Parkes 2006; Goel et al., 2005). Ultimately, specifying and considering purchasing parameters, such as quality, lead time, order sizes, geographic, and transportation conditions can contribute to the strategic nature of not only the reverse auction but also the sourcing process (Smeltzer & Carr, 2001; Goel et al., 2005).

Additionally, Smeltzer and Carr (2001) deem that purchase lots need to be large enough so that suppliers can achieve production efficiencies and are thus incentivized to bid. The authors believe that one way to achieve this is essentially category management or by pooling a family of goods for an auction (Smeltzer & Carr, 2001). Ideally, existing suppliers should also have excess production capacities in order to take on more business and buyers should have the appropriate organizational infrastructure as well as effective software technology and forecasting tools (Smeltzer & Carr, 2001).

#### Contracts

In general, literature alludes to a greater usage of contracts in the agricultural industry due to an increased need for closer vertical coordination. This has been confirmed by many authors, including Handayati, Simatupang and Perdana (2015) who claim that the contracts are the most common coordination mechanism taken in agri-food supply chains.

Hobbs and Young (2000) identify various factors explaining the need for greater vertical coordination through the usage of contracts. These factors are primarily technological advances creating economies of scale and facilitating product differentiation, the need to reduce risk and uncertainty, the capital intensity of production, and the perishability of products and changes in consumer preferences (Hobbs and Young, 2000). On the other hand, Kuwornu, Kuiper and

Pennings (2009) claim that the shift from food supply chains being supply driven to more closely integrated with demand has led transaction mechanisms in food marketing channels from openmarket mechanisms to coordination through the usage of contracts.

#### **Contract Functions**

In general contracts can function as coordination devices by aligning decisions between buyers and sellers. Additionally, Handayati et al., (2015) claim that contracts are used "to coordinate supply chain members to have better supplier and buyer relationship and risk management. Specifically, decisions related to coordination revolve around ensuring that products are delivered at the right quantity and quality and at the right time and place (Da Silva & Rankin, 2013).

In order to ensure that these decisions are aligned, contracts can stipulate the required volumes and obligations of each party. Such specifications can aid producers in accurately forecasting the inputs needed as well as the appropriate cultivation and production practices and timings to apply and the processors in estimating the required processing capacity to install (Da Silva & Rankin, 2013).

Contracts can also be used to motivate performance by providing incentives and specifying penalties. Incentives can include premiums and compensations for conforming to quality specifications (Da Silva & Rankin, 2013). Penalties, such as contract termination or request in the case of for instance side-selling should discourage producers to not oblige to the terms of the contract. On the other hand, contracts can also serve the function of allocating risk by for instance mitigating the risk of income loss as a result of poor yields by signing a contract, in which the contractor provides a compensation to the producer regardless of yields (Da Silva & Rankin, 2013).

#### Forward Buying

Additionally, forward buying is considered to be a natural extension of spot-market purchasing, only that buyers take physical possession of a commodity in need if the price of that commodity is projected to increase (Jones et al., 2007). However, this requires that firstly the buyer has the storage capacity for the purchase and that the storage costs are less than the forecasted price increase of the commodity, generating thus a lower per-unit cost (Jones et al., 2007).

Variations of a forward buy exist and take place in accordance to the storage capacities of both the buyer and the seller in question. For instance, the buyer could request the seller to retain the commodity until the buyer requests a delivery (Jones et al., 2007). This would once again imply that the storage costs assumed by the seller and paid by the buyer would have to be lower than the future expected price increase of the commodity. Forward buying entails the development of contracts that stipulate the contingencies addressing which party and at what point the responsibility and costs of storage and delivery requirements should be assumed.

However, forward buying is not compatible with a lean philosophy since it entails holding additional inventory and thus the cash attributed to doing that, which could be used for other investments (Xia & Wallace, 2014). Holding extra inventory could also imply operational costs such as the potential for more damage, spoilage and obsolescence (Xia & Wallace, 2014).

#### **Types of Contracts**

Handfield et al. (2011) outlines the basic parameters of contracts as well as some generic contract typologies. The basic parameters include the introduction, which identifies the parties in question and the clauses, which usually outline what is to be purchased and at what cost, the shipping, delivery, acceptance, warranty, remedy, and dispute as well as arbitration clauses (Handfield et al., 2011). Contracts also usually include schedules and appendices, which specify the details behind the clauses. In the schedules and appendices, the payment clause is outlined and this includes the specific nature of the pricing formula, cost elements, and pricing index to be used. When drawing up this clause, Handfield et al. (2011) deem that managers should consider the implications of using fixed price and cost based contracts. Managers should also reflect upon the usage of short-term versus long-term contracts.

#### Fixed Price Contracts

According to Handfield et al. (2011), fixed price contracts are the most basic contractual mechanisms and entail that the stated price does not change. As a result, fixed price contracts are relatively simple, since it implies a limited need for extensive auditing. Fixed price contracts also represent a higher supplier risk, since suppliers in a rising market may be subjected to opportunity

losses and might not be able to make reasonable profits if the costs of production increase (Handfield et al., 2011).

In order to compensate for such risks, various fixed price contracts exist. Fixed-price with escalation contracts are used when the costs of items are likely to increase over a longer period of time and such contracts take into account the increase of decrease of base prices based on identifiable changes in material prices (Handfield et al., 2011). On the other hand, when parties cannot predict labor and material costs and quantities, fixed price with redetermination contracts, which allow buyers and sellers to negotiate an initial target price based on best guess estimates of costs, are usually used. For such contracts, prices are usually renegotiated once a certain level of of production volume has been reached.

Similarly, fixed-price with incentives contracts also utilize initial target prices, but potential cost savings are shared and such contracts are particularly appropriate for purchasing high unit cost items characterized by long lead times (Handfield et al., 2011). Overall, Handfield et al. (2011) deems that is is important for buyers to understand existing market conditions before signing fixed contracts in order to prevent contingency pricing to negatively affect the total cost of the purchase (Handfield et al., 2011).

#### **Cost-Based Contracts**

However, in the case that the risk of large contingency fees when using fixed-price contracts is high, cost-based contracts might be more appropriate. In general, cost-based contracts present lower risks to suppliers, however buyers can also benefit from lower costs through careful contract management (Handfield et al., 2011). Nonetheless, cost-based contracts do present higher risks to buyers, since they provide lower incentives for suppliers to improve operations and lower costs and at times suppliers actually have the incentive in the short-term to resort to inefficiency, since they are rewarded with higher prices regardless (Handfield et al., 2011). Cost-based contracts are especially suitable for goods and services that are expensive, complex, are subjected to a high degree of uncertainty in terms of labor and material costs, and are important to the buyer (Handfield et al., 2011).

Of the types of cost-based contracts, the cost plus incentive contract presents the lowest risk to the buyer and the base price is based upon allowable supplier costs, with cost savings shared between buyer and suppliers (Handfield et al., 2011). However, during periods of raw material price increases cost-sharing contracts where allowable costs are shared between the parties based on a predetermined percentage basis, might be more appropriate. The cost plus fixed-fee contract presents the greatest risk to buyers, since suppliers are provided with reimbursements for all its allowable costs up to a predetermined amount plus a fixed feed and are thus not incentivized to reduce costs (Handfield et al., 2011).

According to Handfield et al. (2011) the factors of component market uncertainty, long-term agreements, degree of trust between parties, process or technology uncertainty, supplier's ability to impact costs, and total dollar value are important when deciding what type of contract to select. The effects that these abovementioned factors have upon the contractual choice made is outlined in Table 6.

Environmental Condition	Fixed-Price Contract		Incentive Contract		Cost-Based Contract
			Desirability of use		
marker uncertainty	Low	•			High
Long-term agreements	Low	•			High
High degree of trust	Low	•			High
High process/technology uncertainty	Low	•			High
Supplier's ability to affect costs	Low	•		<b>→</b>	High
High dollar value purchase	Low	•		<b>→</b>	High

Table 6: Desirability of using contracts under different conditions

Source: Handfield et al., 2011

#### Long-term versus Short-term Contracts

In choosing between short-term and long-term contracts, Handfield et al. (2011) outlines the advantages and disadvantages of each contract typology. In general, short-term contracts are more flexible and can take take into account changing conditions in terms of technology, market, forecasted demand changes, suppliers cost improvements, and short product life cycles (Handfield et al., 2011). Additionally, shorter term contracts can enable quick profit maximization opportunities and competitiveness. However, short-term contracts present limited opportunities to create joint value and for the supplier to invest in longer-term commitments, and do not assure a continued source of supply (Handfield et al., 2011).

On the other hand, long-term contracts induce higher levels of commitment on the part of both parties, present opportunities to create joint value and share information in terms of pricing, costs, and resources and creates incentives for suppliers to improve and invest in processes (Handfield et al., 2011). Long-term contracts may also improve the learning curves of suppliers thus enabling cost savings to be passed on to buyers and lower contract administrative costs to be achieved.

However, the disadvantages of long-term contracts include lower flexibility and locked-in situations for buyers especially in industries characterized by short product lifecycles (Handfield et al., 2011). Additionally, suppliers may lose motivation and buyers can incur opportunity losses in terms of choosing the wrong supplier and not being able to scan the market for more appropriate and effective ones (Handfield et al., 2011).

#### **Alliances and Partnerships**

Alliances and partnerships between buyers and sellers can be considered to be the preceding sourcing alternative to vertical integration (Xia & Wallace, 2014). Alliances can seek to achieve coordination efficiencies, optimal service levels, and continuous improvement without the buyer actually owning the assets in question (Xia & Wallace, 2014). However, in a partnership or alliance, the parties are expected to a certain degree to share knowledge and resources in order to share

benefits and create synergies. Thus, the idea is that the creation of synergies compensates the benefits of actually owning the asset (Xia & Wallace, 2014).

However, it has been recognized that a partnership must include the elements of collaboration, trust, and intimacy, in order for it to be more efficient than relying on purely market oriented sourcing strategies or resorting to vertical integration. This is because synergies tend to arise from close and ongoing relationships as well as direct feedback from different value chain actors (Osegowitsch & Madhok, 2003).

Although alliances are usually more flexible than contracts, alliances require that parties recognize their mutual goals and collaborate together in order to achieve these goals (Hobbs et al., 2000). Within the spectrum of possibilities proposed by Grant (1991) longer term contracts imply reiterative and transaction specific investments by both parties, whereas vendor partnerships result from difficulties in specifying complete contracts and a need for closer cooperation (Grant, 1991).

From the buyer's perspective, partnerships usually arise when there are only few alternative suppliers, since suppliers in this case have a stronger short-term position and because using market based supply strategies implies high switching costs (Xia & Wallace, 2014). Another argument encouraging alliances and partnerships is based upon taking advantage of market efficiencies and avoiding high internalization costs of vertical integration (Osegowitsch & Madhok, 2003).

However, Grant (1991) believes that the type of partnership established depends on the resources, capabilities, and strategies of the buyer and seller involved. Additionally, allocation of risks, which depends highly on the bargaining power and efficiency considerations of both the buyer and seller should be taken into account (Grant, 1991). Lastly, the design of the partnership pursued should also consider incentive structures that limit and discourage opportunistic behavior (Grant, 1991).





## 2.7 Conclusions and Gaps in Literature

Overall, this literature review evinces that sourcing as a function has shifted from assuming an operational, singular, and shareholder view to a more multi-stakeholder and strategic perspective. As a result, it is more challenging for managers to align strategic sourcing functions to corporate strategies and to implement this in practice. As a response to these challenges strategic sourcing frameworks such as the one proposed by Handfield et al. (2011) have gained importance. This line of argument also applies to the emergence and increased attention given to purchasing portfolio and supplier view matrices used to develop sourcing strategies for non-commodities as well as commodities.

However, this has led to the identification of significant gaps in literature with regards to developing sourcing strategies explicitly for agricultural commodities. Currently, literature fails to cover the application of the strategic sourcing process, purchasing portfolio matrix, and Dutch Windmill model to supply specific situations within the agricultural industry. Nonetheless, some studies have attempted to outline some of the factors and constraints that mediate the type of sourcing strategy chosen throughout agricultural supply chains. Additionally, a series of ad-hoc sourcing approaches that can be applied to the purchasing of agricultural commodities have been identified.

Taking this literature into consideration, a vertical coordination continuum of sourcing approaches ranging from the usage of spot markets to alliances and partnerships has been outlined. It is hoped that such a spectrum can enable a better understanding of some of the possible sourcing approaches that can appropriately be selected as a result of using a strategic sourcing process in the agri-business industry. The literature reviewed in this section will serve as the foundation of the theoretical framework where it is the aim to extend the strategic sourcing process including the purchasing portfolio matrix. This will be done in order to be able to apply it specifically to the agricultural industry and thus optimize the sourcing process for agricultural commodities.

# **3. Theoretical Framework**

This thesis recommends buyers in the agri-business industry to take a point of departure in the strategic sourcing process outlined by Handfield et al. (2011) in order to effectively develop sourcing strategies for agricultural commodities. This is because the step-by-step process provides comprehensive guidance for managers to identify and structure the information needed for developing sourcing strategies. More specifically, the strategic sourcing process can be useful in outlining the necessary goals, inputs and tools, as well as outputs needed to develop, implement, and continuously monitor the outcomes of a sourcing strategy. Literature does not imply that the strategic sourcing process is limited to specific goods and services and thus it can be applied to noncommodities and commodities including agricultural commodities alike.

As it has been emphasized already, the third step of the strategic sourcing process specifically entails the development of the sourcing strategy. Specifically, within this step it is recommended to make use of purchasing portfolio matrices to structure the data collected through market and spend analyses in order to generate commodity strategy developments. However, literature and theory does not allude to the usage of the purchasing portfolio matrix in the agricultural industry. As a result, the Kraljic (1983) purchasing portfolio matrix will be extended in order to render it directly applicable for buyers developing sourcing strategies for agricultural commodities. This will firstly be done by extending the supply risks considered in the matrix and by recommending a measurement method for the prioritization of such risks.

# 3.1 Extending the Supply Risk in the Purchasing Portfolio Matrix

Firstly, profit impact will be delimited to volume purchased and percentage of total cost. This is because impact on product quality or business growth is broadly defined and difficult to measure, and no consensus has been found in literature on the purchasing portfolio matrices that these factors must be taken into account. In order to extend the matrix to make it more applicable to agricultural commodities it is in our belief that contributions should be made specifically in the dimension of supply risk. Consequently, the supply risks of availability, number of suppliers, competitive demand, make-or-buy opportunities, storage risks, and substitution possibilities will be

extended with the product characteristics of perishability and seasonality. Literature emphasizes that these product characteristics can potentially play a role in mediating the type of sourcing approach selected when it comes to agricultural commodities.

As previously mentioned perishability affects the unit costs of a buyer in terms of storage and transportation. More specifically, perishability imposes requirements on the type of storage needed to ensure quality and freshness of the commodity. This also applies for the transportation required where specific features such as time and temperature should be considered carefully. Thus perishability affects the uncertainty and risk that a buyer faces regarding the reliability of quality and timeliness (Hobbs & Young, 2000). The fact that quality is subjected to deterioration might not only induce greater transaction frequency but also require contracts addressing the terms of transportation, storage, and delivery dates.

With regards to seasonality, factors such as cultivation, production and demand patterns can generate price swings and thus represent potential supply risks to the buyer. Seasonality also affects the product availability which is mainly influenced by cultivation and production patterns. Overall, seasonality can greatly affect the timing of a purchase and in order to take advantage of lower prices and ensure availability buyer might resort to forward buying.

### 3.1.1 Measuring Methods to Prioritize Supply Risks

Given the number of dimensions that need to be considered when sourcing agricultural commodities, it can be argued that the one-by-one method reviewed in literature is too simplistic and deterministic and thus it is not recommended to use as a way to prioritize supply risks within the matrix. On the other hand, the consensus method allows critical discussions and different opinions to emerge and should be used when buyers have less resources and time at their disposition. However, the consensus method is perceived to be subjective and is not considered to be a very replicable methodology. This is because the participants of such discussions as well as the agenda and nature of what is being discussed will naturally change each time a discussion is held. Thus it is unlikely that the consensus method will produce consistent prioritizations of agricultural specific supply risks and buyers should take this into account when deciding what measurement method to use.

An optimal method to use for prioritizing which supply risks to consider when sourcing agricultural commodities is the weighted factor score model and literature recommends to utilize this method only when buyers have time and appropriate resources. Given the fact that a large number of supply risks should be taken into consideration when developing the sourcing strategy of agricultural commodities, this method seems fit. This is because the weighted factor score model enables companies to quantify and customize different factors, weights, and scores in order to determine which supply risks should be prioritized. However, the quantitative data needed for the factors and weights may be hard to obtain.

### **3.1.2 Plotting in Sourcing Approaches in the Purchasing Portfolio Matrix**

The following section will plot and align the most suitable purchasing approaches that can be used within the agricultural industry to the overall sourcing strategy for each quadrant. The overall sourcing strategies of purchasing, sourcing, materials, and supply management outlined by Kraljic (1983) will be used and insights provided by Van Weele (2009) will also be considered.

#### Non-critical commodities

According to Kraljic (1983) the main sourcing strategy used for non-critical items is purchasing management, where supply risk is low, the number of suppliers is high, and supply is in general abundant (Kraljic, 1983). Given the fact that the profit impact in terms of volume purchased and percentage of total cost is also low for non-critical items, buyers often pursue a strategy based upon efficiency. In fact, Gelderman and Van Weele (2003) deem that for non-critical items, efficient processing, product standardization, order volume, and inventory optimization should be prioritized throughout a time-span of twelve months or less (Gelderman & Van Weele, 2003).

Although not every risk can be prioritized the same way for agricultural commodities, using the spot market generally implies that perishability, and seasonality do not play a significant role in terms of risk. In fact, price is the main determinant and limited relationships exist between buyers and sellers when buying on the spot market. Thus negotiating specifications such as quality, logistics, and delivery, which is required for commodities that are for instance highly perishable cannot be done on the spot market. Instead, homogenous products in predefined qualities can be purchased from many sellers on the market in an efficient and quick manner.

#### Bottleneck commodities

The second strategy proposed by Kraljic (1983) is sourcing management and this is specifically relevant to bottleneck items that are characterized by high supply risk and low profit impact. Kraljic (1983) also deems that bottleneck items suffer from supply scarcity and a small number of available suppliers. Thus, sourcing management for bottleneck items largely involves problems and risks that should be handled by volume insurance, vendor control, inventory buffers, and backup plans (Gelderman & Van Weele, 2003). Van Weele (2009) deems that supply should be secured in the short-term and risk in terms of buyer dependency on suppliers should be reduced in the long-run.

For agricultural commodities, the risks of perishability, seasonality, and un-commoditization play a more significant role. However, since profit impact is still low for such items, buyers are not incentivized to commit to using long-term contracts or forming strategic alliances and partnerships. On the hand, short-term contracts can flexibly take into account changing conditions especially in terms of for instance short product lifecycles, which is closely related to perishability.

Nevertheless, necessary contingencies in terms of quality, logistics, and delivery are still negotiated, decided upon, and addressed between buyers and sellers assuring thus the supply of the required agricultural commodities in the short-run. In addition, when prices of input materials are subjected to price fluctuations buyers will most likely source bottleneck commodities through fixed price contracts. This is because fixed price contracts represent a higher supplier risk and in contrast to cost-based contracts, the buyer is not interested in sharing costs with suppliers due to a lower profit impact of the bottleneck items being sourced.

#### Leverage commodities

According to Kraljic (1983) the sourcing strategy of materials management is pertinent to leverage items originating from abundant and non-complex supply sources and markets (Kraljic, 1983). Leverage items thus present low supply risks. Purchasing power should be exploited through for instance, target pricing, tendering, and product substitution (Gelderman & Van Weele, 2003). This is also confirmed by Van Weele (2009) who deems that the operational efficiency of sourcing should be improved and the number of suppliers should be reduced. Kraljic (1983) deems that

leverage items are especially suitable for a strategy based upon exploitation, which could entail spreading volume over various suppliers, taking advantage of price advantages, and decreasing inventory levels.

Once again for leverage agricultural commodities risks in terms of perishability, seasonality, and differentiation do not play a significant role, but the importance to the buyer in terms of volume purchased and the percentage of total cost is high. Due to the fact that buyers can select between multiple suppliers, buyers have the incentive and leverage to apply pressure on suppliers in obtaining lower price levels as well as higher levels of quality.

This can especially be done through competitive tendering, which requires enough suppliers bidding in order to achieve optimal prices and quality levels. One way to ensure enough competition is ensuring that volume is high enough to justify the costs and efforts on the part of the suppliers. Such a condition is directly correlated to leverage items, which are usually purchased in large quantities. These conditions similarly apply to e-auctions and as a result this approach is also placed within the leverage quadrant. An additional benefit of using e-auctions is the reduced cycle time of the bidding and sale process and thus such an approach can also be applicable to commodities that are perishable.

#### Strategic commodities

Supply management is a relevant sourcing strategy for strategic items that are obtained from naturally scarce and complex supply markets (Kraljic, 1983). Supply risk is high and thus decisions are primarily focused upon achieving the long-term availability of strategic items (Kraljic, 1983). Van Weele (2009) further deems that strategic items should be procured through partnerships and long-term relationships and that this requires mutual commitment as well as careful selection of suppliers and supply risk analyses. The approach of partnerships and alliances is deemed to be more flexible than contracts, but should generally include elements of collaboration, trust and intimacy. Partnerships might be a preferred approach, when contract clauses and specifications are too complex and difficult to outline.

In the case that seasonality risks in terms of cultivation and production patterns are high, buyers might want to engage in long-term contracts to ensure supply and availability of the

agricultural commodity at the right time. On the other hand, cost-based contracts can be used to hedge against the price fluctuations of material, labor, and input costs. Cost-based contracts are especially suitable for goods and services that are expensive, complex, and important to the buyer, since the changes in costs are shared between the buyer and a seller (Handfield et al., 2011). Figure 8 provides an overview of the procurement approaches that can be used within the agribusiness industry plotted into the purchasing portfolio matrix.



Figure 8: Extended purchasing portfolio matrix



# **3.2 Additional Considerations when Developing Sourcing Strategies** for Agricultural Commodities

In addition to the supply risks outlined above a number of other considerations should be taken into account when developing sourcing strategies for agricultural commodities. With regards to the external supply market, the regulatory environment of suppliers can potentially play an essential role in the process of sourcing agricultural commodities and thus buyers need to be aware of such regulations. Some commodities may be subject to regulations on quotas that can render the limited availability of supply and restrain the quantity that can be bought. As a result, such regulations on quotas can trigger price increases that will eventually be brought upon buyers as well as consumers.

Competition and anti-trust laws can also increase the number of suppliers available and potentially limit the existence of dominant suppliers. Furthermore, product liability laws can increase the need for buyers and suppliers to ensure traceability (Hobbs & Young, 2000). Especially in terms of highly perishable products this can result in severe consequences for producing and

selling unacceptable qualities and thus great focus must be placed on guaranteeing product quality (Hobbs & Young, 2000).

Another consideration in the external supply market is technological drivers. According to Hobbs and Young (2000), technological drivers affect product characteristics or may influence the transaction environment directly. For instance, novel product characteristics introduced through the usage of innovative and newly developed technology can limit supplier availability as well as alternative sources of supply needed to fulfill the buyer's' requirements. However, technology can also serve as the foundation of generating economies of scale, industry consolidation, and tighter control over product quality (Hobbs & Young, 2000).

Finally, it is important to consider different socio-economic drivers in the external supply market in order to comprehensively develop sourcing strategies for agricultural commodities. According to Stekelenborg and Kornelius (1994), logistics play a significant role and more specifically geographic concentration of the supply base, distance, and local infrastructure affect the sourcing of highly perishable products. Consumer preferences can also dictate the product quality requirements and differentiation (Hobbs & Young, 2000).

Literature also outlines the importance of considering the strength and position of buyers relative to that of suppliers in developing appropriate sourcing strategies. As previously mentioned, the annual volume purchased as well as the expected growth in demand can serve as a determinant of a buyer's bargaining power and can signal the ability to generate economies of scale (Kraljic, 1983). Additionally, the extent to which the purchase is part of the buyer's core competences and improves the capabilities and knowledge of the purchasing department can mediate the leverage and strength that the buyer has relative to its current and future suppliers (Olsen & Ellram, 1997).

Naturally, the relative positions and power of suppliers should also be taken into consideration. According to Kraljic (1983) this is signaled through supplier capacity utilization and excess levels. The financial situation of the supplier in terms of break-even, performance, and reliability is also important to consider (Kraljic, 1983; Olsen & Ellram, 1997; Stekelenborg & Kornelius, 1994). Suppliers that do not have excess capacity and are financially unstable are likely to present significant threats and can to a large extent be more easily exploited. Nonetheless, the

factors above heavily depend upon the uniqueness of the product offered by the supplier, since the more unique a product is, the higher the probability is of buyers relying on less supply alternatives and being able to obtain products as favorable prices (Kraljic, 1983).

Overall, taking the factors above into consideration, Van Weele (2009) deems that buyers in the leverage quadrant to a large extent retain a dominant position. Buyers purchasing agricultural commodities can thus seek to exploit the large number of substitutable suppliers through competitive tendering and e-auctions. However, suppliers of bottleneck items, largely have a more dominant position, since there are a few alternative suppliers from which buyers can rely on.

More specifically, a buyer should firstly evaluate its position relative to that of a supplier and then determine if the supplier in question is non-critical, leverage, strategic, or bottleneck. The degree to which the buyer is attractive in view of the seller as well as the relative value of the items being sold will lead to the identification of the interdependencies between both parties which can be either exploitable, core, nuisance, and development and the specific actions attributed to each interdependency (Van Weele, 2009). These interdependencies and actions are outlined explicitly by the Dutch Windmill model (Van Weele, 2009).

Specifically, in relation to buyers being in the dominant or leverage position, nuisance (low attractiveness/low relative value) implies a possible mismatch resulting in accepting the relationship on a short term basis or changing the supplier completely (Van Weele, 2009). In terms of development (high attractiveness/low relative value) both parties should explore supplier development opportunities and encourage participation between one another (Van Weele, 2009). Regarding the core situation (high attractiveness/high relative value), suppliers are in a sound position and seek to improve their own profit (Van Weele, 2009). On the other hand, when suppliers are exploitable adversarial relationships could emerge and buyer should continuously check the power balance as well as consider other sources (Van Weele, 2009).

Regarding suppliers that are in the dominant or bottleneck position, nuisance (low attractiveness/low relative value) translates into high service risk and thus buyers having to offer incentives or change suppliers (Van Weele, 2009). In terms of development (high attractiveness/low relative value), potential risks still exist and buyers should seek to raise mutual dependency or offer

inducements (Van Weele, 2009). In the case the supplier is exploitable, moderate cost risks could exist, thus the buyer should closely monitor price and service levels, or switch supplier (Van Weele, 2009). On the other hand, core situations signify a good match where relationships should be intensified and maintained for a long time (Van Weele, 2009).

Overall, taking into account buyer and seller relative power positions and interdependencies will shed light on the feasibility of not only implementing the sourcing strategies, but also possible strategic movements. As outlined by Gelderman and Van Weele (2002, 2003) buyers can seek to either hold the position or move to another quadrant in order to make use of the potential of alternative sourcing strategies. However, the switching costs of moving to another quadrant especially in terms of non-delivery and inadequate quality must be taken into account (Stekelenborg & Kornelius, 1994).

