



SCHOOL OF  
ECONOMICS AND  
MANAGEMENT

## **Marketing Capabilities for Downstream Adoption**

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*How B2B Firms Adapt to Context-Specific Market Conditions in  
Complex Value Chains*

By

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# Abstract

In complex B2B value chains, even functionally strong innovations may struggle when success depends on end-consumer adoption beyond the focal firm's direct control. This thesis examines how context-specific market conditions shape perceived adoption drivers and barriers, how these perceptions influence downstream adoption, and how B2B firms can respond by adapting marketing capabilities to shape downstream adoption perceptions. It focuses on FMCG-related value chains, where end-consumer perceptions affect not only final demand but also the willingness of other downstream actors like producers and retailers to invest in and support an innovation.

Building on existing literature, this thesis develops a framework connecting market context, perceived adoption drivers and barriers, downstream willingness to adopt, and B2B firm-side marketing capabilities. The framework is empirically examined and refined through a mixed-method single-case study in collaboration with a global packaging company, drawing on an expert interview, focus groups, and a survey in the context of prepared food packaging.

The findings indicate that adoption is not determined by product characteristics alone but depends on the fit between market context, perceived value, and firm-side responses. Context did not play an equal role across all dimensions. Some contextual factors and perceived drivers or barriers appeared more influential than others, while markets appeared more similar than expected. This underlines the need to identify which factors are actually relevant for adoption and where potential mismatches may occur between what the innovation offers, how it is marketed, and what end-consumers value, expect, or trust.

Theoretically, this thesis strengthens the link between marketing and strategic management research. Practically, the refined framework helps managers map adoption drivers and barriers, distinguish relevant contextual differences, and identify suitable marketing capability responses in retail-oriented industries.

**Keywords:** *marketing capabilities, B2B value chains, downstream adoption, consumer perceptions, market characteristics*

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## Abbreviations

|      |                                                 |
|------|-------------------------------------------------|
| B2B  | Business-to-business                            |
| CBV  | Capability-based view                           |
| DMC  | Dynamic marketing capability                    |
| FMCG | Fast-moving consumer goods                      |
| IMS  | International market selection and segmentation |
| MSM  | Multi-stage marketing                           |
| OMC  | Operational marketing capability                |
| RBV  | Resource-based view                             |
| TPB  | Theory of planned behavior                      |

# 1. Introduction

*“Although customers are the final judges of innovations, their opinions on firms’ innovations are rarely listened to.” (Kurtmollaiev et al., 2022, p. 87)*

Product innovation is associated with both considerable uncertainty and risk, as unsuccessful launches can have serious strategic consequences for firms (Gourville, 2006; Joachim et al., 2018; Talke & Heidenreich, 2014). This can be caused by multiple reasons, as innovation adoption and resistance research emphasizes (Rogers, 1983). Either product development takes place without sufficiently considering the needs and wants of consumers (Kurtmollaiev et al., 2022), or subjective perceptions can influence consumers’ purchasing behavior, acting as adoption drivers or barriers (Ajzen, 1991; Joachim et al., 2018). This distinction is important, as these perceptions might not align with the technical characteristics of an innovation, potentially leading to a failing innovation despite beneficial product characteristics (Joachim et al., 2018). Marketing research supports this, stating that consumers can act rationally within an untrue set of beliefs (Dickinson et al., 1986). Marketing capabilities might allow firms with the ability to shape those beliefs, equipping them with a firm-sided response mechanism.

Untrue beliefs or biases can have a particularly strong impact on product categories that are characterized by short lifecycles and in which products cannot differentiate themselves fundamentally through new features or functions. This is very common in the Fast-Moving Consumer Goods (FMCG) industry, where purchasing decisions are often based on perceptions and attitudes (Niedermeier et al., 2021a). The high relevance of this issue is reflected in the large number of new FMCG products that fail shortly after market introduction. Depending on the definition of failure, industry reports estimate that more than 50% of new FMCG product launches do not achieve sustained market success (Dijksterhuis, 2016; Gourville, 2006).

The FMCG industry is characterized by complex value chains, often including suppliers, producers, channel members, and end-consumers (Lambert & Cooper, 2000). Suppliers typically sell their products to producers; however, these organizations follow rational purchase logics and base their demand on anticipated demand at subsequent market stages, such as demand by retailers or end-consumers (Bishop et al., 1984; Geiger et al., 2015; Webster & Wind, 1972). Hence, B2B firms increasingly seek to influence customers’ customers to

stimulate downstream demand (Homburg et al., 2014). At the same time, innovation adoption research shows that barriers often stem from consumer perception, making technical superiority insufficient (Joachim et al., 2018).

To address this challenge, this thesis draws on the Resource-Based View (RBV) and Capability-Based View (CBV). This integrative perspective shifts attention to internal resources and capabilities that explain variation in firm performance (Barney, 1991). Especially relevant in the described context are marketing capabilities, which allow firms to sense market needs, communicate value, and build relationships across the value chain (Vorhies & Morgan, 2005). Moreover, certain marketing capabilities might help firms to connect with their external environment and adapt their operational marketing activities to context-specific conditions (Barrales-Molina et al., 2014; Kachouie et al., 2018).

Against this background, the following problematization highlights the main gaps in existing literature.

### **1.1 Problematization and research gaps**

Although prior research has generated important insights into innovation adoption, Business-to-business (B2B) value chains, and marketing capabilities, these research streams remain insufficiently connected.

Innovation adoption research offers a useful starting point for explaining why market adoption of objectively attractive innovations or products might remain low. Literature has identified many drivers and barriers that work as evaluation mechanisms, influencing consumers' buying behaviors (Claudy et al., 2015; Joachim et al., 2018; Luchs et al., 2010; Rogers, 1983). Prior research has gathered data on those drivers and barriers for single-market settings; however, research gaps persist regarding cross-cultural adoption patterns (Joachim et al., 2018). Especially in closely intertwined markets such as the European Union, where trade barriers are relatively low and many countries offer attractive expansion opportunities, companies aiming to expand may face strong cultural differences in value perception and purchasing behavior (Cecere et al., 2018; European Commission, n.d.; Sebri & Zaccour, 2017; Shavitt & Barnes, 2020). Thus, country-specific data gathering on adoption barriers could deepen the understanding of predominant barriers and their relative importance across different markets (Joachim et al., 2018).

Overcoming low adoption becomes even more complicated in B2B value chains that include actors such as producers, retailers, and human end-consumers (Lambert & Cooper, 2000). However, innovation resistance in B2B settings has received limited scholarly attention so far (Talke & Heidenreich, 2014). Literature suggests that organizational buyers follow different decision logics than consumers, as they evaluate innovations through economic, technical, operational, and strategic criteria (Sheth, 1973; Webster & Wind, 1972). Furthermore, demand from direct customers is frequently derived from demand further downstream, meaning that producers or retailers may hesitate to adopt when end-consumer demand is uncertain (Bishop et al., 1984; Geiger et al., 2015). Existing research on multi-stage marketing (MSM) already recognizes the need to address multiple actors in the value chain to stimulate downstream demand (Geiger et al., 2015; Homburg et al., 2014). However, there is still a lack of clarity regarding which downstream actors should be prioritized, how their signals should be interpreted, and how these should be translated into marketing capabilities (Homburg et al., 2014; Wengler & Kolk, 2023).

Marketing research might offer a solution to this issue. In the past, marketing and strategy research developed mostly in parallel, even though marketing connects firms to their external environment and allows them to sense customer needs (Biggadike, 1981; Moorman & Day, 2016). Dynamic marketing capabilities (DMCs) can be understood as a marketing-specific extension of dynamic capability logic, enabling firms to sense market changes, engage customers, and link partners in response to changing external conditions (Kachouie et al., 2018; Mu, 2015). More broadly, dynamic capabilities help firms sense and seize opportunities, transform organizational arrangements, and improve business model design (Teece, 2007, 2018). DMCs therefore provide a useful bridge between operational marketing activities (OMCs) and higher-order strategic adaptation (Hoque et al., 2021; Kachouie et al., 2018). However, the DMC approach remains relatively new, and its dimensions and definitional robustness require further clarification (Hoque et al., 2021). Therefore, research is needed to integrate DMCs into concrete business contexts and strengthen the bridge between strategy and marketing research.

## **1.2 Strategic management significance**

To position this thesis within the field of strategic management, it is useful to begin with a definition of the concept. Strategic management describes how managers make decisions and

take actions to use firm resources in a way that improves performance under different environmental conditions (Nag et al., 2007).

For this purpose, strategic management needs marketing because strategy is ultimately about matching the firm to market opportunities. Marketing helps define those opportunities by identifying customer needs, segmenting markets, positioning the firm, and analyzing competitors (Biggadike, 1981). Similarly, Moorman and Day (2016) conceptualize marketing as the interface between the firm and its market, contributing to firm performance.

Building on this perspective, differences in firm outcomes can be linked to variation in firms' underlying capabilities (Teece, 2019). Marketing capabilities are strategically relevant because they enable firms to interpret external market conditions and translate them into organizational responses (Hoque et al., 2021).

This thesis builds on this perspective by incorporating downstream adoption dynamics, an area that remains particularly relevant because traditional strategy research has often focused more strongly on supply-side sources of value creation than on demand-side mechanisms (Massa et al., 2017).

### **1.3 Purpose and research question**

This thesis aims to explain how B2B firms can respond to context-specific downstream adoption conditions in complex value chains. While B2B firms often sell innovations to direct organizational customers, market success may ultimately depend on how end-consumers perceive and adopt these innovations. This creates a strategic challenge: firms must understand downstream market barriers that arise outside their direct customer relationship and translate these insights into internal capability development.

The study focuses on the relationship between external adoption conditions and internal firm responses. Externally, it examines how market-, consumer-, and product-specific characteristics shape perceived adoption drivers and barriers. Internally, it investigates how B2B firms can use marketing capabilities to address these barriers.

The purpose of this thesis is therefore to contribute to the interface between marketing and strategic management by showing how B2B firms can align marketing capabilities with heterogeneous downstream market conditions. Practically, the thesis provides a framework that

helps firms identify mismatches between downstream adoption barriers and their current capability base and downstream marketing approach, particularly in FMCG and other retail-oriented industries where end-consumer perception strongly influences adoption.

Accordingly, the thesis is guided by the following research question:

*How do context-specific market conditions shape downstream adoption drivers and barriers, and how can B2B firms adapt marketing capabilities to strengthen end-consumer adoption in complex value chains?*

## **2. Literature Review**

By synthesizing prior studies, literature reviews strengthen the theoretical basis of a field and give a comprehensive overview of the existing literature (Paul & Criado, 2020). Furthermore, prior research emphasizes the importance of developing frameworks to enhance theory-building activities (Whetten, 1989). Following a deductive approach, this literature review develops a preliminary conceptual framework to address the research question, which is later empirically evaluated and refined (Saunders et al., 2023).

The literature review follows a systematic approach. Relevant studies were identified through searches in multiple academic databases, including Google Scholar and EBSCO, using keywords aligned with the focus of this thesis, such as consumer adoption and marketing capabilities. Boolean operators were used to combine keywords and identify additional literature. The review focuses mainly on academic papers and predominantly includes English-language publications.

Priority was given to highly cited and peer-reviewed publications, while recent high-quality research was also included to ensure that relevant new contributions are not overlooked. A strong emphasis was placed on journals ranked A/Q1 or higher. Journal quality was validated using established ranking systems, including VHB Publication Media Rating, ABDC Journal Quality List, and SCImago Journal Rank. Titles and abstracts were first screened for relevance, before selected full texts were reviewed for inclusion.

### **2.1 External context: (end-) customer adoption and market dynamics**

This section examines the external conditions shaping downstream adoption, covering contextual market determinants, customer-level adoption, and value chain structure.

#### **2.1.1 Context-specific market characteristics**

FMCG refers to products that have a high purchase frequency, are relatively low in price, and are characterized by consumers' low involvement (Nijssen, 1999). Low involvement makes consumers rely strongly on habits, cues, familiarity, and quick evaluations (Hoyer, 1984; Macdonald & Sharp, 2000). Therefore, market success is particularly dependent on understanding how different consumer groups perceive and evaluate products. In innovation

contexts, this is relevant because consumers may resist new offerings even when they provide objective advantages, as existing alternatives are often overvalued relative to innovations (Gourville, 2006). Market segmentation provides a useful analytical approach, as it allows firms to identify groups of consumers that are relatively homogeneous within segments and heterogeneous between segments. For example, Niedermeier et al. (2021b) show that FMCG consumers can be segmented by factors such as values, habits, and brand affinity, and that these segments differ substantially in their preferences.

International market selection and segmentation (IMS) literature extends this logic to international markets. IMS is a process through which firms search for and evaluate potential markets for initial or further expansion. This process requires comparative market characteristics on countries, industries, products, and customers (Papadopoulos & Martín Martín, 2011). According to Papadopoulos and Martín Martín (2011), the abbreviation IMS can be used to capture both country-based and cross-national approaches.

Wind and Douglas (1972) provide a useful specification of the characteristics to consider. The authors distinguish between country-level characteristics, which are shared by consumers within a market, and customer-level characteristics, which differentiate consumers within the market. They also separate enduring characteristics from situation-specific characteristics tied to a particular product or purchase situations. Similarly, Hassan et al. (2003) argue that segmentation should combine macro-level factors, such as cultural factors and demographics, and micro-level factors, such as attitudes and taste. Building on this logic, three levels of context-specific market characteristics can be identified: market-level, consumer-level, and product-level characteristics.

#### Market-level characteristics

Market-level characteristics refer to broader contextual conditions that are shared by consumers within a geographical market and shape how innovations are interpreted, evaluated, and adopted. IMS literature supports this view by treating countries or groups of countries as macro-segments based on national market characteristics before identifying customer segments within them (Wind & Douglas, 1972). However, market-level characteristics do not necessarily correspond to a single country. Consumer segments may transcend national borders, requiring firms to decide whether markets should be approached through country-specific, multi-domestic segmentation or through cross-national segmentation (Papadopoulos & Martín Martín, 2011; Steenkamp & Ter Hofstede, 2002; Yavas et al., 1992).

Region can therefore be understood as an important market-level characteristic because it captures shared conditions within a geographic area. A central subdimension of region is culture, as cultural patterns influence consumer attitudes, motivation, information processing, decision making, and brand loyalty (De Mooij & Hofstede, 2011). Similarly, Tellis et al. (2003) and Gelper and Stremersch (2014) suggest that new product takeoff differs across countries and is shaped by economics, culture, and country innovativeness. Furthermore, Wills et al. (1991) stress that consumer behavior relies on factors such as involvement and learning, whose roles differ across cultures.

Beyond region and culture, market-level characteristics can also include infrastructure and institutional conditions. Wind and Douglas (1972) refer to the economic and legal context, while Hassan et al. (2003) include technological, political, industrial structure, and response-to-marketing variables. For example, waste and recycling infrastructure can also shape FMCG-related consumer behavior because it impacts how convenient and trustworthy product disposal is viewed by consumers (Fogt Jacobsen et al., 2022; Nemat et al., 2019).

Steenkamp et al. (1999) show that consumer innovativeness is influenced by both individual-level variables and national-cultural variables, indicating that openness to new products depends not only on market-level characteristics but also on individual consumer characteristics.

### Consumer-level characteristics

Research on innovation adoption also suggests the critical role of consumer demographics. Younger consumers tend to be more open to novelty and place greater emphasis on the potential advantages when trying new products. In contrast, older consumers often perceive the potential advantages as insufficient to justify changes in established habits, leading them to prefer maintaining the status quo (Hettich et al., 2025). Similarly, Lambert-Pandraud and Laurent (2010) note that older consumers often show attachment to established brands and may be less inclined to switch to new alternatives.

Gender might also be an influencing factor on consumer behavior. Consumer research suggests that women and men may differ in how they process advertising information, with women paying more attention to detailed message claims under certain conditions (Meyers-Levy & Maheswaran, 1991). Meyers-Levy and Loken (2015) review consumer differences between genders and identify several theoretical explanations, including socio-cultural, evolutionary,

and hormone-brain. Gender may also influence sustainability-related product perception. Brough et al. (2016), for example, show that environmentally friendly products and behaviors may be associated with femininity, which can discourage some male consumers from adopting green practices. These studies support the view that gender may shape how consumers process and interpret product information, leading to potentially different purchasing behavior.

### Product-level characteristics

IMS literature further indicates that product-level characteristics can be useful for segmentation, because consumers' needs and responses may vary depending on the product, usage situation, and purchase context (Wind & Douglas, 1972). Ter Hofstede et al. (1999) argue that segmentation can be based on consumer-product relations, meaning that product attributes are interpreted differently by different customer segments, leading to varying product-benefit structures.

Market segmentation research further shows that segmentation can be based on consumption patterns of customers, as well as their preference for packaging (Jain & Hudnurkar, 2022; Niedermeier et al., 2021a). Consumption patterns are relevant because FMCG purchase decisions are characterized by low involvement and routine-based decision making, in which consumers rely on habits, brand familiarity, and simple cues (Hoyer, 1984; Macdonald & Sharp, 2000). Packaging preference is also important as it acts as an extrinsic cue when intrinsic product attributes are difficult to assess before purchase (Zeithaml, 1988). Food and FMCG packaging research shows that material, design, labels, and other extrinsic cues can influence consumer perceptions (Niedermeier et al., 2021a; Van Ooijen et al., 2017).

The three levels of context-specific market characteristics discussed above should not be understood as exhaustive. Other factors, such as income, education, occupation, family life cycle, lifestyle, or personality, may also influence consumer evaluations of FMCG innovations (De Villiers et al., 2020). However, this thesis focuses on market-, consumer-, and product-level characteristics because these categories provide a theoretically grounded starting point for structuring context-specific influences on downstream adoption. Future research could extend this structure by incorporating additional levels and more specific segmentation factors.

### **2.1.2 Adoption drivers and barriers**

The preceding section showed that international markets can be segmented through market-level, consumer-level, and product-level characteristics. To understand how these differences influence market response, the following section reviews literature on innovation adoption and resistance.

Innovation adoption can first be understood through Rogers' (1983) diffusion of innovation theory, which argues that adoption depends on how potential adopters perceive an innovation's relative advantage, compatibility, complexity, trialability, and observability. This theory is relevant because it indicates that even technically beneficial innovations may fail when consumers do not perceive them as superior, compatible with routines, or easy to understand. Ajzen's (1991) Theory of Planned Behavior (TPB) complements this perspective by explaining adoption as behavior shaped by intentions, which themselves are shaped by subjective norms, attitudes, and perceived behavioral control.

Building on this logic, adoption drivers and barriers can be understood as perceived evaluation factors that can either increase or reduce consumers' willingness to adopt an innovation (Claudy et al., 2015). Drivers refer to perceived benefits, reassurances, or facilitating conditions, while barriers refer to perceived risks, sacrifices, uncertainties, or mismatches with existing expectations (Talke & Heidenreich, 2014; Zeithaml, 1988). However, the same attribute may function as a driver or barrier, depending on contextual conditions, such as demographics of the buyer, culture, or habits (Zeithaml, 1988). This can be explained through perceived value, which describes consumers' evaluation of what they receive (e.g., convenience or quality), relative to what they sacrifice (e.g., money, time, or effort). Since product attributes such as actual product quality are often difficult to evaluate before purchase, consumers frequently rely on extrinsic cues such as price, brand, or packaging (Zeithaml, 1988). This terminology is also used in FMCG-related adoption research. For example, Niedermeier et al. (2021a) examine price, pro-environmental attitudes, perceived risk, trust, habits, and convenience perception as potential drivers or barriers in the adoption of green non-food FMCG.

The strength of brands as an extrinsic cue is supported by brand credibility, which can be divided into trustworthiness and competence. In turn, this makes consumers more inclined to consider a brand's product for purchase, with trust in particular playing a key role in shaping market outcomes (Erdem & Swait, 2004). Brand-related cues can therefore reduce uncertainty and support adoption when consumers cannot fully evaluate the product before purchase.

Research suggests that, particularly for less well-known end-product brands, an alliance with a reputable upstream brand leads consumers to evaluate the product more positively, such as Intel inside computers (Voss & Gammoh, 2004).

Price and product costs represent another important factor. Niedermeier et al. (2021a) suggest that price can act as a barrier in green FMCG adoption when consumers perceive a sustainable product as too expensive relative to its additional benefits. This is also consistent with broader consumer behavior research, which argues that price can act as an extrinsic cue that consumers use to assess quality and value when intrinsic product information is difficult to assess (Zeithaml, 1988).

Another relevant factor on the consumer side is the sustainability perception of products. While consumers increasingly evaluate products based on sustainability, it can both positively and negatively affect preferences depending on desired product benefits. Preferences for sustainability decrease when consumers seek “strength-related” factors such as high performance and effectiveness, for example, in sanitizers. Firms, therefore, need to communicate that sustainable products remain highly effective despite being sustainable. Sustainability is viewed more positively in soft, “gentleness-related” products such as baby shampoo (Luchs et al., 2010, p. 18). Sustainability can therefore operate both as an adoption driver and as a barrier, depending on the product category and the benefits consumers expect from the product.

Recycling behavior represents another sustainability-related factor. It is shaped by macroenvironmental, situational, and individual factors, including recycling infrastructure, knowledge, attitudes, and trust (Ertz et al., 2023). As a result, products may be perceived as sustainable in some contexts, while creating uncertainty or inconvenience in others where recycling systems or consumer trust are weaker.

Finally, the value–action gap is relevant for sustainability-related adoption. Although consumers often express positive attitudes toward ethical or sustainable consumption, these attitudes do not necessarily translate into adoption behavior. Instead, actual purchasing decisions may be more strongly influenced by factors such as performance, convenience, price, or perceived quality. Moreover, consumers from wealthier countries may shift responsibility for harmful market practices toward firms, which further suggests that ethical or sustainability-related concerns do not automatically lead to individual adoption decisions (Belk et al., 2005).

Taken together, adoption and resistance literature suggests that consumers evaluate innovations through multiple perceived factors. These factors are shaped by the market context. As a result, the same product feature may function as a driver in one context and a barrier in another.

### **2.1.3 Value chain context and downstream market structure**

A value chain describes all activities that bring a product from conception, through all phases of production, to the end-consumer (Kaplinsky, 2000). Adoption in B2B value chains typically does not take place in a simple setting between one supplier and one buyer. Instead, it includes several independent actors between the supplier and the final user of the product (Kaplinsky, 2000; Lambert & Cooper, 2000). Each of these actors further down the value chain fulfills a different role. Producers or manufacturers transform inputs into products that can be offered to the next market stage (Kaplinsky, 2000). Channel members, such as distributors and retailers, connect the offering to later market stages and influence whether and how the products become available to final consumers (Reve & Stern, 1979).

Furthermore, each of the downstream actors after the supplier follows different adoption logics. Generally, organizational customers' adoption is usually characterized by formalized decision processes, multiple decision participants, and economic and technical criteria (Sheth, 1973; Webster & Wind, 1972). This means that for organizational buyers, anticipated downstream demand is a major evaluation factor (Geiger et al., 2015; Hillebrand & Biemans, 2011; Homburg et al., 2014). Co-branding literature suggests that supplier inputs can strengthen a final offering by credibly signaling quality or increasing consumer acceptance (Desai & Keller, 2002; Rao et al., 1999); in turn, manufacturers may be more likely to adopt such inputs when this added perceived value is expected to translate into higher downstream demand. Rao and McLaughlin (1989) show that channel members base adoption on several evaluation criteria, including expected category growth, product uniqueness, and marketing support. Van Everdingen et al. (2011) further show that the relationship between producers and retailers also strongly influences adoption likelihood, specifically through relationship length and dependency conditions.

In contrast, human end-consumers evaluate products through individual perceptions, habits, attitudes, and perceived value (Ajzen, 1991; Rogers, 1983; Zeithaml, 1988). Furthermore, in the FMCG context, product adoption takes place with low involvement, meaning that consumers are often not motivated to engage in extensive in-store decision-making when

products are purchased frequently and perceived as relatively unimportant (Hoyer, 1984). This means purchases are often quick, habitual, and shaped by simple decision cues (Hoyer, 1984; Macdonald & Sharp, 2000). As earlier established, consumers may rely on extrinsic cues rather than on actual product benefits when intrinsic product attributes are difficult to evaluate before purchase (Zeithaml, 1988).

Because organizational buyers base their decisions on expected downstream demand, a strong interdependence between the adoption decisions of organizational buyers and the adoption behavior of human end-consumers is formed. These interdependencies clearly create a specific challenge for B2B firms, especially suppliers: they sell to organizational buyers, but market success still depends on the end-consumers. Therefore, understanding the direct customers' needs is insufficient. It requires awareness of downstream needs, perceptions, and barriers, because even technically attractive innovations may be rejected if direct customers perceive downstream demand as weak or uncertain (Geiger et al., 2015; Hillebrand & Biemans, 2011).

Although suppliers cannot directly control downstream adoption, B2B marketing literature suggests that they are not limited to influencing direct customers only. MSM describes the approach of firms targeting not only their direct customers, but also customers at subsequent market stages in order to strengthen demand and increase the value perceived by direct customers (Geiger et al., 2015; Kleinaltenkamp et al., 2012). Similarly, research on indirect customer marketing shows that B2B suppliers may approach customers' customers through direct customer downstream support, cooperative indirect customer marketing, or independent indirect customer marketing (Homburg et al., 2014).

However, this influence remains partial and conditional. Suppliers may support downstream adoption through information, communication, collaboration, and demand-stimulating activities, but final market execution depends on subsequent actors in the value chain. For example, promotion planning involves interrelated decisions by manufacturers and retailers, whose objectives may not always be aligned (Guyt & Gijsbrechts, 2014). Similarly, retailer-controlled marketing instruments, such as pricing and promotion, can have a stronger effect on new product performance than manufacturer-controlled activities such as brand equity or product innovativeness (Lamey et al., 2018). For upstream suppliers, this limitation is even more pronounced, because end-consumer-facing decisions are often mediated by producers, retailers, and their respective pricing, and margin logics (Jeuland & Shugan, 2008).

