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Addressing Private Label Knowledge Gaps for

Optimised Competitive Intelligence

Master's Degree in International Business Management (MBA)

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ABSTRACT

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The purpose of this thesis is to address knowledge gaps in the quest for rationalised competitive intelligence (CI) between competing private label (PL) brands in the Finnish fast moving consumer goods (FMCG) sector. Two factors converge to describe the research problem, the knowledge gap; asymmetrical marketing mix features of PL brands and access to PL information in the FMCG sector. The thesis aimed to explore the current level of CI deployed in the industry, identify what knowledge (service) gaps exist and how to optimise CI processes, efficiency and access to information for PL brands.

The theoretical choices of the study are comprised of firstly, the interplay between supply and demand in the grocery sector, private label brands and options for retailers using such brands to create a competitive advantage. Competitive intelligence provided the second topic of theory. Key success factors for an optimised CI system were proposed. The overall purpose of a competitive intelligence system is to collect information about competitors to create valuable knowledge to support company's decision making. The five stages of competitive intelligence cycle provided the theoretical framework as part of the empirical study.

The methodological approach of the thesis was defined as constructive research, aimed to produce solutions to explicit problems, creating new reality and as such can be implemented. A qualitative industry-level survey method was used to collect insight from the Informants, who comprised both PL owners and external experts. A directed-content analysis method was used to develop and determine a preliminary coding scheme derived prior to the data analysis and arranged during the theory collection.

The empirical research identified and described knowledge gaps in the current implementation of CI for PL in the Finnish grocery sector across the five phases of the competitive intelligence process. Both phenomena converging towards the research problem were confirmed. The main knowledge gaps comprise of a lack of scope when considering CI for fringe competitors, lack of data transparency for the demand side, gaps in sourcing detailed specific product feature information, identification of categories with opportunities for PL, low frequency of CI collection, the utilisation of emerging technologies and the requirement to seek new and varied sources of CI.

In response, the output of the thesis developed an action plan containing measures to optimise the CI process for PL. The recommendations developed include: improving management involvement and institutionalisation of CI; optimising the organisation, network and qualified human resources as users of CI; to clarify the purpose and need of CI; and to leverage on existing and emerging technological factors.

Acknowledgments

This Master's thesis came at a time when my life was at its most hectic, both professionally and personally, and time seemed scarcer than ever. Balancing and managing time between duties to my wife and children, and requirements to develop my professional profile, really boiled down to the second. To provide an impetus for perseverance at times of desperation, I referred to a quote a wiseman once said, *"If you're going through hell, keep going." -Winston Churchill.*

This study has offered a crucial moment of enlightenment in my academic research career. It has proven my area of interest and thus field of scientific interest and perhaps topical specialisation. The culmination of my professional experience and academic trajectory have converged to highlight where my interests, strengths and weakness converge. Therefore, this thesis went beyond just a required deliverable of an academic degree, more so the care, depth and motivation of this study was carefully considered.

I wish to express my sincerest gratitude for the support and guidance from my supervisor, Heli Itkonen. I was privileged to be one of the last to access Heli's wisdom and experience before her retirement. I wish you a happy and rich experience in the next challenge of your life. I would like to extend unsurmountable thanks to the thesis commissioning company, and staff.

Most of all, this thesis and indeed the entirety of the academic achievements I have made to date, have never been primarily for the benefit of me, it was for my family. Through these endeavours, I wish to provide an example to my children, highlighting to them, that should you work relentlessly at what you love, whatever it may be - blood, sweat and tears - you can achieve the moniker of a Master in your field. To my beautiful wife, thank you for your enduring support, the countless evenings and nights providing me with space and time to commit to this work. It's your turn next and I promise to reciprocate the support to you.

Kajaani, April 2020

John Wideman

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List of abbreviations

- BI Business intelligence
- CAGR Compounded annual growth rate
- CI Competitive intelligence
- FMCG Fast moving consumer goods
- GBO Global brand owner
- IPR Intellectual property rights
- KITs Key intelligence topics
- NB National brands
- NBO National brand owner
- NPD New product development
- PL Private label brands
- POS Point of sale
- RFID Radio frequency identification
- SKU Stock keeping unit
- TDM Text and data mining
- TRL Technology Readiness Level
- UP Unit price
- Value terms Monetary measurement
- Volume terms Quantity measurement
- YoY Year on year

1 Introduction

The current landscape of business is driven by the knowledge economy, no longer are physical inputs or natural resources the focus of innovation, intellectual capital is now the key driver in technical and scientific advancement. Compounding this issue and during the last century, globalization and systematic economic growth has opened new possibilities for both organizations and competitors (Ho & Lee, 2008).

Due to such, the spearheads of growth in developed countries is driven by innovations and technologies based on knowledge, in addition to the procurement and the targeted dissemination of the information contained within such knowledge (Wilensky, 1967; Albrecht, 2002). Towards this strategic aim of optimized competitive positioning for organizations via advanced knowledge inputs, the current shift from the industrial age towards the information age, and a networkingbased economy, have led to a strong renewed interest in the discipline of competitive intelligence (CI) (Bergeron & Hiller, 2002). CI process includes collecting, analysing and providing timely and useful information and knowledge, which are essential for managers and all decision makers for improving competitive position of their companies - in the eyes of consumers (Cobb, 2003).

While companies are constantly changing their services and messages, companies see the need of competitive intelligence more important to maintain the edge in today's unpredictable economy (Johns & Van Doren, 2010). At the pinnacle of capabilities in the knowledge economy and its positive impact on competitiveness, Finland has been regarded as both one of the leading countries of information society development (Sitra, 1998, p.4) and one of the most competitive countries in the world (IMD, 2019).

Competition is equally rife in the fast-moving consumer goods (FMCG) sector, where both manufacturers but also retailers strive for growth, increased market share and prevalence over their national and international competitors (Pepe, 2008). One way for the retailers to differentiate themselves from the competitors is by introducing their own private labels (PL) (Pepe, 2008; Kardes, Cronley & Cline, 2014) in response to national brands (NB). Thus, PL can be considered as a differentiation strategy, since it can lead to a competitive advantage (Pepe, 2008). According to latest statistics from Private Label Manufacturer Association (PLMA, 2019), the market share of PLs accounts for 20 to 51% of the groceries market in the EU in 2019. In Finland this figure stands firmly in the middle, at 32%. Many consumers see private label not only a trade-down but more often as another branded option (Nielsen, 2018). During the last century, competitor information was largely concentrated on market share and the product offering. However, the complexity and volatility of the modern business environment nowadays requires much broader information about the competition; current and potential (Gračanin et al, 2015). Such Information about the competition are a critical component for both tactical and strategic decision making of every company, even more so for PL goods which are enjoying strong levels of growth across developed markets. In Finland more focus and resources are being made towards product development of PL goods, evidenced in increased assortments, these are not being adequately monitored.

However, and unlike NB, critical knowledge gaps exist for effective CI between competing PL brands, stemming purely from their inherent design to achieve a differentiated profile towards the attainment of a competitive advantage. The research topic was chosen due to the author's previous experience; a ten year plus educational and professional experience in the field of CI, focusing on the FMCG sector. The research problem was initially identified at the commissioning company via a recent client engagement, highlighting a service gap in CI for PL goods, in particular, within the FMCG sector. Upon deeper exploration, two factors converge to describe the research problem of this research, contributing towards the knowledge gaps: 1) asymmetrical marketing mix features of PL goods and 2) access to PL information in the FMCG sector. Adding justification for this research in the perspective of theory building, the academic gap evident in the topics not when isolated, but more importantly when combined, CI and PL goods are not strongly represented at theoretical level.

It is derived the research problem of this thesis, is there currently exists critical knowledge gaps, or barriers in CI for PL brands in the Finnish FMCG sector. This thesis attempts to address such knowledge gaps in the quest for rationalised CI between competing PL brands. The thesis addresses the research question of how to optimise competitor intelligence for retailers' PL brands in the Finnish FMCG sector? To successfully solve the research problem, the sub-questions and thus theoretical framework of the output of the study refer to the CI cycle process (Pellissier, R., & Nenzhelele, T.E., 2013) a comprehensive framework of an "optimum" CI system which will be applied in the context of PL goods in the FMCG sector. The five phases of such model are 1) planning and direction 2) information collection 3) information sorting, capturing and storing 4) information analysis and 5) intelligence dissemination. Navigating each of the CI phases, the sub-research questions are as follows:

1.1What is the Scope of CI data required ? (What and why)

- 1.2 What frequency of CI data required? (what and when)
- 1.3 Depth and quality of information? (who, where and why)
- 1.4 How does this data need to be reported? (how)
- 1.5 How will this information help your organisation ? (how and why)

Improved CI provides retailers with valuable and actionable knowledge to support marketing and strategic-based decision making in a highly dynamic and competitive market, in the quest to achieve and sustain a competitive advantage through the use of PL.

Towards improving CI, the empirical part of the study aims in sequence, to A) explore the current level of CI deployed in the industry B) identify what knowledge (service) gaps exist and C) how to optimise CI processes, efficiency and access to information for PL brands. The thesis was commissioned by company X, upon their direction the purpose and expected output of this thesis is to confirm the knowledge gaps and provide recommendations in the form of an action plan for optimised CI for PL goods. The output is expected to contribute to confirm the commercial potential of the development of a new CI service. The thesis is classified as a type I research and development task (product design and development), equally since CI systems incorporates a high degree of technology, accordingly the research satisfies type I on the technology readiness level scale.

The theoretical positioning of the thesis relies on a focused theoretical base consisting of the following fundamentals: 1) Private label brands and their strategic considerations within the FMCG sector and 2) Competitive Intelligence key success factors and cycle. Methodologically, the thesis is a constructive research, deductive approach, employs a cross-sectional qualitative survey method, directed content analysis is used to develop the research findings.

In the empirical part of the study the interviews with retailers and external experts in Finland's FMCG grocery sector, are positioned to seek answers to the research question. The findings from the interviews will be processed in three stages to satisfy the research objectives. Raw input from the informants is to be coded to define the current level of CI, identify knowledge gaps, assess the competitive environment of PL in the Finnish FMCG sector and to corroborate the expected challenges in the future as well as potential opportunities for improve CI for PL brands. The interpreted findings will be categorised and reflected towards the five phases of CI cycle framework, preceded with findings of the competitive scenario of PL within the FMCG sector. Finally the output presents measures to answer the research question through an action plan to identify market opportunities to supplement current CI for PL in the Finnish FMCG sector.

2 Private label brands and their strategic considerations in the FMCG sector

This sub-section comprises of three converging topics of relevance to understand PL goods. Firstly, the contextual positioning of PL in the FMCG sector exploring the supply and demand dynamics at play at macro and meso level.

Secondly, the theoretical definition of private labels and their opposites national brands, a presentation of theory relating to the historical development of private labels in terms of complexity through the four generations of private label goods. Finally, the value and inherent characteristics of PL brands will be developed to highlight the importance of these particular brands in the modern day and highly competitive retail space.

The third and final sub chapter comprises of topics of relevance for PL owners when assessing their strategic options as a tool for gaining a competitive advantage via the use of private label goods. Three topics converge to provide strategic options for retailers in their quest for increasing their competitive footing within the FMCG market; success factors of private label goods according to existing theory, theory relating to the competitive nature of PL goods against other PL retailers and to a lesser extent NB goods, aligned along the horizontal competitive axis. Finally, the response strategies according to theory for PL goods when competing with NB and other PL goods in an inter-market setting.

Concurrent to the rising global market share of PL, so does the importance of research related to the topic. Furthermore, the increased intensity and sophistication of academic research on PL goods and the interplay with strategic decision making is witnessed through the database search. Private label research began in the early 1960's (e.g. Bonwich, 1962), using the *Science Direct database*, between 1996 and 2005 the number of scientific researches (comprising all article types) remained fairly stable. From 2006 onwards the intensity of scientific research accelerated and mirrors the increased trajectory of global growth in PL market share (Science Direct, 2020).

Brands are often concerned into two distinct groups (Tamilia, et al., 2000) national brands and store brands, or private label brands. Cole et al. (1955) classifies in synthesis as: "basic to this classification is the assumption that national brands are developed by manufacturers and promoted nationally and regionally, and the private labels are controlled by wholesalers, retailers, chains, or other middlemen".

2.1 The grocery sector and the interplay between supply and demand

The retail sector in Finland is slowly, perhaps reluctantly (compared to other European nations), transitioning towards automation. This disruption and unaligned level of commitment across the retailers also provides a mismatch of access to PL data for the purposes of competitor intelligence. Equally an abundance of new product development (NPD) launches has created an opportunity to develop a comprehensive solution to consistently track PL brand coverage and development in the Finnish market. Over the past few years new solutions have been put to the market, but the same issues with data asymmetry and access to information specifically for PL goods are still not rationalised nor answered effectively. This creates an opportunity to solve such issues based on the views of the supply side.

In the retail space, PL growth in volume and value sales has been identified across all major geographies in Europe. In 2016, the EU28 reported the highest share of private label in terms of value at an average rate of 31.4 % (Nielsen, 2018), however in Finland the growth of private label brands in value terms has been rather modest and not following EU level growth. Growth of PL in Finland between the period of 2012 – 2016 is just 4 percentage points. Growth disruption factors in the structure of the retail sector includes the transition to new technologies, changing consumer motivations and behavior. Retailers are understanding the potential that private labels can offer to afford differentiation in the retail sector, and in parallel to maximum profit through deeper integration and control of the supply chain. New PL products are entering the market at a fast rate and current tools are slow to react to the impact on performance in terms of competition. Therefore, the response rate of competitors pricing is also relatively slow to react in light of changing PL assortments.

2.1.1 The view of the consumer: a demand side reflection

Perhaps, the most important sector of an economy is the retail sector due to its direct interaction with the consumer. Retailing is defined as a place where all the activities for selling goods or services directly to ultimate buyers for their personal, non-business use (Kotler & Armstrong, 2012). Retailing is beyond a mere transactional arrangement, where consumers receive physical products, services, convenience and several experiences, and in return the consumer pays with money, time and effort. In order to succeed in retailing, the total sum of benefits should equal or exceed the customer's expectations.

A great potential of competitive gain for retailers is the creation of situations and stimuli that increase the perceived benefits of the customer during the purchase act (Chamie et al, 2015). Only when retail recognises the importance of deep customer comprehension, and offers actionable implementation of that knowledge, thus consumer satisfaction increases as well as the performance and the success of retail (Puccinelli et al., 2009). Consumer buying behaviour is a contingent of the field of marketing and its main objective is the understanding of how the individuals, groups or organisations choose, buy, use and dispose of the goods and the factors such as their previous experience, taste, price and branding on which the consumers base their purchasing decisions (Kotler & Keller, 2012).

Perhaps the most commonly acknowledged and cited work on the consumer decision making process was developed by Blackwell et al (2006). Whereby the five stages of consumer decision making process are as follows: problem/need recognition, information search, evaluation of alternatives, purchase decision made and post-purchase evaluation.

Understanding the changing buyer behaviour in the retail sector and the opportunities provided to PL can be addressed at three levels; Global, Transnational (EU) and National level in Finland.

At macro-, or global level, the key driver for growth in retail and thus PL goods, are changes in population structures in the form of urbanization. As people move to larger conurbations, spurred mainly by the prospects of employment, their income levels rise and in tandem so does their disposable income and spending for FMCG goods. In cities, people buy what they consume, regardless of their geography, channel store size etc (Nielsen, 2018). Although the key drivers of retail and private label growth vary by country, there exists commonality in the current development of consumer trends towards PL brands (Nielsen, 2018):

- Consumers today are connected at all times and have access to endless information. As
 a result, their expectations are changing and they're shopping differently.
- Many now see private label brands as being equivalent to or substitutable for multinational (national) brands. When consumers consider quality, many view private label products as good and getting better.

Despite these facts, consumers are often mindful of their spending, meaning they seek good value for a good price. This is evidenced particularly in **developed markets**, are willing to spend more for **premium products**. The conclusion for retailers of PL brands is that consumers are willing to spend more if a product can deliver a point of differentiation. In Europe, global market research company Nielsen (2018) expects evolutionary change needed for manufacturers and retailers seeking new opportunities to grow. Such changes will revolve around the trends of technologically induced consumer engagement, wealth developments causing fragmentation amongst consumers, and opportunities in innovation-based strategies to reach the connected, conscious and unconventional consumer. The seven key trends driving the future of Europe's FMCG market are described in

Figure 1. It provides a checklist for retailers and manufacturers in the FMCG sector to consider in order to meet the rapidly changing and complex consumer needs, preferences and trends.





EUROPE'S GROWING INCOME DIVIDE WILL FUEL

Diblockend biothym i'r Prendmon Pro Processon Neisien ddar shwas that 37% of Duropeans are better off than they were five years ago, while 32% are the same and 31% are reportedly worse off Versus five years ago. Over th next decade, FMCG growth will increasingly be double edge as weaith fragmentation drives both the premium and value ends of categories and markets.

BOOKEND GROWTH IN PREMIUM AND VALUE



HEALTH AND WELLNESS WILL BE A

STRONG SOURCE OF EUROPEAN GROWTH

Health and wellness sales will soar as Europeans become an increasingly aged population, challenged by weight issues and air pollution, and sensitive to processed products and unhealthy ingredients. Over the next decade, Europeans will demand "better for you" products.

EUROPEAN CONSUMERS WILL SHIFT FROM PASSIVE CONSUMPTION TO INTERACTIVE PARTICIPATION

The next decade of consumption will be one where consumer's desires for things like increased sustainability will turn to action. Sustainability credentials are becoming increasingly important to European consumers. Nielsen data shows that SBM of European consumers are willing to change their consumption habits to support sustainability.

TOP 7 FORCES THAT WILL DRIVE THE MARKET OVER THE NEXT DECADE







h

EUROPEAN CONSUMERS WILL EXPECT PERSONALIZED RETAIL EXPERIENCES

Personalization will continue to be one of the most important drivers in retail through the 2020s. Brands and retailers on the leading edge will get it right by delivering better offers, in the right channel at the appropriate moment. Companies will need to continue to invest in analytics and At tools to unlock new ways to reach and stimulate shopper purchases.

E-COMMERCE WILL BRING A SECOND WIND FOR European private label

Eorthe schemes and scape continues to mature within the European market, we foresce private label gaining a second wind of grooth. Gearing insights from the U.S. market, online recallers are making a move towards prioritizing their own labels over branded items. In fact, Nielsen data, powered by Rakuten Intelligence, shows that dollar share of U.S. FMGG e-commerce sales have doubled for private labels in the last two years. TIME WILL BE THE NEW CURRENCY OF CHOICE Increasingly frictionless commerce in both a world will change the game for retail. From p

Increasingly frictionless commerce in both a click and brick world will change the game for retail. From pop-up shops with cashier-less payment to automated warehouses in urban centers, fusing the overall consumer experience with smarter, intuitive tech is the future.



Figure 1. Seven forces driving the future of Europe's FMCG sector (Nielsen, 2018).

In Finland, consumer buying behaviour and trends mimic that of findings at European level, although a few specific issues separate Finland. According to NordeaTrade (2019) the spearhead trends and circumstances of Finnish consumer behaviour are listed as follows:

- Finland is a consumer society where the main determinant of purchases is quality.
- Security, the origin of the product, the brand image are other important factors.
- Compliance with European standards is considered a **guarantee of quality** and the places of purchase may vary.
- Consumers will go on the internet to make quick purchases.
- Prices being high in Finland, the average basket of a Finn is higher than in the rest of Europe.

- Online shopping accounts for 7 to 10% of total purchases from retailers. The sector continues to grow (+ 8% in 2017).
- Finnish consumers are generally **comfortable with technology**, whether for a purchase on a computer, tablet or smartphone. The Internet can also search for product information and compare it.
- Finns generally favour **domestic products**, but international brands also attract a growing market share. However, foreign products are mainly purchased when they target a specific segment.
- To retain Finnish consumers, it is often necessary to focus on customer service and the buying experience.
- About 60% of the population in 2018 is active on social networks.
- **Data protection** is an important issue for the population and data access and protection is desired.
- Emerging consumer trends in Finland are related to **environmental protection** or progressive values.
- K Group study shows that consumers are more and more interested in **quality and ecological foods**. The consumption of prepared meals that are good for health is increasing. Products that are **simple, practical, with minimal packaging and respectful of the environment are increasingly consumed**.
- Sales of organic products increased by 13% in 2017. Linked to a respectful mode of consumption, the circular economy is developed in the country.

In addition, a study commissioned by retailer K- group based on interviews of experts in K Group's food retailers, and an extensive survey carried out in K Group's customer community as a consumer panel. The research sought responses from over 1000 consumers and based on such, the results of response growth strategies are found below in Figure 2. Feedback from the study of consumers in Finland again matches both national level, EU and global level trends in consumption concerning personalized food and wellbeing (additional utility and value) as well as adventure-based food (K Group, 2019).



The coefficient describes the growth potential of the trend in 2019.

Figure 2. Consumer driven growth potential in grocery sector (K group, 2019).

Deriving from the above evidence, it is clear consumer driven trends play into the strengths of PL brands, with their inherent control ability to differentiate and thus require strategic actions on the supply side, i.e. the retailers and manufacturers of PL, providing a huge opportunity to meet such future consumer preferences and trends.

2.1.2 Retail landscape in Finland: a supply side reflection

The commerce sector is one of the most significant industries in Finland, it is also the largest employer (280 000 people). It accounts for about ten per cent of Finland's GDP, given this structural implication, the performance of the commerce sector is important for society, as it provides wealth, wellbeing and success for the nation (Finnish Commerce Federation, 2019). Contained within the commerce sector are the retail and wholesale trade, and when specifying productlevel industries, contains fast moving consumer goods (FMCG), specialty goods trade and technical trade.

For the purpose of this study, FMCG is the focus sector and is defined as products that are sold quickly and at a relatively low cost, examples include non-durable household items such as packaged foods, beverages, toiletries, OTC drugs, and other consumables (Brierley, 2002).

The grocery trade, a sub sector of the FMCG trade, which is classified as the formation of chains and the centralisation of procurement and logistics of all stakeholders related to the supply of food to consumers (PTY, 2018). In a traditional sense a grocery outlet is a self-service shop selling the full range of grocery goods and is also classified as the daily consumer goods trade, also referred to as the market trade (Finnish Commerce Industries, 2019). Inclusive under the grocery trade, is specialty foodstuffs, service stations and discount outlets. Beyond the scope of this study, the grocery trade also includes the wholesale foodservices trade serving hotels, restaurants and cafes (HoReCa).

The *International Standard Industrial Classification* (ISIC), offers a standard classification of economic activities arranged so that entities can be classified according to the activity they carry out, of which the classes relevant to the FMCG sector can be seen in Appendix 1, where the product categories are arranged into the retail and wholesale sectors.

The grocery trade is highly important for Finland's economic and societal prosperity. In 2018, 62,000 people were employed in the Finnish grocery trade and wholesale foodservices, and value sales accounted for EUR 18.2 billion. On a societal level, retailers are proactive in the quest for reducing waste, engaging in green economy principles and upholding age-based legislation for restrictions for certain product categories. The population shift in recent decades towards urban centres, the rapid development of IT solutions and increased level of personal transportation has somewhat changed the structure of the Finnish grocery trade. This can be evidenced by the number of small sized outlets reducing from 10,000 to around 3,000. Product selections have increased in span by a factor of three in only twenty years (PTY, 2019).

Efficiency in large stores is definitively higher than smaller outlets. Large stores (above 1,000 sqm) which comprise 20% of the volume of all outlets, account for a staggering 81% of sales. Despite this, smaller stores, particularly those in sparsely populated regions in Finland, maintain a strong position in maintaining the habitability of such geographies, beyond that of their economic impact. In response to expected future population ageing, services that are close to consumers and accessible even without a car become more and more necessary. Due to the distribution of outlets in line with the demand bases in Finland, concatenation and logistical concentration are typical of the Finnish daily consumer goods trade. In line with other Nordic countries, and without such centralized logistical concentration, efficiency cannot be achieved in sparsely populated nations. Such weaker cost efficiency would ultimately be translated into higher consumer prices, narrow selections and limited service and availability (PTY, 2019).

The grocery trade in Finland is characterised as an oligopoly, defined as a small number of firms who realise they are interdependent in their pricing and output policies. The number of firms is

small enough to give each firm some market power (OECD, 1993). The top four players control 95,1 % of the Finnish grocery market in terms of sales value. Therefore based on such, and due to the players holding varying levels of market share (refer to Figure 3) the competition is seen as an asymmetrical oligopoly, where the dominant player, S-Group has an evidently superior market share and duopolistic behaviour is widely acknowledged in the sector.

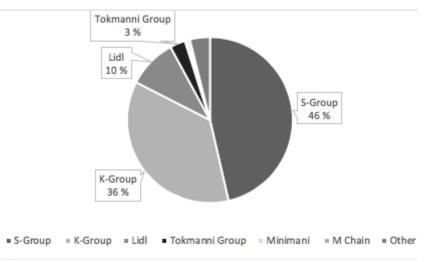


Figure 3. Market share of the Finnish Grocery Trade in 2018 (PTY, 2019).

The way consumers shop and where is changing, shoppers are now thinking and spending differently (Nielsen, 2018). In response to demand side considerations, retailers are heavily investing in their PL brands, and they seek ways to differentiate themselves to meet consumer needs and gain attractive margins.

Based on such demand side dynamics, companies operating in the FMCG sector, must reconsider their marketing strategy, and planning begins with building an offering that brings superior value to target customers (Selnes, 1993). Within this offering, products play a crucial role, a product in its simplistic form is defined as a tangible or non-tangible good or service that is offered to the customer in exchange for some unit of value (Kotler & Armstrong, 2012). Selling such correctly chosen product to the right customers is, what makes a business successful (Sethi, 2000). The ultimate goal of the product offering is to satisfy the needs of the customer as a result of the direct use of the product (Cant, Wiid & Kallier, 2015). Customer loyalty is therefore achieved on the basis of correct product strategies and aims to grow customer retention and share as well as building customer equity (Chittaie, 2012). The overarching aim of effective marketing requires companies to create explicit strategies to guide a firm in its efforts for developing and marketing its products to build a sustainable competitive advantage in return (Miguel, 2008).

The initial decision steps of retailers revolve around product decisions, such decisions are made at three levels: individual product decisions, product line decisions and product mix decisions (Kotler & Armstrong, 2012). Individual product decisions are aimed to create core customer value (Selnes, 1993). As it is understood a product is a package of attributes and comprises both tangible and abstract attributes. Quality, features and design are seen as the most critical attributes in the view of the consumer of a product (Akpoyomare, Adeosun & Ganiyu, 2012). Differentiation is afforded to retailers by using carefully chosen product attributes to provide benefit and thus a sustainable competitive advantage in the consumer's mind (Mason & Bequette, 1998). During instances where a retailer is deemed as vulnerable to competition, according to Gwin & Gwin (2003) the following steps can be taken:

- The company may develop and market a new product to fill the gap if existing products do not satisfy a specific ratio of attributes.
- The company may make changes in existing products after recognizing what attributes the product may be deficient. It can then apply new product improvements needed to shift the product to a more favourable position in the target market.
- The company can make changes in the product's price according to the maximum price the consumer is ready to pay.

In relation, product line management is an important tool of competitive strategy used by firms in the FMCG industry (Putsis & Bayus, 2001). A company has to determine on an optimal number of products in a product line and aim to have a product line, which offers enough choices for the target market while keeping the length of product line manageable and profitable (Dowell, 2006). Assortment planning is a tool at the disposal of modern-day retailers and includes the following inputs and outputs: Competition analysis, forecasting/trends analysis, customer analytics, demand planning and revenue projection (Kinduz business consulting, 2009).