# 4. Methodology

# 4.1 Research Purpose and Objectives

The background and motivations for this thesis builds upon the experiences that we gained during our first year Supply Chain Management (SCM) business project. Specifically, we focused on the strategic sourcing process of cocoa and inclusive raw ingredients of the Italian chocolate producer, ICAM. During the research process we discovered that ICAM was not employing any formalized sourcing process for the purchasing of its cocoa and raw ingredients. This motivated us to explore the sourcing process and strategies of agricultural commodities further.

Furthermore, when exploring the literature on the sourcing of agricultural commodities, we discovered that there was a limited coverage on the subject and this increased our interest. Consequently, it can largely be argued that this thesis engages in exploratory research, which Saunders, Lewis, and Thornhill (2009) deem entails a review of the literature and interviewing experts in the subject, both of which has been done and will be elaborated further in the following sections. The focus on CT emerged through a contact, which informed us that the company was in the process of developing the sourcing strategies for two diverse agricultural categories. This

motivated us to utilize CT as the core practical focus and case study for the thesis. The background and motivations lead to the following specific objectives:

- Understand the theoretical role that the strategic sourcing process especially in terms of the purchasing portfolio matrix can play in determining a sourcing strategy in an agri-business context;
- II. Extend the applicability and relevancy of the strategy development step within the strategic sourcing process to buyers developing sourcing strategies specifically for agricultural commodities;
- III. Apply and compare theory to practice through CT's recent application of sourcing frameworks and tools in developing sourcing strategies for the categories of frozen potatoes and dairy;
- IV. Gauge the motivations for applying a strategic sourcing framework and the sources for the similarities and differences between the contributions made to theory and practice through the case study on CT;
- V. Address the opportunities and challenges of implementing the strategic sourcing process, purchasing portfolio matrix, and the Dutch Windmill model;
- VI. Overall, provide recommendations for optimizing the strategic sourcing process. Specifically, in terms of the implementation of the purchasing portfolio matrix and the Dutch Windmill model.

The methodological framework of this thesis will be based on the research onion outlined by Saunders, et al. (2009) (Figure 9). Accordingly, this paper will begin by explaining the outermost layer of the onion that is the research philosophy employed throughout the project followed by an explanation of research approaches used. The following layers will also be discussed and applied to this study.

Figure 9: The Research-Process Onion



Source: Saunders et al. (2009)

### 4.2 Research Philosophy

Saunders et al. (2009, pg. 128) deem that a research philosophy "contains important assumptions about the way in which you view the world" and that such assumptions will underpin the research strategy and methods chosen to be part of the strategy in the next layers. Consequently, selecting an adequate and relevant research philosophy is of crucial importance for the methodological development of the thesis.

Research philosophy firstly relates to ontology, which is the nature of reality and questions the assumptions that researchers make about the manner in which the world operates (Saunders et al., 2009). At the same time the research philosophy also takes into consideration the epistemology, which is defined as the "researcher's view regarding what constitutes acceptable knowledge" (Saunders et al., 2009, pg. 119).

Regarding our ontological considerations, we assume to a large extent an interpretivist position. This is because we believe that our reality as researchers is constructed by social actors, including ourselves. This is directly related to our theoretical framework, which is based upon

extending the application of the sourcing process and the purchasing portfolio to agricultural commodities by incorporating relevant theory and literature. It can thus be argued that the theoretical framework is largely constructed by us as researchers and may change if other researchers attempt to develop a similar framework.

The epistemology of this thesis is also largely based upon interpretivism. This is firstly because this study takes into account the fact that the definition of strategic sourcing not only differs, but has been developed over time by different scholars and practitioners. Consequently, the concept of strategic sourcing is likely to be further constructed and changed as time passes. The same argumentation can be applied to the strategic sourcing process, since many variations of the process have been developed and applied to different industries. Literature points to the fact that this process is often customized to whichever product and industry being analyzed and thus the reality of the strategic sourcing process is largely subject to change.

Once again, similar reasoning is applied to the purchasing portfolio matrix as different versions of the purchasing portfolio models have been developed over time with varying focuses, objectives, attributes and measuring dimensions. Due to the existence of different versions of these models in literature, we have chosen to specifically take our epistemological point of departure in the sourcing process outlined by Handfield et al. (2011), since not only is this the most recent sourcing process found in literature, but this specific sourcing process was also presented to us and applied at the Copenhagen Business School (CBS). Regarding the purchasing portfolio matrix, we have chosen the model developed by Kraljic (1983) as our main theoretical point of reference for the theory on purchasing portfolio matrices. This is because the purchasing portfolio matrix developed by Kraljic is still perceived in literature to be the founding and dominant model and many models after that have built upon the fundamental principles of Kraljic.

The practical knowledge on CT can also assumes an interpretivist nature, since the data collected has been constructed in alliance with a strategic buyer and it only takes this single buyer's perspective into account. Specifically, the steps and data of the strategic sourcing process and how this process is overall utilized is decided on a buyer basis and can vary between different buyers.

Similarly, in terms of the purchasing portfolio matrix, the buyer decides what supply risks to consider, where and how to place items, and what sourcing strategies emerge as a result of that.

## **4.3 Research Approach**

Saunders et al. (2009) claim that clarifying the research approach is important because it enables the ability to make more informed decisions about the research design and which research strategies will work and which will not. More specifically, a research approach will serve as the "overall configuration of a piece of research involving questions about what kind of evidence is gathered and from where, and how such evidence is interpreted in order to provide good answers to your initial research question" (Saunders et al., 2009, pg. 126).

The primary consideration that researchers need to make when it comes to research approaches is whether an inductive or deductive approach is employed. For this thesis, although some elements of a deductive approach are used, it can largely be concluded that the research approach leans towards a more inductive perspective. This is because, although the thesis takes a point of departure in literature and theory, no explicit hypotheses were formalized and tested quantitatively on sufficiently sized population samples, which are aspects that largely characterize a deductive research approach. Nonetheless, the theoretical framework can to a certain extent be perceived as a hypothetical foundation, since it considers relevant literature and theories in order to create a framework that we believe can contribute to the development of sourcing strategies for agricultural commodities. To test the relevancy and validity of this framework it will compared to practice through the case on CT. However, although a wealth of theory and literature exists on the development of sourcing strategies, this is not the case for agricultural commodities. In this sense, the explorative nature of this research is well aligned to the inductive approach in order to generate a direction for further work (Saunders et al., 2009).

In line with the inductive research approach this thesis takes a point of departure in the relatively specific context of the strategic sourcing process and the sourcing strategy development step, which comprises the purchasing portfolio model. The context is further specified to agricultural commodities and the population sample size is delimited to the two categories of frozen potatoes and dairy sourced by CT. It can be also argued that it is hoped that a suitable fit emerges

between the social reality of the sample investigated and the theory that emerges and that it will be grounded in that reality (Saunders et al., 2009).

By analyzing and comparing the data obtained in practice to theory it is hoped that the theory on the strategic sourcing process and specifically the usage of the purchasing portfolio matrix can be extended and rendered more applicable to the sourcing of agricultural commodities. Such reasoning is to a large extent aligned to the inductive approach, which emphasizes that data should be analyzed and reflected upon in a theoretical manner (Saunders et al., 2009).

Another research approach, which this thesis relies on is the systems approach as we relate to problems holistically. The assumption behind the systems approach is that reality is arranged in such a way that the whole differs from the sum of its parts (Arbnor & Bjerke, 1997). In other words, this means that relations between different parts are just as essential as the parts themselves. Our task as researchers is to create an understanding of a given part of the world, to identify the systems parts, links, goals, and feedback mechanisms in order to improve the system (Gammelgaard, 2004). The intention of the model and level of detail desired determines what a systems model contains (Arbnor & Bjerke, 1997).

In this case we will magnify the sourcing process of CT and specifically the sourcing strategy development step, which can be seen as a subsystem (Arbnor & Bjerke). By using the systems model we intend to develop a systems construction, since we are depicting the real and existing strategic sourcing process of CT as a basis for comparing and extending it theoretically (Arbnor & Bjerke). Consequently, the project is contextual since we rely on practical knowledge derived from a case study, which are all characteristics for the systems approach. This is confirmed by Churchman (1979) who claims that the ideal method in systems analysis is case studies. Overall, an inductive and systems research approach significantly affects the research strategy chosen in this study and this will be elaborated further in the following section.

### 4.4 Research Strategy

According to the research onion the next phase entails considering which research strategy to employ in order to be able to answer the research questions formulated. Saunders et al. (2009)

state that the choice of research strategy is typically guided by the research questions and objectives, the extent of existing knowledge, the amount of time and other resources available, as well as the philosophical underpinnings. As alluded above, this thesis will make use of a single case study which is well aligned with the inductive research approach as well as the systems approach. The single case study on the development of sourcing strategies for the categories of frozen potatoes and dairy done by CT is justified and supported by the research approaches. Case studies are also useful when one wishes to "gain a rich understanding of the context of research and the processes being enacted" (Saunders et al., 2009, pg. 146).

The usage of the single case study strategy provides an opportunity to observe and analyze a phenomenon that few have considered before (Saunders et al., 2009). Due to the fact that the development of sourcing strategies using frameworks and tools for agricultural commodities is under-researched, a single case study strategy is used to fill in that gap. Lastly, case studies tend to lead to the usage research choice of triangulation, which will be elaborated further below.

### 4.5 Research Choices

The way in which you choose to combine quantitative and qualitative data collection techniques and procedures is according to Saunders et al. (2009) referred to as your research choice. Within business and management research the choice of research method is most commonly between a mono method or multiple methods (Saunders et al., 2009) In this case we have chosen to rely on both qualitative and quantitative data and thus we are using a mixed method approach to collect data. The use of two or more independent sources of data or data collection methods to corroborate research findings is also what Saunders et al. (2009) refer to as triangulation of the data. We employ triangulation through the usage of primary data obtained from semi-structured interviews and secondary data obtained from a continued email correspondence with the strategic buyer aa well as quantitative data sent to us subsequent to the interviews we had at CT.

The qualitative data and also our primary data, consists of two semi-structured interviews, which technically are neither free conversation nor highly structured questionnaires (Kvale, 1983). Both interviews were conducted at CT located in Høje Tåstrup with the strategic buyer responsible for the category of fresh and frozen goods in CT's own private label. The first interview took place

the 6th of April 2016 while the second interview were conducted May 4th 2016. Both interviews were carried through following a priori created interview guide focused on certain themes and they were recorded and later transcribed (Appendix 5). The first interview covers CT's corporate and sourcing strategy, the procurement structure and the sourcing process of CT, the purchasing portfolio matrix, and questions about CT's sourcing approaches. The first interview also entails a presentation of the specific category strategy development process for frozen potatoes, whereas the second interview is primarily focused on the strategy development process for the category of dairy products.

Additionally, CT has provided us with supplementary data in terms of power-point presentations about CT and its performance in general, supplier lists, category overviews, as well as a presentation of their most recently developed category strategies for frozen potatoes and dairy. This data is mainly expressed in terms of spend analyses, supplier performance pie charts, and matrices and thus it is more quantitative by nature. This data was sent to us immediately after each interview we had with CT by agreement with the strategic buyer participating. We rely much on the quantitative data in the analysis in order to go into depth with the strategy development of the two specific categories.

Lastly, regarding the research choices Saunders et al. (2009) emphasize the importance of considering a time horizon when planning your research. Saunders et al. (2009) further refer to two types of time horizons, the cross-sectional and the longitudinal perspective. In this thesis we have studied a particular phenomenon at a particular time and it only shows a snapshot of CT's strategic sourcing operations. Thus, this study is cross-sectional because it does not cover a series of snapshots or representation of events over a given period of time. The fact that this thesis relies on a single case study further underpins that our research is cross-sectional.

## 4.6 Criteria of Research

### 4.6.1 Reliability

Reliability addresses the question of whether the results of a study are consistent and replicable (Bryman, 2004). With regards to the replication of our study, it is questionable whether

the procedures that constitute the qualitative data collection in form of interviews can be replicable. Since we as researchers are subjectively enrolled in the construction of the project and what is considered knowledge, it will evidently be problematic for someone else to repeat the research process and procedures completely. The fact that we are only two individuals writing this thesis further adds to the subjective bias and precludes the potential for replicability. On the other hand, two researchers are better than one and can only add to the subjective diversity of the study.

Due to fact that the systems approach is less quantitative than the analytical approach, its measurements are less precise (Arbnor & Bjerke, 1997, pg. 231). Furthermore, Arbnor and Bjerke state that the important thing is what a measure can be used for, not the way a measurement is made or its precision. Therefore, "the concept of reliability is rarely used" within the systems approach (Arbnor & Bjerke, 1997, pg. 231).

### 4.6.2 Validity

Validity is concerned with the integrity of the results that are generated from research (Bryman, 2004). In other words, we perceive validity as a criterion of our research to assess whether we measure what we say we measure. Arbnor and Bjerke (1997) specifically relate the definition of validity to the systems approach. They argue that due to the lower degree of generality and absoluteness of systems theory, "the requirement is not so much that definitions correspond with existing theory" (Arbnor & Bjerke, 1997, pg. 234). Furthermore, it is stated that a common procedure for guaranteeing that measurements are correct within the systems approach, is to reflect upon the real system from as many angles as possible (Arbnor & Bjerke, 1997 pg. 234).

Throughout this study we have aimed to assure the integrity of our research by interviewing CT in two rounds. Ideally, this should both create better relationships between us and the interviewee and generate a trustworthy and comfortable environment for sharing information. It can also be argued that the integrity of our results is high because we have approached CT just after they have implemented the new sourcing strategy development tools and thus it is possible for us to gain a more comprehensive before and after picture. On the other hand, it can be argued that since the framework and tools have just been implemented that we are not able to fully understand and realize the effects of these yet. Furthermore, the fact that we had a couple of weeks in between the first and

the second interview has added to the integrity of the results as well, because we have been able to reflect upon the data gained from the first meeting before preparing for the next meeting.

## 4.7 Delimitations

The main delimitation of this thesis is that we are illustrating the sourcing processes of only two agricultural commodities, frozen potatoes and dairy, in order to represent and cover the manner in which strategic sourcing is performed in the agricultural industry. Although these two categories differ substantially from each other both in terms of product characteristics and strategic importance, we acknowledge the fact that their sourcing processes cannot fully serve as a proxy for how all agricultural commodities are sourced.

Furthermore, this project is delimited by the usage of the single case study approach and accordingly the selection of the case. Relying on a single case study commonly raises concerns on the interrelated issues of methodological rigor, researcher subjectivity, and internal as well as external validity (Willis, 2014). Accordingly, using CT as our sole reference and source of information to cover the practical implications of strategic sourcing as well as the development of sourcing strategies for agricultural commodities can to a certain extent not only undermine the validity of the conclusions generated in the project, but also the level of generalizability. The validity of our results and the applicability of our research to the general is therefore compromised by the usage of the singular perspectives and views of CT. Additionally, it can be argued that the selection of CT was based on the fact that we knew about the company's recent efforts in developing sourcing strategies prior to the collaboration and this factor might have caused a bias in our selection of CT. Furthermore, with regards to the collaboration with CT, it should be highlighted that we have delimited ourselves to only focusing on the strategic sourcing of agricultural commodities for their private label brands and thus we disregard the sourcing of commodities for branded labels.

Another delimitation is that although we are outlining the whole strategic sourcing process of Handfield et al. (2011) and comparing it to the sourcing process done by CT, greater attention will be given to the step of strategy development and the application of the purchasing portfolio matrix. This is primarily because we were constrained in terms of scope and specifically number of pages to analyze and compare the sourcing process of CT to theory in an in-depth manner. Furthermore, we perceive the step of strategy development as the most important phase in terms of actually formulating sourcing strategies. Thus, focusing on this step enables us to develop and use a nuanced and relevant theoretical reference that can be compared to practice in order to obtain the most meaningful results.

Our data collection procedure can to a certain extent be biased and this should also be considered as a delimitation. This is because the interviews largely assume a singular buyers view. Specifically, the content and implementation of the sourcing process and appropriate matrices varies from buyer to buyer and this thesis takes into account the perspective and application of these models and tools from the perspective of only one buyer. This bias could have been reduced if the perspectives from more buyers and representatives from other departments would have been considered and integrated. Taking into account other perspectives would most likely have allowed us to gain a more holistic and complete view of the development of sourcing strategies within the entire company.

The fact that we have only taken the buyer's perspective into account immediately engenders another bias in the procedure of collecting data. It would have been ideal to consider the suppliers' perspective as well and although CT does evince and elaborate on the suppliers they collaborate with, interviewing the actual suppliers would have increased the validity of the final results. However, working with both CT and its suppliers individually at the same time is a challenging matter because of confidentiality aspects and the likelihood of obtaining sensitive data from both parties is limited due to relationship-specific reasons.

# 5. Data Presentation on Coop Trading

The aim of this section is to present data on CT. Data has been collected qualitatively through interviews with a strategic buyer as well as quantitatively through forwarded presentations on CT's suppliers, category strategy development, and one pagers. The data has explicitly been collected on the two categories of frozen potatoes and dairy, each including different characteristics and features in order to be able to compare and understand how sourcing strategies are developed

individually. The data presented will be compared to the theoretical framework and this will serve as the basis for the analysis.

### 5.1 Company Description and Overview

CT is a sourcing company owned by Coop Norway, Denmark, and SOK Finland. It was established January 1st 2008 and handles joint purchasing, contract management, and quality assurance of goods for 4,000 stores belonging its customers in the four countries of Norway, Denmark, Finland and Sweden. Coop has a market share of 33% with ICA Sweden as the closest competitor in terms market share. It is important to distinguish between Coop and CT, since Coop comprises of retailers while CT does sourcing and negotiations of private label, fruit and vegetables, indirect goods and some selected branded goods. Furthermore, it is important to note that this thesis will focus only on the sourcing of private labels performed by the department of private brand foods (Figure 10).





Source: PPT Coop Trading supplier presentation

Specifically, within private labels CT has three brands: Xtra, Coop and Rainbow, and Coop Änglemark and each brand represents a different position with regards to the price and the perceived added value (Figure 11). The private label Xtra serves as a discount platform for strategically selected volume products with focus on low prices and as a quality benchmarking the discount
sector. Coop and Rainbow are appointed master-brands of quality products that offer consumer value for money. The products in Coop and Rainbow labels are benchmarking the market leaders. The platform of Änlgemark is characterized by being allergy and environmentally friendly as well as organically produced.



Figure 11: Positioning of Coop brands

Source: PPT Coop Trading supplier presentation

## 5.2 Vision, Mission, and Corporate Strategy of Coop Trading

The vision of CT is to be the most efficient sourcing company for its partners and customers and thus the mission of CT is to create value by offering products at the right quality and at the best price. Specifically, through its 2018 strategy CT seeks to obtain the best price and selling portfolio in terms of reputation based upon increased volume and a cost efficient, streamlined, and competent co-operation model. The overall vision, mission, and corporate strategy of CT is outlined in Figure 12 (PPT About Coop Trading).



Source: PPT About Coop Trading

## 5.3 Sourcing Strategy

Since CT is a sourcing company, the sourcing strategy of CT although more detailed, is closely aligned to the corporate strategy of the company. The sourcing strategy of CT is firstly based upon global sourcing, meaning that the company seeks to exploit price advantages by continuously evaluating the opportunities of sourcing from new regions and countries (CT Interview 1, pg. 3). Global sourcing is also used in order to mitigate risks of becoming too dependent upon existing suppliers (CT Interview 1, pg. 9).

The sourcing strategy of CT also emphasizes harmonization in terms of efficiency, customer preferences, and product descriptions (PD). Harmonization for efficiency purposes revolves around bundling volumes and obtaining better prices. This is in order to take advantage of production efficiencies and economies of scale on the part of suppliers in terms of design and product changes as well as setup costs. This was evinced by the strategic buyer who claims that "one whole day, full power, same bags, same product - that is the optimal set-up" (CT Interview 1, pg. 4).

Harmonization also occurs on a customer preference basis by taking into account the national preferences of customers and making compromises. For instance, customers in different

nations might prefer different lengths and weights of french fries and CT through product design attempts to a large extent to help suppliers develop united products in terms of weight, size, and content (CT Interview 1, pg. 3). That being said, customers also have preferences for the brand and packaging designs. Consequently, CT aids their suppliers in developing products that are as similar as possible in terms of functions and recipes, but that at the same time are tailored to customer preferences (CT Interview 1, pg. 4).

Besides global sourcing and harmonization, the sourcing strategy of CT focuses upon closer co-operation with selected suppliers and supplier base development as well as efficient negotiations by exploiting volumes through tenders, auctions, and supporting tools (PPT About Coop Trading). Lastly, through its sourcing strategy, CT seeks to increase the attractiveness of the product assortment available to customers through new product development (NPD) and by focusing on taste, function, and packaging (CT Interview 1, pg. 4).

### **5.4 Development of the Procurement Function**

The role that sourcing has within CT has significantly shifted within the last six months. Although the role of procurement has always been strategic within the company, it now takes into account supplier perceptions of CT as a customer and it is much more long-term in this regard (CT Interview 1, pg. 4). Specifically, the strategic buyer interviewed claims that CT now seeks to be the "best sourcing partner for our customers and within that lies the global sourcing, the harmonization, and the price developments" (CT Interview 1, pg. 5). Furthermore, the strategic buyer claims that in the past the development of sourcing strategies was not as well thought through as it is now and that this is very common in the retail market (CT Interview 1, pg. 5). However, the introduction of specific frameworks and tools through intensive courses, which the strategic buyers of CT have attended, have greatly contributed to this shift (CT Interview 1, pg. 5). These frameworks and tools will be elaborated in the following sections.

### 5.5 Category Strategy Development

As alluded above, CT has started working with certain frameworks and tools that enables them to ask relevant questions, determine objectives, and tasks for a given strategy (CT Interview 1, pg. 7). The strategic buyer claims that before the introduction of such tools that "there wasn't really any formal idea or expectation to strategy" and that buyers did not know how to really approach and handle the development of sourcing strategies (CT Interview 1, pg. 7). The overall framework which CT relies on is that of category strategy development and in general buyers can rely on certain steps, which will be described below.

Firstly, buyers define the scope of each category by identifying the spend, the products and services involved, the relevant geographies in terms of customer and the sourcing locations (PPT Category Strategy Development - Frozen Potatoes, 2016). Buyers then analyze the type of data that they need and determine the relevance and importance of this data as well as if they have already obtained it. Specifically, a score of 1 to 3 is assigned to the importance, 1 signifying required and 3 not significant (CT Interview 1, pg. 10). This score is utilized to convey the relevance of this data when negotiating with suppliers (CT Interview 1, pg. 10). In terms of data availability, a score of 1 to 6 is utilized, 1 being that there is no relevant data available and 6 being that data collection has already been completed extensively (PPT Category Strategy Development - Frozen Potatoes, 2016).

The data requirements are divided firstly into internal, which includes spend in terms of products, supply, and country and price development as well as external customer requirements, which covers product requirements and specifications. For this data CT utilizes the Nielsen database, which provides data on total sales, volumes, and market shares of products within the retail industry. Characteristics of the commodity are then taken into consideration and this can include weather forecasts, harvesting processes, quality, and information on raw input commodities (PPT Category Strategy Development - Frozen Potatoes, 2016). To obtain such data, CT relies on Kairos, an online forecasting and analysis tool of commodity risks and prices. Characteristics of the supply market as well as the supply chain, and supply chains of competitors are subsequently analyzed. Lastly, characteristics of suppliers are taken into account.

CT then develops a spend and SWOT analysis, as well as an overview on the current situation. The spend analysis is developed firstly on the customer country level and then aggregated into a complete Nordic spend analysis. The invoiced net value that is the amount spent paying suppliers is identified for each sub-category within a category (CT Interview 1, pg. 12). The sum of

the index value of the spend is then calculated and a number below 100 signifies that spend for that sub-category has decreased whereas a value over 100 implies that spend has increased over the time span of one year (CT Interview 1, pg. 12). The sum of units received at warehouses is also outlined as well as the of the sum of volume index, which signifies either a decrease or an increase in the volume purchased compared to the previous year (CT Interview 1, pg. 12).

A SWOT analysis is then developed along with an outline of the current situation. The current situation highlights current objectives and goals of the product portfolio development (PPD) specifically in terms of product and process structuring, supply base structuring, and sourcing on a country level. Current performances in terms of contracting, supplier development, and supply chain considerations is also considered (PPT Category Strategy Development - Frozen Potatoes, 2016). Supply chain considerations usually include, shelf life, lead time, shop unit size, packaging sizes and weights, as well as incoterms (PPT Category Strategy Development - Frozen Potatoes, 2016).

As a next step within in the category strategy development process CT makes use of a product portfolio matrix. The matrix is a newly introduced tool to CT and it is used to plot in the product types or subcategories that are included in the overall category for which the strategy is being developed. The product portfolio consists of two variable axes, one describing the supply risk and the other describing the relative cost. The matrix forms four quadrants each representing an option of high, low supply risk and high, low relative cost.

The strategic buyer emphasizes that a number of relatively similar matrices and models with the purpose of product categorization have been offered, but that this one is chosen because it is simple to apply as well as to communicate to other departments (CT Interview 1, pg. 13). The four possible scenarios in the product portfolio are referred to as routine, leverage, strategic and bottleneck and it is stated that ideally all subcategories should be in the leverage quadrant. However, that is not how it is in practice and this emphasizes the importance of having the right supplier portfolio and supply base (CT Interview 1, pg. 13). Furthermore, it must be noted that the routine quadrant corresponds to the non-critical quadrant proposed by Kraljic (1983).

Another tool that has recently been added to CT's process of developing category strategies is the supplier view matrix. It is constructed similarly to the product portfolio, but it serves a drastically different purpose. Firstly, the axes represent different variables, that is the company attractiveness as a function of the relative value (CT Interview 1, pg. 15). The four quadrants formed are in this case nuisance, exploitable, core, and development and this enables CT to plot in different suppliers in accordance to their perception of CT (PPT Category Strategy Development - Frozen Potatoes, 2016).

The strategic buyer highly emphasizes how useful the implementation of this new tool has been for CT and also states that the position of a product in the product portfolio matrix will usually reflect the position of that product's supplier in the supplier view matrix. This is because "it is a really good icebreaker to discuss how we are doing and how they see us as a partner and a customer" (CT Interview 1, Pg. 15). The strategic buyer argues that this information can contribute to CT's performance level as a customer as well as to optimize its attractiveness as a company to its suppliers. The supplier view matrix entails a set of additional features for CT as it can also be used in relation to the product portfolio to determine which supplier to engage more with and in which direction. This overview further allows for CT to assess if they have the right supplier base, if they have enough suppliers, and if these suppliers are positioned in the most optimal quadrant, or if there is an opportunity to move the suppliers (CT Interview 1, Pg. 16).

CT then compares their current performance on a category level, which includes the price index and spend to the future objectives and goals. Mores specifically, the overview is used to compare the previously described current situation with regards to product structuring, supply base structuring, sourcing, contracting, supplier development, and supply chain considerations to the future objectives and goals of these.

Conclusively, CT summarizes all the steps of the category strategy development process into a foreseeable table that can be easily communicated to the quality and design departments. The table describes the strategic elements included in the strategy development, the logic behind it in terms of specific actions that should be taken, the result of such actions, and an allocation of who is responsible for certain actions and tasks.

#### **5.5.1 Updating Category Strategies**

It was emphasized that the strategic category development process is used as a working document and continuously updated especially in terms of strategic supplier dependency. This is because if CT is relying on only one supplier and if something goes wrong, then CT will have to redevelop its strategy entirely (CT Interview 1, pg. 14). The strategic buyer that was interviewed also evinces that not too many changes should be made as that would signal that something has gone wrong for too long and that only some adaptations and the incorporation of new ideas would be ideal (CT Interview 1, pg. 18).