The literature is synthesized in Figure 1:

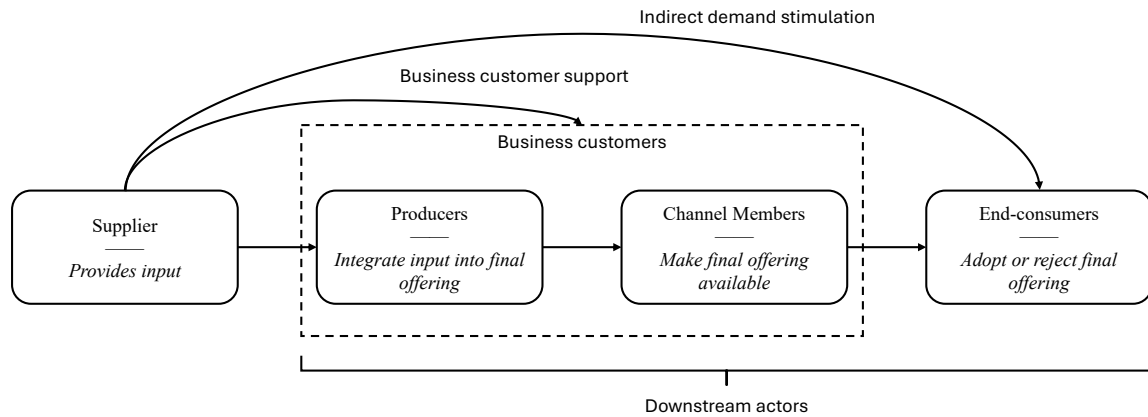


Figure 1: Downstream value chain structure and supplier influence logic; own illustration synthesized from value chain and MSM literature

For this thesis, complex value chains are defined as value chains in which the focal firm must consider multiple independent downstream actors whose decisions can influence market adoption. Complexity arises from the interdependence of these adoption decisions, the different adoption logics of producers, channel members, retailers, and end-consumers. Suppliers can only partially influence subsequent market actors through support, collaboration, and indirect demand stimulation.

## 2.2 Internal capabilities: firm responses to external conditions

The literature on innovation adoption shows that market success does not only rely on beneficial innovation characteristics but on context-specific market characteristics leading to adoption or resistance. This implies that market success cannot be explained entirely by the properties of an innovation. Instead, firms differ in how effectively they interpret adoption barriers and respond to them through organizational actions (Day, 1994). This makes competitive advantage a relevant theoretical starting point.

### 2.2.1 Foundations of resources and capabilities

When market success remains limited despite beneficial product characteristics, RBV and CBV provide a useful lens for analyzing how firm-specific resources and capabilities enable firms to respond to uncertainty and downstream adoption barriers. The RBV elaborates the relationship between a firm's internal resources, capabilities, and competitive advantage (Hart, 1995). Barney (1991) argues that sustained competitive advantage arises from resources that are valuable, rare, inimitable, and non-substitutable. The CBV extends the RBV by shifting greater

attention from resource ownership to resource deployment. Rather than treating capabilities as firm-specific assets among other resources, they become the primary focus of analysis (Makadok, 2001; Teece et al., 1997). Capabilities are treated as the mechanism through which resources are transformed into superior performance.

The concept of dynamic capabilities represents an extension of the CBV. Accumulating valuable resources is often not sufficient to sustain competitive advantage. Capabilities may follow a lifecycle with three stages: founding, development, and decline (Helfat & Peteraf, 2003). Dynamic capabilities refer to the ability to renew and redefine a firm's resources and capabilities to create new forms of competitive advantage in response to changing environments (Teece et al., 1997). This includes the ability to sense changes in the environment, seize opportunities by designing an appropriate business model, and transform the organization by aligning existing capabilities and investing in additional capabilities (Teece, 2018).

While RBV, CBV, and dynamic capabilities offer useful explanations for firm performance, they have also been criticized for conceptual ambiguity. Hoopes and Madsen (2008) argue that RBV can become tautological when valuable resources are defined by superior performance and then used to explain that same performance. Similarly, CBV and dynamic capabilities often remain vague regarding which capabilities matter, how they are developed, and how they can be measured independently from outcomes. Dynamic capabilities, in particular, have been criticized because of their broad and general nature (Helfat & Peteraf, 2003). Therefore, this thesis uses these perspectives cautiously and focuses on specific, observable capabilities.

While these perspectives explain in general terms how firms achieve and renew competitive advantage, the present thesis is particularly concerned with one specific capability domain: marketing capabilities.

### **2.2.2 Dynamic marketing capabilities**

Marketing capabilities translate broader RBV and CBV into concrete market-facing processes. According to Amit & Schoemaker (1993), capability development often takes place in functional areas such as marketing, where physical, human, and technological resources are combined to create value. Vorhies (1998) describes a marketing capability as the result of repeatedly applying marketing employees' knowledge and skills to transform marketing inputs into outputs. These intangible resources are often combined with tangible assets, enabling firms

to add value to their goods and services, adapt to market conditions, counter competitive threats, and harness opportunities. Morgan (2012) similarly conceptualizes marketing capabilities as a firm's ability to use available resources to perform marketing tasks in ways that achieve desired outcomes.

Research on this topic is still highly fragmented, and general classifications exist only partially (Morgan, 2012; Morgan et al., 2018). Morgan et al. (2018) conduct a literature review in an attempt to identify differences between purely domestic marketing capabilities and international marketing capabilities. Their findings suggest that international marketing capabilities require the ability to adjust an organization's existing marketing capabilities so that they can cope with "context-based variance across country markets" (Morgan et al., 2018, p. 89).

Marketing capabilities have also been under examination from the theoretical lens of the CBV. In an attempt to identify which marketing capabilities are dynamic capabilities, DMC research has emerged (Barrales-Molina et al., 2014). Following the definition of Kachouie et al. (2018), OMCs are the capabilities that enable firms to perform day-to-day marketing tasks and maintain the current market position. At the same time, DMCs operate as higher-order, future-oriented capabilities that reconfigure OMCs in response to changing market conditions and the business environment. This requires the ability to extract market information but also manage close relationships with actors in the value chain. Similarly, Hoque et al. (2021) define DMCs as the organizational ability to gather and integrate market knowledge in their managerial processes to effectively serve the customers' value proposition. The authors underline that this is especially useful for companies that rely on exports, helping them to adapt to their customer markets. Aligned with this, Bruni & Verona (2009) highlight the importance of DMCs as a tool to identify market dynamics and as a reference point to adapt corporate strategy accordingly. Furthermore, DMCs not only allow companies to adapt to ambiguous business environments but also to create turbulence in markets by creating new value for customers and disrupting the advantage of incumbents (Kachouie et al., 2018).

A central cornerstone of DMC and marketing literature is Day's (1994) concept of market-driven capabilities. Day conceptualized outside-in capabilities as market-oriented capabilities that connect the organization to its external environment and enable firms to anticipate market requirements, understand customers, and build relationships with channel members. Mu (2015) later developed this perspective further and refined outside-in capabilities into three distinct dimensions: market sensing, customer engaging, and partner linking.

According to Mu (2015), market sensing capability refers to a firm's ability to gather, interpret, and use market information about customers, competitors, and broader environmental developments. This capability enables firms to identify market trends, understand changing customer requirements, and guide organizational responses. Customer-engaging capability describes a firm's ability to form strong bonds with customers, respond to their needs, and adapt business processes from the customer's perspective. Finally, partner linking capability refers to a firm's ability to connect with external partners and leverage their resources and capabilities for value creation. This capability is particularly relevant in complex market environments, where customer solutions often depend on coordination, knowledge exchange, and resource integration across multiple actors.

As earlier established, marketing capabilities can be treated as dynamic when it does not only execute marketing activities, but enables firms to adapt or reconfigure lower-level marketing capabilities. This follows the broader dynamic capability logic (Teece, 2018; Teece et al., 1997). When interpreted through later DMC literature, Mu's (2015) outside-in capabilities meet these criteria. Market sensing enables firms to detect changes in customer needs, competitor behavior, and broader market conditions. Customer engaging enables firms to deepen and adapt customer relationships. Partner linking enables firms to coordinate the partner and collaborative network of a firm. Therefore, these capabilities are not only market-facing capabilities but can be interpreted as DMCs when they help firms translate external market information into the reconfiguration of OMCs.

### **2.2.3 Operational marketing capabilities**

After having identified relevant DMCs, this chapter will define relevant OMCs that allow firms to navigate in complex value chains and adapt to new and changing environments. This step is necessary because OMCs are the mechanism through which higher-level DMCs become actionable (Kachouie et al., 2018). Several potentially relevant OMCs have been identified in the literature. However, the relevance of individual OMCs depends on their effectiveness in the setting of complex value chains.

It is important to distinguish between market-facing and internally oriented OMCs. Some OMCs become visible through concrete activities that end-consumers can directly observe. These capabilities can therefore shape adoption perceptions through visible marketing

activities. Other OMCs, however, operate mainly inside the firm (Day, 1994; Vorhies & Morgan, 2005).

Three criteria were selected to assess identified OMCs for their relevance in the setting of complex value chains with B2B and human end-consumers (see Table 1). They include downstream reach, perception-shaping relevance, and supplier controllability. Downstream reach assesses whether the OMC is capable of downstream reach, meaning it must influence not only direct B2B customers but also channel members and human end-consumers. Secondly, perception-shaping relevance verifies if the OMC allows the firm to reduce perceived barriers or strengthen perceived drivers. Lastly, supplier controllability means that the OMC must be at least partly controllable by the focal firm, either directly or through collaboration with downstream business actors. The three criteria are rated as high, medium, or low depending on the extent to which each OMC is directly suited to addressing low adoption in complex value chains, with high indicating strong and direct relevance, medium indicating partial or indirect relevance, and low indicating limited relevance for the specific setting of this thesis.

Table 1: Literature-based selection of relevant operational marketing capabilities for downstream adoption in complex value chains

| OMC                                      | Source                                              | Definition                                                                                                                                  | Downstream reach | Perception-shaping relevance | Supplier controllability | Select?         |
|------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|--------------------------|-----------------|
| Brand Management                         | Morgan (2012); Hoque et al. (2021)                  | The capability to build, maintain, and adapt brand meaning, credibility, and associations in target markets.                                | High             | High                         | Medium                   | Yes             |
| Channel management                       | Vorhies & Morgan (2005)                             | The capability to develop and manage relationships with distribution partners and channel members.                                          | Medium           | Medium                       | High                     | No, part of MSM |
| Comprehensive MSM                        | Geiger et al. (2015)                                | The capability to coordinate marketing activities toward both direct customers and indirect downstream actors across several market stages. | High             | High                         | High                     | Yes             |
| Context segmentation capability          | Papadopoulos & Martin (2011); Wind & Douglas (1972) | The capability to distinguish markets, regions or customer segments according to context-specific market characteristics.                   | High             | Medium                       | High                     | Yes             |
| Customer education                       | Bell et al. (2017)                                  | The capability to increase customers' understanding of a product, its use, and its value.                                                   | High             | High                         | High                     | Yes             |
| Customer information analysis capability | Varadarajan (2020)                                  | The capability to transform customer-related information into actionable market insights for marketing decisions.                           | Medium           | High                         | High                     | Yes             |
| Customer relationship management         | Morgan (2012)                                       | The capability to manage customer interactions and relationships over time to support retention, value creation, and coordination.          | Medium           | Medium                       | Medium                   | No, part of MSM |
| Digital marketing capability             | Morgan et al. (2018)                                | The capability to use digital tools, channels, and data to support marketing activities.                                                    | Medium           | Medium                       | High                     | No              |
| Marketing communication capability       | Vorhies & Morgan (2005)                             | The capability to design and deliver messages that influence how target actors understand and evaluate an offering.                         | High             | High                         | High                     | Yes             |
| Marketing planning capability            | Vorhies & Morgan (2005)                             | The capability to formulate structured marketing goals, programs, and resource allocations.                                                 | Low              | Low                          | High                     | No              |
| Marketing implementation capability      | Vorhies & Morgan (2005)                             | The capability to execute planned marketing activities effectively across organizational processes.                                         | Low              | Low                          | High                     | No              |
| Pricing capability                       | Vorhies & Morgan (2005)                             | The capability to set and manage prices in ways that support market objectives and customer value perceptions.                              | Low              | High                         | Low                      | No              |
| Service support capability               | Morgan (2012)                                       | The capability to provide support activities that help customers use, maintain, or benefit from an offering.                                | Medium           | Medium                       | Medium                   | No              |
| Selling capability                       | Vorhies & Morgan (2005)                             | The capability to manage sales activities and persuade customers during exchange processes.                                                 | Low              | Medium                       | High                     | No              |

Relevant OMCs can be roughly organized according to the DMCs, although it is important to understand that this order is not exclusive. Generally, DMCs jointly inform the development and reconfiguration of OMCs.

### Partner linking OMCs

Literature emphasizes the importance of integrative marketing activities, spanning across organizations (Morgan et al., 2022), and channel management, which enables firms to identify relevant channel members and establish and manage relationships with them (Van Everdingen et al., 2011; Vorhies & Morgan, 2005). Channel management has also been identified in literature as an OMC (Kachouie et al., 2018).

However, focusing on only the channel members is unlikely to be sufficient in complex value chains. Research on adoption dynamics in complex value chains underlines the importance of relationships to all downstream actors in the value chain, because demand from direct customers often relies on demand from actors further downstream (Bishop et al., 1984; Homburg et al., 2014; Wengler & Kolk, 2023). This idea is reflected in the concept of MSM, which describes the approach of firms to influence the buying behavior of their customers by targeting customers in subsequent market stages with marketing efforts (Kleinaltenkamp et al., 2012). In order for MSM efforts to succeed, firms require in-depth knowledge about their position in the value chain, relevant downstream actors, and the needs of direct and indirect customers (Wengler & Kolk, 2023).

Geiger et al. (2015) conceptualize MSM by classifying marketing efforts towards direct and indirect customers in two categories: awareness and activities. Awareness refers to the company's understanding of customers' needs and situations. Activities build on this understanding and include concrete measures to create extra value for the targeted customer or measures to communicate the value of products more clearly. Based on those classifications, the authors identify three MSM types (see Figure 2). If companies conduct activities for both direct and indirect customers, they follow a comprehensive MSM approach. It aims to increase the value perception of customers at every market stage, ultimately stimulating demand. Therefore, this thesis treats comprehensive MSM as a relevant OMC for complex value chains.

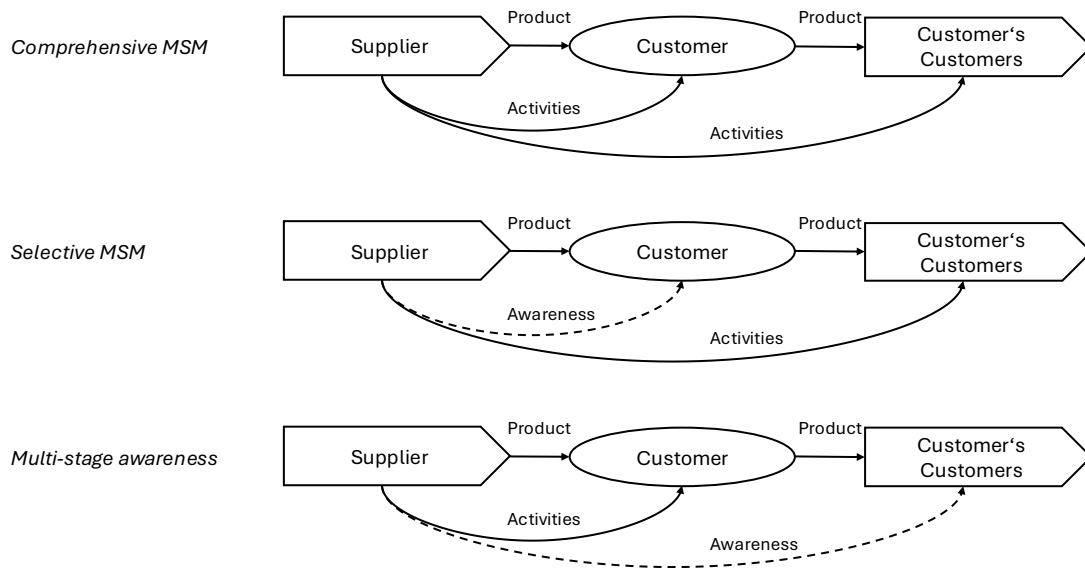


Figure 2: Typologies of multi-stage marketing; own illustration adapted from Geiger et al. (2015, p. 177)

### Customer engaging OMCs

Targeting human end-consumers requires brand management capabilities. Morgan (2012) defines brand management as the ability to develop and manage a firm's brand assets. This capability is particularly important from a strategic point of view. Porter (1996) emphasizes that firms must establish a clear basis of advantage through cost leadership, differentiation, or focus. If the value proposition is unclear, the firm risks an ambiguous position on the market in which customers do not clearly perceive a cost or differentiation advantage. This logic can be applied to complex value chains where both human and organizational customers must be convinced of the value proposition to drive demand. In this context, the marketing communication capability should also be mentioned, which refers to the effectiveness and efficiency with which a firm achieves its desired perception among target customers and other value chain members (Vorhies & Morgan, 2005).

Brand management and positioning can be strengthened through customer education. This involves activities that aim to increase the knowledge of customers about products and services offered by a firm (Bell et al., 2017). Since organizational customers typically have formalized purchasing processes, this is particularly important for human end-consumers. Efforts to convince customers to switch from the products that they are used to the firm's own products can be quantified through switching costs. Switching costs describe the perceived costs that arise when customers move from an existing alternative to a new offering. Burnham et al. (2003) distinguish between procedural switching costs, such as time, effort, and learning

requirements; financial switching costs, such as monetary losses or uncertainty about value; and relational switching costs, such as the psychological discomfort of abandoning familiar brands, routines, or relationships.

According to Vorhies and Morgan (2005), the marketing communication capability can be defined as a firm's ability to use marketing communication activities effectively and efficiently to shape desired perceptions among target customers and relevant market actors. The capability is particularly important when adoption barriers are based on beliefs rather than objective product limitations. Customers can act on beliefs that can be rational but untrue at the same time. Thus, consumers might act rationally within a false set of beliefs, impacting their purchasing behavior. Marketing communication can help to shape wants and beliefs (Dickinson et al., 1986), potentially allowing firms to overcome biases that exist in certain regions and might be culturally shaped.

#### Market sensing OMCs

While IMS research usually frames market segmentation and selection not as an OMC, it provides the conceptual basis for such a capability. IMS literature emphasizes that firms need to evaluate and segment foreign markets according to characteristics, including demographic, cultural, and product-level characteristics (Papadopoulos & Martín Martín, 2011; Wind & Douglas, 1972). In the context of this thesis, this logic is reconceptualized as a context segmentation capability: an OMC that allows firms to effectively classify downstream markets according to adoption-relevant characteristics.

Finally, the customer information analysis capability (Varadarajan, 2020) is a relevant market sensing OMC. Varadarajan (2020) defines it as complex bundles of skills and knowledge embedded in organizational processes that enable firms to obtain customer knowledge from customer information assets. Customer information assets refer to economically valuable information about customers that is owned or accessible by the firm, while customer insights describe the firm's understanding of customers that informs business decisions, including product innovation and marketing strategy decisions.

Taken together, the most relevant OMCs for complex value chains in this thesis are comprehensive MSM, brand management, customer education, marketing communication, customer information analysis capability, and market segmentation capability. This list should not be understood as exhaustive, but as a literature-based starting point for analyzing OMCs as

firm-side responses to downstream adoption barriers in the specific setting of this thesis. These capabilities are lower-level than DMCs because they consist of concrete routines and processes, but they are still broader than individual marketing activities. Specific activities can be understood as applications of OMCs to a particular product, market, or adoption barrier (e.g., customer education through educational advertising video for one product). This distinction allows the thesis to explain not only which higher-level DMCs are needed to support downstream adoption in complex value chains, but also how OMCs can be translated into concrete market-facing responses.

### 2.3 Synthesis and conceptual framework development

Based on the insights of the literature review, a preliminary framework with the following logic is developed (see Figure 3).

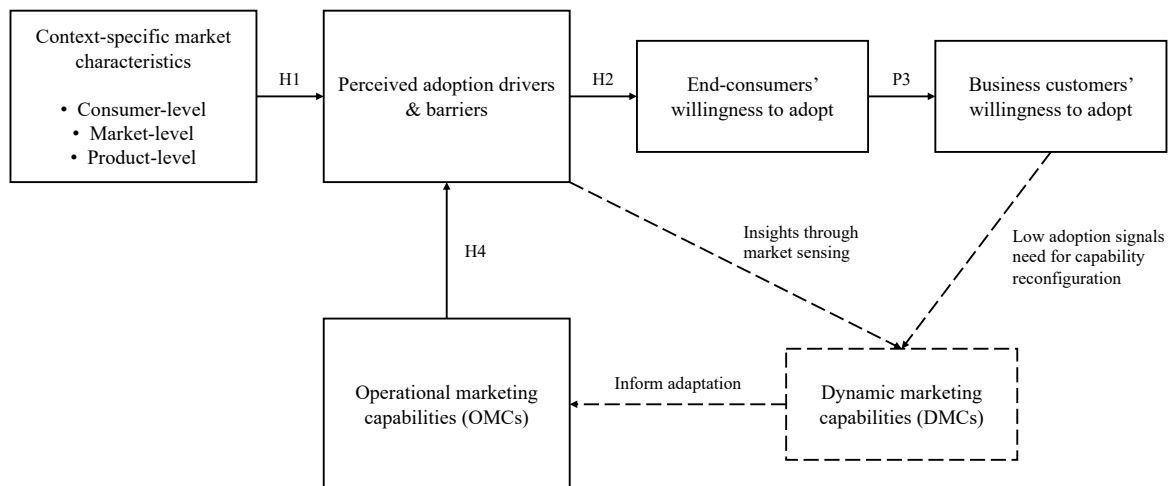


Figure 3: Preliminary framework for downstream adoption in complex value chains; own illustration based on the literature review

Context-specific market characteristics act as the main independent variables. They include market-, consumer-, and product-level characteristics and are expected to shape how downstream actors evaluate an innovation. Perceived adoption drivers and barriers function as mediating variables because they translate contextual conditions into adoption-relevant perceptions. These perceptions influence willingness to adopt among indirect downstream actors, including end-consumers and channel members. This willingness represents an intermediate adoption outcome and is assumed to influence the dependent variable, namely, business customer willingness to adopt. In this logic, business customers such as producers are more likely to adopt when they expect acceptance among end-consumers

OMCs function as firm-side response variables that can shape perceived adoption drivers and barriers, while DMCs provide the higher-order mechanism that enables firms to reconfigure these OMCs and embed them into selected business model components.

Solid lines represent the core relationships formulated as hypotheses or propositions. Dashed lines were used for DMCs as theoretically relevant enabling mechanisms. DMCs are not directly measured as a separate empirical construct in this thesis but serve as a conceptual mechanism that supports the interpretation of firm-sided responses.

### **2.3.1 Market context and adoption perceptions**

IMS research argues that markets differ across country-, market-, consumer-, and product-level characteristics. These include region, demographics, socioeconomic conditions, infrastructure, regulations, consumption patterns, and product-related attitudes (Hassan et al., 2003; Papadopoulos & Martín Martín, 2011; Wind & Douglas, 1972). Such characteristics are relevant because they shape how consumers interpret and evaluate innovations. Consumer culture research further shows that information processing, motivation, innovation openness, and attitudes are culturally embedded and vary across national contexts (De Mooij & Hofstede, 2011; Shavitt & Barnes, 2020; Steenkamp et al., 1999; Tellis et al., 2003).

Innovation adoption literature explains why these differences matter. Rogers (1983) suggests that adoption depends on perceived relative advantage, compatibility, complexity, trialability, and observability. However, these perceptions depend on the context. Similarly, Claudy et al. (2015) show that adoption drivers and barriers differ across contexts. Potential factors that can act as adoption drivers or barriers include convenience, quality, brand-trust, sustainability, and recyclability (Erdem & Swait, 2004; Ertz et al., 2023; Luchs et al., 2010; Zeithaml, 1988).

Thus, context-specific market characteristics do not automatically determine adoption, but they shape the perceived adoption drivers and barriers on which consumers base their adoption decisions. Therefore, the first hypothesis is formulated as follows:

*H1: Context-specific market characteristics influence perceived adoption drivers and barriers.*

### **2.3.2 Adoption drivers & barriers and end-consumer adoption**

Innovation adoption theory suggests that consumers are more likely to adopt innovations when they perceive clear advantages, low complexity, compatibility with habits, and the opportunity to observe or try the innovation (Rogers, 1983). The TPB adds that behavioral intention depends on subjective norms, attitudes, and perceived behavioral control (Ajzen, 1991). Accordingly, favorable perceptions should increase willingness to adopt.

Innovation resistance literature supports the opposite side of this relationship. Consumers may actively reject innovations after evaluation or passively resist them because they prefer familiar alternatives (Heidenreich & Handrich, 2015; Talke & Heidenreich, 2014). Perceived value theory also shows that consumers evaluate products by comparing what they receive with what they sacrifice (Zeithaml, 1988). Benefits such as convenience, quality, safety, sustainability, or brand trust may increase willingness to adopt, while sacrifices such as price, effort, uncertainty, risk, or complexity may decrease it.

Hence, perceived adoption drivers and barriers form the evaluative mechanism behind end-consumer willingness to adopt. Therefore, the second hypothesis is formulated as follows:

*H2: Perceived adoption drivers positively, and perceived adoption barriers negatively, influence end-consumer willingness to adopt.*

### **2.3.3 End-consumer and business-customer adoption**

In complex B2B value chains, adoption decisions are interdependent. Value chain literature shows that firms often operate across several stages, including producers, retailers, and end-consumers (Homburg et al., 2014; Kaplinsky, 2000; Lambert & Cooper, 2000). Demand is frequently derived from anticipated downstream demand, meaning that business customers may adopt an innovation only if they expect acceptance from their own customers and subsequently final consumers (Bishop et al., 1984; Geiger et al., 2015; Hillebrand & Biemans, 2011).

This relationship is particularly relevant in FMCG value chains. Both producers and retailers may be more willing to adopt a supplier's innovation when they expect that end-consumers will accept it. Although this relationship is not directly tested with primary data, it remains a central explanatory factor in the framework because it links end-consumer adoption perceptions to business-customer adoption decisions. Therefore, it is formulated as a proposition:

*P3: Higher end-consumer willingness to adopt increases business customer willingness to adopt.*

#### **2.3.4 Operational marketing capabilities and adoption perceptions**

The preceding relationships explain how external conditions shape downstream adoption. However, firms are not passive recipients of these conditions. Marketing capabilities allow firms to interpret market-specific barriers and translate this understanding into concrete activities. DMCs such as market sensing, customer engaging, and partner linking enable firms to identify downstream needs, coordinate value-chain actors, and reconfigure OMCs in response to market conditions (Day, 1994; Hoque et al., 2021; Kachouie et al., 2018; Mu, 2015).

