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ENABLERS AND BARRIERS IN GERMAN ONLINE FOOD RETAILING

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Abstract

This article discusses enablers and barriers in online food retailing in Germany. The German food retail sector is one of the largest in Europe; however, its online or Internet provision for customers lags way behind the United Kingdom and France. Prior research has considered the demand-consumer side of this dyad; however, little has been done on the online food supply-retail side. This article addresses that gap through exploratory empirical research with three retailers, three logistics service providers, and a marketing agency. There is good potential in this market but costs of fulfilment and service quality currently represent major barriers.

Keywords: online retailing, food sector, Germany

INTRODUCTION

This article discusses enablers and barriers related to online food retailing in Germany. The German food retail sector is one of the largest in Europe; however, the sector's online or Internet provision for customers is far behind the United Kingdom (UK) and France. Prior research has considered the demand-consumer side of this dyad and has highlighted German consumers' reluctance to participate in online food shopping. However, little research has been done on the online food supply-retail side in Germany.

In Germany, several online food retail start-ups failed at the turn of the millennium, mainly because of cost and logistical reasons. Since the UK and French markets are very well developed in this area, it is of interest to investigate why the German online food retail market lags behind them despite being one of Europe's largest food retailing markets. Thus, this article presents an exploratory research project guided by two research objectives: what are German food retailer and logistics service provider perceptions of (1) the important enablers and (2) the major barriers affecting online food retailing in Germany?

LITERATURE REVIEW

Our literature review considered three themes pertaining to this phenomenon: the unique context of Germany compared to other countries in Europe and North America, the domain of online food retailing, and issues of logistics and online fulfilment.

The German context

Germany is one of Europe's largest retail food markets with a population of 82 million people and food retail sales in 2012 of €186.7 billion (Access 6, 2013). By comparison, the UK retail food market was £169.7 billion in 2013 with hypermarkets, superstores, and small supermarkets accounting for 64.2% of this total. Retail food sales in France were €208 billion in 2012 with hypermarkets and supermarkets representing 75% of the market (IGD, 2014).

Structural changes in the German market since the start of the millennium have seen an intensifying concentration of the top five food retailing companies, as shown in Table 1. Further, the German retail food market has long been dominated by discounters such as Aldi and Lidl. Discounters in Germany still have 43.9% of the market – a huge share when compared to 5.6% or £9.5 billion in sales in the United Kingdom and 15% or €31.2 billion in sales in France (IGD, 2014; Thomasson, 2014) – and are currently increasing their share in the United Kingdom.

Table 1 here

Pressure from discount competition has forced German retail food chains to lower prices in order to compete and maintain or even gain customers. Thus, extensive price competition offers almost no opportunity to pass along increased costs, such as logistics costs, to final consumers (Klumpp & Jasper, 2008). Accordingly, German food retailers and in particular discounters operate on very small average profit margins of about 1% compared to higher margins found in France (5%), the Netherlands (6%), and Spain and the United Kingdom (6%–8%).

Online food retailing

The Internet has risen in importance and acceptance among firms and consumers as a way to conduct business (Xing & Grant, 2006). Almost 82% of German households have Internet access, a marginally higher percentage is found in the United Kingdom at 83%, and France has 74% household penetration (RetailNet Group, 2011). In 2004, German consumers annually spent on average €229 per person online in e-commerce transactions, but by 2010 that had grown to €477 (Wahby, 2010). According to FACT-Finder (2012) online retailing in Germany is one of the most developed e-commerce markets in Europe with almost 50% of total German retail revenues coming from online sales. The most purchased items in Germany are computers, consumer electronics, and accessories and the ten largest online retailers, including Amazon and the Otto Group, generate the majority total turnover (FACT-Finder, 2012).

Online food shopping has been presented for some time as a promising additional channel for future sales and as a medium to create customer loyalty (Fernie & Grant, 2008). Further, consumers' ability to purchase their food needs over the Internet and have them delivered to their homes represents a service innovation in retailing (Kämäräinen & Punakivi, 2002).

