

## Exploring Success Factors and Constraints in German Online Food Retailing

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### Abstract

This paper discusses success factors and constraints in online food retailing in Germany. While the German food retail sector is one of the largest in Europe, the sector's online/Internet provision for customers lags way behind the UK and France. Prior research has considered the demand/consumer side of this dyad however little has been done on the supply/retail side. This paper addresses that gap through 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 constraints.

**Keywords:** Online retailing, food retailing, Germany

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This paper discusses success factors and constraints for online food retailing in Germany. While the German food retail sector is one of the largest in Europe, the sector's online/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 grocery shopping. However, little has been done on the supply/retail side in Germany.

In Germany, several online retail grocery start-ups failed at the turn of the millennium, mainly for cost and logistical reasons. Due to the fact that the UK and French markets are very well-developed in this area, it is of interest as to why the German online food retail market lags behind them despite being one of Europe's largest grocery retailing markets. This paper discusses an exploratory research project guided by two research objectives: what are the important success factors and major constraints for online grocery retailing in Germany?

## **Literature Review**

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 Euros (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 Euros in 2012 with hypermarkets and supermarkets representing 75% of the market (IGD, 2014).

Structural changes in the German market over the last ten years 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 still have 43.9% of the market (IGD, 2014, Thomasson, 2014) – a huge share when compared to 5.6% in the UK (or £9.5 billion in sales) and 15% in France (or 31.2 billion Euros in sales).

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Table 1 here

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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 almost offers no opportunity to pass along increased costs, such as logistics costs, to final consumers (Klumpp and Jasper, 2008). Accordingly, German food retailers and in particular discounters operate on very small average profit margins of around 1% compared to higher margins found in France (5%), the Netherlands (6%), and Spain and the UK (6-8%).

However, while Germany is one of the largest retail food markets in Europe, it significantly lags behind in online food retailing when compared to the driving force in Europe, the UK, as well as France. Online food retailing market share in 2012 was about 3.8% (£6.5 billion) in the UK and 2.4% (5 billion Euros) in France, but only about 0.06% (1.1 billion Euros) in Germany (IGD, 2014).

The Internet has risen in importance and acceptance among firms and consumers to conduct business (Xing and Grant, 2006). Further, online grocery shopping has been presented as a promising additional channel for future sales and as a medium to create customer loyalty (Fernie and Grant, 2008). Lastly, consumers' ability to purchase their food needs over the internet and have them delivered to their homes represents a service innovation in retailing (Kämäräinen and Punakivi, 2002).

Indeed, it is predicted that the UK online food and grocery market will almost double in value by 2017, accounting for around 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 from to 10.6 billion Euros while even Germany is predicted to reach 2.5 billion Euros.

One factor that deters some Europeans from moving to the Internet for grocery shopping is a lack of quality assurance (RetailNet Group, 2011). European grocery 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 grocery market is only developed around a few high density urban areas. While home delivery is convenient for European shoppers because it saves them the time of traveling 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).

While it is too soon to tell how the online grocery market will perform in Germany, German shoppers still show a strong preference for their neighbourhood stores and are extremely price conscious due to leaders such as Aldi and Lidl. However, the German market is

undergoing a makeover as shoppers demand more upmarket products like organic meat and exotic cheeses and retailers take tentative steps onto the web (Thomasson, 2014).

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

Notwithstanding, almost 82% of German households have Internet access; a marginally higher percentage is found in the UK at 83% while France has 74% household penetration (RetailNet Group, 2011). In 2004, German consumers spent on average 229 Euros per person online but by 2010 that had grown to 477 Euros (Wahby, 2010).

But around 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 a secondary channel. 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 in the past 15 months (IGD, 2014, Thomasson, 2014).

However, a new, foreign player was introduced into the German online food market in July 2010: Amazon. As Germany's fifth largest e-commerce retailer, Amazon has the potential to be successful in the struggling online food market. Amazon has partnerships with a few local

supermarkets (Froodies, Gourmantis, Moevenpick) to provide over 35,000 products. Further, Amazon is soon to launch its Amazon Fresh grocery home-delivery service in Germany (Mintel, 2014). Amazon Germany has reportedly already established distribution centres and a fleet of delivery trucks in the country. This will be Amazon's first Fresh grocery operation outside of the US, where it is offered in Seattle, Los Angeles and San Francisco.

German grocery shoppers are also unique among the major European countries in that more shopped at online-only retailers for groceries than shopped from the websites of store-based supermarkets. This reflects German shoppers' generally high rates of shopping at pureplay retailers (Seitz, 2013, Mintel, 2014).

The rise of B2C e-commerce has brought challenges in retail logistics, especially in the physical distribution to the final customer. In traditional retail businesses products are selected and taken home by the consumers from the local store at any time they want. In contrast, e-commerce enables consumers to select the products online and have them delivered to their doorstep (Xing et al., 2011). Additional operations of order-picking, packaging and delivery have to be performed by the retailers which are expensive to carry out (Kämäräinen and Punakivi, 2002). Thus, the responsibility for the fulfilment process has switched from the consumer to the retailer.

Research regarding German history of online food retailing among B2C e-commerce is limited and studies of e-grocery are mainly focused on the USA, UK and Scandinavia. In the German market there are almost no well-known e-grocery 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.

Since 2000, several attempts have been made but have failed. For example, the Otto group and Rewe had to withdraw from the online food market a few years ago due to unprofitability and lack of experience (RP-Online, 2010, Seitz, 2013). Two main constraints dominated these failures.