Another aspect of product decision revolves around product diversification, companies must continually search for ways to improve the array of products in the form of New Product Development (NPD) in their portfolios in order to achieve organizational goals (Miguel, 2008). In choosing the right new product projects, is cited as key to maintain the business's competitive position (Cooper, Edgett & Kleinschmidt, 1999). The final planning tool for retailers once a product hits the market, is to assess the performance of the product in line with market dynamics, the product life cycle effectively maps out the life span of the product as it transitions to multiple life-cycle stages, and each stage offers new challenges to retailers requiring refinement of marketing strategies and tactics (Sharma, 2013). Moving onto product assortments in the FMCG sector, the product portfolio of a typical grocery store comprises of branded or national (NB) brands and private label (PL) brands. Branded (product) goods or national brands are defined as brands that are owned and marketed by producers are commonly referred to as "national brands" or "manufacturer brands" (Branding Strategy insider, 2018). National brands serve the interest of the manufacturer first, and benefit the retailer who carries them, second. On the other hand, private labels are becoming a dominant feature in world markets. A private label is defined as products encompassing all merchandise sold under a retailer's brand. That brand can be the retailer's own name, or a name created exclusively by that retailer. In some cases, a retailer may belong to a wholesale group that owns the brands that are available to only the members of the group (PLMA, 2019).

According to results of a survey conducted by The Finnish retailer's association (PTY, 2019), In the quest for differentiation Finnish retailers are using PL brands for the following strategic considerations:

- increase customer loyalty,
- boost and differentiate a chain brand,
- stand out from competition (premium and value brands),
- strengthen market positions,
- improve the margin in retail trade,
- improve product quality, and
- ensure supply chain control.

According to statistics from Private Label Manufacturer Association (PLMA, 2018), the market share (volume terms) of PLs accounts for 20 to 51% of the grocery market in the EU in 2018. Spain, Switzerland and the UK lead the way with the highest penetration of PL brands. The Nordics stand just above the EU average between 32-33%. In Finland in 2019, 32% of the total volume of the grocery trade is characterized by PL brands. Due to the high concentration (share of top retailers) levels it may be contributing to relatively stagnated growth of PL in Finland (Nielsen, 2018) and has not reached the levels of other trailblazing nations in Europe. Figure 4 describes the dynamics of the value share of PL in the Finnish consumer goods sector. While PLs production and sales in Finland has about 20 years of history, the market share of PLs had stayed fairly stable since 2012 (Lui & Niemi, 2012).

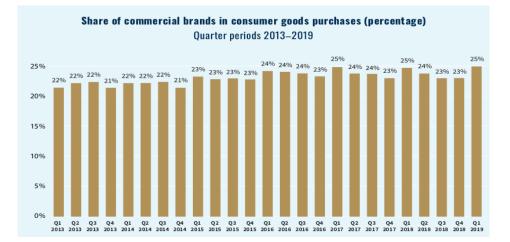


Figure 4. Private label share in Finland (value) 2012-19 (Nielsen, 2018).

Perhaps one of the barriers to growth is that Finland is a small consumer market that has not attracted too much attention of international retailing groups and the multinational food industry. Equally the concentration of the duopolistic nature plays a part in a non-stimulating environment for competition. However, Lidl's aggressive market entry subsequently captured nearly 10% market share through their private label business model, and has to some extent required traditional retailer to react and offer more focus on PL. Figure 5 describes the development in PL assortments across the retailers between 2005 and 2019, with the two largest retailers S-Group and K Group, increasing the number of Private label Stock keeping units (SKUs) by 125 % and 60% respectively.

Outlet/s	Grocery PL	No of PL S	KUs	% of PL	NBO	Market share %
	Brands			Brands		
		2005	2019			
Prisma/Sale/ABC/S- Market	Kotimaista/Rain- bow/X-Tra	1108	2500	No data	S Group	46.4%
K-Citymarket/K-Su- permarket/K- Mar- ket	Pirkka/K- Menu/Pirkka Parhaat	2053	3300	20%	Kesko Oyj	36.1%
LIDL	Multiple	-	1875	75%	Lidl Suomi Ky	9.6%
Tokmanni	Multiple	-	1800	30.9%	Tokmanni Oy	3.9%

Figure 5. Development of PL assortments of the top four retailers in Finland (Source: Liu & Niemi, 2006 and retailers' own statistics).

In conclusion, clearly the traditional retailers have been challenged to react not only by competitive dynamics, but more importantly by changing consumer needs and trends. The question still stands as to why PL penetration and growth rates in Finland are not matching the level of other EU nations. Many factors exist to impede such growth prospects, and in response this thesis attempts to understand one of those aspects, if the relative data asymmetry and access to PL goods compared to branded goods, is a contributing factor to inhibiting PL growth in the Finnish FMCG sector.

2.2 Private label brands

Retailers have offered consumers with manufacturers' branded goods for a substantial amount of time but have come a realisation in recent times the benefits associated with supplying own created brands (Håkansson, 2000). Pressure derived from the competitive nature of the retail sector has engaged retailers to develop new ways of sustaining a competitive advantage, one such way is through the strategic usage of private labels.

A variety of names are used to define the concept; private labels, store brands, own brands, retailer brands, wholesaler brands, white brands, distributor brands. For the purposes of consistency, this study will use the term private label (PL) brands in accordance with the concise and clear definition provided by Baltas (1997): "consumer products produced by, or on behalf of, retailers and sold under the retailers' own name or trademark through their own outlets".

Unlike national goods, a key defining factor of PL brands is the responsibility for R&D and maintenance of the brand itself is squarely placed on the retailer, despite whether or not the retailer actually manufactures the brand (Brassington & Pettitt, 2000).

PL is a brand that is owned or controlled through contract rights by a retailer or buyer organisation and that is solely sold at their own establishments (Ailawadi, Pauwels & Steenkamp, 2008). In some cases, the manufacturer is responsible for producing PL items, the product property and right of use are transferred to retailers, who are responsible for managing the products' life cycle (Bowersox & Cooper, 1992), a standardised industry-wide term for such is National Brand Owner (NBO) on a national level, and Global Brand Owner (GBO) on a global level.

When using such definition, PLs are indeed not a new phenomenon (Håkansson, 2000), their history stems back to sole traders producing and selling products under sole proprietorship during market trading times. A pivotal moment for PL brands, in terms of focus and resource allocation, came in the 1970s where the oil crisis and onslaught of global economic recession provided impetus to focus and rely on PL as strategic option to maintain a competitive profile (Laaksonen & Reynolds, 1994).

Due to such global economic shocks, coupled with the contraction of consumer spending, afforded an opportunity for increased demand of low-cost, basic quality and minimally packaged generic products (Keller, 2003). Since this event, the momentum of PL has not slowed down, and is evidenced by increased growth and penetration rates in a majority of western markets between 1990 -2015 as well as their sophistication levels (Håkansson ,2000; Nielsen 2018).

Through the emergence of PL brands, national brands are now required to compete directly with the NBOs of private label brands, the very retailers where their products are distributed, in addition to existing horizontal wholesaler competition with other national brands (Håkansson, 2000).

National brands

During the last century, the market was dominated by national (producer, or manufacturer) brands (Dimitrieska, 2017). National brands typically are more recognizable by consumers in day-to-day situations, and according to Keller (2003) the distinctive mark for these types of brands is that they are created by producers and bear their own chosen brand name, therefore the value derived from the brand itself is directed to the producer.

In support of the definition Jobber (2001); Chernatony and McWilliam (1998) define a national brand as "an added value entity conceived and primarily developed by a manufacturer for a specific group of customers and consumers, which portrays a unique relevant and distinctive personality through the support of product development, promotional activity and an appropriate pricing and distribution strategy".

Tamilia, Corriveau and Arguedas (2000) suggest other terminology is used including; country brands, manufacturer brands and national manufacturer brands. For the purpose of consistency, the term national brands (NB) is used throughout this research. For clarity the use of NB refers to the brand itself *and* the manufacturer of such brands, negating the need to use the term BGM, or branded goods manufacturers. The intensity and level of control is evident with an NB, and by building the brand through marketing, a producer can gain distribution and customer loyalty.

Mass media played a pivotal role in creating opportunities for NBs to promote their brands via increased awareness and sales promotions as tool to cement national brand awareness among

consumers. Quality as a feature was heavily utilized in promotional language to stimulate demand as a symbol of national level approval, still to this day brand awareness and image are key factors in making consumers desire manufacturer brands (Tamilia, Corriveau & Arguedas, 2000).

The concept of a brand, according to Davis (2000) is one of the most important assets for NBs, and manufacturers must capitalise on brand building activities with the ultimate aim of securing customer loyalty (Jobber, 2001). The holy grail of brand building activities secures the position of a leader brand, of which such designation is described as the brand with the optimum attributes of the entire product category (Kapferer, 2001).

Brand value in a brand leader position is heavily contingent on intangible assets and trademarks; such focus on developing the brand building exercise has even led to certain NBs outsourcing their manufacturing operations to third parties, such decisions are made to allow sufficient resources to focus on managing the brand. Keller (2003) explains that for NBs to maintain their corporate image, and in turn their company valuation, manufacturers are allocating increased resources on their brands' development with the aim of achieving increased market share and increasing profits (Goff, 2002). Another factor steering such increased investment in brand building activities is the threat posed by PL brands, where retailers wish to achieve the same success of increased profits and market share (Mason, 2002).

2.2.1 The four generations of private label brands

The first iteration of mass market PL brands was first witnessed in the early 20th century, where the orientation of PL was aligned only to the quality/price relationship, occurring during the consolidation times of the retail sector (Kumar and Steenkamp, 2007). In a strategic sense PLs were used in Europe and the United States during the 1970s when retailers began to expand internationally.

In an evolutionary perspective, Laaksonen (1994) categorizes PLs into four distinct generations. Such categorisations provide potential for overlap and it is acknowledged certain industries or geographies may not follow the logic in sequential terms, it does however offer an insight into the developmental process of increased PL sophistication. Table 1 describes and summarizes (Yokohama et al, 2014) the four evolutionary steps of private labels and is derived from research conducted by Laaksonen (1994) and supported in a complementary nature with the research of Senhoras (2003) and Kumar & Steenkamp (2007). This particular summarization of the process was chosen for this research as it contributes a greater level of detail compared to focusing on a single source. The key development components and characteristics of each generation will be expanded below.

	1st generation	2nd generation	3rd generation	4th generation
Type of brand	Generic, no name, brand free, un- branded	"quasi-brand", private la- bel	Private label	Extended private label, seg- mented private label
Strategy	Generics	Cheapest price	Me too	Value-added
Objective	Increase margins, provide choice in pricing	Increase margins, reduce manufacturers' power, provide better value prod- uct (quality/price)	Enhance category mar- gins, expand product as- sortment, build retailer's image among consumers	Increase and retain the cli- ent base, enhance category margins, improve retailer's image, differentiation
Product		One-off staple lines with a large volume	Big category products, with strong brand leader	Image-forming product groups, large number of products with small vol- ume, new products
Technology	Simple production process and basic technology lagging behind market leader	Technology still lagging behind market leaders	Close to the brand leader	Innovative technology
Quality / im- age	Interior image	Medium quality but still perceived as lower than leading manufacturers' brand	Comparable to the brand leaders	Same or better than brand leader, innovative and dif- ferent products from brand leaders
Price Levels	20% or more be- low the brand leader	10 to 20% below	5 to 10% below	Equal or higher than known brand
Consumers motivation to buy	Price is the main criterion for buying	Price is still important	Both quality and price, value for money	Better and unique products
Supplier	cialized	National, partly specializ- ing to private label manu- facturing	National, mostly special- izing for private label manufacturing	International, manufactur- ing mostly private labels
New Product Develop	Nono	Little effort; consider the relation of cost- benefit	Reverse engineering, with manufacturers adopting techniques close to brand leader	Considerable effort to de- velop better products
Packaging	Cheap and minimal	Cost-efficiency	Close as possible to the leading brand	Exclusive; source of differ- entiation

Table 1. The four evolutionary steps of private labels. (Source: Yokoyama et al (2014) adapted from Laaksonen (1994); Senhoras (2003); Kumar and Steenkamp (2007)).

Typically, PL in its first iteration, or generation, are characterized as generic products with low prices (generally 20% or more compared to national brands), lower quality, a comparative inferior image and no specialized suppliers. NPD is not witnessed, and the objective of the brand is to

increase margins, through the offering of choice to consumers (Yokohama et al, 2014). In the Finnish FMCG market, generic PL products are not visible in the current product portfolios of the major retail players.

The second generation of PL, or a "quasi-brand", places more emphasis on quality levels and for the retailers of PL in this phase, brands are starting to bear fruition. Pricing tends to occupy a level 10-20 % below that of equivalent NBs, and that provides its value proposition to consumers. NPD is still at relatively low levels, however, is considered should the need require (Yokohama, 2014). Second generation PL brands can be partly seen in the Finnish FMCG sector with value positioned PL brands (Menu, X-Tra, select LIDL brands), however many of such brands indeed emphasis a brand image and perhaps more suited to the third generation.

The third generation of PL are defined where both quality and price are close to the leading brands. A me-too strategy is often employed to adopt a strategy to mimic market leaders (brand leaders), and thus competition is played out in terms of value, price and quality. In an attempt to relieve consumer's hesitation relating to the benefit of switching to such brands, Batra and Sinha (2000) emphasize that information about product ingredients and manufacturing quality, as well as seals of approval and third-party endorsements can assist in such. In the Finnish FMCG sector, brands in certain product categories occupying such generation include Rainbow, Pirkka and a sizeable contingent of Lidl's PL mid-range.

The final and most sophisticated generation of PL brands is termed as extended private label or segmented private label, where the objective is to improve the retailer's image through product differentiation. Value-added strategies are employed, utilising innovation, R&D and specialized supply chains to offer a sense of exclusivity for consumers (Yokohama et al, 2014). Through such generation, premium brands can be developed to achieve increased customer loyalty and equally profitability (Huang and Huddleston 2009). In Finland a fitting example of PL brands positioned to achieve differentiation include Pirkka Parhaat (premium), Kotimaista (Locally sourced) and Lidl's deluxe (premium) brands.

One defining factor of achieving such differentiation strategy as part of the most advanced generation of PL goods relies heavily on the retailers' relationship with their source of supply, i.e. the producer (Rosenbröijer, 2001). Obtaining advanced and integrated levels of collaboration with the producer is of utmost importance when aspiring to differentiate through quality, price and image.

2.2.2 Profiling the value and characteristics of private label brands

Multiple researches have analysed the value and specific characteristics afforded by a PL brands, such as Hoch (1996); Quelch and Harding (1996); Leahy (1992). Hoch in his seminal study (1996) explains that PLs traditionally have been viewed as offering consumers an inferior-quality alternative at a value price. However with technological advances in manufacturing, PL products have upscaled, and given this fact, the value of PL goods in the eyes of NBs, has turned them into direct competition.

Hoch describes five characteristics which PL brands differ from national brands and suggests that PL may in fact hold inherent strengths compared to competing national brands. The characteristics are summarized in Table 2, and will be explored in greater depth below.

Author	Characteristic		
Hoch (1996)	Private label coverage and penetration		
	Retailer control		
	Piggybacking		
	Placement		
	Trade deals		
Quelch and Harding (1996)	Improved quality of private label products		
	Development of premium private label		
	brands		
	European supermarkets' success with pri-		
	vate labels		
	The emergence of new channels.		
	The creation of new categories.		
Leahy (1992)	Market planning		
	Control		
	Innovation		
	Choice		
	Loyalty		
	Cost		

Table 2. Advantageous characteristics of PL goods (Amended from Hoch (1996); Quelch and Harding (1996); Leahy 1992)).

Private label coverage and penetration. PL is only intellectually protected with a comprehensive recurrence across a particular outlet, as such even NBs cannot compete with the coverage and penetration across multiple product categories, equally a consistent brand reinforces the PLs awareness.

Retailer control. PLs, as opposed to NBs, are unique in the fact that all marketing and inventory investments are the responsibility of the retailer. More control effectively means more influence on performance related aspects, e.g. brand image, quality levels.

Piggybacking. Perhaps for some opportunistic retailers, PL can acquire gains by advertising price reductions during NB promotional campaigns in an attempt to sway buying decisions.

Placement. Due to increased control, PLs are afforded with full distribution and rights and preference in shelf allocation. Slotting allowances are not relevant since the retailer controls the retail space itself.

Trade deals. PLs can benefit from 100 percent pass-through on trade deals. For NBs, typically less than 50 percent of the wholesale price reductions actually get passed on to the consumer. Due to this control of the supply chain, retailers can promote PLs without eroding the real price reductions seen at the consumer end (Hoch, 1996).

Quelch and Harding (1996) put forward an additional and supplementary list of profiling factors that distinguish PL in terms of value, from that of NB goods. These characteristics are explained below:

Improved quality of private label products. Through the development of PL, the subsequent perceived gap in quality between PL and NB has decreased substantially, therefore NBs cannot rely on quality alone, to achieve a competitive advantage.

Development of premium private label brands. Through retailer's investment into upscaling PL brands, they can now be seen as direct competitors to NB goods.

European retailer's success with private labels. European retailers have witnessed higher pretax profits as a consequence of higher PL sales, thus provides a lucrative business opportunity. Such success is being tracked by other markets and therefore the introduction of PL brands in non-penetrated markets is seen as increasingly likely.

New channel creation. A recent trend in the advancement of mass merchandisers, warehouse sales, selling for example dry groceries, homecare, and health and beauty products. Such new concepts are seen typically in national chains and are positioned to develop their own brands, through PL, in the quest to ensure quality at competitive costs.

The creation of new categories. The evolution of PL beyond that of traditional product categories have offered opportunities in new and previously less penetrated categories, the aim of which is to create awareness and acceptance from the consumer against NB goods in categories without specific competition.

Six additional value-based benefits of PL compared to NB goods are identified by Leahy (1992) and are positioned in the retailers' perspective. These will be explored below:

Market planning: PL can be utilised as a coordinated development option to fill in assortment gaps within particular markets. Product positioning requirements can by identified by retailers within their existing assortments, in the quest for product niches which are not currently or adequately served by NB goods.

Control: Since retailers have full control over their PLs, and legal ownership of the brand per se, they possess the ability to quickly react to market dynamics and implement changes as necessary.

Innovation: The risk profile associated to PL innovation is often dampened compared to NB goods, due to the fact distribution is not "bought" when new products are launched, the retailer holds control of the distribution channels and can test the market for product acceptance, for example.

Choice: Simply as PL is intended to compete directly with existing PL and NB in particular categories, this affords the consumer heightened levels of choice.

Loyalty: Because of the inherent and unique nature of PL being exclusively distributed in the retailer's distribution network, PL can create positive associations with the retailer itself; store loyalty is one derived effect of PL brand loyalty.

Cost: If the retailer uses the store name, or an established PL brand with a new PL product, the brand image is partly created, and advertising and promotional activity can be relaxed to some extent.

2.3 Creating a competitive advantage with private label brands

In an economic sense, the variation in PL share is closely linked to the business cycle. Analysis by Hoch (1993) clearly shows that changes in the share of PLs are inversely related to both coincident

and lagged changes in disposable income. Such the belief that consumers are price conscious is partly true; when income reduces, consumers tend to switch to private labels from national brands. This is far from conclusive and does not paint the whole picture with regards to success factors for private labels, as performance of PL in various categories is asymmetric.

Three groups and their actions converge to affect PL success include consumers, retailers, and manufacturers. Consumer needs, expectation and behaviours constitute the demand side, and the retailer decisions affects the supply side. The wider environment, compromised of the industry per se, the manufacturers and competitors provide an additional input towards the success or failure of PL (Hoch, 1993).

Consumer based success factors

Quality assurance is the primary role of branding (Klein & Leffler, 1981) and branded products are seen to reduce consumer risk as they will hold a lower differential in product quality. Buzzell (1987) has shown through studies that higher quality products achieve higher market share and ROI. Thus, a private label is of utmost importance to lead to success. Montgomery and Wernerfelt (1992) suggest two aspects converge to determine the quality of a PL: the mean level of quality relative to that of national brands, and the variability in quality.

The first aspect concentrates on technological issues in the manufacturing process and determines the level of refinement required. Quality in simple, non-sophisticated processes is easily achieved. However, if the processing sophistication is elevated, competing NBs actively compete via increased (and expensive) investments in process innovation. If a PL cannot respond with similar investment the comparative quality is likely to be lower.

The second aspect revolves around the ability of implementing reliable, low-defect manufacturing. Similar to the first aspect, for unsophisticated manufacturing processes, quality variability for PLs is likely to be low. When quality control requires advanced sophistication levels, potentially extended beyond the levels of PL, variability is likely to be elevated, thus reducing the consistency of quality for PL lines in such categories. For consumers with elevated levels of proneness to PL, which is reliant on (PL) familiarity, and extrinsic values, such as price or packaging, in order for the consumer to judge product quality and allow variation of quality between NBs and PLs (Swan, 1974). However, the variable of quality is not the full picture, as price may be a moderating aspect when focusing on consumer choice. Trade-offs are foreseen, and consumers are likely to balance the quality versus price ratio. Raju et al (1992) argue that PLs are likely to do well in categories where consumers are particularly price sensitive. For such categories, success for PL can be achieved when sold at relative discount to competing NB brands. In support, many consumers believe PL offer high value for money (Deleersnyder et all, 2007). Lower income households are a key target for PL, as their low per capita income facilitates constrained spending budgets (Putsis et al, 2001).

Retailer based success factors

PL brand presence requires investment in many aspects, e.g. packaging, inventory, everyday shelf space, promotional display space, and feature advertising (Hoch, 1993). In addition the retailer takes on the opportunity costs of the shelf space. In the quest to recover such initial and continuous outlays, resource allocation for the purposes of PL must be designated to product categories with the highest potential for return. Hoch continues that the returns with most potential for PL are those of large categories (in value terms) that possess high gross profit margins, in such categories even small market shares provide a return on investment.

A balancing act is required, since retailers in their vertical competition with manufactures of NB, must consider the effect of PL dominance and its effects in declining manufacturer support. Based on this potential for failure, retailers of PL should focus on implementing PLs "in addition" to national brands rather than "instead of" them (Progressive Grocer, 1977). PLs can in one sense be designated as traffic builders, as if too much emphasis is placed on PL, profitable shoppers may be repelled (Lui & Wang, 2008). For success a retailer should utilize NB manufacturers for their PL production; economies of scale can be achieved, compared to fringe or low scale production, to achieve lower unit costs and this can be passed to the final consumer (Amrouche & Zaccour, 2007).

If a PL brand achieves a footing in a wide range of product categories, economies of scope in promotional activity can be attained (Putsis, 1999), and once a PL has penetrated the width and breadth of the entire assortment, this signals expertise, trustworthiness and commitment. Therefore provides a superior brand image, aligning with the expectations of consumers across all product categories.

Manufacturer based success factors

It is evident NBs and PLs are in direct competition, the current footing of NB in a particular category will affect the barriers to entry and sales success of a potential PL entrant. The level of barriers to entry is determined by two aspects: variety and advertising (Hoch, 1993).

For PLs wishing to succeed, the existing product variety must be analysed, and requires an assessment of the number of manufacturers in the market, the number of brands and product variants on offer and an understanding of the intensity of new product development activity (Hoch, 1993). In the event a category is highly varied, this provides a barrier to entry as so many competitors are striving for smaller market shares and reduces the ability to achieve high levels of growth (Lancaster, 1979). For categories with high levels of NPD, PL will face difficulty in matching the current offering in efficient timeframes (Hoch, 1993), therefore success will be suppressed for PL in categories with acknowledged and high levels of variety.

The second factor entails the level of advertising and promotion Intensity. Success may be subdued for PL where advertising is fierce (Farris & Albion, 1980). Brand equity and reputation can be increased through continuous advertising activity, and generally speaking, retailers of PL will face difficulty in matching advertising levels, in terms of budgeting compared to NB manufacturers (Klein & Leffler,1981). Hoch (1993) therefore suggests the higher the level of spending on advertising by national manufacturers, the lower the share of private labels. Finally, the intensity of promotions in a particular product category, will affect the willingness of consumers to choose PL. Lal (1990) explains that heavy promotional spending on the part of NB will force PL out of the market, thus the success of PL categories with high promotional intensity tends to be low.

2.3.1 Competitive nature of private label and competing brands

The dynamics of competition of PL brands can be categorised in two ways; intra-brand competition and inter-brand competition, the competition can also be classified by vertical and horizontal competition.

Intra-brand competition refers to competition amongst distributors or retailers of the same branded product or substitutable product. Inter-brand competition refers to competition between suppliers or resellers of the same brand or companies that have developed brands or labels for their products in order to distinguish them from other brands sold in the same market segment (Du Plooy, 2018). The intra-competitive nature of PL goods and NB brands is a balancing act, as the relationship between a producer and retailer concerns co-operation as the complimentary roles create value when providing goods for the consumer. However, a tension arises between the parties in terms of competition, in *how* such value is shared.

Such tension will be exemplified when a retailer, with majority controlled private label enters the segment. As now the competition is experienced in two axes; firstly in a vertical setting over the division of profits (wholesale price v retail price) but also a competitor in a horizontal axis, as a direct supplier (i.e. at the same stage of the supply chain). This scenario is described as a "double agent" role in the perspective of the retailer. (Dobson & Chakraborty, 2015) The competitive relationship is illustrated in Figure 6.

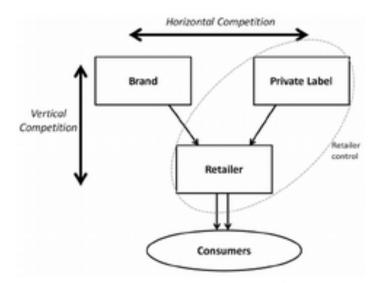


Figure 1 — Brand and Private Label Competition

Figure 6. National brand and Private label competition (Dobson & Chakrabort, 2015).

The development of such tension and rivalry is not focused only on the division of value, but equally how it effects the outcomes for the supply chain, the market as a whole and the consumer.

Mills (1995) suggests consumers stand to gain from increased presence of PL brands by adding to their choice set and spurring increased producer price competition. But this may not occur if the value benefits are directed to the retailer and provide it with greater scope of control over consumers, e.g. the ability to employ price discrimination tactics.

Dobson & Chakrabort (2015) research aimed to answer how the combination of price and nonprice competition is affected by these mixed vertical-horizontal relationships. It concludes that retailers will seek to position its PL as closely as possible to the national brand, by seeking to minimise the quality gap, but price the two goods very differently, with a wide price gap, as a means to segment consumers.

In extension and incorporating the concept of inter- and intra-brand competition, an amended concept is illustrated in Figure 7. Here the interplay **between** competing PL goods in the same product category can be shown, adding an additional aspect of horizontal competition.

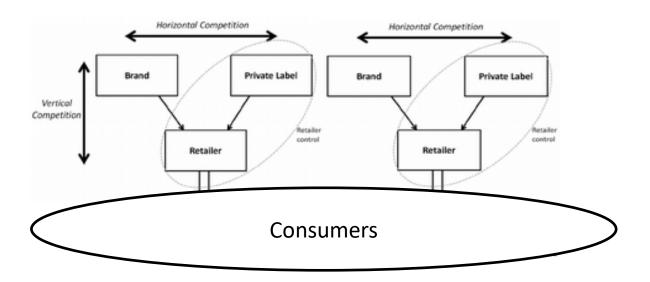


Figure 7. Intra- and Inter brand competition (Author's representation, an amendment of Dobson & Chakrabort, 2015).

With this new dimension of inter-brand competition, we can follow the logic that in the traditional horizontal competition, or intra-brand competition where a national brand producer requires trading with a retailer, who in turn controls a competing brand in the form of a PL brand. In essence, the increased penetration of PL may serve to increase the complexity of the relationship between producer-controlled national brand and a retailer- controlled PL brands. Not only is there is both a horizontal element to competition at the product level (and the battle for market share) and a vertical element to competition in trading between successive stages of the supply chain (and the battle for profit share) (Dobson & Chakrabort, 2015).