The United Kingdom's online food retailing market share in 2012 was about 3.8% (£6.5 billion) whereas France's share was about 2.4% (€5 billion) (IGD, 2014). Indeed, it is predicted that the UK online food and food market will almost double in value by 2017, accounting for about 6% of total retail food sales at £11.1 billion (IGD, 2014). Online retailing for food and consumer goods in France is also set to double to €10.6 billion whereas even Germany is predicted to reach €2.5.

However, one factor that deters some Europeans from moving to the Internet for food shopping is a lack of quality assurance (RetailNet Group, 2011). European food shoppers, especially those in countries where food is an important part of their culture (e.g., France and Italy) are very concerned with the freshness of their produce and other consumables. Another reason is that delivery fees are still expensive, especially in areas where e-commerce is relatively underdeveloped (e.g., Southern and Eastern Europe).

Additionally, delivery options are often limited to a few select areas throughout Europe. The continental European online food market is developed around only a few high-density urban areas. Whereas home delivery is convenient for European shoppers because it saves them the time of travelling to the supermarket, delivery time slots are often limited and conflict with work schedules. On average, 75% of typical European online shoppers work outside the home. Thus, delivery options after work hours are essential to the growth of this market (RetailNet Group, 2011).

Germany's online food retailing market share in 2012 was only about 0.06% or €1.1 billion (IGD, 2014). It is too soon to tell how the German online food market will double in three years of performance given some consumer cultural aspects. Fernie et al. (2006) investigated these issues in an analysis of Walmart's experience in Germany. German shoppers still show a strong preference for their neighbourhood stores and are extremely price conscious because of leaders such as Aldi and Lidl, and these attitudes are a deterrent to online buying. Further, they tend to shop for different items at different formats – a discounter for everyday basics, local markets for fresh items, and hypermarkets for bulk items. German consumers also like to physically engage with products and the process; for example, they prefer to pack their own bags and hence may not like online store staff picking products for them (Fernie et al., 2006).

A recent Europe-wide survey by McKinsey (Pusch, 2013) found that the most important buying motives for German consumers in online food purchases were home delivery (38%), curiosity (33%), attractive prices (27%), and time savings (25%). The survey also revealed other important findings – a majority of German interviewees had never bought food on the Internet for reasons such as existing shopping possibilities (66%), a lack of visibility and tangibility of online products (60%), and unsafe product quality (55%). The survey revealed similar results from consumers in France, Spain, and the United Kingdom. For example, about one-quarter of French consumers who shopped for food online once continue to do so regularly. Their main concerns are unsafe product quality, followed by reduced assortments and additional fees.

However, the German market is undergoing a makeover as shoppers demand more upmarket products, such as organic meat and exotic cheeses, and retailers take tentative steps onto the web (Thomasson, 2014). German food shoppers are unique among major European countries in that more of them shop at online-only retailers for food than shop from websites of store-based supermarkets. This reflects the generally high rates of Germans who shop at ‘pure-play’ retailers (Mintel, 2014; Seitz, 2013).

One of the most well-known pure players, Amazon, entered the German online food market in 2010. As Germany’s fifth largest e-commerce retailer, Amazon has developed partnerships with a few local supermarkets (Froodies, Gourmantis, Moevenpick) to provide more than 35,000 products. Further, Amazon launched its *Amazon Fresh* food home-delivery service in 2014 in Germany (Mintel, 2014). This was their first fresh food operation outside of the United States and they have already established distribution centres and a fleet of delivery trucks in the country.

Another reason for the gaps across similar countries is that each country has different retail food market structures. Unlike Germany, the United Kingdom and France have highly consolidated food markets with less price competition and fewer hard discounters, and this enables ‘high-value service’ retail concepts such as online food (Grant et al, 2006). Further, some of the requirements for establishing an online food market – large metropolitan areas with fewer food retailers, high broadband usage, and lots of online shoppers – vary considerably across countries.

