

Drs Joost van der Laan

NINE BATTLES of ONLINE GROCERY Part 1



your unique manual for developing
a profitable online food business

RETAIL ECONOMICS

Category Management | Store Operations | Logistics | Online Retail

0. INTRODUCTION TO THIS BOOK

0.1 How to profit from this book

Model the successful patterns. What are patterns and performance indicators of successful online grocery retailers. The key to success is to recognize these patterns and to consistently model them and use them to guide the decisions you make in your business.

Study of successes and failures. When I did my research for this book, I studied the best online grocers on the planet. But I also studied the many failures of online grocery retail. Some as a consultancy project for an informal investor. And two failures as director of a wholesale company that was supplying early online grocers that finally went bankrupt. I still remember the discussions very well when I tried to get our money back.

0.2 Why listen to Drs. Joost van der Laan

This book not only covers international market developments, but also process analysis and actionable recommendations for each marketing and logistics step in de grocery shopping and delivery process.

Drs. Joost van der Laan is director of RetailEconomics. During his career he worked as manager and consultant with many retail companies, national brand suppliers, consultancy firms and universities:



- **Bijenkorf Marketing Research and Development.** My first job was marketing research manager of the Bijenkorf department stores. I developed zip code software to plan the optimal distribution patterns of promotion material and to analyze the sales results.
- **Retail consulting.** I provide consulting services and training to retailers, suppliers and service organizations. He managed more than 50 category management projects for major national brand suppliers and retailers
- **Ahold logistics.** Worked as logistics manager and controller for Ahold, where I developed and managed the third full line distribution center; the results included outsourcing part of the transportation fleet.
- **Jumbo marketing.** Participated in the development of the successful supermarket chain Jumbo, by changing customer frustrations into unique selling propositions. Since then Jumbo increased market share from 1.2% to 19%.
- **PWC.** At consultancy firm PWC I directed marketing projects for Sara Lee and Tesco, Bacardi and Ahold, Unilever and Jumbo, and for Procter & Gamble
- **Nielsen.** Was director at Nielsen, in charge of retail cost/profit modeling projects and category management development
- **At Kearney.** Developed the Total Quality service area of AT Kearney Management Consultants

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- **Logistics director Blokker stores.** Developed an automated warehouse for a large assortment of household products.
- **Erasmus Food Management Institute.** Was research director, working with students to report on developments in FMCG and online grocery consumer research.
- **Publications.** Published articles on (online) grocery shopping in trade journals. In 1999 the first publication about the Online Grocery Retail model, in which overly optimistic claims of consultancy firms about the potential of Online Grocery were challenged.

This is part 1 of the e-book (page 1 – 75)

You can download part 2 [by clicking here](#)

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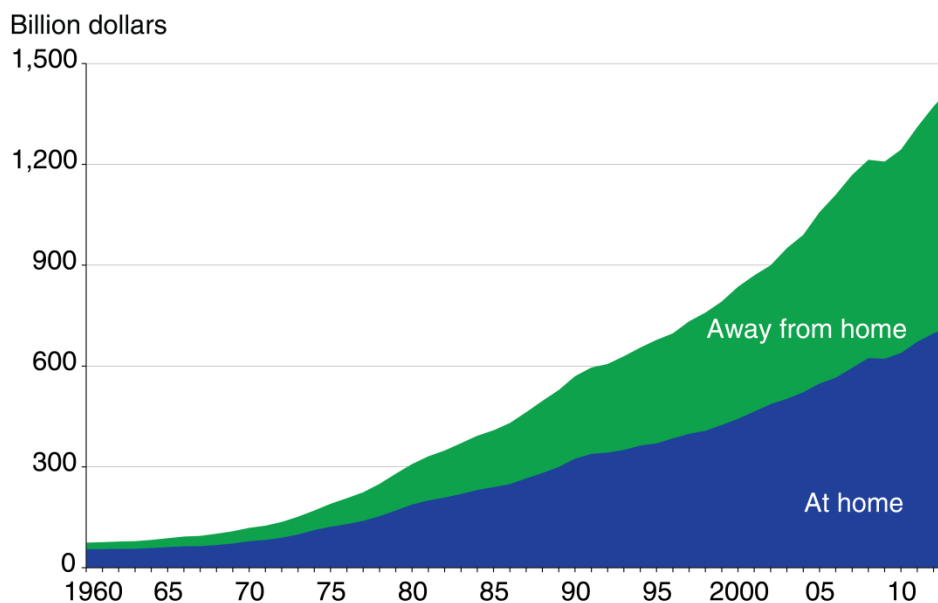
1. THE MARKET OF ONLINE GROCERY RETAIL

1.1 The international “Law of Food Spending”

*The higher the disposable income,
the higher the **absolute** food spending
and the lower food spending as **percentage** of disposable income.*

The grocery industry is one of the largest segments in global retail, in which established international players lead the way with significant market share. In the US an average household spends \$3.971 per year (2014) on food at home and \$2.787 per year (2014) on food away from home. Total food expenditure is 9.7% of disposable income.

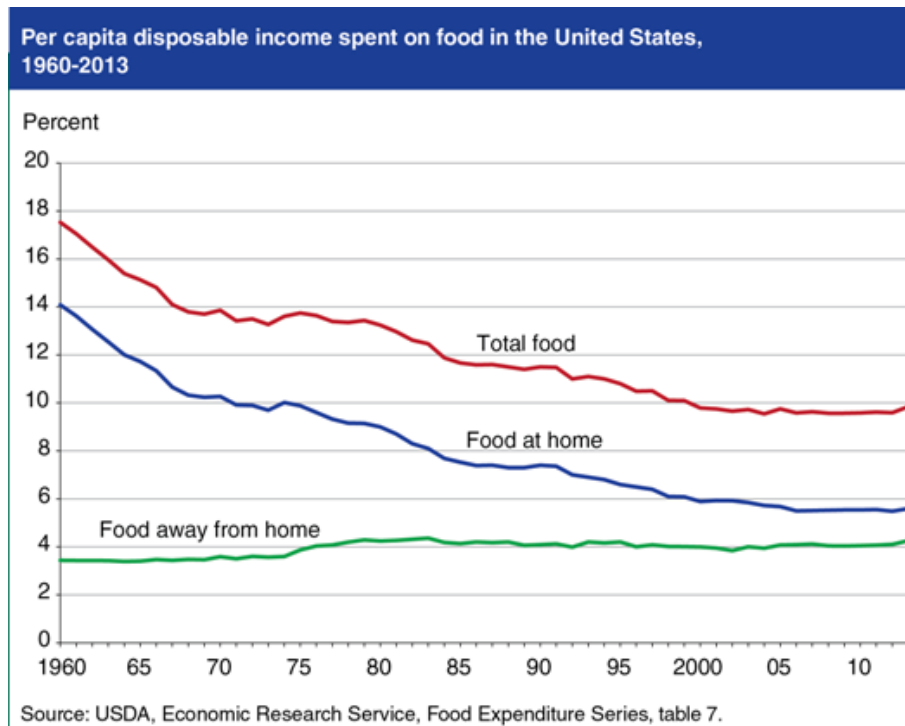
Food-at-home and away-from-home expenditures in the United States, 1960-2013



Source: USDA, Economic Research Service, Food Expenditure Series.

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The food at home expenditures (part of groceries) are rising, but total food expenditures and food at home as share of disposable income is declining since 1960. See the next diagram.



Grocery spending is income dependent. There is a worldwide relationship between food spending and income. The higher disposable income:

- the higher **absolute** food spending
- the lower food spending as **percentage** of disposable income.

I call this relationship of income and food: "the International Law of Food Spending".

House and car. What happens with the rest of high or rising disposable income? People are spending it on a bigger house they can hardly afford, and they are spending it on a more expensive car they also can hardly afford.

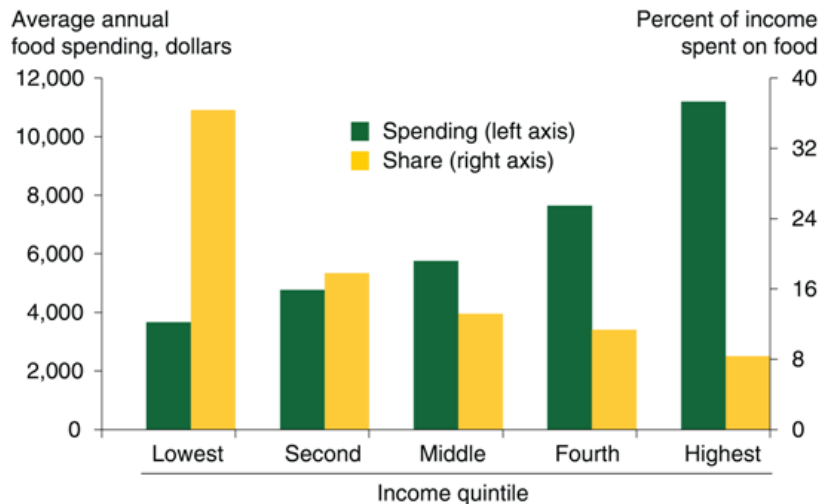


Most expensive home in Mumbai India

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Comparing cross sections. The “International Law of Food Spending” also becomes clear by comparing cross sections of US consumers. Low income Americans spend only \$4,000 per year on food, but almost 35% of their disposable income. High income Americans spend \$11,000 per year on food, which is only 8% of their income.

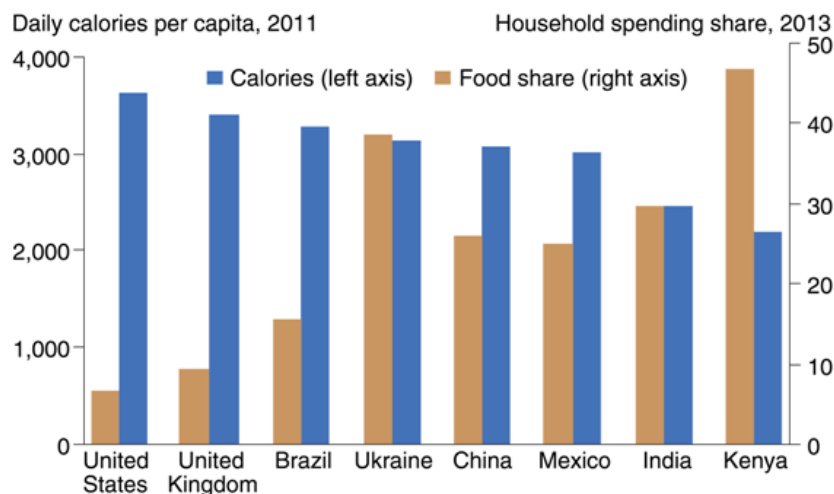
Food spending and share of income spent on food across U.S. households, 2013



Source: USDA, Economic Research Service using data from U.S. Bureau of Labor Statistics, Consumer Expenditure Survey, 2013

Comparing different countries. The “law of food spending” becomes also very clear by comparing caloric intake and household spending on food of different countries. People in the US and the UK have high calorie intakes, but spend less than 10% of disposable income on food. Households in India and Kenya have low calorie intakes, but spend on average more than 30% of their income on food.

Calorie availability and share of consumption expenditures spent on food at home



Source: Expenditure data from USDA, Economic Research Service using data from Euromonitor International. Calorie data from FAOSTAT.

1.2 The grocery retail revolution

The state of the grocery industry is changing rapidly. Traditional grocery retailers must deal with price wars, reduced margins and growing consumer appetite for organic health food. And digital trends are forcing retailers to adapt their business models.