With the introduction of direct competition, in the form of competing PL brands, i.e. incorporating inter-brand competition, the balance of power can now be redefined. Two aspects converge to sway the overall balance of NB and PL in a competitive sense 1) the extended horizontal, inter-

brand competition between opposing PL brands defining the retail market share, or power and 2) the potential for growth of producers to serve as manufacturers of PL across various and separate retail chains, defining the wholesale market share or power. In line with rising growth in PL shares across major western markets, such an opportunity for producers to increase their presence, albeit through PL goods, and despite the inherent lack of control, they can decide to produce private labels and pursue two options: produce both the manufacturer brand and the private label product; or focus exclusively on producing private labels (Ailawadi, Pauwels & Steenkamp, 2008).

An additional benefit for the producer is they can manufacture private label at a substantially lower cost, since it becomes possible to dilute cost of marketing, distribution, advertising, and sales promotion. Alternatively, manufacturers may produce premium private label, with the objective of bringing new alternatives to consumers who seek high quality products (Hoch, 1996).

Dobson and Chakrabory (2009) offer a supportive theory of how and in what scenarios PL brands can compete directly with NB brands, albeit in a slapstick approach. They propose two sets of competitive tactics, entitled "Horrors", or consumer nightmares, and "Heroes", consumers' sweet dreams. A summary and features of such profiles can be found below in Figure 8.

	Manu	facturer brands	Retailer private labels		
	Character	Features	Character	Features	
ʻHorrors' Consumers' nightmares	'The blob'	Smothers competition, restricts innovation and deters entry	'The blood sucker'	Bleeds dry in novative effort by free riding on brand investments	
	'The giant octopus'	Tentacles everywhere to leverage portfolio power	'The flesh eater'	Slowly devours brands by undermining them in-store	
	'The virus'	Proliferates brand variants to spread its category control	'The body snatcher'	Copies then replaces brands with look-alike products	
'Heroes' <i>Consumers'</i> sweet	'The protector'	Offers quality, value, consistency and trustworthiness	'The underdog'	Takes on the strongest brands to challenge their dominance	
dreams	'The pioneer'	Innovates to provide new or improved products for consumers	'The adventurer'	Opens up new product categories with new ranges of products	
	'The equalizer'	Enters from adjacent markets to neutralize existing market power	'The revolutionary'	Challenges brands by offering real value and choice for the masses	

Private Labels and Branded Goods

Figure 8. National brand and private label horrors and heroes, according to Dobson and Chakrabotory (2009).

To draw a conclusion, the various competitive options PL brands has within its arsenal, have a both positive and negative effect for the consumer. For benefits, consumers have an increased choice of retailers to choose from, and when at store-level they have abundant product choice (Dobson and Chakrabotory, (2009), meeting the needs of even the most-fickle consumers. Such that the consumers benefit in price as competition between retailers accelerates, also assisted by the fact consumers often cannot differentiate PLs from NBs (Batra & Sinha, 2000). Consolidation in the retail environment through efficiency gains is duly raised at retailer level.

However, there exists also drawbacks of such fierce coexistence between PL/NB and PL brands. Dobson and Chakrabotory (2009) worries that continued consolidation will lead to retailer sovereignty, where they will employ strategies to serve their own benefits first, then those of the consumer. This could attribute to lower quality standards on PL, limit comparability across like-forlike PL products, this is particularly evident in the current assortments of PL v PL competition. Such a self-serving trend could lead to price distortion, creating dissent amongst suppliers and perhaps aid in retailer collusion (Dobson and Chakrabotory, 2009).

2.3.2 Response strategies for private label brands

Through the literature review multiple models are provided for national brand manufacturers to respond to PL brands, however no strategic models exist in literature for inter- private label competition. Despite this, two models with strategic resonance for PL responses against other PL brands will be presented. Empirical research on strategies of brand manufacturers towards private labels is still rather scarce according to Verhoef et al (2002). Literature for strategic options is particularly anecdotal (Dunne and Narasimhan, 1999; Quelch and Harding, 1996). Hoch (1996) is the only study extensively discussing strategic options of brand manufacturers.

Equally, the changing appeal of PLs goes beyond price as modern consumers are seeking quality and value (Nielsen, 2018). Due to such fact the existing strategic options for PLs against other horizontally orientated PL brands, i.e. inter-PL competition, can be applied with the same logic. However, due to controlled nature of PL (by the retailer) a portion of the proposed strategies are intangible when applying such logic.

Four basic recommendations for NB in response to PLs are presented by Halstead and Ward (1995). Each recommendation will be presented in its original form with annotation for relevance when analysing competition between PL brands, as described:

- Private labels are increasingly filling shelf space. To neutralize such occurrence, NBs should increase trade support in addition to increasing distribution beyond traditional outlets. This strategy is not available in the Inter-PL competitive environment, such PL brands are bound by their own retailer's store network in terms of placement.
- Sales promotions from NB in the form of couponing is seen as effective deterrent to PL share increases. This recommendation is relevant to inter-PL competition and is employed to some level in the retail environment (loyalty schemes, PL specific promotions etc).
- 3. NB should apply pressure on PL brands through low prices and increasing quality, value and customer satisfaction. This applies to PL v PL competition, and this strategy is evident and aggressively applied in the PL inter-brand competitive environment.
- 4. NB's should create PL brands, as it provides a level of protection against PL however may erode their own brand lines. In the context of a retailer and owner of PL brands, this can apply on the inverse where the retailer dedicates resources to create PL lines in underrepresented categories.

The second model to be presented is that of Stephen Hoch (1996), found below in Figure 9, with a presentation of six strategic measures available for a NB to respond in order to improve its competitive position towards PLs. Two pre-determined factors are required before utilizing such model: the model's options are neither mutually exclusive nor exhaustive and secondly, each of the option's viability can depend on the distance between the PL and NB's on both quality and price variables. The model is intended to provide an integrative framework for the most common strategic options for use. The six strategic options include: 1) Innovate with new and improved 2) Provide more for the money 3) Reduce the price gap 4) introduce a value-flanker 5) wait and do nothing and 6) Produce premium private labels.

The viability of each option depends on the degree of difference between the national brand and the private labels in its category. The model has also been amended to provide strategic options for private label inter-brand horizontal competition. Below will detail the tactical considerations of each strategic option.

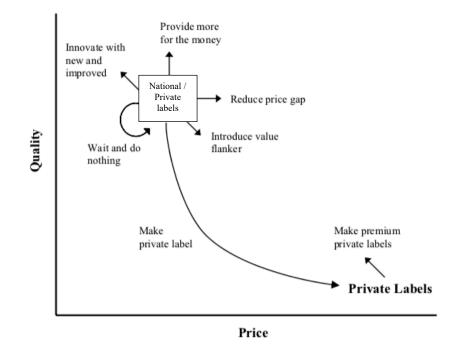


Figure 9. Strategic Options for the National Brand Source: Adapted from Hoch (1996) amended also to represent and additional aspect, inter- PL competition.

Strategy I - Innovate with new and improved: Is concerned with competing via innovation, particularly relevant to brands with short product lifecycles. Innovation lessens the effect of PL's market share attrition.

Strategy II - Provide more for the money: Entails a manufacturer maintaining price levels but offering more value for the consumer. It can be achieved through measures such as improving product features, e.g. packaging or improving nutritional value.

Strategy III - Reduce price gap: Is a strategy to improve the price gap between PL goods and NB or PL brands in a horizontal competitive dimension and is positioned to improve quality/price ratio. The strategy must be used with caution as significant reductions may harm profitability and equally damage relationships with intra-brand competition.

Strategy IV - Introduce a value flanker: The goal of such strategy is to offer a low priced, and potentially lower quality version to compete with other PL brands, or take pre-emptive action to limit a competitor to up-scale their existing products.

Strategy V - Wait and do nothing: In the event PL penetration of a certain category remains unclear or high levels of market volatility ensue, PL owners can use the opportunity to wait and gauge the situation (Waarts and Wierenga, 2000). Instant reactions to competition, may require

deeper levels of commitment and resource allocation, waiting can provide an option for competitors an opportunity to assess doesn't necessarily lead to under-performance (Shankar et al., 1998). For PLs this pertinent in under penetrated PL product categories where market testing is not at an advanced level.

Strategy VI: Make (premium) private labels. The final strategy is to introduce private labels, generic and or premium. For PL owners, this strategy could allow for penetration in segments with low or non-existent PL presence. In the perspective of the PL label, a risk but equally an opportunity in terms of relationship, that they would now maintain two sales relationship with manufacturers (should the produce both PL and NB goods) (Quelch & Harding ,1996). Equally the level of power (within the category) of the retailer increases when creating new PL lines.

3 Competitive intelligence

The rise in popularity of academic research on CI can be derived from the reference list of the renowned work of Bergeron & Hiller (Competitive Intelligence Annual Review of Information Science and Technology, 2002) and suggests the intensity has increased by twenty-fold in the period 1960-2000 (Juhari & Stephens, 2006). Using the Science direct database as a focal reference point, the level of research concerned with CI has been low in volume, with less or equal to three-digit publications per year until 2017, however in 2018 over 1000 publications were available.

CI is an iteration of and is heavily influenced by national strategic intelligence. National intelligence first drew considerable research in the inter-war and post war periods. CI was generally widespread in its commercial introduction during the 1990s, CI practitioners can learn from national-intelligence experts, especially in the analysis of complex situations (Barnea, 2010). However CI is frequently confused with industrial espionage (Colakoglu, 2011), but they are separate disciplines. Unlike CI, industrial espionage is considered unethical and illegal (Haddadi *et al.* 2010). Roitner states (2008) CI is ethical and legal largely because it follows a code of ethics.

Many definitions of Cl exist in literature; however none have achieved acceptance amongst scholars (Weiss & Naylor (2010) and Franco et al, (2011)) and a holistic view of Cl has not been developed (Calof & Dishman, 2008, cited by Saayman et al., 2008). One of more widespread definitions of Cl is in literature of the Society of Competitive Intelligence Professionals (SCIP) whereby Cl is: "the process of ethically collecting, analysing, and disseminating accurate, relevant, specific, timely, foresighted and actionable intelligence regarding the implications of the business environment, competitors, and the organization itself" (Johns & Van Doren, 2010). Reasoning for the lack of a comprehensively acknowledged definition are argued by Fleisher & Wright (2009) that Cl practitioners do not possess the time for definitions but rather focus on performing in their job. Cl definitions usually follow a process or product-oriented perspective, and Roitner (2008) stresses the difficulty in separating Cl between the two, as ultimately it covers both aspects. From the literature review definitions have evolved over time (Pelissier & Nenzhelele, 2013).

Intelligence is heavily grounded on information, but it is important to note pure information is not intelligence. Information is raw data (Palmieri, 2005) but intelligence, on the other hand, is information that has proceeded through a screening process and has been analysed. Competitive intelligence capability remains crucial in an increasingly globalized, information-driven, knowledge-based and dynamic global marketplace (Herzog, 2007). Decision makers are more in need of intelligence than information in order to make decisions (Du Toit, 2003).

Michael Porter's (1980) work on strategic management was a precursor for CI as a business discipline or function, and according to Dishman & Calof (2008) plays an influential role in the formulation and the implementation of an organisation's strategy. For increased CI effectiveness the following should be adhered: consistency of CI should be a permanent activity, offering objectivebased thinking foundered on historical information and a centrally located CI unit with dedicated support from the entirety of the organisation (Saayman et al., 2008). To achieve such, the CI function should undoubtedly be incorporated within strategic planning and business development functions (Saayman et al., 2008). Nasri (2011) states the CI function should be positioned in the organization with direct links to the CEO.

Vedder & Guynes (2002) explain that CI is important when conducting business planning, as the concept of CI delivers information regarding current and future activities of an organization's competitors, as well as information about the business environment. Calof & Wright (2008) and Dishman & Calof (2008) convey that the ultimate objective of sustaining and developing a competitive advantage is a progressing process and of core essence in the development and implementation of a business strategy.

From the above literature there is a consensus that successful Cl's core aim is to comprehensively understand the various stakeholder perceptions through information collection, and via processing. Alas Intelligence seeks for possible future opportunities in the quest for a sustainable competitive advantage. According to Langabeer (1998) the key goal of competitive intelligence is to proactively discover things which could help the organization vastly differentiate its performance from others in the industry.

The discipline of CI has an inherent strength driven by technological advancements, as the volume of available digital information has grown rapidly and is constantly increasing (Fleischer, 2008). No longer is capturing the data an issue, identifying and recognizing new sources is. Clearly defined and tested CI procedures are required to acquiring a competitive advantage through the acquisition of vast amounts of information supporting a company's decision-making processes (Johns & Van Doren, 2010).

In tactical terms, CI can assist in the formulation of strategy through an understanding of the company's industry, the company itself, and its competitors. CI therefore is the key component of strategic business analysis. It can also help identify areas of improvement as well as risks and

opportunities (Ranjit, 2008). According to Anica-Popa & Cucui (2009) performance gains can be acquired through the medium of CI in the following areas:

- Acquisition of new business,
- Retention of existing business,
- Improvements in sales-force performance and morale,
- Identification of new business opportunities,
- Sharing of ideas,
- Improved ability to anticipate surprises,
- Improving managers' analytical skills,
- Integrating diverse idea,
- Enhancing organization's competitiveness,
- Predicting, with a high level of trust, business environment's evolutions, competitors' actions, customers' requirements, even influences generated by political changes, and
- Providing a better and better support for strategic decision-making process.

CI must also be considered as part of the knowledge-based view (KBV) of the firm, where KBV defines knowledge as a strategic resource that does not depreciate in the same way traditional economic productive factors do, since it has the capacity to generate increasing returns (Wang et al., 2009). Patton (2007) explains the KBV of an organisation; knowledge and information have become the underlying sources of competitive advantage and the implication is that knowledge accumulates, and the learning capabilities of organisations become key economic factors in the productivity of knowledge-based organisations (Martin de Castro et al., 2007).

Therefore, knowledge is seen as a highly lucrative resource, and the success of an organisation is based on the knowledge the organisation has, how it uses it in its operations and new innovations, and how fast it can acquire it (Davenport & Prusak, 1998). In a dynamic business world, knowledge management is contingent on how to share, describe and organise knowledge, so the beneficiaries are aware of its existence and can utilize it without issue. According to Kogut and Zander (1992) an organisation's success is based on its ability to control, manage and exploit knowledge in its business.

3.1 Competitive intelligence key success factors

Based on the summarized theory for inputs of key success factors CI from scholars (GIA, 2004, Nasri and Zaria, 2013, Adamala and Cidrin (2011) Yeoh, Gao & Koronious (2008), Mesaros et al. (2016)), commonalities in their findings exist, despite differences in the comprehensibility of

scope, the following success factors will be analysed and are of pertinence to this study: 1. Management support and involvement, 2. Culture, network and human resources, 3. The need and right focus of competitive intelligence and 4. Technological factors and data validity. These focal success factors for CI systems will explored in greater detail below.

3.1.1 Management involvement and institutionalising CI

In terms of importance across the focused theory, management support and involvement were not only explicitly stated but ranked of high or highest importance in the successful creation of competitive intelligence systems (GIA, 2004; Mandicac et al., 2007; Yeoh, Gao & Koronius, 2008; Nasri & Zarai, 2013). Terms used to define this aspect comprised of management support, understanding, and support. An intelligence strategy must have full support at board level if it is to succeed (Kahaner, 1996). Senior management must value competitive intelligence as a significant tool in order to institutionalize its presence as an ongoing function of an organization (GIA, 2004; Nasri & Zarai, 2013). For heightened levels of CI success, an increased level of understanding at senior management level must be achieved of what intelligence provides for the company (GIA, 2004).

To increase education amongst senior management of the value of CI, lies within the responsibility of CI practitioners, additionally it is imperative to ensure management has the relevant intelligence at their disposal (Herring, 1999). Financial resources are often associated as being a limiting factor for successful CI programs, however strong management support will overcome such barrier (GIA, 2004).

The nature of intelligence are an iterative and continuous process, and thus strong institutionalized management level support is a pivotal factor in overcoming potential organisation asymmetry, therefore strong recognition and support of senior management is an absolute prerequisite (Yeoh, Gao & Koronius, 2008).

Coburn (1999) offers three methods for initiating management support for CI activities, as follows:

 In the event personal initiative is undertaken by senior management, promotion and support of CI activities will ensue. Those managers with foresight will see the value in comprehensive, companywide intelligence systems.

- 2) Via a critical or not so critical reminder of the importance of CI. In reaction, senior management will ultimately come to terms with the advantage of competitor intelligence.
- 3) When the CI function is the spearhead in launching the system. Input from senior management is transcribed into design and organization value generated in order to deliver explicit interest and support amongst the management.

3.1.2 Organisation, network and qualified human resources

Herring (1999) states it is essential to have qualified people in the intelligence program. Staff within its responsibilities must be adequately trained and equally dedicated. An open corporate culture provides an enabling environment for a vast range of organizational groups to be integral in CI practices, and act as ambassadors in its importance. Within such organizational context, trust is a prerequisite for effective cooperation and is regarded as the protagonist for such (Cope, 1998), especially critical in knowledge-intensive companies, where it is necessary to transform the knowledge of individuals into organizational knowledge (livonen & Huotari, 2000). In response, Strauss & DuToit (2010) stress the training of employees as a clear contributor for success and embedding of the competitive intelligence practices. When motivating employees engaged in CI activities, translating the perceived benefits and usefulness of the CI system is ultimately necessary (GIA, 2004). Increasing engagement amongst CI networks can be achieved by the proliferation of projects with the greatest visible positive effects in order to convince and boost understanding of the need for CI across all levels of organization (Nasri & Zarai, 2013; Yeoh, Gao & Koronius, 2008).

Another method to increase success for CI amongst the human resource base is to offer incentives and personal preferential benefits to CI users in order to boost motivation, feedback, awareness and rewards (Nasri & Zarai, 2013).

Selection of the most appropriate manager of CI activities is essential in the success for CI systems. Managers must have the business aptitude and credibility, in order to navigate the dynamic nature of CI activities, in addition to a sound understanding of strategic, operative and tactical needs and technological aspects of a CI system (GIA, 2004; Yeoh, Gao & Koronius, 2008). Furthermore, Senior management's approval and granting of trust towards the manager will solidify the success of a CI system (GIA, 2004). Herring (1999) succinctly describes the situation facing organisations who overlook the human resources aspect, "failing to understand the critical nature of human resources will lead to the slow death of an intelligence program".

3.1.3 Purpose and need of competitive intelligence

For most organisations' CI is purposed to be a differentiating factor within a particular market, as it provides opportunity for improved positioning within such market. According to Iyamu and Moloi (2013) CI as a strategic business tool, has long been proposed in an effort to increase a firm's competitiveness. Successful enterprises truly recognize the value of managing their knowledge assets effectively and efficiently. An argument by Viviers et al. (2008) suggest that making the most of available information through the CI process is a necessary activity for any business to remain competitive or even survive in a highly competitive world. Fleisher and Bensoussan (2002) state the transition of the global economy towards a knowledge and innovation economy, where knowledge and innovation are the new ammunition in the quest to differentiate from the competition. Porter (1998) contributes that organizational skill is required to translate indicators in the competitive environment into business opportunities and to apply the intelligence in decision-making and developing competitive strategies.

Herring (1999) in his study describes the CI system's purpose as the most important element to be defined in order to be successful, such system's implementation is required to be aligned and directed by the long-term strategic vision and inherent business needs of the company (Yeoh, Gao & Koronius, 2008). For firms planning market leader status, CI's main output can assist in achieving such via good forward-thinking decisions (Arrigo, 2016). According to Johns & Van Doren (2010) a well-informed company is in a better position to "out sell" and "out smart" and "out negotiate" the competition to remain on the leading edge than a company that does not incorporate CI into its planning. For this purpose, Nasri & Zarai (2013) explain it's imperative to be clear why the information is needed (purpose), how it's acquired (process), and what kind of information is used and where it's located. To attain its purpose, CI needs to be actionable (GIA, 2004).

Nasri & Zaria (2013) present five generic needs and focus areas for competitor intelligence: early warnings, support for strategic or tactical decision making, competitive monitoring and assessment, and assistance with the strategic planning process of the organization. These success factors will be explored in more detail in the following paragraphs.

CI can provide early warnings for identifying opportunities and threats for an organization before they appear visible to the focused industry, as such CI should be positioned to best respond to potential opportunities or threats. Another focus of CI is offering support for strategic decision making. CI should be integrated to provide direct information and analysis to focus on key strategic issues. CI should be focused on tactical decision making, these are the day to day activities operations of a business to achieve strategic goals. The next CI focus should be concerned with competitive monitoring and assessment, justified by a comprehensive understanding of a competitors' strategic and tactical manoeuvres. The final focus area described is assisting in strategic planning process, should be positioned to supply processed information as an input into the design and implementation of strategic plans (Prescott, 1999).

3.1.4 Technological factors and data validity

Technology plays a pivotal role in successful competitive intelligence; however, it is often overlooked. The Global Intelligence Alliance (GIA) Whitepaper (2013) explains that technologies are a critical component in CI only when utilised in the correct way and in today's information society, utilization of information tools is imperative for business.

Olszak (2014) explains that organisations should develop two parallel activities in order to build a successful CI implementation; Data exploration and data exploitation. Data exploration enables to overcome the boundary of actual knowledge of the organization and its capabilities. On the other hand, data exploitation concerns the use of existing knowledge bases it is concerned to actual resources and refers to their detailed analysis (Lavie, Stettner & Tushman, 2010).

According to Olszak's research (2014), there exists ten types of technology-based tools appropriate for building CI systems as illustrated in Figure 10 and are designated to the two aforementioned perspectives.

Data exploration perspective	Data exploitation perspective
1. Predictive modeling and data mining activities	7. Dashboards
2. Text mining	8. Interactive visualization tools
3. Web mining	9. Balance scorecard
4. Agent-based models	10. Service-Oriented Architecture (SOA)
5. Exponential random graph models (ERGM	
6. Search based application	

Figure 10. Tools and technologies for CI (Olszak, 2014).

Data exploration tools are focused on searching of new knowledge sources, enriching of existing resources, adoption of new behavioural orientations and acquisition of new competencies. Such tools are positioned to support long-term decisions, prediction and optimization. Data exploitation tools exist purely to integrate business and IT needs. For successful CI, an optimal balance of CI tools and technologies is essential on order to meet the needs of the modern-day organization. By balancing such technologies, effective CI tools should be sought to serve two purposes 1) discover new knowledge and 2) exploit this knowledge (Olszak, 2014).

Usage of such technological tools assist with the overall intelligence processes, particularly in disseminating and communicating information to users, and storing it in one place. Such tools enable seamless communication between individuals who may be physically distant. The key value of such tools is that an organisation is able to share and receive information anywhere at any given time (GIA, 2013). Ranjit (2008) suggests one of the key factors for successful competitive intelligence system was the value of information and intelligence. The key attributes or metrics used to measure the value of intelligence can be the following:

- Accuracy sources and data should be relevantly evaluated,
- Usability enables ready comprehensions and immediate actions,
- Relevance systems suits for requirements and needs of key users,
- Readiness System is responsive for existing and contingent intelligence requirements, and
- Timeliness Intelligence is delivered when still actionable.

3.2 Competitive intelligence cycle

There are numerous definitions of the CI process or cycle contained within literature. There exists commonality in each of the processes conceptualised, however the number of phases as part of the process is often divergent. One contributing factor to such unaligned definition is the naming of CI as an implementation methodology, some refer to it as a process, whereas others suggest it is a cycle. CI in the perspective of a process, follows predetermined phases (Du Toit & Sewdass, 2014). However, there exists ambiguity in the approach as some models suggest a circular and continuous process (McGonagle & Vella, 2012) of which the end product of one phase is the input of the next phase (Calof & Skinner, 1998).

Starting at the minimalistic end of concepts, Nasri (2011) offers a theoretical four-step process, of which the CI process consist of planning and focus, collection, analysis, and communication of intelligence. Many researchers list only five steps or stages of the CI process (Bose, 2008). The Strategic & Competitive Intelligence Professionals (SCIP) cycle consists of five distinct phases, and is described as the process by which "raw information is acquired, gathered, transmitted, evaluated, analysed and made available as finished intelligence for policymakers to use in decision making and action". Bose (2008) adds "there are five phases which constitute this cycle: planning and direction, collection, analysis, dissemination and feedback".

In addition and compounded within this five phase approach is the SCIP's acknowledged definition of the intelligence process, the concept is described as : "The process elements of Competitive intelligence process consist of the following: Identify the intelligence needs of the Decisionmakers (Planning), determine what information is required to generate the intelligence (Planning), Acquire the necessary information (Collection), transform the information into the required intelligence (Analysis), dissemination the intelligence to the Decision-Makers (Dissemination), actively promote the utilization of intelligence to the Decision-process (Utilization). Each element in the process is important of the overall function" (Nasri, 2011).

In an attempt to strengthen the definition of the CI process, Calof and Dishman (2008) supplemented contextual influences within the process, such as organization culture/awareness, the formal infrastructures and as employee involvement (Nasri, 2011). Botha and Boon (2008) identify seven steps, which include *Intelligence needs and determining key intelligence topics:* Intelligence needs of decision-makers are ascertained, and all intelligence leads are narrowed to key intelligence topics. *Planning and direction*: Plans and directions are formulated in order to fulfil the intelligence needs of decision- makers. *Collection:* Information is collected from the external environment in an ethical and legal manner. *Information processing:* Collected information gets captured and stored. *Analysis:* Stored information is analysed to produce actionable intelligence. *Dissemination:* Actionable intelligence is distributed to decision-makers. *Intelligence users and decision-makers:* New intelligence needs are identified.

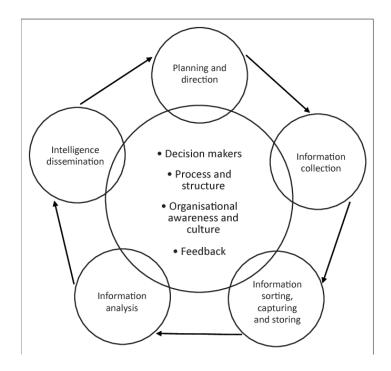


Figure 11. Five phase competitive intelligence cycle (Pellissier, R. & Nenzhelele, T.E., 2013).

For the purpose of this study the universally acknowledged five stage CI cycle proposed by Pellissier & Nenzhelele (2013) will be used to provide conceptual framework as part of the empirical study. The CI cycle is comprised of five steps as depicted in Figure 11. The five steps contained within the model include: Planning and direction, information collection, information sorting, capturing and storing, information analysis and intelligence dissemination. The following subchapters will expand on the individual process steps referring to relevant literature.

3.2.1 Phase I: Planning and direction

For certain scholars' CI process models, the planning and direction phase, is classified as the first phase, whilst for others it comprises the secondary stage. Ultimately this phase defines the decision-makers' intelligence requirements. To reach the first stage three aspects are considered; Key groups for competitor intelligence need and usage, definition of the intelligence needs, and competitor identification. Decision-makers have plenty of intelligence needs and these needs must be differentiated from information needs, prioritised and translated into key intelligence topics (KITs) (Bartes, 2014). The intelligence requirements must be transformed into information requirements in order to determine if the required information already exists or not. The steps to acquire the required information must be clearly outlined (Nasri, 2011).

For the planning and direction phase, certain scholars include the importance of drivers concerned with CI; the support functions and goals. Through this, the implementation of a formal process should be seen as a project that involves several areas of the company and also has the support of the higher management (Nasri, 2011). Equally during such preliminary phase, an assessment is made of what intelligence is required (Fleisher, 2001, cited by Saayman et al., 2008).

Nasri (2011) develops that decision-makers initiate the CI process by pinpointing the intelligence needed to make effective decisions. Furthermore, questions such as "The company needs is defined in terms of what is needed? Why is this necessary? and when this information is true?" are of utmost importance to regulate the justification of CI (Bose, 2008). Those in control of CI functions, must work cooperatively with decision makers in order to discover intelligence needs and translate into specific intelligence requirements or KITs (Nasri, 2011). KIT's can de deduced into three distinct categories and comprise of; strategic decision and actions, early warning topics and descriptions of key players. These categories will be explored below.