About a fifth of UK households are buying groceries online every month. Of these, a third use online as their main channel for buying food and groceries, with two-thirds using it as a secondary channel; that is, retailers such as Tesco are using online as a complementary channel in a multi-channel environment. Online growth in France is driven primarily by the expansion of ‘click and collect’ – or ‘Drive’ as it is known in some markets – with the number of Drive outlets doubling since 2012 (IGD, 2014; Thomasson, 2014).

Issues of logistics and online fulfilment

The rise of e-commerce has brought challenges in retail logistics, especially in the physical distribution to the final customer, that is, the consumer. In traditional retail businesses products are selected and taken home by consumers from the local store at any time they want (Teller et al., 2006, 2102). By contrast, e-commerce or online retail enables consumers to select products online and have them delivered to their doorstep (Xing et al., 2011). In the online environment, logistics operations of order-picking, packaging, and delivery that are usually performed in-store by consumers have to be undertaken by the retailers (Kämäräinen & Punakivi, 2002). Thus, the responsibility for the fulfilment process has switched from the consumer to the retailer. There are two primary methods for fulfilment, both of which are active in the United Kingdom: picking in an existing retail store, as done by Tesco and Sainsbury (Grant et al., 2006), or using dedicated online facilities or ‘dark stores’ such as Ocado for itself, Waitrose, and Morrisons (Wood, 2012).

Logistics and fulfilment operations under both scenarios, that is, the ‘last mile’ delivery, are expensive to carry out (Grant et al., 2006; Kämäräinen & Punakivi, 2002), entail operational difficulties (Fernie et al., 2014), and are more environmentally unfriendly (McKinnon & Edwards, 2014). Most companies offering home delivery use a rigid methodology based on fixed schedules (ChainLink Research, 2013). During final online checkout a few of these scheduling choices are offered, generally with long delivery windows, based on a static model using a set of assumptions about what demand might be for a given territory.

This approach is limited because consumers really want a precise appointment because delivery services require them to be at home. Hence, ‘online shopping cart abandonment’ occurs frequently at the checkout payment point when consumers realise they are not going to get the product when they want it.

Xing and Grant (2006) developed and later tested (Xing et al., 2010) an electronic service quality physical distribution quality for non-food online retail that has four critical elements in the online purchase process: availability, delivery time, condition on arrival, and return options and convenience if the product is not to standard or damaged. In this regard a

consumer's behaviour tends to be more like a business-to-business logistics buyer instead of exhibiting usual hedonistic consumer behaviour patterns. An alternative is to offer consumers more choice while they are in the buying process, which can be critical because a retailer's ability to meet a consumer's schedule is often a key factor in making a sale (ChainLink Research, 2013).

Since 2000, several attempts in online food retailing in Germany have been made but have failed. For example, Rewe had to withdraw from the online food market a few years ago because of unprofitability and lack of experience (RP-Online, 2010; Seitz, 2013). Two main barriers have dominated these failures. One was delivery cost. Delivery operations were based mainly on expensive and inefficient postal services and deliveries and would take from one to four days to occur. A study on costs revealed that standard delivery fees were about €0.77 for a set of ten food products valued at a price of €19.96 (RP-Online, 2010) compared to a £7.50 delivery charge used by Tesco in its online process (Grant et al., 2006). An overnight express delivery was being charged an additional €3. Along with costs, it wasn't possible to maintain an appropriate cold chain for fresh products because specialised delivery services are almost nonexistent or locally limited in German marketplaces.

The other barrier was the nature of the German retail industry. Because of the high shop density and short distances to local food shops, German customers hesitate to shop for groceries online as noted previously (Teller et al., 2006, 2012). Moreover, because of online groceries being more expensive than in a local store, consumers were reluctant to pay extra costs (RP-Online, 2010).