#### 5.5.2 Buyer Groups Assigned to Categories

CT relies on category management when sourcing products for their private label platform. The products are typically grouped in a top down approach starting with the category group, the category, different sub-categories, and finally on a segment level. With regards to defining the categories the strategic buyer states that it is important to break down the categories into sub-categories in order to be able to realize where to focus, apply work efforts, and similarly important where not to (CT Interview 1, pg. 21). Thus the sourcing strategies are developed on category level, however, they build upon a total assessment of the different sub-categories.

The strategic buyer was furthermore asked to elaborate upon how the buyer groups are assigned to the categories and the underlying incentive for such an allocation. It was stated that there is not any major thought behind who is allocated to which category. It is however preferable within certain categories that the responsible buyer has experience with the products included in the category, as the buyer states that "if you have some kind of experience from the past that will make sense" (CT Interview 1, pg. 6). Another incentive to assign a specific buyer to a specific category is if the buyer can benefit and build upon previous relationships with suppliers. However, this can also show to be a bad idea if the relationships between the buyer and the suppliers are poor, but even such information adds to the overall knowledge of how to perform the assignment of a buyer to a category (CT Interview 1, pg. 6).

However, CT does after some years try to reorganize the buyers assigned to categories, because as the strategic buyer explicitly states "sometimes it is a really good idea to get a fresh start and get some new people on the category because you can also get stuck a little bit and get a little bit too comfortable with everything" (CT Interview 1, pg. 6). However, the strategic buyer highlights some of the disadvantages of reorganizing buyers to categories, which includes lost competences, experience, and information (CT Interview 1, pg. 6). This is especially relevant to agricultural products that require buyers to spend three to four years learning how products are made and what the quality standards as well as requirements are (CT Interview 1, pg. 6). This is because possessing such information is crucial when negotiating with suppliers and to know "whether a supplier is telling the truth or not" (CT Interview 1, pg. 6). Consequently, the strategic buyer deems that such reorganizations should be thought through and not implemented too often (CT Interview 1, pg. 6).

## **5.6 Category Strategy Development: Frozen Potatoes**

#### Harvest and Seasonal Category Characteristics

Frozen potatoes belong to the overall category of harvest products. For this category, seasonality plays a large role in terms of harvesting occurring during one interval per year. Berries and vegetables are also included in this category and in general harvesting for these products occurs during the spring and summer months (CT Interview 1, pg. 2). Once harvesting has ended the total amount of harvested products that are needed for one year are bought. Negotiations and tendering also take place during that period and long-term contracts, that enable buyers to purchase annual amounts the subsequent year are renewed the 1<sup>st</sup> of October and last until the 30<sup>th</sup> of September the following year (CT Interview 1, pg. 18). Prices are fixed through these contracts and NPDs are generally done in the Spring so that new product proposals are ready for the 1<sup>st</sup> of October.

Since frozen potatoes are also bought once per year, CT utilizes specialized warehousing methods to store the potatoes in certain temperature and moisture levels (CT Interview 1, pg. 3). This enables CT to keep its potatoes fresh without the potatoes actually being in the earth for extensive periods of time (CT Interview 1, pg. 3). This also implies that CT does not go out to re-

negotiate and re-buy the purchase of potatoes during other periods of the year so as to avoid paying higher prices and that CT naturally relies on agreements being on time (CT Interview 1, pg. 3).

## **Category Scope**

In terms of the scope of the category, CT supplies private label frozen potatoes to its customers in Denmark, Sweden, and Finland. As earlier stated, Norway is also a customer to CT, however it should be noted that in this case CT does not supply Norway with private label frozen potatoes. The potatoes are sourced from seven suppliers in Germany and in Benelux (Belgium, Netherlands, and Luxemburg). Specifically, the pool of suppliers for the different product types of frozen potatoes includes: Clarebout Potatoes NV, Lamb Weston/Meijer V.O.F, Farm Frites International BV, Oerlemans Foods Nederland B.V, Aviko, and Ardo A/S (CT PPT Category Strategy Development - Frozen Potatoes, 2016).

#### Spend, SWOT, and Current Situation Analyses

The total spend of purchasing frozen potatoes in 2015 was 11,002,209 EUR. As shown in

the figures below, Coop Denmark as a customer constitutes the biggest spend whereas COOP Sweden represents the smallest spend (CT PPT Category Strategy Development – Frozen Potatoes, 2016; Figure 13). In terms of sub product categories, Standard Frites represents the largest spend and Rösti the least (Figure 14). The largest increase in the sum of the value index is for the sub-categories of organic (134.1), special barbeque (107.2 Development – Frozen Potatoes, 2016).



Country Segmented Spend Analysis - Frozen Potatoes



Source: CT PPT Category Strategy Development - Frozen Potatoes, 2016

organic (134.1), special barbeque (107.2), and other (106.5) (CT PPT Category Strategy Development – Frozen Potatoes, 2016).





Source: CT PPT Category Strategy Development - Frozen Potatoes, 2016

On the other hand, the largest decrease in the sum of the value index is for crinkle-cut (89.1), sliced (87.4), and Rösti (89.7). The strategic buyer states that the sum of the value index is especially important and signals potentialities for NPDs. For instance, the values above indicate the possibility of considering to invest in the development of organic specialty products (CT Interview 1, pg. 13). Overall, the spend analysis serves as a sound initial basis for future actions and developments.

The current situation in terms of product and process structuring stipulates that CT is working on 29 PDs that the products are only partly harmonized, and that CT is currently working with eight different sub-categories (CT PPT Category Strategy Development - Frozen Potatoes, 2016). Regarding supply base structuring, CT relies on seven different suppliers, Clarebout being the biggest and supplying around 50% of what CT needs and that there are two to three potential suppliers that CT can develop.

The spend and current analyses serve as direct sources used for the SWOT analysis. Some of the strengths that CT is currently facing is that the category of frozen potatoes represents a large spend and volume and that CT is currently engaged in NPDs for Ziggy, nuggets, and dipper potatoes (CT PPT Category Strategy Development - Frozen Potatoes, 2016). Other strengths include the presence of strong organic suppliers that can potentially serve the increase in demand for organic frozen potatoes and a strong knowledge base in Coop Denmark in terms of category optimization

(CT PPT Category Strategy Development - Frozen Potatoes, 2016). Opportunities consist of the use of potential new suppliers, the fact that Clarebout has extended its capacity levels, expanding the new suppliers of Aviko and Schnee-Frost, and developing the portfolio of Coop Sweden, as well as the organic frozen potato portfolio (CT PPT Category Strategy Development - Frozen Potatoes, 2016).

On the other hand, the weaknesses include the fact that CT is currently engaged with the a rather large number of PDs and a lack of competition due to the reliance on few suppliers and portfolios (CT PPT Category Strategy Development - Frozen Potatoes, 2016). Threats cover the aspects of force majeure, such as fires and breakdowns and harvest-related risks, and the increase in the prices of raw materials (CT PPT Category Strategy Development - Frozen Potatoes, 2016).

#### **Product Portfolio**

When CT is conducting the product portfolio matrix for frozen potatoes they categorize the product types as follows (Figure 15 - CT PPT Category Strategy Development):

- Leverage: Standard Fries (28%), Crinklecut (20%), Wedges (15%), Rösties (7%)
- Routine: Sliced (5%)
- Bottleneck: Other (7%); Organic (3%)
- Strategic: Special (15%)

In the specific case of sourcing frozen potatoes the dimension of supply risk is based on a number of factors. The fact that potatoes is a harvest good that can only be sourced



Supply Risk

Source: CT PPT Category Strategy Development - Frozen Potatoes, 2016

seasonal implies a supply risk for CT. The strategic buyer states that potatoes are fragile and that quality, size, and the accessible volumes depends heavily on how the weather and the harvest develops (CT Interview 1, pg. 2). Furthermore, as it has been elaborated upon earlier, potatoes

require special storage conditions in order to ensure quality and freshness, and that imposes a supply risk in terms of sourcing as well.

Another factor that affects the supply risk is the composition of the supplier base in terms of number of suppliers, supplier qualifications, and supplier performance and capacity. The strategic buyer emphasizes that the scope of working with suppliers can be long term as well as short term. CT continuously has to screen its supplier base in order to assess whether it covers the entire product spectrum and also if the suppliers included are small, flexible, and service oriented suppliers or big, dominant suppliers that can produce large volumes. Additionally, it is important for CT to evaluate if the supplier base includes enough suppliers to meet the demanded requirements and if not, CT aims to find new, alternative suppliers and develop relationships with these. For CT finding new suppliers and engaging in the establishment of solid relationships is considered a long term investment (CT Interview 1, pg. 9).

The above considerations are closely related to product availability which CT highlights as their number one concerns with regards to assessing the factors that affect the supply risk used in the product portfolio to determine the position of sub-categories. When discussing which product types to focus on based on spend, the strategic buyer heavily emphasizes that "nobody really cares about how big the spend is - if there are no products on the shelves, you are in trouble anyways. Having products on the shelves is the most important thing!"

Lastly, it was asked how CT decides which supply risks are significant for each respective product category and thus should be included in the product portfolio matrix. The strategic buyer claims that the importance of the different risks is perceived individually from buyer to buyer, however the factors for defining the supply risks are more or less the same. In order to fully comprehend a supplier and to assess the associated supply risks, some buyers engage physically by visiting the supplier location and production and meet with the individuals represented by the supplier. However, other buyers prefer working from their desk sourcing solely through E-auctions. The strategic buyer conclusively reasons "we are all different as buyers, I couldn't say that one thing is better than the other" (CT Interview 1, pg. 12)

#### **Supplier View Matrix**

Through the supplier view matrix, the suppliers are categorized into the quadrants of exploitable, nuisance, development, and core based upon the relative value of the supplier to CT and the degree of attractiveness that CT represents for each supplier. Currently, there are no suppliers that are exploitable, whereas Aviko is currently placed between nuisance and development, since it is a relatively new supplier and "could go anywhere" (CT Interview 1, pg. 16). Agrarfrost, Crops, and Oerlemann are positioned in development quadrant and Farm Frites as well as Lamb Weston are placed between development and core. On the other hand, Clarebout is considered to be the only core supplier (Figure 16).







**Company Attractiveness** 

(7) (6)

Development

High

#### **Current to Future Situation**

Relative Value

Low

Nuisance

Regarding future goals, CT plans to decrease its PDs from 29 to 26 and further harmonize its product portfolio. At the same time, CT wants to introduce two to four NPDs by 2017. In terms of supply base, CT wants to ensure it has a least three strategic suppliers and three preferred suppliers, two approved suppliers, two new suppliers, and at least four qualified suppliers for all its seven products (CT PPT Frozen Potatoes, 2016). Specifically, the buyer deems to have at least four

suppliers for the top seven products in terms of spend, since this "makes a better ground for competition" (CT Interview 1, pg. 19). CT also strives to make its supplier development more strategic through alliance and relationship management as well as through joint R&D efforts (CT PPT Frozen Potatoes, 2016).

Regarding the overall strategy for the category of frozen potatoes, CT seeks to become a price-fighter in terms of global sourcing. Additionally, CT is pursuing harmonization in relation to quality and size and an attractive assortment by developing quality and increasing the category turnover (CT PPT Frozen Potatoes, 2016). The elements of this strategy include harmonizing PDs by bundling volumes in order to achieve better prices and more effective production processes and prequalifying more suppliers for the top seven products in order to increase competition to once again obtain attractive prices (CT PPT Frozen Potatoes, 2016). The same logic can be applied to the establishment of relations with at least one more organic supplier.

Additionally, CT wants to push more NPDs to Finland and Sweden in order to diversify assortments, increase volumes, and achieve better margins, which will contribute to an overall bigger selection for customers (CT PPT Frozen Potatoes, 2016). Another element includes pursuing strategic alliance management with the suppliers of Clarebout and Lamb Weston through the development of NPDs and information sharing in order to achieve better forms of collaboration, a common understanding, and to obtain more favorable prices in the long-term. Lastly, CT is investigating sourcing opportunities in Eastern Europe and Asia to further develop its supplier portfolio, foster competition, and thus obtain better prices (CT PPT Frozen Potatoes, 2016). An overview of the category strategy can be found in Appendix 6.

## 5.7 Category Strategy Development: Dairy

#### **Dairy Category Characteristics**

The overall category of dairy covers a number sub-categories including milk, cultured products, cream, yoghurt, dairy (allergy) and others, yoghurt drinks, dessert snack meals, and cottage cheese. Macroeconomic and market conditions, regulations, customer preferences, and logistics are factors that are to a large extent considered when purchasing dairy products.

Specifically, the strategic buyer claims that Russia's import ban of dairy products from the European Union (EU) along with China's recent success of independently developing and producing quality ensured milk powder has weakened the European dairy market and contributed to prices falling (Interview 2, pg. 9). Additionally, the abolition of the EU milk quota regime on the 31st of March 2015 has led to an over-supply of milk and thus a sharp decrease in prices, placing pressure on the ability of small-scale farmers to cover costs (Interview 2, pg. 9).

National regulations in terms of product content affect the number of products CT has to source. For instance, allergy based products that contain B12 vitamins cannot be sourced to Denmark, since vitamin B12 under Danish law is illegal, whereas that is not the case for Finland (Interview 2, pg. 8). Additionally, national customer preferences play an equally large role in determining which specific products should be supplied to each respective market. For instance, Danish consumers due to nationalistic and political purposes strongly prefer Danish milk, however this is not the case for yogurt products (Interview 2, pg. 11). Lastly, logistics and lead times affect the shelf-life of products and it is especially important for CT to be able to rely on suppliers that possess adequate distribution capabilities (Interview 2, pg. 12).

#### Category Scope

Similar to the category of frozen potatoes, the scope of this category is limited to only include dairy products for CT's private label brands. CT supplies private label dairy products to its customers in Denmark, Sweden, Finland, and in this case also Norway. The dairy products are sourced from six geographical regions including Germany, the Baltics, Austria, Benelux, Denmark, and Czech Republic. Overall, CT relies on 17 suppliers for dairy products including: Arla Foods, DMK Deutsches Milchkontor GmbH, Osterhusumer Meierei Witzwort eG, Tere AS, Mona Naturprodukte GmbH, Karwendel-Werke Huber BmgH & Co. KG, Nöm AG, Incopack NV, ZOTT SE & CO. KG, Ehrmann AG, Lactails Danmark A/S, OBM Omira Bodensee Milch GmbH, Hochwald Foods GmbH, Turm Sahne, Farmi Plimattööstus, Best Brands Sp z o.o., Solo Italia Srl (CT PPT Category Strategy Development - Dairy, 2016). Lastly, in terms of category scope it should be noted that other cheese products, besides cottage cheese, fall outside the scope of this category.

#### Spend, SWOT, and Current Situation Analyses

CT spends 65,243,760 EUR on the dairy category per year, which is around six times more than they spend on frozen potatoes. Figure 17 below shows the total category spend of dairy allocated per customer and it is clear that Coop Denmark constitutes the biggest spend (67%) followed by Finland (26%), Coop Sweden (6%), and finally Coop Norway representing only 1% of the total spend (CT PPT Category Strategy Development - Dairy, 2016).

In terms of the different product types included in the category of dairy, milk plays a dominant part in the assortment representing almost half of the spend. On the other hand, cottage cheese represents only 1% of the total spend (Figure 18). The largest increase in the sum of the value index is for the sub-categories of yoghurt (105), cultured (104), and dessert snack meals (102) (CT PPT Category Strategy Development - Dairy, 2016). On the other hand, the largest decrease in the sum of the value index is for cream (79), milk (84), and yoghurt drinks (88) (CT PPT Category Strategy Development - Dairy, 2016).



With regards to the current situation for dairy, CT states that currently their product and process structuring is un-harmonized and that many products are only listed in one country. The supply base is dominated by one big supplier (Arla), many smaller companies, and only two to four potential suppliers (CT PPT Category Strategy Development - Dairy, 2016). Furthermore, CT currently relies on open ended contracts with the duration time of three, six, and twelve months. At the moment supplier development is limited, there is no strategic supplier management and only few NPDs (CT PPT Category Strategy Development - Dairy, 2016).

The SWOT analysis highlights that the strength of this category is the big spend and high volume products. However, some weaknesses include strong brand and national preferences. The fact that there is no harmonization among the different sub-categories is also an evident weakness just as it can be viewed as problematic that there is no competition within the Danish milk market because Arla is the superior supplier. For instance, CT currently procures seven different kinds of cottage cheese for two different countries and the products vary in terms of protein, carbohydrates, and fat values as well as packaging and labeling (Interview 2, pg. 8).

The SWOT analysis does however also highlight a number of opportunities to be realized for the category of dairy. Firstly, unexploited development potential exists with Coop Norway since they currently only represent 1% of the total spend of the category. Furthermore, the potential of existing suppliers should be developed and new suppliers should be found. The threats highlighted in the SWOT include an increase in the milk prices, higher demand from China, and the fear of open Russian borders (CT PPT Category Strategy Development - Dairy, 2016).

#### **Product Portfolio**

When CT applies the product portfolio matrix for dairy they categorize the product types as follows (Figure 19 - CT PPT Category Strategy Development - Dairy, 2016):

- Leverage: Milk (46% positioned between strategic and leverage), Cultures (22%), Cream (14%), Yoghurt (9%)
- Routine: Yoghurt drinks (2%) and Dessert snack meals (2%)
- Bottleneck: Allergy (4%) and Cottage cheese (2%)
- Strategic: none



Figure 19: Product Portfolio Matrix for Dairy

Source: CT PPT Category Strategy Development - Dairy, 2016

In the second interview, the strategic buyer was asked to elaborate upon the factors underlying the dimension of supply risk in the product portfolio matrix for dairy. It was pointed out that most of the factors overlap with the elements considered in the category for frozen potatoes while others are explicitly restricted to the supply risk of dairy. Specifically, the buyer still considers the composition of its supplier base in terms of number of suppliers and the qualifications, performances and sizes of suppliers as well as the volume share that each supplier constitutes of the assortment.

However, in alignment to the above mentioned characteristics for the dairy category, considerations with regards to regulations, macroeconomic factors, and national customer preferences play an important part in the sourcing procedure of dairy products. Once again, the supply risks that are considered when using the product portfolio matrix are chosen on an individual buyer basis and no formalized selection method is used to do this.

#### **Supplier View Matrix**

As in the case with frozen potatoes, CT positions their suppliers for dairy in the supplier view matrix based upon the relative value of the supplier to CT and the degree of attractiveness that

CT represents for each supplier (Figure 20). Currently, Arla is categorized as an exploitable supplier, DMK and Osterhusumer are core suppliers, Tere and Mona are positioned in the nuisance quadrant with low company attractiveness and low relative value, whereas Karwendel and Nöm are suppliers susceptible for development.





Source: CT PPT Category Strategy Development - Dairy, 2016

Throughout the second interview it was highly emphasized that Arla is a dominant supplier representing half of CT's total spend on dairy. The buyer accordingly expresses that "Arla is definitely up in exploitable for me - 50% and they are definitely taking advantage of it" (CT Interview 2, pg. 8). Currently, Arla is the only one that can supply CT with Danish milk meaning that they have monopoly in the market and consequently CT aims to find new suppliers that can add to the competition. However, the strategic buyer elaborates that the problem with adding in new suppliers from other countries is that the demand is not compatible because Danes prefer milk from Danish suppliers. Furthermore, supplying from for instance Germany will increase the lead times and thus decrease the shelf life of products.

#### **Current to Future Situation**

Due to the fact that the Category Strategy Development for dairy products is currently being developed and is not complete, exact information about current to future situation including the

actions and execution of such is not available. However, information was given on which elements to include in the category strategy for dairy, the logic behind each strategic element, and the expected results.

Accordingly, CT seeks to source Danish milk from its core supplier Osterhusumer in Germany, in order to apply pressure on Arla, generate greater competition, and obtain favorable prices (CT PPT Category Strategy Development - Dairy). Additionally, CT is attempting to prequalify the supplier Nöm for cottage cheese in order to be able to rely on an alternative supplier for cottage cheese for the Finnish market and this is once again to be able to apply pressure on Arla. CT also seeks to develop a private label brand for rice desserts to be supplied to Coop Sweden and Denmark. The logic behind this is based upon increasing value through volume bundling in order to obtain better prices (CT PPT Category Strategy Development - Dairy). Lastly, CT wants to introduce extended shelf life (ESL) milk to the Scandinavian market in order to provide customers with an alternative and unique product and it is expected that this will increase the volume and value of the assortment (CT PPT Category Strategy Development - Dairy). An overview of the category strategy is provided in Appendix 7.

## 6. Analysis

## 6.1 Evolution of Strategic Sourcing: Literature versus Coop Trading

In line with how the evolution of the sourcing function is described in literature it can be argued that CT has also developed the role that sourcing has within the company. As alluded in literature, the role of sourcing has undergone a shift from assuming a functional and operational perspective to a more strategic one. However, since CT is a sourcing company it can be argued that the sourcing function has always been strategic in some sense. Thus the challenges that literature refers to in aligning the sourcing strategy with the corporate strategy has in general not been experienced by the company. Nonetheless, the changes that CT has undergone with regards to the development process of its sourcing strategies is that sourcing strategies are now to a large extent less developed on an ad-hoc basis, but are rather structured and thought through via the usage of frameworks and tools.

Additionally, CT has explicitly started to integrate supplier perspectives into its sourcing strategy development process in the attempt to be the best sourcing partner for its suppliers. On the other hand, literature on the development of the sourcing function does not explicitly state that integrating supplier perspectives serves as a condition for making the role of sourcing more strategic. Lastly, literature does refer to the need of increasing the effectiveness and efficiency of the organizational setup of the purchasing function for it to become more strategic. It can be argued that CT has to a certain extent increased the organizational setup of the sourcing function by assigning buyers to the sourcing strategy development processes of categories, but that the effectiveness and efficiency of this cannot be measured yet, since they have only recently started doing this.

# 6.2 Comparing the Strategic Sourcing Process to the Category Strategy Development Framework

The strategic sourcing process proposed by Handfield et al. (2011) is a very systematic stepby-step approach to develop a sourcing strategy. It can be argued that CT is similarly relying on a framework for developing category strategies, however, the steps in CT's process are less clearly defined. Some of the elements of the strategic sourcing process outlined by Handfield et al. (2011) are sometimes used by CT in a predetermined order and sometimes not. The following section will compare the two processes and highlight the similarities and differences that have emerged between the two.

Taking point of departure in theory, Handfield et al. (2011) propose initiating the process of developing sourcing strategies by building a cross-functional team that should be in charge of defining the scope of the category strategy, publish a project charter, and develop a work and communication plan. With regards to establishing a cross functional team, CT does not view this as a necessary step, but implicitly integrates product specialists and members of both the quality and design department. Especially during the stages of pre-qualification, which includes quality assurance and tasting and when harmonization needs to be considered during the new product development stage. On the other hand, both processes allude to the fact that categories need to be scoped and CT specifically does this by identifying the spend, the products and services involved, as well as the relevant geographies in terms of customer and sourcing locations.

In terms of market research both processes recommend developing a spend analysis on a category basis and to triangulate different sources of data. Specifically, CT uses the Nielsen database for its internal retailer market research and the Kairos database for obtaining external commodity related data. Additionally, both processes propose the usage of data representation tools such as the SWOT analysis, however, CT also relies on a current situation overview in order to summarize and present relevant facts. On the other hand, CT specifically dedicates time and resources to determine and score the importance of the data required as well as the extent to which this data is available and has been collected. Handfield et al. (2011) does not propose such a scoring system in terms of data requirements and availability.

The next step in the strategic sourcing process proposed by Handfield et al. (2011) is the strategy development step which entails classifying suppliers and defining a sourcing approach. Within this step, Handfield et al. (2011) deem that a portfolio analysis can be done to structure and segment the supply base in order to develop appropriate sourcing strategies. In order to achieve this Handfield et al. (2011) specifically suggest the usage of a purchasing portfolio matrix together with a supplier evaluation scorecard. CT does in fact utilize a purchasing portfolio matrix to categorize the product types that it is sourcing in terms of relative cost and supply risk. A comparison on the structure and usage of the purchasing portfolio matrix proposed by Kraljic (1983) and the one used by CT will be elaborated in the following sections.

However, rather than directly evaluating suppliers through supplier evaluation scorecards, CT evaluates the performance of suppliers based on spend, qualifications, capacity levels, and through the supplier view matrix. Although CT evaluates suppliers on the basis of these factors, CT does not directly assign scores to suppliers as done through supplier evaluation scorecards. Nonetheless, CT is highly aware of the process and design capabilities of its suppliers and prequalifies them on the basis of these terms. This is especially important for NPDs and the harmonization of PDs for private labels products. Accordingly, Handfield et al. (2011) deems that relying on qualified suppliers for product design activities reduces the time required for the achievement of successful NPDs, however, it can be argued that, since CT develops and supplies private label products, this is a necessity for the company. Furthermore, Handfield et al. (2011) explicitly suggests analyzing the financial conditions and cost structures of suppliers through the

usage of financial ratios. Regarding this aspect, it can be argued that CT is to a certain extent aware of the financial positions of its suppliers, but does not explicitly utilize financial ratios to assess their financial strengths and reliabilities.

Handfield et al. (2011) proposes a step in which win-win contracts are negotiated with suppliers. Although CT is not explicitly dedicating an individual step to negotiating contracts, it does so implicitly once suppliers have been selected. Nonetheless, both frameworks imply that a certain degree of readiness is required as well as the correct data to ensure successful negotiations. Additionally, Handfield et al. (2011) states that buyers sometimes use preferred suppliers, who have previously proven their performance capabilities and these suppliers are given priority during selection and negotiation processes. CT similarly relies on preferred suppliers, but also relies on a classification system, where suppliers are firstly qualified, approved, then ranked as preferred, and finally viewed as strategic.

Lastly, Handfield et al. (2011) deems that it is necessary to manage the relationships with suppliers. Specifically, it is the buyer's job to continuously review, update, as well as align the objectives of the sourcing strategy to market changes. In order to do this, buyers should monitor the performance of suppliers based on cost, quality, and delivery performances. Although CT does not outline this as a specific step, CT does utilize the current to future overview to determine how suppliers are currently being developed including how the relationships are managed compared to future supplier development. Managing supplier relationships is further supplemented with the use of the supplier view matrix, which is used to determine which suppliers CT should invest in, in terms of time and resources. Lastly, CT utilizes a current to future overview as well as a summary of results to outline the current strategy and the specific elements and actions that are required to develop this strategy, which Handfield et al. (2011) does not suggest and it can be argued that this should be viewed as an additional step.

# 6.3 Applying and Comparing the Purchasing Portfolio and Product Portfolio Matrices

## 6.3.1 Determining Supply Risks and Product Positions for the Frozen Potatoes and Dairy Category Groups

Theory stipulates that supply risks in the purchasing portfolio matrix include availability, number of suppliers, competitive demand, make-or-buy opportunities, storage risks, and substitution possibilities (Kraljic 1983). Similarly, the strategic buyer explicitly considers product availability as the one of the most important supply risk to take into account when utilizing the product portfolio matrix. In fact, guaranteeing on-shelf availability is considered as the number one risk to address.