Strategic decisions and actions are understood to offer the most tangible measure of intelligence value and success. The purpose is to support the company's strategic decision making and provide intelligence, for example how competitor's actions affect the company's strategy or how the competitor responded to company's actions (Weiss, 2002; Herring, 1999).

Early warning KIT's aim to eliminate surprises that for example technological changes, legislative changes, new entrants or competitors' product introductions may cause (Weiss, 2002; Herring, 1999).

Key players are usually the least actionable and simply reflect the need to better understand the competitors. Essentially a full competitor analysis which may include e.g. benchmarking, financial status, products, strengths and weakness (Weiss, 2002; Herring, 1999).

Once such KITs are acquired and defined, intelligence requirements must be coded into information requirements (Nasri, 2011). To arrive at such requirements, Herring (1999) notions the importance for CI to focus on the issues that are of the highest importance for upper management. Effective resource allocation planning for CI must occur, in light of the intelligence requirements (Saayman et al., 2008). The planning phase serves three functions; establishing the competitive intelligence process, but also includes the planning activities and project management of the entire process as finally acting as the forum for feedback between the competitive intelligence group and decision makers (Nasri, 2011). In order for CI to be useful, in the quest for a competitive advantage, many tools and intelligence questions exist of interest to decision makers and are easily transposable as KITs for CI operatives to conduct (Johns & Van Doren, 2010: 556).

Another consideration of the planning phase is the definition of a company's competition, Kotler (2000) describe rivals as companies whose products satisfy the same customer need. Due to such definition, competitor scanning should revolve around functional similarities and similarities in use, rather than in type (Peteraf, 2003). Furthermore, Bergeron et al (2002) states that rivals can be identified not just by similarities among their products, but by similarities among their resources and capabilities.

A framework seen in Figure 12 by Peteraf (2003) proposes a method to identify competitors using two variables; market needs correspondence and capability equivalence. Market needs correspondence (market commonality) refers to a competitor's service or product serving the same customer needs, whether the product is similar or not with the company. Capability equivalence (resource similarity) refers that the same customer needs could be met with competitor's resources and capabilities, also considering the resources and capabilities may or may not be the same with the company. Both axes use a simple two option indicator in its assessment (yes & no, hi & lo).

Once a target competitor is assessed based on the matrix, four distinct competitor types are deduced: direct competitors (I), indirect competitor (IV), potential competitors (II) and non- competitors (III), see Figure 12 below.



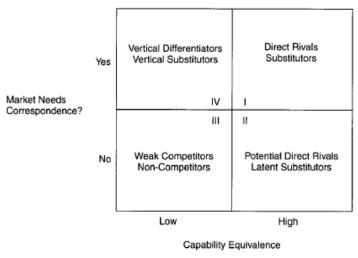


Figure 12. Framework for competitor identification (Peteraf, 2003).

Firms allocated to quadrant I are defined as those competitors who serve the same basic market needs as the focal firm, with capabilities that are comparable in terms of ability to meet the needs, if not in outward form or type. In terms of satisfaction, these firms satisfy customer's needs at a comparable level. These firms are classified **as direct rivals** and includes not only the firm's nearest and most direct competitors, but also rivals offering good product substitutes. These rivals must be monitored consistently as their level of competitive threat is at its most prevalent.

Quadrant II contains firms that do not meet corresponding market need, however, offer high levels of capability equivalence. They are classified as **latent substitutors** and are potential direct competitors, and emphasis should be put on monitoring of those who can offer a similar market need with minimum resources.

Those categorised under quadrant III, are not competitive or comparable in terms of either market presence or capabilities. These firms are weak competitors and are classed as **non-competitors**. In terms of monitoring, these firms are least likely to offer a competitive threat but should be systematically tracked.

The final quadrant has established presence in the marketplace but offer little in terms of capability equivalence. They are categorized as **vertical differentiators** and substitutors. In practice they are those competitors in the market but have a deficiency of serving customer needs effectively. Generally, these firms are monitored, but not to same level of those in quadrant I, in particular (Peteraf, 2003). The above model is of relevance as it allows for different functions and positions within an organization to align perspectives to analyse and categorize the competition in a comprehensive manner. Equally many senior level managers tend to focus only direct competition and this model alleviates such hindrance for a true and varied analysis of the competitive environment.

Strauss & Du Toit (2010) state that during the planning phase, the CI function should investigate and pinpoint to whom this intelligence should be delivered to. To arrive at such determination, assessment of the groups within an organization who require competitive awareness and access to competitive intelligence are defined as key beneficiaries or groups. According to Pirttilä (2000) key groups and individuals are capable of acquiring competitor information and transfer it into knowledge, which can be used for business development decisions. Furthermore, he describes the most common CI beneficiaries within an organization as: company's management, marketing and sales, R&D, customer service, manufacturing and line management.

Within these key groups exposed to such competitor information, all should be categorised upon the usage levels of the information, this can also aid with dissemination of information for groups who require such inputs but might not have access to it. To this end, the official policy of systematically collected information incorporated with unofficial and ad-hoc information would be utilized in the best possibly way. Pirttilä (2000) suggests three steps to successfully identify key beneficiaries of CI within an organization, as follows:

- 1. Identify the groups, managers and specialists that are naturally aware of the competitive environment. Also those groups, managers and specialists that are not aware.
- 2. Carefully examine, analyse and categorize all the competitor information and knowledge that competition aware groups, managers and specialists possess.
- 3. Define the key groups and individuals of competitor intelligence system.

On the proviso that the key groups are effectively identified, and satisfying process considerations, the creation of a systematic internal information dissemination network should then be created between the groups to optimize actionable competitive information (Pirttilä, 2000).

3.2.2 Phase II: Collection: sources, ethics and regulation

The second phase of the CI process is referred to in different ways depending on the scholar, including 'data and information collection', 'collecting raw data', 'researching and gathering information', 'data collection', 'collection', 'gathering' and 'monitoring business environment'. However, the aligning factor of emphasis is on collection of publicly available information (Botha & Boon, 2008).

Arriving at a clear definition of the information collection phase, Bose (2008) states the collection process involves identifying all potential sources of information and then investigate and collect correct data from all available sources and placing it in a regular form (Bose, 2008). Furthermore, the data should be acquired legally and ethically and put in an ordered form (Herring, 1999), the ethical and regulatory issues pertaining to CI are described later in this sub-chapter.

Hussey (1998) offers the logic that in the event CI is conducted in a systematic, continuous and almost institutionalised method, many of the potential obstacles disperse. This is mainly due to the cumulatively accrued value of collecting competitor information, and thus offers an enabling environment for deduction to be completed and to identify the information within a larger context. This cannot be achieved with an only ad-hoc collection procedure.

Porter (1998) describes two types of competitor data referring to an industry-based view and should be collected and analysed simultaneously: 1) Published data, which refers to data published on the internet and 2) data gathered from field interviews with industry participants and observers. In terms of human sources of data, unpublished information is a useful source of Cl, this comprises of anyone in contact with the competitor, for example employees (sales), suppliers, customers, the competitor and general industry experts (Weiss, 2002). Secondary sources can be sought from, for example, the internet, conferences, reports, newspapers and promotional advertisements (Weiss, 2002). The pareto principle is at play with sources of information, whereby Ho & Lee (2008) suggest the volume and usefulness of competitive intelligence follows the 80:20 rule. In practice, 80 % of competitor information is indeed publicly accessible, but accounts for no more than 20% of Cl that an organization uses in terms of actionable response implementation, it can be derived that thus the prevailing information of value is sourced from the internal constraints of the industry and is not generally publicly available.

According to Hussey (1998) the cause of CI becoming publicly available is attributed to four simplified reasons, as follows: 1) evidence deposited by competitor's activities, 2) competitors inherent need to communicate with stakeholders, 3) legal obligations to publish information in the public domain (annual reports), and 4) activities of external influences, not under the control of the organization. The information of most pertinence is derived from instances where competition is conducted, i.e. at product and service level, whereas non-competing activities might be ignored or overlooked (Hussey, 1998). Porter (1998) describes the level of intensity of published sources of publicly sources are varied dependent on the industry.

Nasri (2011) explains one of the greatest primary sources of information, is from the employees of the firm itself, therefore an effective communication infrastructure must exist to support the acquisition of the information. Other methods of obtaining information, include mystery shopping, whereby competitors themselves are a source of information (Johns and Van Doren, 2010).

Secondary sources of information are plentiful and diverse, common means of secondary information include magazines, TV, radio, analyst reports, and professional reports (Nasri, 2011). Also articles, books, theses, works presented in congresses and similar presentations, periodicals, government documents, speeches, analytical reports, government archives and those of agency regulations, registers of patents, etc. (Mélo & Medeiros, 2007).

Given its exponential scope and reach, the internet has become a haven for CI practitioners. An increasing number of customers now have opportunities to directly express their opinions and sentiments regarding products through various channels, such as online shopping sites, blogs, social network sites, forums and so forth. These opinion-based data, coming directly from customers, become a natural information source for CI (Xu, Liao, Li & Song, 2011).

Information captured for the purposes of CI entails the collection of information from a variety of sources (both primary and secondary) using various techniques (Viviers et al., 2005, cited by Nasri, 2011). The process of data collection involves various acquisition methods including environmental scanning (Lenz and Engledow, 1986; Daft et al., 1988), surveys, telephone interviews, observation, media scanning and networking (Nasri, 2011). CI Scanning is typically iterative and cumulative and will vary from person to person (Qiu, 2008). Two factors contribute to the overall value of CI scanning, firstly, the scope of scanning which is the extensibility of scanning of information from six distinct sectors: customer, supplier, competitor, company resources, technology and socioeconomic sectors. Secondly, the frequency of scanning determines how often these sectors are scanned for CI (Qiu, 2008).

Furthermore, Porter (1998) stresses the importance to understand the basics of the focal industry or field to maximize the value of the field interviews and thus overall value of the CI. Once the framework of data collection is legitimised at organizational level and sources of data have been pinpointed, a summarisation of the data collection sources can be used to define the CI data collection process, and thus enables specific business intelligence applications, e.g. competitor position analyses and sequentially to compare the company's own position with competitors (Chakraborti, 2014).

Dishman and Calof (2008) describe the diverse nature of sources utilised, including internal and external sources, and can be both qualitative and quantitative in nature, as well as using both textual and human information sources. Sources of information must be validated, and the collection phase entails assurance that the information and sources of information are tested for reliability and credibility (Saayman et al., 2008). Equally the importance of the source of information must be considered. Pranjic (2011) describes the most prominent sources spanning across the information spectrum in the context of CI, as employees of the company in question, who represent the most important primary source of information, and Internet publications are the most important secondary source of information.

For the purposes of the retail trade, specifically in Finland, according to Leppänen (2010) sources of competitor information can be gained from both public and private market information sources. Figure 13 below describes the sources of information for market-based data and can be divided into public and company owned information. For the purposes of PL, publicly available information can be sourced form market share reports, raw material prices, price basket analysis, consumption statistics, consumer panels, trade association reports and global novelty tracking. For retailer-owned information, in the context of PL, data is sourced form in-store price studies, customer bonus card data and point of sale (POS) data.

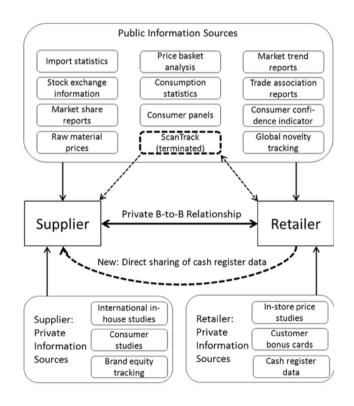


Figure 13. Sourcing and sharing competitor and market information (Leppänen, 2010)

CI has gained an unprecedented amount of attention questioning its legality and ethical standards. Equally, Competitive intelligence is not to be confused with espionage. Espionage is unlawful and unethical while competitive intelligence is legal and associated with a detailed code of ethics (Richardson & Luchsinger 2007: 42). At EU level, regulatory reactions to control and institutionalize the practice of CI have been employed.

The European Union first adopted in 2001 The Information Society Directive (IP/01/528), aimed at harmonization of EU legislation with international law, the aim of which was to strengthen IP protection, reduce conflicts in copyright laws across member states and provide commensurate renumeration for content creators and owners (European Commission, 2001). Due to inefficiencies in its impact, namely based on huge bounds in technological capabilities, the directive was deemed not sufficient for the current digital market (as of 2012). During the same year the European commission (EC) announced an internal and external review of the directive. After deliberation the updated legislation Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC came into force on the 7th June 2019. One of the key articles (3 & 4) of the directive states the mining of in-copyright works without the permission of the copyright owner is illegal. An exception has been granted for text and data mining (TDM) for the

purposes of scientific research is allowed, without the prior and explicit permission of the content owner. The directive is expected to enter force in all member states by the latest of June 7th, 2021. However, there exists serious uncertainty regarding the current relevant legal regime for TDM under EU copyright laws. It may be the case intellectual property rights may affect and hinder TDM activities (Rosati, 2018).

Many critics have expressed negative reactions of the new directive as in the commercial viewpoint, it effectively creates and legitimizes a derivative market for text and data mining. This provides undiluted power to content or right holders to control, licence and even prohibit the data (Hugenholtz, 2018). In terms of the current EU legislative position, the legality of using TDM in a commercial setting is described by three steps as seen in Figure 14. The starting point of TDM practitioners is access to the content. The decision to proceed depends upon if the content is freely accessible, in the event the information is specifically excluded form free access, and/or incorporates usage terms, a license must be obtained from the content owner. This first step revolves entirely on access rights, not usage or reproduction.

The second step concerns the valorisation of the content itself in the form of extraction and or copying, the task is to determine whether the data is part of a database, or not. Despite this, almost all instances there might exist either: a) sui generis right b) copyright c) related rights and d) restrictions may be in place. In conclusion, the current legislation creates uncertainty for the practitioners of TDM as method to capture CI intelligence, and the legalities of such practices remain unclear.

Licence may be No required Is the content freely accessible? Yes Step 2 – Extraction and/or copying of content sui generis (database) right might subsist is included in a copyright might database subsist if neither sui generis right nor copyright subsist, restrictions might be in place The content to copyright might extract/copy subsist is not included in a database related rights might subsist might be subject to legal restrictions other than IP, eg data protection /privacy, contract, etc Step 3 - Mining of text and/or data and knowledge discovery Pre-processing Extraction Removal of unnecessary or unwanted information Tokenization Identification of patterns Identification of synonims • Dealing with tables, figures, and events extraction Text transformation formulas Identification of equivalence (Normalization of text/data) classes

Step 1 – Access to content



Such legislative changes have already cascaded its way to national level. Indeed, within the confines of the scope of this research many large retailers with online webstores have filtered such barriers to TDM in their respective terms and conditions page. Evidenced by very generic statements prohibiting the commercial reproduction and/or recreation and processing of all data stored within the confines of the online database. For example, a mainstream retailer in Finland includes the following statement in the terms and conditions of their online web-platform: "The content of the...web service is protected by copyright law and international treaties. The text or images must not be used for commercial or goodwill purposes" (Kesko, 2019).

3.2.3 Phase III and IV: Information filtering and analysis

The information filtering and analysis phase of the CI process is an essential step. The phase includes analysis of collected data to determine patterns, relationships and its present activity, that will improve planning and decision making and makes it possible to develop strategies that offer a sustainable competitive advantage (Bose, 2008). The process encapsulates converting information into usable intelligence on which strategic and tactical decisions may be taken (Nasri, 2011). The analysis process itself, according to Gilad and Gilad (1985), comprises of six steps: collating data, condensing information, drawing conclusions, building scenarios, studying implications for competitive positioning and suggesting recommendations for action. The forms of analysis as part of this phase include deduction, induction, pattern recognition, and trend analysis (Bose, 2008).

The techniques employed by CI professionals are varied and broad. Nasri (2011) describes the most useful analytical approaches incorporate a forward-looking philosophy, relevant to the company, accurate, resource-efficient, objective, useful, bias free, and current with the competitive landscape.

Marceau and Sawka (1999) point out that to enable relevant competitor intelligence, advanced and appropriate analytical tools must be used such as SWOT analysis, PEST(LE) analysis, scenario analysis, and competitor profiling (Porter, 1998) also (Fleischer & Bensoussam, 2003) analytical techniques: BCG growth/share portfolio matrix, GE business screen matrix, industry analysis (Porter's five forces model), strategic group analysis, financial ratios, and value chain analysis and satellite (Bose, 2008). Pranjic (2011) suggests the SWOT analysis is the is the most commonly used method of analysis.

Towards the scope of this study, Porter's globally acknowledged and generic model of competitor response will be presented in more detail. Porter stresses the positioning of a business to maximize the capabilities and separate it from competitors is essential for a competitive strategy. In strategic management, a comprehensive understanding of the competition is a critical component. It is obtained though competitor analysis, where the purpose is to identify the current strategy employed by the competition, what strategic changes are anticipated, how competitors react to externalities such as industry trends or competitor's strategic moves (Porter, 1998).

Through Porter's work on competitive strategy, *Techniques for analysing industries and competitors* he aims to clarify the following competitive-based questions: What is the purpose of competitor's strategic move, its consequences and how seriously it should be taken? Against which competitors should we fight? What areas to avoid because competitor's reaction might be emotional or desperate?. Aimed to answer such issues, Porter conceptualized the competitor analysis framework of which is comprised of four diagnostic components, together such quadrants combine to create a response profile on how to act against a particular competitor. The components of the input side of the model include competitor's current strategy, capabilities, assumptions and future goals. The final two aspects may be ignored if an organization does employ a systematic process analysing its competitors (Porter, 1998, p. 48-49). The competitor analysis framework is illustrated in Figure 15 below. A brief description of the four contributing components that develop a competitor's response profile will follow.

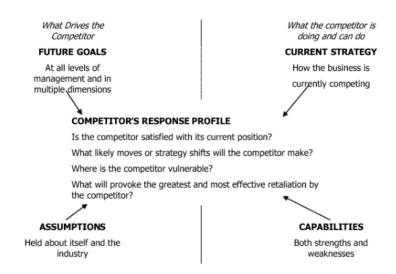


Figure 15. Competitor response profile (Porter, 1998).

The Future goals of a competitor analysis defines the possible strategic objectives that may drive the competitor in the strategic actions. All levels of management should be comprehensively analysed to deliver a concise understanding of what these organizational level goals are, and equally what level on the organizational hierarchy in terms of priority. A future goal analysis identifies the level of satisfaction on a competitor's current position and highlight potential of reactions or strategic manoeuvres it may implement.

For more scope of this aspect, an analysis of a competitors' financial situation, risk structure, values and attitudes, organizational structure, management, board of directors should be conducted, with the aim of deriving an understanding of future goals. The goal is to assess the focus areas a competitor channels its capabilities and resources, revealing also how the company will react in competitive scenarios (Porter, 1998, p. 50-56).

Assumptions are the converging aspects of competitor's internal assumptions and those about the industry and other competitors within. It is imperative to understand the unique assumptions held by a competitor as it underlines the strategic actions it may employ. Porter (1998) poses the following questions of relevance to assess in order to gauge the inherent assumptions held within a competitor, and to ascertain such assumptions that may not be dispassionate or realistic, as follows:

- What does the competitor appear to believe about its relative position?
- Does the competitor have strong historical or emotional identification?
- Are there cultural, regional, or national differences that will affect the way in which competitors perceive and assign significance to events?
- Are there organizational values or canons which have been strongly institutionalized and will affect the way events are viewed?
- What does the competitor appear to believe about future demand for the product and about the significance of industry trends?
- What does the competitor appear to believe about the goals and capabilities of its competitors?
- Does the competitor seem to believe in industry conventional wisdom or historic rules of thumb and common industry approaches that do not reflect new market conditions?
- A competitor's assumptions may well be subtly influenced by, as well as reflected in, its current strategy. It may see new industry events through filters defined by its past and present circum- stances, and this may not lead to objectivity (Porter, 1998).

A second aspect indicating assumptions on what a competitor holds about itself or others is found in competitors' managements' background and advisory relationships. Historical background of a competitor's senior management may indicate where leadership has come from and equally clarify future moves (Porter, 1998).

Current Strategy is the third component of competitor analysis in developing understanding of the strategic trajectory of each competitor. It describes the key operative factors relevant to each of the function s of the business and the linkages between such functions. Strategies can be implicit or explicit and will exist in one form (Porter, 1998). In today's digital world the currently employed strategy can often be found on the competitor's dedicated website.

Capabilities is the final component of a competitor analysis. The underlying aim of this diagnostic step is to create a realistic view about competitor's strengths and weaknesses in each key area of its business. According to Porter (1998) the following points must be focused upon when conducting a SWOT analysis:

- Core Capabilities of the competitor,
- Ability to grow,
- Quick response capability to changes,
- Ability to adapt changes, and
- Staying power to maintain competitiveness.

A full understanding of a competitor's current strategic goals will influence the likelihood, timing, nature and intensity of a competitors' reactions. With knowledge on such capabilities, will allow insight into what the competitor's capabilities are when reacting to unique moves and changes in the competitive environment (Porter, 1998).

The final step of the competitor analysis according to Porter (1998) is the **Creation of a competitor profile.** This output combines the analysis developed through the competitor's future goals, assumptions, current strategies and capabilities. After which an overview of the competitor's response profile can be created. Of which is aimed to create scenarios and allow for prediction relating to strategic situations on what offensive and defensive actions the competitor may employ and in tandem what are the unique capabilities it possesses to implement.

Furthermore, an understanding of the competitor's satisfaction with its current position should be reached, this aspect can allow for insight on possible strategic moves or changes are to be attempted related to its inherent future goals. Such offensive strategic moves can be deduced if an expected strategic move has been made, in line with the competitor's goals, assumptions and capabilities. To add weight to such it is equally relevant to understand the strength and seriousness of the moves the competitor might take and what the competitor might gain as a reward if the moves are deemed successful. The measurement of gain is a relevant indicator the level of seriousness a competitor attempt will pursue its goals. Defensive scenarios must also be addressed. Through analysis of a competitors' defensive capability against environmental changes or other competitors' feasible strategic moves, Porter stresses considering competitors' vulnerability to a certain event. The level of vulnerability will suggest the effectiveness and capitatim the competitor is able to respond to an eventuality (Porter, 1998).

In conclusion, Porter's competitive response profile model allows a company to define and make informed choices to where it is able or should compete from a strategic perspective (e.g. segments, dimensions, countries, industries etc.) with a greater level of understanding. To this end it is optimum for a company to develop a strategy in which a competitor is not capable to challenge, given the current scenario. Equally the information sought through the diagnostic process, also for pre-emptive action, in order to interfere or affect the ability of a competition to reach its future goals (Porter, 1998).

After a full collection of competitor intelligence from all available and required sources, final judgements cannot yet be made. Data analysis tools can help analysts to uncover hidden knowledge in the collected datasets that can be applied to the analytic techniques (Bose, 2008). Current deployment of data analysis tools mainly consists of data mining, statistical analysis and BI (Business Intelligence) tools (Wee, 2001).

3.2.4 Phase V: Competitive intelligence dissemination

The ultimate process step with CI systems revolves around the targeted dissemination of the collected information towards the relevant internal stakeholders, this typically represents management level and expert employees where the information is relevant to the activities of their role. For CI to be ultimately successful, dissemination of such information to the correct user is crucial. To this aim, organisations must enhance a culture internally that is capable of promoting the exchange of knowledge and thoughts among individuals and departments (Pole, 2000). Due to the fact the process steps in CI are sequential, and dissemination of CI constitutes the final step, i.e. the output, undeniably any process failures in previous steps can implicate failure in this delivery (Straus & Toit, 2010). Also, sequential CI relies heavily on analysed intelligence to be coded effectively, processed into the correct format and thus usable in the form of actionable decision-making options for the recipient in order to optimize implementation (Miller, 1996; Weiss, 2002). In its original application in the military sector, it is pointed out that consumers of intelligence are not pressed into action by the receipt of intelligence, if and how they consume intelligence is key (Lowenthal, 2011).

Due to the dissemination of CI contributing the final phase of the CI cycle, an important element of this phase for CI practitioners is to communicate the results of its worth to those with the authority and responsibility to act on the findings within the organization (Saayman et al., 2008). CI practitioners must choose the relevant communication channel based on the type of information to share. Various communication and dissemination channels exist, such as ad hoc reports, alerts, e-mails, presentations, news briefs, competitor files and special memos (Fleisher, 2001). In modern times the usage of e-mail has become more important than printed reports, interviews and presentations for CI based dissemination (Pranjic, 2011: 284). The methods and frequency of the collected competitive intelligence to be communicated is dependent on the intelligence requirements and nature of the information (Weiss, 2002). This dictates the urgency of the intelligence, and therefore certain data will be less urgent and disseminated monthly, whereas more critical and pertinent information must be disseminated immediately after collection and coding.

Weiss (2002) states that daily and/or weekly emails to employees in the format of reports or analyses located in the company's intranet is one possible way to share written information for employees. Periodic competitor-centric meetings for senior management is a useful method to disseminate CI within a company and allows for immediate feedback and evaluation (Nasri & Zarai, 2013).

Supporting the CI dissemination process, a user requirements agreement should be put in place to determine how the information will be communicated and to whom. Weiss (2002) states the essential point is that CI needs to be used in decision-making, and its presentation should thus aid this process.

Once the CI has traversed across the appropriate dissemination channels and decisions or actionable implementation has been conducted, an additional aspect should be considered, the evaluation process.

The evaluation phase is defined as the evaluation of the CI process, the identification of its benefits and the assessment of its effectiveness in the decision-making process (Santos, 2010). Adding value to the evaluation is feedback from CI users, in terms of the development and improvement of future competitive intelligence plans, as well as the review and reassessment of the organizational strategy (Fleisher, 2001).

In aide of a systematic dissemination and evaluation process, a supportive organizational culture is required where employees collectively contribute to the CI system and understand its value in their decision making. Policy, infrastructure and procedures should be put in place and of supportive nature to enable CI to be shared and used effortlessly (Miller, 1996).

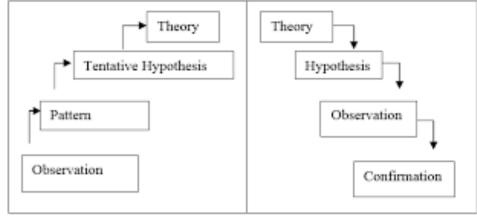
4 Methodology

The philosophy of this research is defined as pragmatic as the positioning of the thesis supports actions. Saunders et al (2012) describe pragmatics as those who "recognise that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities". The thesis' deductive approach satisfies the pragmatic research philosophy, as the researcher in this case recognises that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture approach satisfies the pragmatic research philosophy, as the researcher in this case recognises that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities (Saunders et al, 2012).

Ontology in business research can be defined as "the science or study of being" (Blaikie, 2010). In practical terms, it confines to an interpreted belief system of an individual about the constitution of facts, and the central question lies within the researcher's view of whether social entities should be perceived as objective or subjective (Dudovskiy, 2019). For the basis of this research a pragmatic and subjective epistemology is employed, to emphasize the relationship between knowledge and action-knowledge is truthful to the extent it is successful in guiding action (van de Ven, 2007).

Furthermore, the axiology, defined as the assessment of the role of researcher's own value on all stages of the research process (Li, 2016) should be acknowledged. As part of the methodological discussion, the researcher must understand his internal view of the industry as defined in the scope of the study and thus both objective and subjective values will be displayed in interpreting the results as part of the empirical study.

The research approach is defined as deductive; the qualitative methods employ a deductive approach. Clarifying the deductive reasoning approach, is concerned with "developing a hypothesis based on existing theory, in turn designing a research strategy to test the hypothesis (Wilson, 2010). Such approach is is determined by a generalised starting point, and predictions provide the basis for the observational testing, through which an evidence-based confirmation or conclusion is based upon, Figure 16 compares inductive versus deductive reasoning, Moreover, deductive reasoning can be explained as "reasoning from the general to the particular" (Pelissier, 2008), whereas inductive reasoning is the opposite.