Consumers are shopping for groceries at multiple channels. The trend of shopping at different types of stores is not new. Consumers are easily switching between supermarkets, hypermarkets, discount stores, convenience stores, specialty stores and online stores. It is no problem anymore for consumers to visit a service supermarket and a discount store in one trip. And supermarkets with mainly organic foods (example: WholeFoods) are becoming popular.

Private label is gaining market share. National brands used to be the traffic-builders of grocery stores. And when a popular national brand product was out-of-stock, consumers were inclined to look elsewhere (and stay there). But private label products are becoming more popular, because they are not only cheaper, but the quality perception of private labels is also improving. This is a great opportunity for grocery retailers, since private label products offer excellent gross margins and make prices less transparent.

Private Label essential for profitability. *In chapter 12 we will show, that the mix of high gross margins and low price transparency of private label products is essential for online grocery retailers to be profitable.*

Large supermarkets are becoming smaller. Supermarkets in the US used to be extremely large. But there is a clear downsizing trend. 5.000 m² (50.000 square feet) used to be a normal size in the US, but the average size is declining to 46.000 square feet (source: Food Marketing Institute).

Chad Arnold (CEO of Door to Door Organics): "When a customer walks into a supermarket of 40.000 items and only wants to buy 30 of them, that is a terrible customer experience".

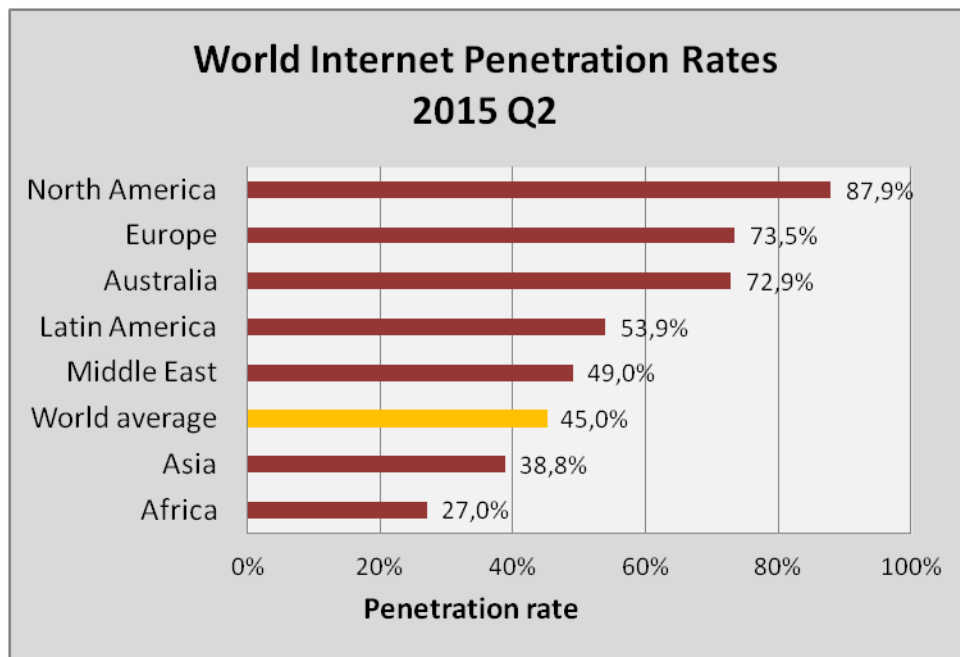
Small supermarkets are becoming larger. In my home country The Netherlands, a large supermarket is 1.500 - 2.000 m² (about 17.500 square feet), and the trend is that many supermarkets smaller than 1000 m² (10.000 square feet) are disappearing. In the US the convenience store format is becoming more and more popular. Kroger is opening a new Turkey Hill Market store of 6.800 square feet, while the old ones were 4.000 square feet.



1.3 Internet penetration is high and growing

A major social change is the fast advancement in technology and how this has impacted our daily life. Wider internet access with personal computers, mobile devices, apps and increasingly faster broadband speeds, enable people to use technology more than ever before.

Internet penetration sky high. Internet penetration has grown sky high in USA, Australia and Europe, and is growing with a high rate in other regions of the world:



Source: Internet World Stats

Internet penetration is still relatively low in Asia, but 50% of all internet users in the World live in Asia!

E-commerce is the fastest growing retail market in Europe. In 2015, overall online sales are expected to grow by 18.4% (same as 2014), but 13.8% in the U.S. on a much larger total. These figures relate only to retail spending, defined as sales of merchandise to the final consumer. At present, Germany has the fastest-growing online sector (23.1% forecast for 2015, compared with 25.0% in 2014).

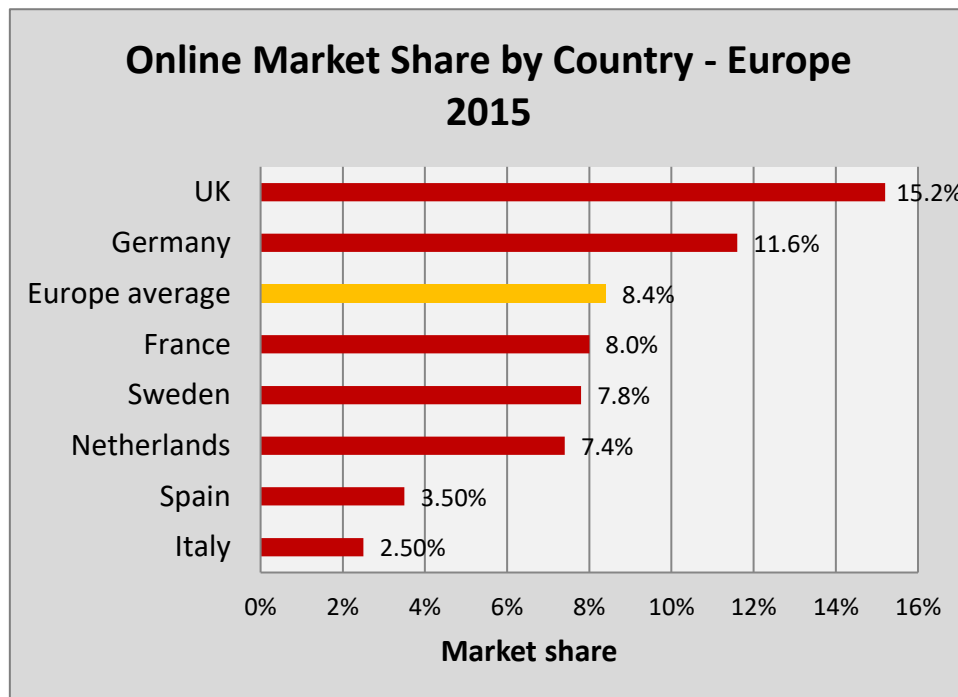
About the statistics of "retailing". The retail figures in this book are based on a strict definition of retailing: only "merchandise" or "tangible goods". Not included are some large online sectors as:

- retail banking
- retail travel agents and holidays
- tickets
- insurance

Motor fuel is also not included, because fuel cannot be sold on the Internet.

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In Europe the online sales differ per country. The average online market-share of all merchandise categories (including groceries) in the UK is high, due to the relative high market share of online groceries in the UK. See the next diagram.



USA: \$349 bn online sales in 2015. In the USA 60% of the population regularly shops online. Online sales are expected to rise from \$349.20 bn in 2015 to \$398.78 bn in 2016.

1.4 Online retail is disrupting many industries

Different commodity sectors experience a different influence from online retailing. The competition of online retailing can be:

- **destructive:** for digital products
- **disruptive:** for physical non-food products
- **only incremental:** for food products (groceries)

DESTRUCTIVE COMPETITION IN DIGITAL PRODUCTS

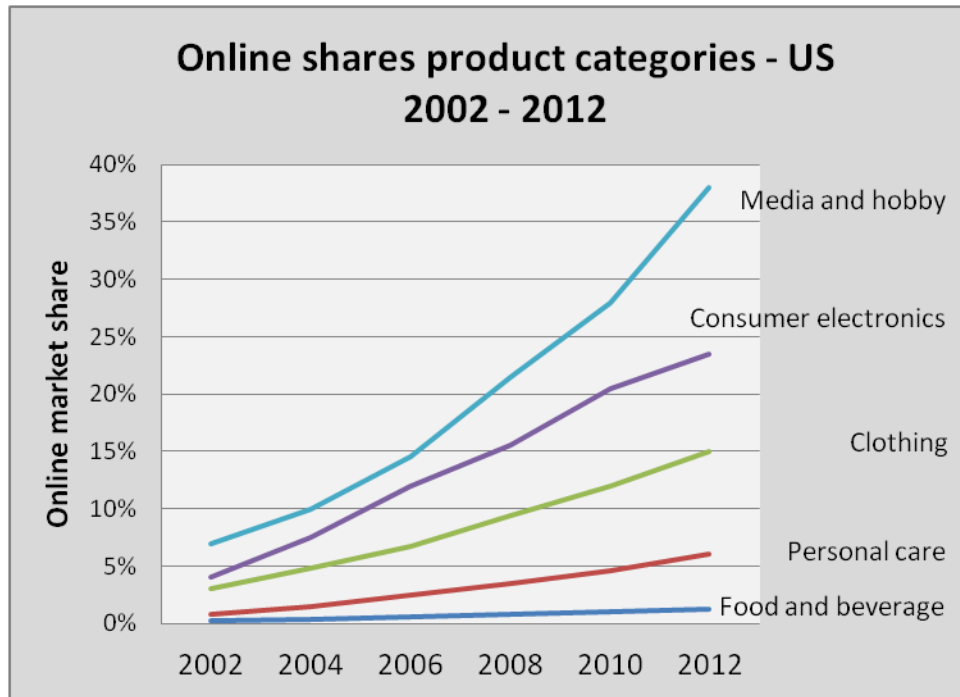
Digital products. Online retailing is very destructive for physical stores selling products that can be digitized and sold as downloads. There are three sectors that are hit the hardest: travel, tickets and multimedia.

Booking vacations online is now the norm and travel agencies are disappearing. Buying tickets for concerts is a booming online business. And downloading music, films and videogames is now made possible by popular new sites and apps. Online retailer Amazon.com is the largest seller of books worldwide and is selling more e-books than physical books.

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I started buying books at Amazon.com as early as 1998. In the last 18 years I bought 640 books online and only about 50 books in traditional stores. And the last 2 years' half of my purchases are e-books.

Testing at home is convenient. A special characteristic of digitized products is the fact that testing at home is even more convenient than testing in a physical store. Also downloading is fast and buying digitized products online does not involve expensive stores handling and logistics. Above all: looking for the right book on Amazon is easy, informative and fun.



DISRUPTIVE COMPETITION IN NON-FOOD PHYSICAL PRODUCTS

Competition from webshops. Physical stores selling non-digitizable non-food products are suffering from increasing competition from web shops. Large sectors like clothing and consumer electronics are experiencing a substantial shift of sales volumes from physical stores to online stores. Physical stores have to adapt to the reality of new online competition. Waiting for customers to visit their stores and buying their products is no longer a sustainable business model.

In the week I wrote this paragraph on disruptive competition, a large department store chain filed for bankruptcy after 80 years of existence. It is now more fun to shop online for consumer products than to shop in low-end department stores.

Orientation is key. A special characteristic of many non-food products is the need for orientation by consumers before they buy. Consumers want to have sufficient choice and information before they buy so-called shopper goods. And during orientation, consumers might visit several websites and physical stores. After orientation the actual buying takes place in the physical store or online.