In order to ensure product availability, CT mainly focuses on its supplier base. CT especially considers the number of suppliers that it is relying on and whether new relationships need to be established in order to ensure product availability and competitiveness. Specifically, in terms of frozen potatoes, CT relies on three to four suppliers for the products of standard fries, crinklecuts, and wedges and thus these products present relatively low supply risk. At the same time, these products constitute a high spend of 28%, 20%, and 15% respectively and can therefore be considered as leverage products. Similarly, for dairy products, cultured, cream, and yogurt products are considered as leverage products. This is because cultured and cream products are sourced from five different suppliers respectively, whereas yogurt is procured from four different suppliers and these products constitute the highest spend after milk.

Sliced potatoes, yogurt drinks, and desserts are all considered as routine products. This is largely due to the fact that these products represent low spend and supply risk. CT currently has five different supplies for desserts and can thus rely on competing supply alternatives. On the other hand, sliced potatoes are only procured from the two suppliers of Clarebout and Weston and yogurt drinks are also sourced from two suppliers. It can thus be argued that although supply risk in terms of supplier dependency could be high, the spend to justify such risks is not sufficient.

On the other hand, for the category of frozen potatoes, although organic products constitute a relatively low spend, these products also present a significant risk, since CT is only relying on one supplier for organic frozen potatoes. Organic frozen potatoes are thus positioned in the bottleneck quadrant. The strategic buyer claims that in order to secure supply, relying on one supplier is not enough, since if something were to occur to that one supplier, CT does not have any alternative suppliers that could cover the production. CT would therefore not be able to source organic potatoes until a new supplier is found. This implies that there is a significant risk associated with single sourcing and that multiple sourcing is preferable for CT. In terms of the dairy category, cottage cheese and allergy products are also considered as bottleneck items. Both products constitute the low spend (2% and 4%) and cottage cheese comprises solely of three product types procured from one supplier and allergy products are also sourced from one supplier. These products thus present a significantly high supply risk in the form of supplier dependency.

Special products, such as barbeque potatoes similarly present significant risks since CT also relies on one supplier for these products. The spend however, for these products is significantly higher than for organic potatoes and thus special frozen potatoes are positioned in the strategic quadrant. On the other hand, milk is situated in between the quadrants of leverage and strategic. Undoubtedly, milk presents a high relative cost for CT and supply risks are as well high, since CT is solely relying on Arla for its twelve private label milk products.

Furthermore, in addition to considering the number of suppliers and substitution possibilities, CT also evaluates the qualifications, performances, and capacities of its current suppliers. Specifically, CT critically analyzes its supplier base and evaluates the extent to which it is composed of large and dominant suppliers and small, flexible, but capacity constrained suppliers. On the other hand, CT does not explicitly seem to consider make-or-buy opportunities due to the fact that it is a sourcing company and thus relies on suppliers to develop products for the private label products that will be sold in the Coop retail stores. Furthermore, contrasting theory, CT does not directly take into account storage risks when utilizing the product portfolio matrix. This same argument can be applied to competitive demand, however CT does on a continuous basis evaluate how to most efficiently bundle volumes and harmonize PDs in order to offer its customers the most attractive product assortments at favorable prices.

Contrasting the theoretical framework, which extends the purchasing portfolio matrix with the supply risks of perishability and seasonality, CT does not directly apply these risks when using the product portfolio matrix. However, for the frozen potato category, it can be argued that both perishability and seasonality factors are considered through category management. This is especially relevant for the harvest category to which frozen potatoes belong in. The strategic buyer explicitly states that the quality, size, and accessible volumes of the products belonging to the harvest category depend upon weather and harvest developments. Additionally, a high degree of seasonality in terms of harvesting periods implies that buyers need to put forth a lot of effort in drawing up an annual sourcing strategy before the contract is renewed (CT Interview 1, pg. 9).

Perishability is also taken into consideration especially in terms of storage, since harvest products are usually bought once per year and thus the freshness and quality of for instance potatoes needs to be ensured through appropriate warehousing conditions. Overall, although agricultural-specific supply risks are not explicitly accounted for when positioning items in the product portfolio matrix, these risks have already been considered through the establishment of the category.

As opposed to the harvest category of frozen potatoes, which is significantly affected by seasonality, dairy products do not belong to a category where seasonality plays a significant role in terms of supply risk. Instead market and macroeconomic conditions as well as regulations and national customer preferences can present great risks. Naturally, perishability and reduced shelf-life risks are considered when deciding and managing logistical arrangements with suppliers. These factors are viewed as additional considerations and will be elaborated further in the subsequent section of the analysis.

Although the weighted factor score method is recommended as the manner in which buyers should prioritize and select the supply risks to consider when using the purchasing portfolio matrix, practice does not reflect this. In fact, CT does not utilize any form of method when selecting which supply risks to focus on. Instead, supply risks are decided on an ad-hoc and buyer basis. It can be argued that the manner in which supplier risks are prioritized leans towards the one-by-one method. This is because although the strategic buyer claims to critically analyze the qualifications, performances, and capacities of its current suppliers when positioning products in the product

portfolio matrix, the reasoning process reflected that a greater emphasis is placed upon the number of suppliers and substitution possibilities. Furthermore, the fact that buyers do not discuss which supply risks to consider between other buyers or cross-functionally further contributes to the fact that the one-by-one method is utilized.

Overall, the product portfolio matrix is primarily utilized to position products in terms of spend and the number of suppliers as well as supplier substitution possibilities. Although additional supplier factors are considered, a significant focus is given to the number of suppliers when actually positioning products within the matrix. It can be argued that this enables buyers to easily utilize the product portfolio as an initial reference for the positioning of suppliers within the supplier view matrix. Nonetheless, the theoretical intention of the product portfolio matrix is to certain extent not aligned to theory and this will be elaborated further in the subsequent sections and discussion.

#### 6.3.2 Alternative Considerations

Literature alludes to the importance of considering regulations and technological as well as socio-economic drivers when sourcing agricultural commodities. For both categories viewed it can be concluded that CT does take regulations into account. Especially the products included in the dairy category are subject to conforming to regulations due to their perishable nature. In fact, CT either sends required documents to suppliers or uploads them through the Scanmarket before performing a tender or e-auction. Such documentation includes a code of conduct, product and quality requirements, and the inclusion or omission of chemical substances, such as straw shortening chemicals (PPT About Coop Trading, 2016).

Furthermore, regulations can be either general or country-specific and the strategic buyer heavily expresses his frustration on this matter because the rules for what can be included in dairy products vary from country to country. In terms of the category of dairy products, some vitamins and aromas are allowed in some countries whereas they are prohibited in others and as a result "you have a lot of specialized products that are different from country to country and we are struggling with harmonizing the products" (CT Interview 2, pg. 8).

The presence and removal of quotas is also relevant to consider when it comes to the sourcing of milk based products. The recent abolishment of the EU Milk quota regime resulted in an oversupply of milk and thus the sharp decrease in milk prices. Overall, macroeconomic factors and regulations affect price fluctuation risks and thus the usage of fixed versus open-end contracts. On the other hand, quota restrictions do not seem to be prevalent in the supply market of potatoes and as mentioned above CT is accounting for product liability laws for all of the agricultural goods that it is sourcing.

Technological drivers in the form of novel technologies generating economies of scale, industry consolidation, or tighter control over product quality do not directly affect the sourcing process of potatoes done by CT. With regards to dairy products the need for differentiated product descriptions that conform to national consumer preferences complicates the utilization of economies of scale.

On the other hand, logistics clusters and the ability of suppliers to assume logistics functions play a rather significant role in the evaluations that CT makes when sourcing agricultural commodities. Although CT is generally in charge of managing the logistics functions itself when it comes to the sourcing of private label products, in some cases within the dairy category, suppliers individually dispose of the logistics function and this can result in significant cost reductions on the part of CT. Such suppliers often "base their whole business strategy on logistics and they have big seller advantages because they can deliver directly to the stores" (CT Interview 1, pg. 9). Additionally, logistical arrangements and lead times affect the shelf-life of products and this can impose restrictions on the number of suppliers CT can use (Interview 2, pg. 11). Overall, it is especially important for CT to be able to rely on suppliers that possess adequate distribution capabilities and CT carefully evaluates which party is able to assume the logistics functions and compares the end-costs of each scenario.

Socio-economic factors in terms of national customer preferences and demands are also considered when sourcing private label frozen potatoes and dairy products. However, it can be argued that such considerations play to a large extent a much more significant role when it comes to the sourcing of milk-based products. In fact, the strategic buyer emphasizes that it has been extremely difficult to formulate a strategy on a category basis for dairy products, since the category involves a multitude of suppliers and products that need to conform to national brands and customer preferences (Interview 2, pg. 8). This contributes to the complexity and number of PDs that CT has to handle.

## 6.4 Determining Sourcing Strategies

It is suggested through the theoretical framework that sourcing approaches and strategies should emerge based on where items are positioned within the purchasing portfolio matrix. However, an important finding from the empirical data reveals that CT only does this to a certain extent. The application of the product portfolio matrix in CT's case serves the main purpose of establishing a foundation for the subsequent use of the supplier view matrix. It can then be argued that CT implicitly uses the product portfolio matrix to determine sourcing strategies, however, the supplier view matrix plays a dominant role and the sourcing strategies are extremely supplier oriented. Consequently, the manner in which products are bought does not change based upon where products are positioned in the matrix. Furthermore, sourcing strategies are decided purely on an individual buyer basis and time and effort also play critical roles in choosing what sourcing strategy to employ.

Keeping in mind the above considerations, CT largely attempts to push and create competition between the suppliers for products positioned in the leverage quadrant (standard fries, crinklecuts, wedges, cultured, cream, and yogurt). This is comparable to the generic strategy of exploitation proposed by Kraljic (1983), which is based upon spreading volume over various suppliers and exploiting price advantages. However, the usage of competitive tendering and e-auctions suggested in the theoretical framework is not incorporated in the sourcing strategy for leverage products. In fact, there is no clear link between the leverage product position in the matrix and the way these products are sourced.

In terms of routine products (sliced potatoes, yogurt drinks, and desserts) the buyer expresses that not much attention is given to routine products and thus limited efforts are put forth in managing these products. This contrasts the sourcing strategy proposed in theory, which is based upon efficient processing, product standardization, order volume, and inventory optimization (Gelderman & Van Weele, 2003). Furthermore, the theoretical framework proposes the sourcing approach of spot markets, which CT does not directly rely on as way to purchase their products.

On the other hand, the buyer is working on preapproving more suppliers for organic potatoes positioned in the bottleneck quadrant. This is not only to secure supply and reduce the risks of single sourcing, but also because index numbers derived from the current situational overview indicate an increasing demand of organic potatoes especially in Denmark and in Sweden. Similarly, the buyer is also searching for alternative suppliers for cottage cheese and allergy products in order to reduce dependency on the suppliers for these products. Consequently, the buyer is to a certain extent employing a diversification strategy, where volumes are currently concentrated in a single supplier (Kraljic, 1983). Furthermore, it can be argued that the buyer is also pursuing a long-term diversification strategy by investing time in looking for alternative sources of supply. Nonetheless, inventory and backup plans are not explicitly considered and the bottleneck quadrant does not constitute that one sourcing approach should be used prioritized over another as it is initially proposed in the theoretical framework.

Regarding barbeque potatoes positioned in the strategic quadrant, CT has formed a strategic alliance with the supplier. This largely conforms to what is stated in the theoretical framework, which emphasizes that partnerships and long-term relationships should be established with suppliers for strategic products. However, whether products are positioned in the strategic quadrant or not does not affect whether a buyer will engage in a long-term or cost-based contract as suggested in the theoretical framework. Furthermore, the buyer is working on preapproving more suppliers for barbeque potatoes and this strategic initiative deviates from theory. On the other hand, for the product of milk, CT currently attempts to reduce its dependency on Arla by searching and approving new suppliers and is thus unsure whether to consider milk as strategic or leverage. Possible strategic movements and perspectives on Arla as a supplier will be elaborated further in the following sections of the analysis.

As previously mentioned, each buyer has their own preferences and way of buying. Some buyers prefer to purchase agricultural commodities through e-auctions, while others favor the more traditional way of utilizing the phone to contact suppliers and some buyers use a combination of those methods. However, CT relies on a framework purchasing agreement, if the tendering process is used. This includes firstly reviewing the Scanmarket by sending out a RFQ in order to screen prices and request quotations in order to ultimately establish the fact base (PPT About Coop Trading). Relevant documents are then submitted through the Scanmarket, including logistical specifications, which are specific to the respective countries, product and quality requirements, and code of conducts. Quick guides for logistics labels are also sent and depending if the tender requires samples, CT might request samples to be tested (PPT About Coop Trading).

Nonetheless, the strategic buyer does claim that some conditions need to be fulfilled in order to use certain approaches. Aligned with theory, the strategic buyer claims that competition in the form of number of suppliers needs to exist in order to perform a successful e-auction. In addition to this, the buyer also asserts that the difference in prices offered by bidders need to be close enough to generate enough pressure for obtaining the most optimal price. The buyer explicitly states that if this does not occur then suppliers will in general "enter a new price and a new price – and it won't get close to the first price that the first supplier entered" (CT Interview 1, pg. 19).

In addition to the sourcing approaches being determined individually by buyers, the risks and conditions that seasonality impose also significantly affect the manner in which frozen potatoes are sourced. As previously mentioned, this is considered when products are grouped in categories. In fact, the reliance on long-term and fixed price contracts for frozen potatoes does not change based on whether not a specific frozen potato product is bottleneck or strategic. As previously justified, using and renewing long-term and fixed price contracts is instead based upon harvesting patterns and the avoidance of re-purchasing potatoes at higher prices. Consequently, harvesting patterns for the category of frozen potatoes largely require buyers to engage in forward buying. Furthermore, the strategic buyer argues that because of the risks that seasonality imposes, it is important that CT does good tendering, inform, and prequalify suppliers in order to have the exact specifications and expectations aligned when the last negotiations are initiated in the middle of May (CT Interview 1, pg. 2).

However, for dairy products, macroeconomic factors and regulations can mediate the extent and direction which prices fluctuate. For instance, in the case that prices are are forecasted to remain low, CT is incentivized to pursue the usage of fixed price contracts for a significant period of time. However, the supplier in question will most likely not be inclined to enter such an arrangement and thus a compromise of three to six month open-end contracts, which can be changed will mostly likely be agreed upon (Interview 2, pg. 9).

Overall, CT mainly relies on the sourcing approaches of tendering, e-auctions, alliances and partnerships, short-term and long-term contracts, as well as open end and fixed-price contracts. Deviating from the theoretical framework, CT does not seem to be utilizing the spot market and cost-based contracts when sourcing agricultural commodities. It can be argued that CT does not rely on the spot market because it sources products that are intended for its private label brands. This requires a certain degree of negotiation on especially quality requirements and in terms of product descriptions. This is especially important in order to conform to customer preferences, which can differ from country to country and in attempting to harmonize these differences in order to benefit from volume bundling and production economies of scale on the part of suppliers.

Open end contracts are also commonly used and such contracts can be changed either on a three, six, or twelve-month basis, depending on what CT and the supplier agrees upon. However, the buyer argues that three-month open end contracts are not particularly useful, since changes are rarely integrated before re-negotiations must be done again. In general, open end contracts require awareness of market developments on the part of both CT and the supplier in question and this can sometimes be challenging especially with products situated in the routine quadrant. Lastly, cost-based contracts are not used by CT due to reasons related to competitiveness.

# 6.5 Supplier Perspectives: The Dutch Windmill Model versus the Supplier View Matrix

CT uses the supplier view matrix to position the suppliers enrolled in each category and to highlight the possible movements of the suppliers. Furthermore, CT uses the supplier view matrix to point out the potentialities of suppliers and thus which suppliers to focus on and prioritize over others. Due to the fact that the supplier view matrix builds upon how suppliers view CT as a buyer, it can be used to track changes in the relationship and largely serve as a basis for an action plan for how CT should deal with its suppliers now and in the future. The supplier view matrix enables CT to realize where to place additional efforts with its suppliers and take actions to nurture relationships by for instance increasing the number of supplier visits, interaction, or information sharing.

In both cases the matrix is based upon the dimensions of relative value and company attractiveness forming the four positions of core, exploitable, nuisance, and development. For CT the reasoning behind positioning suppliers in the matrix is generic and applies for the category of frozen potatoes as well as the category of dairy. According to the strategic buyer, the position of core is where CT is searching for the perfect relationship (CT Interview 2, pg. 3). Both the supplier and CT are benefitting from such a relationship and "it is an open collaboration where you try to find common ground to work towards your goals" (CT Interview 2, pg. 3).

With regards to the position of exploitable, the strategic buyer explains that this is where one big supplier is dominant and representing a big spend by supplying CT with a lot of products (CT Interview 2, pg. 3). However, with exploitable suppliers CT often experiences some imbalances in terms of for instance service levels, relationship, or delivery of campaigns and the suppliers "might have issues understanding the way you work and they don't really want to accept it" (CT Interview 2, pg. 3). As a result, the company attractiveness is low in the exploitable quadrant and this is well aligned with what theory dictates.

According to the strategic buyer, the position of nuisance "is where is doesn't really matter" and it is emphasized that the main goal in this quadrant is to try to move suppliers to another position if possible by giving the suppliers more orders or new products and thus increasing their workload (CT Interview 2, pg. 3). Lastly, the position of "development is about growing and seeing possibilities" (CT Interview 2, pg. 4) and the aim is to move towards the core quadrant, however such actions can be very time consuming. Even though the positions within the matrix are well aligned with theory as well as generically applicable for both categories, the conditions for positioning suppliers are evidently different for each category and these will be elaborated separately in the section below.

For the category of frozen potatoes, CT is currently not on good terms with its core supplier Clarebout and does not feel that Clarebout views CT as attractively as it once did (CT Interview 1, pg. 16). Consequently, the strategic buyer deems that Clarebout might be moved down to exploitable or nuisance if the disagreement persists. However, the buyer realizes that "I have put too many eggs in that basket" and that if the relationship ends, CT will have to find new suppliers that can compensate for the supply that Clarebout has been providing (CT Interview 1, pg. 17). Another important consideration to make is that Clarebout is able to produce a large volume of standard french fries at the price and quality, which CT needs, whereas for instance Weston produces more customized fries such as twisters (CT Interview 1, pg. 17). As a result, the buyer deems that "if I need to find new suppliers to cover that volume I can pretty much expect a price increase and it take a lot of effort and resources internally" (CT Interview 1, pg. 17).

Nonetheless, CT is not able to share information with Clarebout as it once did, since trust between the two parties is simply not there anymore (CT Interview 1, pg. 16). CT does however, share strategic information with Weston, as it deems that Weston will not utilize the information given to its own advantage. The rest of the suppliers in the category of frozen potatoes are more or less positioned in the development quadrant in the supplier view matrix and this implies that there are many options available for substituting Clarebout. These suppliers all find CT attractive and at the same time they are not representing high value to CT. This means that with the right amount of time and effort there is significant potential for development in order to make these suppliers more competitive and able to match Clarebout. On the other hand, what characterizes the suppliers for frozen potatoes is that they are each specialized in one or two segments (CT Interview 2, pg. 1) which can impose some limitations in terms of capabilities when trying to find a substitute for Clarebout.

For the category of dairy, Arla is a dominant supplier representing half of CT's total spend. The buyer accordingly expresses that "Arla is definitely up in exploitable for me - 50% and they are definitely taking advantage of it" (CT Interview 2, pg. 8). Currently, Arla is the only supplier that can provide CT with Danish milk meaning that they have monopoly in the market and consequently CT aims to find new suppliers that can add to the competition. However, the strategic buyer elaborates that the problem with adding in new suppliers from other countries is that the demand is not compatible because Danes prefer to drink milk from Danish suppliers. Furthermore, supplying from for instance Germany will increase the lead times and thus decrease the shelf life of products.

The main problem with the suppliers for dairy is that even though they are more or less all able to produce the same types of products, they do not have the capacity to produce the same volumes as Arla. As a result, reaching the overall strategy of harmonization is a challenge, which is highly expressed in the strategic buyer's frustration when it comes to developing a homogeneous strategy for the entire category of dairy products.

DMK and Osterhusumer are both core suppliers of dairy products representing high relative value to CT as well as high company attractiveness. In the second interview the strategic buyer explicitly expresses that especially DMK, a German supplier, assumes a core position for CT. This is because DMK is currently in the limelight for substituting Arla as they are able to supply similar products, except milk that at least for Denmark has to be from Danish suppliers. Tere and Mona are placed in the nuisance quadrant because they have little interest in engaging with CT and at the same time they are not representing much value to CT. Lastly, Karwendel and Nöm are placed in the development quadrant in the supplier view matrix because they find CT attractive and are interested in working with them.

It can be argued that the supplier view matrix is more or less comparable to the Dutch Windmill model presented in theory, especially in terms of purpose and objectives. According to theory, the objective of the Dutch Windmill model is to enable buyers to mirror their views with respect to the views of the suppliers involved and this can lead to more realistic expectations and plans with regard to future buyer-seller relationships. These objectives are well aligned with the objectives of the supplier view matrix as it is in fact based on the CT's attractiveness to its suppliers and the relative value that the supplier represents. As mentioned above, the procedure of implementing the suppliers view matrix in practice is based upon the product portfolio and this is also well aligned with how theory suggests to implement the Dutch Windmill model.

However, the practical application of the supplier view matrix deviates from theory in one critical matter. In the supplier view matrix CT considers the entire pool of suppliers enrolled in each category at once instead of focusing explicitly on the suppliers relative to each specific quadrant in the product portfolio matrix (leverage, strategic, bottleneck, and routine). Adapting the suppliers view matrix to encompass such specifications derived from theory could possibly enable CT to get a

more accurate and realistic perception of their suppliers' positions as well as the future actions that should be taken in order to continuously nurture and maintain the relationships with important suppliers.

### **6.6 Strategic Movements**

As it has been highlighted in the theoretical framework, the purchasing portfolio matrix developed by Kraljic (1983) largely lacks to provide guidelines for strategic movements of commodities or suppliers within the matrix. However, Gelderman and Van Weele (2002; 2003) strongly recommend that purchasing professionals should always aim to move to another more favorable strategic position in the matrix if possible. Alternatively, if such strategic movements are not possible, purchasing managers should strive for holding the current position within the matrix.

From the first interview it was immediately clear that CT does in fact position each item of the category in the product portfolio. On the other hand, after the first interview it was still unclear whether CT considers the strategic movement of products in the matrix. The second interview does however, shed light on this matter and reveals that CT does aim to move products in order to reach an optimized position within the matrix. Furthermore, CT actually also considers strategic movements within the supplier view matrix, which is immediately possible due to the fact that the structure is similar to the product portfolio matrix. In this particular case, practice deviates from theory, as theory only focuses on the possibility of performing strategic movements within the purchasing portfolio matrix can be more or less equated with the Dutch Windmill as both models evaluate the impact of the supplier view within the strategy development, theory does not suggest strategic movements within the Dutch Windmill.

More specifically, the strategic buyer states that the most optimal position within the product portfolio matrix is leverage representing low supply risk and high relative cost and that CT aims to move all products to leverage if possible. However, some products might not have the potential to be moved directly to the leverage quadrant due to specific conditions and characteristics. The strategic buyer explicitly states in the first interview that "you want as many products in strategic and leverage quadrants as well as suppliers in core and development quadrants as possible" (CT
Interview 1, pg. 16). This statement is further evinced in the second interview where it is affirmed that all products should ideally be moved to leverage and the strategic buyer additionally states that "you want to move anything that is not leverage, if it is important" (CT Interview 2, pg. 4).

From the interviews, the action of moving suppliers in the supplier view matrix actually eclipses the strategic movements of products in the product portfolio matrix, which once again emphasizes the deviation from theory. The strategic buyer mainly focuses on the strategic movements within the supplier view matrix whereas the movements of products in the product portfolio matrix were not really elaborated upon before directly addressed in the second interview. This is also the reason why the main focus in this section has been placed upon the strategic movements within the supplier view matrix.

CT aims to position their suppliers within the core or development quadrants and suppliers not included in these quadrants should be moved if possible. More specifically, moving suppliers from exploitable to core entails having open conversations with the suppliers about the current situation and the specific actions necessary to move towards a more optimal position (CT Interview 2, pg. 3).

In terms of nuisance, the strategic buyer explicitly emphasizes that the overall aim of this quadrant is to move, of course only in case the supplier represents a certain level of value and potential to CT. The specific movement from the position of nuisance can be done by for instance "increasing the workload by giving the supplier more orders or new product to move it up in value and also make yourself more attractive to the supplier" (CT Interview 2, pg. 4).

Lastly, the strategic buyer highlighted that the suppliers positioned in the development quadrant have several options of strategic movements. The aim is still to move towards core, but depending on the specific conditions, capabilities and relationships with the suppliers included in development, they can take various positions within the matrix. The strategic buyer conclusively states that "development is about growing and seeing possibilities and maybe it doesn't go into core, maybe it stays in development maybe it even goes a little bit back to nuisance - but development is about moving up in core and usually there is a lot of time invested there" (CT Interview 2, pg. 4).

Theory emphasizes that an immediate advantage of using a purchasing portfolio matrix, especially one including considerations regarding strategic movements, is that it enables purchasing managers to position commodities in different segments in order to develop differentiated sourcing strategies. It can be argued that CT does not fully exploit this advantage in the application of their product portfolio and supplier view matrix since they ultimately develop a sourcing strategies for the entire category, both for frozen potatoes and dairy and they do not develop differentiated strategies for the individual products within each category. Conclusively, on the matter of considering strategic movements, it should be noted that CT focuses more on the movement of suppliers than the movement of products. This is of course only based on the impression that was given during the two interviews, but there seems to be an imbalance between the application of the product portfolio matrix and the supplier view matrix.

### 7. Discussion

## 7.1 The Usage of Frameworks and Tools for Developing Sourcing Strategies

It has to be evinced that the sourcing strategy of CT, which is based upon global sourcing, harmonization in terms of volume bundling and product descriptions, supplier development, and providing attractive assortments to customers has not changed throughout the years. However, the manner in which the sourcing strategy of CT is achieved has drastically altered with the introduction of the category strategy development process and the product portfolio as well as supplier matrices. Although the thought processes related to the positioning of product segments and suppliers has always been implicitly applied within the company, these processes were not structured and formalized in any way whatsoever. In fact, buyers were largely working in any direction that best served their needs.

The adoption of the above mentioned frameworks and tools largely resulted from a demand on the part of the strategic buyers of CT. In fact, buyers had been for some time asking for better tools that they could use in order to adequately manage their categories. Overall, this demand was also based on a desire to increase the personal and professional developments of buyers. This has resulted in the management of CT heavily investing in the implementation and diffusion of relevant frameworks and tools. The formalized integration of these instruments began with the usage of an external consulting firm. The consulting firm through a six-day workshop firstly introduced and then elaborated upon the theoretical foundations of the models. Next, casework was used as a method to allow buyers to apply the models, and ultimately buyers were given the opportunity to apply these models on the categories, products, and suppliers of CT. It can thus be argued that the strategic buyers of CT received a well rounded and all-encompassing introduction as well as training session on understanding and applying the frameworks and tools.

The advantages of the models include the fact that they provide buyers with focus and awareness on possible details that might have previously been over-looked. This includes the importance of individual product segments, the manner in which suppliers are viewed and are treating CT as a customer, and the potential gaps, which need to filled. In fact, the strategic buyer claims that the framework and tools enable him to generate conclusions, which previously he would not have been able to derive. Ultimately, the usage of the category strategy development framework and the product portfolio as well as supplier view matrices enable buyers to gain a more accurate overview of category strategies as well as the manner in which these strategies can and should be improved.