OMCs are the concrete activities through which firms influence downstream perceptions. In complex value chains, the most relevant OMCs include comprehensive MSM, brand management, context segmentation capability, customer education, marketing communication, and customer information analysis (Geiger et al., 2015; Homburg et al., 2014; Morgan, 2012; Vorhies & Morgan, 2005; Bell et al., 2017; Varadarajan, 2020).

Therefore, OMCs can strengthen perceived drivers and reduce perceived barriers, leading to the following hypothesis:

*H4: Operational marketing capabilities positively shape perceived adoption drivers and reduce perceived adoption barriers.*

### **3. Methodology**

#### **3.1 Research design, data sources, and data collection**

To address the research question, this thesis adopts a mixed-method single-case study design. The research design follows the logic of the research question, as the study requires insights into both firm-side capabilities and downstream consumer perceptions. This approach allows for an in-depth analysis of complex organizational phenomena within their real-life context, particularly when examining the relationship between firm capabilities, market conditions, and end-consumer responses. Mixed methods research represents a well-established approach in academic research, as it combines qualitative and quantitative approaches and strengthens the overall analysis through the inclusion of a broader range of perspectives and information (Khalifa & Docherty, 2016). In this thesis, the mixed-method design is particularly suitable because downstream adoption involves both subjective perceptions, such as perceived value, trust, convenience, and sustainability, and broader behavioral patterns across different market contexts. While the qualitative phase enabled the exploratory understanding of perceptions, adoption barriers, drivers, and possible marketing responses, the quantitative phase allowed these emerging patterns to be examined across a broader sample (Creswell & Zhou, 2016).

A single-case study design was selected because the phenomenon examined in this thesis requires detailed contextual understanding (Yin, 2018). The empirical context is the food packaging industry. This industry can be positioned within the broader FMCG context, because packaging is a central element of FMCG value chains. Research suggests that it can shape consumer perceptions, product experience, and purchase decisions (Heiniö et al., 2017; imarc, 2025; Jain & Hudnurkar, 2022; Niedermeier et al., 2021a). The study focused on an innovative packaging solution introduced by a large international carton packaging company. The product can be understood as an innovation because it represents a novel application of an existing technological principle within a specific market context, creating a new value proposition. Furthermore, it provided a relevant empirical setting because, despite strong functional product characteristics, its market adoption in the prepared food segment, especially for ready meals, remains limited. This made it suitable for examining how B2B firms can respond to limited downstream adoption and shape consumers through market-facing capability development. Accordingly, the primary unit of analysis was the firm-level adaptation of marketing capabilities in response to downstream adoption conditions in different contexts.

The analysis focused on Sweden and Southern Europe, as demand for prepared meals is strong, while market characteristics differ (Fortune, 2026). Differences in consumer and adoption behavior across contexts were expected. Furthermore, this study focused on Gen Z and Millennials, as younger consumers tend to be more open to new products and demonstrate less persistent brand attachments compared to older consumers (Lambert-Pandraud & Laurent, 2010b). Consequently, they are expected to be more inclined to new offerings and marketing efforts. Additional age groups were included in the survey for generational comparison. Together, these choices delimit the study.

This thesis draws on several sources of primary data, complemented by selected secondary data for contextualization purposes. First, a 45-minute semi-structured interview was conducted with representatives from the selected packaging company to understand the product and its business environment. A semi-structured format was chosen because it provided a structured but, at the same time, flexible discussion that allowed relevant topics to be explored further (Kallio et al., 2016). The interview was held with the product manager responsible for the investigated product and covered aspects such as business model, product features, marketing and sales processes, and value chain collaboration. Additionally, a global category manager participated in the interview and contributed further strategic insights.

Following purposive sampling, the interview participants were selected because their roles provided access to both product-specific and strategic market-related knowledge (Bernard, 2018; Etikan, 2016). The interview also provided the authors with the necessary background to ask informed follow-up questions during the focus groups and to design contextually relevant consumer-survey questions. Therefore, these expert insights were important for addressing the research question (Meuser & Nagel, 1991). Beyond the interview itself, the global category manager provided valuable input throughout the entire duration of this thesis. Other downstream stakeholders, such as producers and retailers, were not interviewed, as the scope of the study was limited to exploring downstream adoption factors of end-consumers, which represents another delimitation.

Second, two consumer focus groups (with Swedes and Southern Europeans) were conducted online via Microsoft Teams to explore consumer perceptions and attitudes toward novel packaging solutions (Krueger & Casey, 2015). Focus groups were considered particularly suitable because they allowed participants to collectively discuss packaging perceptions, contexts, and adoption-related factors. The interactive group setting further enabled participants to build on each other's opinions and experiences (Morgan, 1992, 1996). The focus group

participants were selected through a combination of purposive and convenience-based sampling. General selection criteria were that participants should belong to Gen Z or the Millennial generation, come from Sweden or Southern Europe, be able to discuss ready-meal consumption, packaging perceptions, sustainability considerations, and adoption-related attitudes, but also be accessible for participation. Purposive sampling was applied to intentionally recruit participants who could provide relevant insights related to the target group of the study (Bernard, 2018; Etikan, 2016). Convenience sampling was additionally part of the recruitment process, as most participants were recruited through the authors' university network, which ensured participant availability and participation within available resource constraints of this study (Dörnyei & Griffee, 2010; Etikan, 2016).

The Swedish focus group included four participants from the authors' master's program. Although the number of participants was at the lower end, it allowed participants to express and discuss their views in depth. The 95-minute duration was within the common range for focus groups and enabled sufficient data collection while ensuring continuous participant involvement (Morgan, 1992, 1996). However, the similarity of participants' educational and social backgrounds is acknowledged as a limitation, as this may have reduced the variety of perspectives.

The Southern European focus group included six participants from five countries: Portugal, Spain, Italy, Greece, and Cyprus. This group offered greater variation in nationality and life situation compared with the Swedish focus group. However, since most countries were represented by only one participant, the findings are interpreted as exploratory regional insights rather than representative national consumer views.

Following an exploratory sequential design, insights from the interview and focus groups informed the design of a quantitative online survey, which was distributed to a broader consumer sample in both regions. The survey covered consumer behavior, sustainability attitudes, trust, packaging preferences, preferred distribution channels, and responses to potential marketing initiatives, and was additionally distributed to respondents from other generations to broaden the empirical basis. This approach is coherent with the thesis objective, as consumer preferences are context-dependent and only partly captured through standardized questions. Combining qualitative exploration with subsequent quantitative assessment represents a well-established practice in business research (Harrison, 2013).

Greene et al. (1989) identify triangulation, expansion, initiation, complementarity, and development as key purposes of mixed-method research. In the context of this study, the mixed-method design particularly incorporates elements of development, complementarity, and triangulation, as qualitative findings informed the survey design and multiple data sources were combined to examine downstream adoption from different perspectives.

The interview questions, focus group guide, and survey categories were developed from themes identified in the literature review, particularly innovation adoption, marketing capabilities, and downstream adoption. This ensured alignment between the research question, the conceptual framework, and the empirical data collection process. The qualitative phase was conducted first to identify context-specific perceptions, adoption drivers and barriers, and consumer expectations regarding marketing and communication activities. These insights then informed the survey design, consistent with sequential mixed-method approaches, where qualitative findings inform the development of quantitative instruments (Creswell & Zhou, 2016). Themes emerging from the focus groups, including desired marketing activities, communication needs, adoption drivers and barriers, convenience perceptions, sustainability concerns, packaging preferences, and trust-related issues, were incorporated into the survey to assess whether they also appeared in a broader sample.

Before distribution, the survey was pre-tested with university supervisors, company contacts, friends, and family members to assess coherence, comprehensibility, length, and the clarity of terminology and answer categories. Based on this feedback, wording and structure were adjusted where needed, helping to avoid issues for both participants and the thesis authors (Presser et al., 2004).

The semi-structured interview protocol, focus group guide, and survey questionnaire are provided in Appendices A, B, and C.

### **3.2 Data analysis**

The qualitative data from the interview and focus groups were analyzed using thematic analysis. The collected material was systematically coded to identify and interpret recurring patterns across participants, leading to the development of broader themes related to marketing capabilities, consumer perceptions, sustainability attitudes, trust, perceived product advantages, as well as potential barriers and drivers of adoption. The analysis followed an abductive

approach, combining deductive and inductive coding. This approach was particularly suitable because the study aimed both to examine theoretically derived concepts from the literature review and to remain open to context-specific adoption dynamics and perceptions emerging from the empirical material. Initially, the analysis was guided by broad deductive categories derived from the literature review and the preliminary framework, such as culture, adoption, and marketing. These categories were then refined and complemented inductively as additional themes emerged from the interview and focus group material, for example, clusters related to usability and digital engagement. The analysis followed an iterative approach, allowing themes to be continuously refined and facilitating comparisons between company and consumer perspectives (Braun & Clarke, 2006; Sekaran & Bougie, 2016). Appendices D and E provide a detailed overview of the identified clusters, which informed the survey design.

The survey data were analyzed using comparative and descriptive statistical methods to identify patterns in consumer preferences and differences between the Swedish and Southern European markets. Descriptive statistics were used to provide an overview of general behavioral tendencies and context-specific consumer attitudes, while comparative analyses were applied to examine differences between regions, generations, and gender.

Different analytical procedures were applied depending on the question type. For Likert-scale statements, mean values were calculated and compared across groups, for example, to examine differences in adoption drivers across contextual variables (Norman, 2010). Separate linear regression analyses were conducted for each independent variable to examine the relationships between context-specific factors and the dependent variables of perceived adoption drivers and barriers to test H1 (Sekaran & Bougie, 2016; see Appendix F).

The survey used a seven-point Likert scale, as previous research indicates that this scale provides high reliability and validity while also allowing for greater response differentiation (Preston & Colman, 2000). To analyze H2, Spearman's rank correlation analysis was used to examine how perceived adoption drivers and barriers were associated with respondents' willingness to adopt, as nonparametric tests are appropriate for analyzing relationships between ordinal variables such as Likert-scale responses (Sekaran & Bougie, 2016; see Appendix G).

In addition, the survey included a choice-based question on preferred packaging formats (see Appendix H) and selection questions concerning preferred downstream marketing activities. For these questions, the positioning of answer options was randomized where possible to reduce

potential order effects (Dillman et al., 2014). Thematic frequency distributions were used to identify preferred marketing and adoption-supporting activities for the analysis of H4.

Table 2 and Appendix I provide an overview of the survey sample, potential marketing activities, variables, and corresponding survey questions.

To strengthen the overall analysis, findings from the qualitative and quantitative data were compared and integrated. Combining insights from interviews, focus groups, and survey data enabled a broader understanding of how B2B firm-level marketing capabilities relate to downstream consumer perceptions and adoption (Sekaran & Bougie, 2016). Therefore, the empirical findings were used to examine recurring patterns and relationships related to the research question and to inform the refinement of the preliminary framework, reflecting the exploratory nature of the study while avoiding overstating statistical causality.

*Table 2: Overview of survey participants by region, generation, and gender*

| Demographics        |        | Main Sample         |                     | Full European Sample |                 |                |
|---------------------|--------|---------------------|---------------------|----------------------|-----------------|----------------|
| Generation          | Gender | Sweden              | Southern Europe     | Northern Europe      | Southern Europe | Central Europe |
| Gen Z & Millennials | Female | 58                  | 20                  | 59                   | 20              | 13             |
|                     | Male   | 36                  | 21                  | 38                   | 21              | 17             |
|                     | Other  | 1                   | 1                   | 1                    | 1               | 1              |
| Older Generations   | Female | <i>not included</i> | <i>not included</i> | 2                    | 2               | 1              |
|                     | Male   | <i>not included</i> | <i>not included</i> | 2                    | 2               | 0              |
|                     | Other  | <i>not included</i> | <i>not included</i> | 0                    | 0               | 0              |
| Total per region    |        | 95                  | 42                  | 102                  | 46              | 32             |
| Total per sample    |        | 137                 |                     | 180                  |                 |                |

### 3.3 Validity, reliability, and ethical considerations

To strengthen internal validity and credibility, the study combined interviews, focus groups, survey data, and secondary sources. Since every method is associated with certain limitations, combining different forms of data allows findings to be viewed from multiple perspectives and compared across methods. This supports the identification of patterns and contributes to a more robust assessment of the conclusions (Greene et al., 1989). Additionally, the qualitative and quantitative methods were deliberately designed to address overlapping aspects of the research

problem. Since the survey was developed based on prior insights, key themes and relationships could be examined across perspectives and methods, further supporting the validity of the findings (Yin, 2013). In addition, interview guides and survey measures were informed by existing literature in marketing capabilities and consumer adoption. This further supported construct validity, as the empirical measures and themes were derived from existing research (Yin, 2018).

Several methodological limitations should be acknowledged, as they affect the validity, generalizability, and interpretation of findings. The focus groups were exploratory and based on relatively small samples, which limits the representativeness of the findings. As participants were mainly selected based on availability and shared characteristics within a specific demographic group, this sampling approach may limit generalizability due to bias (Etikan, 2016). As discussed above, the Swedish focus group was relatively homogeneous, while the Southern European group provided broader variation but limited country-level representation. Consequently, the findings should not be interpreted as representative of national markets, but rather as exploratory insights into possible regional differences in downstream adoption perceptions. These limitations were considered acceptable given the exploratory approach and combination of sampling methods. The survey broadened the empirical basis by allowing emerging qualitative patterns to be examined across a larger sample and by enabling comparisons across region, gender, and age group.

In addition, the interview and the focus groups were conducted online, which may have limited the observation of non-verbal communication and reduced interaction dynamics compared to physical settings. However, due to availability, an online approach was chosen (Sekaran & Bougie, 2016). Due to the online format, participants could not physically hold and examine the products. To compensate for this limitation, several slides were presented during the sessions, showing different carton-packaged products, competing packaging solutions (see Appendix J), and the opening mechanism.

Furthermore, both the survey and the focus groups relied on self-reported perceptions and attitudes, which may have been influenced by social desirability bias, for example, regarding sustainability-related topics (Sekaran & Bougie, 2016).

As participation in the online survey was voluntary and respondents were recruited through social media platforms, personal networks, and university-related channels, some individuals may have been more likely than others to complete the survey, while others chose not to

participate. As the study relied on non-probability sampling, this may have introduced self-selection and systematic bias into the sample. In addition, online surveys frequently experience comparatively low participation rates, which may further affect the representativeness of the data. These factors may limit the external validity and statistical generalizability of the findings. Consequently, the findings should be viewed as exploratory and interpreted with caution when drawing conclusions about the broader population (Sekaran & Bougie, 2016). However, the final survey sample exceeded 100 respondents, with more than 30 respondents in each regional subsample (Sweden and Southern Europe), meeting commonly accepted methodological guidelines for sample sizes in quantitative research (Roscoe et al., 1975; Sekaran & Bougie, 2016), and nevertheless strengthened the empirical basis for exploratory comparisons across regions and demographic groups. As described above, survey pretesting also enhanced instrument validity. The survey was conducted exclusively in English to ensure consistent understanding across participants and to minimize the influence of linguistic differences during the analysis. Nevertheless, this may also have discouraged some participants from taking part in the survey due to language barriers, while cultural differences may still have affected how certain survey items were understood (Vijver & Leung, 1997). VIF values were calculated and indicated no critical multicollinearity between the independent variables, thereby strengthening the internal validity of the regression analysis (Sekaran & Bougie, 2016).

Reliability was supported through systematic documentation of the research process, including interview protocols, coding procedures, and the transcription of qualitative material (Yin, 2018; see Appendices I & K). Regarding the survey, Cronbach's alpha was not considered appropriate because the survey items represented different constructs rather than one unified reflective measure. Instead, reliability was supported through a structured questionnaire design and uniform scales and data collection procedures (Sekaran & Bougie, 2016). This approach is consistent with prior research emphasizing the importance of transparently documenting data collection processes, the sample, and data analysis (Eisenhardt, 1989). The use of appendices for the interview protocol, focus group guide, and survey questionnaire further supports transparency and allows the research process to be followed more closely.

To strengthen measurement reliability and reduce the risk of acquiescence/response bias, the survey included both positively and negatively worded Likert-scale statements to avoid respondents consistently agreeing in one direction (Tourangeau et al., 2000).

Although the single-case study design may limit statistical generalizability, the use of multiple data sources, the mixed-method approach, and the comparison between different market contexts allow for analytical generalization and transferability to other B2B settings.

Ethical considerations were addressed throughout the research process. All participants in the interview, focus groups, and survey were informed about the purpose of the study before participating. Where applicable, participants were informed about recording and transcription. Participation was voluntary, and the collected data were treated confidentially and used only for the purpose of this thesis. The analysis was conducted anonymously, and neither the real names of participants nor the name of the case company is disclosed in the thesis. In the survey, respondents were briefed that participation was anonymous and that the authors would only process data voluntarily provided by the participants. No names or email addresses were collected. This approach is in line with the ethical guidelines of the British Educational Research Association (British Educational Research Association [BERA], 2024).

### **3.4 AI usage**

AI-based tools were used only to a limited extent to support the preparation of this thesis. Specifically, ChatGPT and Grammarly were used for idea development, language refinement, grammar checks, and reviewing formal aspects of the text (see Appendix L). The tools were used to support the authors' own writing process, but all conceptual decisions, theoretical choices, methodological decisions, analysis, interpretations, conclusions, and final arguments were developed independently by the authors. The use of AI-based tools was conducted in accordance with the Lund University School of Economics and Management guidelines for generative AI use in theses. No confidential company information was shared with AI-based tools.

## 4. Empirical Results

### 4.1 Context-specific market characteristics

To assess H1, this section examines context-specific market characteristics in relation to perceived adoption drivers and barriers, first through focus group and interview findings, followed by the survey results.

#### 4.1.1 Consumer-level context

At the consumer-level, the analysis of demographic characteristics, lifestyles, household situations, culture, and consumption habits appeared to matter.

One of the most noticeable differences between the focus groups involved the regional background, age, and gender. Depending on their daily routines and cultural context, participants interpreted carton-packaged food products very differently, even though both groups consisted of younger consumers within Gen Z and the Millennial generation.

Participants from FG1 generally approached ready meals more pragmatically, viewing them as situational convenience products which are appropriate in certain everyday situations. They were mainly associated with low motivation to cook, stressful workdays, or lack of time. One participant in FG1 stated that ready meals are useful “*if you [...] get home after [...] a long day of studying*”, describing it as a “*fast solution [...] to the daily hustles*”.

In FG2, reactions were noticeably more emotional, as participants regularly linked cooking with identity, enjoyment, culture, and freshness rather than inconvenience. One participant explained that “*cooking is fun*”, whereas another participant added that “*I really enjoy cooking, so [buying ready meals] doesn't happen a lot*”. Therefore, ready meals were often perceived as conflicting with cultural norms around home cooking, authenticity, and freshness, creating a notable tension between functional benefits and culturally embedded ideas of cooking.

Although FG1 and FG2 only consisted of younger consumers, region-specific culture and habits shaped attitudes toward ready meals more heavily than age alone, showing that demographic similarities alone are not sufficient to explain openness toward food-related innovations.

Context-specific factors also include living situations and lifestyles, which shape adoption perceptions. Participants with busy time schedules and living on their own appeared to be more open to ready meals than those who lived with their family and/or had home-cooked meals available. Therefore, convenience food appeared to be context-dependent rather than universally desired.

Another important context-specific factor relates to established consumption routines and familiarity with products. FG2 participants often compared cartons with familiar packaging formats such as metal cans and jars before discussing particular attributes. Unfamiliar packaging types often produced hesitation during first impressions, which became evident when participants discussed the fit of carton packaging to certain types of food. End-consumers did not assess packaging independently, but rather through established category structures and routine expectations. Therefore, familiarity appeared to shape openness toward packaging innovations in a wider context. In other words, the findings suggest that resistance toward carton packaging was often less related to the product itself and more related to deviations from common purchasing behavior and routines.

The importance of consumer-level regional differences was reinforced by the company interview. According to the interviewees, carton-based packaging was adopted earlier by Nordic consumers as sustainability-oriented consumption patterns were already more settled within those markets.

All in all, the findings support the relevance of consumer-level context-specific factors, as regional background, household situation, lifestyle, habits, and culturally embedded norms shaped consumers' evaluation of ready meals and carton-based packaging solutions.

#### **4.1.2 Market-level context**

At the market level, recycling infrastructure, sustainability conditions, and retail environments were considered as relevant contextual factors.

Across both focus groups, participants repeatedly discussed recycling systems in their home countries and environmental concerns when evaluating packaging types. Here, significant differences arose between FG1 and FG2.

In general, participants from FG1 perceived carton packaging as rather sustainable due to trust in and familiarity with recycling systems and material separation behaviors. Regarding waste handling, participants generally highlighted advantages regarding disposal. Recycling carton packaging was described by one participant as: *“it's so much easier to just [...] water it out, smash it together, and then [...] get rid of it”*. By contrast, FG2 participants stated greater uncertainty regarding recycling and disposal infrastructure, highlighting stronger familiarity with glass and metal packaging disposal. One participant explained that *“glass is [...] easier to recycle”*, whereas another participant described that *“I don't really know what happens when [carton packaging] gets recycled”*.

Consequently, the focus group discussions indicate that sustainability infrastructure and familiarity with recycling systems varied between markets and function as market-level factors shaping the context in which packaging solutions and innovations were evaluated. However, sustainability did not appear to be a primary purchasing driver for participants across focus groups, even though it was appreciated particularly by FG1 participants. The differences between markets were also acknowledged in the expert interview, framing Sweden as a frontrunner in sustainability maturity, whereas Southern Europe is more resistant to the transition to more sustainable packaging alternatives. This shows again that sustainability was appreciated by participants, especially in FG1, but usually did not function as a main driver.

On a market-level, retail structures and competition also appeared to matter. Both focus groups mainly bought ready meals in physical supermarkets rather than online via e-commerce. Online ready meal purchases were generally viewed critically, as purchasing decisions were mainly made spontaneously rather than planned. Especially, FG1 participants described those purchase decisions as short-term and convenience-driven, whereas FG2 participants would rather switch to alternatives like delivery services and takeaway food. Furthermore, one participant of FG1 added that *“I want to look at it and see what I'm actually buying”*, highlighting another disadvantage of online retail for fast-moving products. This further suggests that visual first impressions and evaluations played an important role during adoption processes.

Overall, the findings indicate that market-level factors, particularly recycling infrastructure and sustainability maturity, shaped evaluations. However, sustainability was not a primary driver across contexts, while retail-related factors appeared relatively similar across contexts.

#### **4.1.3 Product-level context**

Product-level context factors included existing consumption patterns and packaging preferences.

Both focus groups repeatedly mentioned familiar packaging types and existing consumption patterns when discussing the focal company's carton packaging innovation. Especially, FG2 participants referred to materials they are used to and trust, like glass and metal. Packaging functionality was not addressed first, as familiar packaging types dominated the discussion. This observation was reinforced through the company interview, as one interviewee mentioned that "*the consumer is looking for the same package*". During the interview, this perspective was strengthened by the example that tuna carton packaging replicated design features of traditional cans to be more consistent with existing categories.

Furthermore, participants in both focus groups relied strongly on category-specific packaging expectations. Certain food categories were associated with specific packaging types, functioning as reference points for adoption drivers and barriers. In FG1, participants generally accepted simpler products like beans, soups, or sauces in carton packaging, showing greater openness for alternative formats. However, participants often still preferred other types of packaging, like glass. In FG2, packaging expectations were more connected to traditional category choices. Especially, glass jars were mentioned as traditional formats ensuring freshness, suggesting that willingness to adopt depended on category fit as an early product evaluation.

Overall, the results indicate that product-level factors influenced perceived adoption barriers and drivers, although these effects appeared relatively similar across both focus groups.

Taken together, the empirical results provide cautious support for H1 by showing that context-specific factors shaped perceived adoption drivers and barriers, with consumer-level factors appearing particularly relevant. While market-level factors also contributed to these evaluations, product-level factors formed a more shared evaluative background across contexts.

#### **4.1.4 Survey results (H1)**

The context-specific market characteristics, including consumer-level (region, age, and gender), product-level (packaging preference and consumption patterns), and market-level characteristics (recycling infrastructure), were tested on their influence on the perceived

importance of perceived adoption drivers and barriers. For this purpose, five multiple linear regressions were conducted with the six independent variables being the context-specific market characteristics and the five dependent variables being convenience, quality, packaging and brand image, sustainability and disposal trust, and category fit. Each regression model assessed whether the context variables explained variation in how important those adoption drivers and barriers were for purchasing decisions for packaged food products (see Appendix F).

Overall, the survey results only provide limited support for H1. The results suggest that context-specific market characteristics do not influence all adoption drivers and barriers equally (see Table 3). Their effect seems to be selective and dependent on the perception driver/barrier. This is also reflected in the generally low explanatory power of the models, with  $R^2$  values ranging from .037 to .097 in the main sample. The models for convenience, sustainability, and category fit were not statistically significant, suggesting that these perceptions were relatively consistent across respondents and not strongly influenced by the context variables.