Price transparency. Easy orientation at different web shops makes prices very transparent. And new price comparison websites and mobile phone apps make comparing product prices easier, even

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when visiting physical stores. This price transparency causes a pressure on prices, gross margins and ultimately net profitability of retailers.

The weakest stores will disappear. Successful non-food retailers will have to close their weakest stores to maintain overall profitability. And weak traditional retailers will have a hard time surviving the new online competition. Unless they change into a strong omni-channel business model.

ONLY INCREMENTAL COMPETITION IN GROCERIES

Groceries are different. The grocery sector is the focus of this book. Groceries is the largest retail sector with the lowest online share. Competition by online stores in the grocery sector is not very disruptive and certainly not destructive. This sector is very different from other sectors: it is very large and online shopping plays a much smaller role than in other sectors. The low online share is the result of the typical characteristics of groceries.

Online plays a small role in grocery shopping as a result of a number of characteristics that are specific for grocery shopping and retailing:

Routine shopper behavior:

- hardly any orientation necessary (routine products)
- customers know and trust their grocery stores (routine shopping)
- high frequency shopping and short lead-times

Relatively high costs and low margins for retailers:

- many different products in one shopping bag
- low value products
- low margin products and price pressure
- three different temperature zones

Boring and expensive. These characteristics of groceries make online shopping rather boring for consumers and very expensive for retailers.

In this book I will explain why pure online retailers will have a hard time developing an online grocery store from scratch and make it profitable.

Omni-channel growth. In the meantime, traditional supermarket chains are using their web shops to counter the competition from pure online players and other omni-channel grocers. And they use their web shops to defend and enhance their physical stores to grow their market share.

Opportunities for special products. Not all grocery categories are insusceptible for online retailing. Some products thrive on product information (wines), other products are small and expensive (cosmetics, razor blades and supplements) and some products are light and expensive (diapers). New online stores are successfully selling these special products.

1.5 The online grocery retail hype in 2000 was a disaster

In 1999 and 2000, online grocery shopping was a disastrous hype. Some major e-commerce consultants were very optimistic about market potentials. Andersen Consulting predicted a market share of online grocery shopping of 20 % in the year 2010. Cap Gemini was even prepared to predict a percentage for online grocery retailing between 30 and 40 %!

From big hype to big investments to big fiasco. The overly optimistic predictions of online market shares were used by Peapod in 1999 to explain its high potential. And in 2000 the new online grocery retailer Webvan made a nationwide investment program of one billion US\$. But Webvan became the biggest dotcom flop ever.

More realistic expectations. The influential Verdict Research tuned the market potential of online retailing in the US down to 3 % in 2004 for the total retail sector and 2.33 % for the grocery sector. But even this prediction was too optimistic, as was shown in par. 1.4.

In 1999 I published several articles about online grocery retailing on my website RetailEconomics.com and in trade- and marketing journals. These articles were based on cost modeling and consumer research. Conclusions:

- *extremely high fulfillment costs*
- *consumers were not willing to pay the extra delivery costs*

My cost models are explained in chapters 16 and 17.

My prediction in 1999 for mainland Europe was a market share of online grocery retailing of less than 1,5 % in 2010. My low predictions for online grocery retail were in sharp contrast with the extremely high predictions of major consultancy firms, leading to much debate.

Halfhearted efforts for online. Some of Europe's grocery retailers have ventured into online selling in the early stages, but in general their efforts were tentative and half-hearted and thus have failed to win customers. The exceptions in Europe in the early stages were Tesco (UK) and Albert Heijn (NL). Both companies succeeded in building online businesses, that were examples for their competitors and new pure players.

The examples of Tesco and Albert Heijn are described in chapters 5 and 6.

Many retailers were put off by the economics of the business. Selling groceries online means taking on additional costs—in labor, delivery vehicles, and fuel—that are higher than the delivery fees customers are willing to pay. Profitability seems to be unattainable. This is particularly problematic for retailers in markets like Germany and The Netherlands, where gross margins are low and labor costs are high relative to the United Kingdom.

1.6 The online shopper revolution

Technology is the most bullish thing possible for the standard of living of human beings. Many people living below the poverty line in developed countries have televisions, refrigerators, medicines, and luxuries that even kings and queens of only a hundred years ago could not have dreamed of. That trend is going to continue and accelerate.

GROCERY SHOPPING BEHAVIOR

Grocery shopping is mainly routine. Much of what you are buying now is the same as last week. And grocery products are on average rather inexpensive. That makes grocery shopping very specific and different from buying other consumer goods. Grocery shopping must be fast, efficient, convenient and fun. Groceries are “convenience goods”.

Other consumer goods have their own specific characteristics, that make shopping behavior more complex and less routine. Price is important, but also the product life cycle and the need for product information:

- **Software** (apps) are bought to produce an easy solution and a new “experience”
- **Clothes** buying requires comparison, look, feel and fitting. Clothes are “shopping goods”.
- **Non-fiction books** buying requires rich information about its contents, that must fit your information need of the moment
- **Car** buying is a complex decision process with a lot of emotion involved: an “exploration phase”.

Health food shopping is less routine. But there are new developments that ask for different grocery business models. A good example of a major trend is the popularity of health foods. This trend makes food shopping a different, less routine experience.

THE DIGITAL TOOLS REVOLUTION SHAPES OUR RETAILING

Digital tools for shopping are changing rapidly:

- Before 2000, you needed a fax machine or telephone to go grocery shopping online
- 2000: you still needed to walk to your PC for online shopping
- 2007: the smartphone and mobile internet surfing made a breakthrough
- 2010: the iPad was the first of many tablets, that made “lean forward” multitasking possible for everybody
- 2015: consumers are always online with laptops, smartphones, iPads and yes, also with their PC's
- The next step is the use of smartwatches and other wearable devices
- And “non-clickable devices for grocery shopping are introduced by Amazon and Ocado.

THE DIGITAL MEDIA REVOLUTION SHAPES OUR ENTIRE LIFE

Social media are taking over our lives. Facebook, Twitter and WhatsApp are now the most important means of online communication. US president Trump gave Twitter a new boost. And

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Instagram, Pinterest, Snapchat and Vine are attracting more young users each year. Consumers share their experiences with retailers and manufacturers online. Price and quality of consumer goods become more transparent every day.

Facebook still the greatest. 35% of worldwide internet users are using Facebook every day. Facebook is also becoming a significant competitor for Google Adwords for online advertising.

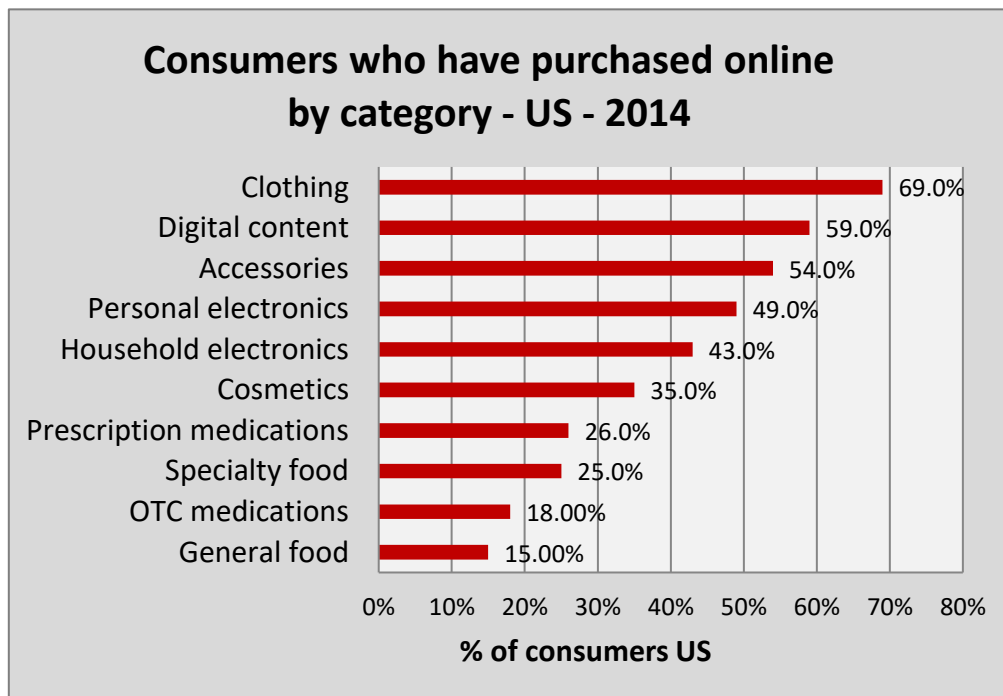
Social media are discussed in chapter 13, as part of the battle for branding and traffic building.

Social media still growing. In 2010 1.8 billion people worldwide were active on social media. In 2015 this number is 2.7 billion. And these billions are not only teenagers. In The Netherlands 81% of baby boomers (45-65 years old) are using social media, half of them on a daily basis.

YouTube and Netflix. Also “watching TV” is changing into the YouTube and Netflix experience: watching films and series on demand, when and where we want. My two nieces of 6 and 4 years old are not “watching TV” anymore; they ask for their favorite shows when they have time in their busy schedules.

1.7 Online grocery still small

Poor supply and low demand. With a few exceptions (such as in the United Kingdom, where Tesco and pure-play retailer Ocado have made assertive moves), Europe’s online-grocery market has been stuck in a vicious cycle: poor supply drives low demand, which in turn justifies the poor supply.



Source: PayPal, Harris Interactive, June 2014

The facts in 2014. The online food market share in the UK is 4,5 % in 2014, in the early stages pushed by Tesco Direct and later by Ocado. In France online food market is 3,5 %. The online food share in

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The Netherlands is still not higher than 1,5 %. In the US and Germany, the market share of online food retail is even lower.

Still few consumers buy groceries online. In a survey in the US (2014) 15% of consumers said they had purchased general food online. Of the same consumers 69% said they had purchased clothing online.

55% of consumers say they will buy groceries online. In an international survey of Nielsen, 25% of interviewed consumers said they order groceries online, and 55% are willing to do so in the future.

NB: these percentages are NOT actual and future online grocery market shares, because the actual buying is always divided over online and traditional channels. In the US, 15% of respondents say they purchased general food online, but the national online food market share is not more than 1,5%.

Supermarkets are defending market share. Once a retailer makes an assertive move in online grocery, others are likely to follow suit. But at that point, the business case for investing in online grocery will be a matter of defending market share and preventing further losses. Not delivering incremental profit.

The supermarket is a fantastic business model. Consumers will shop for groceries online only if the offer is right: they are not willing to sacrifice the price, quality, and range of products that they have grown accustomed to in the supermarket, and they avoid inconvenient delivery or pickup arrangements. To date, few European retailers have given consumers a compelling reason to switch from the neighborhood supermarket to the Internet.

Skepticism about product quality. Another factor keeping online demand low is consumer skepticism about product quality. Consumers who have not yet tried grocery shopping online say their biggest concern is not being able to see or touch the actual products before buying. They want reassurance that their groceries will be fresh and high quality—no bruised fruit, no wilting lettuce.

Ocado (UK) has found the solution to prove to customers that their fresh products are actually very fresh. See par. 5.4 about this transparent company.

There is latent demand. In France, 33% of consumers who have never bought groceries online say they would “probably” or “certainly” begin to do so within the next six months, if the service were available in their area. In Spain, that figure is even higher, at 49 percent.

READ IN THE NEXT CHAPTER WHAT TRIGGERS ONLINE DEMAND FOR FOOD.