Inductive Reasoning

Deductive Reasoning

Figure 16. Inductive v deductive reasoning (Trochim and Donnelly, 2006).

In line with aim of the research, the research strategy employed is constructive. Defined as a research procedure for designing constructions, in turn which is defined as reference to entities that produce solutions to explicit problems, creating new reality and can be implemented (Kasanen et al, 2003).

4.1 Research strategy

In light of the thesis addressing an industry-wide problem, in-line with a constructive research method, to develop a commercial solution, the R&D methodology follows two acknowledged measurements of intensity of R&D, the typology of developmental research and the Technology Readiness Level (TRL) scale.

The thesis is defined as an investigative effort in order to ascertain the market feasibility of a new product/service for the commissioning company. Thus, the research is developmental in nature and satisfies a type 1 developmental research, product design and development, as described in Figure 17 below. The R&D method employed for this thesis follows an in-depth interview and partial field observation.

Type of Developmental Research	Functions/Phase	Research Methodology Employed
Type 1	Product Design and Development	Case Study, In-Depth Interview, Field Observation, Document Analysis
Type 1	Product Evaluation	Evaluation, Case Study, Survey, In-depth Interview Document Analysis
	Validation of Tool or Technique	Evaluation, Experimental, Expert Interview, In-depth Interview, Survey
Type 2	Model Development	Literature Review, Case Study, Survey, Delphi, Think-Aloud Protocols
Type 2	Model Use	Survey In-Depth Interview, Case Study, Field Observation, Document Analysis
Type 2	Model Validation	Experimental, In-Depth Interview, Expert Review, Replication
Figure 17. Develo	opmental research t	ypes and common research methods employed for a partic-

ular study (Hassan B, 2018).

When referring to the TRL of this exploratory research, where the primary purpose of using technology readiness level scale is to assist management in making decisions concerning the development and transitioning of technology (Duetsch et al, 2010). Given an improved CI service combines technology, in particular for its sourcing of CI information, it is necessary to assess the level as part of the R&D methodology of the thesis. This thesis represents a stage 1 TRL level, defined as "basic principles observed, and theoretically analyzed" (see Figure 18) i.e. a primary component of knowledge development, setting the theoretical basis for knowledge creation in the quest to active higher level of absorptive capacity, in the form of knowledge application.

TRL	Description	Stage of Technology Development Related to the Absorptive Capacity Required
9	Actual system flight proven through successful mission operations	Exploitation Stage
8	Actual system completed and flight qualified through test and demonstration	(knowledge application)
7	System prototype demonstration in an operational environment] /
6	System/subsystem model or prototype demonstrated in a relevant environment	
5	Component and/or breadboard validation in relevant environment	1 /
4	Component and/or breadboard validation in laboratory environment] /
3	Analytical and experimental critical function and/or characteristic] /
2	Technology concept and/or application formulated and analyzed	Exploration Stage
1	Basic principles observed, reported, and theoretically analyzed	(knowledge creation)

Figure 18. Technology Readiness Level (TRL) Scale and its Relation to the Absorptive Capacity

Required (Adalberto, 2017).

4.2 Research and development methods

The methodological choice of the thesis is a mono-method qualitative study. The research strategy is defined as a semi-structured survey, utilising both questionnaire and interviews as the mode of data collection.

The qualitative approach's purpose to this research is to clarify and gain new knowledge and insight on the research problem. When analysing such information inputs, it is imperative to summarize the data without the possibility of data attrition, but equally ensuring a consistent and clear message in the view of the reader (Eskola & Suoranta, 1998).

Qualitative interview methods are crucial for an in-depth analysis of the topic and provides informants the environment to elaborate, and are also seen as response to develop human feelings and thoughts. Monette et al (2010) credit qualitative methods with the acknowledgement of abstraction and generalisation. Typical strengths of such method are the level of detail, comprehensiveness and non-formative focus, equally the weaknesses include poor levels of internal reliability, weak decisiveness and poor generalizability (Albery & Munafo, 2008). The time horizon of the study is cross-sectional, defined as one that takes place at a single point in time (Trochim & Donnelly, 2006) with no repetition. Multiple types of interviews are available, the research relies on semi interviews, which according to Bryman (2008) is a method with built in flexibility, which incorporates predefined questions, as well as an opportunity to instigate ad-hoc questions to gain detail.

In order to process the data collection, the thesis employs a directed approach to content analysis technique, where the goal is to validate or extend a conceptually valid theoretical framework (Hsieh & Shannon, 2005). Figure 19 reminds the reasoning behind the choices of the particular content analysis technique. Cementing the fact this research design is most suited to directed content analysis, as the coding categories and/or keywords, are derived prior to the data analysis and arranged during the theory collection. The profile of such directed content analysis allows for a comparatively more structured process to high-level content analysis (Hickey & Kipping, 1996).

		Timing of Defining	Source of
Type of Content Analysis	Study Starts With	Codes or Keywords	Codes or Keywords
Conventional content analysis	Observation	Codes are defined dur- ine data analysis	Codes are derived from data
Directed content analysis	Theory	Codes are defined be- fore and during data analysis	Codes are derived from theory or relevant research findings
Summative content analysis	Keywords	Keywords are identified before and during data analysis	Keywords are derived from interest of re- searchers or review of literature

Figure 19. Major coding differences among the three approaches to content analysis (Hsieh & Shannon, 2005).

4.3 Reliability and validity of the research

The research acknowledges reliability as part of the process, and in focus of qualitative research Lincoln & Guba (1985) describe four issues pertaining to the trustworthiness of research: (1) Truth value (2) Applicability (3) Consistency (4) Neutrality. Bias is often a concern in the case of qualitative research, purposeful sampling has advantages when compared with convenience sampling in that bias is reduced because the sample is constantly refined to meet the study aims.

Francis et al (2010) suggest that a premature close of the selection of informants may threaten the validity of the research, to alleviate this, researchers can continue the recruitment of new informants into the study during data analysis until no new information emerges. In response to this, the population size of the study is defined by the competitors within the FMCG sector, and sample is characterized by the market shares of the competitors. The top four players in the market control 95% of the market, and through such the sample is defined as 95%, leaving scope for the additional informants in terms of regional representation, and thus new and valuable information.

It is suggested reliability is not enough, research must incorporate the principles of validity. Pelissier (2008) describes two categories for validity: internal and external. Internal validity explores how the research findings match reality, whereas external validity refers to the extent to which the research findings can be replicated to other environments and applications. 5 Empirical study: Knowledge gaps in competitive intelligence for private labels

This section marks the transition from the theoretical discussion towards the empirical scenario. The aim is to present the research findings and contrast to the theoretical framework and providing an insight into the current level of CI employed in the Finnish grocery sector. Satisfying and defining objective A of the thesis to *explore the current level of CI deployed in the industry* based on the input of the informants of this study.

Before presenting the findings, the two components of the research problem, **Asymmetrical marketing mix features of PL goods** and **Access to PL information in the FMCG sector** are addressed in greater detail below, to develop and describe the current scenario inhibiting competitive intelligence for PL in the Finnish FMCG sector.

Asymmetrical marketing mix features of PL goods

The emergence of PL goods as mode of competitive advantage and differentiation strategy for retailers is aimed at answering the dynamics of demand side considerations in the grocery trade sector. Equally, the National Brand Owners (NBO) that control PL brands now have more control on the marketing mix considerations, compared to branded goods. In order to meet choice, and paradoxically, in a market where comparison of alternatives were seen as simple, PL has distorted the transparency of product comparisons and PL goods afford retailers the benefits of adding diversity in a retail category (Raju et al. 1995).

Anecdotal and mainstream media initiatives exploring the surface level of the retail sector often publish annual comparative cost per basket between the retailers of grocery goods. However when assessing the methodology of such comparisons it either 1) focuses on primarily branded goods or 2) mis-represents the asymmetry of PL goods based via mis-categorization and 3) overlooking certain aspects of the comparative attributes of products and 4) comparing in a simplistic methodology (e.g. not taking into account the non-aligned pricing policies employed by various retailers).

PL products by definition, are at face value difficult to benchmark on a like-for-like basis compared to branded goods, due to their differentiated nature driven by their unique business model approach (Lincoln, 2008).Thus are deemed asymmetrical when attempting to directly compare without processing. In practice retailers controlling PL goods have options to distance their offerings compared to A) national brands and B) other retailers' PL goods via marketing mix control and this autonomy is displayed through product feature differentiation.

According to Chan and Coughlan (2006) product differentiation can reflect quality differences or just differences in features. Features can be explained as follows; a quality attribute is one for which a consumer's ideal point is **infinite** (more is always better) and a feature attribute is one for which a consumer's ideal point is **finite** (e.g., colour, package size, labelling, flavour). Their research suggests, a strategically oriented manufacturer is likely to persist in efforts to both increase its quality and to increase its feature differentiation from the competing national and PL brand through time.

Many scholars argue quality is both subjective and objective (Garvin, 1984; Shewhart, 1931). However, in response to the focus of this study, and when assessing quality in the view of the consumer, quality is defined in terms of meeting customer expectations, explicit or not. Feigenbaum (1983) explains quality as "the customer's actual experience with the product or service, measured against his or her requirements—stated or unstated, conscious or merely sensed, technically operational or entirely subjective". Ishikawa (1985) further emphasizes that requirements change and, thus, quality is a dynamic concept. Another definition of quality "future needs of the user into measurable characteristics" (Deming, 1986).

In line with the findings and approach to defining quality, in the context of the consumer perspective, a quality attribute of a brand with infinite measurement of quality is concurrent to the comparison sought within this study. Whereas a feature attribute is logically more objective, supported by consumers measurement scale being finite. The data asymmetry witnessed as part of this research is relevant to feature attributes, due to its ability to be directly compared, ordered and compute intervals due to their designation as a ratio level on the scale of mathematical measurements. Therefore any comparison made, can be directly compared.

Figure 20 below conceptualizes in a simplistic manner, the comparative control of the marketing mix aspects of a retailer, between NB and PL brands. The concept assumes a product in a particular product category A. We will use a simplistic definition of the marketing mix as the 4p's, including Product, Price, Place and promotion whereby as a group, are defined as the "set of marketing tools that the firm uses to pursue its marketing objectives in the target market" (Kotler, 2000).

The left side of Figure 20 below, describes the scenario of a NB across three unique and distinct retail outlets. Regarding NBs, the span of control of the retailer is limited to **price**, thus offers only one dimension of data *asymmetry* when attempting comparison between retailers stocking such NB goods. In practice, the retailer can only control the price features of the product (wholesale price and slotting agreements are agreed with manufacturer, retail price is designated by the retailer). On the contrary, the **place** (NB manufacturers are not bound to service one retail chain, in fact they want to maximize penetration), **promotion** (NB manufacturers are in control of branding and advertising beyond that of in-store promotions) and **product** (product features are symmetrical, and under the control of the manufacturer) are deemed as symmetrical and features can be directly compared.

The right-hand side of Figure 20 below focuses on PL brands, again assuming a product in product category A. Described are three distinct retailer outlets (A,B,C) with their own PL brand with representation in the particular product category A. Due to the control options afforded by PL brands, the level of data *symmetry* has decreased when comparing brands based on the four marketing mix factors. In an ideal scenario, the PL goods *can* be identical, however reality does not reflect this. In a worst-case scenario, the only symmetrical feature is now the **product category**. Whereas feature *asymmetry* is now witnessed in **price** (retailers have discretion on negotiation of whole-sale price, and retail price, also convoluting the comparison is some retailers using regional pricing), **place** (PL brands are only available at outlets controlled and owned by the retailer themselves, causing exclusivity), **promotion** (the retailer has full control of the promotional activities, resources allocated to PL brands) and **product features** (despite the product being in Category A, the packaging, size, claims and positioning are under the full control of the PL owner).

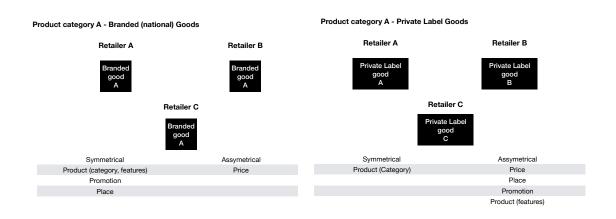


Figure 20. Comparative Control of the marketing mix: Asymmetry/symmetry between National brands v Private label

In conclusion, when retailers conduct competitive benchmarking of PL brands, the complexity increases due to the above data asymmetry, compared to that of comparing national brands. For PL, the level of direct comparability reduces, and requires two prerequisites in order to allow for successful competitor intelligence to commence; 1) For a *retailer* to define product categories aligned with the competition in terms of their PL brands and 2) a methodology of further processing of product feature data in order to create an aligned level of comparativeness. Next, the second phenomena at play to arrive at the research problem and circumstantial evaluation will be assessed, access to rationalized PL information in the FMCG sector.

Access to PL information in the FMCG sector

Access to product information for PL brands is not as prevalent compared to NB goods, for both the supply and demand side. NBs will typically have both an online site and designated brand subpage, where comprehensive details (general and specific brand information) of each product is accessible and positively disseminated. This is primarily for the benefit of the consumer when seeking comparative information.

However, and in addition, this product information is targeted for retailers on the supply side as a means of marketing material. A brand owner of NBs will produce vast amounts of product specific details in the form of updated inventory lists, specification sheets, sales brochures and awareness of NPD to 1) increase brand awareness amongst consumers and 2) lure retailers to stock such brands, as wholesale to retail is an intermediate step to the final consumer. For PL brands however, the impetus to provide supply-side information is non-existent, since the retailer and manufacturer will jointly-develop the brand specific attributes and product specifications "behind closed doors". There exists no information in the Finnish market of PL brands from the manufacturer, simply the retailer or brand owner has control and rights to display such product feature information at their discretion.

Retailers can choose to actively refrain from displaying such information in digital formats (i.e. online), this is the case with Lidl and Tokmanni in the grocery categories as of January 2020 (except promotional or featured items). Amongst the top four players in the Finnish grocery sector, all four have a dedicated website. However not all have a webstore (also home delivery/pick up) nor access to the full product range, including PL brands. The retailers show varying levels of access to general and specific product information. The effort and investment to promote NPD is unaligned. In practice, this means retailers when conducting Cl often miss, or receive out-of-date information regarding competitor's new product launches, this is especially crucial for retailers in product categories with little PL penetration. Lidl as a retailer in Finland are an expectational case,

where the majority of their stock keeping units (SKUs) are PL brands (c.75%), coupled with the fact the access to internet-based information is scarce, offers a huge barrier to competitors and equally consumers when investigating product specific information. Traditional methods of data collection can still be sought from all retailers (i.e. instore primary data collection).

On the demand side, this equates to a barrier for consumers to be informed on the availability of both NPD and existing products. Equally for retailers' (and other primary stakeholders such as PL manufacturers, packaging suppliers etc) ability to fully understand the full spectrum of dynamics relating to PL NPDs, as well as general and specific product attributes. A summarized analysis of the current and varying levels of access to information (as a source of CI) regarding PL goods is illustrated below in Table 3. For clarity in the table, **Specific Brand info:** claims, shelf space (no of facings, i.e. prominence), country of origin, ingredients, packaging material and system, Certifications, membership of associations, Charitable/religious action, Responsible sourcing, Animal welfare, Sustainability and Trade interviews. **General Brand Info:** Price, product attributes (category), place, NPD, promotions, manufacturer. In terms of the overall assortment, the largest four retailers collectively control 95% of the total sales volume and have nationwide coverage in terms of physicality.

Outlet/s	PL Brands	No PL of SKUs		% of PL		Online	Access to digi- tal spe-	Access to digi- tal	Visi- bility	Mar- ket	No of
		2005	2019	Brands	NBO	store	cific brand info	Gen- eral brand info	of NPD	share %	stores
Prisma Sale ABC S-Mar- ket	Ko- timaista Rain- bow X-Tra	1108	2500	No data	S Group	Yes	Mod- erate - high	High	Mod- erate	46.4%	1048
K-City- market K-Super- market K- Mar- ket	Pirkka K-Menu Pirkka Parhaat	2053	3300	20 %	Kesko Oyj	Yes	Mod- erate- high	High	Mod- erate	36.1%	1256
LIDL	Multi- ple	-	1875	75 %	Lidl Suomi Ky	No	No	No	Low	9.6%	179
Tok- manni	Multi- ple	-	1800	30.9%	Tok- manni Oy	Yes	No	No	Low	3.9%	186

Table 3. Differing levels of access to PL brand specific and general product data, of the FMCG leading players in Finland (Source: Liu & Niemi (2006) and supplemented by retailer's own sta-

In conclusion of the current scenario in the Finnish FMCG sector, the ease of access of data relating to the product features of leading retailers' PL brands is non-aligned. This causes an additional factor of impedance in the quest for optimizing CI processes and constructing accurate competitor product benchmarking. It can be derived from the above table, the higher the market share the easier the access to PL brands' product features data using digital-based sources. It is important to note here, the traditional method of collecting competitor's PL good feature data can still be collected using traditional, manual in-store data collection techniques.

Defining the limits of the study are crucial given its specific problem-orientated approach, the research focuses exclusively on the supply side, i.e. the retailers and those in brand ownership status of PL brands. Given this premise, the below Figure 21, offers an industry-based hierarchical view through a graphical representation of the sphere of focus of the research. The boxes in grey shading represent areas of which the research will focus and investigate. Equally boxes in white shading will be mostly ignored in terms of focus in this research, however reference will made to certain dependencies or variabilities.

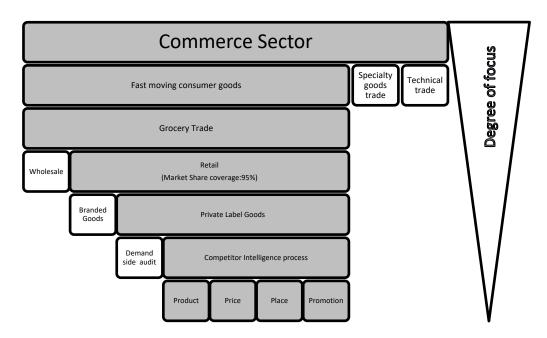


Figure 21. Industry based hierarchical view of the research scope.

5.1 Client principle description

The commissioner of this research, company X is a start-up business consultancy established in 2017, providing internationalisation services as its core service offering. The main product groups

include market intelligence, branding, sales channel development and investor services. Customers are distributed in Finland, and other EU nations.

In light of this, the choice of the company as the commissioner was gained by the company's past involvement in providing market intelligence solutions to large market research companies. The work involved primary and secondary data collection within the FMCG sector in Finland, to provide input for syndicated and ad-hoc market research reports and solutions sold by the customer to key retailers in Finland.

Through such relationships, it was deemed an academic study was required to ascertain the feasibility of providing more detailed and consistent CI services, with particular emphasis on PL brands. This thesis therefore is positioned to proof the concept with the industry (and potential customers) in order to develop recommendations for a new service offering within the company utilising existing resources and expertise.

5.1.1 Collection of empirical data

The aim of the data collection is to identify similarities between the data from the informants, sorted within coding choices derived from the presented theory of this thesis. In sequence the inputs from experts will be used to corroborate the findings and correlation will be sought.

The purpose of the data collection in the confines of this research and its research question, is to understand if the current level of competitive intelligence for PL goods is sufficient for effective pricing and branding strategy decision making. In extension, the proposed sub questions aim to generate new information and clarify the opinions of the informants. To reach such aim, and in order to provide the most relevant insight and knowledge, a semi-structured interview method is utilised.

To remind, the research sub-questions follow the logic of the competitive intelligence cycle process, which provides a comprehensive framework of an "optimum" CI system for PL brands in the FMCG sector, conceptualized by Pellissier & Nenzhelele (2013). The keywords and coding structures have been pre-developed as follows and of relevance to each sub-question: 1) Planning and direction 2) Information collection 3) Information sorting, capturing and storing 4) Information analysis and 5) Intelligence dissemination. A detailed analysis of the model and the sequential steps of the CI process is found as part of the theoretical background section in this thesis. The content of the questions posed to informants as part of the empirical study are arranged in sections as described below. In order to reach a conclusion for the research sub-questions, preidentification of coding categorisations (keywords) are required, inline and in anticipation with the directed content analysis approach. A full list of interview questions is found in the appendix, item II and III.

1.1What is the Scope of CI data required ? Phase: Planning, collection

Keywords: Pricing, Claims, positioning, Nutrition information, producer, shelf space, NPD, country of origin, promotions, claims, packaging type. Certifications and membership of associations. Charitable/religious action. Responsible sourcing, Animal welfare. Sustainability.

1.2 What frequency of CI data required? Phase: Planning, collection

Keywords: Time series, structured, ad-hoc. Seasonal, promotion - based.

1.3 Depth and quality of information Phase: planning , collection

Keywords: Which competitors do you need intelligence for? What market share coverage do you require? What methodology do you use currently for CI?

1.4 How does this data need to be reported? Phase: Collection, sorting and analysis

Keywords: What format does the data need to presented? Is it to be coded ? processed into other BI platforms? What software is used?

1.5 How will this information help your organisation? Phase: dissemination

Keywords: What decisions are made with this information? What processes are conducted with the aid of this data? What marketing objectives require CI? What strategic response decisions are made? Who needs to see the CI?

For this research, and in line with the process steps of deductive reasoning, the thesis: 1) presents relevant theory and circumstantial evidence to 2) define an expectation and 3) through qualitative field testing leads to 4) the confirmation or denial of the expectation.

For this purpose and following the expectation is presented: **Knowledge gaps are present in PL** goods competitive intelligence in the Finnish FMCG sector. Here we refer to the initial assump-

tive expectation that CI for PL brands in the Finnish FMCG is not optimised. This approach provides focus on the research question, and imperatively offers predictions regarding the variables and thus determine a preliminary coding scheme and the interrelations between them, this can be also referred as a deductive category application (Mayring, 2000).

5.1.2 Target organisations and interviewee selection

The aim of the interviews conducted with the primary informants was to define the current level of CI, to interpret the current knowledge gaps when focusing on horizontal inter-brand competition for PL brands, and to provide input to optimise CI for PL processes. The aim of the second set of interviews was to ascertain an industry-based view (see Figure 21) of the competitive environment of PL in the Finnish FMCG sector and to corroborate the expected challenges in the future as well as potential opportunities for improved CI for PL brands.

The informants of the research are comprised of two groups: 1) the largest FMCG operators in Finland and 2) external industry experts in the Finnish grocery sector. When considering sample vs population, the top four retailers control 95% of the market and thus represent a strong voice of the demand side of the market, strengthening the reliability and validity of the results. A list of circa twenty target informants was created. The job positions, or profile of the informants, were regional and senior level branch managers; the main users of CI. These individuals were preferred as they will hold the greatest amount of knowledge and experience towards the topic of the the-sis, and equally hold a high level of decision-making power.

The interviews were conducted between March-April 2020. Non-leading questions were used and probing when necessary, in the event the response lacked depth and/or clarity, valorising on the choice of semi-structured interview method. A breakdown of the interview questions and overall formulation of the questions are found in the appendix. The interviews were preceded with a short covering letter, or verbal introduction to the research, including: 1) personal introduction 2) description of the interview structure and agenda; agreeing to a preferred method of data input (via phone/skype or online survey) 3) request of permission to record the interview if necessary (not granted by interviewees). All informants were given the option for a copy of the thesis upon completion.

5.1.3 Empirical analysis process

To meet the research aims, a directed content analysis technique was employed. Microsoft excel was as used as the tool to perform the content analysis as part of this research, given the frequency of respondents was low and complexity greatly reduced. The content analysis utilised in the empirical study is comprised of a three-stage process from input to output, and includes the following analysis steps:

- Raw data input Input whether verbal or text-based is transcribed and inputted into the program in relation to the question.
- 2) Analysis Stage I Descriptive coding will be performed on the raw data in order to develop keywords. The findings of such are contained in this chapter five, entitled *outcomes of the retailer/expert interviews*. The interviews for primary informants (retailers) utilise the CI cycle as a conceptual framework. The interviews for the secondary informants (experts) seek to validate research problem components and utilise a more generalised structure, of success factors for PL as a conceptual framework. This stage satisfies objective A of the thesis.
- 3) Analysis stage II Based on keywords identified as part of stage I analysis, groupings of similarities and/or differences are performed to develop themes. to aid in the aggregated output of questions. These are presented in the form of themes, to be used directly in the *Interpretation of the empirical study* section of the research, found in chapter six. The interpreted findings reflect on the theory and utilise the CI cycle as a conceptual framework. This step satisfies objective B of the thesis.
- 4) Output The final phase uses the findings derived from the analysis stage II, to attempt to answer the research question. This output is presented in chapter six, in the form of an action plan, in the chapter entitled *How to optimize CI for PL in the Finnish Grocery sector*. The action plan follows the theoretical framework of the four categories of key success factors for CI. The outputs comprises objective C of the thesis.

5.2 Outcomes of the retailer interviews

The purpose of the retailer's interviews is to understand and provide an industry-based view on steps needed towards the optimisation of CI for PL brands in the Finnish FMCG sector. One retailer was interviewed and was conducted via an online survey, the results were directed into the content analysis processing application, and will be referred to as informant I. The retailer maintains a regional operation in the Finnish grocery sector and has over 10 years' experience in the industry. The informant wished to remain anonymous as part of this research.

The purpose of the interviews was to understand in detail the current assortment and development of PL assortment in their control, in addition to the current deployment of CI in the context of competitors' PL goods. The questions and aim of the questions for the retailer interviews can be seen in Appendix II. The responses to the questions will be examined in detail below.

The survey began with a short section ascertaining the current PL assortment in the control of the informant. It was derived they stock only 33% of the total number of PL brands available to the retail chain, perhaps due to the outlet size and peripheral location. These PL products account for about 15% of the total SKUs as part of the store's assortment. Sales growth of PL brands have been modest, showing low single figure positive value growth YoY. The informant described that responsible sourcing, focus on producers and premiumisation are key trends in the current offering of PL brands.

Planning and scoping considerations

The next section of the survey focused on the first stage of the CI cycle. Beginning with a binary question to ascertain whether the informant currently tracks competitors' PL brands as part of the CI process, the informant responds with a positive reply. The next question reflects on the research problem, the relative data asymmetry of PL brands, and asks *Is it difficult to compare own branded products because of the different product features?* The response was somewhat unexpected, and simply put, the informant describes it as not an issue, suggesting the internalised systems is capable of processing/analysing raw data of competitors' PL brands to result in comparability.

The following questioned aimed to ascertain the *most important sources of Cl of PL*; internet and traditional advertising were found to be the main source of information. In analysis, suggests the level of Cl is not comprehensive given the access to information for many competing products is

not available on internet-based sources. The next question, although perhaps self-evident, was confirmatory to ascertain *identification of their primary competition*, naturally the response was in-line with the expectation; competitors comprise 95% of the market share of the grocery share, i.e. the top four retailers. The following question and linked to the previous, asked *of these main competitors which do you require CI for PL goods from?* In a somewhat surprising manner only one of the direct competitors was mentioned and did not consider fringe players in the market. A surprising response since the fringe competitors (in terms of market share) are present in the region in which the respondent is located and have a strong and growing assortment of PL brands.

Still within the first phase of the CI cycle, the next question asked *Which functions/activities are the key users of CI within your organisation?* The informant responded with category and assortment management functions, suggesting the primary usage of CI for PL brands is in line with the theory presented in this study.

Information collection

The survey transitions to the second phase of CI cycle, and the next two questions revolve around intelligence requirements for the purpose of collection. The first questions asked in a multiplechoice format, *what general information do you need about competitors' PL products?* Interestingly the informant stated price, product category, NPD, offers, Not marking place (outlet) or manufacturer. This suggests at retailer level, the level of detail for CI is not critical. However, the omission of outlet, was a surprise considering the competition operate various outlet sizes in the immediate geographic radius, with varying pricing levels. The second of these linked questions, again in multiple choice format, seeking *what specific feature information do you need about competitor's PL products?* The responses were product claims, shelf space and country of origin and suggests in terms of developing new or existing products, competitors' product claims are a key source of information as part of product renewal and improvement. Equally on regional level, shelf space of competitors PL brands is required to optimise their own assortment planning processes.