*Table 3: Regression results for the influence of context-specific characteristics on perceived adoption drivers and barriers*

| Perceived adoption driver/barrier    | Main sample model result                 | Significant predictors, main sample                | Robustness check                                                                                                 |
|--------------------------------------|------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Convenience and usability            | $F(6,130) = 0.913, p = .488, R^2 = .040$ | None                                               | Non-significant: $F(6,173) = 1.405, p = .215, R^2 = .046$                                                        |
| Quality, freshness and homemade feel | $F(6,130) = 2.328, p = .036, R^2 = .097$ | Region: $\beta = .238, p = .019$                   | Region remained significant: $\beta = .161, p = .049$                                                            |
| Packaging and brand image            | $F(6,130) = 1.713, p = .123, R^2 = .073$ | Gender: $\beta = -.233, p = .008$                  | Full model significant: $F(6,173) = 2.571, p = .021, R^2 = .082$ ; Gender significant: $\beta = -.237, p = .002$ |
| Sustainability and disposal trust    | $F(6,130) = 1.124, p = .352, R^2 = .049$ | None; gender borderline: $\beta = -.175, p = .050$ | Age significant: $\beta = .191, p = .014$                                                                        |
| Category fit                         | $F(6,130) = 0.828, p = .550, R^2 = .037$ | None                                               | Non-significant: $F(6,173) = 0.572, p = .753, R^2 = .019$                                                        |

*Note. Main sample:  $N = 137$ ; robustness check:  $N = 180$ . Independent variables were age, gender, country/region, packaging preference, buying frequency, and perceived effectiveness of the recycling system.  $\beta$  refers to standardized regression coefficients. Significance threshold:  $p < .05$ .*

The quality model was statistically significant, with country being the only significant predictor ( $\beta = .238, p = .019$ ). This indicates that the importance of quality is differently perceived between geographic groups, which is in line with focus group findings. The descriptive statistics support this result, as Southern European respondents reported a higher mean value for quality, freshness, and homemade feel (6.14) than Swedish respondents (5.44). On average, Southern

Europeans rated perceived quality 0.662 points higher than Swedish respondents, controlling for the other variables.

The model for packaging and brand image was not significant overall, but gender was a significant individual predictor ( $\beta = -.233$ ,  $p = .008$ ), suggesting a gender-based difference in packaging and brand-related evaluations. The findings also suggest that male respondents assigned significantly lower importance to packaging and brand image, with evaluations being approximately 0.624 points lower on average while holding the other variables in the model constant ( $B = -0.624$ ). This finding should be interpreted cautiously, because the main model did not reach statistical significance. However, the robustness check largely confirms these findings, as gender remained significant for packaging and brand image in the extended European sample ( $\beta = -.237$ ,  $p = .002$ ), while the full model also became statistically significant.

To complement the regression analysis, descriptive statistics were calculated for each adoption driver and barrier by region (see Table 4). The results provide an overview of how perceptions differ between Swedish and Southern European respondents and help illustrate some context-specific patterns but should not be interpreted as significance tests.

*Table 4: Descriptive comparison of perceived adoption drivers and barriers between Sweden and Southern Europe*

| Adoption driver/barrier              | Mean Sweden | Mean Southern Europe | Difference | Interpretation                    |
|--------------------------------------|-------------|----------------------|------------|-----------------------------------|
| Convenience and usability            | 4.99        | 5.07                 | +0.08      | No meaningful regional difference |
| Quality, freshness and homemade feel | 5.44        | 6.14                 | +0.70      | Largest regional difference       |
| Packaging and brand image            | 4.53        | 4.40                 | -0.12      | No meaningful regional difference |
| Sustainability and disposal trust    | 4.21        | 4.26                 | +0.05      | No meaningful regional difference |
| Category fit                         | 4.07        | 4.40                 | +0.33      | Moderate regional difference      |

*Note. Values represent mean scores on seven-point Likert scales. Difference refers to Southern Europe minus Sweden. The table is descriptive and is used to illustrate the direction and relative size of regional differences; it does not represent a test of statistical significance.*

Additionally, VIF values indicated no problematic multicollinearity, as all VIF values were clearly below critical thresholds. Therefore, H1 is only partially supported: context-specific market characteristics selectively influence quality, as well as packaging and brand image perceptions, but not all perceived adoption drivers and barriers.

One possible explanation for the limited explanatory power of the models could be the relative homogeneity of the survey sample, as many respondents were academics and belonged to a similar age group (Gen Z and Millennials). This reduced variation in demographics might have limited the ability to detect stronger effects between context-specific market characteristics and perceived adoption drivers and barriers.

## **4.2 Perceived adoption drivers, barriers, and end-consumer willingness to adopt (H2)**

To assess H2, this section examines the relationship between perceived adoption drivers and barriers and end-consumer willingness to adopt. It first presents the focus group and interview findings, followed by the survey results.

### **4.2.1 Convenience and usability**

Convenience emerged as a potential driver of adoption in both FG1 and FG2, although the understanding of convenience differed across cultural contexts.

In FG1, participants understood convenience in functional terms. Ready meals were described as practical alternatives in stressful times (e.g., after work) or in situations where participants lacked motivation to cook, even though participants never viewed ready meals as their main choice. One participant explained that ready meals are an option if you “*want something fast*”. Further convenience-related positive packaging attributes include easy portability and efficient storage.

Participants from FG2 viewed convenience-related benefits more critically, as ready meals conflicted with Southern European food culture related to cooking, fresh ingredients, and authenticity. However, participants acknowledged the practical advantages of ready meals. Consequently, convenience appeared to be a more context-dependent driver than a universally attractive benefit.

Usability-related concerns regarding carton-packaged food emerged as an important barrier to adoption in both focus groups. Especially opening mechanisms and resealability functions were criticized by the participants of both focus groups.

Participants in FG2 were more emotional about this topic. One participant explained that “*if you need instructions on how to open and close the package, then it’s a poorly designed*

package”. Another participant explained that *“I tried to follow the instructions, but I didn’t manage to do it [...] successfully, [...] so in the end, I used scissors”*. Therefore, the easy-to-open mechanism was not seen as a convenience and usability-enhancing feature.

These findings from the focus groups are in line with the findings from the company interview, as the interviewees explained that consumers often do not read instructions and expect the handling of packaging to work intuitively. Furthermore, the interviewees stated that many convenience- and usability-related benefits become visible only after consumers have tried the product for the first time: *“After [consumers] test our carton, they prefer that”*. However, a participant in FG2 had tried the product before and still criticized the opening and closing mechanism.

Overall, the findings indicate cautious support for H2 regarding convenience-related factors. Convenience benefits appeared to support willingness to adopt, although they partly conflicted with cultural expectations, while usability concerns appeared to function as adoption barriers.

#### **4.2.2 Quality, freshness, and homemade feel**

Consumers’ perceptions related to quality, freshness, and homemade feel appeared to function as important barriers to adoption, especially within FG2.

Participants from both focus groups associated ready meals with additives, E-numbers, and highly processed food. However, the degree of those concerns differed. FG1 participants were skeptical about highly processed food but discussed concerns more rationally than emotionally.

FG2 participants, by contrast, communicated stronger general resistance in an emotional tone. Processed food was frequently linked to lower quality, freshness, and authenticity. Freshness was linked to *“real”*, freshly cooked food. In contrast, ready meals in carton packaging were perceived as artificial.

To evaluate product quality, freshness, and homemade feel, packaging itself played an important role as a cue. Transparency, especially through glass jars, appeared to enhance feelings of freshness. One participant in FG2 explained the preference to *“see more or less what [the food] looks like”*. In general, glass and cans were perceived as *“more premium and more reliable”*. These consumer perceptions were confirmed by the interviewees in the company interview.

Across both focus groups, participants frequently used packaging material as a cue for evaluating quality, taste, authenticity, and freshness. FG1 was generally less critical towards ready meals in carton packaging. However, they often associated them with supermarket private labels or lower-priced products. In FG2, associations of low quality were stronger and more immediate.

Therefore, the types of packaging shaped product perceptions before the product was consumed, as consumers did not evaluate the packaging only based on functionality.

All in all, the findings indicate support for H2, as concerns about quality, freshness, and homemade feel appeared to negatively influence willingness to adopt carton-packaged ready meals.

#### **4.2.3 Category fit**

Category fit emerged as an additional factor potentially shaping willingness to adopt carton-based packaging. Participants were frequently shaped by familiarity and relied on existing expectations regarding how certain food categories should look and be packaged. When carton packaging conflicted with these expectations, participants often perceived the product as lower in quality, less suitable, or less authentic compared to familiar packaging alternatives.

Particularly in FG2, participants showed a stronger bond to traditional and more familiar packaging formats such as glass jars and metal cans. Therefore, resistance toward unfamiliar packaging types was rather driven by the disruption of category expectations and buying routines. The interview findings supported this impression, as one interviewee explained that “*consumers are looking for the same package*”. However, the company expert stated that “*79% of consumers [...] prefer the carton*” after trying it for the first time, suggesting that resistance toward new or unfamiliar types of packaging declines substantially after first-time usage. This points to habitual innovation resistance, as participants often stated reluctance toward unfamiliar solutions, while acknowledging potential benefits like portability.

Overall, category fit appeared to shape willingness to adopt carton-packaged food products. However, hesitation seemed to result less from carton packaging itself than from unfamiliarity and perceived mismatches with established category expectations, indicating support for H2 as category mismatch functioned as an adoption barrier.

#### **4.2.4 Packaging and brand image**

Participants from FG1 linked glass and metal packaging more intensely to higher-quality products and established brands, as one participant linked carton packaging to “*cheaper [supermarket] brands*”. At the same time, participants acknowledged that the same food in carton packaging has the same quality as in other packaging types.

FG2 participants reacted more emotionally toward carton packaging, as they emphasized habits, culture, and authenticity when buying packaged food. Food in glass jars or metal cans was associated with higher freshness, especially for ready meals, but also for ingredient-based food products.

Packaging was consequently evaluated not only as a container protecting the food, but also as a cue to evaluate other factors like authenticity, freshness, and brand image.

Overall, packaging and brand-related associations appeared to shape willingness to adopt, indicating support for H2 as they functioned as cues for both adoption drivers and barriers.

#### **4.2.5 Sustainability and disposal trust**

Participants in FG1 perceived carton packaging as relatively sustainable because they were familiar with material separation and recycling systems. However, sustainability rarely appeared as a primary purchasing driver and mostly remained secondary to factors such as convenience, price, or quality.

Within FG2, sustainability perceptions were considerably weaker, as participants stated greater uncertainty regarding recycling outcomes and disposal processes, as well as lower trust in their regional recycling system. They also perceived carton-based packaging as less sustainable compared to other packaging types.

Consequently, the findings suggest that sustainability only positively influences willingness to adopt when consumers perceive environmental benefits as credible and when they trust their regional recycling infrastructure, highlighting the importance of market context. It acted as both a potential adoption driver and barrier regarding willingness to adopt.

Taken together, the findings provide overall support for H2, as perceived adoption drivers and barriers appeared to shape end-consumer willingness to adopt across key dimensions.

#### 4.2.6 Survey results (H2)

To test H2, the survey analysis examined whether perceived adoption drivers/barriers are associated with end-consumer willingness to adopt carton packaging. The dependent survey question used as the indicator of willingness to adopt was:

*“I would be willing to try ready meals or similar food products in carton packaging.”*

Since relevant survey questions were measured on Likert scales, the relationship was tested in SPSS using Spearman’s rank correlation coefficient (see Appendix G).

The survey findings provide partial support for H2 (see Table 5). Some perceived adoption drivers and barriers are significantly associated with willingness to try carton-packaged ready meals, while others do not show statistically significant relationships. The strongest positive relationship was found for environmental friendliness. Respondents who perceived carton packaging as environmentally friendly were more willing to try ready meals or similar packaged food products in carton packaging ( $\rho = .299$ ,  $p < .001$ ). This indicates that sustainability-related perceptions can act as adoption drivers.

Another significant positive relationship was found for food safety and freshness. Respondents who trusted carton packaging to keep food safe and fresh were also more willing to try food products in carton packaging ( $\rho = .273$ ,  $p = .001$ ). This suggests that perceived quality, safety, and freshness are adoption-relevant drivers.

Weak, but significant support was found for the relationship between convenience and willingness to adopt ( $\rho = -.169$ ,  $p = .048$ ). The negative correlation between perceived inconvenience and willingness to try indicates that customers who perceive carton packaging as difficult to open, use, reseal, and store are less willing to try carton-packaged food products.

The influence of “association with cheaper/store brands” on willingness to try showed negative but non-significant relationships. Lastly, the perception that carton packaging is more suitable for ingredients than for complete ready meals was not meaningfully associated with willingness to try ready meals in carton packaging.

Overall, the findings provide partial support for H2. They indicate that willingness to try carton packaging is primarily associated with perceived environmental friendliness, trust in safety and

freshness, and perceived convenience. In contrast, broader image-related or category-fit concerns appear less directly connected to willingness to try.

Table 5: Correlation analysis for H2 with robustness checks

| Perceived adoption driver/barrier   | Survey item                                                                 | Expected direction | Main sample $\rho$ | Main p-value | H2 assessment               | Robustness check $\rho$ | Robustness p-value | Robustness assessment                   |
|-------------------------------------|-----------------------------------------------------------------------------|--------------------|--------------------|--------------|-----------------------------|-------------------------|--------------------|-----------------------------------------|
| Quality / freshness / homemade feel | Carton packaging keeps food safe and fresh                                  | Positive           | .273               | .001         | Supported                   | .313                    | <.001              | Confirmed                               |
| Sustainability and disposal trust   | Carton packaging feels environmentally friendly                             | Positive           | .299               | <.001        | Supported                   | .314                    | <.001              | Confirmed                               |
| Convenience and usability           | Carton packaging feels inconvenient                                         | Negative           | -.169              | .048         | Weak support                | -.159                   | .033               | Confirmed, weak                         |
| Packaging and brand image           | Carton packaging is associated with cheaper/store brands                    | Negative           | -.119              | .165         | Not statistically supported | -.160                   | .032               | Partially supported in robustness check |
| Category fit                        | Carton packaging is more suitable for ingredients than complete ready meals | Negative           | .026               | .760         | Not supported               | -.005                   | .949               | Not supported                           |

Note. Main sample:  $N = 137$ ; robustness check:  $N = 180$ . Spearman's rho ( $\rho$ ) was used because the variables were measured on Likert scales. The willingness-to-adopt item was: "I would be willing to try ready meals or similar packaged food products in carton packaging." Expected direction indicates the hypothesized relationship between the adoption driver/barrier item and willingness to adopt. Correlations are considered statistically significant at  $p < .05$ .

### 4.3 End-consumer willingness to adopt shapes general downstream actors (P3)

This section examines the relationship between end-consumer willingness to adopt and the adoption considerations of other business customers.

The findings suggest that end-consumer willingness to adopt influences other downstream actors' willingness to adopt. However, the relationship cannot be assessed directly, as the study did not systematically collect primary data from retailers or food producers. Therefore, the interpretation relies on existing research, the company expert interview, and consumer-side focus group findings.

Sustainable packaging research suggests that companies' decisions for specific packaging types are strongly influenced by how they perceive consumer demand (Herbes et al., 2024). Similarly, research on retail assortment decisions indicates that retailers tend to align their assortments with anticipated consumer preferences, since customer reactions directly affect image and sales (Sethuraman et al., 2022).

This existing research is in line with the company expert interview: food producers and retailers were described as sensitive to expected consumer acceptance, shelf performance, and category fit rather than technical performance only. Uncertainty in downstream demand increases food producers' reluctance to invest as *“making an investment of some millions of euros and not be[ing] able to sell the packages, [would] be a disaster”*. Similarly, one interviewee stated that retailers *“ask for success [...] and also not successful cases”*, highlighting the need to reduce uncertainty.

The focus group findings illustrate why this uncertainty may arise. Consumers in both focus groups evaluated carton packaging differently depending on factors such as product type or packaging familiarity. These mixed perceptions indicate that end-consumer acceptance may reduce or increase commercial uncertainty for downstream actors.

All in all, P3 should be interpreted as cautiously supported rather than conclusively confirmed.

#### **4.4 Marketing capabilities shaping adoption drivers and barriers (H4)**

This section examines whether operational marketing capabilities shape perceived adoption drivers and barriers, first through focus group and interview findings, followed by the survey results.

The findings further suggest that marketing capabilities of B2B companies need to be adapted to market-specific and category-specific conditions and can actively shape perceived adoption drivers and barriers of end-consumers, even if this relationship is indirect.

Across both focus groups, several adoption drivers and barriers appeared to result from weak communication of benefits, inconsistent category placement, and unfamiliarity with the new packaging type. For example, participants in FG1 and FG2 were often unaware of benefits such as the opening mechanism, resealability, and disposal advantages until the features were introduced during the sessions. Especially, participants in FG2 were surprised that carton-based packaging appears to be more sustainable.

The company interview findings strongly aligned with this observation, indicating market awareness but a lack of marketing capabilities of the company. The interviewees acknowledged that the benefits are often not visible at first contact and that the company's *“experience [...] is based on dairy”*.

Participants in FG1 additionally emphasized the importance of more “*creative [...] marketing on the outside*” and described ready meals such as chicken alfredo in carton packaging as currently resembling “*astronaut food*”.

The interview findings suggest that commercialization routines developed in established product categories do not easily carry over to newer categories such as ready meals, tomatoes, or pet food, given the differences in purchasing drivers and consumer expectations. The interviewees explained that ready meals heavily rely on regional contexts such as food culture as well as perceived convenience and freshness, whereas tomato products are driven mainly by cost. In contrast, pet food mainly demands a premium positioning and emotional branding, as end-consumers are “*willing to spend more for pet than for human food*”.

The company interview further revealed that the company had assumed strong brand awareness across industries in the past due to its strong position within the dairy industry. One interviewee called this a “*mistake*” as “*in the food industry, some of them [...] do not even know*” the company.

This suggests that marketing capabilities developed within one category cannot be automatically transferred to others. The focal company confirmed this as the interviewees emphasized the need for category-specific expertise as different categories “*play [...] different game[s]*”. Therefore, generalized commercialization approaches do not necessarily work to address and shape end-consumers, and companies need to adapt to markets in a dynamic way.

The company appears to have shifted from selling technical advantages to benefit selling. Furthermore, according to the interviewees, the company not only sells packaging and packaging systems but also offers broader commercialization support, including launch activities, packaging design consulting, communication campaigns, and more downstream collaboration activities to drive adoption.

The company also shared proposed ideas on how to improve perceptions of carton packaging for food products, including ready meals, like QR codes or mock-ups in supermarkets, directly addressing barriers and concerns identified in the focus groups, for example, regarding usability.

However, the findings revealed a partial misfit between company-side marketing priorities and end-consumer-side expectations. Focus group participants often evaluated packaging through factors such as perceived authenticity or other symbolic quality cues, while the focal company

repeatedly emphasized technical advantages of cartons, such as the opening mechanism or sustainability-related factors.

Particularly within FG2, participants expressed skepticism toward excessive storytelling, sustainability campaigns, and QR codes. In FG1, participants expressed more mixed perceptions. However, the overall level of positive engagement remained limited in this group as well. Mock-ups in supermarkets were seen in a positive way in both focus groups.

Overall, the findings support H4 and indicate that operational marketing capabilities need to be adapted to context-dependent adoption conditions while simultaneously shaping them through category-specific activities and strategies, including communication, education, and branding, mediated through collaboration with downstream actors to drive ultimate adoption.

To connect the company interview findings with the literature-based OMCs, Table 6 summarizes how the selected OMCs became observable in the company interview. All OMCs could be observed in the case, although their observed expression varied in strength. Context segmentation capability, customer information analysis capability, and comprehensive MSM appeared to be well developed. By contrast, brand management, marketing communication capability, and customer education were also observable, but appeared to be less developed. The interviewee expressed knowledge of various adoption barriers, such as limited consumer understanding of the open-close mechanism, weak category fit, or varying packaging associations across regions, but underlined the lack of fully effective solutions for addressing them.

Table 6: Comparison of literature-based OMCs and observed company-side capability expressions

| OMC from literature review               | Observable expression of OMC in case                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Strength of observed expression in case                                                                                                                                                         |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Context segmentation capability          | <ul style="list-style-type: none"> <li>– Same promotional approach does not work across markets: Nordic markets were described as receptive to sustainability, while in other markets sustainability may have “zero value”</li> <li>– Product segments follow different commercial logics: tomato products were described as highly cost-driven, while pet food was described as more profitable because consumers are willing to “spend more for pet than for human food”</li> <li>– Adoption in some categories is limited by established packaging expectations: selling carton-packaged tomato products in Italy was described as difficult because consumers are “anchored on the glass jar”</li> <li>– The company considers introducing category experts because different product types require different knowledge and commercialization approaches</li> <li>– Age-based differences are acknowledged: older consumers were described as harder to convince, while younger consumers were seen as future adopters because they “will become the majority” of carton packaging buyers</li> </ul> | <ul style="list-style-type: none"> <li>– <b>Strong:</b> clear differentiation between regions, generations and product categories</li> </ul>                                                    |
| Customer information analysis capability | <ul style="list-style-type: none"> <li>– Interviewee referred to consumer tests showing that many consumers prefer carton after trying it</li> <li>– Retailers ask for success and failure cases to understand adoption risks</li> <li>– Interviewee emphasized the need to attract consumers for the first trial</li> <li>– Company uses market research and consumer acceptance data in discussions with retailers and customers</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>– <b>Strong:</b> consumer tests, analysis of success and failure cases, market research, and good knowledge of retailer arguments</li> </ul>             |
| Brand management                         | <ul style="list-style-type: none"> <li>– Tuna launch used similar design cues to cans so consumers would recognize the product</li> <li>– Interviewees stated that consumers often search for the same familiar package or label</li> <li>– Same packaging type may be perceived as low-quality in some contexts and premium in others</li> <li>– Trust-building was described as important when introducing a familiar product in a new package</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>– <b>Medium:</b> packaging design and trust-building are recognized, but optimal positioning across categories and markets remains unresolved</li> </ul> |
| Marketing communication capability       | <ul style="list-style-type: none"> <li>– Interviewee stated that discussions with retailers focus less on technical solution and more on environment, consumer acceptance, and success cases</li> <li>– Company supports customers with positioning and marketing activities</li> <li>– Interviewees emphasized the need to create awareness among consumers</li> <li>– Communication support was described as part of launch and commercialization activities</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>– <b>Medium:</b> communication support exists, but company struggles to translate technical benefits into consumer-relevant messages</li> </ul>          |
| Customer education                       | <ul style="list-style-type: none"> <li>– Interviewees explained that many consumers do not know the package can be opened without scissors</li> <li>– Consumers often do not read opening instructions</li> <li>– Supermarket mock-ups were suggested so consumers can try opening and closing the package</li> <li>– Resealability was identified as a benefit that consumers may only understand after direct experience</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>– <b>Emerging:</b> usability barriers are clearly recognized, but effective educational formats are still being explored</li> </ul>                      |
| Comprehensive MSM                        | <ul style="list-style-type: none"> <li>– Interviewee described a two-track approach: working with producers on capacity and with retailers on demand creation</li> <li>– Company creates a “triangle” between itself, producers, and retailers</li> <li>– Retailers are approached through innovation days and market development activities</li> <li>– Company sometimes invests in campaigns and launch support together with downstream actors</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>– <b>Strong:</b> the company actively coordinates producers, retailers, and end-consumers through two-track demand and capacity logic</li> </ul>         |

#### 4.4.1 Survey results (H4)

The survey results for H4 need to be interpreted cautiously. H4 proposes that OMCs positively shape perceived adoption drivers and reduce perceived adoption barriers. However, the survey did not directly measure OMCs as firm-level capabilities, nor did it measure the causal effect of these capabilities on consumer perceptions. Instead, the survey measured consumer preferences for concrete marketing activities that were theoretically linked to selected OMCs, such as customer education, brand management, and marketing communication. Therefore, the findings should not be interpreted as evidence of actual capability performance, but rather as

indirect and exploratory evidence of the perceived consumer-side relevance of different marketing capability responses.

In line with the comparative research design, the survey-based H4 analysis focuses on region as the main context-specific characteristic. The same logic could be applied to other characteristics, but this was beyond the exploratory scope of this thesis.

The survey findings show that preferred marketing activities differ clearly between the two case regions. Respondents selected up to three measures they considered most relevant for improving perceptions of ready meals in carton packaging. The ten activities were linked to the perceived adoption drivers and barriers and to the relevant market-facing OMCs (see Table 7).

*Table 7: Mapping of survey-based marketing activities to perceived adoption drivers/barriers and operational marketing capabilities. Own illustration based on survey design and literature review*

| Perceived adoption driver/barrier    | Marketing activities                                                                                                                                                                                                                                                                                                   | Main OMC                              |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Category fit                         | <ul style="list-style-type: none"> <li>– In-store information stands or shelf signs explaining carton packaging benefits (e.g., lighter, recyclable, easy to store, or safe food protection)</li> <li>– Free tasting or sampling in supermarkets (e.g., trying the product before buying)</li> </ul>                   | Brand management + comprehensive MSM  |
| Convenience and usability            | <ul style="list-style-type: none"> <li>– A QR code with more information about the product and packaging (e.g., ingredients, recycling, or sustainability details)</li> <li>– A short video or visual guide showing how to open and reclose the package (e.g., simple usage instructions)</li> </ul>                   | Customer education                    |
| Packaging and brand image            | <ul style="list-style-type: none"> <li>– Stronger connection to familiar brands, traditional recipes, or local food culture (e.g., more trusted, homemade, or locally familiar appearance)</li> <li>– More appetizing package design with stronger food images (e.g., fresher, warmer, less processed look)</li> </ul> | Brand Management                      |
| Quality, freshness and homemade feel | <ul style="list-style-type: none"> <li>– Communication that the product quality is unchanged (e.g., same recipe, different packaging)</li> <li>– More visible information about freshness, food safety, and shelf-life protection (e.g., why the package protects the food well)</li> </ul>                            | Customer education + brand management |
| Sustainability and disposal trust    | <ul style="list-style-type: none"> <li>– Simple recycling instructions adapted to my country (e.g., how to sort the package correctly)</li> <li>– Clearer sustainability information on the packaging (e.g., recyclability and comparison with plastic, glass, or metal)</li> </ul>                                    | Customer education                    |

The biggest regional difference appears in the prioritization of quality-related information (see Table 8). In Southern Europe, the most selected measure was more visible information about freshness, food safety, and shelf-life protection, chosen by 61.9% of respondents. Communication that product quality remains unchanged despite different packaging ranked second with 38.1%. This indicates that Southern European respondents primarily valued reassurance about product quality, freshness, and protection.

In Sweden, the highest-ranked activity was a stronger connection to familiar brands, traditional recipes, or local food culture, selected by 46.3% of respondents. This was closely followed by

a more appetizing package design with stronger food imagery, selected by 45.3%. More visible freshness, safety, and shelf-life information ranked third with 41.1%. Thus, Swedish respondents placed comparatively stronger emphasis on familiarity, brand association, and visual appeal, while quality reassurance remained relevant but less dominant than in Southern Europe.