2. TRIGGERS FOR ONLINE GROCERY RETAIL

2.1 Online grocery still marginal in 2015

Ambitious proclamations about online grocery. Go to any seminar or congress on food in any country in the world and you will hear that online grocery retailing is going to become very substantial. Banks, consultancy firms and other retail experts are proclaiming their ambitious revenue predictions for online grocery retailing in an increasing number of publications. Projections of turnover shares for online grocery of 15 to 50% in 2025 are no exception.

Déjà vu. In 1999 a respected consultancy firm as Capgemini predicted, that that in 2010 not less than 40% of food purchases would be online. Every company that aligned its business model on this prediction was brought down to earth with a shock.

Online food is still marginal business. A similar euphoria as in 1999 is currently visible when it comes to online grocery retail. But when you look at the facts, you automatically become much more realistic. In the Netherlands the online supermarket sales in 2014 amounted to approximately € 375 million. This is 1.1 % of total supermarket sales. This includes orders from small commercial and institutional markets (estimated at over 30 % of total online supermarket sales).

My forecast for online grocery shopping is a 5% share in 2025 in most countries of Europe. Then online grocery has to grow by 20% per year during the next 10 years.

Online grocery in the UK. Online grocery sales in the UK are the highest of Europe. We will discuss the UK in chapter 5, with exceptional examples of Tesco and Ocado.

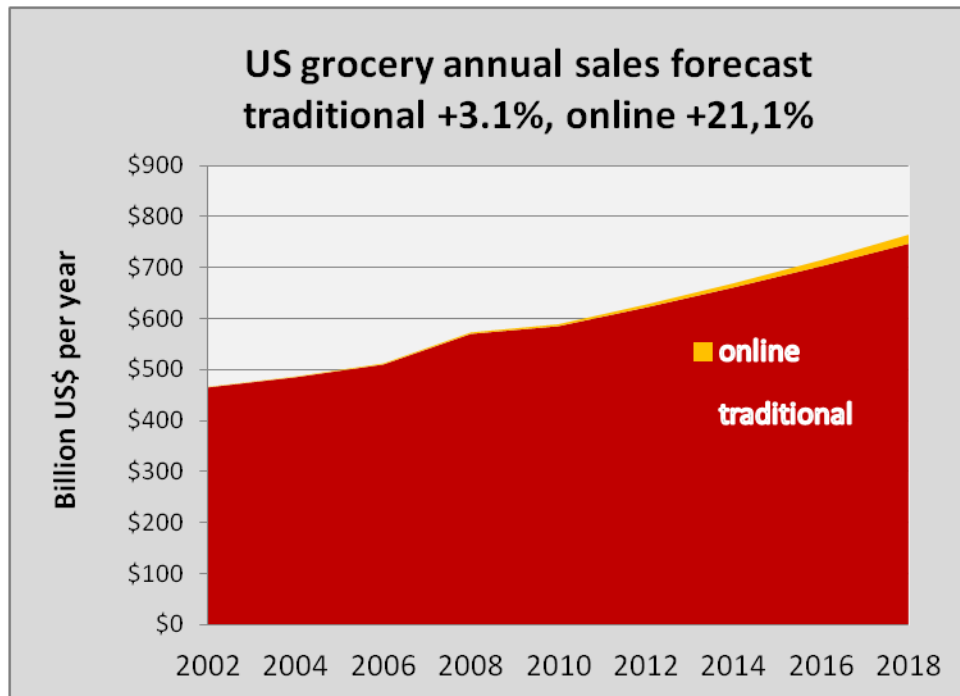
Online grocery in the US. Online grocery sales in the US show in 2014 the same low levels as The Netherlands, with great differences between larger cities and the rest of the country. See chapter 4 for a detailed coverage of the US.

Fast growth of online grocery. The projection of BI Intelligence is that between 2015 and 2018, online grocery sales in the US will grow at a compound annual growth rate (CAGR) of **21.1%**, reaching

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nearly \$18 billion by the end of the forecast period. For comparison, offline grocery sales will rise by **3.1%** annually during the same period.

But the next diagram shows, that when you start with a 1.1% share, even exponential growth does not take a big chunk out of total grocery retailing.



Source: BI Intelligence

A need to optimize the online process. Online grocery retailing will not always stay a niche and someone will make money on delivery. There is a need to segment the online food process into its component parts, in order to optimize and make money from each segment in the chain.

This necessary segmentation is the reason this book reveals that successful retailers have to win all 9 battles of online grocery retail, in order to survive and prosper.

2.2 Market developments impact the online grocery industry

Mobile technologies. The growth and adoption of digital and mobile technologies has caused a fundamental shift in the way consumers shop and interact with retailers of all sizes and types, in all locations.

Consumers are ultra-connected and also older people are using their laptops and mobile phones to go online.

Pure players are improving their online business models. Pure players have been testing and pivoting their business models and some of them have crafted strong business propositions. AmazonFresh (US), Instacart (US), Ocado (UK) and Picnic (NL) have gained instrumental know-how

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and put well-polished processes in place. Expansion, not only in their home markets but also internationally, is very likely.

Traditional retailers expand their online operation. To respond to the growing competition from discounters, traditional retailers such as Walmart and Tesco will keep investing into their omni-channel initiatives. Consumers seeking value for money and convenience will increasingly adopt this way of shopping and drive growth for the online channel.

New entrants. The competition between online grocery retailers is intensifying. New players entered the arena and established players pushed innovation and operational excellence to develop attractive online offerings.

Venture capital. Venture capital companies are pouring millions into the online grocery business. These venture capital companies expect fast growth and therefore spend large budgets on branding and traffic building to the grocery websites.

HelloFresh

A good example of venture capital stimulus is online grocery startup HelloFresh. This company spends more than €100 per new customer on TV advertising, first order reductions and Google Adwords traffic building. More on HelloFresh in par. 6.6.

Unique partnerships. Some of the big traditional retailers are looking for new ways to bypass costly IT and operational investments. They did so by outsourcing key technological and business capabilities to third parties.

*British retail giant **Morrison's** partnered with pure player **Ocado** to benefit from their 15 years of ecommerce and logistics experience. The partnership was also hugely beneficial to Ocado because it created an additional stream of revenue.*

*In the US, **WholeFoods** teamed up with grocery delivery startup **Instacart** to gain from their mobile expertise and avoid the expenditure of developing their own delivery capacities. This partner program is now being expanded across the US.*

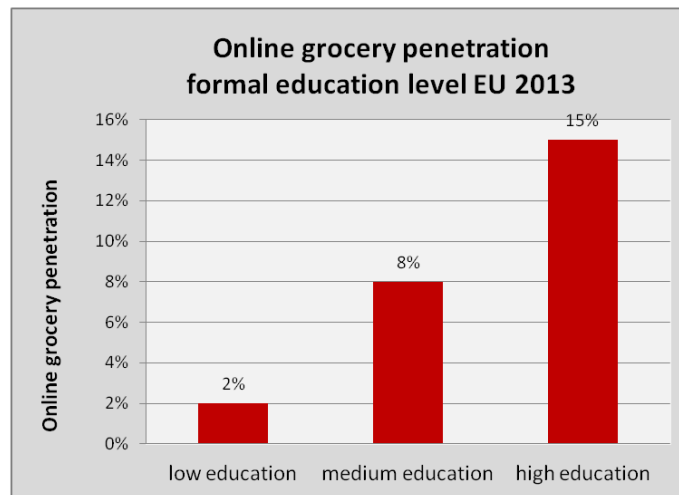
Increased efficiencies. The growth of online grocery retailing has a positive influence on the efficiency of warehousing and delivery of products to consumer homes. When the share of online groceries is only about 1,5%, home delivery is extremely expensive as a result of large distances between delivery points. But higher online shares (UK) and the introduction of pickup points (NL and FR) make “the last mile” of home shopping less expensive for retailers.

Globalization. Business models that proved successful in countries like the US and the UK are now being replicated and adopted globally. Traditional retailers are competing with pure online players and established global online companies are entering the online grocery domain.

2.3 Consumer demographics stimulate online grocery

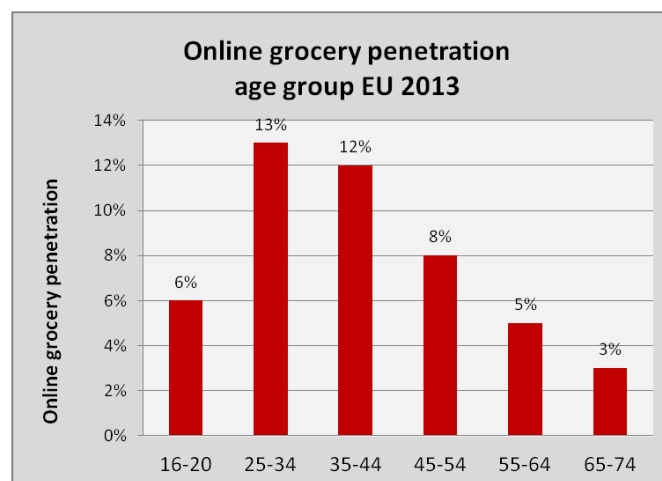
Big spenders. Online grocery typically attracts the most profitable customers: high education households, dual-income households, customers who prioritize convenience over price or promotions, and other big-spending customers.

Education level plays an important role in purchasing groceries online. In 2013 the higher educated people started to buy groceries online. See the next diagram.



Source: Eurostat

Young adults in Europe show the highest levels of online grocery penetration (not market share!). See the next diagram.

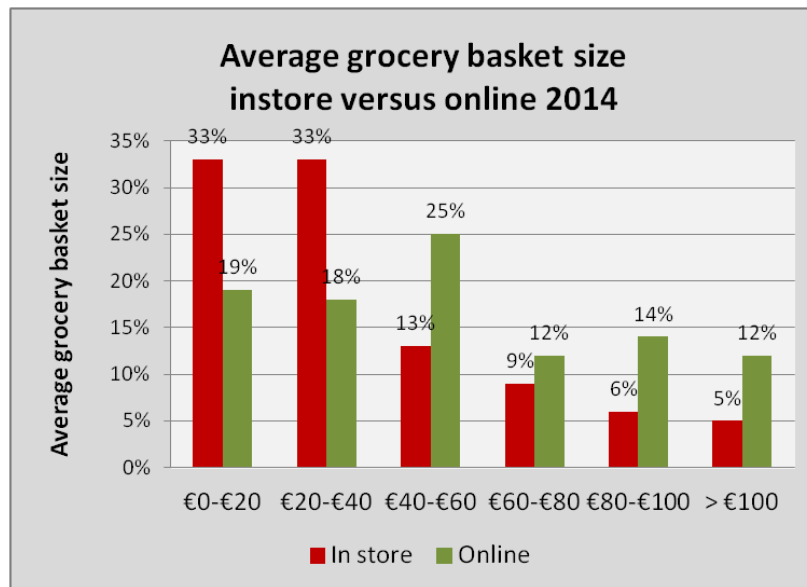


Source: Eurostat

Online growth potential. But consumers in higher age groups are rapidly increasing their online presence. This fact and the aging of young consumers will increase online grocery purchasing over time.