On the other hand, a disadvantage includes the fact that the framework and models are to a large extent generic and this results in the need for buyers to highly customize the usage of these instruments. The strategic buyer claims that adapting the models to varying situations and products can be challenging and that it generally entails flexibility on the part of the buyers. Additionally, since the manner in which these models and tools are applied is extremely buyer-specific, strategies are either developed on a category level or for specific product segments. This entails that an alignment between varying sourcing strategies and the way buyers utilize the framework and tools has to be reached and maintained.

Nonetheless, the buyer views the adoption of these models very positively and actually converts the need for a high degree of customizability into an opportunity. In fact, the strategic buyer claims that the most important feature of the models is that they enable buyers to effectively

initiate and formalize the thought processes relevant to the development of a category strategy. As a result, aligning the different ways in which buyers utilize the framework and tools and the consequent sourcing strategies that emerge is not viewed as an issue by the buyer. This is because most buyers utilize the foundations in terms of diagrams and figures and that these are comparable to each other. Furthermore, it was emphasized that most buyers utilize and present the same steps and that the ability to supplement the framework and tools with additional elements contributes to flexibility that buyers have when applying the models.

# 7.2 Opportunities and Recommendations: Filling in the Gaps in Literature

#### 7.2.1 Application of Framework and Models Across Industries

It can be argued that due to the generic nature of both the strategic sourcing process, the purchasing portfolio matrix and the Dutch Windmill model presented in theory, these models can be applied across different industries including the agricultural industry. The original purchasing portfolio matrix proposed by Kraljic (1983) as well as the subsequent alternated versions of the model have all been applied in various industries confirming that the purchasing portfolio matrix can be adjusted according to specific industries. As an example, Stekelenborg and Kornelius (1994), who proposed an alternative version of the purchasing portfolio model, emphasize that even though the framework is originally developed for the use in an industrial environment, it can just as well be applied in other fields where purchasing is important.

As continuously highlighted throughout this thesis literature has not attempted to apply these specific frameworks and tools in the agricultural industry and as a consequence we have aimed to shed light on this specific matter. One of the biggest findings from this study is that CT is in fact already using a product portfolio matrix as well as a supplier view matrix and it can thus be stated that these models can be applied in the agricultural industry as well. However, it can be argued whether the models are used correctly according to the theoretical intended purposes and these differences will be elaborated upon in the subsequent sections. On the other hand, literature highly emphasizes that frameworks and models used to determine sourcing strategies should in fact be customized to industry specific situations. Especially, Handfield et al. (2011) states that the actual outcomes of the commodity strategy development process may vary considerably, depending on the specific commodity and the supply market. It is questionable whether CT does in fact customize the models provided to them by the external consultancy firm, since the dimensions used in both the product portfolio matrix as well as the supplier view matrix are not considered specifically in relation to the agricultural industry.

Specifically, with regards to the process of developing sourcing strategies, it can be argued that the strategic sourcing process proposed by Handfield et al. (2011) is too rigid and systematic for practical application, at least in comparison to the process that CT relies on. CT takes point of departure in the same template when developing category sourcing strategies including a standard set of elements that are compatible with the process proposed in theory and as thoroughly described in the analysis. The main difference lies in the fact that CT's category strategy development process is not a step-by-step process per se, but more of a working document that does not require one step to be fulfilled before moving on to the next.

### 7.2.2 Theoretical Intention versus Practical Application

A main difference that emerged from the comparison made between the purchasing portfolio matrix in theory and the application of the product portfolio matrix on the part of CT is the way in which CT determines which supply risks it will use within the matrix. Firstly, it can be argued that the supply risks that the specific buyer interviewed considers and uses within the product portfolio matrix are very supplier specific. Although product availability is considered as the primary risk, it is primarily based upon the number of suppliers that CT can rely on. The size of these suppliers and their qualifications, flexibility, and capacities are also taken into account, but to a much lesser extent. However, since buyers largely decide these risks on an individual basis, the determination of the type of supply risks may vary from buyer to buyer.

Ultimately, it can be inferred that, since buyers make such decisions on an individual basis that the selection of supply risks is too a large extent biased and subjective. On the other hand, it does increase the accountability of buyers if a supply risk which was not accounted for emerges and serves as a basis for supply disruption. Nevertheless, it should be evaluated whether this approach is adequately proactive in addressing not only the most prevalent supply risks, but also risks that have yet to emerge, but could have an eventual impact.

The fact that supply risks are chosen on an individual buyer basis also generates uncertainty on the alignment of the actual usage of the product portfolio models between buyers. It would thus be recommended that all relevant buyers firstly decide upon a common set of supply risks to consider when utilizing the matrix. Depending on the importance and complexity of the category in question, it can also be beneficial to decide upon these risks in a cross-functional manner by for instance, working with product specialists.

Naturally, as demonstrated throughout the analysis, category and agricultural specific risks can also play a significant role on the timing of the sourcing strategy development process and on the actual purchase, as well as the type of contract pursued. It would thus also be beneficial for buyers to formally determine the criticality of such risks and include them within the product portfolio matrix. Buyers, which are assigned similar categories could potentially work together and share insights on how such risks have previously affected their purchasing experiences of products belonging to these categories and how to integrate such risks when using the matrix.

Specifically, theory dictates that when a high level of customizability is needed, the weighted factor score model should be utilized. Thus depending on the amount of time and resources that buyers have, it is recommended that buyers collectively construct a weighted factor score model. This would not only eliminate the current high level of subjectivity that exists when deciding upon which supply risks to consider, but also allow buyers of similar product categories to take into account risks that are specific to their categories. This is because the weighted factor score model can be done and set up as an excel spreadsheet and risks can thus be easily added or eliminated. Nonetheless, it can be argued that the challenge of using this model involves the gathering of the necessary data to be able to assign weights, factors, and ultimately scores to each relevant supply risk.

Furthermore, it can be concluded that the intent of the product portfolio matrix used by CT deviates from the theoretical purpose of the purchasing portfolio matrix. This is because the

theoretical purpose of the matrix is to enable practitioners to formulate appropriate sourcing strategies for the products situated in each quadrant (leverage, strategic, routine, and bottleneck) given the value represented to the buyer and supply risks. CT on the other hand, formulates strategies on a category level and not for products situated in the respective quadrants of the matrix. Nonetheless, CT does utilize the product portfolio matrix as a springboard for the supplier view matrix in order to identify if more suppliers should be prequalified and how existing suppliers should be dealt with. Such strategic considerations are done on a product quadrant level, but ultimately do not reflect the way each product is sourced.

In terms of the actual sourcing strategies developed, CT reviews and renews the category strategy for frozen potatoes on an annual basis. As mentioned earlier, the strategy is based upon global sourcing and obtaining the most favorable prices, as well as on the harmonization of quality and size, and by increasing the attractiveness of the product assortment. An emphasis is also placed on reducing supplier dependency and on the strategic relationship management of suppliers.

The development of a sourcing strategy on a category level also applies to dairy products. However, contrasting the strategies outlined above for frozen potatoes the sourcing strategies for dairy products are largely focused on decreasing CT's dependency on Arla. CT outlined that the strategic elements to do this include prequalifying more suppliers and introducing new products such as ESL milk. However, given the fact that the category is rather complex in terms of number of suppliers, products, and product descriptions it can be argued that CT is facing a tradeoff in being able to decrease its dependency on Arla while not increasing the complexity of the category. Consequently, the buyer is currently contemplating whether to create sourcing strategies on a product segment level within the dairy category (Interview 2, pg. 14). This might be an appropriate solution in not only gaining a more accurate overview of the category but also in adequately managing the tradeoff mentioned above.

Consequently, it can be argued that the current intent of the product portfolio matrix used by CT does not entirely conform to theory and the purpose is also unclear. Currently, it can only be deduced that CT utilizes the product portfolio matrix to determine whether it is relying on enough suppliers for the products within the assortment in order to ensure product availability. In fact, the

buyer claims that the product portfolio matrix is utilized to discern whether CT has the "right portfolio of suppliers and that they are in the right boxes" (Interview 2 pg. 3). This not only oversimplifies the manner in which the matrix should be used, but is also to a certain extent erroneous.

Moreover, CT does not segment its suppliers based on the quadrants of the product portfolio matrix, but rather considers all suppliers at once when utilizing the supplier view matrix. This not only alludes to the over-simplified usage of the supplier matrix, but also contributes to the unclear link that exists between the product portfolio and supplier view matrices. The most thorough way of linking the two models would be to evaluate the suppliers for each quadrant individually and to determine how to manage suppliers for these products respectively.

It can be argued that for categories that are extremely complex, such as the one for dairy products, it would be recommended to not only create individual sourcing strategies for products belonging to each quadrant, but also to treat the suppliers respective to each quadrant separately. Applying the product portfolio in that manner would effectively enable buyers to identify tradeoffs and create sourcing strategies that appropriately address such tradeoffs.

Additionally, viewing suppliers in relation to each quadrant should not only be done for complex categories, but should in general be done for products positioned in the leverage and strategic quadrants. This is because suppliers of leverage products usually present the largest opportunities for strategic exploitation, while strategic products constitute the highest spend and supply risk. Strategic products already entail the development and management of alliances and partnerships with suppliers and evaluating strategies for doing so independently, would provide greater focus and accuracy for buyers.

Overall, utilizing the matrices as stipulated by theory for complex categories and for items positioned in the leverage and strategic quadrants, will not only allow buyers to be able to accurately formulate sourcing strategies for products representing significant importance, but also effectively determine how critical suppliers should be managed. Using this approach could also allow potential gaps, which previously have not been identified to emerge. Results can still be aggregated holistically in the end for representation purposes and will most likely reflect greater precision.

### 7.3 Strategic Movements

As evinced in the analysis, practice deviates from theory in terms of strategic movements. Whereas theory alludes to the strategic movements of products within the purchasing portfolio matrix in order to reach a more optimal position, CT focuses mainly on the strategic movements of suppliers within the supplier view matrix. This phenomenon can be discussed from two different angles. Firstly, it can be argued that CT's category strategy development is generally more focused on the supplier than on the product level and thus the movement of suppliers is evidently more relevant and significant for the actual development of a sourcing strategy. Adding to this statement is the fact that the final strategy for both frozen potatoes and dairy revolves very much around the suppliers, specifically with regards to optimizing and possibly extending the supplier base and developing relationships with the existing suppliers.

Secondly, it can be argued that since the supplier view matrix in CT's case is more or less structured similarly to the product portfolio matrix, it pleads just as well the opportunity of considering strategic movements. As mentioned above, this choice of structure does however not exclude some alternative complications as the supplier view matrix is constructed on a category level and not directly related to the categorization performed in the product portfolio matrix. If the supplier view matrix was in fact completely aligned with the Dutch Windmill model, CT would not be obliged to consider the strategic movements of suppliers as it would be more implicitly included in such model that builds directly upon each quadrant in the product portfolio model.

### 7.4 Overall Reflections and Limitations

The purpose of this section is to reflect upon the overall findings of comparing the practical category strategy development process of CT to the theoretical framework. It should once again be emphasized that the theoretical framework builds upon literature and theories relevant to the development of sourcing strategies on a broad industry level combined with agricultural specific elements. The framework attempts to provide a theoretical point of departure for developing

sourcing strategies specifically for the agricultural industry and it can be argued that it serves as a hypothetical foundation before exploring the practical field of study. However, in order to complete the loop of study, the practical findings should similarly be applied to the theoretical framework. The loop of study thus refers to the action of moving from theory to practice and then back to theory enabling possible improvements to emerge. As a result, the theoretical framework should be reviewed and considerations and experiences derived from practice should be taken into account in order to theoretically form a solid basis for developing sourcing strategies for agricultural commodities.

Firstly, practice implies that the strategic sourcing process is a working document that is continuously updated without taking any specific order of steps into account. Since this allows for a flexible workflow and potentially a more effective use of time, it is recommended that such considerations should be adapted to the theoretical framework. Thus the theory on the strategic sourcing process can be criticized for emphasizing the reliance on a step-by-step approach, since it is largely incompatible with the practical application and execution of such a process. On the other hand, Handfield et al. (2011) explicitly highlight that the strategy development steps presented are relatively general and it can be argued that they are formulated in such generic manner in order to fit different commodities as well as supply markets.

The practical application of the product portfolio matrix in particular has revealed major differences from the application stipulated in theory. Literature on the purchasing portfolio matrix largely does not shed on how the application of matrix changes depending on the industry, company, buyer, and commodity. However, just from this single case study it can be derived that the practical application and purpose of the product portfolio matrix deviate significantly from theory, since the manner in which the matrix is applied differs entirely from buyer to buyer. Theory to a large extent fails to cover how the usage of matrix changes depending on who is using it and this underexplored matter should be investigated further and form the basis for future studies. This not only applies on an individual level, but also on a business unit and department level.

Furthermore, Kraljic's founding purchasing portfolio matrix was initially criticized for the lack of alignment and application to practice and it can be discussed whether these criticisms are

still valid to some extent. Theory does shed light on the fact that the dimensions within the purchasing portfolio matrix can be altered according to specific needs, however, these needs are not necessarily taking the industry characteristics into account as attempted in the theoretical framework used as the foundation for this thesis. Ideally, relevant industry specific supply risks such as seasonality and perishability should be incorporated into the matrix in order to underpin and specify the application.

With regards to the strategic movements, the case on CT shows that greater focus is placed on suppliers, whereas the movement of products is largely neglected. This is only possible due to the fact that the supplier view matrix is structured similarly to the product portfolio matrix. In theory the purchasing portfolio matrix is used as the basis for the principles and actions of strategic movements and thus the manner in which CT considers strategic movements is adopted from that.

As discussed above, it is recommended that CT uses a tool more similar to the Dutch Windmill model in order to position suppliers directly based upon the quadrants in the product portfolio matrix. However, in that case the possibility of considering strategic movements of the suppliers becomes challenging, since the Dutch Windmill model prescribes that suppliers for products situated in each quadrant should be evaluated separately. It should thus be argued whether the Dutch Windmill model is compatible and applicable to practice and furthermore if there is even a need for such a tool. Drawing on the experiences from this case, it should be questioned whether theory should be adapted accordingly. In other words, it should be considered whether it is sufficient to directly structure and base the Dutch Windmill Model upon the purchasing portfolio matrix in order to easily consider supplier movements in practice.

Overall, both practice and theory is subjected to some significant limitations. Theory clearly lacks to cover the subject of determining sourcing strategies for agricultural commodities and it is generally recommended that further studies should be focused on clarifying this matter. Moreover, future research on how the application of models such as the purchasing portfolio matrix and the Dutch Windmill model changes depending upon who it is used by should also be addressed. On the other hand, it should be emphasized that the practical findings of this study are limited by the fact that these are based upon one case and company. This immediately raises a concern to whether the

limited scope of the practical findings achieved through this study can actually serve as a foundation for developing agricultural specific sourcing strategies in the future. In order to fully establish a theoretical foundation that companies purchasing agricultural commodities can rely on, similar natured studies that take into account multiple cases should be conducted.

### 8. Conclusions

Overall, this thesis has attempted to address the gap found in literature regarding the application of frameworks and tools used to determine sourcing strategies in the agricultural industry. Consequently, the study largely assumed an explorative nature in both theoretically and practically applying frameworks and tools intended for the development of sourcing strategies to the purchasing of agricultural commodities. This was firstly done by identifying the relevant models used to determine sourcing strategies and reviewing their applications. The relevant models discerned include the strategic sourcing process outlined by Handfield et al. (2011) and specifically the purchasing portfolio developed by Kraljic (1983) as well as the Dutch Windmill Model (Van Weele, 2009), which takes into account supplier perspectives.

Subsequently, specific factors that can mediate the way agricultural commodities are purchased were identified in the literature and reviewed. The relevant sourcing approaches that can be used to purchase agricultural commodities were also pinpointed and the conditions for application, advantages, and disadvantages of these approaches were respectively considered.

The literature review was then used as a basis for a theoretical and hypothetical framework intended to be used in the agricultural industry for the development of sourcing strategies. The theoretical framework firstly recommends the usage of the strategic sourcing process proposed by Handfield et al. (2011). The third step of strategy development was then elaborated further by extending the supply risks within the purchasing portfolio matrix to include the risks that seasonality and perishability can have upon the manner in which agricultural commodities are purchased.

The weighted factor score model was also recommended as a method for buyers to select and prioritize supply risks. This is due to the fact that the weighted factor score method allows a high degree of customization. Subsequently, according to the strategic implications of each quadrant within the purchasing portfolio matrix, the agriculture-specific purchasing approaches identified in literature were plotted in each respective quadrant. The additional considerations of regulations, technological factors, logistics, and customer preferences were also evinced as well as the importance of considering supplier perspectives. Specifically, the Dutch Windmill Model (Van Weele, 2009) was proposed as the tool to utilize when taking into account the implications that buyer and seller power positions and interdependencies can have upon the development of sourcing strategies.

Data from CT was then collected and presented on the two categories of frozen potatoes and dairy. The analysis explicitly compared the theoretical framework and specifically the structure, content, and objectives of the theoretical models proposed to the ones utilized by CT. The overall findings that emerged from the comparison made include the fact that CT rather than relying on a step-by-step framework such as the strategic sourcing process prescribed by Handfield et al. (2011), utilizes the category strategy development process as a working document.

Regarding the application of the purchasing portfolio model, CT utilizes a comparable matrix and refers it as the product portfolio matrix, however the actual application of the model deviates to some extent from theory. In fact, the supply risks considered are largely supplier specific and agricultural-specific risks are not directly utilized within the matrix. Instead, such risks are implicitly considered through the establishment of the categories and taken into account on a continuous basis. Additionally, risks are prioritized and selected individually by buyers and no selection method is used.

Overall, it was observed that the application of the matrix is not only to a large extent buyer specific, but that the intent of the model is not fully exploited by CT. In other words, the product portfolio matrix is not utilized for the determination of sourcing strategies on a quadrant level. Regardless of where products are positioned in the matrix the buyer in question individually decides upon a sourcing strategy on a category level and the manner in which products are purchased. The main sourcing approaches that CT relies on include e-auctions, competitive tendering, alliances and partnerships, short-term and long-term contracts, open-end contracts, as well as fixed-based contracts.

CT takes into account the perspectives of its suppliers through the supplier view matrix, which is in essence based upon the Dutch Windmill model proposed by Van Weele (2009). However, rather than considering suppliers separately and respective to each quadrant (leverage, strategic, bottleneck, and routine) CT evaluates all its supplier at once through the matrix. Overall, a large emphasis is given to suppliers and this also applies to possible strategic movements, which are considered through the supplier view matrix to a much greater extent than on a product basis through the product portfolio matrix.

The results that emerged from the comparisons made in the analysis were then discussed and it was evinced that the motivations for utilizing these models on the part of CT arose from a buyer demand for greater personal and professional development. According to the strategic buyer, the advantages of adopting these models outweigh the disadvantages. The advantages include a greater awareness of details that could have previously been overlooked and the ability to identify gaps and generate valuable conclusions. However, one challenge of applying the framework and models is that entails a high degree of customization and this can be challenging to do.

Overall, it is concluded that the strategic sourcing process and the matrices outlined can be applied not only across various industries, but also to the purchasing of agricultural commodities. This is largely due to the generic nature of the models and as shown through the case on CT, these models are rendered applicable through customization. Nonetheless, the fact that supply risks are chosen solely on an individual buyer basis increases the bias and subjectivity of the usage of the model and it can be questioned whether the application of the product portfolio model is aligned between buyers. This thesis thus recommends that buyers collectively decide upon a set of generic supply risks that can be applied across categories. Additionally, buyers of similar categories should decide upon category and agriculture-specific supply risks to use within the product portfolio matrix in order to further decrease subjectivity and increase the ability to consider relevant risks in a proactive manner.

Most importantly, the fact that CT does not utilize the product portfolio matrix for the theoretical intended purpose of developing sourcing strategies contributes to the un-clarity of CT's usage of the model. This un-clarity is further confirmed through the fact that CT does not consider

suppliers for products situated in each quadrant individually but rather considers all its suppliers together through the supplier view matrix. Consequently, it is largely ambiguous for what exactly CT utilizes the product portfolio matrix for and the link that it actually serves to the supplier view matrix. This erroneous usage of the matrices might be contributing to the challenges the buyer is currently experiencing in managing the complex category of dairy products.

As a result, this thesis recommends that for complex categories, buyers should develop separate sourcing strategies for products and consider suppliers on an individual quadrant basis. Furthermore, it would be recommendable to also do this for products positioned in the leverage and strategic quadrants, in order to maximize opportunities for strategic exploitation and relationship management. Lastly, it is recommended that similar natured studies are pursued using multiple cases in order to contribute to the validity of these findings and to strengthen the theoretical foundation that buyers of agricultural commodities can rely on.

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# Appendix

# Appendix 1: Overview on the Development of Purchasing Portfolio Matrices

	Kraljic (1983)	Van Stekelenborg and Kornelius (1994)	Olsen and Ellram (1997)	Gelderman and Van Weele (2002;2003)
Name of the model	Purchasing portfolio matrix	Typology of supply situations	Portfolio model	Purchasing portfolio matrix
Matrix dimensions	Profit impact (1), Supply risk (2)	Control need of the internal market demand (1), control need of the external supply market (2)	Strategic importance	Profit impact (1), Supply risk (2)
Categories	Strategic, Leverage, Bottleneck, Routine	Supply situations Plain supply, internally problematic supply, externally problematic supply, complicated supply	<i>Purchases</i> Non-critical Bottleneck, Leverage, Strategic	Strategic, Leverage, Bottleneck, Routine
Conditions and application	Cross-functional teams, top- management commitment, systems support, upgrading staff and skill requirements, and	Task of performing purchasing portfolio matrix should not only be done by the purchasing department	Evidence of applicability only on manufacturing companies	Conditions of Kraljic purchasing portfolio matrix still apply but requires further sophistication of purchasing function in terms of professionalism and exposure in given

	logistics infrastructure			organization
Action Plan	Exploit, Balance, Diversify	Purchasing as: effort manager, demand manager, supply manager, and integrative manager	Strengthen the relationship, improve the supplier attractiveness/the performance of the relationship, reduce the resources allocated to the relationship	Hold or move positions depending on opportunities to pool purchasing requirements, standardize and on the number of suppliers performing and possessing capabilities for co-design
Advantages	Generic nature allows customizability, simple and straight-forward	Links supply to specific situations and identifies which purchasing activities to focus on and control	Provides in-depth analysis on buyer-seller relationships as well as factors that influence the strategic importance of the purchase and the difficulty of managing the purchase situation	Additional information provided in terms of measurement methods and conditions for strategic movements
Disadvantages	Issues related to the demarcation and measurements of supply risk and profit impacts, disregards supplier's side, and does not take into account strategic movements	Still does not address limitations that emerged from the Kraljic purchasing portfolio	Model does not address dimension complexities, does not highlight interdependencies between products characterized and does not provide guidance on which products to focus on	Does not fully take into account positions and intentions of suppliers

Adapted from Dubois and Pedersen, 2002; Gelderman and Weele, 2002

# Appendix 2: Contingency Factors in Supply Influencing the Need for Control

The external supply market	The internal market demand
Importance of the supplier	Strategic importance of the purchased goods or services
Switching cost (e.g. due to former investments)	Explicitly prescribed functionalities
Possible supply scarcity	Legislative restrictions
Financial situation of the supplier	Product characteristics (complexity, uniqueness)
Number of suppliers	Dynamism and unpredictability of the customer demand
Poor supplier performance and reliability	
Logistics (geographic concentration vs. internationalization, distance, local infrastructure)	
Market characteristics (changes in economic and technological circumstances)	

Source: Stekelenborg and Kornelius, 1994

### **Appendix 3: Underlying Factors to the Portfolio Dimensions**

Factors	influencing the strategic importance of the purchase	Factors of situation	describing the difficulty of managing the purchase
Compet	ence factors:	Product	characteristics:
1.	The extent to which the purchase is part of the	1.	Novelty
	firm's core competencies	2.	Complexity
2.	Purchase improves knowledge of buying		
	organization		
3.	Purchase improved technological strength of		
	buying organization		
Econom	ic factors:	Supply	market characteristics:
1.	Volume or dollar value of purchases	1.	Suppliers' power
2.	The extent to which the purchase is part of a final	2.	Suppliers' technical and commercial competence
	product with a great value added		
3.	The extent to which the purchase is part of a final		
	product with a good profitability		
4.	Criticality of the purchase to get leverage with		
	supplier for other buys		
Image f	actors:	Environ	mental characteristics:
1.	Supplier critical image/brand name	1	Risk
	~ "FF8"8"		

Source: Olsen and Ellram, 1997

## **Appendix 4: Supplier Strategies**

	Partnership	Competitive bidding	Secure supply	Category management and e-procurement solutions
Objective	<ul> <li>Create mutual commitment in long term relationship</li> </ul>	<ul> <li>Obtain 'best deal' for short term</li> </ul>	<ul> <li>Secure short and long term supply</li> <li>Reduce supply risk</li> </ul>	Reduce logistic complexity     Improve operational     efficiency     Reduce number of     suppliers
Suitable for	<ul> <li>Strategic products (e.g. gearboxes, axles, engines)</li> </ul>	<ul> <li>Leverage products (e.g. commodities, steelplate, wire)</li> </ul>	<ul> <li>Bottleneck products (e.g. natural flavors, vitamins, pigments)</li> </ul>	<ul> <li>Routine products (e.g. consumables, office supplies)</li> </ul>
Activities	Accurate forecast of future requirements     Supply risk analysis     Careful supplier selection     'should cost' analysis     'rolling' materials     schedules     Effective change order     procedure     Vendor rating	<ul> <li>Improve product / market knowledge</li> <li>Search for alternative products / suppliers</li> <li>Reallocate purchasing volumes over suppliers</li> <li>Optimize order quantities</li> <li>'target' pricing</li> </ul>	<ul> <li>Accurate forecast of future requirements</li> <li>Supply risk analysis</li> <li>Determine ranking in supplier's client list</li> <li>Develop preventative measures (e.g. buffer stock, consigned stock)</li> <li>Search for alternative products / suppliers</li> </ul>	<ul> <li>Subcontract per product group</li> <li>Standardize product assortment</li> <li>Design effective internal order delivery and invoicing procedures</li> <li>Delegate order handling to internal user</li> </ul>
Decision level	Board level     Cross functional approach	Board level     Purchasing	Purchasing     Cross functional     approach	<ul> <li>Purchasing</li> <li>Cross functional approach</li> </ul>

Source: Van Weele, 2009

### **Appendix 5: Transcribed interviews**

#### **Interview 1**

#### Strategic Buyer at Coop Trading, Department of Fresh and Frozen

Kathrine: jeg ved ikke hvor meget Jakob har fortalt dig om projektet?

Strategic buyer: han har ingenting fortalt mig...

Kathrine: du er bare blevet kastet ud i det

Strategic buyer: jeg ved kun det I skrev i e-mailen

**Kathrine**: okay, så tror jeg bare lige vi kort fortæller dig om projektet, det gjorde vi også med Jakob og selvfølgelig først og fremmest, tusind tak fordi du gider at afsætte lidt tid det er virkelig en stor hjælp for os... men vi er i gang med at skrive speciale og skriver om strategisk sourcing og kunne godt tænke os og sammenligne - vi skal have noget teori med fordi sådan er det når man går på cbs, men vi kunne godt tænke os at kigge nærmere på sourcing strategier specifikt for fødevarer industrien. Fordi det vi har fundet ud af ved at dykke ned i litteraturen, det er at der er ikke ligesom sådan en standard sourcing strategi og det skyldes en masse forskellge ting og det bliver også fremhævet i litteraturen og det vi så godt kunne tænke os det var så udefra teorier omkring hvordan man former de her sourcing strategier og ligesom opstille et framework eller nogle forskellige scenarier for hvordan man kan lave sourcing strategier givet nogle forskellige specifikationer - altså f.eks. produkt kategorier...