Activities linked to trial and category fit received moderate support. Free tasting or sampling was selected by 35.8% of Swedish respondents and 26.2% of Southern European respondents. In-store information stands or shelf signs explaining carton packaging benefits received relatively low support in both regions, with 15.8% in Sweden and 16.7% in Southern Europe.

Sustainability-related activities were not among the strongest priorities in either region. Clearer sustainability information reached 27.4% in Sweden and 19.1% in Southern Europe, while simple recycling instructions reached only 13.7% and 14.3%, respectively. QR codes with additional information also ranked low in both regions, with 9.5% in Sweden and 14.3% in Southern Europe. The weakest activity overall was a short video or visual guide explaining how to open and reclose the package, especially in Sweden, where it was selected by only 1.1%.

Table 8: Regional comparison of preferred marketing measures to support carton packaging adoption

| Marketing measures                                                                                                                                  | Swedish votes | Swedish Rank | Southern European votes | Southern European Rank |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|-------------------------|------------------------|
| Stronger connection to familiar brands, traditional recipes, or local food culture (e.g., more trusted, homemade, or locally familiar appearance)   | 46.32%        | 1            | 35.71%                  | 3                      |
| More appetizing package design with stronger food images (e.g., fresher, warmer, less processed look)                                               | 45.26%        | 2            | 26.19%                  | 4                      |
| More visible information about freshness, food safety, and shelf-life protection (e.g., why the package protects the food well)                     | 41.05%        | 3            | 61.90%                  | 1                      |
| Free tasting or sampling in supermarkets (e.g., trying the product before buying)                                                                   | 35.79%        | 4            | 26.19%                  | 4                      |
| Communication that the product quality is unchanged (e.g., same recipe, different packaging)                                                        | 29.47%        | 5            | 38.10%                  | 2                      |
| Clearer sustainability information on the packaging (e.g., recyclability and comparison with plastic, glass, or metal)                              | 27.37%        | 6            | 19.05%                  | 5                      |
| In-store information stands or shelf signs explaining carton packaging benefits (e.g., lighter, recyclable, easy to store, or safe food protection) | 15.79%        | 7            | 16.67%                  | 6                      |
| Simple recycling instructions adapted to my country (e.g., how to sort the package correctly)                                                       | 13.68%        | 8            | 14.29%                  | 7                      |
| A QR code with more information about the product and packaging (e.g., ingredients, recycling, or sustainability details)                           | 9.47%         | 9            | 14.29%                  | 7                      |
| A short video or visual guide showing how to open and reclose the package (e.g., simple usage instructions)                                         | 1.05%         | 10           | 7.14%                   | 8                      |

Note. Main sample: N = 137; Sweden: n = 95; Southern Europe: n = 42. Respondents could select up to three marketing measures. Percentages indicate the share of respondents selecting each measure; ranks are calculated separately by region.

The aggregated comparison between adoption drivers/barriers and linked marketing activities provides only limited support for a direct relationship between perceived adoption concerns and preferred marketing responses (see Table 9). The clearest alignment appears in Southern

Europe, where quality, freshness, and homemade feel ranked first in both H1 and H4. This suggests that Southern European respondents not only perceived quality-related concerns as central but also preferred marketing activities that directly address these concerns.

However, beyond this case, the alignment is weaker. In Sweden, packaging and brand image ranked highest in H4, although it had ranked only third in H1. At the same time, convenience and usability ranked second in H1, but only fifth in H4. A similar inconsistency appears in Southern Europe, where convenience and usability ranked second in H1 but last in H4. This indicates that respondents did not simply translate the most important adoption barriers into corresponding marketing activity preferences.

*Table 9: Comparison of regional priorities for perceived adoption drivers/barriers in H4 with regional rankings from H1*

| Perceived adoption driver/barrier    | Swedish average (P4) | Swedish rank (P4) | Swedish rank (H1) | Southern European average (P4) | Southern European rank (P4) | Southern European rank (H1) |
|--------------------------------------|----------------------|-------------------|-------------------|--------------------------------|-----------------------------|-----------------------------|
| Packaging and brand image            | 45.79%               | 1                 | 3                 | 30.95%                         | 2                           | 3                           |
| Quality, freshness and homemade feel | 35.26%               | 2                 | 1                 | 50.00%                         | 1                           | 1                           |
| Category fit                         | 25.79%               | 3                 | 5                 | 21.43%                         | 3                           | 3                           |
| Sustainability and disposal trust    | 20.53%               | 4                 | 4                 | 16.67%                         | 4                           | 4                           |
| Convenience and usability            | 5.26%                | 5                 | 2                 | 10.72%                         | 5                           | 2                           |

*Note. Main sample: N = 137; Sweden: n = 95; Southern Europe: n = 42. Respondents could select up to three marketing activities. Activities were assigned to corresponding drivers/barriers and compared with H1 rankings. Results are exploratory and should be interpreted with caution.*

The comparison indicates that preferred marketing measures do not simply mirror the previously identified adoption barriers. Respondents may consider a barrier important but still reject or deprioritize the specific activities proposed to address it. For example, usability may matter for adoption, but QR codes or instructional videos may not be perceived as attractive, credible, or necessary solutions. Therefore, the comparison should be interpreted cautiously. H4 does not provide strong evidence that marketing activity preferences directly mirror the ranking of perceived adoption barriers. Instead, it indicates that the effectiveness of OMC-based responses depends not only on which barrier they address, but also on the concrete format, perceived relevance, and consumer acceptance of the activity itself.

Overall, the survey results indicate that OMC-based marketing activities might need to be adapted regionally. However, these findings need to be interpreted cautiously, because the

survey did not directly measure OMCs. Instead, it measured consumer preferences for concrete marketing activities that were theoretically linked to selected OMCs. Therefore, the results can indicate which types of market-facing activities consumers consider relevant, but they cannot fully demonstrate whether the focal firm possesses these capabilities, how strongly they are developed, or how they are reconfigured through DMCs.

#### **4.5 Comparison of results**

Overall, the findings generally support the logic of the framework, although not all relationships were fully confirmed (see Table 10). The focus groups and expert interviews provided broader support by explaining how context-specific factors, adoption drivers and barriers, and OMCs influence downstream adoption. The survey results complemented these insights by showing which factors received stronger empirical support. Differences between the results may partly be understood in light of the exploratory sequential approach, as the interview and focus groups offered exploratory insights, while the survey assessed selected factors across a broader sample. Thus, the framework appears useful for answering the research question, while also showing that the relevance of individual factors may vary across contexts.

Table 10: Summary and comparison of empirical results

| Hypotheses / Propositions | Focus group / Expert interview results                                                                                                                                                                                                                                                                   | Survey results                                                                                                                                                                                                                              | Comparison / Implication                                                                                                                                                                                                                                                                                 |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>H1</b>                 | <ul style="list-style-type: none"> <li>Especially consumer-level context-factors (i.a., demographics, culture) influenced drivers and barriers</li> <li>Market-level (i.a., recycling infrastructure, sustainability maturity) relevant</li> <li>Less contextual differences on product-level</li> </ul> | <ul style="list-style-type: none"> <li>Context selectively influenced drivers and barriers</li> <li>Country -&gt; quality (+)</li> <li>Gender -&gt; packaging/brand image (+)</li> </ul>                                                    | <ul style="list-style-type: none"> <li>FG / interview results show stronger effects of context-factors</li> <li>However, importance of consumer-level factors (gender, country) reinforced</li> </ul>                                                                                                    |
| <b>Results H1</b>         | <i>Cautious support</i>                                                                                                                                                                                                                                                                                  | <i>Partial support</i>                                                                                                                                                                                                                      | <i>H1 partially supported (selective effects)</i>                                                                                                                                                                                                                                                        |
| <b>H2</b>                 | <ul style="list-style-type: none"> <li>Convenience as context-dependent driver</li> <li>Usability issues as barrier</li> <li>Category fit and packaging/brand image shaped adoption</li> <li>Sustainability dependent on other factors</li> </ul>                                                        | <ul style="list-style-type: none"> <li>Supported impact on willingness to try: quality/freshness/homemade feel, sustainability/disposal trust, convenience/usability</li> <li>Not supported: packaging/brand image, category fit</li> </ul> | <ul style="list-style-type: none"> <li>Relatively strong overlap: quality/freshness/homemade feel, sustainability/disposal trust (to some extent), convenience/usability</li> <li>However, packaging/brand image and category fit more important qualitatively (quantitatively not supported)</li> </ul> |
| <b>Results H2</b>         | <i>Largely supported</i>                                                                                                                                                                                                                                                                                 | <i>Partial but strong support</i>                                                                                                                                                                                                           | <i>H2 largely supported but not across all factors</i>                                                                                                                                                                                                                                                   |
| <b>P3</b>                 | <ul style="list-style-type: none"> <li>Expert interview suggests: food producers and retailers sensitive to expected consumer acceptance, shelf performance, category fit</li> <li>Supported by previous research</li> </ul>                                                                             | <ul style="list-style-type: none"> <li>Not measured</li> </ul>                                                                                                                                                                              | <ul style="list-style-type: none"> <li>No primary data from retailers/producers</li> <li>Potential for future research</li> <li>Not within scope of this thesis but important explanatory factor</li> </ul>                                                                                              |
| <b>Results P3</b>         | <i>Cautious support</i>                                                                                                                                                                                                                                                                                  | /                                                                                                                                                                                                                                           | /                                                                                                                                                                                                                                                                                                        |
| <b>H4</b>                 | <ul style="list-style-type: none"> <li>Adapting marketing capabilities can shape perceptions (e.g., by education, category-specific positioning)</li> <li>OMCs observable in company interview</li> <li>Pay attention to misfit of consumer expectations vs. firm priorities</li> </ul>                  | <ul style="list-style-type: none"> <li>OMCs not directly measured</li> <li>Survey measured preferred activities linked to OMCs</li> <li>Regional differences suggest need for adapted OMC-based responses</li> </ul>                        | <ul style="list-style-type: none"> <li>Qualitative evidence supports relevance of OMCs</li> <li>Survey provides indirect exploratory support only</li> <li>H4 cannot be fully tested statistically</li> </ul>                                                                                            |
| <b>Results H4</b>         | <i>Largely supported</i>                                                                                                                                                                                                                                                                                 | <i>Partial exploratory support</i>                                                                                                                                                                                                          | <i>H4 partially supported through exploratory survey evidence and qualitative company evidence</i>                                                                                                                                                                                                       |

## 5. Discussion

### 5.1 Context-specific adoption conditions and downstream perceptions

The findings of this study show that downstream adoption in complex value chains cannot be explained solely by technical characteristics of a product. Instead, adoption largely depended on how downstream actors interpreted the innovation within a broader consumer-, market-, and product-context. The results suggest that adoption was mainly shaped by whether the packaging aligned with consumption expectations and habits, supporting innovation adoption and resistance literature, which argues that beneficial product characteristics do not directly lead to adoption when an innovation conflicts with routines or consumers do not perceive them as valuable (Joachim et al., 2018; Rogers, 1983). Therefore, the study advances adoption research by demonstrating that technical advantages must first be translated into consumption-relevant implications to influence downstream adoption decisions.

The findings provide a more nuanced picture than initially expected based on the literature review. H1 can only be interpreted as partially supported. This does not contradict IMS and segmentation literature but suggests that not every theoretically relevant context variable necessarily becomes relevant in a specific adoption setting (Hassan et al., 2003; Papadopoulos & Martín Martín, 2011; Wind & Douglas, 1972). Some differences appeared relevant, while others, such as consumption patterns, did not translate into clear quantitative effects. This also indicates that some contexts may be less different from each other than initially assumed, especially when consumers share similar routines or low-involvement purchase behavior. Consequently, the findings refine rather than challenge the framework: context remains important, but its relevance appears selective and needs to be specified more carefully.

This also refines culture-based explanations. De Mooij and Hofstede (2011) remain useful for understanding why food-related meanings may differ across regions, but culture should not be used as a general explanation for all adoption differences. At the same time, the weaker quantitative role of some context variables may indicate that context operates more indirectly, by shaping how consumers interpret the meaning of specific drivers and barriers, thereby adding to existing adoption literature.

The study challenges the assumption that younger customers are generally more open toward innovation or sustainability-oriented products (Hettich et al., 2025; Lambert-Pandraud &

Laurent, 2010). Instead, even younger consumers appeared to rely on established food and packaging expectations, which may be shaped by socialization, family routines, or repeated consumption experiences. This indicates that openness to innovation should not be attributed to age alone, particularly in FMCG contexts, where habits and learned quality expectations appear to be especially noticeable.

The study further aligns with Rogers' (1983) research on innovation adoption: Compatibility appeared to be particularly critical, as skepticism emerged when carton-packaged food conflicted with consumer expectations about freshness and quality. However, context-dependent nuances also emerge in relation to this literature. Complexity did not appear to be highly relevant to consumers, as they did not mainly seem to struggle with understanding the packaging. Rather, the packaging format conflicted with established expectations in the food category. Regarding relative advantage, the study shows that firms may overestimate the relevance of technical product advantages when consumers evaluate the innovation through consumption-based expectations. This suggests that, in low-involvement FMCG contexts, alignment with category expectations may be more important than complexity or technical superiority.

The discrepancy between survey and focus group findings regarding category fit should be interpreted carefully. It may not directly predict willingness to try, but may still shape how consumers evaluate quality. This connects to innovation resistance literature on passive resistance and status quo bias, as consumers seemed to use familiar formats because they trust them rather than rejecting carton packaging itself (Heidenreich & Handrich, 2015; Samuelson & Zeckhauser, 1988). However, passive resistance was not directly measured. Therefore, this interpretation remains explanatory. This matters because firms may underestimate category-related resistance if they only measure it as an explicit evaluation criterion, rather than considering how it indirectly shapes trust in the product.

The findings partially align with TPB-related assumptions (Ajzen, 1991). Adoption evaluations were shaped by underlying beliefs and consumption norms. However, the study only partly supports the relevance of perceived behavioral control, which appeared comparatively unimportant, as consumers were less concerned with the usage itself. This suggests that perceived behavioral control may be less decisive in low-involvement FMCG contexts where the product is easy to use, and adoption depends more on factors like trust and quality. Still, it cannot be fully excluded, as only stated preferences were captured.

H2 can be interpreted as broadly supported, but not all perceived drivers and barriers appeared equally relevant to adoption. This refines adoption and perceived value literature by suggesting that some perceptions may play a more central gatekeeping role, while others only become persuasive once core concerns are resolved (Luchs et al., 2010; Rogers, 1983; Zeithaml, 1988). In this case, usage communication would be unlikely to compensate for unresolved quality concerns. From a theoretical perspective, this indicates that perceived drivers and barriers should not only be analyzed separately but also in terms of their hierarchy and interplay.

Moreover, the findings reinforce literature on perceived value, emphasizing the importance of extrinsic cues under conditions of uncertainty. Since consumers could not directly evaluate intrinsic quality-related attributes before purchase, they relied heavily on packaging design, food imagery, familiarity, and brand-related associations as substitutes for intrinsic quality assessment. In this context, packaging functioned not only as a protective layer but also as a reassurance mechanism. This insight supports Zeithaml's (1988) argument that consumers fall back on extrinsic cues when intrinsic product quality cannot be fully evaluated. Similarly, Voss and Gammoh's (2004) discussion of brand-related cues helps explain why packaging and brand image played a role in this study, compensating for uncertainty through visual cues. The study adds to that literature by suggesting that extrinsic cues may not only compensate for missing information but also shape expectations about the product itself. However, some negative perceptions may have resulted from the combination of ready meals and carton packaging rather than the packaging alone.

This also helps explain why convenience remained as the second most important driver after quality, despite showing limited country differences. In contrast to high-investment innovations, ready meals are rather low-cost and low-involvement products. This supports Claudy et al's (2015) argument that adoption drivers and barriers differ by context, but specifies it for low-involvement FMCG settings, where barriers may be less technical or economic and more related to convenience, trust, habits, and expectations.

Sustainability-oriented consumer research provides a useful but not fully straightforward lens here. Luchs et al. (2010) show that sustainability can negatively affect preferences when consumers perceive it as conflicting with expected product performance. Ready meals, however, do not fit neatly into either strength- or gentleness-related category. On the one hand, consumers evaluate them through performance-related expectations such as taste, freshness, quality, and convenience. On the other hand, food is also connected to softer meanings such as homemade feel, authenticity, and healthiness. This makes the effect of sustainability less clear

than in the product categories by Luchs et al. (2010). In this study, performance-related expectations seemed to dominate, meaning that sustainability supported willingness to try only conditionally, when it was not perceived as threatening core product expectations. This may also reflect that sustainability was not understood as one single, uniform concept by consumers, which complicates how firms should address sustainability-related perceptions. Furthermore, it questions the common managerial belief that sustainability is persuasive by itself. Instead, sustainability-related messages appear to be only effective when combined with a broader value proposition that also reinforces perceptions about trustworthiness and quality.

Overall, context shaped adoption drivers and barriers more selectively than initially expected, and not all perceived drivers or barriers translated equally into willingness to try. Firms should therefore identify which perceptions remain stable across contexts, which require adaptation, and which are adoption-relevant before translating technical advantages into consumer-relevant value through marketing capabilities and value-chain coordination.

## **5.2 Business-customer adoption**

The relationship between end-consumer willingness to adopt and business customer adoption emerged as one of the most relevant, but also least directly observable, mechanisms in this study. Conceptually, this relationship shifts the adoption problem from a dyadic supplier-customer issue to a market-mediated adoption challenge. Even when the innovation offers functional advantages, business customers may hesitate if they perceive consumer acceptance as uncertain, because adoption requires investment, production adaptation, and commercial risk. Consequently, end-consumer willingness should not be treated as a direct trigger of adoption, but as a signal that may reduce uncertainty and strengthen the business case for producers.

This interpretation is consistent with the logic of derived demand and multi-stage marketing, which suggests that B2B adoption can depend on demand expectations further down the value chain (Bishop et al., 1984; Geiger et al., 2015; Homburg et al., 2014). However, the link between end-consumer willingness and business customer adoption should be treated as a theoretically and empirically plausible relationship rather than a confirmed causal mechanism. The framework should therefore treat end-consumer willingness as a conditional signal for business customer adoption, not as an automatic mechanism. Future research should therefore explore how producers and retailers interpret consumer adoption signals, which signals they

consider credible, and how these signals interact with cost, retailer demand, and category-specific risk.

### **5.3 Operational marketing capabilities as firm-sided responses**

The findings provide only conditional support for H4 and refine the capability-based logic developed in the literature review. The hypothesis assumed that OMCs can positively shape perceived adoption drivers and reduce perceived adoption barriers.

The company interview refines the interpretation of H4 by showing that the relevant OMCs were not absent but unevenly developed and not equally effective in shaping downstream perceptions. This is consistent with marketing capability literature, which treats capabilities not as isolated activities, but as bundles of routines that differ in effectiveness across firms and contexts (Morgan, 2012; Vorhies & Morgan, 2005).

The survey results support the relevance of marketing capabilities, as consumer responses indicate that marketing activities can influence how carton packaging is evaluated. However, the findings also show that this relationship is not as linear as originally assumed: marketing activities may not automatically address the adoption barriers they are designed to solve.

One explanation for this inconsistency might be the product type addressed in the survey. In the low-involvement FMCG context, consumers may rely on quick impressions, habits, and familiar cues, rather than processing detailed information (Hoyer, 1984; Macdonald & Sharp, 2000). Customer education includes marketing activities aimed at educating the customer about product benefits and reducing uncertainty (Bell et al., 2017). However, in the setting of low-involvement purchase situations, they might not be optimal to address adoption barriers. The findings suggest that in some cases, consumers may expect the packaging to be intuitive and familiar rather than explaining benefits through additional communication measures.

These findings align strongly with the literature on perceived value and brand credibility. Zeithaml (1988) argues that consumers rely on extrinsic cues when intrinsic product characteristics are difficult to assess before purchase. In the present case, consumers preferred marketing activities that were related to external cues, such as familiar branding and visual appearance. This suggests that the packaging should not be treated and marketed as a technically beneficial innovation, but rather as a cue that signals desired attributes. Similarly, Erdem and Swait (2004) show that brand credibility can reduce uncertainty, which helps to

explain why connections to familiar brands and local food culture appear important for adoption.

The findings also suggest the existence of a value-action gap: while both focus groups mentioned sustainability as an adoption driver, the survey findings revealed that both regional groups valued it relatively low in comparison to other drivers. This is consistent with sustainability-related literature, which mentions that sustainability attributes can become less persuasive when consumers prioritize performance-related benefits (Belk et al., 2005; Luchs et al., 2010). Packaging, therefore, appears to be evaluated primarily in terms of performance, while also functioning as an extrinsic cue.

Finally, the findings are consistent with MSM literature. Homburg et al. (2014), Geiger et al. (2015), and Wengler and Kolk (2023) argue that B2B firms often need to influence actors beyond their direct customers. However, the case also shows the limits of this influence. Since the focal firm operates upstream, its ability to shape end-consumer perceptions depends on downstream partners that control branding, packaging design, shelf location, and consumer communication. H4 should therefore be interpreted as partially and conditionally supported. Marketing capabilities matter, but their effect depends on market sensing, consumer acceptance of the activity format, and partner execution within the value chain.

#### **5.4 Framework refinement and theoretical contributions**

The empirical findings suggest that the general logic of the preliminary framework is broadly useful for understanding downstream adoption in complex value chains and the mechanisms through which firms can aim to shape demand. The framework's core assumptions, namely that context-specific market characteristics influence perceived adoption drivers and barriers, that these perceptions can lead to willingness to adopt, and that firms can respond by reconfiguration of OMCs through DMCs, are generally supported by the data. Both the qualitative and quantitative findings indicate that downstream adoption cannot be explained by technical product characteristics alone. Instead, adoption depends on a chain of effects, beginning with how consumers interpret the product in relation to their market context. In this sense, the framework offers a meaningful mapping logic.

However, the empirical findings also suggest that the first relationship in the framework, described by H1, should be interpreted with caution. The qualitative data indicated clear

differences between Swedish and Southern European participants. Nevertheless, the survey results only provide partial support for this relationship, limited to distinct effects.

This does not necessarily mean that context-specific market characteristics are unimportant. Rather, it suggests that their influence is more selective and less direct than initially assumed. One explanation may be the relatively limited sample size, which reduces the ability to detect weaker trends statistically. Another explanation may be that the examined consumer groups were still relatively similar in several aspects. Many respondents were young, educated, and internationally mobile. As a result, the statistical difference between the groups may have been smaller than expected. Similarly, the literature on IMS suggests that some consumer groups transcend beyond national borders, meaning that the survey might have identified a cross-national consumer group rather than country trends reflecting the entire population of the region.

The second relationship, tested as H2, also requires a more nuanced interpretation. The quantitative findings suggest that not all drivers and barriers were equally relevant. Environmentally friendliness, perceived safety, freshness, and convenience were significantly associated with willingness to try carton-packaged food. In contrast, factors such as packaging and brand image or category fit were highly visible in the focus groups but did not show the same significant impact in the survey. This indicates that some factors influence adoption more directly, while others may operate indirectly or are less relevant for adoption in the specific case.

Overall, the findings suggest that the refined framework should take the form illustrated in Figure 4:

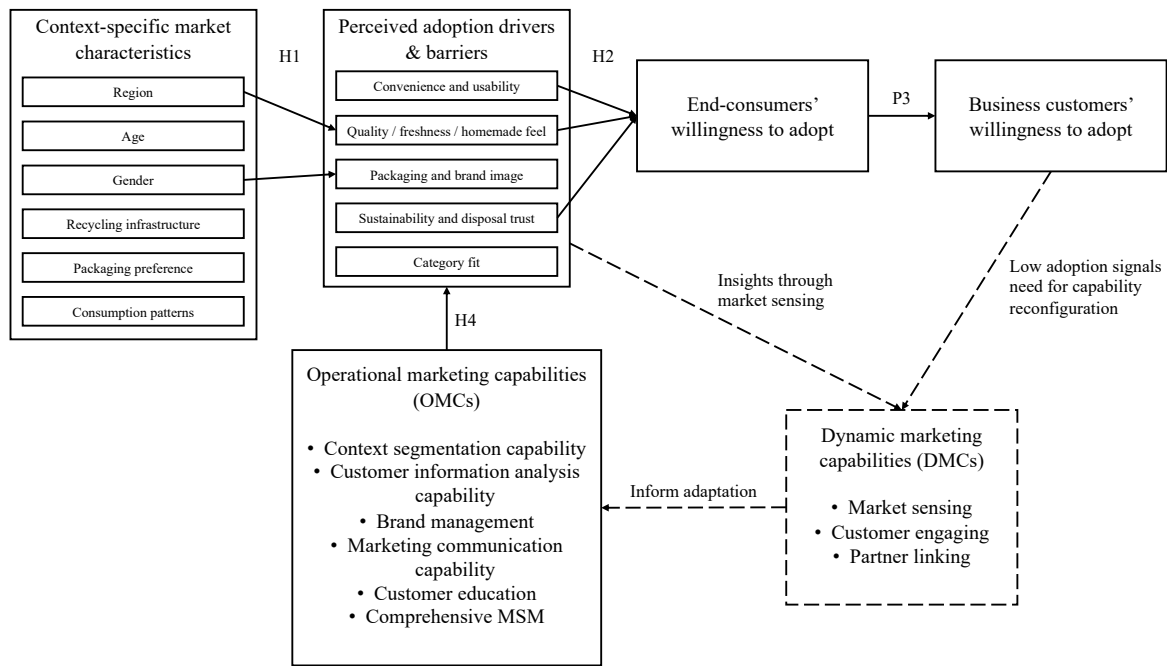


Figure 4: Refined framework for downstream adoption in complex value chains; own illustration based on literature review and empirical findings

## 5.5 Managerial implications, limitations, and future research

This thesis offers several managerial implications for firms operating in complex B2B value chains, particularly in FMCG and other packaging-related industries characterized by low-involvement purchase decisions and short consumption cycles. The findings point to three managerial priorities: understanding adoption-relevant perceptions, translating product advantages into meaningful consumer cues, and coordinating downstream activities with business partners.

First, managers should be able to reconfigure marketing capabilities, such as communication and customer engagement activities, in response to different downstream market conditions. To achieve this, firms should develop sensing mechanisms, such as downstream consumer research, to assess where adaptation is necessary and where standardization is appropriate. This is particularly important because a value proposition that drives adoption in one context may be considerably less relevant in another, as illustrated by sustainability-related perceptions, while other adoption perceptions may be more similar across contexts.