The next question aims to understand the main sources of information for the purposes of collecting CI for competitors' PL brands. The two main responses comprise of online sources and instore. Online sources are inclusive of the private sources (competitors' online stores, e-magazines, and online advertisements) as well as publicly available information sources (cost of basket comparisons, consumption statistics & associations). The second source comprised of in-store visits, suggesting data collection is still being collected manually, particularly from competitors with limited online access to PL brands' information. The next question asked the respondents, *what frequency do you require CI for your competitors private label good?* The resounding answer was monthly, a relatively surprising fact given that promotional activities, for certain retailers, typically are bound by days or even weeks.

Information sorting, categorisation and storage and analysis

The respondent were asked *in which formats should the raw data collection of CI for PL brands be presented?* The two most common formats expected by the informants were product range presentations and web-based applications. For product range presentations this covers systematic reports on aspects such as NPD, promotions as well as the required general and specific feature information requested and required by the retailers. Secondly, sorting, categorisation and analysis of the data must be integrated into the operational web-based BI system used by the retailer.

Intelligence dissemination

Comprising the final phase of the CI cycle, dissemination and usage, the final question of the survey posed to informant group I, asked *What decisions do you make about your own branded products based on competitors' own branded information?* The responses were clear and showed retailers primarily use the CI for PL brands, in terms of actionable output, towards assortment planning, promotional planning and product offer tasks and responsibilities. The following subsection transitions towards the outcomes of the interviews conducted with informant group II, industry experts.

5.3 Outcomes from the expert interviews

The purpose of the expert interviews was to clarify and corroborate the importance of PL and Cl in a holistic setting and provide an explanation and knowledge of macro-level trends and competition within the market. Two experts from the industry were interviewed and were conducted via telephone and were transcribed immediately into the relevant transitionary processing application. In continuation they will referred to as Informant 2 and Informant 3, respectively. In total, the informants share over 25 years of experience in the sector and were optimally positioned to provide valid and reliable insight on the topic. The first issues were to clarify the *success of PL brands in the market and identify factors contributing to knowledge gaps in CI for PL brands*. As a background of their input towards the industry, both informants represented entities comprising of retailer-focused, value added or supporting functions and responsibilities, and both wished to remain anonymous as part of the study. The varying nature of their responsibilities in the grocery trade were clear, the perspective of the information were varied, and thus contributed to a wider range of input towards particular questions. The questions and aim of the questions for the expert interviews can be seen from Appendix III. The responses to the questions will be examined in detail below.

Market trends and dynamics in PL

Comprising the main body of the interview, the first section was allocated to identifying the current market trends in addition to the response dynamics of retailers of PL brands. The first question posed to identify *interesting product trends in PL brands in the Finnish FMCG sector*. Informant 2 responded that there has been five continuous years of combined growth of PL brands. Specifically there have been marked developments in fresh (e.g. dairy, fruit, meats) and locally sourced products, this input was corroborated by informant #3. Another trend at play is differentiation to compete with national brands; price fighters (i.e. K menu, X-tra) those positioned to challenge mid-range national brands, equally premiumisation of PL brands is increasing. As a general observation, volume categories (dairy, staple goods) are seeing consistent PL sales value and volume growth. Informant #3 went on further to stress the increased advertising and brand building activities of PL goods in Finland, for example the Deluxe PL range of Lidl. It is expected the frequency of premium private label brands to increase their advertising and promotional spend in a drive to increase and build brand equity.

The second question posed was *why the level of volume growth of PL brands is stagnant compared to other EU trailblazing nations?* All informants agreed many issues are at play, however one aspect considered is the high level of concentration in the Finnish grocery sector, the oligopolistic situation may somewhat impede competition. An additional factor presented was the rather limited visibility of Finnish PL brands outside of national territories. Thirdly, *the question of what role will PL take in the future of the retail sector*? was met with general agreement from both informants for anticipated growth. It is foreseen that domestically, successful PL with established brands, have the opportunity for export within the EU. Growth is foreseen in categories with no or little current PL penetration if the value-price ratio reflects the needs of the consumer. According to informant #3 more specific growth trends lie in providing for health-conscious buyers, as well as implementing sustainable solutions (e.g. bio-based packaging). Higher transition to online shopping provides a huge opportunity to PL at all levels of the price positioning.

The final question within this section was how *fast are retailers in reacting to competitors in the development of PL brands?* The informants took conflicting views; informant 2 explained it is generally quick between the retailer and manufacturer, both are carefully analysing the market and when an opportunity arises the decision are to: A) develop a new product or B) reposition existing brands in new categories with minor adjustments. Informant 3 counteracts that it does take time, and there still exists categories with low levels of PL penetration. In addition all of the top three players in the market have at least two positioning levels of PL brands in the market.

The changing role of technology in CI for PL brands

The second section of the survey revolved around the balance between technology and human input into the CI function. The first question aimed to ask directly *what the current balance of technology and human capital for CI systems?* Informant 2 explained the balance in terms of PL systems between different organisations is highly varied; more advanced systems incorporate a majority of technological solutions, whereas those implementing rudimentary systems employ more human resources, particularly in data collection. Informant 3 corroborates this by stating IT has played a huge role in the data collection phase, online stores have allowed for vast volumes of data to be captured. Both informants noted the need, at the time being, for human resources to make actionable decisions based on CI data.

The next question asked *what current CI tools/providers exist in the market to analyse competing PL brands?* Unanimous in their responses, both informants suggest the task has now been mainly internalised by the top retailers; marketing functions and category managers are responsible for such task and compile data from internally sourced data as well as ad-hoc collection from third parties. The number of third parties providing such data/services are limited. A defining event occurred in 2008 where Nielsen's Scantrack service, used by the top two retailers (and other manufacturers) was abruptly ceased due to decisions by the Finnish competition authority (FCA) on the grounds of potential collusion and price manipulation in the grocery sector. It is evident this event caused lasting damage to the practice and thus the function has now been secured as a mainly internal function. The Scantrack saga was underpinned mainly by pricing comparisons based on POS sales data.

The final question as part of this section aimed to understand *what technological developments can assist in optimisation of CI for private brands*? Both informants almost instantly referred to AI, and to a lesser extent big data. However both offered a proviso such tools used for such CI purposes must adhere to the guidelines and regulations of national and EU data protection law, as well as aligned with current national competition legislature, and ethical standards so to not repeat the issues encountered in 2008.

Challenges and success factors for private Label brands

The following section discussed the generalised barriers and success drivers for PL in the Finnish FMCG sector. Starting with the *bottlenecks for growth*. Informant 2 explained reaching the optimum positioning for PL is an arduous task; retailers must carefully balance pricing, sourcing strategy, competitiveness, suppliers and other factors. If not carefully strategized, it plays a huge role in the underperformance of particular products, as well as an impact on the overall growth of a retailers' PL assortment. Informant 3 explains that comparatively low branding and advertising budgets (compared to NB) plays a role in inhibiting the potential of PL growth. Conversely, the next question aimed to understand the *success factors of PL*, consensus was achieved and both informants described positioning playing a pivotal role. Using PL in product categories with clear opportunities for meeting consumer needs contribute to heightened performance-based success. Equally, price fighter PL brands are well positioned to serve budget constrained consumers in times of economic downturn.

5.3.1 Verification of the research problem

Supporting the integrity of the research, the informants were posed two question to directly confirm or deny the existence of the two situational factors at play to determine the identified research problem, to validate the logic and necessity of the thesis.

Data asymmetry of PL brands in the FMCG sector

The section focuses on the first contributing factor to the research problem, **Asymmetrical marketing mix features when comparing competing PL brands**, informants were asked if they acknowledge such issue. A resounding yes from both informants was gained towards the question. Informant 2 explained the demand side cannot understand the direct competition between PL brands, and such fact necessitates the need to improve the CI process to allow comparing alternatives. Informant 2 agrees that the nature of control of PL allows for retailers to distinguish, overtly or covertly, their brands from the competition, despite occupying a position in the same product category.

Access to PL information in the FMCG sector

The second factor comprising the research problem, **unaligned access to information relating to private label brands** was poised to the informants. For general product feature information, both informants described that in most circumstances, competitors and in extension consumers, have access to publicly available information from a variety of sources. Equally all of this information is accessible instore. However, collecting and analysing using manual collection methods and further processing in the form of a comparative analysis is a cumbersome process. It was acknowledged the level of access to general feature information using digital sources was un-aligned, due to certain retailers not offering a webstore. To further exacerbate the problem, certain retailers use regional pricing which somewhat confuses the situation when comparing across regional boundaries.

For specific product feature information, it was acknowledged the level of access to information is not aligned. Informant 2 explains the potential harm to retailers if the level of access to information to consumers is limited as they may not to complete a purchase due to lack of information. For more conscious consumers, who require even the most specific information, a lack of comparative information across a product category may sway them to purchase from an outlet with increased data transparency.

5.4 Summary of the interviews

In this sub-chapter the main outcomes from both informant groups are summarized in the table below to provide a succinct overview of the outcomes of the interviews. The findings below (Table 4) refer to analysis Stage I of the content analysis process, where descriptive coding has been performed on the raw data in order to develop key word and thus findings to satisfy objective A of the research.

Question theme	Key findings of the interviews using the directed content-analysis technique
Informant group 1 (Retailers	
General Privat label/suc- cess factors	 Modest sales and volume growth for PL brands PL Ranges increasing in size, smaller outlets naturally do not stock the full range (assortment planning optimization) Trends in PL include responsibility, producer focus and premiumization
CI phase #1: Planning	 Retailers track PL as part of CI processes and not difficult to compare competing PL Transparency of competitor's Internet and advertising channels are the main factors affecting access to competitors' PL good information Retailers identify their main competitors Only oligopoly players in the market are tracked in terms of CI for PL goods The main activity using CI for PL is assortment planning/management The main users of CI for PL include store managers, and HO functions supporting pricing and supply chain issues.
Cl phase #2: Collection	 The general feature information (intelligence need) required for PL data collection are price, product (and category), NDP and promotional information The specific feature information (intelligence need) required for PL data collection are product claims, shelf space and country of origin Preferred source of competitors' PL goods information is from internet and instore collection methods Currently CI for competitors PL goods required on a monthly basis
CI Phase #3 & 4. Sorting and analysis	• The preferred method of dissemination of CI for PL goods is via product assort- ment reports, as well as integration into web-based applications
CI phase #5: Dissemination of information	• The main decisions made with CI for PL include product assortment decisions, promotions and promotional strategy and discounts
Informant group 2 (Industry	experts)
What are the Future and market dynamics of PL?	 Locally sourced goods, premiumization and increased budget for PL branding to increase penetration Generally low levels of visibility of Finnish PL in other EU geographies New segments, and exports provide opportunities for PL growth Retailers are generally fast to respond to competitors' PL goods, improvement is needed
Data asymmetry issues for competing PL goods	 Consumers and retailers acknowledge it is difficult to directly compare PL Misunderstanding is evident at the demand side
Challenges and success fac- tors for PL goods	 General bottleneck is the optimization of PL product strategy and lower advertising and promotional spend, CI is needed to improve this PL success lies in positioning in underutilised categories
Balance of humans and IT in CI for PL	 Technology in CI improves optimization of production and capacity Important are tools to capture digital open data sources Retailers internalise CI functions AI and big data are emerging technologies to support optimised CI Competition and data protection laws must be considered and adhered to
Access to PL information	 Access to general feature information is generally aligned, using manually collected publicly available information. Access to specific feature information needs to improve and increase transparency, needed for conscious consumers

Table 4. Summary of findings from the interviews.

This section and sub-sections present the answer to research question and the output of the study. As a reminder and in reflection to the initial research problem which is comprised of two convergent issues; data asymmetry between PL goods and access to information for PL goods, the thesis proposed the research question **how to optimize competitor intelligence for retailers' PL brands in the Finnish FMCG sector?**

Such findings in this section contribute towards the identification of knowledge gaps and describe methodological improvement measures of CI processes for PL brands in the Finnish FMCG sector in the form of an action plan. The chapter is divided into two subchapters; **Interpretation of the empirical study** and **How to optimise CI for PL in the Finnish grocery sector**.

The first sub chapter responds to objective B of the thesis; *to identify what knowledge (service) gaps exist in Cl for PL brands in the Finnish FMCG sector*. This is performed by interpreting the outcomes of the empirical study in the previous chapter, via keyword grouping of similarities and or differences, to develop and present themes to aid in the aggregated output of the interview questions. The interpreted findings of the empirical study use the theoretical framework of the five stages of the Cl cycle as presented in chapter 3.2 and refer and synthesize with additional theory contained in this study. Since the need for Cl for PL is interlinked to developments and success factors of PL brands, the first section of interpreted findings provide a foundation and framing for the study and focus on the market-based dynamics of PL in the Finnish FMCG sector. In succession, the interpreted empirical findings will also answer the five research sub-questions, to offer input towards improvement measures for an "optimum" Cl system for PL brands in the Finnish FMCG sector. To provide clarity in the interpreted findings, a summary of the knowledge gaps evident in Cl for PL will be described at the end of the first subchapter.

The final section of this chapter processes the input of the interpreted findings to provide answers the research question, I.e. How to optimize CI for PL in the Finnish Grocery sector and satisfying objective C of the thesis. This output presented in chapter 6.2, in the form of an action plan, is a set of actionable measures for the commissioner of the research to valorize upon based on the initial need for such research. The content of the action plan follows the theoretical framework of the four categories of key success factors for CI, found in chapter 3.1.

6.1 Interpretation of the empirical study

Developments of PL in support of optimized CI

Growth in value and volume shares of PL in the grocery sector have been steady, although relatively stagnant in the past five-year time period. At industry level, the total number of PL products (SKUs) has increased across the top four retailers, this fact was corroborated by the informants as part of the empirical study.

Consumer trends are driving the driving the growth of PL in Finland, and the control ability allows retailers to meet such trends in expedited time frames. Retailers reacting first, given increased Cl, are afforded more opportunity for PL success. Changing consumer needs dictate new growth opportunities in the FMCG sector. Identifying and targeting such opportunities is a key task of retailers of PL brands.

Competition in the Finnish grocery sector is acknowledged to be concentrated. The current duopoly maintains primary power of the sector, with Lidl and Tokmanni positioned as fringe competition. Such concentrated competition was found to be contributing factor towards the relative stagnation of Finnish PL growth compared to other EU nations. However, there exists commentary that PL sales and volume growth are expected to increase. Additional demand in new segments and also overseas territories (exports) can provide growth opportunities for PL retailers.

In the Finnish FMCG sector the current range of PL brands typically match the profile developed by Yokoyama et al (2014) of third and fourth generation brands, i.e. "true" private labels and extended private label brands. For the current assortment of third generation PL, price and quality ratio play a pivotal role and in turn they compete by mimicking market leaders, for both PL and NB. Fourth generation brands, focus on value added, and here we see a rise in premiumisation of PL brands across categories in the Finnish FMCG sector. Increased levels of customer loyalty and brand building activities are witnessed in such brands in Finnish FMCG sector.

As a quantitative output indictor for the increase in PL focus and product assortments, at retailer and regional level, sales are consistently growing, however growing at modest levels. This tallies with statistics from national level (PTY) and suggest optimisation of CI is required at various stages in order to assist in the competitiveness and performance of PL brands.

One such aspect for supporting the optimization of CI for PL, where changing needs of consumers can and should be better matched by PL. To do so having a comprehensive and detailed view of

the market offering is crucial, this provides PL brands with the ability to secure a truly comparative added value. It is understood that retailers possess the capabilities to reacting to competitors PL brands; CI systems/processes are operational and include PL information. Given that increased resources are provided to PL development, in line with the third and fourth generation of PL where spend on R&D is heightened. With optimised CI for PL, retailers are able to reach the success requirements for PL brands, such as penetrating categories with higher gross profit margins (Hoch, 1996) and arriving at a balance with NBs in their product assortments (Progressive Grocer, 1977). Equally optimized CI for PL can assist in achieving economies of scope in promotional activity (Putsis, 1999), this is particularly prudent given the fact the intensity of promotional activity for PL in Finland is in its infancy. Such success for Finnish PL brands would be seen via an increase in brand loyalty, as well as other advantageous factors such as improved assortment planning. In turn this leads to optimised category penetration, innovation focus, choice criteria and cost reduction (Leahy 1992).

In summary the relationship between demand and supply side in the Finnish FMCG sector, as well as performance of PL support the need for optimised CI for competitors' PL brands in the quest to promote growth for such products. As the growth of PL increases, the need for more environmental and market scanning is also increased (given more SKUs). CI is required to ensure effective, accurate and consistent benchmarking of retailer's offering compared to their primary competitors, in order to provide actionable intelligence for current and future PL strategy and decisions.

Need, planning and key users for CI for PL brands

The findings in this sub-section aims to analyse the current planning considerations of retailers and input from external actors, reflecting also on the presented theory to build arguments of how to optimise CI for PL in this first stage of CI cycle, planning and direction. The sub question asked *what is the scope of CI data required*? It is evident their exists opportunities for improvement for the purpose of planning of CI for PL goods. The three factors of the planning are discussed: intelligence need and usage, definition of the intelligence needs, and competitor identification.

It was established that all of the top four retailers have a dedicated, mostly internalised CI system, inclusive of tracking PL brands. Hence the retailers clearly understand the general needs and purpose for CI, supporting the findings of Nasri (2011). The level of complexity of the CI systems remains unknown, as the information of such processes are typically kept classified. Surprisingly, retailers did not find it difficult to compare competitors' private label brands, considering the relative data-asymmetrical profile of PL brands. This in extension suggests also that the retailers'

CI system involves a comprehensive understanding of a competitors' strategic and tactical manoeuvres (Prescott, 1999). A knowledge gap for the ability to compare competing PL brands exists on the demand side, due to the lack of transparency for comparing PL brands across retailers in particular categories. This provides an opportunity for a demand-side focused comparative platform for PL brands.

Retailers fully understand their key competitors, and no gaps were identified in the classification of the competitive profile (Porter, 1998). However, in the practice of CI, at least on regional level, only CI for PL between, and with the duopolistic competitors is required and provides a critical knowledge gap for the full understanding of PL developments of fringe competitors. Across the board, CI for PL is used specifically in the functions associated with the processes of category management. The responsibility of such tasks lies with store managers and centralised support functions, proving strong organisation support for CI (Nasri & Zarai, 2013; Yeoh, Gao & Koronius, 2008).

For planning purposes, and in response to one component of the research problem, mis-aligned access to CI for PL is an acknowledged issue. This depends heavily on the transparency and volume of publicly available CI data; the internet and advertising remain key sources of CI for PL. There exists an opportunity to supplement with other sources of data (Bose, 2008), via private sources such as instore visits and NPD tracking. All three factors of stage one were confirmed in the findings; intelligence need and usage, definition of the intelligence needs, and competitor identification.

Collection of CI for PL brands

This subsection provides answers to the sub-question of how to optimise the collection process of CI for PL in the Finnish FMCG sector, including *depth and quality of information*? and the required *frequency of CI data*?

In the current CI implementation, retailers focus collection efforts for general feature information of PL brands in price, product (product category), NPD and promotional activity. There exists a knowledge gap to track regional pricing as well as the manufacturers of PL brands. Understanding the regional pricing will allow more optimised assortment planning activities, at regional level. Equally, understanding the suppliers (manufacturers) of PL will allow retailers to optimise their supply chain management and achieve, through trade deals (Hoch, 1996) for example, economies of scale and increased market concentration (Dobson and Chakrabotory, 1999). This is achieved via the identification of new PL brands in categories served by the competing PL. Regarding specific feature information for PL brands, retailers focus on the collection of product claims, shelf space and (country of) origin. Such intelligence requirements are important for category management (Nasri & Zarai, 2013), particularly at store level. However knowledge gaps exist when considering PL ranges and their unique value offering, particularly in response to changing consumer needs. Retailers' centralised CI systems can and should track a wider range of specific feature information. Mapping changes in competitors' ingredients, packaging systems, certifications, responsible sourcing, sustainability are required. This would provide actionable insight into industry-wide PL product development and attain heightened levels of quality (Halstead and Ward, 1995) to achieve competitive advantage compared to both PL and NB competing brands.

The focal current sources of information for CI for PL brands is from both public and private sources. There exists particular focus on online public sources (webstores) and ad-hoc collection from in-store price studies (typically outsourced). Knowledge gaps exists in the frequency of collection; through the study frequency was deemed to be monthly. Collecting CI from private sources (instore) allows for missed opportunities and CI must be more frequent, systematic (Qiu, 2008) and cover also fringe competitors (Peteraf, 2003) and from those with limited access to public digital sources of CI. For example, promotions can take place weekly or even daily, and by transitioning to more frequent collection, marketing mix variables can be tracked more effectively for the purpose of optimising assortment decisions, as and when competitive changes occur.

Sorting and analysis of CI for PL brands

This subsection answers the question of how CI for PL should be analysed, sorted and presented, specifically, *How does this data need to be reported?* In line with the third and fourth phase of the CI cycle. The current methods of the presentation of CI for PL information use mostly ad-hoc category reports, and integration into centralised web-based applications/platforms. Retailers require expedited CI and must be coded into the relevant BI systems used by their organisation in order to uncover hidden intelligence (Bose, 2008).

By integrating additional sources of CI into existing platforms and analysis tools used by retailers, it allows optimisation for a retailer of PL to develop a strategy in response to a competitors' tactics. Furthermore it can allow pre-emptive action should the analysis of data suggest the competitor is planning a certain strategy (Porter, 1998). Thus, supplementary CI for PL data must be coded to allow seamless transition into the retailers internalised CI functions and tools and is determined by the application or software choices of the retailer. Such data exploitation tools include dashboards, visualisation tools, balanced scorecards and SOA (Olszak, 2014). Emerging technologies such as AI, big data etc are positioned to optimise CI in the quest for capturing of larger volumes of publicly and privately sourced data. Any attempts of automated collection must also closely consider and follow the national and EU level laws responding to data and IP protection laws and remain ethical (Richardson & Luchsinger 2007: 42).

Dissemination and actionable CI for PL brands

The final section of findings looks at how to optimise CI for PL when considering the valorisation of CI based information, directed towards the sub-question of *How will this information help your organization?* Retailers typically and primarily use CI for PL brands for the purposes of assortment planning, developing promotional strategies and product offers. Data exploration processes are predominantly conducted using technological tools such web mining, text mining, search based applications (Olszak, 2014). Data exploitation outputs of CI collection provide insight and actionable intelligence. However, it is stressed at least as of present, that actions based on CI data are conducted by human resources, in the form of management and decision makers (Miller, 2001; Weiss, 2002).

In order to optimise CI for PL in its current form, management and key users of CI should create a strong communicative culture to fully benefit from the outputs of CI. Thus it will increase the knowledge management process across functions (Miller, 1996), since the usage of CI is vast at retailer level. Practitioners and users of CI should be well equipped to manage strategy and decision-making tasks based on the intelligence provided. Given developments in technology, there exists an opportunity to automate certain decision-making processes related to CI for PL. For example price or promotional changes of competitors could be responded to automatically, since some of the retailers now have digital in-store price labels and require no human intervention to control such processes. One critical factor for the actionable decisions derived from CI, is the factor of collusion and anti-competitive behaviour. Past attempts to optimise CI in the Finnish retail sector were abruptly stopped by the FCA, due to possible price setting and collusion. Such events have had a long-standing impact of the practice of CI and evidently brought the function to a closely guarded and internalised process. The sharing of POS and loyalty data between retailers is no longer an option to optimise competitor intelligence in the retail sector.

6.1.1 Summary of knowledge gaps in CI for PL in the Finnish FMCG Sector

The two phenomena at play to determine the research problem were confirmed through the research. Asymmetrical marketing mix features of PL brands is deemed to play a role in short-comings for the current implementation of CI, and in particular when focusing on the demand side. It is acknowledged that retailers, have developed an internalised coding and categorisation system to allow comparison of competitors' PL brands in the market. However the depth they explore such comparisons is seen as point of contention. The second component of the research problem, mis-aligned access to rationalised PL information has also been confirmed though the study. Retailers do not necessarily utilise the full range of information available for the purposes of CI for PL. CI processes are concentrated on the duopoly in the market, and to a certain extent miss potentially vital information for PL brands from fringe competitors. Referring back at the initial research question placed for this study, the aim was to understand the knowledge gaps at play in CI for PL in the Finnish grocery sector. As such the results confirms the original tentative expectation, that knowledge gaps are present in PL brands competitive Intelligence in the Finnish FMCG sector.

Table 5 below presents a summary of the interpreted identified knowledge gaps, divided into 1) a description of the developments of PL in the Finnish grocery sector as a foundation for improved CI. Secondly and also satisfying objective B of this thesis to describe 2) identified knowledge gaps in CI for PL in the Finnish grocery sector.

 Sales of PL are growing at modest levels, aligned with national statistics PL brands are being introduced and modified to meet consumer needs, thus presenting new growth and targeting strategies for PL brands (premiumisation, local production, and improving the value-cost relationship) Stagnated growth of PL may be attributed to high levels of retailer concentration; however, growth is expected particular though exports and new category development 2) Identified knowledge gaps in CI for PL goods in the Finnish grocery sector CI is currently utilised for tracking competitors' PL brands, as part of the overall CI function. Retailers are active in their reaction to development in PL, however general optimisation of CI is possible, to succeed in higher sales and brand equity. The level of access to both public and private information for PL brands is mis-aligned. Particularly on the demand side, lack of transparency makes it difficult for product comparisons of competing PL goods. Retailers identify their primary competitors; knowledge gap exists for fringe competitors' PL brands who may not be adequately tracked. Most CI activity is focused on the retail duopoly Currently CI for PL is utilised in category management systems, CI users are mainly store managers and head office support functions. 		4) Developments of DL in the Elevich second of the last of the last
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Table 5. Summary of findings: Identified knowledge gaps in CI for PL in the Finnish FMCG sector.

6.2 How to optimise CI for PL in the Finnish FMCG sector

This section comprises the measures for optimising CI for PL in the Finnish FMCG sector, from the viewpoint of third-party providers of CI systems and fulfilling objective C of the research, *how to optimise CI processes, efficiency and access to information for PL brands*. The section is classified as the developmental output of the thesis, i.e. type 1 R&D classified as product design and development. The input, or knowledge gaps, for answering the research question are derived from the

previous section, interpretation of the empirical study. For beneficiaries to take full advantage of this study an action plan will be used as an output method for presenting a series of actionable measures in order to optimise CI for PL brands in the Finnish FMCG sector.

An **action plan** is chosen as part of this study's output due to its ability to provide a detailed set of instructions to follow in order to solve a problem or achieve something (Cambridge Dictionary, 2020). Janse (2018) suggests a focused action plan consists of a series of steps that must be taken to successfully complete a certain strategy. In the context of this study the action plan is chosen as an output due to its ability to turn input to lead to a more concrete strategy in obtaining optimised CI for PL in the Finnish grocery sector. The content of the action plan allows for clear implementation in the form of actionable measures to reach a particular goal. This paper's output in synthesis includes a reflection of focused theory and input from the empirical study. The action areas for optimised CI for PL will follow the categories of pertinence according to theory of key success factors for CI, developed in chapter 3.1.

Table 6 below presents the identified measures to improve CI for PL in the Finnish FMCG sector and thus offers answers to the research question. The improvement measures are described in a simplistic way to allow actionable tactics and also describe the responsible body of each optimization area.