### Strategic buyer: okay, altså varegrupper

**Kathrine**: ja, varegrupper... hvis man ligesom kunne finde nogle faktorer og kategoriserer dem på og så sige når men for denne her type varer kategorier så kunne man bruge sådan en strategi ikke - rent teoretisk... Det er selvfølgelig os der står for den del og der I kommer ind i billedet det er at det kunne være spændende at gå ud når vi så har opstillet sådan nogle scenarier og prøve det af i praksis.

### Strategic buyer: Okay

**Kathrine:** det er meget kort fortalt, men det er altså det det handler om. Og så tror jeg at det vi også skrev i mailen, det var at for ligesom at få det mest spændende resultat, så kunne det være sjovt at kigge på to varegrupper, som hver repræsenterer sin strategi.

### Strategic buyer: mmmhmm

**Kathrine**: så vi har mest muligt at analysere så vi ikke ender med to ens... Og der var derfor at Jakob foreslog mælk som værende et strategisk produkt med en leverandør og smør. Men vi er fuldstændig åbne for hvad du har af gode forslag, men det er bare for at have rammerne på plads for

at kunne udnytte det mest muligt.

**Strategic buyer**: okay, jeg tænkte umiddelbart hvis I gerne vil have to aspekter på det og to hvad kan man sige, vidt forskellige udgangspunkter, så ville jeg ikke vælge mælk og smør - så ville jeg vælge mejeri som en varegruppe og eventuelt nogle, det kunne være høstvare - varegruppe. Med høstvarer mener jeg at det noget man køber én gang om året fordi det er kun én gang om året man høster.

Kathrine: så noget sæson?

**Strategic buyer**: sæson præget, lige præcis. men det er noget man køber ind til hele året, så har man hele året til at ligge sin strategi og få kendskab til leverandører, få sat det hele op til the grand finale ikke også. Hvor i modsætning til mejeri, så er det jo noget der er meget mere op og ned hele tiden med smørpriser, mælkepriser og dermed er det meget mere fleksibel - du skal være meget mere på og det er kortere kontrakt perioder man indgår. Så du har noget der er meget agilt og noget som hele tiden ændrer sig og så har du noget som hvor man har et skud i bøssen til at få købt de kartofler man skal bruge til hele året. Det er to vidt forskellige strategier...

**Kathrine**: det kunne være rigtig spændende, især også fordi vi beskæftiger os rent teoretisk med category management og det virker som om at er lidt mere udtrykt der i forhold til produktbasis, altså mælk og smør - altså så kunne det være lidt sjovere netop at komme lidt op - altså løfte forstørrelsesglasset en lille smule og så kigge på det lidt mere overordnet, så det ville være rigtig spændende.

Eva: så høstvarer, that includes potatoes and ...?

**Strategic buyer**: in my case, potatoes, I actually like the idea because I just made the strategy for potatoes. It could also be berries or vegetables that are seeded in springtime and the you have the development time where wait and you see the whether and you see the changes in harvest and how the harvest is developing and then you have the time where you finalize the deal in mid spring beginning of the summer. So right now I am in the beginning face of the negotiations and tendering and that sort of thing.

Eva: you say you do this once a year? Totally different from the dairy?

**Strategic buyer:** totally different from the dairy because you have stable production, you have all year round production and you have steady supply - whereas potatoes are much more fragile in that sense and they are also, the quality, size and volumes are depending on how the whether is and the harvest develops. So its much more fragile and that why its important that you do good tendering, that you inform and prequalify the suppliers so they know exactly what is expected to do when have the last negotiations and we will have that in the middle of May.

Kathrine: ja fordi der ligesom kun er det ene skud i bøsse, fordi det er så sæsonpræget.

**Strategic buyer**: ja, man kan sige at på kartofler, på almindelige kartofler - ikke økologiske, men på almindelige kartofler, der høster man dem sådan løbende, men stadig indenfor et kort interval. Så har man nogle høj teknologiske lagringsmuligheder, det er faktisk et lager til kartofler hvor de ligger

og har en speciel temperatur, en speciel fugtighed, så man kan holde dem friske uden de er i jorden i faktisk et stykke tid. Men vi køber én mængde typisk for hele året og det er det vi har at lege med og så kan man godt kunne snooze lidt fordi de producerer ikke alle kartofler på én gang og pakker dem i poser osv - men vi går ikke gerne ud og genkøber og genforhandler kartofler midt på året eller sidst på året fordi at vi regner selvfølgelig med at når vi lukker vores aftaler, så er det på det rigtige tidspunkt. Og så at skulle ud og købe nogle dyre kartofler senere på året, det er simpelthen for dumt.

#### Kathrine: det bliver for omkostningsfuldt

**Eva:** I dont know if we should start generally or dive into the questions - I mean we are really interested in actually comparing these two categories. The question is if we should go directly into the interview

Kathrine: ja fordi vi bevæger os allerede ind på de spørgsmål vi har lavet.

Strategic buyer: lad os prøve at gå igennem interviewet

Kathrine: altså det kan godt være at det bliver bare en slags samtale, men jeg har lige sådan en interviewguide som du kan forholde dig til.

**Eva**: the first couple of questions are very general, but it is just also for us to get an understanding of COOP and its cooperate strategy and you know the overall objectives of COOP. So I don't if you could maybe elaborate on what is COOP's cooperate strategy?

Strategic buyer: You are in a lot, because well COOP Trading as such has a strategy that's overall and then we dive into different departments of COOP Trading - they have their own strategies depending on the category. But you could say about COOP Trading as a strategy, one of the main points must be global sourcing - is has been and is a big factor. When I say global sourcing I mean that we always look at if there is a case to change the regional way of buying products. So say that I buy my butter from Arla here in DK and there are plenty of suppliers in the Baltic and Eastern Germany where they can produce the butter as well. COOP Trading expects that you always seek and challenge those opportunities of buying your butter for instance Lithuania. Because we find if the product just as good as it would be in DK and if its cheaper it makes sense to buy somewhere else. So we are very global oriented and always open to source from new regions and new countries - especially undeveloped countries where the general pay and salaries are much lower than in DK. For instance, with dairy is a brand new market and one of the cheapest countries to produce in in Europe. So that is one strategy and harmonization is another strategy. We take care of four customers, four countries within COOP Trading, so the whole cost of this so that we should buy together and in that case we will bundle volumes and get better prices. But when you buy for four countries there are always national preferences and we try to find compromises on that so that if Finland wants French fries that are 12 mm and Sweden wants one that is 11 and DK wants one that's 10, then its our job to harmonize so that the product is the same but also the weights so 500 for instance in DK and 800 grams in Finland we try to see if we can find one united weight size. And third option is the design, so you have a rainbow brand in Finland, you have COOP brand in DK, you have a COOP brand in Sweden, but then they have their own design in Sweden and don't want the Danish design so harmonizing the design also, so you have one product that is exactly the

same and have the same barcode in all four countries, that's the perfect harmonization and that is a big part of our strategy.

Kathrine: because they will enable you to buy in bigger batches?

**Strategic buyer:** one volume, one product, one SKU, one barcode - so I don't have to buy or tell the supplier okay we want 10,000 bags of that design in that weight size and 7,000 bags in that size in that design - so he needs to change the production - he needs to stop the production change, set up and everything and that just cost money. So just use one whole day, full power, same bags, same product - that is the optimal set up! But it is almost impossible

Eva: the pooling and you reach economies of scale that is the goal?

Strategic buyer: it is just about being effective in the production and thereby save costs

Eva: cost saving is the most important?

Strategic buyer: cost saving is definitely a big factor here

Kathrine: so it makes it simple for the supplier as well?

Strategic buyer: makes it fast, makes it simple, makes it effective...

**Kathrine**: and this gives them actually a good job, like they have the opportunity of being able to supply more?

Strategic buyer: they can plan everything, they don't have to change set up all the time - so its just easy and simple

**Eva**: it also provides and makes an incentive to choose/stick with the supplier over longer periods of time?

**Strategic buyer**: the supplier is something we will talk about a little bit later, but way of handling our suppliers is a little bit new to us - you are actually lucky because half a year ago we would not be able to have this conversation, but we want to be attractive to our suppliers and it is new way of thinking because normally if you go somewhere else - I am the customer, I am the king and the supplier will do what I tell them - we want it to be more of a partnership where we ask the supplier, where we become more attractive and one of the answers to that would be to try harmonize a bit more so I don't have to make ten different french fries for four different markets.

Eva: so a definite shift in COOP with regards to that?

**Strategic buyer**: a definite shift and investment because we think long term that doing category strategies is an advantage and a little bit more long term than usually done. I have been with Aldi, I have been with COOP DK, I have been with Lidl before and I have never tried something like this before - so it really is something else.

**Eva**: so then would you say that like now the procurement role is COOP Trading plays a much more strategic role?

**Strategic buyer**: I thing the procurement role has always been very strategic, but I think it has not been well thought through, I has just been okay this how we have always done and this is how you do usually in the retail market - this is what we know and suddenly you bring in an external frame, kind of guidance and they give you some tools to work with looking at the big picture and then seeing it from different perspectives. That is something new to COOP Trading, that is something new I would say to most of the business. So, no its a big part but more long term and more thought through now. I have only been with COOP Trading for about one year now and we started out with these courses about half a year ago and I notice a big difference. Besides that, of course it is to be the best sourcing partner for our customers and within that lies a lot of things and factors - service lever of course and the price development is a big factor. So when we renegotiate every year, we inform our customers that this category we expect to in index 102 so we will expect 2 % increase overall on the year and there are some budgets on that and some expectations about that, so we need to be in line with that also so we don't buy more expensive than we plan to. So, overall you can say be the best sourcing partner for our customers and within that lies the global sourcing, the harmonization, and the price developments.

**Eva**: so I guess you already did answer our third question then, that you try to align on a category basis, the strategy to the overall cooperate strategy of harmonization...

Strategic buyer: yes, in a big way, it is a big part of it...

**Kathrine**: and I guess also the fourth question actually - you talked about economies of scale and scope before - how you organize with the suppliers as well and thus the possibility of reaching economies of scale

**Strategic buyer**: yeah, it is not as fancy as that, it is more practical it is about finding the right balance between what we expect and what we need and what the supplier expect and is needing. And in fact to have the most efficient production and the best prices...

Eva: I am going to add few questions that are more specific to the categories that you just suggested

Strategic buyer: please do

**Eva**: you say that you have category strategies, so do you have one for the harvest category and one for the dairy?

**Strategic buyer**: yes, we do... Jakob is for example taking care of the vegetables and I have the one for frozen potatoes and the next one I will do is for dairy and I will love to show it to you later.

**Eva:** So, now we get more into general procurement structure and the sourcing process. I guess we should now stick to the categories we discussed because I thing it is harder to answer these questions in general.

Strategic buyer: Sure, you will get better answers if we make it more specifically

**Eva**: If you could just briefly describe how the procurement group for harvest and dairy are organized and how they are responsible? Just to get an overview...

**Strategic buyer**: well okay, you could say that there not really any major thought behind who takes care of what here. When you start you are assigned a certain number of categories and preferably with some categories that you have experience with beforehand and you are responsible for this certain amount of categories and that is basically it.

Kathrine: so it is more based upon the relationship with the supplier?

Strategic buyer: if you have some kind of experience from the past that will make sense or if you have worked close together with Arla before it could be and good idea - or it could be a bad idea, but it is not something you have influence on before you start. You just say okay, if they ask you what preferences you have it is just on a preference basis and then you will have to see what you get. But mostly it makes sense to assign the categories to someone who have had experience with it before. We also try to after some years to reorganize some categories because sometimes it is a really good idea to get a fresh start and get some new people on the category because you can also get stuck a little bit and get a little bit too comfortable with everything and it could then be a sleeping pillow a little bit where the development stops and it gets too routine and it could make sense to shift around a little bit. but there is also a lot of competence lost and experience lot every time you change your categories so you really need to think it through and see if it is a good idea, because there is so much information that are so specific on every category so you really know deeply how the product is produced and what kind of quality issues there are and its not that difficult on potatoes but it is really difficult on fish and shellfish and stuff like that and you spend the first three or four years learning about the products and understanding how it works and where do they fish and how do they store it and how they produce it and what are the problem that is look for and then after those years you tend to be effective, you tend to know whether the supplier is telling the truth or not. So you really get much more sharp on what is possible and suddenly to change the categories will loose a lot of experience and knowledge. You don't want to do it to often.

Eva: especially for categories like fish, I mean deep market knowledge...

**Strategic buyer**: yeah, it is complicated... when you work with fast consumer goods, especially fresh products, you really need to be sharp on the product itself and what to look for in quality and in the product because it is all made in Asia especially meet and fish...

Kathrine: there must also be a lot of like regulations that you need to be aware of?

**Strategic buyer**: very much! but we have a good quality department here that is more into that sort of things but we as buyers concentrate more on the product itself and suppliers and production, methods and also new product development and stuff like that

Eva: How many buyers in average do you have for like dairy and harvest?

**Strategic buyer**: on dairy as a whole including you know everything - milk and cheese and ... we are two buyers. One is taking care of the cheese and I am taking care of the rest. So that is milk and yogurt and creme fraiche and cottage cheese and pudding and desserts and stuff like that.

Eva: so you say one for milk and everything else and then one for cheese?

**Strategic buyer**: yes, whereas you have the harvest products, I am just talking fresh and frozen now because there is also harvest products in grocery when they can tomatoes for instance it is also a harvest product. So, fresh and frozen there are berries that is harvest and vegetables and potatoes. Those are the three categories that are depending on harvest and they are all assigned to different buyers because they are all very much in the same time of year - so it takes a lot of work to do these thing because you have to kind of through up the the whole category at once, you can't really do it in the daily where you negotiate some of that in the summer, some of that later in the middle of the year or when you have time - this has to be done at once. And that is why it is important that you don't have two or three that you have to do like that. But we have divided it into three different persons who takes care of it so you don't get overloaded with work with the harvest products.

Eva: so I guess seasonality plays a big part of this?

**Strategic buyer**: it does, it is about dividing you work load into, yeah divide on to the whole year so you don't totally warn down in the middle of the year and you have nothing to do in autumn and winter.

Kathrine: and you said one person is each allocated to ... ?

**Strategic buyer**: each harvest group, yeah... and then they have other categories too, but those are not harvest products. They can have that during the year. You could have more harvest products, I also have for example fish, so herrings for example, those are also harvest products. They harvest them, not as they take them out of the field, but they fish all herrings in North of Norway in October/mid November and that harvest, that kind of fishing, is a major factor for the rest of the year, so you don't fish for herrings in January or in summer time. But those are smaller harvest products...

**Eva**: I think it would be a good idea in terms of harvest products to as you said use a group of products or categories that are the same in terms of seasonality so that you can group them in that way. I am assuming that that is what you are doing, that is what you have been explaining?

Strategic buyer: yes! pretty much...

**Eva**: maybe more into if you guys use any particular sourcing process to come up with the strategies that you need?

**Kathrine**: just if you develop the strategies based on the process every time in order to include different steps every time for each strategy?

**Strategic buyer**: yes, we have rather new tools that we use and there is a lot individual rethinking and adapting to the specific category. So we have a general form that we use which is the one I am going to show you on the screen and everyone, every buyer would kind of adapt and fit it to the specific category, so yes we have tools to work with it and behind every slide, behind every model is a lot of thinking that is specific on the category. So yes, we have recently start working with these tools and that is the base of our strategy that ask us questions that in the end effect will give us some task or some objective that we want to focus on in the strategy. Beforehand, before we had this, there wasn't really any formal idea or expectation to strategy - strategy was such a fluffy word just

flying around and it was very fancy, but nobody really knows what it is and how to handle it...

Kathrine: and do you feel like this tool makes it easier for you to develop strategies?

**Strategic buyer**: it is the only tool that we have and it is a whole new world so yes, it the way we think strategy this is a really good tool - not perfect, but really good for what we need. And it just makes us ask the questions that we will not create or ask without having models and guidelines...

Kathrine: how often does the procurement department update the strategies and why?

**Strategic buyer**: it is a working document so it is not something that you print out and you pack and fold it and you put it on the wall - it is something that you work with when there is something that is changed. Say you have a strategic supplier that you worked very closely with and that is really depending on you and the other way around and you suddenly get into an argument or a disagreement about something and for some reason the collaboration stops, then you have something that you worked into a strategy that you base your strategy upon and suddenly it is no longer there. Then you need to kind of rethink the strategy so hopefully not too often, but in this case I think from season to season because of the harvest products but for dairy, I would probably not think that far, but more half a year, short term.

Eva: okay, so generally for harvest it is seasonality and for dairy would say short term, half year?

**Strategic buyer**: yeah, although some like to use some model which shows or asking for thought two or three years ahead. Usually, it does not say much in that part where it says two or three years because it is so far away and for me it is much more short term in that sense because I just know things change all the time and it takes really nothing to make the strategy fall a part and you need to rethink...

**Kathrine**: who asks for the, in case are asked to make the strategy for lets more long term, three to five years as you said before, who asks for that? Is that in order to be able to maybe link it more to cooperate strategy?

**Strategic buyer**: no, no... this is only made to be most effective and to have the best way of working within the specific category, so it is not something we do for the management or for kind of adapt to the overall strategies of the company. It sort of makes itself, but it is only for us as buyers and for our colleagues we have certain people connected to us - the quality department, the design department - so they know okay within the frozen potato business this is how it looks this is the next year or two years these are the ideas that the buyer have so they are aligning with what to expect, what is coming their way - because they need to also to be a part of the tasting and the prequalification and everything.

Eva: all in all a cross functional alignment across the departments?

**Strategic buyer**: it is very much a cross functional alignment yes! everybody kind of have to sign off and say okay well this is what we do...

**Eva**: you said for harvest, season - dairy, short term and your kind elaborated upon why its short term but maybe if you could just re-mention some of the points again?

**Strategic buyer**: I would say some of it are short term, some of it are long term. when you look at the strategy and you think okay my base suppliers - how is that base, how is that portfolio - do I have what I need, do I cover my whole product spectra, do I have the small, flexible, convenient service oriented suppliers - do I have the big ones that can produce hundred tons of milk a day, that I can push, that I can press, that I can get the most out of? And do I have all those in the middle... and you miss suppliers, where you miss some of the supplies you need in order to do what you want, then you work with finding new suppliers, develop the collaboration, that could be longer term. When you talk about price developments, getting the best prices at the right time - then it is shorter term. And when you look at just developing also products itself - it is also longer term. So some of it is short term prices because they go up and down so much but the supplier base and what is really important that you have in order is much longer.

**Eva**: for instance, with Arla - big supplier, monopoly pretty much - you know that you can apply pressure and that is very short term and based on price development?

**Strategic buyer**: That is only to get the right price, it is possible. But that is also why we have global sourcing as our overall strategy because we want to have Arla but we also want to have alternatives! We want to keep our options open, we don't want to depend on one supplier - once we get to dependent on one, the shift of power is changing and suddenly we have to adapt to Arla and it should be the other way around.

**Eva**: I think Jakob last time mentioned also that the importance of logistics cluster and how Arla also has a lot of power in terms of that?

**Strategic buyer**: yes, they very much depend on but also base their whole business strategy on logistics and they have the big seller advantages so they can deliver directly to the stores and we don't have to transport ourselves through the logistics - they also do their own ordering and stocking and everything - so it is very easy for the logistics department and ordering department in COOP DK for instance to say okay, we want products from Arla because then we don't have to handle the product as much they pretty much handle it on their own and take in the orders, they pack it, they stock it, they deliver it, everything directly to the stores, so it is very convenient - and that is also worth something. You have to ask yourself, how much is that worth when you have two prices, you have a German supplier that producing has longer lead time also therefore often a shorter self life and has to go into one of the two warehouses in Denmark, we have to handle it here, it has a couple of days in the warehouse again, shorter self life and then deliver it to the stores. Whereas Arla pretty much is able to deliver on a day to day basis, so that is definitely in the calculation and that you have to think of. But there is also a strategy and a good idea in tipping the supplier of Arla and have them supply because once you run out of competition you pay the price that Arla is asking and that is what we are trying to avoid.

#### Describing the Power Point show:

**Kathrine** so what kind of data do you use on each category - we talked about supplier data, market data...?

Strategic buyer: let be show you the answer while we are at it, because this is something that you

### will like ...

Eva: yes, we are going to go into that also after

**Strategic buyer**: data requirements! the first column is with data requirements, then the key words I often make this is for frozen potatoes, the relevance and importance so how relevant is that for me when I need to negotiate frozen potatoes: 1 is required, 2 is nice to have and 3 is not significant for me. And the score is how far am I in this process gathering or understanding this data. So say, spend, products, supplier, sourcing, everything that is specific to the category - yes it is required definitely, and 6 - I have had everything required, everything I need. Price development, obviously, internal information - something that I have. External: that could be product requirements, specifications from the countries - say Norway wants this, and Finland wants that, that is something I need to have. Most of it I have, so all this i available... numbers, figures is nice to have, doesn't cover discount business, doesn't cover all the countries - would be nice to have a little bit about what kind of french fries.

### Kathrine: what is Nielsen?

**Strategic buyer**: Nielsen is a huge information and gathering information within the retail business and within the product. But it is very much specific for ?? business excluding the discount business and very much on branded. So say Nielsen would keep track of the total sales of coca cola in Scandinavia and the rest of the drinks. So you see the volumes, the market share, so you know what kind of development is there not only in the retail business, but also very specific on the category.

Eva: so it is a database for benchmarking?

**Strategic buyer**: its for a lot of things, but it is to see where the product is on the total scale and what is trendy and what is not so trendy... If I want a new cheese in my assortment and I think I have everything that I need, I look into Nielsen, I see okay, cheeses top hundred - which has the most sales, which brand, product, in that way I can see okay these are very strong, demand is high on that product.

Eva: we can try to access through CBS?

**Strategic buyer**: they should definitely have access, it is a must to know about that in your situation, because it also tells the market share DK with the retail business in Denmark.

**Eva**: we used something called Euromonitor - it does cover consumer goods, it might be similar to Nielsen

**Strategic buyer**: check up Nielsen, it is a great tool! Quite simple to understand. With regards to the characteristics of the commodity we use something called Kairos (??) and that is an investment tool that is doing a lot analyses on harvest on the product itself - it could be anything, it could be from aluminum to sunflower oil, but on big products. There are a lot of people working behind that and it was involved with its own category and they look very specific into the price development of the raw material. Very important stuff! Then a little bit less important but still major factor on the harvest could be weather, could be suppliers are thinking, what they are expecting, how developing

are, when has the potatoes been put into the ground. Potato quality is very much important, always worse in the end of the season and the beginning of the season. Sunflower oil is the other major part of our french frie, so you want to know how is that developing - not only the potatoes, but also the sunflower. And if you have more complicated products, you have a lot of ingredients you want to keep track of. That always plays a part in the big picture. Then about supplier market, capacity - how is the demand, supply-demand is always an important factor. With potatoes, the supplier often goes out to the farmers, they contract the supplies, so they have about 80% covered in a contracted price and the rest of their capacity is supplied by purchases on the spot market. So they have the basic in place and they have the price in place and the for the rest they kind of shop around.

Kathrine: and this is in order to reduce risk?

Strategic buyer: yes!

Kathrine: so your kind of secure yourself with 80%?

**Strategic buyer**: yeah! market trends and developments obviously. supply chain - was possible, was not possible. Logistics... a little bit about the how the competitors are doing, I wouldn't that that is very important. It is all very basic from the better looks area when you talk about potatoes, so you see what are the characteristics of the suppliers, , business assignments, assessments, so you have a possibility to look into how the figures are at your suppliers - are they doing profits, quarterly we use stuff like that... how is performance, how are they performing, are they investing in new production sites and stuff like that so - but that is something you learn and keep track of when you go along and you work and speak to suppliers you get those kind of things, knowledge.

Kathrine: yeah, okay and you say this is a standard step in the process? This is part of the new tool?

**Strategic buyer**: this is part of the new tool yes... It is a good tool that includes everything and it is well used to organize and check off when you go along - to say okay I have that, I don't have that and then you should be prepared in the best way for a tender, for a negotiation.

**Eva**: the next question: you gave us a big overview of how you categorize, but you also said that these categories have been predefined a long time ago, but does spend play a part in this?

**Strategic buyer**: not on how it is divided and not really on how you choose the strategy either - spend is something that is there - it goes up and down all the time

Kathrine: so you don't have a target spend and then you organize it accordingly

Strategic buyer: no, no if you can get the spend down it is better than getting the spend up

Eva: would it be possible to get access to this material (power point)?

Strategic buyer: I will look through it and see if there is anything, but yeah it should be possible

**Eva**: so now we have been talking about the whole process that you use and maybe we can get into the tool, more specific tools that you use? Specifically regarding the purchasing portfolio matrix
**Strategic buyer**: yes, let us go through it... The scope is just basically overall what is the spend and the euros and then you are looking at private label frozen potatoes - we are sourcing for Denmark, Sweden and Finland and we are sourcing from Germany. What is not in this is the country lit, so what Sweden decides to buy for themselves without us and brands. So, McCain and all the other brands, what they buy - we are only private label sourcing here. So we don't buy Coca Cola and we don't buy...

Eva: so you said private level – what is the country let?

**Strategic buyer:** The country let – that is the national buyer prefers to buy – could be private label but most often is in terms of brand or other brands – If you think that McCain French fried are better or McCain lying next to private label that is basically the ideal way in selling your private label – to see the price difference

Kathrine: that can serve as leverage?

**Strategic buyer:** yes if the have a preference then they will buy the McCain and that is good then you have a better margin on branded products

Kathrine: and if not then they can see how much cheaper the private label is?

**Strategic buyer:** yes exactly

**Eva:** so yeah step 1 – scope

Strategic buyer: yes this is the overall spend analysis and it is divided into some sub-categories and here there are 8 different categories – it could be more or it could be less. It could be a standard fry or a crinkle cut or wedges and specialties like twisters, sliced organic. And then you have the invoice and that's what we spend here paying suppliers. Sales price and then the purchasing spend. The index value of that spend – are we buying cheaper than last year or more expensive than last year? And then the units so the actual bags and do we buy more bags or less bags. And you want to have a value index that's lower than a 100 and you want to have volume that's over 100. And some of the categories are very much like herrings for example – people that buy herrings they die you know - it's the older part of the population - it's harder to sell herrings to younger people, its a more traditional market. So you have a category where you think - how am I going to turn this around? Selling herrings to young people... so some of the categories are dead end and some have the potential to grow. You would think that the sales for frozen potatoes would represent a decreasing market because people want to buy fresh potatoes but actually its doing pretty well. So there are a little standard fries – a big focus on that. I have some that I can develop on and then next the small circle is how its divided into the three countries - COOP Danmark, Sweden is okay, I don't buy anything from Norway because they have taxes and they want to keep the stuff Norwegian – so everything that comes outside of Norway is heavily taxed – super expensive. So this tells me where I need to focus, where to have a lot of spend on as few products as possible, where I can develop – like can I make the last one – we see a huge increase in the volume (930) so that's 30% more organic than last year – so I have 2 organic products – wedges and French fries, so can I make some new products – new organic products that will be interesting to the market. In terms of speciality products like barbeque and twisters has 111 on the index. So I have organic

going strongly but only with 2 standard products and I have speciality that are also going very well – can I then make an organic speciality – that would be sense to look at.