Second, managers should therefore translate product advantages into meaningful consumer cues rather than assuming that objective benefits are sufficient to drive adoption. This also requires balancing efforts to actively shape markets, for example, through education initiatives,

with the need to adapt to existing market conditions. In practice, this could mean combining educational initiatives with targeted point-of-sale communication or trial-based incentives to reduce initial adoption barriers and encourage first-time purchases.

Third, managers should develop collaborative MSM approaches together with downstream business partners to gain deeper insights into end-consumer needs and stimulate demand throughout the value chain. In this regard, marketing capabilities should not be treated as isolated promotional activities but as a way to work with business customers to make innovations visible and relevant further downstream.

The study also contains several limitations. First, the research relies on a single-case study design focusing on one innovation context, making comparisons difficult and limiting the ability to fully confirm or reject the proposed framework. The study primarily examines carton-packaged food, while adoption dynamics may differ in other sectors, industries, or higher-involvement product categories.

Second, the proposed framework should be understood primarily as a mapping tool rather than as a set of directly operationalized measures. The identified context-specific characteristics, adoption drivers and barriers, OMCs, and DMCs are not exhaustive and may vary substantially across industries, product categories, and value-chain settings. This limits the framework's immediate applicability as a standardized measurement instrument.

Third, the presence and strength of capabilities within a firm can still be evaluated subjectively. Some companies may believe that they are already dynamic or possess certain capabilities, while external observers might assess this differently. This may reduce the framework's usefulness for objective capability assessment.

Finally, the survey was not equally suited to testing all relationships in the framework. In particular, H4 was only measured indirectly through consumer preferences for concrete marketing activities linked to selected OMCs, rather than through a direct measurement of firm-level capabilities or their causal effect on adoption perceptions. Therefore, the survey results for H4 should be interpreted as exploratory rather than confirmatory.

These limitations also lead to several opportunities for future research. Future studies could investigate more systematically which context-specific factors become most relevant under particular market conditions and how firms can identify which downstream drivers and barriers require adaptation rather than more standardized commercialization approaches. Moreover,

future research could examine the effects of dynamic capabilities on long-term financial performance, with a particular focus on identifying which capabilities have the strongest impact on the bottom line.

In addition, future research could empirically examine whether and how capabilities need to be integrated into the business model in connection with business model innovation, and how capability reconfiguration unfolds in practice. For example, comparative internal case studies across multiple companies could provide deeper insights into these processes. By doing so, future research could further strengthen the connection between marketing and strategic management research.

Furthermore, future studies should replicate this analysis across different industries and companies in cross-regional settings. Extending the research to additional industries and markets would help evaluate whether the findings are transferable beyond FMCG-related packaging contexts. Longitudinal studies could further examine how approaches evolve over time as downstream conditions change. To make the proposed framework more operationalizable, future research could investigate methods for assessing the presence of capabilities within firms more objectively and consistently across different evaluators.

Table 11 provides a non-exhaustive overview of selected future research areas and possible research questions based on the discussion above.

*Table 11: Non-exhaustive overview of selected future research areas and potential research questions*

| Research area                                         | Potential research questions                                                                                                                                                       |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Assessment of capabilities within firms</b>        | – How can capabilities within firms be assessed more objectively and consistently across different evaluators?                                                                     |
| <b>Capabilities and business model integration</b>    | – How are capabilities integrated into the business model in the context of business model innovation, and how does capability reconfiguration unfold in practice?                 |
| <b>Context-specific downstream adoption</b>           | – How can firms identify which context-specific factors and downstream drivers or barriers indicate the need for adaptation rather than standardized commercialization approaches? |
| <b>Impact of dynamic capabilities on performance</b>  | – How do dynamic capabilities influence long-term financial performance, and which capabilities appear to have the strongest effect on the firm's bottom line?                     |
| <b>Longitudinal changes in capability development</b> | – How do firms develop and reconfigure their capabilities over time as downstream conditions change?                                                                               |

## 6. Conclusion

Complex B2B value chains create a central problem: firms may develop functionally strong innovations, but market success still depends on actors they do not directly control. This thesis addressed this challenge by examining how context-specific market conditions shape downstream adoption and how B2B firms can respond through marketing capabilities. The study is relevant because downstream adoption is not only a marketing issue, but a strategic management problem. When end-consumers hesitate, direct customers such as food producers may also be reluctant to invest, even if the innovation offers functional, cost-related, or sustainability-related advantages.

The study answers the research question by showing that context-specific market conditions can shape downstream adoption mainly through the way end-consumers interpret an innovation, although this influence was selective rather than uniform across all adoption dimensions. The findings suggest that adoption is not determined solely by the objective advantages of an innovation, but rather by the extent to which these are perceived as relevant, credible, and compatible within a given consumption context. For B2B firms, the strategic response is therefore to use DMCs to sense market-specific perceptions and to reconfigure OMCs in ways that address the barriers that matter most in each context.

The findings further indicate that adoption was not driven by one dominant factor, but by the interaction of several perceived drivers and barriers, including convenience, quality, packaging and brand image, sustainability, and category fit. At the same time, context did not matter equally across all dimensions. Some perceptions were relatively similar, while others were more strongly shaped by food culture, gender, country-of-origin, and category expectations. This implies that firms should avoid both excessive full differentiation and overly standardized approaches that overlook relevant contextual differences. Against initial expectations, younger consumers did not necessarily appear particularly open to innovation but still evaluated it through familiarity and established expectations.

The findings also show that downstream adoption in complex value chains requires B2B firms to look beyond direct organizational customers. In the investigated case, end-consumer perceptions influenced the attractiveness of the innovation for downstream business actors because producers and channel members depend on expected market acceptance. This highlights the importance of DMCs as higher-order marketing capabilities that enable firms to sense downstream market conditions. Firms, therefore, need to identify dominant market-

specific adoption barriers and translate these insights into adapted OMCs, which include collaborative efforts with producers and channel members. Consequently, marketing capabilities are not merely promotional tools, but strategic mechanisms through which firms interpret context-specific market conditions, coordinate downstream actors, and shape adoption perceptions in complex value chains.

This thesis contributes theoretically by strengthening the connection between marketing and strategic management research. It treats marketing as an integral part of strategic adaptation rather than as an isolated operational function. By linking literature on innovation adoption, marketing capabilities, and complex downstream value chains, the thesis shows how contextual factors and consumer-side adoption barriers can create firm-level capability requirements.

For managers, the findings imply that market-facing adaptations should not be treated as late-stage communication efforts, but as part of how firms use downstream insights to adjust customer relations, partner networks, value-chain activities, and other market-facing capabilities. Managers should also avoid relying on transferable brand awareness or generic sustainability claims and instead address specific mismatches between what the innovation offers and what consumers expect from the product category.

Ultimately, reflecting on Kurtmollaiev et al.'s (2022) observation that firms often overlook the views of those ultimately evaluating innovations, this thesis shows that downstream adoption depends less on functional superiority alone than on firms' ability to understand and respond to what downstream customers and end-consumers value, expect, and trust. Consequently, downstream perceptions are not remote consumer responses, but strategically relevant signals for adapting marketing capabilities in complex value chains.

## 7. References

- Ajzen, I. (1991). The Theory of Planned Behavior, *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp.179–211
- Amit, R. & Schoemaker, P. J. H. (1993). Strategic Assets and Organizational Rent, *Strategic Management Journal*, vol. 14, no. 1, pp.33–46
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage, *Journal of Management*, vol. 17, no. 1, pp.99–120
- Barrales-Molina, V., Martínez-López, F. J. & Gázquez-Abad, J. C. (2014). Dynamic Marketing Capabilities: Toward an Integrative Framework, *International Journal of Management Reviews*, vol. 16, no. 4, pp.397–416
- Belk, R., Devinney, T. & Eckhardt, G. (2005). Consumer Ethics Across Cultures, *Consumption Markets & Culture*, vol. 8, no. 3, pp.275–289
- Bell, S. J., Auh, S. & Eisingerich, A. B. (2017). Unraveling the Customer Education Paradox: When, and How, Should Firms Educate Their Customers?, *Journal of Service Research*, vol. 20, no. 3, pp.306–321
- Bernard, H. R. (2018). Research Methods in Anthropology: Qualitative and Quantitative Approaches, Sixth edition., Lanham Boulder New York London: Rowman & Littlefield
- Biggadike, E. R. (1981). The Contributions of Marketing to Strategic Management, *The Academy of Management Review*, vol. 6, no. 4, p.621
- Bishop, W. S., Graham, J. L. & Jones, M. H. (1984). Volatility of Derived Demand in Industrial Markets and Its Management Implications, *Journal of Marketing*, vol. 48, no. 4, pp.95–103
- Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology, *Qualitative Research in Psychology*, vol. 3, no. 2, pp.77–101
- British Educational Research Association [BERA]. (2024). Ethical Guidelines for Educational Research (5th Ed.), [e-journal], Available Online: [www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2024](http://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2024)
- Brough, A. R., Wilkie, J. E. B., Ma, J., Isaac, M. S. & Gal, D. (2016). Is Eco-Friendly Unmanly? The Green-Feminine Stereotype and Its Effect on Sustainable Consumption, *Journal of Consumer Research*, vol. 43, no. 4, pp.567–582
- Bruni, D. S. & Verona, G. (2009). Dynamic Marketing Capabilities in Science-based Firms: An Exploratory Investigation of the Pharmaceutical Industry, *British Journal of Management*, [e-journal] vol. 20, no. s1, Available Online: <https://onlinelibrary.wiley.com/doi/10.1111/j.1467-8551.2008.00615.x> [Accessed 6 May 2026]

- Burnham, T. A., Frels, J. K. & Mahajan, V. (2003). Consumer Switching Costs: A Typology, Antecedents, and Consequences, *Journal of the Academy of Marketing Science*, vol. 31, no. 2, pp.109–126
- Cecere, G., Corrocher, N. & Guerzoni, M. (2018). Price or Performance? A Probabilistic Choice Analysis of the Intention to Buy Electric Vehicles in European Countries, *Energy Policy*, vol. 118, pp.19–32
- Claudy, M. C., Garcia, R. & O'Driscoll, A. (2015). Consumer Resistance to Innovation—a Behavioral Reasoning Perspective, *Journal of the Academy of Marketing Science*, vol. 43, no. 4, pp.528–544
- Creswell, J. W. & Zhou, Y. (2016). What Is Mixed Methods Research?, in A. K. Moeller, J. W. Creswell, & N. Saville (eds), *Second Language Assessment and Mixed Methods Research*, Cambridge: Cambridge University Press, pp.35–50
- Day, G. S. (1994). The Capabilities of Market-Driven Organizations, *Journal of Marketing*, vol. 58, no. 4, pp.37–52
- De Mooij, M. & Hofstede, G. (2011). Cross-Cultural Consumer Behavior: A Review of Research Findings, *Journal of International Consumer Marketing*, vol. 23, no. 3–4, pp.181–192
- De Villiers, R., Tipgomut, P. & Franklin, D. (2020). International Market Segmentation across Consumption and Communication Categories: Identity, Demographics, and Consumer Decisions and Online Habits, in U. Ayman & A. Kemal Kaya (eds), *Promotion and Marketing Communications*, [e-book] IntechOpen, Available Online: <https://www.intechopen.com/books/promotion-and-marketing-communications/international-market-segmentation-across-consumption-and-communication-categories-identity-demograph> [Accessed 4 June 2026]
- Desai, K. K. & Keller, K. L. (2002). The Effects of Ingredient Branding Strategies on Host Brand Extendibility, *Journal of Marketing*, vol. 66, no. 1, pp.73–93
- Dickinson, R., Herbst, A. & O'Shaughnessy, J. (1986). Marketing Concept and Customer Orientation, *European Journal of Marketing*, vol. 20, no. 10, pp.18–23
- Dijksterhuis, G. (2016). New Product Failure: Five Potential Sources Discussed, *Trends in Food Science & Technology*, vol. 50, pp.243–248
- Dillman, D. A., Smyth, J. D. & Christian, L. M. (2014). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method, 4. ed., Hoboken, New Jersey: Wiley
- Dörnyei, Z. & Griffee, D. T. (2010). Research Methods in Applied Linguistics, *TESOL Journal*, vol. 1, no. 1, pp.181–183
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research, *The Academy of Management Review*, vol. 14, no. 4, p.532
- Erdem, T. & Swait, J. (2004). Brand Credibility, Brand Consideration, and Choice, *Journal of Consumer Research*, vol. 31, no. 1, pp.191–198

- Ertz, M., Addar, W., Ouerghemmi, C. & Takaffoli, M. (2023). Overview of Factors Influencing Consumer Engagement with Plastic Recycling, *WIREs Energy and Environment*, vol. 12, no. 6, p.e493
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling, *American Journal of Theoretical and Applied Statistics*, vol. 5, no. 1, p.1
- European Commission. (n.d.). Single Market, Available Online: [https://commission.europa.eu/topics/single-market\\_en](https://commission.europa.eu/topics/single-market_en) [Accessed 5 April 2026]
- Fogt Jacobsen, L., Pedersen, S. & Thøgersen, J. (2022). Drivers of and Barriers to Consumers' Plastic Packaging Waste Avoidance and Recycling – A Systematic Literature Review, *Waste Management*, vol. 141, pp.63–78
- Fortune. (2026). Prepared Meals Market Size, Share & Industry Analysis, By Product (Frozen Meals, Chilled Meals, and Canned Meals), By Distribution Channel (Supermarkets & Hypermarkets, Convenience Stores, Online Retail, and Others), and Regional Forecast, 2026-2034, *Fortune Business Insights*, Available Online: <https://www.fortunebusinessinsights.com/prepared-meals-market-105002> [Accessed 9 March 2026]
- Geiger, I., Dost, F., Schönhoff, A. & Kleinaltenkamp, M. (2015). Which Types of Multi-Stage Marketing Increase Direct Customers' Willingness-to-Pay? Evidence from a Scenario-Based Experiment in a B2B Setting, *Industrial Marketing Management*, vol. 47, pp.175–189
- Gelper, S. & Stremersch, S. (2014). Variable Selection in International Diffusion Models, *International Journal of Research in Marketing*, vol. 31, no. 4, pp.356–367
- Gourville, J. T. (2006). EAGER SELLERS & STONY BUYERS., *Harvard Business Review*, vol. 84, no. 6, pp.98–106
- Greene, J. C., Caracelli, V. J. & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs, *Educational Evaluation and Policy Analysis*, vol. 11, no. 3, pp.255–274
- Guyt, J. Y. & Gijsbrechts, E. (2014). Take Turns or March in Sync? The Impact of the National Brand Promotion Calendar on Manufacturer and Retailer Performance, *Journal of Marketing Research*, vol. 51, no. 6, pp.753–772
- Harrison, R. L. (2013). Using Mixed Methods Designs in the Journal of Business Research, 1990–2010, *Journal of Business Research*, vol. 66, no. 11, pp.2153–2162
- Hart, S. L. (1995). A Natural-Resource-Based View of the Firm, *Academy of Management*, vol. 20, no. 4, pp.986–1014
- Hassan, S. S., Craft, S. & Kortam, W. (2003). Understanding the New Bases for Global Market Segmentation, *Journal of Consumer Marketing*, vol. 20, no. 5, pp.446–462
- Heidenreich, S. & Handrich, M. (2015). What about Passive Innovation Resistance? Investigating Adoption-Related Behavior from a Resistance Perspective, *Journal of Product Innovation Management*, vol. 32, no. 6, pp.878–903

- Heiniö, R.-L., Arvola, A., Rusko, E., Maaskant, A. & Kremer, S. (2017). Ready-Made Meal Packaging – A Survey of Needs and Wants among Finnish and Dutch ‘Current’ and ‘Future’ Seniors, *LWT - Food Science and Technology*, vol. 79, pp.579–585
- Helfat, C. E. & Peteraf, M. A. (2003). The Dynamic Resource-based View: Capability Lifecycles, *Strategic Management Journal*, vol. 24, no. 10, pp.997–1010
- Herbes, C., Mielinger, E., Krauter, V., Arranz, E., Hurtado, R. M. C., Marcos, B., Poças, F., De Maya, S. R. & Weinrich, R. (2024). Company Views of Consumers Regarding Sustainable Packaging, *Sustainable Production and Consumption*, vol. 52, pp.136–150
- Hettich, D., Bornemann, T. & Hattula, S. (2025). Understanding Older Consumers’ New Product-related Information Behaviors—A Life-span Theory Perspective, *Journal of Product Innovation Management*, vol. 42, no. 6, pp.1068–1088
- Hillebrand, B. & Biemans, W. G. (2011). Dealing with Downstream Customers: An Exploratory Study, *Journal of Business & Industrial Marketing*, vol. 26, no. 2, pp.72–80
- Homburg, C., Wilczek, H. & Hahn, A. (2014). Looking beyond the Horizon: How to Approach the Customers’ Customers in Business-to-Business Markets, *Journal of Marketing*, vol. 78, no. 5, pp.58–77
- Hoopes, D. G. & Madsen, T. L. (2008). A Capability-Based View of Competitive Heterogeneity, *Industrial and Corporate Change*, vol. 17, no. 3, pp.393–426
- Hoque, M. T., Ahammad, M. F., Tzokas, N. & Gabay, G. (2021). Dimensions of Dynamic Marketing Capability and Export Performance, *Journal of Knowledge Management*, vol. 25, no. 5, pp.1219–1240
- Hoyer, W. D. (1984). An Examination of Consumer Decision Making for a Common Repeat Purchase Product, *Journal of Consumer Research*, vol. 11, no. 3, p.822
- imarc. (2025). FMCG Packaging Market Size, Share, Trends and Forecast by Packaging Type, Material, End Use Industry, and Region, 2026-2034, Available Online: [https://www.imarcgroup.com/fmcg-packaging-market?utm\\_source=chatgpt.com](https://www.imarcgroup.com/fmcg-packaging-market?utm_source=chatgpt.com) [Accessed 27 May 2026]
- Jain, P. & Hudnurkar, Dr. M. (2022). Sustainable Packaging in the FMCG Industry, *Cleaner and Responsible Consumption*, vol. 7, p.100075
- Jeuland, A. & Shugan, S. M. (2008). Managing Channel Profits, *Marketing Science*, vol. 27, no. 1, pp.52–69
- Joachim, V., Spieth, P. & Heidenreich, S. (2018). Active Innovation Resistance: An Empirical Study on Functional and Psychological Barriers to Innovation Adoption in Different Contexts, *Industrial Marketing Management*, vol. 71, pp.95–107
- Kachouie, R., Mavondo, F. & Sands, S. (2018). Dynamic Marketing Capabilities View on Creating Market Change, *European Journal of Marketing*, vol. 52, no. 5/6, pp.1007–1036

- Kallio, H., Pietilä, A., Johnson, M. & Kangasniemi, M. (2016). Systematic Methodological Review: Developing a Framework for a Qualitative Semi-structured Interview Guide, *Journal of Advanced Nursing*, vol. 72, no. 12, pp.2954–2965
- Kaplinsky, R. (2000). Globalisation and Unequalisation: What Can Be Learned from Value Chain Analysis?, *Journal of Development Studies*, vol. 37, no. 2, pp.117–146
- Khalifa, H. & Docherty, C. (2016). Investigating the Impact of International Assessment: A Convergent Parallel Mixed Methods Approach, in A. K. Moeller, J. W. Creswell, & N. Saville (eds), *Second Language Assessment and Mixed Methods Research*, Cambridge: Cambridge University Press, pp.269–298
- Kleinaltenkamp, M., Rudolph, M. & Classen, M. (2012). Chapter 6 Multistage Marketing, in M. S. Glynn & A. G. Woodside (eds), *Advances in Business Marketing and Purchasing*, [e-book] Emerald Group Publishing Limited, pp.141–174, Available Online: <http://www.emerald.com/books/edited-volume/14856/chapter/85953863> [Accessed 2 April 2026]
- Krueger, R. A. & Casey, M. A. (2015). Focus Groups: A Practical Guide for Applied Research, 5th edition., Los Angeles London New Delhi Singapore Washington DC: SAGE
- Kurtmollaiev, S., Lervik-Olsen, L. & Andreassen, T. W. (2022). Competing through Innovation: Let the Customer Judge!, *Journal of Business Research*, vol. 153, pp.87–101
- Lambert, D. M. & Cooper, M. C. (2000). Issues in Supply Chain Management, *Industrial Marketing Management*, vol. 29, no. 1, pp.65–83
- Lambert-Pandraud, R. & Laurent, G. (2010a). Why Do Older Consumers Buy Older Brands? The Role of Attachment and Declining Innovativeness, *Journal of Marketing*, vol. 74, no. 5, pp.104–121
- Lambert-Pandraud, R. & Laurent, G. (2010b). Why Do Older Consumers Buy Older Brands? The Role of Attachment and Declining Innovativeness, *Journal of Marketing*, vol. 74, no. 5, pp.104–121
- Lamey, L., Deleersnyder, B., Steenkamp, J.-B. E. M. & Dekimpe, M. G. (2018). New Product Success in the Consumer Packaged Goods Industry: A Shopper Marketing Approach, *International Journal of Research in Marketing*, vol. 35, no. 3, pp.432–452
- Luchs, M. G., Naylor, R. W., Irwin, J. R. & Raghunathan, R. (2010). The Sustainability Liability: Potential Negative Effects of Ethicality on Product Preference
- Macdonald, E. K. & Sharp, B. M. (2000). Brand Awareness Effects on Consumer Decision Making for a Common, Repeat Purchase Product: A Replication, *Journal of Business Research*, vol. 48, no. 1, pp.5–15
- Makadok, R. (2001). Toward a Synthesis of the Resource-based and Dynamic-capability Views of Rent Creation, *Strategic Management Journal*, vol. 22, no. 5, pp.387–401
- Meuser, M. & Nagel, U. (1991). ExpertInneninterviews — vielfach erprobt, wenig bedacht, in A. Bogner, B. Littig, & W. Menz (eds), *Das Experteninterview*, [e-book] Wiesbaden:

- VS Verlag für Sozialwissenschaften, pp.71–93, Available Online:  
[http://link.springer.com/10.1007/978-3-322-93270-9\\_3](http://link.springer.com/10.1007/978-3-322-93270-9_3) [Accessed 9 May 2026]
- Meyers-Levy, J. & Loken, B. (2015). Revisiting Gender Differences: What We Know and What Lies Ahead, *Journal of Consumer Psychology*, vol. 25, no. 1, pp.129–149
- Meyers-Levy, J. & Maheswaran, D. (1991). Exploring Differences in Males' and Females' Processing Strategies, *Journal of Consumer Research*, vol. 18, no. 1, p.63
- Moorman, C. & Day, G. S. (2016). Organizing for Marketing Excellence, *Journal of Marketing*, vol. 80, no. 6, pp.6–35
- Morgan, D. L. (1992). Designing Focus Group Research, in M. A. Stewart, F. Tudi-ver, M. J. Bass, E. V. Dunn, & P. G. Norton (eds), *Tools for Primary Care Research*, Sage Publications, Inc., pp.177–193
- Morgan, D. L. (1996). Focus Groups, *Annual Review of Sociology*, vol. 2, pp.129–152
- Morgan, N. A. (2012). Marketing and Business Performance, *Journal of the Academy of Marketing Science*, vol. 40, no. 1, pp.102–119
- Morgan, N. A., Feng, H. & Whitler, K. A. (2018). Marketing Capabilities in International Marketing, *Journal of International Marketing*, vol. 26, no. 1, pp.61–95
- Morgan, N., J. Slotegraaf, R. & Feng, H. (2022). Marketing Capabilities for B2B Firms, in G. Lilien, A. Petersen, & S. Wuyts (eds), *Handbook of Business-to-Business Marketing*, [e-book] Edward Elgar Publishing, pp.96–116, Available Online:  
<https://www.elgaronline.com/view/book/9781800376878/book-part-9781800376878-14.xml> [Accessed 7 May 2026]
- Mu, J. (2015). Marketing Capability, Organizational Adaptation and New Product Development Performance, *Industrial Marketing Management*, vol. 49, pp.151–166
- Nag, R., Hambrick, D. C. & Chen, M. (2007). What Is Strategic Management, Really? Inductive Derivation of a Consensus Definition of the Field, *Strategic Management Journal*, vol. 28, no. 9, pp.935–955
- Nemat, B., Razzaghi, M., Bolton, K. & Rousta, K. (2019). The Role of Food Packaging Design in Consumer Recycling Behavior—A Literature Review, *Sustainability*, vol. 11, no. 16, p.4350
- Niedermeier, A., Emberger-Klein, A. & Menrad, K. (2021a). Drivers and Barriers for Purchasing Green Fast-Moving Consumer Goods: A Study of Consumer Preferences of Glue Sticks in Germany, *Journal of Cleaner Production*, vol. 284, p.124804
- Niedermeier, A., Emberger-Klein, A. & Menrad, K. (2021b). Which Factors Distinguish the Different Consumer Segments of Green Fast-moving Consumer Goods in Germany?, *Business Strategy and the Environment*, vol. 30, no. 4, pp.1823–1838
- Nijssen, E. J. (1999). Success Factors of Line Extensions of Fast-moving Consumer Goods, *European Journal of Marketing*, vol. 33, no. 5/6, pp.450–474