One was delivery cost. Delivery operations were mainly based on expensive and inefficient postal services and deliveries time take place from one to four days. A study on costs revealed that standard delivery fees were about 30.77 Euros for a set of ten grocery products valued at a price of 19.96 Euros (RP-Online, 2010). An overnight express delivery was being charged an additional 13 Euros. Along with costs, it has not been possible to maintain an appropriate cold chain for fresh products as specialized delivery services are almost non-existent or locally limited in the market.

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

Hence, due to the underdevelopment of online food retailing in Germany there is a need for further research on this topic. Most studies on this phenomenon have concentrated in other markets where this business model has existed for a longer period. The scarce literature on the German market has mostly concentrated on consumer or demand issues in online shopping or superficial reasons why German food retailers have failed in e-commerce.

Thus, there is a strong need for study of this sector's potential, as well as any constraints to success, from the supply side perspective of the retailers and logistics service providers (LSPs). Accordingly, we derived two research objectives for exploratory study with them: what do they believe are the critical success factors (research objective or RO1) and major constraints (RO2) to online retail food provision and adoption in Germany?

## **Methodology**

Given the research objectives above, the empirical study followed an interpretive philosophy and is exploratory as it seeks to get insights into opportunities and barriers of e-grocery adoption by retailers in Germany. Thus, the study focused on details of the present situation to gain insights into this phenomenon, i.e. 'what is currently happening' and 'why it is happening' within a particular industry (Simons, 2009). Accordingly, a research strategy of individual company case studies was considered the most suitable and followed well-established guidelines in the literature (Ellram, 1996, Yin, 2003, Simons, 2009). Data collection came from semi-structured interviews with actors at the case companies as well as a secondary collection of organizational reports, documents and company websites.

Companies as units of analysis comprised German food retailers and LSPs in the food retail sector and requests for interviews were made by telephone and e-mail. However, out of the 18 retailers contacted only three were interviewed as eight retailers declined to participate for competitive reasons and seven did not respond. Three out of five LSPs agreed to be interviewed and an online marketing agency was also interviewed for a non-sector perspective for a total sample size of seven. Interviews were audio recorded and transcribed and the data were summarized and categorized according to key themes in context with the research objectives both on a within-case and cross-case basis (Yin, 2003).



## **Findings**

### *ROI: Critical success factors for online food retailing in Germany*

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

A certain customer base is crucial to conduct online grocery 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 only be covered if a critical mass can be generated which in turn implies the problem that *“German customers are used to paying small amounts of money for groceries and are not willing to pay for any extra services”* (retailer2). Therefore, it is essential to convince customers of the added value this business model offers (Teller et al, 2006, 2012). Retailers named on the one hand single households which are characterized by stressed young career-minded people and on the other hand the so-called ‘cash rich–time poor’ families who strive for convenience that outweighs the price (Xing and Grant, 2006).

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

Interviewees also noted that online grocery retailing is only successful when a broad assortment of products is being offered online. The importance of the assortment is due to the fact that it contributes to the amount of the shopping cart. They agreed this is an important aspect as the amount in the shopping cart is significant to cover additional costs of online grocery retailing and thus needs to be higher in online shopping.

They also considered that German customers are driven more by quality aspects than by the price which, according to them, represents an important component in the future of online grocery 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 (Xing and Grant, 2006, Xing et al, 2011).

Issues about the development of the technology and the online shop regularly emerged. All retailers and the marketing agency concluded that the presentation of a grocery retailer on the Internet is of key importance to keep customers 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 customers to make them familiar with this topic (Grant et al, 2006).

Fulfilment issues concentrated mainly on customer 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 (Xing and Grant, 2006, Seitz, 2013).

Retailers also emphasized different aspects in fulfilment issues which 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 between the online shop, local store and logistics service providers (Xing et al, 2011).

### *RO2: Major constraints for 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 utilization.

The topic of customer acceptance was an inherent part during the interviews. While all interviewees agreed on the point that customer acceptance is relatively small 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. While 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 grocery logistics and in particular what challenges they see in the B2C side in terms of warehousing, handling and delivery

operations on the German market. They noted that maintaining a cool chain poses the major challenge as this touches upon many aspects within the operations. This makes it more difficult to perform the already challenging tasks in conventional e-commerce logistics as *“there are very strict governmental conditions in grocery 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 emphasized hygienic requirements for perishable, fresh groceries which need to be treated specifically and which in turn poses complex and cost intensive requirements on the logistics task.

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

Further, deliveries from local grocery 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 a cost effective route planning, truck utilization and the problem of the ‘last mile’.

## **Conclusions**

This study has investigated a vexed topic in Germany. Findings indicate that while 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. Summarizing, the underlying success factors in the German market include a significant customer base, a broad product portfolio, service quality, website and technology, and fulfilment; while barriers identified included issues about profitability, customer acceptance and fulfilment. Findings generally support the extant literature however space limitations for this paper preclude a deeper discussion.

Limitations and challenges of this study were due mainly to the time available to gather data and limited participation from retailers. Findings must therefore be interpreted with caution as they are from a limited range of participants and thus may not be generalizable. Further research should obtain a broader scope of opinions to obtain a more representative result.

Despite the foregoing, this study has 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.

Finally, we acknowledge and thank the two anonymous reviewers who suggested we reshape the theoretical background and provide a few more methodological details.

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<b>Retailer</b>	<b>Grocery retail market share 2012</b>
Edeka	16.4%
Rewe Group	11.7%
Schwarz Group	10.6%
Aldi	9.3%
Metro (Real)	7.0%
Others	45.0%

**Table 1 German grocery retail market share 2012 (Source: Access 6, 2013)**