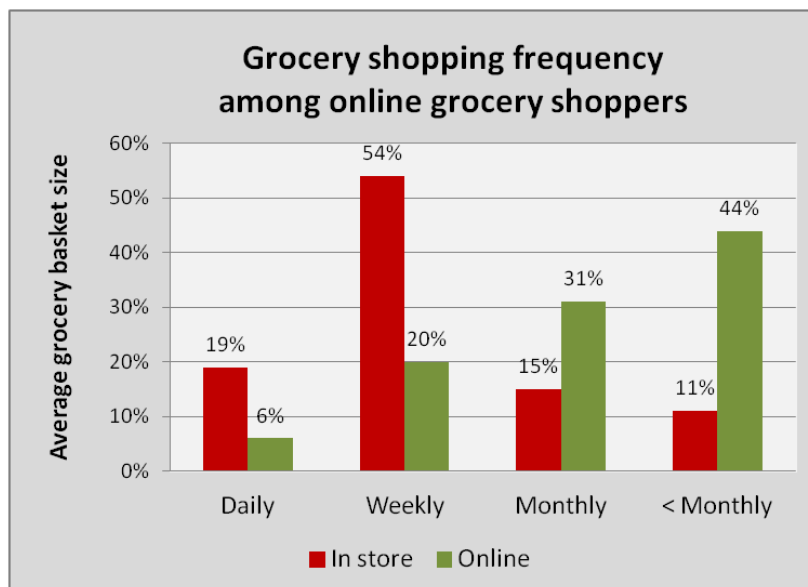
2.4 Online grocery basket size and shopping frequency impact profitability

Basket size. Online grocery retailers try to increase their basket size to levels above €75, -. But most online grocery shoppers purchase lower basket sizes. See the diagram. The low basket size creates a profitability problem for retailer profitability, which does not exist in physical stores.



Source: Syndicate Plus 2014

Shopping frequency. Most online shoppers purchase their groceries only once a month or even less frequent. While the same online shoppers visit their local supermarket at least once a week. See the diagram.



Source: Syndicate Plus 2014

The low online grocery shopping frequency indicates the consistent popularity of the physical grocery store, also for online shoppers.

2.5 Each country is different

Online growth per country. In 2014 the online grocery markets in Germany, US and the UK grew by +38%, +27% and +26% respectively. The Dutch online grocery market grew the most at +55% as a result of aggressive newcomer HelloFresh and new online activities of Jumbo supermarkets. The French market grew slowest, still reaching an impressive +25% growth.

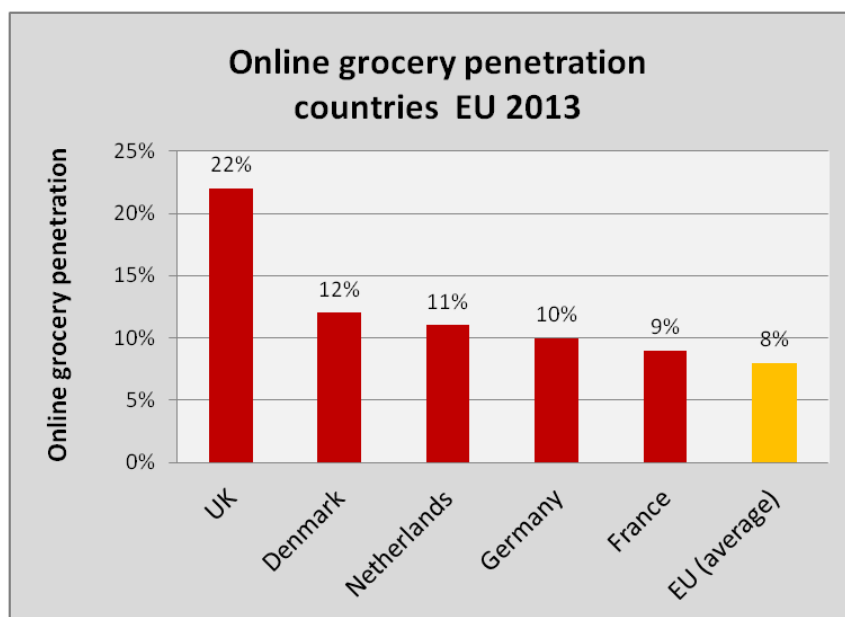
Shopper preferences for mobile differ across countries.

- **UK.** Mobile devices are most popular amongst British shoppers, of whom 89% indicate to use them for online grocery shopping. That is compared to 51% who use PCs/laptops.
- **German** shoppers prefer mobile devices (59%) over the use of PCs/laptops (46%)
- **French** shoppers prefer mobile devices (61%) over the use of PCs/laptops (48%)
- **In the Netherlands** only 48% of consumers use smart phones or tablets.

UNITED KINGDOM (UK)

The UK is champion in online grocery retail. The United Kingdom has a lead start in online grocery retailing, compared to other countries in Europe. 22% of UK grocery shoppers do part of their grocery purchase online. See the diagram.

The EU average is lower than the specified countries, because large countries like Spain and Italy have much smaller online grocery markets than the north of Europe.



Source: Eurostat 2013, Syndicate Plus 2014

Early start by Tesco Direct. Research revealed that in 2014 the US has the largest overall online grocery market (€14.9 billion), whereas the UK has the largest share (4.5%) of online grocery sales. The high market share in the UK stems back many years. In the late 90's, online grocery retailing was already boosted by Tesco Direct and later by newcomer Ocado. In chapter 5 we will discuss the UK online grocery market in detail.

Nine Battles of Online Grocery

High online penetration and high online share. Remarkable for the UK grocery market is not only the high (22%) online grocery penetration, but also the high share of online grocery purchases by the online grocery shoppers (4.5%/22% = 25%). In other less “online developed” countries the online grocery shoppers buy only around 10% of their groceries online. They still purchase about 90% of their groceries in physical supermarkets.

This high online share in the UK means, that online grocery retailers in the UK are doing a terrific job in delivering service to their customers, resulting into high retention rates.

UNITED STATES (US)

Less than 1.5% online groceries. At \$600 billion a year in sales, food and beverage is by far the largest retail category in the U.S. grocery retail is also the category that has been the least disrupted by e-commerce. Less than 1.5% of food and beverage sales occur online in 2014, according to BI Intelligence estimates.

Same day delivery service. Some of the biggest names in tech (Amazon, eBay, and Google) are beginning to offer and promote same-day delivery services. As consumers get used to the convenience of ordering something online and receiving it the same day, online grocery may benefit too, because people are more likely to buy food when they know they will get it quickly. While same-day delivery comes with a big price tag, 25% of millennials say they would pay a premium for same-day delivery (BI Intelligence).

Subscription services. New startups that focus on concierge shopping and subscription prepared meals are innovating the online grocery model and offering services that are different from traditional supermarket retailing.

More about the US in chapter 4.

THE NETHERLANDS

Venture capital is investing in online grocery. Venture capitalists have discovered online grocery as a promising investment opportunity. Online grocery concepts as HelloFresh, Marley Spoon and Picnic are backed by much capital. The objective of the venture capitalists is to capture significant market share in the short term and become leaders in their market segment. Rocket Internet is financing hundreds of start-ups, and when HelloFresh is a success, the start-up will go public and the investment company is a success. More on the strategy of Rocket Internet and HelloFresh in par. 6.6.

Online grocery 4% in 2020. “In the Netherlands the online grocery market share in 2015 is 1.5%. The EFMI Business School estimates that the online grocery market in the Netherlands will grow to about 4% - 5% in 2020. That would be triple the current market share” says my friend professor Retail Marketing Laurens Sloot.

Déjà vu dangerous predictions. Other parties publish different online estimates than professor Laurens Sloot of EFMI. This time it is the CEO of online start-up, Muller (Picnic) who refers to a recent

Nine Battles of Online Grocery

study in which ING bank consultants concluded, that over five years, 20% of groceries is ordered via the internet. "We will travel this wave. The online shopping market is the next growth market".

FRANCE

The online grocery market in France has a market share in 2015 of around 3.5%.

Pick-up popular. Across all of the researched countries, only in France are pickup points as popular as home delivery. This could be explained by the fact that France has the largest pick-up point network amongst all of the researched countries, making it convenient for consumers to use this type of service.

2.6 What is triggering online grocery retail

In the last decade the grocery retail sector has changed in many ways. Technological developments had a great impact in the way consumers communicated with each other and with retail companies. Some of these developments act as triggers for online grocery retail:

- Personalized offers
- Logistics efficiency
- Freedom to buy 24/7

Personalized offers. Each digital contact with online shoppers can be used to present personalized offers for no extra costs. These personalized offers are based on:

- **past shopping behavior** and analysis of stored data presents a personalized homepage
- **website surfing behavior** presents instant response on visitor interests
- **actual shopping behavior** creates up-selling and cross-selling opportunities

Personalized offers for groceries are for example: kosher, organic, vegetarian, gluten-free, non-sugar.

Amazon.com

The website of Amazon is the best example of personalized offers. As a consultant and writer I bought more than 650 books at Amazon.com since 1998. This number is larger than intended, because each time I am interested in a certain subject for my research, Amazon presents at least 5 other titles that also provide the necessary information.

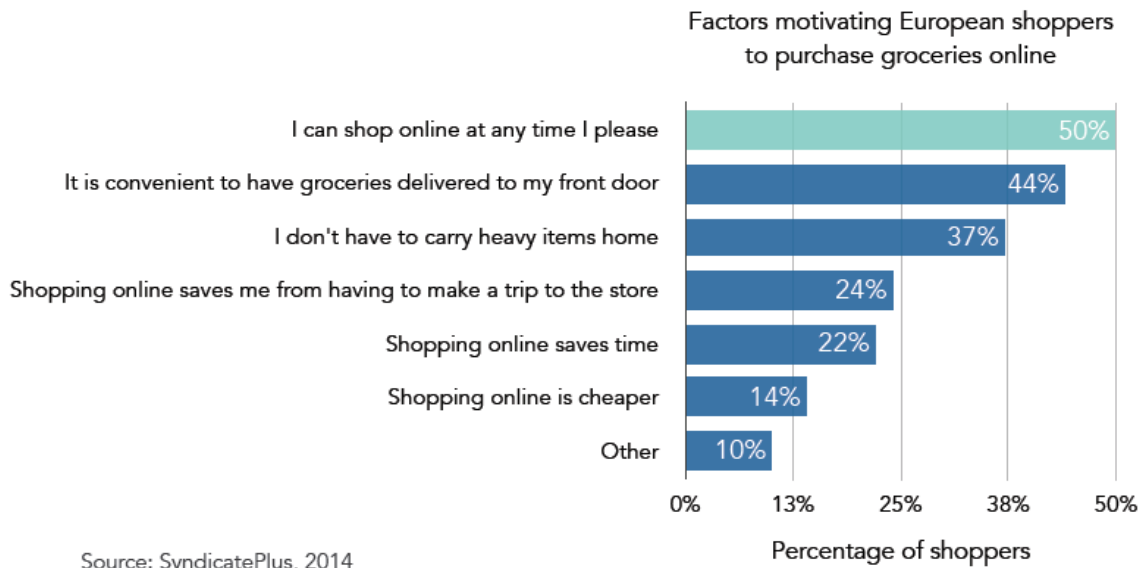
"Believe me", I know online impulse buying!

Logistics efficiency. The success of online grocers also relies heavily on warehouse utilization and productivity, customer penetration in densely populated areas, order frequency and basket size. Logistics efficiency is essential for online grocery retailers to keep the high costs of home delivery under control, so delivery charges can be low and the service is still profitable and sustainable.

The **freedom to buy 24/7** drives online shopping. See the next diagram.