Optimisation Area	Improvement measures	Responsi- bility
1) Improve manage- ment involvement and institutionalising Cl	 Cl for PL output is required to develop actionable insight for all levels and functions of the organisation. Human intervention is still required to implement decisions and strategy for PL brands. Optimised Cl system should allow for seamless dissemination of Cl across all functions/ users of Cl within the retailer group. 	Retailer / CI providers
2) Optimise the or- ganisation, network and qualified human resources	 There exists an opportunity to improve current, mainly internalised CI for PL with increased third-party involvement (more data collec- tion). Optimised CI system must be complemented by developmental input from external organisations (associations, third parties, government agencies etc). 	Retailers/ CI providers
3) Clarify and renew Purpose and need of competitive intelli- gence	 Optimised CI should consider fringe retailers in the market (less than 10% market share) to increase market share coverage. Optimised CI system collection should be more frequent, to allow for more actionable intelligence (weekly/ or daily collection). Optimised CI for PL system should develop a standardised categorisation of pl goods to allow direct comparability of PL(third party to combine retailers' product categories to negate asymmetry). As an output, optimised CI system should also present PL product categories with opportunities for PL penetration (based on competitors' assortments). There exists a market level opportunity based on low competition levels in the market. CI tools should under no circumstances rely on sales data from the retailers and be clear in its mission. CI for PL system must adequately track the developments of competitor's product responses to consumer demands (premiumisation, responsible sourcing). 	Retailers/ CI providers
4)Leverage on techno- logical factors and data validity	 Optimised CI for PL system should include a process to track new product trends (NPD, new ingredients etc). Optimised CI must adhere to the competition authorities ruling on previous initiatives and avoid opportunities for pricing collusion. CI should leverage on emerging technologies (big data, AI) to optimise the collection and analysis phases. Optimised CI for PL system should focus its input on supplementing existing retailer's IT based tools used to present CI (data exploitation), the data should be pre-coded in order to allow seamless integration into such systems. CI for PL system should focus its efforts on collecting information from <u>all</u> publicly available sources of information, aligned with data protection laws. Optimised CI for PL system should use a multi-modal collection process to fully track PL general and specific product features. There exists an opportunity for CI for PL to track regional pricing, and producers to strengthen the meso-level effectiveness of CI. 	Retailer / Cl providers

Table 6. Action plan for optimising CI for PL goods in the Finnish FMCG sector (Author's own cre-

ation).

7 Conclusions and discussion

Maintaining the edge in today's unpredictable economy is a key target for organisations, and CI is more important than ever (Johns & Van Doren, 2010). Within the retail sector, retailers use and rely on PL brands in the quest for improved growth and increased market share (Nielsen, 2018). Differentiation is afforded by the use of PL brands (PTY,2019) where retailers have greater control over the marketing mix features of each brand. PL brands are afforded with multiple tactics and strategies to respond to competitors, both PL and NB. PLs have sophisticated over time, and currently many PL brands are of similar or greater quality than that of NBs (Quelch and Harding (1996). Success factors for PL include optimising price v quality ratios, fulfilling categories with opportunities for growth, and increasing advertising spend in order to strengthen brand image. Competition between PL brands and competing PL and NB brands is proven to be fierce.

To improve competitive positioning, organisations are transitioning more focus and resources towards the practice of CI. CI is most widely defined as "the process of ethically collecting, analysing, and disseminating accurate, relevant, specific, timely, foresighted and actionable intelligence regarding the implications of the business environment, competitors, and the organisation itself" (Johns & Van Doren, 2010).

CI process includes five phases and is understood as the CI cycle. CI is aimed to improve retention and identification of customers, knowledge sharing, anticipatory skills, improving competitiveness and sales performance, and offering knowledge to support strategic decision-making processes. The key success factors of optimised CI include: 1) improved management involvement and institutionalisation of CI 2) optimisation of the organisation, network and qualified human resources, 3) clarification and renewal of the purpose and need of CI and 4) leveraging upon technological factors.

The key retailers in Finnish FMCG sector are focusing their efforts towards PL brands, evidenced by increased product portfolios and brand building activities. Competition is rife with all major players now providing extensive PL ranges across a majority of the grocery product categories. The practice of CI is not a new trend in Finland, the controversial events of the Scantrack incident in 2008, somewhat distorted and created a downward trajectory of optimised CI, as the system in its operational status was perhaps the most "optimal" method of tracking competitors' products, including PL brands. This thesis examined **how to optimise competitor intelligence for retailers' PL brands in the Finnish FMCG sector.** Towards this, improvement of CI for PL as part of the empirical study focused on exploring the current level of CI deployed in the industry, identified the knowledge (service) gaps that exist and finally offering measures how to optimise CI processes, efficiency and access to information for PL brands.

The current utilisation of CI amongst the retailers varies in level of detail and scope, and is almost an unnoticed and underground practice when viewed as an outsider, but still includes input from a select few providers of external CI intelligence, a market opportunity for third parties exists to supplement and improve CI for PL. There exist many challenges to fully optimise current CI processes. Particularly for the comparison of PL brands since an added dimension of complexity is evident compared to the "standard" comparisons of NB, related to the mis-aligned access to data to and information asymmetry afforded by such PL brands. The two convergent issues formulating the research problem, asymmetrical marketing mix features of PL brands and access to rationalised information and comparative information for PL brands were duly confirmed through the study to cement the logic and need for such research.

The purpose of the study was to assess the commercial feasibility of a service to improve the level of CI for PL in the Finnish FMCG sector. The research question has been answered based on the synthesis of theory and empirical study of chapter five and six, resulting in the output of the thesis; an action plan to optimise CI for PL in the Finnish FMCG sector in which measures to develop a service are proposed. The measures proposed include improving management involvement and institutionalisation of CI, optimising the organisation, network and qualified human resources as users of CI, to clarify the purpose and need of CI and to leverage on existing and emerging technological factors.

This thesis adheres to the Responsible Conduct of Research, under the responsibility of the Finnish advisory board on research integrity (TENK). Care has been taken to present accuracy and integrity at all stages of the thesis, including recording, presenting and evaluating the results. Results are to be disseminated and communicated in an open manner, whilst also respecting confidentiality of informants. In addition theory and input from other researchers' work is clearly cited within the body of the text according to standard guidelines dictated by the University.

The researcher of this thesis strived to reduce bias, where necessary and within the confines of the resources available, by following the recommendations of Morse et al (2002) by conducting respondent validation, constant comparisons across participant accounts, representing deviant

cases and outliers, prolonged involvement or persistent observation of participants, independent analysis of the data by other researchers and triangulation methods.

In reference to the axiology of the study, and due to the author's experience in field, he refrained with care to display both subjective and objective values when interpreting the results. In support, during the research process the methodological choices and results were discussed in detail with both the commissioner and the supervisor. Aimed to provide an external view on the progress of the research. The expert-based views as part of the qualitative study provided a broad, yet comprehensive view of the industry from a non-internalised view, adding strength and validation to the internal-based views, subduing potential bias of the researcher and the competing retailers comprising the primary informants.

The thesis provided an excellent learning pinnacle to the academic degree for the author. By combining many years of academic and professional experience to sculpt an academic work for the needs of a real SME, in the hope the output will contribute to expedited growth, prosperity and competitiveness of the commissioning company and any multiplier effects that ensue.

7.1 Recommendations

To fully valorise from the study and the measures to improve CI implementation for PL brands in the Finnish FMCG sector the commissioning company and/or other third parties should consider that service gaps have been successfully identified through the study and have offered a window of opportunity to commercialise or test a service in the market. However, what is evident is the relative barriers to entry to the market; the practice of CI in the retail sector is well established and operational, but ultimately is kept covert. The thesis demonstrated the general lack of willingness of retailers to openly discuss about such issues, despite the inherent and increased value to the competitiveness of the retailer through optimised CI processes.

It is necessary to stress any services for the improvement of CI by third parties in the Finnish retail sector must avoid at all costs the inclusion of methods which may stimulate collusion, anti-trust or unfair practices. The scandal of 2008 was a harsh reminder of the implications of such issues on the practice of CI. To succeed fully in optimising CI for PL, the correct, and centralised function controlling the organisational level market intelligence functions should be contacted to establish

need assessment, since the process and strategic management of the function lies on national level for the major retailers.

Based on the output of this thesis the commissioning company will receive a succinct list of measures to improve CI for PL in the Finnish FMCG to conduct a decision of whether or not to proceed with further development and testing of a new service. Equally, the results are possible to be transferred to other third parties, however the resource base and expertise may differ and not be matched for commercial application.

7.2 Research limitations

The scope of this research is an industry-wide qualitative study of the Finnish grocery sector, focusing on PL brands. Only retailers of PL brands were included in the study, not supply-side manufacturers of PL brands. Due to the concentration in the Finnish grocery trade the depth of variation of retailers in this specific industry was limited. In the end, one retailer (one interview) and two expert and external organisations (two interviews) were used as informants in this research.

Two of the planned primary informants refused to take part in the survey. The primary informants interviewed are key players in the Finnish grocery trade, and the expert organisations play a pivotal, yet distinct role in the Finnish grocery sector. In hindsight, dedicated financial resources in order to meet to face-to-face with the originally planned informants may have garnered a higher response rate. However the potential sensitivity of the topic of CI is surely a contribution factor to a low number of willing primary informants as part of this study. The data collection coincided with the covid-19 pandemic in March-April 2020. Given such exceptional circumstance, heavily affected the ability to gain information from both sets of informants, and as such the results are somewhat non-comprehensive, despite conducting a second and third invitation round for surveys. Paradoxically the online sales of groceries increased dramatically during the thesis and provided a good opportunity for focus and expansion on the topic. Due to the severe timing and resource constraints it was agreed with both the commissioner and supervisor to continue with the collected information and complete the thesis.

Geographically the study focused on the Finnish domestic market, the original plan was to conduct surveys with the head office functions, however due to difficulty in maintaining communication due to the covid-19 situation and/or refusal to participate, the informants were comprised of regional retailers.

7.3 Further research

This research scope is based on a specific industry, namely the grocery sector, and on one geographical scope (Finland). The FMCG sector comprises one component of the broad commerce sector. As a simple extension for further research options, the research itself and results could be applied and expanded into other sectors where PL brands are prevalent, to identify knowledge gaps and optimise CI processes.

Although the thesis touches the surface on technological tools in the quest for optimal CI, it focuses more on the business and strategic level aspect. The utilisation of emerging technologies (AI, IoT, Big data) could be applied to such future research in a more technologically oriented research in order to streamline the current capabilities in the market to optimise CI.

The output of this thesis is designed purely for the benefit of the supply side, i.e. the retailers and those third parties contributing towards CI functions. Therefore, the focus of such future research may concentrate on the demand side, i.e. the consumers. Given the dynamism in the retail sector, in the form of consumer's ever-changing needs, trends and consumption patterns, such research could pinpoint the characteristics of the modern-connected consumers and align response strategies for PL brands to meet such transitions.

Additionally, the research mostly excluded the concept of National brands. A multidirectional (horizontal and vertical) competitive study could be performed to understand the internal competitiveness of PL and NBs under one retailer. One research question that could be entertained - will there be a point when retailers with PL brands no longer require branded goods as part of their business model?

Finally, the relative stagnated growth of PL share in Finland, in volume and value terms, compared to the rest of Europe could be investigated; why is Finland underperforming despite increased focus, revenue and competitiveness afforded by PL goods? A study could identify the key barriers and bottlenecks to PL growth in Finland and, for example identify best practices from other spearhead EU nations to develop expedited market penetration and overall performance of PL brands. Adamala, S. & Cidrin, L. (2011). Key success factors in business intelligence. Journal of Intelligence Studies in Business, p.107-127.

Ailawadi, K. L, Pauwels, K, & Steenkamp, J.-B. (2008). Private-Label Use and Store Loyalty. Journal of Marketing, 72(6), p.19–30. Retrieved from: https://doi.org/10.1509/jmkg.72.6.019

Akpoyomare, O. B.; Adeosun, L. P. K. & Ganiyu, R. A. (2012). The Influence of Product Attributes on Consumer Purchase Decision in the Nigerian Food and Beverages Industry: A Study of Lagos Metropolis. American Journal of Business and Management Vol. 1, No. 4, 2012, p-197. Retrieved from: http://worldscholars.org/index.php/ajbm/article/view/ajbm1237/121

Albrecht, K. (2002). Organizational intelligence and Knowledge management the executive perspective.

Albery, I. & Munafo, M. (2008). Key Concepts in Health Psychology. SAGE Publications

Amrouche, N. & Zaccour, G. (2007). Shelf-space allocation of national and private brands. European Journal of Operational Research 180(2), p.648–663.

Anica-Popa, I. & Cucui G. (2009). A framework for enhancing competitive intelligence capabilities using decision support system based on web mining techniques, International Journal of Computers Communications and Control, IV (2009), . 4, p.326-334.

Arrigo, E. (2016). Deriving competitive intelligence from social media. International Journal of Online Marketing, 6(2), p.49–61.

Baltas, G. (1997). Determinants of Store Brand Choice: A Behavioural Analysis. Journal of Product & Brand Management. 6(5), p.315-324.

Barnea, A. (2010). Intelligence Failures: Competitive Intelligence and Strategic Surprises, Competitive Intelligence Magazine, Vol. 13. No. 3, July/September.

Bartes, F. (2014). The objectives of competitive intelligence as a part of corporative development strategy, ACTA Universitatis Agriculturae ET Silviculturae Mendelianae Brunensis 62(6), 1243–1250. Retrieved from: http://dx.doi.org/10.11118/actaun 201462061243

Batra, R. & Sinha, I. (2000). Consumer-level factors moderating the success of private label brands. Journal of Retailing 76(2, p.175–191.

Bergeron, P. & Hiller, C.A. (2002). Competitive Intelligence , Annual Review of Information Science and Technology 36, p.353–392 .

Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2006). Consumer behaviour. Mason, OH: Thomson/South-Western.

Blaikie, N. (2010). Designing Social Research, Polity Press, Cambridge, p.8.

Bose, R. (2008). Competitive intelligence process and tools for intelligence analysis, Industrial Management & Data Systems, Volume 108, Number 4, p.510-528.

Botha, D., & Boon, J. (2008). Competitive intelligence in support of strategic training and learning.SAJournalofInformationManagement,10(3).Retrievedfrom:https://doi.org/10.4102/sajim.v10i3.325

Bowersox, D. J., & Cooper, M. B. (1992). Strategic marketing channel management. New York: McGraw-Hill.

Branding Strategy Insider. (2018). How Manufacturer And Private-Label Brands Differ. Retrieved from: https://www.brandingstrategyinsider.com/how-manufacturer-and-private-label-brands-differ/#.XkJ_shdS-Ms

Brassington, F. & Pettitt, S. (2000). Principles of Marketing (second ed.). England: Pearson Education Limited

Brierley, S. (2002). The Advertising Handbook (2nd, illustrated ed.). Routledge. p. 14. ISBN 978-0-415-24391-9.

Buzzell, R.D., & Gale, B.T. (1987). The PIMS Principles: Linking Strategy to Performance. New York: Free Press.

Calof, J.L. & Skinner, B. (1998). Competitive intelligence for government officers: A brave new world, Optimum 28(2), p.38–42.

Cambridge Dictionary. (2020). Meaning of Action Plan in English. Retrieved from: https://dictionary.cambridge.org/dictionary/english/action-plan

Cant, M. C.; Wiid, J. A. & Kallier, S. (2015). Product Strategy: Factors That Influence Product Strategy Decisions Of SMEs In South Africa. The Journal of Applied Business Research: March/April

Chakraborti, S. (2014). Multi-document Text Summarization for Competitor Intelligence: A Methodology. Computational and Business Intelligence (ISCBI), 2014 2nd International Symposium on, p. 97-100.

Chamie, B. & Ikeda, A. (2015). The Value for the Consumer in Retail v.12, n.2 Vitória-ES, Mar.-Abr. 2015, p. 46 – 65.

Chan C. S., & Coughlan, A. (2006). Private label positioning: Quality versus feature differentiation from the national brand. Journal of Retailing, p.79–93.

Chernatony, L. & McWilliam, G. (1998). Clarifying the difference between Manufacturers' Brands and Distributors' Brands. The Quarterly Review of Marketing. 3, p. 1-4.

Chittaie, R. (2012). Customer relationship management and business strategies. International Journal organizational leadership, vol. 1; No. 1, p.13-22.

Cobb, P. (2003). Competitive Intelligence through Data Mining", Journal of Competitive intelligence and management, Vol. (1) no.3.

Coburn, M. M. (1999). Competitive Technical Intelligence: A Guide to Design, Analysis, and Action. (1st edition). American Chemical Society.

Colakoglu, T. (2011). The Problematic Of Competitive Intelligence: How To Evaluate& Develop Competitive Intelligence?. Procedia - Social and Behavioral Sciences. 2, p.1615-1623.

Cole, R., DeBoer, L., Millican, R., & Wedding, N. (1955). Manufacturer and Distributor Brands: Some Facts and Issues. University of Illinois Bulletin. 52(71), p. 7-95

Cooper, R. G.; Edgett, S. J. & Kleinschmidt E. J. (1999). New Product Portfolio Management: Practices and Performance. Journal of Product Innovation Management: July 1999, Vol. 16, No. 4.

Daft, R.L., Sormunen, J., & Parks, D.M. (1988). Chief executive scanning, environmental characteristics, and company performance: An empirical study.

Davenport, T. H., & Prusak, L. (1998). Working knowledge: How organizations manage what they know. Boston (Mass.): Harvard Business School Press, p.10

Davis, S. M. (2000). The power of the brand. Strategy & Leadership. 28(4), p. 4-9

Deleersnyder, B., Dekimpe, M.G., Steenkamp, J. E. M. & Koll, O. (2007). Win-win strategies at discount stores. Journal of Retailing and Consumer Services 14(5): p-309–318.

Deming, W. E. (1986). Out of the crisis. Cambridge, Mass: Massachusetts Institute of Technology, Center for Advanced Engineering Study.

Dimitrieska, S., Koneska, L., Gavazova, K., Kozareva, K.G & Teofilovska, J. (2017). The power of private brands. CBU International Conference Proceedings. 5, p.114.

Dishman, P. & Calof, J. L. (2008). Competitive intelligence: a multiphasic precedent to marketing strategy, European Journal of Marketing, Volume 42, Number 7/8, p. 766-785.

Dobson, P. & Chakraborty, R. (2015). Assessing Brand and Private Label Competition. European Competition Law Review, 36(2), p.76-81.

Dobson, P. & Chakraborty, R. (2009). Private labels and branded goods: consumers' 'horrors' and 'heroes'. Private Labels, Brands and Competition Policy, p.99-124.

Dowell, G. (2006). Product line strategies of new entrants in an established industry: evidence from the U.S. bicycle industry. Strat. Mgmt. J., 27: p.959-979. doi:10.1002/smj.552

Deutsch, C., Meneghini, C., Mermut, O., & Lefort, M. (2010). Measuring technology readiness to improve innovation management. In Proc. of The XXI ISPIM Conference.

Du Plooy, H. (2018). A quick overview: Intra-brand competition vs inter-brand competition. Dingley Marshall. Retrieved from: https://www.dingleymarshall.co.za/a-quick-overview-intra-brand-competition-vs-inter-brand-competition/

Du Toit, A.S.A. & Sewdass, N. (2014). A comparison of competitive intelligence activities in Brazil, Malaysia, Morocco and South Africa, Acta Commercii 14(1), Art. #234.

Du Toit, A.S.A. (2003). Competitive intelligence in the knowledge economy: what is in it for South African manufacturing organisations? International Journal of Information Management, 23(1)

Dudovskiy, J. (2019). Research approach- Ontology. Retrieved from: https://research-methodology.net/research-philosophy/ontology/

Eskola, J. & Suoranta, J. (1998). Johdatus laadulliseen tutkimukseen. Tampere: Vastapaino.

European Commission. (2001). "Commission welcomes adoption of the Directive on copyright in the information society by the Council". Retrieved from: https://ec.europa.eu/digital-single-mar-ket/en/news/commission-welcomes-adoption-directive-copyright-information-society-council

European Commission. (2015). The EU copyright legislation. Retrieved from: https://ec.eu-ropa.eu/digital-single-market/en/eu-copyright-legislation

Eurostat. (2016). Glossary: Enterprise size. Retrieved from:https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Enterprise_size

Farris, P.W., & M.S. Albion, M.S. (1980). The Impact of Advertising on the Price of Consumer Products, Journal of Marketing 44, p.17–35.

Feigenbaum, A.V., in Andersen, E. (1983). Total quality control, 3rd edn., McGraw-Hill, New York. Qual. Reliab. Engng. Int., 1: p.214-214. doi:10.1002/qre.4680010315

Fink, A. (2014). Conducting Research Literature Reviews: From the Internet to Paper. Fourth edition. Thousand Oaks, CA: SAGE, p.3-11

Finnish Commerce Federation. (2019). Industries. Retrieved from: https://kauppa.fi/en/commerce-sector/industries/

Finnish Grocery Trade Association PTY. (2019). Finnish Grocery Trade 2019. Retrieved from: https://www.pty.fi/fileadmin/user_upload/tiedostot/Julkaisut/Vuosijulka-isut/EN_2019_vuosijulkaisu_lr.pdf

Finnish Grocery trade Association PTY. (2019). The Grocery trade market in Finland. Retrieved from: https://www.pty.fi/front-page/finnish-grocery-trade/

Fleisher, C.S. (2001). An introduction to the management and practices of competitive intelligence (CI), in Fleisher, C.G. and Blenkhorn, D.L. (Eds), Managing Frontiers in Competitive Intelligence, Quorum Books, Westport, CT, p.3-18.

Fleisher, C.S. (2008). Using open source data in developing competitive and marketing intelligence. European Journal of Marketing, Vol. 42 Issue 7/8, p.852 – 866.

Fleisher, C.S. and Wright, S. (2009). Examining differences in competitive intelligence practice: China, Japan, and the West. Thunderbird Int'l Bus Rev, 51: 2p.49-261. doi:10.1002/tie.20263

Fleisher, C.S., & Bensoussan, B. (2002). Strategic and Competitive Analysis: Methods and Techniques for Analyzing Business Competition.

Francis, J., Johnston, M., Robertson, C. (2010). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. Psychol Health 2010;25:p. 1229–45.

Franco, M., Magrinho, A., & Ramos Silva, J. (2011). Competitive intelligence: a research model tested on Portuguese firms", Business Process Management Journal, Vol. 17 No. 2, p. 332-356. doi: 10.1108/14637151111122374

Garvin, D. (1984). Product Quality: An Important Strategic Weapon. Business Horizons, 27, 40-43. doi: 10.1016/0007-6813(84)90024-7

Gilad, T., & Gilad, B. (1985). Business intelligence—The quiet revolution, Sloan Management Review 27, p.53–61.

Global Intelligence Alliance. (2004). Key success factors of competitive intelligence. The GIA White paper. Retrieved from: https://www.m-brain.com/wp-content/uploads/2015/04/10891.pdf

Global Intelligence Alliance. (2013). The GIA White paper 2013. Retrieved from: https://www.mbrain.com/wp-content/uploads/2015/04/10848.pdf

Goff, W. N. (2002). What's in a Brand? Best's Review, p.102.

Gračanin, Š., & Kalac, E., & Jovanovic, D. (2015). Competitive intelligence: importance and application in practice. Review of innovation and competitiveness. 1. Retrieved from: https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=229385

Gwin, C. F. & Gwin C. R. (2003). Product attributes model: A tool for evaluating brand positioningJournal of Marketing Theory and Practice: Spring 2003, Vol. 11, No. 2; p. 30-42.

Håkansson, P. (2000). Beyond Private Label – The Strategic View on Distributor Own Brands. Ph.D. Thesis, Stockholm: EFI Stockholm school of economics.

Halstead, D. & Ward, C.B. (1995). Assessing the vulnerability of private label brands. Journal of Product and Brand Management. 4(3), p. 38-48.

Hassan, Bashir & Alias, Maizam & Awang, H. (2018). Development and Validation of an Instrument for Measuring Technical Teachers' Attitudes towards Teaching Engineering Drawing.

Herring, J. P. (1999). Key intelligence topics: A process to identify and define intelligence needs. Competitive Intelligence Review, Vol. 10, No. 2, p. 4-14.

Herzog, J.O. (2007). Why is there an increasing global demand for business intelligence. Journal of Competitive Intelligence and Management, Vol. 4 No. 2, p.55-70.

Hickey, G., & Kipping, C. (1996). A multi-stage approach to the coding of data from open-ended questions. Nurse researcher, 4 1, p.81-91.

Ho, J. C., & Lee, C. S. (2008). The DNA of industrial competitors. Research-Technology Management, 51(4), p.17-20.

Hoch, S., & Banerji, S. (1993). When Do Private Labels Succeed?. MIT Sloan Management Review. Retrieved from: https://sloanreview.mit.edu/article/when-do-private-labels-succeed/

Hoch, S. (1996). How Should National Brands Think About Private Labels. MIT Sloan Management Review. Retrieved from: http://sloanreview.mit.edu/article/how-should-national-brands-think-about- private-labels/

Hsieh, H.F., & Shannon, S. (2005). Three Approaches to Qualitative Content Analysis. Qualitative health research, p.15.

Huang, Y., Huddleston, P. (2009). Retailer premium own-brands: creating customer loyalty through own-brand products advantage. International Journal of Retail and Distribution Management, v. 37, n. 11, p.975-992.

Hugenholtz, B. (2018). The New Copyright Directive: Text and Data Mining (Articles 3 and 4). Wolters Kluwer. Retrieved from: http://copyrightblog.kluweriplaw.com/2019/07/24/the-new-copyright-directive-text-and-data-mining-articles-3-and-4/

Hussey, D. (1998). Sources of information for competitor analysis. Strategic Change, Vol. 7, No. 6, p.343-356.

livonen, M. & Huotari, M.L. (2000). The impact of trust on the practice of knowledge management. In: Kraft D.H. (Ed) Proceedings of the 63rd Annual Meeting of the American Society for Information Science, vol. 37, p.421-429.

IMD. (2019). IMD World Competitiveness Rankings 2019 Results. Retrieved from: https://www.imd.org/wcc/world-competitiveness-center-rankings/world-competitiveness-rank-ing-2019/

Ishikawa, K. (1985). What Is Total Quality Control? The Japanese Way. Translated by Lu, David J. (1st ed.). Englewood Cliffs, New Jersey: Prentice-Hall. ISBN 978-0-13-952433-2.

Iyamu, T., & Moloi, R. (2013). Competitive intelligence deployment framework for business enhancement, International Conference on ICT for Africa, February 20-23, Harare, Zimbabwe.

Janse, B. (2018). Action Plan. Retrieved from: https://www.toolshero.com/personal-develop-ment/action-plan/

Jobber, D. (2001). Principles & Practice of Marketing. England: McGraw Hill

Johns, P., & Van Doren, D. C. (2010). Competitive intelligence in service marketing, Marketing Intelligence & Planning, Volume 28, Number 5, p.551-570.

Juhari, A.S. & Stephens, D.P. (2006). Origins of competitive intelligence : a fundamental extension of CI education. Loughborough University. School of Science.p.13. Retrieved from:https://repository.lboro.ac.uk/articles/Origins_of_competitive_intelligence_a_fundamental_extension_of_CI_education/9416438/1

Kahaner, L., in McGangole, J. (1996). Competitive intelligence: From black ops to boardrooms how businesses gather, analyze and use information to succeed in the global marketplace. Larry Kahaner, 1996, Simon & Schuster, New York.

Kapferer, J. (2001). The New Strategic Brand Management.

Kardes, F., Cronley, M., Cline, T. (2014). Consumer behavior, 2nd edition, Cengage Learning.

Kasanen, E., Lukka, K. & Siitonen, A. (2003). The constructive approach in management accounting research. J. Manag. Account. Res. 5, p.243-264.

Keller, K.L. (2003). Strategic Brand Management: building, measuring, and managing brand equity (2nd ed.).Upper Saddle River: Prentice Hall Inc.

Kesko Oyj. (2019). Food trends 2019. Retrieved from: https://www.kesko.fi/globalassets/pdf-tiedostot/ruokailmiot_2019_english_final.pdf

Kesko Oyj. (2019). Palvelun käyttöehdot. Retrieved from: https://www.k-ruoka.fi/artikkelit/palvelun-kayttoehdot

Khemani, R.S., & Shapiro, D.M. (1993). Glossary of Industrial Organization Economics and Competition Law, compiled by commissioned by the Directorate for Financial, Fiscal and Enterprise Affairs, OECD.