In summary, most studies on this phenomenon have concentrated in other markets such as the United States, United Kingdom, and Scandinavia, where an online food retailing business model has existed for a longer period. In the German marketplace there are almost no well-known e-commerce food retailers in the market (Phaydon, 2008); it has been dominated by primarily niche food retailers that offer gourmet and special groceries at limited product ranges at higher price levels. Further, the scarce literature on the German market has also

mostly concentrated on consumer or demand issues in online shopping or superficial reasons why German food retailers have failed in e-commerce.

Hence, because of the underdevelopment of online food retailing in Germany and the dearth of extant literature regarding German online food retailing, there is a strong need for a study of this sector's potential and enablers, as well as any barriers to success, from the supply side perspective of food retailers and logistics service providers (LSPs). Accordingly, we derived the following two research objectives for exploratory study:

RO₁: What do food retailers and LSPs perceive to be the critical enablers for online food retailing in Germany?

RO₂: What do food retailers and LSPs perceive to be the major barriers affecting online food retailing in Germany?

METHODOLOGY

Given these two research objectives, our empirical study followed an interpretive philosophy and is exploratory because it seeks to get insights into opportunities and barriers of online or Internet adoption by food retailers in Germany. Thus, the study focused on details of the present situation to gain insights into this phenomenon, that is, 'what is currently happening' and 'why it is happening' within a particular industry (Simons, 2009). Accordingly, a research design and strategy of individual company case studies was considered the most suitable and followed well-established guidelines (Ellram, 1996; Simons, 2009; Yin, 2003). Primary data collection came from semi-structured interviews with actors at the six case companies and secondary data collection put together information from organisational reports, documents, and company websites.

Companies as units of analysis comprised German food retailers and LSPs in the food retail sector and initial requests for participation and interviews were made by telephone and e-mail. However, out of the 18 retailers contacted only three were interviewed; eight retailers declined for competitive reasons and seven did not respond. Three out of five LSPs contacted

agreed to participate and an online marketing agency was also interviewed for a nonsector perspective to provide a total sample size of seven companies. Interviews were audio recorded and transcribed and the data were summarised and categorised according to key themes in context with the research objectives both on within-case and cross-case bases (Yin, 2003). A list of participating firms and interviewees, disguised for confidentiality reasons, is shown in Table 2.

Table 2 here

FINDINGS

Following is a discussion of findings from the interview analyses that also notes related literature.

ROI: Critical enablers for online food retailing in Germany

Interviewees agreed that selling food online provides an additional sales channel to increase sales. They also mentioned creating consumer loyalty and reaching a wider geographical area of potential customers. Interviewees were next asked about underlying enablers in online food retailing, which, in their opinion, must be in place. In essence, the analysis determined such aspects can be categorised into two factors: certain consumer base and a broad and balanced product line.

A certain consumer base is crucial to conduct online food retailing to generate sales and thus turn this business model into profitability. It was commonly agreed by interviewees that additional costs in terms of fulfilment operations can be covered only if a critical mass can be generated, which in turn implies the problem that “*German consumers are used to paying small amounts of money for groceries and are not willing to pay for any extra services*” (RET 2). Therefore, it is essential to convince consumers of the added value this business model offers (Teller et al., 2006, 2012). Retailers named on the one hand single households, which are characterised by stressed, young, career-minded people and on the other hand the so-called cash rich–time poor families who strive for a convenience that outweighs the price (Xing & Grant, 2006).

Creating trust and consumer loyalty is also of great importance to the food retailers to convince consumers of this business model. They see enormous advantages in consumer acquisition for established food retailers in the German market such as Rewe, Metro, or Edeka because of their brand awareness (Kämäräinen & Punakivi, 2002).

Interviewees also noted that online food retailing is successful only when a broad assortment of products is being offered online (Pusch, 2013; RetailNet Group, 2011). The importance of assortment is that it contributes to the amount of the online shopping cart. They agreed this is an important aspect because the amount in the cart is significant to cover additional costs of online food retailing and thus needs to be higher in online shopping.