Nine Battles of Online Grocery

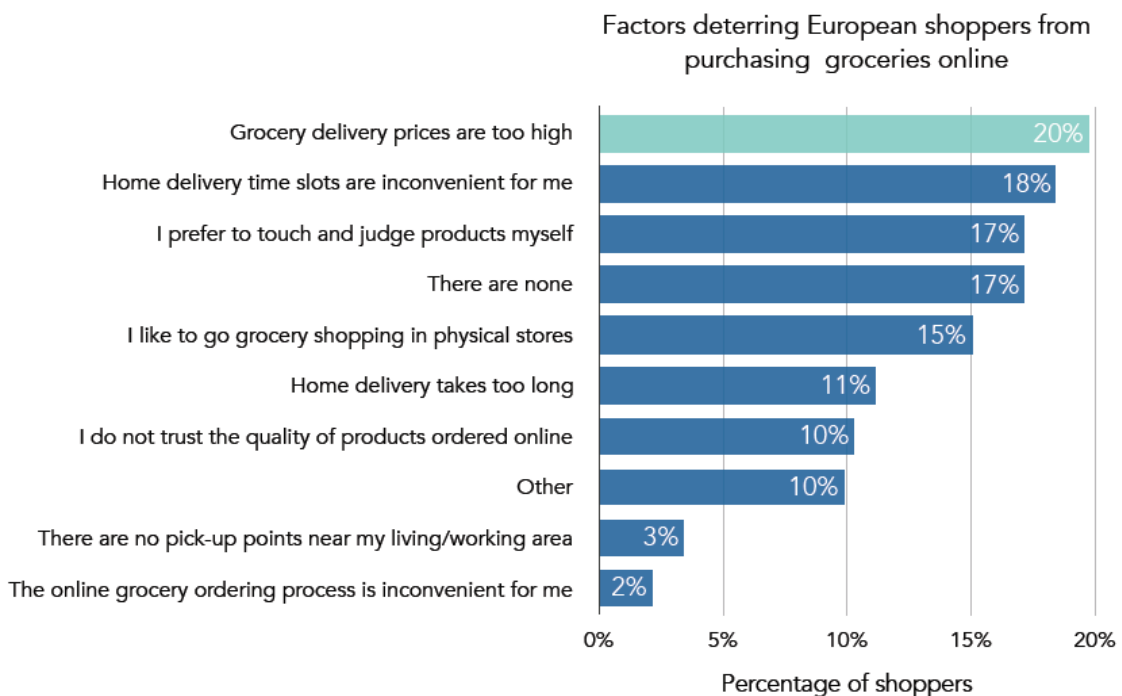
MOTIVATING FACTORS



Home delivery is motivating. The SyndicatePlus diagram shows, that pick-up points do not cover the four most important motivating factors of online shoppers! Three of the most important motivating factors for online grocery shopping involve home delivery!

DETECTING FACTORS

Grocery shoppers also mention factors that deter them from shopping groceries online. See the next diagram.



Deterring factors vary across the researched countries. French and German consumers see grocery delivery cost as the biggest show-stopper (36% and 18% respectively), while the Dutch are most dissatisfied by inconvenient home delivery time slots (38%). In the United Kingdom, 25% of respondents indicated there is nothing withholding them from buying groceries online - an effect that's most likely the result of the well-developed national online grocery business. In comparison to consumers in other countries, British consumers say few things keep them from buying groceries online (Syndicate Plus, 2014).

Deterring factors are Unique Selling Propositions

NB: the deterring factors for grocery online are the customer frustrations that must be turned into Unique Selling Propositions (USP's) for an excellent online grocery store.

2.7 The nine battles to win an online food war

There are nine processes of online grocery retailing that are crucial for success. Each of these processes must be planned and executed in an excellent way. If only one of these processes is performed poorly, customers will stop purchasing their groceries online and visit their local supermarket again.

Battles. In this book we call these nine essential processes “battles”, because online grocery retailers will have to fight internal struggles to continually improve their operation, they must become better than numerous old and new competitors, and on top of that they have to fight against a formidable strong and efficient competitor: the traditional supermarket.

1. **Business development.** The first battle is developing a powerful online business model and obtaining sufficient market share to become efficient and profitable. Read all about market research and development in chapter 9.
2. **Assortment online.** First the online grocery retailer has to choose an assortment strategy. In chapter 10 we will provide you with different assortment strategies, with different merits and opportunities.
3. **Web design and product presentation.** The assortment must be presented to customers on a website. In chapter 11 we will show that product presentation online is entirely different from presenting products in a physical store. The internet provides the grocery retailer with new opportunities to add value with rich product information.
4. **Pricing online.** Product pricing on internet is very transparent, which drives prices down. In the meantime, online grocery retailing introduces high additional costs that most customers do not want to pay. Chapter 12 describes the online pricing dilemmas and solutions.
5. **Branding and traffic building.** To be successful as a retailer you have to build trust with your customers. At the same time newcomers on the online grocery market have to use many tools available to attract visitors to their websites. In chapter 13 we discuss trust building and powerful online traffic building tools.
6. **Customer retention.** Your existing customers are easily attracted to the growing number of online competitors. Delivering excellent service is crucial to build trust and keep your

Nine Battles of Online Grocery

customers loyal to your store. In chapter 14 we show additional tools for effective customer retention.

7. **Ordering and checkout.** Online grocery retailers can choose between different business models with different ordering and invoicing techniques. Chapter 15 will describe in detail ordering techniques belonging to the different online grocery models.
8. **Order-picking consumer orders.** In physical stores the “order-picking” of consumer products is done by customers for free. Online grocers have to hire order-pickers to do this job efficiently and without mistakes. In chapter 16 we cover this start of the “last mile” of online grocery shopping.
9. **Home delivery.** The final battle of online grocery shopping is the most expensive for the retailer. In chapter 17 we describe in detail the different ways the groceries can reach the customers’ homes. The costs and cost efficiency of home delivery is of course an important part of this manual.

Next:

DO YOU NEED A MANUAL FOR ONLINE GROCERY RETAILING?



3. DO YOU NEED A MANUAL FOR ONLINE GROCERY

3.1 Who needs this manual

The fundamentals of online grocery retailing have not changed. Right now in 2017 online grocery retailing is a big hype again, but the reality of 2017 is much different from the hype of 1999. In the meantime, the fundamentals are still the same:

- **Choice.** Customers want choice, but not choice overload
- **Quality.** Customers want convenience, but also proof of quality
- **Value.** Customers want value for money (added value must be more than added costs)
- **Competition.** Physical supermarkets belong to the strongest business models on earth (as are Apple and Google) and they are fierce competitors for online grocery retailers.

Information is not always actionable. If you are flooded with research results and statistics about consumer behavior, you probably do not know what to do with it. Even worse, journalists and analysts are telling you that online grocery retailing will soon take over 20-40% of food retailing, and that you must participate in a big way to survive.

These unrealistic predictions are selling paper headlines and consultancy projects, NOT profitable business models and sustainable results. They are “alternative facts”.

Intelligent analysis and decisions. I wrote this manual to help you make intelligent and profitable decisions about your grocery business. And when you are analyzing grocery retail and reporting about grocery companies, this will help you distinguish hype from reality.

This report is for:

- entrepreneurs starting a pure online food retail company
- traditional food retailers going online
- private equity companies (“venture capitalists”)
- FMCG manufacturers
- service providers to grocery retailers
- journalist reporting on online food retail
- retail students and consultants

3.2 Online grocery retail is a tough business

Online grocery is much different from other sectors like books, fashion and consumer electronics.

Characteristics of grocery deliveries:

- less irregular than non-food deliveries
- each delivery includes many different products
- each product is relatively cheap
- low gross margins
- three different temperature zones

Negative impact on bottom line. The first characteristic of online grocery (regular deliveries) is positive, but the others have a significant negative impact on the bottom line of online grocery.

The total costs of traditional physical grocery stores are on average more than 15% of turnover. But the distribution costs of Ocado (UK) are 25% of turnover (with a target of 22%).

Tough competition. This manual will prevent you from going bankrupt, because it will show you all the pitfalls and necessary choices to become a successful online grocery retailer. Your business is competing with a mighty strong competitor: the physical supermarket.

Branding the stores. And if you already own or are working for a supermarket (chain), this manual will show you how to use online food retailing to improve the branding performance of your company.

No profits from online grocery retailing. As currently structured, most online grocery retailers are not or barely profitable when only direct costs are considered. If indirect startup costs are also included, these online grocery retailers actually operate at a loss. In general, the two largest cost drivers are store/warehouse picking labor and delivery expenses.



3.3 New online grocery services

Online grocery attackers are entering the battle fields. The weapons of creative new pure players are virtual grocery stores, personal shoppers, rich product information, etc.

Traditional food retailers are defending their turf by developing omni channels and integrated marketing of their offline and online business models. But in many cases the additional online channels are cannibalizing the existing stores and replace low-cost sales with high-cost sales.

Online players, pure and omni-channel, are expanding their services:

- Two-way communication by social media (Whole Foods and Twitter)
- Voting campaigns on pricing (Seiyu Japan)
- Consumer generated product ideas (“crowd-sourcing” on Facebook)
- Smart phone apps for ordering efficiency
- Online coupons
- Dynamic assortment presentations
- Dynamic pricing based on delivery parameters
- Product suggestions based on customer profiles and past buying history
- Cross-selling and up-selling (Amazon.com)
- Grocery subscriptions and weekly fresh boxes

All these new services are enticing consumers to visit websites of online grocers, and to purchase online to try out the new online business models.

3.4 Online grocery shopping used to be unpopular

There are four basic reasons why online food shopping in the past was not popular with consumers:

- **Boring.** Online shopping of food was boring
- **Complex.** It added complexity to your lifestyle
- **Expensive.** It was more expensive than buying at the supermarket
- **Not competitive.** On top of those disadvantages: traditional supermarkets are fighting for consumer loyalty by improving their marketing mix and increasing their efficiency.

1. Online food shopping was boring. In my view online shopping for dry groceries and perishables was boring. It did not even come close to the fun of buying books at Amazon, the joy of buying clothes and shoes at Zappos.com, or the excitement of ordering exotic products in China by Alibaba.com. There was absolutely no advantage over the weekly trip to the supermarket.

Only when an online grocery business focuses on special products and on rich product information, online shoppers would become interested and stay interested.

2. Online food shopping is (still) complex. Online shopping is less time consuming than traditional shopping, but it adds complexity to your lifestyle. Let us assume in an optimistic mood that every “household manager” will master the skill of shopping online. After ordering online you first have to be at home and make sure that the goods are properly received. Second you often have to go to the store anyway for miscellaneous articles. Third you have to check proper billing and payment. Fourth you often have to follow up on order-picking mistakes and delivery errors.

3. Online grocery shopping is (still) expensive. The total distribution costs of online food retailing are about twice as high as the costs of traditional food retailing, and most consumers are not willing to pay the extra 15 % delivery fee. Internet startups will first try to gain market share with low prices

and low service fees, but when the shareholders cash is “burned”, online retailers will have to ask higher than “normal” prices to cover the costs and break-even to survive.

4. Online grocery shopping was not competitive. In the beginning of this century, ECR (Efficient Consumer Response) and Category Management did have a significant and positive impact on the quality and efficiency of traditional supermarkets. Food retailing has always been a very competitive business, and super-marketing has become a professional science that is constantly improving the value to the consumer.

In the USA, Europe and now also in India, China and South America, very competitive physical grocery stores with Every Day Low Prices and high service levels are gaining market share and are making the food business a war zone for new entrants.

Conclusion: the average consumer – with access to a good supermarket – did not have many reasons in the past to go grocery shopping online.

3.5 Three cost models for online grocery retailing

Distribution costs of online food retailers are three times the distribution costs of traditional supermarkets. Traditional channels are extremely efficient, because consumers perform the most labor intensive work for the retailer:

- **order-picking** in the store (traditional “grocery shopping”)
- **home delivery** (traditional: “trip to the supermarket”)

These additional costs of online grocery retailing are analyzed in three cost models, developed by different institutes.