- Norman, G. (2010). Likert Scales, Levels of Measurement and the “Laws” of Statistics, *Advances in Health Sciences Education*, vol. 15, no. 5, pp.625–632
- Papadopoulos, N. & Martín Martín, O. (2011). International Market Selection and Segmentation: Perspectives and Challenges, *International Marketing Review*, vol. 28, no. 2, pp.132–149
- Paul, J. & Criado, A. R. (2020). The Art of Writing Literature Review: What Do We Know and What Do We Need to Know?, *International Business Review*, vol. 29, no. 4, p.101717
- Porter, M. E. (1996). What Is Strategy?, *Harvard Business Review*, vol. 74, no. 6, pp.61–78
- Presser, S., Couper, M. P., Lessler, J. T., Martin, E., Martin, J., Rothgeb, J. M. & Singer, E. (2004). Methods for Testing and Evaluating Survey Questions, *Public Opinion Quarterly*, vol. 68, no. 1, pp.109–130
- Preston, C. C. & Colman, A. M. (2000). Optimal Number of Response Categories in Rating Scales: Reliability, Validity, Discriminating Power, and Respondent Preferences, *Acta Psychologica*, vol. 104, no. 1, pp.1–15
- Rao, A. R., Qu, L. & Ruekert, R. W. (1999). Signaling Unobservable Product Quality through a Brand Ally, *Journal of Marketing Research*, vol. 36, no. 2, pp.258–268
- Rao, V. R. & McLaughlin, E. W. (1989). Modeling the Decision to Add New Products by Channel Intermediaries, *Journal of Marketing*, vol. 53, no. 1, pp.80–88
- Reve, T. & Stern, L. W. (1979). Interorganizational Relations in Marketing Channels, *The Academy of Management Review*, vol. 4, no. 3, p.405
- Rogers, E. M. (1983). Diffusion of Innovations, 3. ed., New York, NY: Free Press [u.a.]
- Roscoe, A. M., Lang, D. & Sheth, J. N. (1975). Follow-up Methods, Questionnaire Length, and Market Differences in Mail Surveys, *Journal of Marketing*
- Samuelson, W. & Zeckhauser, R. (1988). Status Quo Bias in Decision Making, *Journal of Risk and Uncertainty*, vol. 1, no. 1, pp.7–59
- Saunders, M. N. K., Lewis, P. & Thornhill, A. (2023). Research Methods for Business Students, Ninth edition., Harlow, England ; New York: Pearson
- Sebri, M. & Zaccour, G. (2017). Cross-Country Differences in Private-Label Success: An Exploratory Approach, *Journal of Business Research*, vol. 80, pp.116–126
- Sekaran, U. & Bougie, R. (2016). Research Methods for Business: A Skill-Building Approach, Seventh edition., Chichester, West Sussex, United Kingdom: John Wiley & Sons
- Sethuraman, R., Gázquez-Abad, J. C. & Martínez-López, F. J. (2022). The Effect of Retail Assortment Size on Perceptions, Choice, and Sales: Review and Research Directions, *Journal of Retailing*, vol. 98, no. 1, pp.24–45

- Shavitt, S. & Barnes, A. J. (2020). Culture and the Consumer Journey, *Journal of Retailing*, vol. 96, no. 1, pp.40–54
- Sheth, J. N. (1973). A Model of Industrial Buyer Behavior, *Journal of Marketing*, vol. 37, no. 4, pp.50–56
- Steenkamp, J.-B. E. M. & Ter Hofstede, F. (2002). International Market Segmentation: Issues and Perspectives, *International Journal of Research in Marketing*, vol. 19, no. 3, pp.185–213
- Steenkamp, J.-B. E. M., Ter Hofstede, F. & Wedel, M. (1999). A Cross-National Investigation into the Individual and National Cultural Antecedents of Consumer Innovativeness, *Journal of Marketing*, vol. 63, no. 2, pp.55–69
- Talke, K. & Heidenreich, S. (2014). How to Overcome Pro-Change Bias: Incorporating Passive and Active Innovation Resistance in Innovation Decision Models, *Journal of Product Innovation Management*, vol. 31, no. 5, pp.894–907
- Teece, D. J. (2007). Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance, *Strategic Management Journal*, vol. 28, no. 13, pp.1319–1350
- Teece, D. J. (2018). Business Models and Dynamic Capabilities, *Long Range Planning*, vol. 51, no. 1, pp.40–49
- Teece, D. J. (2019). A Capability Theory of the Firm: An Economics and (Strategic) Management Perspective, *New Zealand Economic Papers*, vol. 53, no. 1, pp.1–43
- Teece, D. J., Pisano, G. & Shuen, A. (1997). Dynamic Capabilities and Strategic Management, *Strategic Management Journal*, vol. 18, no. 7, pp.509–533
- Tellis, G. J., Stremersch, S. & Yin, E. (2003). The International Takeoff of New Products: The Role of Economics, Culture, and Country Innovativeness, *Marketing Science*, vol. 22, no. 2, pp.188–208
- Ter Hofstede, F., Steenkamp, J.-B. E. M. & Wedel, M. (1999). International Market Segmentation Based on Consumer–Product Relations, *Journal of Marketing Research*, vol. 36, no. 1, pp.1–17
- Tourangeau, R., Rips, L. J. & Rasinski, K. A. (2000). The Psychology of Survey Response, 10. print., Cambridge: Cambridge Univ. Press
- Van Everdingen, Y. M., Sloot, L. M., Van Nierop, E. & Verhoef, P. C. (2011). Towards a Further Understanding of the Antecedents of Retailer New Product Adoption, *Journal of Retailing*, vol. 87, no. 4, pp.579–597
- Van Ooijen, I., Fransen, M. L., Verlegh, P. W. J. & Smit, E. G. (2017). Signalling Product Healthiness through Symbolic Package Cues: Effects of Package Shape and Goal Congruence on Consumer Behaviour, *Appetite*, vol. 109, pp.73–82
- Varadarajan, R. (2020). Customer Information Resources Advantage, Marketing Strategy and Business Performance: A Market Resources Based View, *Industrial Marketing Management*, vol. 89, pp.89–97

- Vijver, F. J. R. van de & Leung, K. (1997). *Methods and Data Analysis for Cross-Cultural Research*, Nachdr., Thousand Oaks, Calif.: Sage
- Vorhies, D. W. (1998). An Investigation of the Factors Leading to the Development of Marketing Capabilities and Organizational Effectiveness, *Journal of Strategic Marketing*, vol. 6, no. 1, pp.3–23
- Vorhies, D. W. & Morgan, N. A. (2005). Benchmarking Marketing Capabilities for Sustainable Competitive Advantage, *Journal of Marketing*, vol. 69, no. 1, pp.80–94
- Voss, K. E. & Gammoh, B. S. (2004). Building Brands through Brand Alliances: Does a Second Ally Help?, *Marketing Letters*, vol. 15, no. 2–3, pp.147–159
- Webster, F. E. & Wind, Y. (1972). A General Model for Understanding Organizational Buying Behavior, *Journal of Marketing*, vol. 36, no. 2, pp.12–19
- Wengler, S. & Kolk, M. (2023). Applying Multi-Stage Marketing in Industrial Markets: Exploratory Insights on Its Successful Implementation, Management and Adaptation in Dynamic Markets, *Industrial Marketing Management*, vol. 108, pp.205–222
- Whetten, D. A. (1989). What Constitutes a Theoretical Contribution?, *The Academy of Management Review*, vol. 14, no. 4, p.490
- Wills, J., Samli, A. C. & Jacobs, L. (1991). Developing Global Products and Marketing Strategies: A Construct and a Research Agenda, *Journal of the Academy of Marketing Science*, vol. 19, no. 1, pp.1–10
- Wind, Y. & Douglas, S. P. (1972). International Market Segmentation, *European Journal of Marketing*, vol. 6, no. 1, pp.17–25
- Yavas, U., Verhage, B. J. & Green, R. T. (1992). Global Consumer Segmentation versus Local Market Orientation: Empirical Findings, *MIR: Management International Review*, vol. 32, no. 3, pp.265–272
- Yin, R. K. (2013). Validity and Generalization in Future Case Study Evaluations, *Evaluation*, vol. 19, no. 3, pp.321–332
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods*, Sixth edition., Los Angeles London New Delhi Singapore Washington DC Melbourne: SAGE
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence

## 8. Appendix

### A. Company Interview Guide

| Company Interview Guide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Role &amp; Context</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p><b>Can you briefly describe your role and responsibilities related to COMPANY's packaging?</b></p> <ul style="list-style-type: none"> <li>- Follow-up: How long have you been involved with the product?</li> <li>- Follow-up: Which areas do you mainly cover? (e.g. product, sales, marketing, strategy)</li> <li>- Follow-up: What type of customers or markets do you usually work with?</li> <li>- Follow-up: How much contact do you have with downstream customers such as producers, retailers or end-customers?</li> </ul>                                                                                                                                                                                                                                 |
| <b>2. Market Environment &amp; Adoption</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p><b>How would you describe the current market environment and adoption of COMPANY's packaging?</b></p> <ul style="list-style-type: none"> <li>- Follow-up: How is adoption evolving?</li> <li>- Follow-up: Which B2B customers are most engaged?</li> <li>- Follow-up: How is adoption evolving in the ready-meal segment? Does it affect packaging requirements?</li> </ul> <p><b>What differences do you observe across regions in adoption rates, consumer attitudes and customer requirements? (Sweden vs Southern Europe)</b></p> <ul style="list-style-type: none"> <li>- Follow-up: How aware are Southern European Customers of COMPANY and Carton Packaging?</li> <li>- Follow-up: Do food producers have region-specific packaging preferences?</li> </ul> |
| <b>3. Product &amp; Positioning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p><b>What are the key characteristics, benefits, and limitations of COMPANY's packaging, and how does it compare to alternative solutions?</b></p> <ul style="list-style-type: none"> <li>- Follow-up: What is the pricing in comparison to other packaging types?</li> <li>- Follow-up: What problems does it solve particularly well?</li> <li>- Follow-up: Where does it still face challenges?</li> <li>- Follow-up: What motivated its development and what future potential do you see?</li> </ul>                                                                                                                                                                                                                                                              |
| <b>4. Sales Processes (B2B)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p><b>How are your sales processes structured when approaching direct B2B customers?</b></p> <ul style="list-style-type: none"> <li>- Follow-up: What does a typical customer journey look like from first contact to implementation?</li> <li>- Follow-up: Where do you face the biggest challenges?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>5. Collaboration &amp; Marketing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p><b>How do you collaborate with downstream actors (e.g., food producers, retailers), and how do you approach marketing and communication?</b></p> <ul style="list-style-type: none"> <li>- Follow-up: What formats do you use (e.g., workshops, co-development)?</li> <li>- Follow-up: How do you address end-consumers indirectly?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                       |

- *Follow-up: Which marketing activities have been most effective?*
- *Follow-up: How are retailers involved in the adoption process?*
- *Follow-up: Does COMPANY approach customers differently depending on whether products are sold mainly through supermarkets or e-commerce?*
- *Follow-up: Do you see e-commerce as a meaningful alternative to supermarkets for ready-meals in carton packaging?*

## **6. Barriers and Opportunities**

**What are the main barriers to adoption of COMPANY's packaging?**

- *Follow-up: Are barriers more technical, economic, or behavioral?*
- *Follow-up: Where do you see the biggest opportunities going forward?*

## **7. Future Improvements**

**What could be improved in the future regarding processes, sales, or marketing?**

- *Follow-up: Are there capabilities that are currently missing to drive adoption?*
- *Follow-up: If you could change one thing to increase adoption, what would it be?*

**Do you think the current approach sufficiently addresses downstream demand?**

## **8. Closing**

**Is there anything else you would like to add?**

## ***B. Focus Group Guide***

| <b>Focus Group Guide</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Dates:</b></p> <ul style="list-style-type: none"><li>- Sweden: 10<sup>th</sup> of April, 14:30 - 16:30</li><li>- Southern Europe: 17<sup>th</sup> of April, 14:30 – 16:30</li></ul> <p><b>Format:</b> Semi-structured focus groups, 95 minutes long</p> <p><b>Mode:</b> Online with video and packaging demonstration</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>1. General Introduction</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>“Welcome, and thank you for joining today. We are conducting this focus group as part of a university master’s thesis in collaboration with COMPANY. We are interested in how consumers think about ready meals and similar packaged food products, what they notice when choosing them, and how packaging influences their impressions and decisions. There are no right or wrong answers here. We are interested in your honest opinions and personal experiences.</p> <p>For today, when we say ready meals, we mean pre-prepared food products that are bought ready-made and need only heating or very little preparation. We may also talk more broadly about comparable packaged food products where relevant (COMPANYs Product: PRODUCT).</p> <p>The discussion will take about 95 minutes and is semi-structured, which means we have a few guiding topics, but we would like the conversation to flow naturally. We also want everyone to feel comfortable contributing, so please feel free to share openly and react to each other’s views. If you have any questions in between, please let us know.”</p>                                                                                                                                                                                                                                                          |
| <b>2. Welcome, framing and warm-up</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><b>Time:</b> 15 minutes</p> <p><b>Purpose:</b> To open the discussion naturally, understand general shopping behavior for ready meals and similar packaged foods, and establish where and how such products are typically purchased before moving into store-based comparisons.</p> <p><b>Introduction round:</b> “Let’s start with a short introduction round. Please tell us your first name, where you are coming from, and a little about your relationship with ready meals. Do you buy them, and if so, how often?”</p> <p><b>Bridge:</b> “We’re interested in how people think about packaged food products in everyday life. There are no right or wrong answers. We would first like to understand how you usually buy these types of products and in what situations.”</p> <p><b>Questions:</b></p> <ul style="list-style-type: none"><li>- Why do you usually choose to buy ready meals, soups, sauces, or similar packaged foods, and how does packaging influence your decision, if at all?”</li><li>- Where do you usually buy these products: supermarkets, convenience stores, online grocery, meal kits, or somewhere else? And why?”</li><li>- What are your thoughts on purchasing ready meals online (via e-commerce)?</li></ul> <p><b>Transition:</b> For the next parts, let’s imagine you are standing in a store and compare products side by side.</p> |

### 3. Perception of packaging materials & physical product exploration

**Time:** 25 minutes

**Purpose:** To understand general associations customers have with different packaging materials and to gather immediate, concrete reactions to carton packaging compared with other formats using real product examples (or video material).

**Introduction:** “Let’s stay with packaging for a moment. Different materials often create different impressions before we even think about the product itself.”

**Questions:**

- When you see food in glass, metal, plastic, or carton packaging, what kinds of thoughts or feelings do those materials create for you?
- What do different packaging materials tend to signal about the food inside?
- Are there some materials that feel naturally right for certain products and wrong for others?
- How do you perceive the opening process of packaged products? (Is it easy/hard? How do you usually do it?)

**After those questions, presentation of real product examples (e.g. Hummus) and open-close mechanism of PRODUCT**

- Did you know about, and have you used those opening mechanisms for COMPANY PRODUCT?
- How do you usually handle food in carton packaging?
- Do you care about how to open it, what do you think of the instructions (overwhelming?)

**Questions:**

- What are your first thoughts when you look at these packages next to each other?
- What associations do you have with carton packaging?
- Which packaging format makes the product feel more homemade, less processed, or more modern and innovative?

### 4. Functional expectations and barriers

**Time:** 15 minutes

**Purpose:** To identify the main barriers and concerns that could prevent consumers from choosing carton packaging.

**Introduction:** “Let’s imagine you were actually deciding whether to buy one of these products. We would like to focus now on what might make carton packaging feel convincing or make you hesitate.”

**Questions:**

- What would make you hesitate before buying a food product in carton packaging?
- How does carton packaging shape your expectations of freshness, taste, quality, or product protection?
- How confident would you feel that food in carton packaging stays fresh until the expiry date, and what shapes that confidence?
- Do you think COMPANY PRODUCT is actually more sustainable in your country, given the local recycling and waste system?

**COMPANY PRODUCT has two important limitations in the ready meal context: it isn’t used to store frozen meals because of packaging material weaknesses, and it cannot be heated in a microwave. How do these limitations affect your perception of carton packaging for ready meals?**

### 5. Sustainability, credibility, and the value-action gap

**Time:** 12 minutes

**Purpose:** To explore how consumers understand sustainability in packaging and how much it actually matters in real purchase decisions.

**Introduction:** “A lot of packaging discussions today also involve sustainability. I’d like to understand what that topic means to you when it comes to food packaging.”

**Questions:**

- When you look at food packaging, what makes something feel sustainable to you?
- What does carton packaging suggest to you, if anything, about sustainability?
- When sustainability conflicts with price, convenience, or product quality, what tends to matter more?

## ***6. Distribution channels and e-commerce***

**Time:** 10 minutes

**Purpose:** To examine whether perceptions of carton packaging depend on where and how the product is bought.

**Introduction:** “So far we’ve mostly spoken as if you were standing in a store. But food is also bought in different ways now, for example grocery delivery, or via e-commerce.”

**Questions:**

- Would your reaction to carton be different in a supermarket than in online grocery or a meal-kit service?
- Are there channels where carton feels especially suitable or unsuitable? If yes, why is that so?

## ***7. Closing and final reflection***

**Time:** 8 minutes

**Purpose:** To identify the strongest barriers, strongest positive impressions, and the most important themes for the later survey.

**Introduction:** “Before we finish, I’d like each of you to reflect on what would matter most if you were actually deciding whether to buy a food product in carton packaging.”

**Questions:**

- What is your main takeaway from today’s discussion about carton packaging?

## C. Online Survey

### Online Survey

#### Introduction

##### Packaged Food and Consumer Perceptions - Master's Thesis Survey

Section 1

##### Introduction

Thank you for participating in this survey. It is part of a master's thesis at Lund University, conducted in collaboration with a major packaging company. We are interested in how consumers perceive ready meals and similar packaged food products, especially different packaging types. In particular, we aim to better understand the differences between the Nordic market, especially Sweden, and Southern European markets. Perspectives from other countries and regions are also welcome.

The survey takes approximately 5-10 minutes to complete.

There are no right or wrong answers. We are interested in your honest opinions and experiences.

For this survey, "ready meals and similar packaged food products" may include soups, sauces, beans, tomatoes, hummus, and prepared meals such as chili sin carne or curries that require little preparation. The image included in this introduction shows different types of products and packages.

Your responses will remain anonymous and will be treated confidentially. The results of this survey may be shared in an aggregated and anonymized form with the collaborating packaging company.

If you have any questions regarding this survey or the research project, please contact:

Julius Karl Deutsch (Lund University School of Economics and Management)  
Email: ju1466de-s@student.lu.se

Gero Adrian Matovinović (Lund University School of Economics and Management)  
Email: ge7048ma-s@student.lu.se

P.S: This survey contains Karma to get free survey responses at SurveySwap.io



## Participant Information

Section 2

**Participant Information**

This section asks a few general background questions. Your answers help us compare responses across different groups of participants.

1

Please enter your age (in years, digits only). \*

Enter your answer

2

Which country are you from? \*

☐ Sweden

☐ Portugal

☐ Spain

☐ Italy

☐ Greece

☐ Cyprus

☐ Other

3

What is your gender? \*

☐ Female

☐ Male

☐ Non-binary

☐ Prefer not to say

☐ Other

## Section 1: Buying Behavior and Preferred Packaging Types

Section 3

### Section 1: Buying Behavior and Preferred Packaging Types

In this section, we want to understand your buying behavior for packaged food and which packaging types and designs you would prefer. You will be asked about your general purchasing habits and shown different packaging options.

4

When choosing ready meals (incl. soups, sauces, beans, tomatoes, hummus, and prepared meals such as chili sin carne or curries), which packaging type would you prefer? \*



- ☐ Carton
- ☐ Glass
- ☐ Can
- ☐ Plastic

5

Which carton design looks the most appealing to you? (Select up to 2 options) \*



Please select at most 2 options.

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8

6

Please indicate your level of agreement with the following statements (1 = strongly disagree, 7 = strongly agree). \*

|                                                                                              | 1 (strongly disagree) | 2                     | 3                     | 4 (neutral)           | 5                     | 6                     | 7 (strongly agree)    |
|----------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I regularly buy ready meals or similar packaged food products.                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would be willing to try ready meals or similar packaged food products in carton packaging. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Section 2: Decision Drivers & General Attitudes

### Section 2: Decision Drivers & General Attitudes

This section focuses on the factors that influence your purchase decisions. In particular, we are interested in how important aspects like packaging and sustainability are to you.

7

When buying a packaged food product in the supermarket, how important are the following factors for your decision? Please rank them from 1 to 5, where 1 = most important and 5 = least important. \*

**Convenience and usability** (easy to open, use, reseal, store, or consume from)

**Quality and homemade feel** (fresh, tasty, trustworthy, and not overly processed)

**Packaging and brand image** (the product looks appealing, familiar, premium, or trustworthy)

**Sustainability and disposal** (environmentally friendly and easy to sort or recycle)

**Category fit** (the packaging feels suitable for the type of food)

8

Please indicate your level of agreement with the following statements (1 = strongly disagree, 7 = strongly agree). \*

|                                                                               | 1 (strongly disagree) | 2                     | 3                     | 4 (neutral)           | 5                     | 6                     | 7 (strongly agree)    |
|-------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Packaging plays an important role in my purchase decision for these products. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Carton packaging for food products feels environmentally friendly.            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| The recycling and waste system in my home country is ineffective.             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I regularly separate packaging waste for recycling.                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Section 3: Perceptions of Carton Packaging

### Section 3: Perceptions of Carton Packaging

This section explores your perceptions of carton packaging for food products. Please indicate your views on quality, usability, and how suitable this packaging type is for different products.

9

Please indicate your level of agreement with the following statements (1 = strongly disagree, 7 = strongly agree). \*

|                                                                                                                  | 1 (strongly disagree) | 2                     | 3                     | 4 (neutral)           | 5                     | 6                     | 7 (strongly agree)    |
|------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I think carton packaging is more suitable for ingredients (e.g., beans, tomatoes) than for complete ready meals. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I trust carton packaging to keep food safe and fresh.                                                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Carton packaging often feels inconvenient (open, use, reseal, store).                                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I associate carton packaging with cheaper or store brands.                                                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| If I cannot see the product inside the package, I am less likely to buy it.                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Ready meals in carton packaging feel more processed than ready meals in other packaging types.                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Using carton packaging improves a brand's image.                                                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Convenience and usability play an important role in my purchase decision for packaged food products.             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Quality and homemade feel play an important role in my purchase decision for packaged food products.             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Packaging and brand image play an important role in my purchase decision for packaged food products.             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Sustainability and disposal play an important role in my purchase decision for packaged food products.           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Category fit plays an important role in my purchase decision for packaged food products.                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Section 4: Adoption, Brand Perception & Communication

### Section 4: Adoption, Brand Perception & Communication

This section explores how communication and additional information may influence your views.

10

Which of the following communication measures would be most effective in improving your perception of ready meals in carton packaging? (Select up to 3 options) \*

Wählen Sie höchstens 3 Optionen aus.

- ☐ Clearer sustainability information on the packaging (e.g., recyclability and comparison with plastic, glass, or metal)
- ☐ Simple recycling instructions adapted to my country (e.g., how to sort the package correctly)
- ☐ A QR code with more information about the product and packaging (e.g., ingredients, recycling, or sustainability details)
- ☐ A short video or visual guide showing how to open and reclose the package (e.g., simple usage instructions)
- ☐ In-store information stands or shelf signs explaining carton packaging benefits (e.g., lighter, recyclable, easy to store, or safe food protection)
- ☐ Free tasting or sampling in supermarkets (e.g., trying the product before buying)
- ☐ More appetizing package design with stronger food images (e.g., fresher, warmer, less processed look)
- ☐ Communication that the product quality is unchanged (e.g., same recipe, different packaging)
- ☐ More visible information about freshness, food safety, and shelf-life protection (e.g., why the package protects the food well)
- ☐ Stronger connection to familiar brands, traditional recipes, or local food culture (e.g., more trusted, homemade, or locally familiar appearance)

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If you have any further comments, please share what would make you more likely to buy carton-packaged food or improve your perception of it.