They also confirmed that German consumers are driven more by quality aspects than by the price, which, according to them, represents an important component in the future of online food retailing. Therefore, particular aspects of product quality are of high importance to them, including fulfilment quality issues in terms of delivery, overall service quality, and the quality of the website (RetailNet Group, 2011; Xing & Grant, 2006).

Issues about the development of technology and the online shop regularly emerged. All retailers and the marketing agency concluded that the presentation of a food retailer on the Internet is of key importance to keep consumers and to convince them to buy groceries online. Factors such as ease of handling, clarity, processing speed, and up-to-date information occurred regularly. It is also important to provide a logical flow of the assortment and attractive display of products in terms of pictures and provide an easy-to-use website to potential consumers to make them familiar with this topic (Grant et al., 2006).

Fulfilment issues concentrated mainly on consumer satisfaction and economic aspects in terms of effective order processing and delivery operations to the final customer. The retailers agreed that in particular effective and quick deliveries are an essential part in gaining customer loyalty. In particular, fulfilment operations help to establish a superior service and differentiate from the competition (Seitz, 2013; Xing & Grant, 2006).

Retailers also emphasised different aspects in fulfilment issues that overlapped in certain points. In particular, information technology (IT) structures, such as an efficient ERP (inventory) system, are indispensable to derive cost-efficient processes and clear interfaces among the online shop, local store and logistics service providers (Xing et al., 2011).

RO2: Major barriers affecting online food retailing in Germany

It was commonly agreed that the food sector in general only offers very small margins, which in turn makes it difficult to cover additional costs that occur within this business model. The retailers considered it necessary to make use of strategic alliances in terms of a powerful LSP to best overcome logistics issues (Xing et al., 2011). Retailers and LSPs also noted that a critical mass to turn this business model into profitability is currently insufficient, which also applies to logistical issues such as efficient truck utilisation.

The topic of consumer acceptance was an inherent part during the interviews. Although all interviewees agreed on the point that customer acceptance is relatively low at the moment, their opinions differed on future prospects. They referred to a low potential of higher-age groups that have no Internet affinity and thus are hesitant to shop online, whereas the next generation may be more Internet savvy. And though interviewees generally agreed on the potential of this target group, their opinions differ in its importance.

LSPs gave a broad insight into general aspects of online food logistics and in particular what challenges they see in the B2C side in terms of warehousing, handling, and delivery operations in the German market. They noted that maintaining a cool chain poses the major challenge because this touches on many aspects within the operations. This makes it more difficult to perform the already-challenging tasks in conventional e-commerce logistics because “*there are very strict governmental conditions in food handling in particular in Germany*” (LSP1).

This aspect includes the availability of specific and cost-intensive warehouses, delivery vans, and efficient processes that can cope with these challenging circumstances as “*the cooling*

chain must not be interrupted at any time!” (LSP2). All interviewees emphasised hygienic requirements for perishable, fresh groceries that need to be treated specifically and that in turn pose complex and cost-intensive requirements for the logistics task.

During the interviews it emerged that the German online food logistics market is currently not able to provide nationwide market coverage for this business model because only limited local specialised LSPs are available. Although the B2C logistics market is well developed in terms of conventional goods the market does not provide the underlying conditions “*because there is no large company such as DHL which can cope with refrigerated goods in this segment*” (LSP2). To overcome these challenges, it was considered that cost-intensive thermo packaging may have to be used to serve the market but in turn implies disproportionately high delivery fees.

Finally, deliveries from local food stores in a given area are also a major logistics challenge. LSPs are concerned about an even greater degree of shorter order lead and processing times and the unpredictability of demand in this business model. This implies the problem of cost-effective route planning, truck utilisation, and effecting the last mile (Grant et al., 2006; Kämäräinen & Punakivi, 2002).