RETAIL ECONOMICS

Category Management | Store Operations | Logistics | Online Retail

THE RETAIL ECONOMICS COST MODEL (1999 – 2015)

Added costs much higher than added value. In 1999 my RetailEconomics company developed and published the first cost model of online grocery retailing. The RetailEconomics model is a detailed Activity Based Costing model of the total logistics chain of an online grocery retailer and different operational delivery systems.

The RetailEconomics model is still operational after regular modifications for cost- and price levels. We concluded in 1999 that the added costs of online grocery shopping are roughly three times the added value as perceived by consumers. The ultimate nightmare of each entrepreneur who wants to make a profit.

Nine Battles of Online Grocery

Controversial conclusions. The conclusion, that the basic “Full Range Supermarket Online” business model was not profitable, was first extremely controversial, but later proven right. In the meantime, we have analyzed other online grocery models that have a more positive profit potential. One example of a potentially profitable online grocery retailing is the “Food Box Online” model of HelloFresh.

The website page with the online grocery retail cost model on RetailEconomics.com has been seen by 135.000 visitors worldwide since 1999. The cost model will be explained in chapters 16, 17 and 18.

The RetailEconomics cost model in a nutshell:

- **10 % additional logistics costs.** The additional costs of order-picking and home delivery are at least 10% of the consumer price, but only when the online store has sufficient market share for efficient home deliveries
- **5 % additional overhead costs** are spent on acquisition, information technology, order management and after sales service.

A basic “Full Range Supermarket Online” business model makes about 15% extra costs as a percentage of the consumer price.

The additional costs are even much higher in case of low market penetration or substandard execution. And online retailers have to pay well trained and professional employees to do this work without errors.

Kurt Salmon

THE KURT SALMON ONLINE COST CALCULATION (2015)

£100m loss per year in the UK. Dan Murphy, partner of Kurt Salmon says on October 2015: “A recent analysis indicated that the major UK supermarkets are losing as much as £100m a year with online shopping. Massive investment in complex technology, costly physical order fulfillment, unfocused digital marketing spending, and lost add-on sales in stores. The more the online channel grows, the more money it loses”.

£15 loss per delivery. Dan Murphy: “Let’s just take one element, the costs of home delivery. Most analysts agree that the real cost of a home delivery is about £20, especially if it includes fresh or frozen/ chilled foods. Retailers know that they can’t charge customers this, they can only charge

Nine Battles of Online Grocery

about £5. So they lose about £15 on every delivery, and this is what generates much of the £100m losses”.

Margins go down and costs go up. Dan Murphy: “I believe that the big four’s ecommerce operations will come under increasing pressure in future years as the national living wage is introduced, wages of lorry drivers increase due to a shortage of qualified personnel and the supermarket price war continues to drive down prices and margins”.

Business case must be realistic and transparent. Dan Murphy: “The challenge is how to leverage the online channel for long-term profitable growth, and the fact is that many large retailers are still grappling with this challenge. The journey to profitability must begin with a robust financial model, with full profit and loss transparency for the channel, clear ownership and accountability for all related costs and a realistic business case.”

The Kurt Salmon analysis and conclusion is based on actual cost figures of existing UK companies. Later in this book we will look at possible cost efficiencies of new online grocery business models like the “Food Box Online” distribution model.



THE MICHIGAN UNIVERSITY COST MODEL OF 2015

White paper. In February 2015 the University of Michigan published the white paper “e-Commerce Supply Chain Insights in Groceries and Consumer Packaged Goods in the United States”. The students of Michigan University developed an online grocery cost model based on the “Micro Activity Based Cost Model” of Willard Bishop. The study was complemented with a survey of 1.986 e-Commerce shoppers in the US.

The first conclusion is: “As currently structured, all e-Commerce systems in the grocery/CPG sector are barely profitable when only direct going costs are considered. If indirect startup costs are also included, these systems actually **operate at a loss**. In general, the three largest cost drivers are delivery expenses, store/warehouse picking labor, and occupancy”.

The fifth conclusion is: “As projected volumes increase and operations become more efficient, there is an increased opportunity for profitability within these distribution systems. We project that at a 15% annual growth rate in volume and 1% annual cost reduction rate, unit profit margins of e-Commerce models in the grocery/CPG sector can achieve **profit in the 12% to 15% range**”.

In this book we will in detail address the overly optimistic fifth conclusion of the Michigan University white paper, because it is in contrast with the Kurt Salmon conclusions and my RetailEconomics cost model.

Nine Battles of Online Grocery

Theoretical profitability is a piece of cake. As a seasoned business analyst I know it is tempting to project any business profitable after a number of years, by constructing a spreadsheet with:

- annually increasing volume and price
- and annually decreasing costs.

These theoretical calculations do not take into account, that more sooner than later FIERCE COMPETITION will destroy the exponential growth assumptions of volume and prices, and continuous cost reductions of individual companies. Each exponential growth line has a saturation level!

Overly optimistic consumers. I also know from experience that it is dangerous to build business forecasts and financial conclusions on online customer surveys. People have always been overly optimistic in surveys about their future online grocery spending.

But the fifth conclusion of the Michigan University white paper is especially noteworthy (read “dangerous”), because some journalists and online grocery prophets are making their case by combining this extremely high profit “potential” with the extremely high market share forecasts for online grocery retailers by the ING and other banks.

PART B: ONLINE FOOD WARS IN US, UK, NL, DE, FR AND INDIA



4. ONLINE GROCERY WAR IN THE UNITED STATES

4.1 Large US grocery market but low online share – Webvan case

The US is the world's largest online retail market, with 62% of its population being online shoppers. In 2014 the online sales were \$294.6 billion, representing almost 12% of total retail sales in the US. This covers general merchandise, digital products and groceries.

Online general retail is growing at an annual rate of approximately 15%, on pace to double roughly every five years.

Total traditional grocery sales in the United States were \$594 billion. Walmart is the category leader controlling 24% of the market, and its stores can be found within 10 miles of 90% of all Americans. Kroger trails with 13% and Safeway & Albertsons, after their 2014 merger, have a 10% share of the grocery market. Together these three groups represent half of the grocery retail market in the US.

Less than 1.5% of U.S. grocery sales in 2014 occurred online. This low online share of groceries is because most companies focus their online operations in densely populated areas only, where a large scale operation can operate with relatively short distances between delivery points.

WEBVAN CASE

Billion US\$ investment. In 1999 Webvan.com was a new player in the American market. The company planned to develop 26 automated warehouses in populated areas all over the USA. These warehouses would deliver groceries to consumers via satellite stations, with a 30-minute delivery window.



Low prices high service. The help section of the Webvan website in 1999 explained the pricing policy ("prices up to 5 % less than in local grocery stores"), and the product policy of a large and high quality assortment of groceries, perishables and drugstore items. Webvan offered free delivery for orders

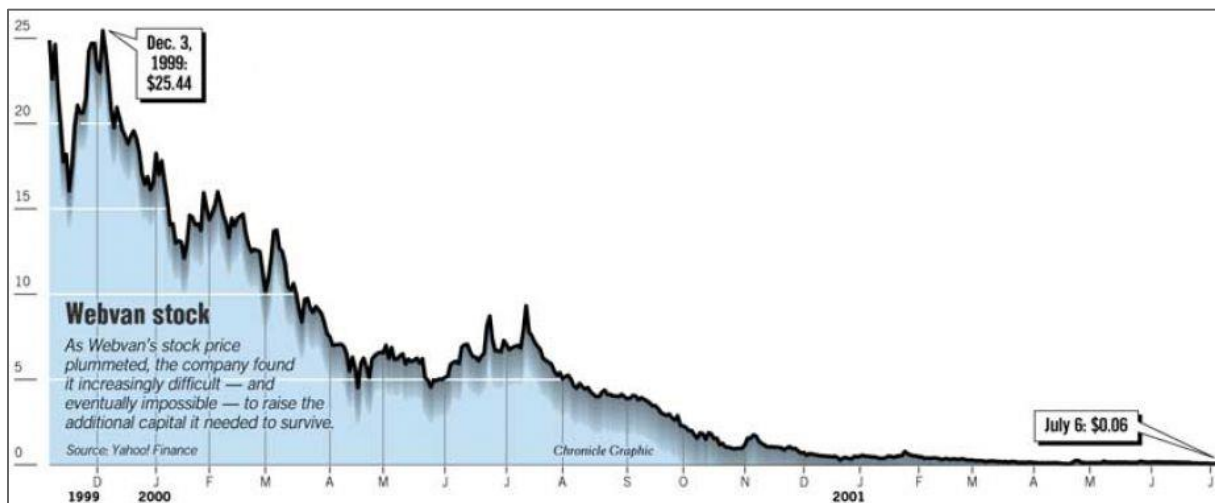
Nine Battles of Online Grocery

US\$ 50 and over and a delivery fee of US\$ 4.95 for orders under US\$ 50. The handling costs were “50 % less than the grocery industry average”.

The semi-automated warehouses of Webvan required huge capital investments, but were intended to increase handling efficiency. The use of local satellite stations increased capital investments but also had a positive effect on vehicle fill-rate and vehicle utilization.

The very narrow 30 minutes’ delivery time window of Webvan greatly increased average distance between customers. This service element was impossible to maintain, because it tripled the already extremely high transportation costs.

Bankrupt in 2001. Webvan had based its business plan on the overly optimistic online grocery market estimations of some influential but irresponsible consultant companies. The Webvan company filed bankruptcy in 2001. All assets were liquidated and all employees were fired.



The “online grocery trap”. Webvan was caught in the same trap that threatens every pure online grocery retailer: reducing the extremely high order fulfillment costs requires a high turnover and high market share. And a high turnover and market share requires low prices, high service and high acquisition costs. But when turnover is much lower than planned, the combination of low prices and high costs means a very negative bottom line.

The Webvan disaster - in my opinion - has played a major role in the very slow development of online grocery retailing in the US.

4.2 Concentration of online grocery in populated areas – Peapod case

Online groceries less than 1.5%. Being the number one country in ecommerce attractiveness, it is surprising that online grocery only represents less than 1.5% of the total grocery market. Countries like the UK and France are more developed in terms of online grocery market share than the US.

Densely populated areas. One of the reasons for the low market share of online grocery is the vast geographic surface of the US, which allows online players to operate only in certain areas of the

Nine Battles of Online Grocery

country. Most players choose to start in densely populated areas of higher-than-average socio-economical levels to reach the highest level of scale in the shortest period of time.

The most attractive cities for online grocery, due to their levels of population density and ecommerce adoption, are New York, Los Angeles San Francisco and Seattle. These cities are the tier 1 markets for online grocery retailers, with most pilot programs taking place there. Both **Amazon and Google** launched in 2014 their online grocery ventures in New York and San Francisco.

Collection of hotspots. Medium-size cities like Denver, San Diego and Portland are the tier 2 markets. Having similar characteristics to the tier 1 cities, these markets offer smaller expansion potential for online grocers. The US market therefore should not be viewed as one big market, but rather as a collection of hotspots.

When more online grocers' pilots start to roll out into the tier 2 markets and beyond, faster online grocery market growth can be expected, with estimates reaching a 5% share in 2020.



PEAPOD CASE

Largest pure online grocer. Peapod is the online pioneer delivering groceries since 1996. The company is part of the Ahold group since 2000, reported a \$550 million revenue in 2014, positioning it as the largest purely online player in the country.