Eva: other is pretty big too

**Strategic buyer:** yeah other represents other special products like mash potatoes and frozen and different specialities from Finland mostly. Then we have divided the current situation into three major points. Product process structuring, supply base structuring, the sourcing, the contracting, supply development and supply chain considerations – those are the groups we will think about when we think about our current situation and the future strategy. This is the current one – I wont go too much into detail but basically just shows you that this is what we have – this is how it looks the picture at the moment and this is what we do at the moment – what is right or wrong we do not think about in this case. So Denmark, Sweden and here I can see okay – Finland – organic – look at that – 75 on the index, organic does not sell in Finland, they don't care about organic, the do not want organic. Whereas Denmark and Sweden organic is bigger – going crazy. Completely different markets within frozen potatoes. SWOT analysis you all know. We use it because its easy and it gets to the point and usually you are aware of most of the information but its nice to break it down a little bit. Its something you use in real life. Product portfolio is new to us and its really interesting.

Kathrine: this is one of the main theories we have been learning throughout our classes.

**Eva:** there are different purchasing portfolio matrices that you can use. I am assuming you are using it because it can be customized to the needs of the buyer.

**Strategic buyer:** and also because of its simplicity. What I tried here is to keep it simple because I don't want to get confused and I do not want to confuse anybody else in making too many matrices and models because usually they tell the same thing in a different way.

**Kathrine:** Can I just ask something? You say this tool is new to you, was it predetermined which axis to use and which factors to use – so you always use supply risk and relative cost?

**Strategic buyer:** in this case we call it something else. Same model but different information. Different explanations to the boxes. Have you seen that one before?

**Eva:** not like this. No. But there are some similar models that are much more complex as well because they take into account buyer considerations together with the ones of the supplier - so all compressed in a model.

**Strategic buyer:** but in real life you don't want to make things too complicated and its usually not that complicated so why make it complicated. In this case I use the 8 top categories that you have seen before and how do I place them into the portfolio. So obviously you all know that everything should be leverage – everything is perfect. But that's just not something that happens. And that's why its so important and that you have the right supplier portfolio and that you have that supply base in order. Because if you have your supply base in order then there is a good chance that you have most of your products in the leverage column.

**Eva:** so what are the specific factors that you consider in supply risk? So is it supply base? Are there any other factors that you consider and how do you decide upon these factors?

**Strategic buyer:** I would say that one thing is obviously how the supplier performances, how is the relationship, what is your feeling with supply, and how dependent are you on the supplier of course. But also how far you are away from a solution if something goes wrong with that supplier on production side, how quickly you are able to find another supplier and what kind of alternatives do you have that you have not already used. So a lot of overall thinking in this case with the product itself – say organic – I have one organic supplier – that's not enough and so if something happens with this supplier – anything – I would be pretty much without organic potatoes.

Kathrine: and that's why supply risk is so high?

**Strategic buyer:** yes but spend is low and risk is high which means that I have to take a look at it because usually I would focus on leverage because that's where I can take out most money and savings but I need to focus a lot about those where supply risk is high, although risk is low. If I had two or three suppliers for organic then it would be something that I wouldn't focus too much, besides obviously that they are doing really well on the index numbers. But I am actually working on – and it would tell me that I don't need to focus on getting new suppliers for 1,2, or 3 because I already have 3 or 4 suppliers and I can push them and create some competition. Whereas 4 - I only have 1 supplier and big spend, but I have a really good relationship with this supplier – we are doing well, it's a strategic supplier, we have a strategic alliance and we share information and stuff like that. So that's why its not completely high as organic but its still a higher risk than I would like and that's why I am also working preapproving other suppliers on those products.

**Eva:** but that when spend plays a big part – because you have one supplier for the special products and I am assuming that you guys have worked on establishing a relationship with this supplier. Whereas for organic you are looking to find new suppliers because the spend is low.

**Strategic buyer:** yes but the problem is no matter what, if something goes wrong with either 4 or 8 we are in deep shit (trouble). Because nobody really cares about how big the spend is if there is no products on the shelves you are fucked anyways (in trouble) so I focus as much on 4 as I do on 8 because having products on the shelves is the most important thing.

Eva: so product availability – that is number one.

## Strategic buyer: yes

**Eva:** so for supply risk you said: supply base, performance, relationships, dependency, but product availability is also important?

## Strategic buyer: yes

Eva: any other risks that you consider?

## Strategic buyer: no not really

**Eva:** and just to get an understanding – you as a buyer you have a category lets say potatoes and do you has a buyer decide upon these risks – do you discuss what kind of risks should be used within such a matrix with other departments?

**Strategic buyer:** no its very individual how you see the importance of the different risks. So for me its important to see how you can open up relationships and how you handle issues that we hit along the way, and some would not appreciate that as much and therefore, assess the risk in a different way. So the factors are pretty much the same but how you assess it is very different from buyer to buyer.

Kathrine: this is maybe where the buyer's knowledge and experience comes into play.

# Strategic buyer: exactly

**Kathrine:** because as you said it is expected that you spend the first 3 years just getting knowledge and experience

**Strategic buyer:** yes getting to learn and know people, visit the locations and production sites, shake hands with everybody, and dive into it. And that's not always something that buyers do – some prefer to sit and work from the desk and not get out there which is also fine. And some prefer to do everything through e-auctions and some prefer to do it the old fashion way. We are all different as buyers and I couldn't say that one thing is better than the other. As long as the targets are met and the performance s there I wouldn't say that I prefer one style but Rikke prefers a different style and Jacob prefers a third style.

Eva: but I am assuming that you need to get the preapproved before you actually do it

## Strategic buyer: yes

**Eva:** and then as long as targets are met and there are no problems then you continue with what you have decided with

# Strategic buyer: exactly

**Strategic buyer:** supplier view – how do we think that the suppliers see us is a really interesting one and that's also something that we use all the time that's why it's a working document. Because right now there is a big discussion with my number 1 supplier which supplies 50% of my portfolio so that's a really important supplier and we are very much in a argument and that's would say its not a core anymore, I would probably move it down to exploitable and the nuisance and that's why I don't feel that we are attractive anymore to this supplier and I am trying to handle that so that we can become more attractive again.

Kathrine: but this is your experience on how suppliers feel about you?

**Strategic buyer:** first of all it's a slide that we like to share with suppliers because it's a really good icebreaker to discuss how we are doing and how do you see us because its not a conversation that we usually have with suppliers – how do you see us as a partner and a customer and how can we become a better customer for you and how can we be more attractive as a company to you and that's

something that is brand new in most of the retail business -I have never heard about that before. Having that kind of dialogue with the supplier, but that's also a dialogue that you would do with your strategic suppliers – so you don't do it with all 20 but you choose some and then you have the conversation with them and then you try to do this because strategic alliance management you find suppliers that you want to have this kind of go to bed with basically - you want to do everything -R&D, discuss numbers, share information, think openly – basically besides negotiations are done together on a common ground so its very interesting stuff. Plenty of development although I would think about moving number 1 in that direction to exploitable but we have to see if we can become friends again but this has taught me that they will never be a strategic supplier in the new sense – I would never be able to share what I would share what I share with the Weston? I shared this presentation with Weston – they have seen everything – about my strategy, openly about everything. I would never do that with Clarebout – not anymore. Because trust is gone and they don't appreciate it. Weston would appreciate it and use it to our advantage. Clarebout is different, more difficult. So very important tool and some of them are different and I have to work some more with this and spend in value is lower so I won't put too much effort into it. I would put effort in saving my relationship with number 1, but I would put more effort into 2,3, and 4 in the future. 4 is a new supplier to me so that's why I can't put him in the right box – he could go anywhere.

**Kathrine:** so this is also a tool for you to see based on the other one, which one to engage more into and in which direction.

**Strategic buyer:** yes and also to see if I have the right supplier base - do I have enough suppliers and if they are in the right boxes and if they are not - how do I move them into the right box - or do I simply give up on them

Kathrine: and the most optimal box would be core.

## Strategic buyer: yes

**Eva:** it's interesting because you use this tool to actually figure out the movements of products and yeah first you guess the positioning and if they should be moved.

**Strategic buyer:** yeah you are aiming to move (suppliers) into the right boxes as possible. We have more models not like this, but you want as many products in strategic and leverage as well as suppliers in core and development as possible.

**Kathrine:** so you can say that you actually do this to gain knowledge on how the situation is but also consider in which direction you should work in order to move products into different strategies

**Strategic buyer:** yes and which suppliers I should focus on and move where and its pretty much impossible to have everybody in the right place because some will always view the relationship differently but it's a nice kind of model to make you think about – okay I need to visit them because there is a good reason to do so and its something that I can do. So that's some interesting stuff.

Eva: when did you guys start using these models?

**Strategic buyer:** this is my first category so I think most of the buyers have only made one and we are on to making number two now

Eva: so very new

Strategic buyer: its very new and as I have said I have never seen it before

**Kathrine:** would you say that its easy to implement and have you received any kind of training on it?

**Strategic buyer:** we have been to courses and we had some formal training and we as a buying time we have – 4 or 5 buyers – presenting our own categories and kind of sharing our thoughts and knowledge and experiences. So we have been working very closely together to get different ideas and thoughts on the different models, besides what we already learnt in the formal training. I could probably put up 2 or 3 more models but this is important for me and this is also important for me – because this shows that number number one partner in crime Clarebout and I have put way too many eggs in that basket and right now I am in a big argument with them and I could definitely lose the relationship or we will stop working together. So that's something I don't want to do because I have a lot of products there and if I have to move all those products – finding suppliers for them, but there is also a reason why Clarebout is supplying that much and that's because they have the right quality to the right price and they are very much focused on making standard products not like Weston, which produces more customized products like Twisters. Clarebout is making standard French fries and a lot of them. So if I need to find new suppliers to cover that volume I can pretty much expect a price increase and it take a lot of effort and resources internally to make those kind of challenges

Kathrine: and maybe even finding one that can supply all of the ranges of the different products.

**Strategic buyer:** exactly – this will probably have to be divided between 3 or 4 suppliers. We already done that groundwork so we know exactly which suppliers are prequalified for each product. So we have been tasting potatoes from all suppliers and we can preapprove say for French fries we have Clarebout as an approved supplier, Weston, Farm Frites etc so I could source products from any of these suppliers - taste, cut, specifications is okay and this we already do before negotiating – because if I find myself that I have to move products between suppliers I should actually be able to do it. So a lot of work in pre-qualification. Basically, we want to see if we can make some synergies and put more products in different baskets (I guess in terms of suppliers?) also it makes more sense in terms of logistics, in terms of using and picking up different pallets from different places. This is a little bit outdated - there are a couple of more suppliers now and some of these numbers might look a little different but probably not much has happened. So now, the current situation versus the future situation. Whats really interesting here is that the current situation is PD product descriptions so that's how many different recipes we have – and we want to try to lower that number as much as possible so we have been trying to do that and find that for 3 different products so we go down to 26, still for 3 countries we buy from and still 8 categories and we expect to form new product developments. You can say that before we had 7 suppliers and one main strategic supplier - Clarebout and 2 to 3 potential suppliers - now we call it something else we call it strategic suppliers, we call the important suppliers, and we call it approved suppliers. Strategic

obviously you have strategic alliance management, target selling, R&D, relationship management, preferred is the step under strategic but still important supplier you still want to value and kind of develop the relationship and for approved suppliers its pretty much basic don't do too much, don't spend too much time, just work and they were kind of in nuisance box before.

**Kathrine:** is this a new way of categorizing in order to be able to as you said the situation you have with main supplier as of now - like if the relationship stops then you are able to reach much faster to..

Strategic buyer: definitely a way to acknowledge these suppliers and to be more flexible faster, but its even more a way to know where to put your workload so you know where you have to focus, who to visit and how many times to visit and you know how to dig down, and which financial statements to read – I would read the one from the strategic suppliers – so I should know 95% of whats worth knowing about my strategic suppliers. Because they have the biggest spend and they are the most important for us and we have the strategic collaboration where this obviously also changes - they are not strategic now but preferred suppliers and think about moving them up here instead because of what has happened. So that's our new way of seeing that. Sourcing is still the same - we can maybe look into possibilities - more globally - but again for potatoes it does not make much sense to buy in China and you can also try to see if you could divide the spend a little bit more equally and maybe sell some more to Sweden - they have a lot of branded products/potatoes in Sweden so maybe if we can sell more branded goods and less private label. We fix for one year – we fix the prices from the 1<sup>st</sup> of October to the 30<sup>th</sup> of September and we did new product development all year round. We still fix the contracts before and do new product development in Spring so we have the new products ready for first of October when the contract starts. The way we used to handle supplier development was more just working together without any formal thinking and basis it was more just visiting them, "hi, how are you, and this looks nice ...." In terms of strategic supplier management, we try to find situations in which the supplier has interest in you as a customer performing well - helping you with important insights on development - specially product development.

Kathrine: this is also in relation to these new tools in order to engage in suppliers more

**Strategic buyer:** yes also to identify what is important and what could be part of this strategic alliance management. Then we have all the innovation meetings, new product development meetings – more intense follow-ups on contracts, this is also new to us. Otherwise current supplier change considerations is the same. The good thing is, that there shouldn't be too many changes – if there are too many changes then it means you have done something wrong for too long. There should be some adaptions and new ideas and potential but if there is too much then you are missing out

# Kathrine: keep it stable

**Strategic buyer:** yeah keep it stable don't think you can make a revolution here - its about identifying the right steps and information to have success. It comes down to the last slide of the results. So you have a strategy, a logic, and a result of that. You can have 20 different assignments or tasks and objectives but you don't have to. If you find 4 or 5 that make a difference for you then

that's okay. In this case how do I analyze the product descriptions? You try to find common ground for the countries and whats the logic behind it? Bundle more volume that is the concept of our company. Whats the result of that? Better prices and more effective production. Janus is my product specialist, so he is into what kind of E numbers we can use and how much salt can there be and all those things. I need him to talk to his colleagues in the other countries so we can agree on this product that this product is made the same

**Kathrine:** because as you said in the beginning it depends of course on the customers' national preferences and maybe regulations that need to be met.

**Strategic buyer:** yes they are much more strict in terms of salt and restrictions in Sweden than in Denmark and in Finland and usually there is always a way – so we want to pre-qualify more suppliers for the top 7 products. My top 7 products are the products with the biggest spend. So I take top 7 products and I see who is supplying now, who is pre-qualifying and who is pre-qualified now. So I have at least 4 suppliers that can produce the top 7 products that I have. Which makes a better ground for competition and therefore usually also better prices in the end. So that's a really important step that we have gathered here and worked on and that we have actually pre-qualified 3 suppliers. So if my current supplier comes with a price increase I will be able to negotiate better knowing that prequalified suppliers can produce these products and that I don't have to test it afterwards and then find out that they cannot produce it and then we are back to scratch. Its more efficient to be upfront with this. Obviously we will also prequalified products later on in the top 7 but with the biggest spend you also want the biggest focus.

**Eva:** So you say the number of suppliers in the supply base play a big role in terms of how you source and how you will negotiate and the establishment of the contact?

**Strategic buyer:** Not necessarily how many suppliers but more in terms of pre-qualified suppliers. So I could have 3 suppliers – but if I only have 2 that are pre-qualified then I am not in a very good situation. So you have to make sure that you have suppliers that can produce what you want otherwise you will spend too much developing products and that you don't have time to develop on.

**Eva:** I have some questions regarding the sourcing approaches – you mentioned that COOP sometimes relies on spot markets, contracts, tendering, e-auctions, so if you don't mind could you list some of the actual ways in which COOP sources? And what determines what is used? Is it you as a buyer that chooses because a product is one of the top 7 and you have 2 suppliers then based upon that you choose the manner in which you source?

**Strategic buyer:** a lot of factors some into play – all buyers prefer their own way of buying – some like to buy e-auctions every time and some like to combine it and some like to use the old fashion way on the phone. But usually there is a good set of key rules of thumb I would say. You need competition in order to have a successful e-auction and they have to be close to each other price wise – if there is too much of a distance between a supplier then you will not be able to have enough pressure on the supplier that has the best price. So you want to have enough suppliers and you want to have enough competition price wise from those suppliers. Otherwise one will just enter his price

and then the other one will enter a new price and a new price – and it won't get close to the first price that the first supplier entered. If you don't have that then usually you want to work manually with the supplier that by far has the best price – see if you can use your techniques to get the price down. So it depends on a lot of things. It also depends on how much time you have and how much work you want to put into it, the preferences from our customers, say that COOP Danmark has a really good relationship with a supplier for a long time and it's a good an really stable supplier then there is a preference that he gets an order the next time. You want to take that into consideration and you want to see okay his price versus the competitor's price and taking into account that COOP Danmark really wants to keep this supplier. Logistics again – whats important there – what is needed and what is nice to have – there is not one way to do it – there is really a lot of considerations that you need to make. We have a lot of categories here I buy for about 110 - 120 million euro – If I have to make a strategy and an e-auction on all the products all the time – its impossible so its about where can I do a "quick and dirty" and where can I get the right price fast without too much effort. So there are a lot of factors.

Kathrine: and what are the typical approaches – e-auctions, tendering, contracts – any other?

Eva: do you financially hedge?

Strategic buyer: we don't hedge but our suppliers do – in terms of raw materials or foreign currency

Eva: So the supplier does that and then you guys agree upon that?

Strategic buyer: yes we agree on a setup on that – so we often have different tools – so for example for the frozen salmon - we have a range that we can adjust - so imagine that salmon is crazy expensive right now – so in terms of spend – it can only fluctuate within that range – so that's one way to do it. You also fix the currency – right now the Norwegian kroner is very poor so you don't risk much into that. But many of the deals made are made long-term especially in grocery where you have 12 months usually - canned stuff - from Asia. Where a lot of transportation and lead time - longer deals there - whereas here with fresh and frozen we can do everything from 3 months to 2 years – depending on right place, timing, competition and all the factors. We have a lot of 3 month contracts – we call it open ended contracts – where there is a 3 month notice – so they can run and run and run an if nobody reacts, if someone wants to change the price then there is a 3 month notice. There are a lot of open ended contracts and if you get the right price at the right time then you can extend them to 12 months. Even Jacob did it for 3 years. So again it's a buyer decision – how long you want to close it and its about asking the customers, the customer being COOP Denmark, Finland, and Sweden ask the category manager there what you think - I have this feeling at the supply market and I feel that its going this way – what do you think? Do you feel the same on your side and a common agreement on how to move forward.

**Eva:** do the contracts that you draw up with your suppliers change? And what is entailed in those contracts, based upon what we discussed here.

**Strategic buyer:** we have our FPA – which is our standard framework purchasing agreements, which provides all the details on the framework collaboration – that's something that is put down in

the basement. But the working document is our PPL – product price list and that's really what we work with and that's what's interesting. This is our product, prices and this is it – its really what we use. For example, this is the price from Arla and the market which is Finland, the brand, the product, size, barcode, we have consumer units, per shop units, type of shop units, and all the details, lead time, shelf-life, minimum orders – how many shop units are per pallet, how the pallet is handled, how high it is, what are the delivery terms, the volume, is the volume, is the volume estimated when handling fresh or frozen? They are usually estimated because they are produced all the time – its not a harvest product. Also typical with a shorter shelf-life price is ... (??) and what the price is. Product re-movement and modification – if you want to delist a product or change the design or something you give a 3 months notice – and the volumes that are steered into this PPL are based on 12 month cells, this is what we are working with. This is how contracts with suppliers works. And they sign this every time it is changed and it is archived and we move on – so this changes often.

**Eva:** and I guess lastly, you have some strategic alliances – and you share more information and collaborate on different fronts

**Kathrine:** if we focus on the specific categories of how risk is on dairy - I don't know if you can say that in one category you tend to use one approach whereas in the other you use another

**Strategic buyer:** I can answer that in about 2 weeks because then I am done with the dairy category – there is going to be a big difference on how you see it – but the basics and objectives are still the same – having the right setup and portfolio of suppliers. How you approach

Kathrine: but I also meant in terms of doing contracts and strategic alliances

**Strategic buyer:** alright there are probably differences there – we can talk about it in 2 or 3 weeks time

**Eva:** but so you said that you are focusing on the harvest category – for which potatoes are part is a sub-category of?

**Strategic buyer :** its not called a harvest category – but something that is a harvest potato – we call it frozen potato as a frozen potato – they are all their own categories. Frozen vegetables as frozen vegetables.

Eva: They are their own categories... but you just consider them as?

Strategic buyer: They are into fresh and frozen category and that's the wide spectrum

Kathrine: so you guys use categories and sub-categories?

**Strategic buyer:** yeah must categories have sub-categories and you want to divide to what makes sense in sub-categories because its really important that they do break it down a little bit so you know where to focus and where to lay your workforce on and where not to because if I look at frozen potatoes as a whole we are doing index 99 was okay but I have no idea where I should start paying attention, but if I break it down – this category is doing well and this one is not doing so well

- then I can start putting things together and making a strategy. So it makes sense to break it down and make the conclusions from there.

Kathrine: so the strategies that you make are on category level?

**Strategic buyer:** yeah on category level but the objectives but the summary is made from a total assessment of the different sub-categories

**Strategic buyer:** this will look different next year – I already prequalified other suppliers – I always push for NPDs and try to find new products and trends in the market – we will always try to harmonize or we will from now on always perform on the basis of strategic alliance management with the most important suppliers.

# **Interview 2**

May 4<sup>th</sup> 2016

# Strategic Buyer at Coop Trading, Department of Fresh and Frozen

**Eva:** so last time we were not clear about the suppliers that you have for the frozen potatoes. Which suppliers supply what products? I mean, we know that Clarebout supplies the standard fries - do they supply any others of the product categories within frozen potatoes?

**Strategic Buyer:** they don't at the moment, but they really want in to that market, so they invested a lot of money into new machinery because it takes specialized machinery to make the twisters and products like that, so they really focused on entering the market on price and on price fighters and then because they have had success with that they see the value in making specialized potato products so they want to invest in that...

Eva: but not yet?

**Strategic Buyer:** we have had samples, but they have not actually asked us the specialized suppliers that has done it for many years and that is sort of the brand name in the market. Lamb Weston, they make a lot of branded price for most retailers in Europe, but they have been specializing in this for years and we definitely see the difference in the products when we compare them. But they are on the way but we would not be able to make a switch of suppliers at this moment - maybe next year.

Eva: so Weston produces twisters then and anything else?

**Strategic Buyer:** yeah, they make the barbecue and they make all the specialized products - all the specialized barbecue products. So that is three products they make that are specialized, where I at the moment only have one supplier! Which is also why they are placed in the matrix where they have high supply risk. But you wouldn't be able to say okay this supplier only makes this and this supplier only makes this kind of potato - they all have an assortment, but they are all very much specialized in one or two segments. If you look at Aviko they are actually mainly producing for food service and for the industry, so they are not really retail suppliers in that sense. So they would want to make as big a bag as possible..

Eva: so what is Aviko producing for you guys at the moment?

**Strategic Buyer:** Avika is producing...they are making wedges, and they are also making others - they are making the noisettes. It is a mash potato that is formed in a top. So they are actually making standard products as well as special products.

**Kathrine**: so what you are saying is that each supplier overlaps and don't have a single product or product type?

**Strategic Buyer:** I have a list of what the strategies are based on to see exactly who is producing what... I will forward this to you...

**Eva**: is it just because then we can get an idea of what supplier is producing what and then based upon that you can explain okay that is why it is placed in bottleneck

**Eva:** that leads to our next question... with regards to the product portfolio matrix that you use, what exactly do you use it for?

**Kathrine:** it was because last time we discussed that the suppliers view matrix is based upon the product portfolio matrix, but as we understand it all the products that are in the product portfolio matrix are also all the products that are supplied by the pool of suppliers you use and then all these suppliers are then elaborated upon or positioned in the suppliers view. So you do it based on all suppliers? You don't use the product portfolio matrix to say well, leverage has these suppliers and then we look at those separately in one suppliers view?

Strategic Buyer: no, I think it depends who you are asking and also how you interpret it how you look at the matrix -what actually want to use it for... The way I look at the product portfolio matrix is that okay I have a segment, I divided my whole category into these eight segments and then I look at number one - the standard fries, I look at okay how many suppliers do I have on that segment and how much competition are there between the suppliers and how will I overall see this segment as being a segment where I have many suppliers to choose from, I have standardized product where I don't need special equipment, special suppliers - this is a segment where I can go out to the wide base of suppliers and just getting prices in and playing the suppliers against each other. So, for me this is a segment where I have a lot of turnover, a lot of value - but it is also where I have a lot of options with regards to suppliers. So, for me the product portfolio is about having the suppliers that are competitive, having enough suppliers that are competitive, basically. I could have a lot of suppliers like Aviko and Clarebout - they are basically very similar, but if you compare Aviko and Clarebout one to one on the standard fries, Aviko is not competitive enough! So, to be honest I don't have anybody who is really competitive enough compared to Clarebout. They are by far the cheapest, so you could say that my supply risk is placed in the middle because it is not high, it is not low. Let's say Aviko and Clarebout and the others where competitive and maybe close to each other - then I would move it to completely low supply risk - but because my alternatives are much more expensive than I have it now, then it is in the middle. So, it is all about having competitive suppliers and having enough of them...

Kathrine: well, you talked about it last time as well...

Eva: what about relative cost - what explicitly do you consider?

**Strategic Buyer:** we don't consider much! I look at how big the segment is, how much turnover it is and obviously that tells me where to put my focus. Let's say I have five suppliers in organic that are all competitive and can all produce the product want - that tells me that I am fine there - but if I only have two or three suppliers in the biggest segment of them all with the biggest segment, then I really need to put more focus on that. So, it tells me okay I have a big segment here a lot of turnover here - this is where I should put my focus and to make sure that I have enough suppliers that are competitive in that segment. So, the relative cost only tells me how important the segment is! How much focus I should put into it. Because there is no doubt that when I look at rösties or wedges or

crinckle cut -they are all much smaller that the standard fries. So this is where I should definitely make sure I have enough suppliers that are competitive...

Eva: speaking of the routine products, how do you define this quadrant?

**Strategic Buyer:** sliced is a routine yeah... they can all pretty much produce sliced, Clarebout is producing now for us, but when I look at spend I have about 600,000 EUR in spend on sliced - it tells me I am fine. They can all do it and the spend is really low so I don't need to put too much focus and effort into that. You know we talk about wedges, standard, crinckles and then at the end of the conversation - oh yeah what about sliced - it just comes along.

**Kathrine:** just to be clear about the product portfolio... so you say that you use the product portfolio to kind of determine which product type you should focus on in terms of number of suppliers and how important it is for you - but then how do you move on from the product portfolio to the suppliers view matrix? Because, again the suppliers view matrix is based upon the entire assortment of products?

**Strategic Buyer:** it is based upon the assortment that the suppliers are producing for us currently, so when I look at Clarebout they are producing 50% of you portfolio which makes the relative cost obviously very high... (taking a call) suppliers view is very much about kind of feeling do we get from the supplier so it is not very objective it is more how you sense and how important you feel - so it tells you that you have high value and you feel like they don't really value it and they don't really respond to you, you need to look into it and make an effort. An obviously the higher the number of percentage the supply the more important and you should do something about it quick - so it is really also about making sure that you have the right portfolio of suppliers and that they are in the right boxes.

**Kathrine:** okay, so that is the link! The link is that you use the product portfolio matrix to determine what you have and what you need in terms of suppliers...

**Eva:** could you briefly elaborate on the suppliers view matrix? So you have core, exploitable, nuisance and development - what do you consider for core for instance?