Kinduz Business consulting. (2009). Category assortment management planning. Retrieved from: https://docplayer.net/14216434-Category-management-assortment-planning.html

Klein, B., & Leffler, K. (1981). The Role of Market Forces in Assuring Contractual Performance," Journal of Political Economy 94, p.796–821.

Kogut, B., & Zander, U. (1992). Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology. Organization Science. 3.doi: 10.1287/orsc.3.3.383.

Kotler, P. (2012). Kotler on Marketing: How to Create, Win, and Dominate Markets". The Free Press.

Kotler, P. (2000). Marketing Management, (Millennium Edition), Custom Edition for University of Phoenix, Prentice Hall, p. 9.

Kotler, P., & Armstrong, G. (2012). Principles of Marketing, Pearson Prentice Hall, 14th Edition.

Kumar, N. & Steenkamp, J.B. (2007). Private Label Strategy: How to Meet the Store Brand Challenge.

Laaksonen, H., & Reynolds, J. (1994). Own Brands in Food Retailing Across Europe. Journal of Brand Management. 2(1), p.37-46.

Lal, R. (1990). Manufacturer Trade Deals and Retail Price Promotions. Journal of Marketing Research 27 (1990): p.428–444.

Lancaster, K.J. (1979). Consumer Demand: A New Approach. New York: Columbia University Press.

Langabeer, J.R., II. (1998). Achieving a strategic focus for competitive intelligence. Comp. Int. Rev., 9: p.55-59. doi:10.1002/(SICI)1520-6386(199801/03)9:1<55::AID-CIR9>3.0.CO;2-3

Lavie, D., Stettner, U., & Tushman, M. L. (2010). Exploration and exploitation within and across organizations. The Academy of Management Annals, 4(1), p.109-155.

Leahy, T. (1992). Branding – the Retailer's Viewpoint. Houndmills: Macmillan Academic and Professional Ltd.

Lenz, R.T., & Engledow, J.L. (1986). Environmental analysis units and strategic decision-making: A field study of selected 'leading-edge' corporations. Strat. Mgmt. J., 7:p.69-89. doi:10.1002/smj.4250070107

Leppänen, P. (2010). Exchange of Market Information in Retail Trade - Insights on the Termination of ScanTrack in Finland. Aalto University, p. 70-72.

Li, Y. (2016). Expatriate Manager's Adaption and Knowledge Acquisition: Personal Development in Multi-National Companies in China, Springer Publications.

Lincoln, K., & Thomassen, L. (2008). Private label: Turning the retail brand threat into your biggest opportunity. London: Kogan Page.

Lincoln, Yvonna S. & Guba, Egon, G. (1985). Naturalistic Inquiry. Sage Publications, Newbury Park, CA.

Liu, T., & Wang, C. (2008). Factors affecting attitudes toward private labels and promoted brands. Journal of Marketing Management 24(3/4): p.283–298.

Liu, X., & Niemi, J. (2012). The first glance at the growing impact of private labels on the upstream localfood suppliers in Finland. Natural Resources Institute Finland (Luke), Economics and Society Research Unit.

Lowenthal, M. (2011). Intelligence: From Secrets to Policy, CQ Press; 5th edition, 2011; ISBN 978-1-6087-1675-3.

Marceau, S., & Sawka, K. (1999). Developing a world-class CI program in telecoms. Comp. Int. Rev., p.10: 30-40.

Martín-de-Castro, G., Lòpez-Sáez, P., Navas Lòpez, J.E.N., & Dorado, R.G. (2007). Knowledge creation process: theory and empirical evidence from knowledge-intensive firms. Palgrave Macmillan: New York.

Mason, K., & Bequette, J. (1998). Product experience and consumer product attribute inference accuracy. Journal of Consumer Marketing: 1998, Vol. 15, No. 4, p. 343-357.

Mason, S. (2002). Private Label Revolution. GCI. (November 2002), p. 40-43.

Mayring, P. (2000). Qualitative Content Analysis. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research. Retrieved from: http://qualitative-research.net/fqs/fqs-e/2-00inhalt-e.htm. 1.

McGonagle, J.J., & Vella, C.M. (2012). Proactive intelligence, Springer-Verlag, London.

Mélo, M. A. N., & Medeiros, D. D. (2007). A model for analyzing the competitive strategy of health plan insurers using a system of competitive intelligence", The TQM Magazine, Volume 19, Number 3, p.206-126.

Mesaros, P., Carnicky, S., Mandicak, T., Habinakova, M., Mackova, D., & Spisakova, M. (2016). Model of key success factors for Business Intelligence implementation. Journal of Systems Integration, p.3-15.

Miguel, P. A. C. (2008). Portfolio management and new product development implementation: A case study in a manufacturing firm. International Journal of Quality & Reliability Management: April 2008. Vol. 25, No. 1, p.10-23.

Miller J.P. (1996). Information science and competitive intelligence: Possible collaborators?, American Society for Information Science. Bulletin of the American Society for Information Science, Vol. 23, No. 1, p. 11-13.

Mills, D,E. (1995). Why Retailers Sell Private Labels, Journal of Economics and Management Strategy, Vol. 4 (3), p509-528.

Monette, D.R., Gullivan, T.J. & DeJong, C.R. (2010). Applied Social Research: A Tool for the Human Resources. Cengage Learning

Morse, J.M., et al. (2002). Verification strategies for establishing reliability validity in qualitative research. Int J Qual Res 2002;1:p. 1–19.

Nasri, W. (2011). Investigate Competitive Intelligence Process: An Exploratory Study in Tunisian Companies, International Business Research, Volume 4, Number 4, p.62-74.

Nasri, W., & Zarai, M. (2013). Key Success Factors for Developing Competitive Intelligence in Organisation. American Journal of Business and Management, Vol. 2, No. 3, p.239-244.

Nielsen. (2018). Seven forces driving future of Europe's FMCG and Retail market. Retrieved from: https://www.nielsen.com/eu/en/insights/article/2020/seven-forces-driving-future-europe-fmcg-and-retail-market/

Nielsen. (2018). The rise and rise again of Private Labels. Retrieved from: https://www.nielsen.com/content/dam/nielsenglobal/ru/docs/2018.02%20-%20Global%20-%20The%20Rise%20and%20Rise%20Again%20of%20Private%20Label.pdf

NordeaTrade. (2019). Advertising and marketing in Finland Retrieved from: https://www.nordeatrade.com/no/explore-new-market/finland/marketing

Olszak, C. (2014). An Overview of Information Tools and Technologies for Competitive Intelligence Building: Theoretical Approach. Issues in Informing Science and Information Technology. 11. p.139-153.

Palmieri, M. (2005). Information vs. Intelligence: What Police Executives Need to Know. Journal: Police Chief Volume:72, Issue:6, p.32-33.

Patton, J.R. (2007). Metrics for knowledge-based project organisations. SAM Advanced Management Journal, 72(1), p.33-43.

Pelissier, R. (2008). "Business Research Made Easy" Juta & Co, p.3.

Pellissier, R., & Nenzhelele, T.E. (2013). Towards a universal competitive intelligence process model, South African Journal of Information Management 15(2), Retrieved from: http://dx.doi.org/10.4102/sajim.v15i2.567

Pepe, M.S. (2008). The Longitudinal Impact of Private Label Brands on Category Profitability and Loyal Customers, ProQuest, p. 3.

Peteraf, M. A. (2003). Scanning dynamic competitive landscapes: A market-based and resourcebased framework. Strategic Management Journal, Vol. 24, No. 10, p. 1027-1041. Pirttilä, A. (2000). Kilpailijaseuranta. EKONOMIA-sarja. Helsinki. WSOY

Pole, J. (2000). Competitive intelligence as a construct for organizational change. Competitive Intelligence Review 11(4):p. 25–31.

Porter, M. E. (1998). Competitive strategy: Techniques for analyzing industries and competitors. New York: Free Press.

Pranjic, G. M. S. (2011). Influence of Business and Competitive Intelligence on Making Right Business Decisions", Ekonomska Misao i Praksa, Volume 20, Number 1, p.271-288.

Prescott, J.E. (1999). The Evolution of Competitive Intelligence: Designing a Process for Action, Proposal Management, Spring, p. 37-52.

Progressive Grocer. (1977). Repositioning Private Label — It's Part of a Broad New Strategy at Star,", p. 107–108.

Puccinelli, N. M. et al. (2009). Customer experience management in retailing: understanding the buying process. Journal of Retailing, v. 85, n. 1, p. 15-30.

Putsis Jr, W.P., & Cotterill, R.W. (1999). Share, price and category expenditure – Geographic market effects and private labels. Managerial and Decision Economics 20(4): p.175–187.

Putsis Jr, W.P., & Dhar, R. (2001). An empirical analysis of the determinants of category expenditure. Journal of Business Research 52(3): p.277–291.

Putsis Jr., W.P., & Bayus, B. L. (2001). An Empirical Analysis of Firms' Product Line Decisions. Journal of Marketing Research: February 2001, Vol. 38, No. 1, p 110-118.

Qiu, T. (2008). Scanning for competitive intelligence: a managerial perspective, European Journal of Marketing, Volume 42, Number 7/8, p. 814-835.

Quelch, J.A., & Harding, D. (1996). Brands versus private labels: Fighting to win. Harvard Business Review, 74(1), p. 99-110.

Raju, J., Sethuraman, R., & Dhar, S. (1992). Cross-Category Differences in Store Brand Market Share" Philadelphia: University of Pennsylvania, Wharton School of Business, Working Paper.

Raju, J., Sethuraman, R., & Dhar, S. (1995). The Introduction and Performance of Store Brands, Management Science, 41 (June), p. 957–978.

Ranjit, B. (2008). Competitive intelligence process and tools for intelligence analysis, Industrial Management and Data Systems, Vol. 108, No. 4, p. 510-528.

Rantanen, A. (2017). Creation of a Competitive intelligence system, Master's thesis, LUT School of Business and Management. Lappeenranta University of Technology.

Richardson, L., & Luchsinger, V. (2007). Strategic Marketing Implications In Competitive Intelligence And The Economic Espionage Act Of 1996", The Journal of Global Business Issues – Volume 1 Issue 2. Roitner, A. (2008). Competitive intelligence in Austria: An empirical study, Unpublished master's dissertation, University of Vienna, Austria.

Rosati, E. (2018). The Exception for Text and Data Mining (TDM) in the Proposed Directive on Copyright in the Digital Single Market - Technical Aspects. Retrieved from: doi:10.2861/480649

Rosenbröijer, C-J. (2001). Industrial brand management: a distributor's perspective in the UK finepaper industry. Journal of Product & Brand Management, v. 10, n. 1, p. 7-24.

Saayman, A., Pienaar, J., Pelsmacker, P., Viviers, W., Cuyvers, L., Muller, M. L., et al. (2008). Competitive intelligence: construct exploration, validation and equivalence, Aslib Proceedings, Volume 60, Number 4, p. 383.

Santos, M. & Correia, A. (2010). Competitive intelligence as a source of competitive advantage: An exploratory study of the Portuguese biotechnology industry, paper presented at the 11th European Conference on Knowledge Management, Famalicão, Portugal, September 2–3, 2010.

Saunders, M., Lewis, P. & Thornhill, A. (2012). Research Methods for Business Students, 6th edition, Pearson Education Limited.

Selnes, F. (1993). An Examination of the Effect of Product Performance on Brand Reputation, Satisfaction and Loyalty. European Journal of Marketing: 1993, Vol. 27, No. 9, p. 19-35.

Senhoras, E. M. (2003). O varejo supermercadista sob perspectiva. v. 9, p.3.

Sethi, R. (2000). New Product Quality and Product Development Teams. Journal of Marketing: April 2000, Vol. 64, No. 2, p. 1-14.

Shankar, V., Carpenter, G., & Krishnamurthi, L. (1998). Late Mover Advantage: How Innovative Late Entrants Outsell Pioneers. Journal of Marketing Research, p.35.

Sharma, N. (2013). Marketing Strategy on different stages PLC and its marketing implications on FMCG products. International Journal of marketing: March 2013, Vol. 2, No. 3, p. 121-136.

Shewhart, W. A. (1931). Economic control of quality of manufactured product.

Sitra. (1998). Elämänlaatu, osaaminen ja kilpailukyky. Tietoyhteiskunnan strategisen kehittämisen lähtökohdat ja päämäärät (Quality of Life, Competence and Competitiveness of the Economy). Helsinki: Sitra.

Strauss, A.C., & Du Toit, A.S.A. (2010). Skills shortages and competitiveness in South Africa: The need for competitive intelligence skills, Journal of Contemporary Management, vol. 7, p. 307-324.

Swan, J.E. (1974). Price-product performance competition between retailer and manufacturer brands. Journal of Marketing 38(3): p.52–59.

Tamilia, R.D., Corriveau, G., & Arguedas, L.E. (2000). Understanding the Significance of Private Brands with Particular Reference to the Canadian Grocery Market. Centre de Recheche en Gestion. Bibliothèque nationale du Canada. Working Paper.

Trochim, W.M., & Donnelly, J.P. (2006). The Research Methods Knowledge Base. 3rd Edition, Atomic Dog, Cincinnati, OH.

Van de Ven, A. (2007). Engaged Scholarship: A Guide for Organizational and Social Research. Oxford University Press.

Vedder, R.G., & Guynes, C.S. (2002). CIOS' perspectives on competitive intelligence, Information Systems Management, Fall, p.49-55.

Verhoef, P.C., Nijssen, E.J., & Sloot, L.M. (2002). Strategic reactions of national brand manufacturers towards private labels: An empirical study in The Netherlands.

Waarts, E., & Wierenga, B. (2000). Explaining Competitors' Reactions to New Product Introductions: The Roles of Event Characteristics, Managerial Interpretation, and Competitive Context. Marketing Letters. 11, p.67-79.

Wang, H.C., He, J., & Mahoney, J.T. (2009). Firm-specific knowledge resources and competitive advantage: the roles of economic- and relationship-based employee governance mechanisms. Strategic Management Journal, 30(1), p.1265-1285.

Wee, T.T.T. (2001). The use of marketing research and intelligence in strategic planning: Key issues and future trends. Marketing Intelligence and Planning, 19(4):p.245-253.

Weiss, A. (2002). A brief guide to competitive intelligence: how to gather and use information on competitors, Business Information Review, Vol. 19, No. 2, p. 39-47.

Wernerfelt, B., & Montgomery, C. (1992). Risk Reduction and Umbrella Branding. The Journal of Business. 65, p.31-50.

Wilensky, H.L., in Peterson, R.A. (1967). Organizational Intelligence: Knowledge and Policy in Government and Industry. By Harold L. Wilensky. New York: Basic Books, p.226.

Wilson, J. (2010). Essentials of Business Research: A Guide to Doing Your Research Project. SAGE Publications, p.7.

Xu, K., Liao, S., Li, J., & Song, Y. (2011). Mining comparative opinions from customer reviews for Competitive Intelligence, Decision Support Systems, Volume 50, Number 4, p.743-754.

Yeoh, W., Koronios, A., & Gao, J. (2008). Managing the Implementation of Business Intelligence Systems: A Critical Success Factors Framework. IJEIS, 4, p.79-94.

Yokoyama, M., Da Silva, A., & Piato, É. (2014). Becoming a Private Label Supplier: Opportunities and Challenges. Revista de Administração da Unimep. 12, p.23-46.

Appendices

Appendix 1 ISIC classification of the FMCG sector, retail and wholesale (ISIC, 2007)

The retail market for	 SIC 5211 retail sales in non-specialized stores 	
FMCG's	 ISIC 5219 other retail sales in non-specialized stores 	
	 ISIC 5220 retail sales of food, beverages and tobacco in 	
	specialized stores	
	 ISIC 5231 retail sales of pharmaceutical and medical 	
	goods, cosmetic and toilet articles	
	 ISIC 5251 retail sales via mail order houses 	
	 ISIC 5252 retail sales via stalls and markets 	
	ISIC 5259 wholesale goods	
	ISIC 5269 wholesale medical prescriptions	
Supplier industries for	1512 fish and fish products	
FMCGs	 1513 fruit and vegetables 	
	 1514 vegetable and animal oils and fats 	
	• 1520 dairy products	
	• 1531 grain mill products	
	• 1532 starches and starch products	
	• 1533 animal feeds	
	• 1541 bakery products	
	• 1542 sugar	
	 1543 cocoa, chocolate and sugar confectionery 	
	• 1544 macaroni, noodles, couscous	
	• 1549 other food products	
	 1551 spirits, ethyl alcohol 	
	• 1552 wines	
	1553 malt liquors and malt	
	• 1554 soft drinks, mineral waters	
	1600 tobacco products	
	• 2101 pulp, paper and paperboard	
	 2102 corrugated paper, containers 	
	 2109 other articles of paper and paperboard 	
	• 2424 soap and detergents, cleaning preparations, per-	
	fumes	
	• 2430 men's and women's inner garments, shaving gels,	
	deodorants, personal care, home care	

Appendix II - Questions and aims for the primary informants

SECTION | General information from the Retailers:

- 1. Number of PL goods (in the grocery sector)
- 2. Current PL share (vs branded share)
- 3. Performance of PL
- 4. Trends in PL (Consumer based)
- 5. Innovation in PL (response from the retailer)

SECTION // Specific information of PL in the context of CI

CI phase 1-5	Generalised question	Aim of the question in the con-
Ci pilase 1-5		
		text of the study
Recognise competi-	Who are the key competitors of the	How competitors are defined,
tors	company?	what is the market share cover-
	DUASE - planning collection	age required(via identification
	PHASE : planning , collection	of primary competitors)
	1.3 Depth and quality of information	
	PHASE : planning , collection	
	Keywords: Which key competitors do	
	you need intelligence for? What market	
	share coverage do you require? What	
	methodology do you use currently for	
	CI?	
Define intelligence	1.1What is the Scope of CI data re-	What is scope of CI required?
needs	quired ?	Richness and depth of product
	PHASE : Planning, collection	specific information.
)What is your intelligence need?)	
	Pricing, Claims, positioning, Nutrition	
	information, producer, shelf space,	
	NPD, country of origin, promotions,	
	claims, packaging type. Certifications	

	and membership of associations. Char-	
	itable/religious action. Responsible	
	sourcing, Animal welfare. Sustainabil-	
	ity.	
Collection of infor-	What are the most important sources	Sources of information, meth-
mation	for the competitor information you	odology to collect?
	get? (instore, online, interviews)	
	1.2 What frequency of CI data re-	
	quired?	
	PHASE : Planning, collection	
	······································	
	Keywords: Time series, structured, ad-	
	hoc. Seasonal, promotion – based.	
(4) Information pro-	In which decisions and work processes	What format does the data
cessing and storage	you use competitor intelligence?	need to be presented? Does it
		require coding/processing?
	1.4 How does this data need to be re-	Which software is used?
	ported?	
Analysis and conclu-		
sions	phase: Collection, sorting and analysis	
	Which phase of the cycle:	
	Keywords: What format does the data	
	need to presented? Is it to be coded ?	
	processed into other BI platforms?	
	What software is used?	
(5) Intelligence dis-	How would you prefer to receive and	What strategic decisions are
semination for users	share competitor information on daily	made; what processes are con-
	basis?	ducted? What response strate-
		gies are employed
	1.5 How will this information help your	0
	organisation ?	
	Phase: dissemination	

Appendix 2

	Keywords: What decisions are made	
	with this information? What processes	
	are conducted with the aid of this data?	
	What marketing objectives require CI?	
	What strategic response decisions are	
	made? Who needs to see the CI?	
Open question oppor-		
tunity		

Appendix III - Questions and aims for the secondary informants

Question	Aim of the question
Question	Ain of the question
Organisation's Role in the promotion	To identify the input of the organisation to the prosperity
of PL in Finnish FMCG Market?	of PL in Finland
Bottlenecks for growth of PL, in the	To understand why the market % of PL goods is lagging that
Finnish FMCG market	of other EU nations
Key success factors of PL goods	To understand in the context of a holistic view of the mar-
	ket the success factors of PL goods
Is the level of brand specific infor-	Given an external role, what are the key knowledge gaps
mation on PL goods	for retailers of PL goods
What role will PL take in the future	How retailers will respond to demand drivers
retail trends? Growth potential?	
How quick are retailers responding	Effectiveness of Retailers, NPD development, and position-
to developments in the PL market.	ing
What is the balance of technology	To understand the roles of human and technology in com-
and human in competitor intelli-	petitive intelligence. Especially, what today's technology is
gence?	capable to provide for competitive intelligence?
What current Ci tools exist to under-	Understand the competitive landscape of third-party pro-
stand PL goods in the FMCG market?	viders of CI for PL
What technological developments in	How emerging technologies are/can be utilised to optimise
the can assist in the quest for opti-	CI for PL
mised CI in the FMCG sector?	
Open question	

Appendix IV – Covering letter for data survey

Saatekirje

15.5.2020

Arvoisa vähittäiskaupan asiantuntija,

Kaupan omien merkkituotteiden myynti on kasvussa. Olisiko yrityksellenne hyödyksi saada enemmän tietoa kilpailijoidenne omista merkkituotteista?

Tämä kyselyn avulla selvitetään käytettävissä olevaa tietoa kaupan omista merkkituotteista.

Tulosten perustella voidaan kehittää suosituksia, joiden avulla kaupat voivat kehittää omaa valikoimaansa mahdollisimman hyvin vastamaan kuluttajan tarpeita ja odotuksia.

Tavoitteena on saada vastauksia seuraaviin kysymyksiin:

- A) Saatteko riittävästi tietoa kilpailijoidenne kaupan omista merkkituotteista? Jos ette niin, mitä tietoja haluaisitte saada kilpailijoidenne kaupan omista merkkituotteista?
- B) Miten voisin parantaa teidän mahdollisuuksia saada tehokkaammin tietoa kilpailijoiden kaupan omista merkkituotteista?

Tutkimuskysely on tarkoitettu alueen oma merkkituotteiden jälleen myyjille.

Kyselyyn vastaaminen on luonnollisesti vapaaehtoista ja siihen vastataan nimettömänä. Kysely vie enintään kymmenen minuuttia. Vastaathan kyselyyn viimeistään 24.3.2020 tästä linkistä: <u>https://forms.gle/f2AfCxjhN373tuNB9</u>

Tämä tutkimus on osa Kajaanin ammattikorkeakoulun tradenomi YAMK-opinnäytetyötä. Opinnäytetyön tarkoituksena on saada tietoa, jota voidaan käyttää kilpailijoiden omien merkkituotteiden seurannan optimointiin Suomen päivittäistavarakauppa -sektorilla.

Tästä YAMK-opinnäytetyöstä lähetetään kaikille halukkaille kopio huhtikuun lopussa 2020.

Opinnäytetyöni ohjaajana toimii Heli Itkonen Kajaanin ammattikorkeakoulusta, sähköposti: <u>heli.itkonen@kamk.fi</u>.

Ystävällisin terveisin,

John Wideman

KAMK liiketalouden opiskelija (MBA) (lisätietoja englanniksi) john.wideman@kamk.fi

Appendix V – Framework of the interviews

Two versions of the survey were created, intended for the primary and secondary informants. Non-leading questions were mostly used and probing when necessary based upon on the precoded keywords, as a guide in order to gain deeper insight into the topic and adhere to the directed content analysis method employed. The interview questions and overall aim of the questions can be seen from appendix II & III.

The interviews where preceded with a covering letter (appendix IV) and where possible during the interviews conducted via direct verbal communication began with:

- 1. Personal introduction with brief description of the interviewers professional and academic background.
- 2. Purpose statement (contribution to a third party)
- 3. Background and scope of the research
- 4. Description of the interview structure and timing
- 5. Request of permission to record the interview (not granted)

In conclusion of the interviews, the following process was followed:

- 1. Request for permission to publish in the thesis the informant's company , title and name (not granted by all informants)
- 2. Mentioning the possibility to receive a copy of the thesis once it is finalised (all parties were interested in this)

Appendix VI – Online survey for primary informants

YAMK-opinnäytetyö laadullisesta tietokartoituksesta: "Kaupan omien merkkituotteiden tietotarpeista"

YAMK -tutkimuksen tiedonkeruu päähaastateltaville (eli jälleenmyyjät / PL-omistajat)

John Wideman

Kajaanin ammattikorkeakoulu (MBA-ohjelma)

Ohjeet:

Pyydän vastamaaan kaikkiin kysymyksiin, jos et voi tai halua vastata tiettyyn kysymykseen, siirry ystävällisesti seuraavaan kysymykseen. Jos haluat saada opinnäytetyöni, täyttäkää ystävällisesti alla olevat tietokentät.

Yleistä tietoa

Nimi: Toiminimi: Yritys: Yhteystiedot:

OSA I Omien merkkituotteiden tiedot

1) Kuinka monta kaupan omaa merkkituotetta on tällä hetkellä tuotevalikoimassanne?

2) Jos mahdollista määrittele, kuinka monta näistä oma merkkituotteista on päivittäistavaran sektorissa?

3) Mikä on omien merkkituotteiden prosenttiosuus koko tuotevalikoimasta?

4) Mikä on kaupan omien merkkituotteiden myynnin kehitys verattuna muihin merkkituottesiin?

5) Onko päivittäistavarakaupan oma merkki-valikoimassa uusia trendejä, jotka vastaavat kuluttajien tarpesiiin?

6) Seuraatteko kilpailijoidenne kaupan omien merkkituotteita säännölisesti?

7) Onko kaupan omien merkkituotteiden vertailu vaikeampaa koska tuoteet ovat erilaisia? (esim. oma-merkkituotteiden kilpailu samassa tuoteryhmässä, kuten Pirkka v. Rainbow v. Deluxe juusto).

8) Mitkä tekijät vaikuttivat kilpailijoiden omien merkkituotteiden tiedon saantiin?

9) Ketkä ovat kilpailijoitanne?

10) Mistä kilpailijasta tarvitset kaupan omien merkkituotteiden tietoja?

11) Mihin toimintaan (esim. myynti, tuotekehitys, markkinointi) tarvitset eniten tietoa kilpailijiodenne oma merkkituotteista?

12) Millaista yleistä tietoa tarvitset kilpailijoiden omista merkkituotteista? (Valitse sopivat

vaihtoehdot)

Hinta: Tuote: Tuotekategoria: Myymälä: Tuote uutuudet: Tarjoukset: Valmistaja: Muut: 13) Millaista erityistä tietoa tarvitset kilpailijoidenne omista merkkituotteista? (Valitse sopivat

vaihtoehdot)

Myntti argumentti: Hyllytila: Alkuperämaa: Ainekset/Koostumus: Pakkausmateriaali ja -järjestelmä: Sertifioinnit: Tuotevoittaja: Yhdistysten jäsenyys: Hyväntekeväisyys / uskonnollinen toiminta: Vastuullinen hankinta: Eläinten hyvinvointi: Kestävä kehitys: Muut:

14) Mistä haluaisitte ensisijaisesti saada tietoa kilpailijoidenne oma merkkituotteista? (Valitse

sopivat vaihtoehdot)

Myymälä: Online: Haastattelut: Tuoteoppaat: Muut: 15) Kuinka usein kilpailijoidenne omista merkkituotteista olisi tarpeen saada tietoa?

Päivittäin: Kuukausittain: Neljännesvuosittain: Vuosittain: Kausittaiset tarjoukset: Muut: 16) Miten kilpailijoidenne omista merkkituotteista olisi oltava tietoa saatavilla? (Avainsanat: Onko

data koodattava? Jalostettava muihin BI-ohjelmiin? Mitä ohjelmia käytetään?)

17) Mitä päätöksiä oma merkkituotteisiinne tehdään, kilpailijoiden oma merkkituotteiden tiedon

perusteella?

Muita kommentteja tai ehdotuksia? Mahdollisuus täydentää lisätietoja tai ajatuksia