CONCLUSIONS

This study has investigated a vexed topic in Germany. Findings indicate that although there is a significant opportunity to make inroads with online food retailing, the German market poses a particular challenge in this field and there are uncertainties about the future of this model. Summarising, the underlying enablers in the German market include a significant customer base, a broad product portfolio, service quality, website and technology, and fulfilment; whereas barriers identified included issues about profitability, customer acceptance, and operational issues for fulfilment. Findings generally support the extant literature on the three themes discussed previously.

An important implication for theory is the need for deeper, explanatory research into German consumer attitudes and behaviour towards online food purchases to determine the extent of

the market. Current industrial prognostications notwithstanding (FACT-Finder, 2012; IGD, 2014; Pusch, 2103), the sector's true potential remains a 'black box' similar to the long-standing consumer behaviour model in marketing (Teller et al., 2006, 2012; Xing & Grant, 2006). Paraphrasing the former US Secretary of Defense Donald Rumsfeld, until the 'known unknowns' and 'unknown unknowns' of real consumer demand for online food retailing are known German retailers will have difficulties developing proper business cases for investment in the online environment. Hence, the suggestion that the online food sector will double in growth over the next two years (IGD, 2014) is quite uncertain at this point.

Managerial implications include addressing issues of delivery costs for the entire online food supply chain, including cold-chain issues to maintain freshness and provide quality assurance; issues in the last mile to households, such as routing and scheduling; and environmental issues pertaining to unattended delivery and urban logistics (Grant et al., 2006; Kämäräinen & Punakivi, 2002; McKinnon & Edwards, 2012). Again, developing proper business cases is problematic at this time without relevant and meaningful scenarios of online food sales demand as noted, but also proper costing models based on such demand and fulfilment options, such as in-store (Grant et al., 2006) or dark store (Wood, 2012) fulfilment. German retailers and LSPs might consider establishing working groups under the Bundesvereinigung Logistik (German Logistics Association) or GS1 efficient consumer response (ECR) trade associations together with academia to address such demand and operational issues.

Limitations and challenges of this study were mainly because of the time available to gather data and limited participation from retailers. Findings must therefore be interpreted with caution because they are from a limited range of participants and thus may not be generalisable. Further research should consider a broader scope of opinions to obtain a more representative result. But despite the foregoing, this article answered the research objectives within its scope. New knowledge was created during this research project about this important topic against the background that this business model is very underdeveloped in Germany and therefore offers high potential for further investigation.

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Retailer	Grocery Retail Market Share 2012 (%)
Edeka	16.4
Rewe Group	11.7
Schwarz Group	10.6
Aldi	9.3
Metro (Real)	7.0
Others	45.0

Table 1: German Food Retail Market Share 2012 (Source: Access 6, 2013)

Firm	Details	Interviewees
LSP 1	One of the largest German logistics service providers specialising in food logistics and offering refrigerated transport ranging from small parcels to large pallet loads	Marketing and sales director
LSP 2	One of the largest German parcel delivery service providers specialising in business-to-consumer (B2C) e-commerce fulfilment	Senior business development manager
LSP 3	Collaborative partner of one of the largest parcel service providers in Germany and Europe	Route development manager
RET 1	One of the leading retailers in Germany and Europe with well-known product offerings in various stores under the parent company umbrella and has undertaken several pilot projects in online food retailing	Head of e-commerce/strategic development
RET 2	Mid-sized food retailer situated in a northern German urban area and has limited experience in online food retailing with specialty offerings such as gift hampers and regional products	CEO and branch manager
RET 3	Food retailer operating in northern Germany that does not currently offer online food retailing, although it has unsuccessfully tried to do so in the past	Branch manager
MKT 1	Online marketing agency that advises firms in their online appearance; was interviewed to derive a deeper understanding about general online retailing issues because of the exploratory nature of the research topic	Lead consultant

Table 2: Details of Participating Firms and Interviewees