**Strategic Buyer:** in core I am searching for the perfect partnership! There the strategic suppliers would be based, so that is where you have supplier that has high value so they supply a lot, represent a high turnover, they are forward thinking - it is a partnership in that sense that we can talk openly about product development, expectations. It is not an open book collaboration, but it is definitely where both partners have an idea that this is a collaboration where you have a sort of say win-win...

Kathrine: both parts are benefitting?

**Strategic Buyer:** both parts are benefitting and it is an open collaboration where you try to find common ground to work towards you goals.

Eva: and what about exploitable?

**Strategic Buyer:** that is where we have a big supplier that supply us a lot of products, but you don't really feel like the service is that good, they might have problems with delivery of campaigns and they might have issues understanding the way you work and they don't really want to accept it. It is kind of a disharmonized relationship, so that is something you want to avoid - or at least if you are in exploitable, try to move the supplier into core which means to have a conversation, talk openly about what is wrong and what can be done - what are you expectations, alignment of expectations.

## Eva: and nuisance?

**Strategic Buyer:** Nuisance is where it doesn't really matter! Try to move it, try to see if their possibilities to increase the workload by giving the supplier more orders or new product to move it up in value and also make yourself more attractive to the supplier. But, it is not our focus - it is just so you are aware that the supplier is there with these products.

Kathrine: so, you think a lot in terms of possible movements?

**Strategic Buyer:** yes, you think a lot about, okay does he have anything in his portfolio that you want or you are interested in and then you might want to move for somebody who is in exploitable for example. Or this is something you don't really want to focus on and you want to focus on developing it instead. Development is about growing and seeing possibilities and maybe it doesn't go into core, maybe it stays in development maybe it even goes a little bit back to nuisance - but development is about moving up in core and usually there is a lot of time invested there.

Eva: you really emphasize movements within the suppliers view, but do you try to move in the product portfolio matrix as well?

**Strategic Buyer:** yeah, well leverage is where you want to be. So you want to move anything that is not leverage, if it is important. Routine products we don't really give a damn... But we want to look into for instance, do we have a problem with organic, with supply. Due to one supplier... So, yes you definitely want to do something about that which is also concluded in the last slide where we have the tasks.

Eva: so you would move organic by for instance finding new suppliers?

**Strategic Buyer:** yes, and then we should probably move it into routine because it would never be strategic or leverage simply because it is not big enough at the moment

Kathrine: so you align it with the demand from the customer?

**Strategic Buyer:** yeah, it is a strong growing market, also with potatoes, but best it would be to move it to routine or leverage, so you also aim to move your products there.

**Kathrine:** I sent you an email just to have you to clarify that your department only focuses on the sourcing of private label?

Strategic Buyer: yes

Kathrine: And your department is called fresh and frozen?

**Strategic Buyer:** yes... but, the whole of CT as a company is only about private label. I could say that and that is 95% true. We also handle on an overall basis - what we call "rammeaftaler" a little bit of branded products, but as it is branded, there is not really a development phase or a negotiation or possible to play the supplier against each other. The branded products are about one supplier, one brand, that is it and the you buy it! So, we do handle that, but the workload is not as big as the private label part.

Kathrine: and other than that, the purchasing of branded goods relies within each customer?

**Strategic Buyer:** each customer (DK, SE, NO and SOK) handles their own private brands but we make the overall agreement and contract here. It is just once a year, you talk to Coca Cola, you agree on the prices and that is pretty much it...

Eva: you have different private brands, with potatoes - which private brands do they fall under?

**Strategic Buyer:** we have different brands in different countries! We really want to talk about harmonizing, which is one of our biggest challenges here! But in frozen potatoes for example, we have a price fighter called Xtra, which is a brand we use in all countries. We have Coop in all the countries except from Finland where it is called Rainbow. So that is different and Coop design in Sweden is different from Coop design in Denmark, so that is also a different unique packaging. Then you have Änglemark which is the same in all four countries... Except that Änglemark doesn't really exists in Finland, because they don't eat organic in Finland - they don't care about organic! And actually, when you look at the design part you actually also have a superior brand - we want to separate the Coop brand, when you go a buy potatoes it is all about 8,9 kroner so it is all very cheap - so in order to differentiate a little bit and make more value and be able to charge a bit more for the product before it adds something more to the customer - we have made a differentiated for Coop superior, that we want to charge more for - the exclusive range within the Coop brand and then you have the standard Coop that matches discount. That is our way of sort of saying, okay we have six or seven products here that we find better than the standard.

Eva: okay, so now we are going even more general - it is just important for us to fully understand...

## Strategic Buyer: go ahead!

Eva: we looked a bit on the history on you website...

**Strategic Buyer:** yes, the website is an important interface for our customers and it needs an update. There has been some confusion - are we a trading company, are we a sourcing company? No, we are a sourcing company for our customers, we don't have any money here, we don't buy anything - we make the agreements, we negotiate the contracts, we sent the contracts to the countries and then they are responsible for paying, communication and all that... It is because it is important to let the customer and especially the supplier know what we are doing and what we can offer because many won't really realize that we have ten thousand stores in Coop Trading and are and umbrella because we are sourcing for fourth countries so it is a gateway to the Scandinavian market and we don't express that anywhere...

**Eva:** however, the website does emphasize that you are looking at the interest of both supplier and buyer, but how did you do this before using frameworks as such you presented now? How did you do it before and what was your motivation actually adopting such frameworks and tools?

**Strategic Buyer:** if you go way back to when NAF was founded, it was the same motivation as we have today. It is about bundling volumes and buy together in order to achieve the biggest discounts. That was the whole foundation and it still is today. The way it is done and the way we work has obviously changed a lot since then it is still the thought that if we buy together instead if individually, then we will succeed in adding more value, more importance and when we approach suppliers we are a bigger customer than we are if we go and negotiate individually, but not much has changes since we started implementing the categories - we have always had that thought and we have always this in our minds - how do I position the supplier, how do I position the segment. It is all in there somewhere when you work on a daily basis, this has given us a tool to be more aware of it and to use it in everyday work, and it also helps us come to some conclusions that we might not have come to just working like we always did! So before this we would work in any direction, kind of like how is the wind blowing today - now it is like okay I might still do some of that, but at the same time I know this is my bullet points, this is my key factors.

Kathrine: so the objectives might be more or less the same, but the way you work are more structured?

**Strategic Buyer:** they are more structured definitely - and they are more visible, the goals! Before this we might not have known how important the wedges segment for example is and how big is the French fries segment and how are the suppliers really treating you that are supplying these segments, so you get more aware of you portfolio, you get more aware of the potential gaps that need to be worked more on. And then I have these things in order to be successful with my strategy, it makes a clear overview of the situation and how to improve it!

**Kathrine**: and did you approach the consultancy firm that developed these tools for you or was it them?

**Strategic Buyer:** I think, the buyers have been asking for some better tools to work with and the management here is really investing a lot of money in development - personal development, as well as professional development.

**Eva:** so that is the motivation for adopting such tools? and you would say that it was the buyers that demanded this?

Strategic Buyer: there has definitely been a demand or asking for something to happen among the buyers!

**Eva:** and did the consultancy firm just present the tools as they are or did they help you to customize it or was it up to you alone?

**Strategic Buyer:** we had two courses - each of two or three days. So, we had about six days working with the consultancy firm here in Denmark and the consultancy came along and they started with the basic, with different cases theoretical cases - some of them where from real life,

some of them not where you had to work in groups using the theoretical tools they explained and use them I practice. So there has been both theory and practical work and then the last session course was much more into details and there we also tried to apply it to our own situation, our own suppliers, our own strategies and stuff like that. So, first it was all theory and practical and cases - and then the second was more about how does this apply to me and my situation.

Kathrine: have you as a strategic buyer experienced any shortcomings of the models for now?

**Strategic Buyer:** well, it is a model! So it always takes a little bit of squeezing here and there and adapting it to your situation because every situation, every category is different - very much different! When you look at grocery department, they work with food that can last two years, and then you have fresh and frozen where we work with a shelf life of five days for example. And the model must be adapted to all situations, so it takes a lot of pushing, but it is the overall thinking that is important and when you realize okay there is a need here for improvement, there is also a possibility of improvement - that is important thoughts and that is giving you sort of the small ideas and then you can start developing yourself from there. But the general, I think it fit pretty good!

**Kathrine**: when you say maybe sometimes it is difficult to fit into every situation, you feel like it is too general in terms of the dimensions in the model? We talked about last time how to define the dimension of supply risk and that it is very general and maybe you could make it more specific?

**Strategic Buyer:** Yeah, some have chosen to divide it up into sub sections - the buyer for the category of cheese has divided it up into every cheese segment and has almost made a strategy for every segment of cheese because that is better for her and that makes it easy for her to get an overview. That work for her... And then she has six or seven kind of cheese segments, she has not done all slides for all kinds, but she has thought that for me it is better to have an overview of each segments in order to have a complete segment. It is smart, but it is also a huge amount of work!

**Eva:** since buyers customize the models to whichever manner they prefer is it hard to like to align then like ...

**Strategic buyer:** I think we are pretty good at aligning, we use the same tool when we take out the numbers and the figures so we have the same kind of "cakes" when you look at the diagrams and that makes it similar for everyone and many have chosen to use the same slides that we were presented at the courses but also in different orders with different add-ons also. Some could not really manage to get all the information into -I had one of the first which was current strategy and then future strategy, where I had in the last one in the future slide -I used both the current and the future scenarios - some would not be able to fill all of that in. Then some have made 2 or 3 different ones or taking every segment base suppliers, supply chain considerations, and then make a slide per segment. But the information and the base is the same - its just how you want to look at it.

**Eva:** maybe its actually a good thing that the models are so generic because that then that allows you to actually customize it to the information that you have and your needs.

**Strategic buyer:** I think it would be impossible to make a matrix or model that would fit each type of information for each category in retail or wherever actually so. They are definitely made to start making you think about the processes and to think about what I need and that's special kind of

phase that you go through and I think I really have hard time with this dairy category strategy. I think its very different compared to the potato one because its hard to make a strategy in a category or in a world that is so versatile and that differs a lot, that always is changing, a market that always goes up and down and its hard with timing. Its really hard but also with these theories it is difficult because we have a lot of products, different products, a lot of different suppliers and they all make something that is special somewhere and they don't make one thing that is all in countries, in the same brand, it's all specialized to Finland, to Denmark, to Sweden and so there is harmonization, no whatsoever and many suppliers can do it all and many suppliers can only do a few things, special things, so it's all kind of like – wow how do I grasp this? How do I produce an overview of this? I am struggling with this.

**Kathrine:** so not so much because I went through the slides and I noticed the no harmonization and I at first I thought well, these products at least some of them might be similar, well I mean yogurt and yogurt drinks might include the same materials but when you say no harmonization you mean in terms of brands or each country

**Strategic buyer:** brands and in terms of recipes for each country and drinking yogurts we only have in Finland. We don't source drinking yogurts for Denmark or for Sweden and we only do creme fraiche for Denmark we don't do it for Finland or Sweden.

Kathrine: so no harmonization across borders

**Strategic buyer:** exactly. There is not harmonization in products, in brands, and there is definitely no harmonization in the recipes. And many of the products are only listed in one country. So I mean it's a problem definitely and cottage cheese in Finland is a different fat content, different protein content, carb content compared to Denmark. So we have different suppliers, recipes, fat values, so we have 7 cottage cheese products for 2 countries and none of them are the same. So its still cottage cheese. So that's really hard to kind of get a complete overview of on how to go from here. Right now we are working on prequalifying a new supplier for cottage cheese because Arla is definitely up in exploitable for me – 50% and they are definitely taking advantage of it. So I want to find a new supplier for that but for Finland not for Denmark. Because in Denmark it's delivered by a German company that's called DMK and they are in my core and so I put a lot of effort into pre-qualifying new suppliers for products in different countries and it is just a mess.

Eva: yes you have cottage cheese and then you have allergi those are the ones ....

**Strategic buyer:** yeah rice and soy and stuff like that - different recipes and vitamins in different countries -B12 can't be in Denmark, you have different aromas in some countries and some in other countries are not allowed. So you have a lot of specialized products that are different from country to country and we are struggling in harmonizing the products.

**Kathrine:** would it be I mean – what you are saying that it is difficult to make this category strategy development on a Nordic level – would it be easier to cut it down into countries?

**Strategic buyer:** I haven't really thought about it if you want to cut it down I think you should cut it down into segments. So you want to look at culture, milk, cream – in different segments and then specialize that segment – make strategies for each – unfortunately I have not done that

Eva: not right now.

**Strategic buyer:** but when you look at potatoes its once a year – and everyone is working towards a harvest and you know we are putting the crop down once per year in April and start May, you have different weather conditions and in the middle May and end May you start to look at how the crop is doing and then you can take it from there.

Eva: Negotiate the contract... renew the contract... and for milk and dairy?

**Strategic:** its all about milk and how milk is developing. Its crazy its going down and its been going down since Russia closed the borders. There is a lot of milk being produced – over-production and its because the prices are low so the farmers

Eva: EU quotas?

**Strategic buyer:** yes unlimited quota – so everybody free to produce as much as they want and that's been because of the low prices. So as long as the -0.001 cent per liters that farmers gain – farmers will product until there is no money left for milk.

Eva: so you would say that regulation in this market can present some risks – as it is right now?

**Strategic buyer:** right now it's all about supply and demand and right now you have a high supply and demand is low mainly because of Russia has closed the borders and they are not importing milk or cheese. Also very much because of China – China has been for many years sourcing milk powder from Europe for children and baby food and they have been trying to produce it themselves but had really big problems getting the quality in order and they have a lot of nasty examples that didn't work for them. But now they have stabilized production and now they can produce their own milk powder and that really hurts a lot on the European markets. So prices have never been low and they will probably still fall a little bit and in time we will tell. But nobody really knows what is going on. So is it time long term deals or is it time to wait a little bit?

Kathrine: it's a gamble.

Strategic buyer: it's all a gamble and its very difficult to forecast and foresee.

**Eva:** so then you were talking about even in the slides there is also the 3 month open contracts – so I mean with potatoes you renew the contracts once per year and how it that you generally do it for dairy products?

**Strategic buyer:** in general, mainly not only in dairy products, but in general open-ended contracts are very much used – open-end with the 3 months notice – you decide on a price and you start delivering and unless something happens the price will stay the same. But there is always 3 to 6 months' notice. So let's say I make a price on butter the prices fall then I want to renew the price or negotiate the price and I will give a notice that I want to re-negotiate and then we have 3 months' period, where we still pay the same price until we start paying the new price that we agreed on. It is easy to handle because it doesn't tell you when you have to renew the contract it will continue until something happens in the market that make you want to change either from a supplier's perspective – lets say the salmon price increases then he will want more money from us and you have 3 to 6 to

12 months to create a contract on new terms and conditions. When you do a 3 months' contract – we don't do do 3 month contracts it doesn't make sense because you don't really start until you negotiate again. So you make it at least 6 months' contract when you fix the contract – 6 or 12 months then you have to renegotiate then you have to take it up and start working with it and look into it and if nothing has changed then obviously it is easier to renew it. But its easier to work with open-end contracts because you don't have to do anything unless something happens in the world so to say, in the market.

Kathrine: And you rely on both or...?

**Strategic buyer:** it is up to both to be active towards if there is something to be changed so if I see that the butter prices are falling a lot and I have a very expensive price or if I close the deal at a bad time – then I can definitely open the contract again and re-negotiate within 3 months. So open-end is easy but it also makes you forget.

Kathrine: you need to be aware and you need to follow the market?

**Strategic buyer:** yes. If there are no changes then its fine, if there is a lot of changes you might want to close it for a longer time. So you see a lot of examples of categories where it's busy yeah and everybody is working hard and then suddenly you forget a small category and that the product prices for this category have been low for 6 months and you are still paying the higher price then you messed up right? So it may be good to have fixed contracts when you have to look at this again.

Kathrine: and who decides again? Is it up to the buyer?

**Strategic buyer:** it is up to the buyer and supplier what terms to agree on. It's a part of the negotiation. I think the product prices are as low as ever – then I will try to fix my product price for at least 12 months if I can. He won't be interested in that – so in the middle maybe/maybe not.

Eva: are costs ever shared between buyers and sellers?

**Strategic buyer:** not really. We do have a cost matrix but in theory we do have this matrix that you can work with – dividing the costs of the product into segments so you know how much energy, production, etc. costs are. So you know approximately you have an idea where the price should be. But we don't work with that because in the end it is all about competition – it does not really take into consideration competition when you share costs. But you can use it to deduce what it should cost in theory but that might be a long away from reality. Because if they have a lot of free space in production, if they are running low on and will have to fill up machinery, if there is a lot of competitors bidding it down, well then you have a different price. We don't want to rely on it. I don't really use it for anything.

Eva: so does seasonality play any role in risks or anything?

# Strategic buyer: in dairy?

Eva: yes, in dairy – just in general. It plays a big role in potatoes but does it do that in dairy?

**Strategic buyer:** no not really. It does not really affect the category. Well in cheese a little bit - you have salad cheese, feta, etc. you usually eat salads in the summer – whereas gouda and spices are primarily consumed all year around.

Kathrine: well then it is seasonality terms of the customer and not in terms of how it is produced.

## Strategic buyer: yes

**Kathrine:** just to some up – supply risks for dairy include macro factors and regulations, market conditions etc?

## Strategic buyer: yes

Eva: and in the product portfolio are the risks are still the same?

Strategic buyer: yes, it does - still exactly the same considerations as with potatoes

Eva: so you have milk between leverage and strategic – it's pretty much half of the assortment

**Strategic buyer:** the problem with milk is that Arla supplies most of it – and Arla is the only one is the only one that can supply Danish milk at the moment. That tells me that okay if I want to move into low supply risk and leverage then I need to find another supplier. So I am working on that. I think that is also in the conclusions. We have a German supplier that is based just south o the border in Jutland, and he is supplying Danish milk at the moment but he can't handle – he is mixing German and Danish milk because he does not have a separate tank for Danish milk. So he won't be able to produce only Danish milk.

**Kathrine:** and the purpose of offering Danish milk is because the customer demands Danish mil? Its not a possibility to supply German milk?

**Strategic buyer:** very much so. We have a very conservative organization in Coop Denmark they are owned by the stores and the Danish buyers are often members. So there is a lot of politics here where I see a lot of advantages in bringing German milk to the market definitely to give Arla some competition – that is what I want to do but there is also a lot of focus on Danish milk and it is a touchy subject for Danes – we very nationalistic.

**Kathrine:** but it seems almost crazy that then you want to have a separate tank for Danish milk in Germany to not blend them together...

**Strategic buyer:** well that is what it takes to guarantee it and we will have to see Coop Denmark says and assess the situation in the future and our possibilities and it would definitely benefit us on the long-term having an alternative supplier – although it's a small alternative to Arla it is an alternative – this is the supplier of Osterhusumer. Osterhusumer is producing our cream at the moment.

Eva: I guess that is all on the list.

**Strategic buyer:** it is all on the list. But it is not dairies – it is just cream? And it is funny that creamy is fine but milk is not.

Kathrine: so the politics does not apply to cream.

**Strategic buyer:** no not at all. It is only for milk. Yeah the yogurt is German, Austrian, and Dutch – it does not matter. But milk yes.

Kathrine: maybe because it's the Danes have the picture of Danish milk... the cows.

**Strategic buyer:** yes, you have to take care of the farmers – example Rema Stunt. It is about emotions really and marketing.

Eva: what about logistics and logistics clusters. I mean Arla – Jakob discussed last time...

**Kathrine:** Jakob mentioned that it adds to the dominant position of Arla and the high switching costs of switching suppliers.

**Strategic buyer:** yes, Arla really has a big advantage in regards to the supply logistics – they have their own set of warehouses (3 warehouses) in Denmark and they also keep their own stock, the shops can order themselves from them. It is easier for Coop Denmark to order from them. Everything just comes from Arla on a daily basis. Whereas DMK they need 5 days of lead time to deliver the warehouse in Aarhus and Copenhagen. Then we have to distribute it from there – we will lose shelf life and time. Whereas Arla everything just goes.

**Eva:** so you say that Coop Denmark or that you handle the contracts between Coop Denmark and Arla – right?

Strategic buyer: yes, on private label because they also have a contract with branded goods.

**Eva:** so with the branded ones they just do it. So what is an example of an Arla private label product?

**Strategic buyer:** well generally, Arla does not really want to produce private label. They want to produce their own products – Caroline and Yogi yogurts – but they have to produce private label in order to fulfill – not only logistics capacities but also production capacities. They are forced into the private label segment. For me they will produce banana yogurt and my brand but also offer the same banana yogurt in their own brand. And we will make our own negotiations for that. It is one to one but 95% the same product.

Eva: do you do this with milk as well?

Kathrine: so the Xtra brand?

**Strategic buyer:** yes, the Xtra Fakta brand is mine and the Øko brand harmony is theirs. So we negotiate the same milk in different boxes. And we have a really hard time not bringing in private label when they have the yearly negotiations over there.

Kathrine: must be difficult to distinguish.

**Strategic buyer:** yes. In theory it should not be. But when you are negotiating and when you need that 5% - you will maybe use dirty tricks and sometimes they will also negotiate some of my products

**Eva:** I mean Arla has the capacity to do it and prices are really low and they want to exploit their capacity

Strategic buyer: they have a monopoly on the market

Kathrine: they have their brand

**Strategic buyer:** they really do. But one thing that makes them weaker is or one of their weaknesses is that government role in the Danish, Swedish and Finnish market, which means that they cannot supply under their costs. So let's say they have a production cost of 5 kr. Per bottle of milk and I get a price from Germany for 4 kr. They would not be able to go under 5 kr. They can do it obviously but they are not allowed to, because if they were able to then they could lower the price as much as they would like to and kill the market and they are not allowed to do that and that's the big advantage for me as a private label buyer because I use Arla or somebody else.

Kathrine: you can use their competition to push Arla.

**Strategic buyer:** yes, and I could also take away products from Arla. Let's say Arla supplies butter to Sweden and I want to get that order – Sweden buys their own butter from Arla but I want to handle that then I can go in and compete with Arla and be cheaper than Arla because Arla is not allowed to go under their cost price.

Kathrine: with the product in your private label?

**Strategic buyer:** yes. So I am working on getting the butter for Sweden from a German supplier because its cheaper than Arla. That's a weakness in that sense obviously and I am trying to use that to compensate for the logistics advantage that they have.

**Kathrine:** I have a very general question – because we didn't get if PD really is if its product descriptions or product developments?

**Brian**: could be both – in which context?

**Eva:** I guess on the slides... 26 PDs?

Strategic buyer: product descriptions

Eva: yeah that makes sense

**Kathrine:** and then it conflicted with that you want to do more NPDs. So the PD you use to harmonize and underpin the strategy?

**Strategic buyer:** we use that to make sure that we get what we want. So let's say that Arla make creme fraiche in one way using different tools – they have their own recipes – we as a private label when sourcing we must make sure that when we put our own name on that the products comply

with regulations and the quality standards that we have and also with the benchmark a country might have – say Sweden wants to have this kind of quality and the suppliers I intend to use for this tender uses this quality and this quality etc ... I want to make sure that everybody bids in and starts working on the same products which is my product description. So my PD is what I want from the supplier. Taking into consideration the relations, all my different countries what should be in there, shelf life, fat content, creaminess, dryness – everything about the product that's important in the sense of sensorique but also in terms of rules and regulations. Also how big it should be how, how thick should the foil be, which brand should it be – all of that. Everything you read on the package of a product that is sourced from CT would be in our PD.

**Kathrine:** and then increasing the number of PDS would allow you to have a bigger range selection ...?

**Strategic buyer:** decrease! Decreasing the number of PDs means that I have fewer different products and thus more harmonization.

**Eva:** one last thing for me, I mean you said that you make strategies on based on the whole category but you said that your co-worker makes it per product segment within each category, I guess that's just buyer-specific?

**Strategic buyer:** it's buyer specific but its also a lot about the complexity in the category. Potatoes as a category is quite simple. Whereas cheese is really really complex.

Eva: and you are considering doing it per product?

**Strategic buyer:** I might do it for dairy because its also very complex at least for now. It might be a good way to divide it a little bit – too have a better overview of the different segments. It would definitely vary from category to category.

**Eva:** buyer to buyer and category to category?

**Strategic buyer:** yes, very much. We all have different needs and profiles, but many buyers do have the same profile, but buyers also have different needs and its very personal. The most important thing that the conclusions that you come to doing this strategy makes sense and that you reach them and we all have different ways reaching those goals.

Kathrine: Do you reach the same conclusions more or less?

Strategic buyer: Kind of – we also learn from each other and gain new ideas from each other.

**Kathrine:** I have a one more question - in terms of the process of the category strategy development because we went through it the last time and felt like it was a step by step approach, but you don't call it steps, but you have a procedure of going through the process? Because now that we have the power-point for dairy we can see that it's the same build-up.

**Strategic buyer:** yes, same build-up because it's the same foundations and general ideas that apply, but there might be much more complex than it actually shows in the strategy and I don't know it's difficult to say if there is really a process. For me it's something that I can sit down with and start

with the first paragraph and work through it and then things start to roll - like I have idea what to write here or I need to look into that...

Kathrine: so you don't finish something and move on to the next?

**Strategic buyer:** it's a working document, but I have to present this at some point so it has to be somewhat finished, but I will always be working on it and adding stuff and taking stuff out so, so it will always be on my desktop ready to be changed because especially for dairy, dairy changes all the time.

**Kathrine:** and then the last step of the power point is that what we can call the strategy of the category?

**Strategic buyer:** you could say that, it's the goal of the strategy and the category and so it depends on what you put into the whole strategy. For me that's the most important slide, because that's what I conclude for the 13 - 14 previous pages that I have made. This is my conclusion and this is what I need to do. And you could definitely put a lot more in there, but for its about putting stuff in there and that I am comfortable that I can reach and that also makes sense, for me and for that strategy.

**Kathrine:** yes, because the current to future is more detailed – we are here and we want to go here and then you sum it up in the last slide?

**Strategic buyer:** yes, exactly, here are the actions that should make me fulfill 90% of my future strategies, so for me that is definitely important

# **Appendix 6: An Overview of the Category Strategy – Frozen Potatoes**







Results

Strategy Element	Logic	Result	Responsible and Timing
Harmonize PD's	Bundle more volume	Better prices, more effective production	Brian & Janus
Prequalify more suppliers for top 7 products	More competition within the high volume products	Better prices	Brian & Janus
Make relations to at least 1 more organic supplier	More competition on the organic segment	Better prices	Brian
Push NPD's to Finland & Sweden	More interesting assortment, more volumes and better margins	Bigger selection for consumers	Brian
Perform strategic alliance management with Clarebout and Lamb Weston.	Develop NPD's, information sharing, future strategies and improve attractiveness	Better collaboration, common understanding, first movers, better prices long term	Brian
Investigate possibilities for sourcing in Eastern Europe and Asia	Develop supplier portfolio and create competition	Better prices	Brian

# Appendix 7: An Overview of the Category Strategy – Dairy





Results

Strategy Element	Logic	Result	Responsible and Timing
Introduce Danish milk from Osterhusumer	Breaks Arla monopoly on the Danish marked	More competition and better prices	Brian
Pre-Q Nöm for cottage cheese	Get alternative suppliers for cottage cheese for Finland	Better prices and more pressure on Arla	Brian & Anne
Develop private label Rice Desserts for Coop Sweden and Denmark	Get more volume and value and bundle volumes	Better prices for our partners	Brian
Introduce ESL milk to the Scandinavia marked	Get more alternatives to Arla and introduce a unique product.	More volume and value	Brian