Ihre Antwort eingeben

## D. Company Interview Analysis

| Company Interview Analysis |                                    |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------|------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Framework                  | Category                           | Sub-category                             | Insights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Marketing capabilities     | Dynamic marketing capabilities     | Market sensing                           | COMPANY acknowledges lack of brand awareness outside core industries (took for granted that everybody knows COMPANY), in new categories (e.g., pet food) customers don't even know COMPANY is active;<br>Trade fairs are a key tool: first fair awareness (why is COMPANY here?), second fair concrete discussions (product launches, collaboration);<br>Strong differences across regions: Sweden early adoption & sustainability-driven, Italy/Spain more traditional & resistant to change, US usability issues (people don't understand how to open package);<br>Learning based on consumer testing: around 79% prefer carton after trying it, problem = getting them to try it the first time;<br>Clear understanding that different categories behave differently: tomato is cost-driven, pet food is branding + premium, ready meals with higher margins and less price pressure |
|                            |                                    | Customer engaging                        | Shift from technical selling to customer value selling; includes full launch support, market data, recipe development, communication measures, and production support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                            |                                    | Partner linking                          | COMPANY actively builds triangles-structure: COMPANY, producer, retailer;<br>Retailers approached via invention days, joint discussions (consumer behavior, positioning);<br>Strong dependency of direct customers on retailers: demand is derived from retail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                            | Operational marketing capabilities | Context segmentation capability          | COMPANY gathered strong evidence that regions require different value arguments: Southern European market values sustainability less than Nordics;<br>Italy/Spain more traditional: are used to food production inside of country and glass packaging as quality signal;<br><br>Category context matters: tomato is cost driven, pet-food is premium/branding driven, ready meals offer higher margin potential                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                            |                                    | Customer information analysis capability | COMPANY uses consumer market tests and adoption data to convince customers → consumer trial data is central; learning from success and failure cases is used to explain adoption outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                            |                                    | Brand management                         | Packaging format affects perceived brand position; wrong price/brand can make carton appear either discount or premium; familiar design can reduce uncertainty when shifting from can to carton                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                            |                                    | Marketing communication capability       | COMPANY acknowledges brand positioning struggles; supports customers with label design and marketing communication; COMPANY creates awareness by presenting success and failure cases to customers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                            |                                    | Customer education                       | COMPANY states that opening/closing mechanism remains poorly understood: education is necessary but instructions may not be read; COMPANY suggests educational activities such as mock-ups or in-store try-out formats                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                            |                                    | Comprehensive MSM                        | Clear comprehensive MSM logic: COMPANY addresses producers, retailers and end-consumers; COMPANY sometimes invests directly in downstream marketing/launch support to stimulate adoption → invests heavily upfront to gain direct customers ("win-win situation" because of more demand for both sides)<br><br>Two tracks: build supply (install production lines) + build demand (retail + end-consumers)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Business model             | What do we provide?                | Value proposition                        | Not just selling packaging and machines anymore: offering full solutions (design, production, marketing, launch);<br>Key value elements: cost advantage (most important), convenience (resealable, safe), sustainability (market dependent)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                            | Who do we serve?                   | Target customers                         | Targeting extends beyond food producers to retailers and end-consumers; prioritized categories include tuna, pet food, ready meals, tomatoes, legumes<br><br>Direct: food producers<br>Indirect: retailers, end-consumers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                            | How do we provide it?              | Customer relations                       | Customer relations are long-term, consultative and collaborative; COMPANY supports customers with market data, recipe development, communication, label design, and launch ("360 degree offering"); relations are long-term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                            |                                    | Value chain architecture                 | Complex demand structures through involvement of food producers, retailers and end-consumers; triangular coordination between COMPANY, producers and retailers; COMPANY influences but does not control final producer-retailer negotiations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                            |                                    | Core competences                         | Packaging technology and integrated commercialization support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                            |                                    | Partner network                          | Key partners are: large food producers (market entry leverage) & retailers (demand creation); logic is to invest in partnerships with big players to scale quickly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                            | How do we make money?              | Profit formula                           | Profit logic depends on cost competitiveness and business-case paypack; COMPANY absorbs launch and upfront costs when volume potential is large<br><br>Revenue: packaging + machines<br>Costs: high upfront investments (marketing + support)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## E. Focus Group Analysis

| Focus Group Analysis                    |                                      |                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                         |
|-----------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category                                | Cluster                              | FG1 (Sweden)                                                                                                                                                                                                                                                                                                                           | FG2 (Southern Europe)                                                                                                                                                                                                                                                                                                             | Insights                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Framework                                                                                                                                                                                                               |
| Ready meals perception                  | Convenience vs Culture               | Ready meals are situationally accepted as a practical solution; Used mainly under time pressure, low motivation; Framed as a backup option, not a preferred choice                                                                                                                                                                     | Ready meals are culturally misaligned; Strong preference for cooking from scratch or ordering food instead; Cooking is associated with identity, quality, enjoyment                                                                                                                                                               | Convenience is interpreted differently: FG1: functional benefit FG2: insufficient, ready meals conflict with deeply embedded food culture norms, convenience alone unable to drive adoption                                                                                                                                                                                                                                                                     | Consumer level: habits & motivations<br><br>Cultural context: strong (cooking culture)<br><br>Adoption: structural barrier especially in FG2                                                                            |
|                                         | Quality, freshness and homemade feel | General skepticism: additives, E-numbers; However often uncertain and not strongly internalized                                                                                                                                                                                                                                        | Stronger rejection: packaged food seen as lower quality and less healthy; Strong link to freshness, authenticity, traditional food values                                                                                                                                                                                         | Health perception: FG1: cognitive concern FG2: normative belief, processed = inferior taken for granted                                                                                                                                                                                                                                                                                                                                                         | Consumer level: risk perception, trust<br><br>Adoption barrier: perceived lack of quality & healthiness                                                                                                                 |
| Perceived adoption drivers and barriers | Packaging and brand image            | Carton associated with private labels, lower price signals lower quality, Glass/metal linked to branded, higher-quality products; Some participants recognize this as a bias                                                                                                                                                           | Strong and intuitive associations: Glass is premium, Metal is traditional/reliable, Carton is inferior<br><br>Strong emphasis on: origin (e.g., Italian food authenticity); Packaging reinforces: credibility, trust, perceived realness                                                                                          | Consumers use material-based heuristics: packaging = shortcut for evaluating quality, taste, authenticity; Carton suffers from a systematic signaling disadvantage, especially in FG2 where heuristic thinking is stronger and less questioned<br><br>Consumers evaluate products through combined heuristics: packaging x brand x origin; Carton is disadvantaged on all three: weak material signal, associated with low-tier brands, lacks authenticity cues | Adoption barrier: low perceived quality leads to reduced willingness to try; low credibility & authenticity perception<br><br>(Marketing capabilities needed: value signaling, perception management, brand management) |
|                                         | Convenience and usability            | Frustration with opening mechanisms, unclear resealing                                                                                                                                                                                                                                                                                 | Stronger emotional reactions: "messy", "need scissors"; Additional concern: usability in real-life cooking situations                                                                                                                                                                                                             | Functional convenience multi-dimensional: not only speed but also ease of use, control, cleanliness, reusability; Functional friction leads to frustration, loss of trust, reinforcement of negative perceptions                                                                                                                                                                                                                                                | Adoption barrier: functional + emotional resistance                                                                                                                                                                     |
|                                         | Category fit                         | Flexible but present norms: beans in cans, sauces in mixed formats                                                                                                                                                                                                                                                                     | Stronger and more rigid: sauces in glass, ready meals are questionable overall                                                                                                                                                                                                                                                    | Consumers rely on category-specific packaging schemas; When carton violates schemas it creates cognitive dissonance and reduces perceived appropriateness; Leads to rejection before product evaluation                                                                                                                                                                                                                                                         | Consumer level: behavioral expectations<br><br>Adoption barrier: mismatch between expectation and offering                                                                                                              |
|                                         | Sustainability and disposal trust    | Carton perceived as relatively sustainable influenced by strong recycling infrastructure, familiarity with material separation; However: sustainability has limited influence on actual purchase decisions, often secondary to price and convenience                                                                                   | Glass and metal perceived as more recyclable, more environmentally friendly; Carton associated with: uncertainty, multi-layer complexity, unclear recycling outcomes; Lower trust in: local recycling systems, actual environmental impact                                                                                        | Sustainability perception is shaped by material + knowledge + system trust; If recycling systems are not trusted, material benefits are irrelevant; Result: FG1 with moderate trust, weak behavioral impact & FG2 with low trust, negative perception                                                                                                                                                                                                           | Market level: recycling infrastructure<br><br>Consumer level: knowledge & trust<br><br>Adoption barrier: sustainability uncertainty & credibility gap                                                                   |
|                                         | Channel & Competitive Context        | Purchases mainly in supermarkets, often spontaneous, unplanned; E-commerce perception: generally rejected or seen as unnecessary; food purchases are habitual, proximity-driven (supermarket close); online grocery perceived as impractical, requiring planning (which contradicts actual behavior); bulk buying online theoretically | Also primarily supermarket-based; Strong alternative food delivery platforms (takeaway culture); E-commerce perception: similarly rejected or irrelevant but reasoning differs slightly: if consumers plan ahead they prefer cooking, if they need convenience they order food instead; Online ready meal purchasing is therefore | E-commerce does not fit the consumption logic: ready meals are spontaneous purchases, and E-commerce requires planning which is a structural mismatch; Channel irrelevance reinforces low adoption without strong use case for bulk purchasing or subscription models; Competitive context differs: FG1 with ready meals vs. cooking, FG2                                                                                                                       | Market level: distribution channels & infrastructure<br><br>Consumer level: purchase behavior (planned vs. spontaneous)<br><br>Adoption barrier: lack of channel-product fit                                            |

|  |                                                          |                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                           |
|--|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                          | attractive (price advantage) but practically unrealistic due to lack of planning and low relevance of ready meals in daily life                                                                                                                                        | seen as lacking a clear value proposition                                                                                                                                                                                                                                             | with ready meals vs. takeaway which further reduces relevance of online channels                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                           |
|  | <b>Innovation, Storytelling &amp; Digital Engagement</b> | Low engagement with QR codes, digital features, ready meals = low-involvement category; Convenience outweighs information-seeking behavior; In-store perception that carton products often blend into shelf environment, limited differentiation vs. competing formats | More critical perspective: skepticism toward marketing claims, sensitivity to greenwashing; Preference for: authenticity, transparency over marketing narratives; In-store: stronger reliance on: visual cues, packaging appearance; Carton perceived as less premium, less appealing | <p>Limited intrinsic pull of digital features: QR codes and storytelling are not primary drivers, especially for low-involvement products;</p> <p>Risk of negative perception (FG2): Sustainability storytelling can be interpreted as exaggeration, manipulation, greenwashing which leads to reduced trust instead of increased engagement</p> <p>Opportunity is barrier reduction: if executed correctly, storytelling can reduce key adoption barriers by explaining recycling systems (sustainability clarity), communicating origin &amp; ingredients (authenticity), guiding usage (functional clarity)</p> | <p>Adoption: potential driver (if trust-building &amp; clarity-enhancing), barrier (if perceived as greenwashing or irrelevant)</p> <p>(Marketing capabilities: communication, storytelling, in-store activation, digital engagement)</p> |

## F. Example of SPSS Survey Analysis (H1 testing)

### SPSS Survey Analysis (H1 testing)

*Selected example: multiple linear regression for quality including multicollinearity checks  
(further analyses available upon request)*

#### → Regression

##### Variables Entered/Removed<sup>a</sup>

| Model | Variables Entered                                                                                                          | Variables Removed | Method |
|-------|----------------------------------------------------------------------------------------------------------------------------|-------------------|--------|
| 1     | Perceived effectiveness of the recycling system, Gender, Packaging preference, Buying frequency, Age, Country <sup>b</sup> | .                 | Enter  |

a. Dependent Variable: Quality

b. All requested variables entered.

##### Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .312 <sup>a</sup> | .097     | .055              | 1.250                      |

a. Predictors: (Constant), Perceived effectiveness of the recycling system, Gender, Packaging preference, Buying frequency, Age, Country

##### ANOVA<sup>a</sup>

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 21.822         | 6   | 3.637       | 2.328 | .036 <sup>b</sup> |
|       | Residual   | 203.054        | 130 | 1.562       |       |                   |
|       | Total      | 224.876        | 136 |             |       |                   |

a. Dependent Variable: Quality

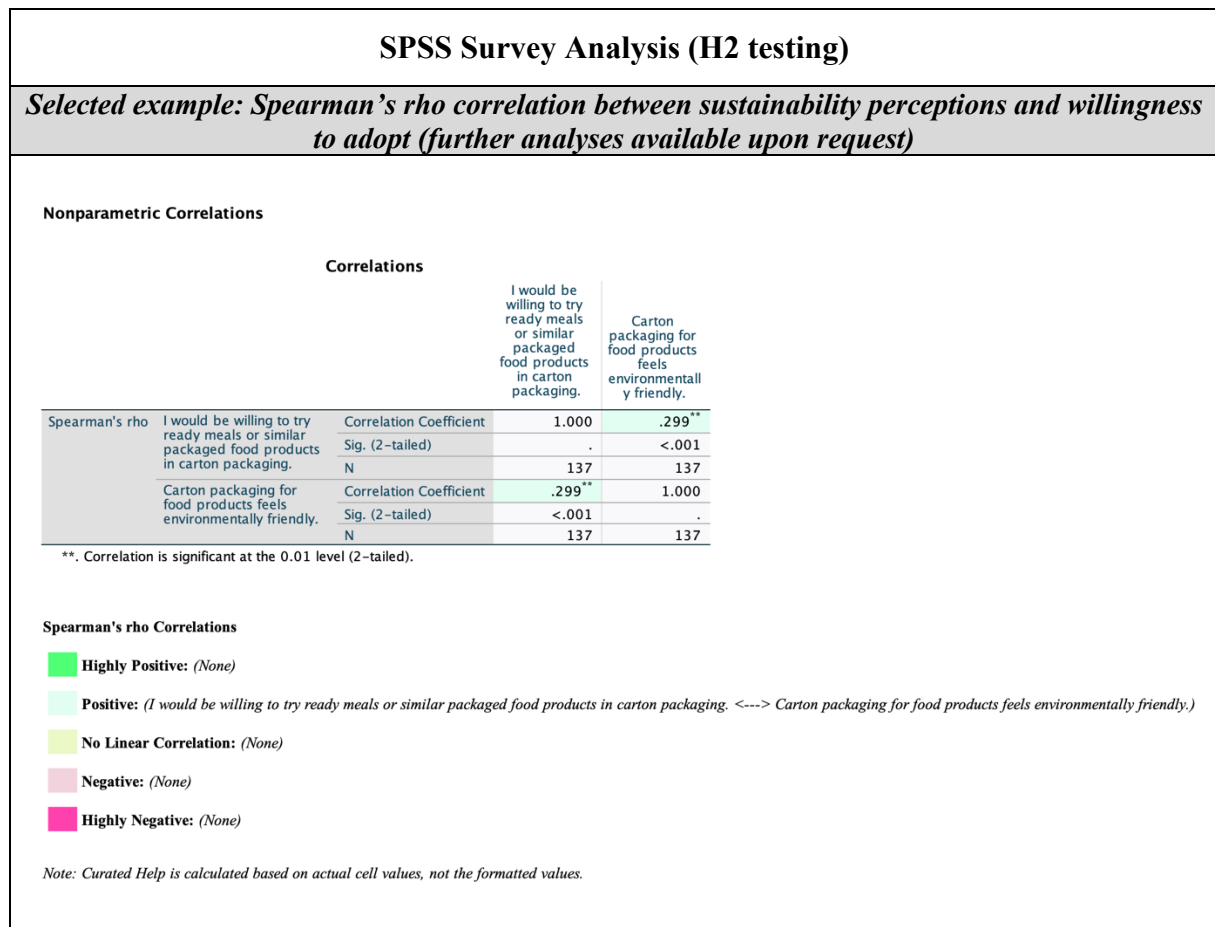
b. Predictors: (Constant), Perceived effectiveness of the recycling system, Gender, Packaging preference, Buying frequency, Age, Country

##### Coefficients<sup>a</sup>

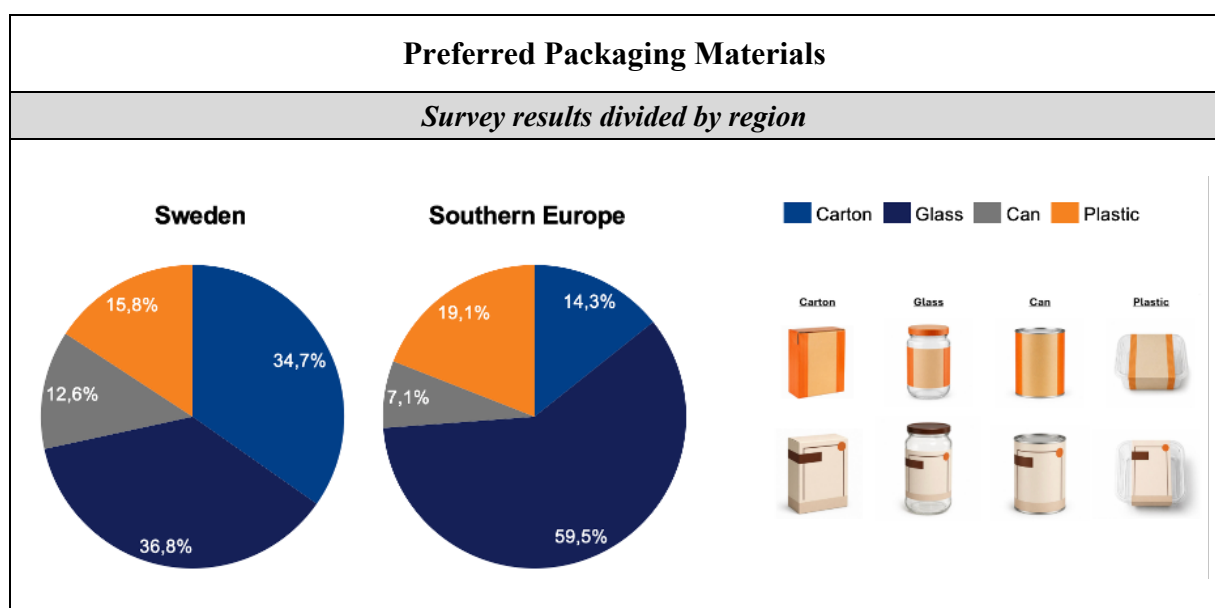
| Model |                                                 | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.  | Collinearity Statistics |       |
|-------|-------------------------------------------------|-----------------------------|------------|---------------------------|--------|-------|-------------------------|-------|
|       |                                                 | B                           | Std. Error | Beta                      |        |       | Tolerance               | VIF   |
| 1     | (Constant)                                      | 4.785                       | .785       |                           | 6.095  | <.001 |                         |       |
|       | Age                                             | .031                        | .023       | .129                      | 1.361  | .176  | .775                    | 1.291 |
|       | Country                                         | .662                        | .278       | .238                      | 2.381  | .019  | .694                    | 1.442 |
|       | Gender                                          | -.289                       | .210       | -.119                     | -1.379 | .170  | .938                    | 1.066 |
|       | Packaging preference                            | -.110                       | .108       | -.087                     | -1.017 | .311  | .945                    | 1.058 |
|       | Buying frequency                                | .025                        | .069       | .031                      | .367   | .714  | .959                    | 1.043 |
|       | Perceived effectiveness of the recycling system | .018                        | .073       | .024                      | .241   | .810  | .726                    | 1.377 |

a. Dependent Variable: Quality

## G. Example of SPSS Survey Analysis (H2 testing)



## H. Preferred Packaging Materials



## I. Coding of Survey Items and Variables

| Coding of Survey Items and Variables                                      |                                                  |                                                                                                                                                                                |                                                                      |
|---------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Category                                                                  | Variable                                         | Survey                                                                                                                                                                         | Coding / Scale                                                       |
| Independent variables for H1,<br>Region as independent<br>variable for H4 | Gender                                           | <i>What is your gender?</i>                                                                                                                                                    | Female 0                                                             |
|                                                                           |                                                  |                                                                                                                                                                                | Male 1                                                               |
|                                                                           |                                                  |                                                                                                                                                                                | Other 2                                                              |
|                                                                           | Packaging preference                             | <i>When choosing ready meals (incl. soups, sauces, beans, tomatoes, hummus, and prepared meals such as chili sin carne or curries), which packaging type would you prefer?</i> | Carton 0                                                             |
|                                                                           |                                                  |                                                                                                                                                                                | Glass 1                                                              |
|                                                                           |                                                  |                                                                                                                                                                                | Can 2                                                                |
|                                                                           |                                                  |                                                                                                                                                                                | Plastic 3                                                            |
|                                                                           | Region                                           | <i>Which country are you from?</i>                                                                                                                                             | Sweden 0                                                             |
|                                                                           |                                                  |                                                                                                                                                                                | Southern Europe (including Portugal, Spain, Italy, Greece, Cyprus) 1 |
| Dependent variables for H1                                                | Age                                              | <i>Please enter your age (in years, digits only).</i>                                                                                                                          | Digits                                                               |
|                                                                           | Recycling infrastructure                         | <i>The recycling and waste system in my home country is ineffective.</i>                                                                                                       | Likert (7)                                                           |
|                                                                           | Consumption patterns                             | <i>I regularly buy ready meals or similar packaged food products.</i>                                                                                                          |                                                                      |
|                                                                           | Convenience and usability                        | <i>Convenience and usability play an important role in my purchase decision for packaged food products.</i>                                                                    | Likert (7)                                                           |
|                                                                           | Quality / freshness / homemade feel              | <i>Quality and homemade feel play an important role in my purchase decision for packaged food products.</i>                                                                    |                                                                      |
|                                                                           | Packaging and brand image                        | <i>Packaging and brand image play an important role in my purchase decision for packaged food products.</i>                                                                    |                                                                      |
|                                                                           | Sustainability and disposal trust                | <i>Sustainability and disposal play an important role in my purchase decision for packaged food products.</i>                                                                  |                                                                      |
| Independent variables for H2                                              | Category fit                                     | <i>Category fit plays an important role in my purchase decision for packaged food products.</i>                                                                                | Likert (7)                                                           |
|                                                                           | Convenience and usability                        | <i>Carton packaging often feels inconvenient (open, use, reseal, store).</i>                                                                                                   |                                                                      |
|                                                                           | Quality / freshness / homemade feel              | <i>I trust carton packaging to keep food safe and fresh.</i>                                                                                                                   |                                                                      |
|                                                                           | Packaging and brand image                        | <i>I associate carton packaging with cheaper or store brands.</i>                                                                                                              |                                                                      |
|                                                                           | Sustainability and disposal trust                | <i>Carton packaging for food products feels environmentally friendly.</i>                                                                                                      |                                                                      |
| Dependent variable for H2                                                 | Category fit                                     | <i>I think carton packaging is more suitable for ingredients (e.g., beans, tomatoes) than for complete ready meals.</i>                                                        | Likert (7)                                                           |
|                                                                           | Indirect downstream actors' willingness to adopt | <i>I would be willing to try ready meals or similar packaged food products in carton packaging.</i>                                                                            |                                                                      |
| H4 items                                                                  | Preferred marketing activities                   | <i>Communication that the product quality is unchanged (e.g., same recipe, different packaging)</i>                                                                            | Qualitative description of frequencies 1                             |

|  |  |                                                                                                                                                     |    |
|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------|----|
|  |  | More visible information about freshness, food safety, and shelf-life protection (e.g., why the package protects the food well)                     | 2  |
|  |  | Stronger connection to familiar brands, traditional recipes, or local food culture (e.g., more trusted, homemade, or locally familiar appearance)   | 3  |
|  |  | A short video or visual guide showing how to open and reclose the package (e.g., simple usage instructions)                                         | 4  |
|  |  | Clearer sustainability information on the packaging (e.g., recyclability and comparison with plastic, glass, or metal)                              | 5  |
|  |  | Free tasting or sampling in supermarkets (e.g., trying the product before buying)                                                                   | 6  |
|  |  | A QR code with more information about the product and packaging (e.g., ingredients, recycling, or sustainability details)                           | 7  |
|  |  | In-store information stands or shelf signs explaining carton packaging benefits (e.g., lighter, recyclable, easy to store, or safe food protection) | 8  |
|  |  | Simple recycling instructions adapted to my country (e.g., how to sort the package correctly)                                                       | 9  |
|  |  | More appetizing package design with stronger food images (e.g., fresher, warmer, less processed look)                                               | 10 |

\* Differences of full sample: Region Northern Europe includes Sweden, Finland, Norway (0); Region Southern Europe stays the same (1); Central Europe includes Belgium, Denmark, France, Germany, Poland, Netherlands, UK (2)

## J. Selected Focus Group Slide

|                                                                                                                                                                                                       |
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| <b>Focus Group Slides</b>                                                                                                                                                                             |
| <b><i>Selected example: goulash soup packaging comparison (full slide deck available upon request)</i></b>                                                                                            |
| <div style="background-color: black; color: white; padding: 5px; margin-bottom: 10px;"><b>Goulash soup</b></div>  |

## K. Transcript Excerpts (Interview & Focus Groups)

| Expert/Company Interview                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Selected transcript excerpt (full transcript available upon request)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>Interviewee 1 (10:52)</b><br/> in one way, for me, there is nothing wrong to say that we need to use scissors, because I'm thinking, for the old people, that maybe they have a problem with the end like that is difficult to open with that like that, but it's with the scissor. It will be much easier anyway, than a glass jar or a can, and there is no risk of cutting that for me, is more important than other things. So maybe it's something we need to learn also, if we can promote different.</p> <p><b>Interviewer 1 (11:30)</b><br/> Thank you. Do you have any ideas on how you would like to do it differently than today? So are there any plans?</p> <p><b>Interviewee 2 (11:41)</b><br/> Remember that once I suggested to put, like a <b>mock up in the supermarket</b>, you know, with saying, like, try it, you know, try to open it, try to close it. Yeah, because maybe, you know, having something, you know, empty, of course, fake there that you could just touch and try to open and close could be easier. Because for me, honestly, as a sad matter, more than open ability, also maybe the fact that you carry close it is quite good advantage. And this is, again, something that people don't even think about when they see the package, and they will never know if they don't read it, of course.</p> |
| Swedish Focus Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <i>Selected transcript excerpt (full transcript available upon request)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>Participant 1 (53:26)</b><br/> Yeah, I agree. I do consider it to be very safe, so I see it as a very good thing. And I guess I never really thought about it, but I think it's because I equate sustainability with safety, like I think if someone cares about how they made the actual thing that's gonna keep the food, they probably gonna care about food safety as well. So I see it as a good thing.</p> <p><b>Moderator 1 (53:48)</b><br/> Yeah. Okay, thank you. Maybe also, regarding your point, earlier, you mentioned [Participant 2] that you often perceive like the quality and maybe also the taste and the freshness of the ingredients in carton packaging often is like lower quality because of the brand. But do you think actually that the <b>carton packaging itself has like, any influence on, like, the freshness, taste or quality of the product?</b></p> <p><b>Participant 2 (54:15)</b><br/> Oh, I think it's the <b>same, or even maybe higher.</b></p>                                                                                                                                                                                                                                                                                                                                                      |
| Southern European Focus Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <i>Selected transcript excerpt (full transcript available upon request)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>Participant 1 (2:23)</b><br/> I think like I wouldn't be interested in that. <b>I know how to cook.</b> I don't know. I don't feel like I need to wait for a [Company] to tell me how to use up a product that I bought. This feels Yeah, I don't know. I wouldn't go through the trouble. I would trust, like a famous chef or something, and not [Company] for, like, preparing a food. So yeah, I think yeah, putting a recipe on the title wouldn't change my buying decisions.</p> <p><b>Moderator 1 (3:05)</b><br/> And [Participant 2]?</p> <p><b>Participant 2 (3:07)</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

yeah, I feel like it might help someone, maybe. But I feel like, especially for all Southern Europeans, I feel like we get a very strong cooking, cuisine culture. So I feel like it will be probably useless and nobody will check those we I also interview some brands that put the recipes, but I guess, like nobody actually checks them. Or, yeah, this is not that useful, so it wouldn't influence my buying decision in any possible ways. Will be like a very useless tool to have.

## ***L. Used AI Prompts***

| Used AI Prompts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <i>AI use is aligned with FEK guidelines, which allow AI support for wording, spelling, structure and practical thesis work</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ol style="list-style-type: none"> <li>1. "Please suggest possible angles for structuring this subsection"</li> <li>2. "Please check this paragraph for grammar, spelling, and academic clarity without changing the meaning"</li> <li>3. "Please identify sentences in this paragraph that are unclear or too informal"</li> <li>4. "Please suggest how this paragraph could be made more concise while preserving my argument"</li> <li>5. "Please review whether the transition between these two paragraphs is clear"</li> <li>6. "Please point out repetitions or redundant wording in this section"</li> <li>7. "Please suggest alternative academic wording for the following sentence"</li> <li>8. "Please help me improve the formal tone of this paragraph without adding new ideas"</li> <li>9. "Please check whether the structure of this methodology subsection is logical"</li> <li>10. "Please suggest possible headings for this section based on the content I provide"</li> <li>11. "Please explain the difference between thematic analysis and content analysis in general terms"</li> <li>12. "Please explain how to report Spearman's correlation results in academic writing"</li> <li>13. "Please check whether this text is written consistently in past tense"</li> <li>14. "Please identify grammar mistakes in this paragraph and list them without rewriting the full text"</li> <li>15. "Please suggest a clearer way to phrase this sentence, but do not add new arguments or interpretation"</li> </ol> |