Peapod.com is the oldest and best known online grocery retailer in the USA. Peapod once delivered from local stores, but in 1999 the company switched to direct delivery from central warehouses. The delivery fee changed from US\$ 16 (very high) to a minimum of \$ 6.95 and a maximum of \$ 9,95. Peapod.com became a full subsidiary of Dutch Ahold in 2000, and profit figures are no longer published.

Low margin and high distribution costs. In the first 9 months of 1999 – when profit and loss figures were last published - turnover was US\$ 57.3 million, excluding additional income of US\$ 14.4 million. Gross margin was extremely low: 5.9 % of turnover. Distribution costs were exactly 30 % of turnover.

Other costs were: marketing and sales (13.2 %), information technology (5.9 %) and other overhead (19.7 %). The result was a loss of 37.6 % of turnover. Note that this was not a recent startup: the company had been in business since 1989.

High expectations. The “about us” section of the website of Peapod.com in 2000 made a remarkable referral to “industry experts” who predicted a 20 % share of online groceries in the year 2003.

Peapod at Stop & Shop. Peapod recently started the possibility for customers to pick up orders at Stop & Shop stores.

Nine Battles of Online Grocery



Virtual stores. The Peapod virtual store started in 2013, heading to ballparks, concert venues, local recreation centers, and coffee shops in five major cities along the East Coast, as well as Chicago. The Internet grocer also used commuter rail stations in a number of major U.S. cities in 2012, allowing anyone with a smartphone to scan a QR code and start shopping.

4.3 Major supermarkets go online – Walmart case

Traditional retailers (retailers with physical locations) have jumped into the online grocery/CPG business. They include Walmart, Target, and leading supermarkets such as Ahold (Peapod), Safeway, Giant Eagle, Harris Teeter, Kroger, Lowes Foods, Roche Brothers, ShopRite, and other strong regional chains.



WALMART CASE

Large online investments. In 2014, traditional players made significant efforts in the online domain to keep up with online developments in the highly competitive grocery market. Walmart crafted a new digital strategy, planning to invest between \$1.2 and \$1.5 billion in 2015, in order to deliver the best omni-channel experience to consumers. The retailer's efforts led to a 21.6% increase in online revenues in 2014.

No fresh or frozen. Walmart has also tested a new home page. The page has three tabs — one for traditional online shopping, one for browsing items that are popular at the moment on Pinterest and search engines and one with personalized information from a shopper's local store. The product offerings contain no fresh and frozen! Only boxes and cans. This is efficient from a home delivery point of view, but it limits sales, customer loyalty and retention.

Nine Battles of Online Grocery

Walmart seeks omni-channel dominance, looking to align its online offering with in-store experience. The company can leverage its many physical stores to expand online grocery services more rapidly and with lower costs than other retailers. 75 percent of the US population lives within five miles of a Walmart store.

No pick-up fee. Unlike the delivery services from Target and Amazon (with relatively high delivery fees and subscription fees), the pickup option of Walmart is offered for free. Walmart can simply designate a team of employees as "personal shoppers" to shop and load online orders as part of their daily assignment.

Designated pick-up areas. Customers just shop their grocery lists online, choose a time to pick up their orders, and then pull into a designated parking area at their local Walmart store. An associate then loads the order into their car.

KROGER

Online acquisitions and partnerships. Other traditional retailers also joined the online grocery business. **Kroger** has made a series of acquisitions like Harris Teeter (a grocery chain with a wide pick-up point network) and Vitacost (an ecommerce platform), to gain expertise in both click-and-collect and home delivery. Kroger's products have also been made available through **Instacart**.



FAIRWAY AND WHOLE FOODS

Fairway and Whole Foods have also partnered with **Instacart** to sell their products through the Instacart platform. Sales made through Instacart already account for 5% of total sales in some of the Whole Foods stores. Instacart serves 15% of the chain's stores.

Pinterest. WholeFoods is using Pinterest as a traffic builder to the stores.



4.4 Online-only grocery retailers – Amazon case

PURE ONLINE GROCERS

The largest pure online grocers on the US East coast are: Netgrocer, ShopFoodEx and USgrocer. These companies have very different assortments and delivery conditions.

NETGROCER

Netgrocer has been delivering grocery items since 1999 from New Jersey (Northeast coast) to households across the nation, including perishable and frozen goods. Two of the shop departments are “natural-organic” and “kosher”.



Netgrocer is promoting shipments to students and military (APO/FPO) addresses.

FedEx. Orders of Netgrocer are shipped by FedEx with a **minimum fee of \$ 9.99** in the New Jersey area: region 4. Shipping to other regions is more expensive. Shipping an order of \$80.- will cost \$16.99 to region 1, \$27.99 to region 2 and \$29.99 to region 3. The fees for shipments to Alaska and Hawaii depend on weight.



SHOPFOODEX

ShopFoodEx does not carry dairy, fresh meat and perishables. ShopFoodEx has partnered with UPS and the United States Postal Service (USPS) for the daily shipments.



Shipping rates. ShopFoodEx is based in Virginia (East coast). Shipping rates for shipments in the Virginia area are \$8.99 for orders below \$100, -. The rates for the West Coast are \$14.95 and up. The shipping fee for a \$80, - order to the West coast is \$42,99.

Nine Battles of Online Grocery

USGROCER

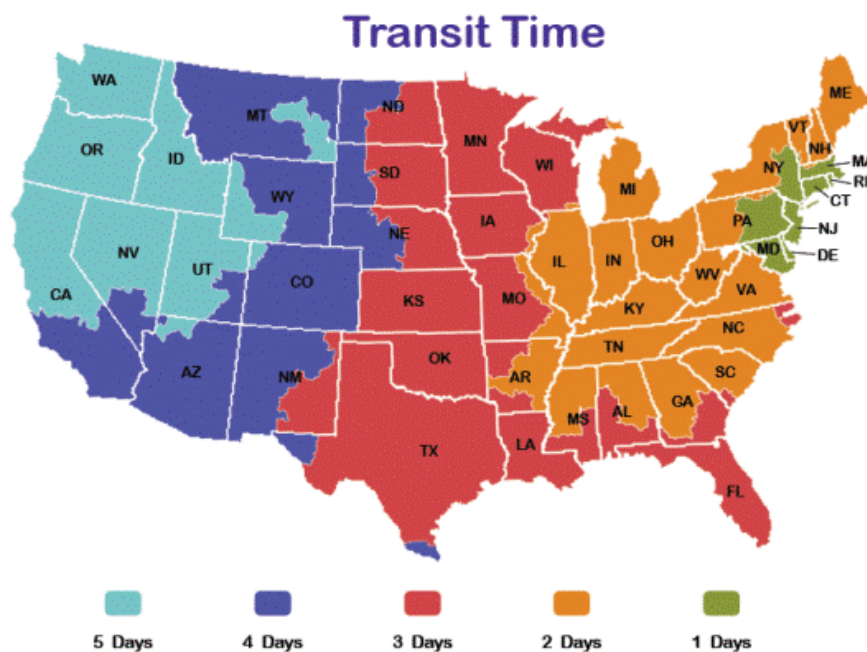
Cans and boxes. The food assortment of New York based USgrocer is mainly cans and boxes. The company “does not carry any meats, dairy, produce or frozen foods due to the very high cost of shipping refrigerated items. We do however have substitutes for many of these categories”. This means that meat, fruits and vegetables are only sold in cans.



The presentation of products on the website and the navigation is extremely plain.

FREE shipping. USgrocer offers FREE standard shipping of orders - of \$40 or more - to all US destinations except Alaska and Hawaii. Large orders are usually shipped by FedEx Home Delivery. Smaller orders may be sent by USPS Priority Mail. APO and FPO orders are shipped through the United States Postal Service.

FedEx Home Delivery serves 100 percent of residential addresses. Packages are delivered within 1 to 5 business days, Tuesday through Saturday. Shipping to the New Jersey area (Northeast coast) takes 1 day and to the West coast takes 5 days.

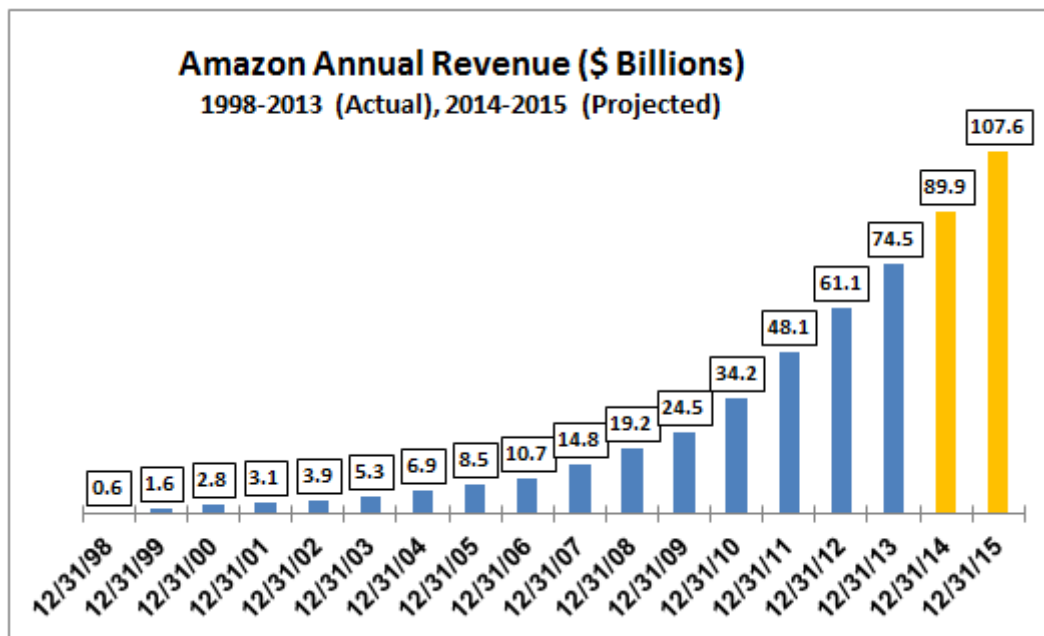


New online-only grocers are popping up, sometimes gaining online grocery market leadership in the cities where they operate. Amazon (Pantry & Fresh) for example, has a 40% online grocery market share in Seattle, and 31% in Los Angeles. FreshDirect leads in New York with 41%.



AMAZON CASE

Amazon is the most successful online business in the world. The total revenue of Amazon is increasing every year since the start in 1995. In 2015, Amazon surpassed Walmart as the most valuable retailer in the United States by market capitalization.



Amazon.com started as an online bookstore in 1994, later diversifying to sell DVDs, CDs, software, video games, electronics, apparel, furniture, food, toys, and jewelry. The company is the world's largest provider of cloud infrastructure services.

International websites. Amazon has separate retail websites for the United States, the United Kingdom and Ireland, France, Canada, Germany, Italy, Spain, Netherlands, Australia, Brazil, Japan, China, India, and Mexico.

The success of Amazon is based on a number of right choices and excellent execution:

- The right choice to start selling books online
- Excellent execution of the Amazon website
- The right choice to start with a membership fee to cover distribution costs

The dominant market position of Amazon in many industries gives Amazon a chance to be successful in groceries and fresh deliveries, but there are many challenges.

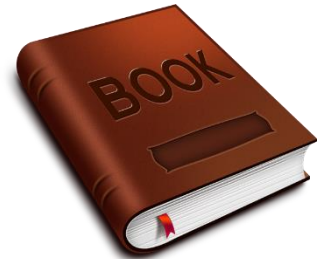
Nine Battles of Online Grocery

THE RIGHT CHOICE OF AMAZON TO START SELLING BOOKS ONLINE

Jeff Bezos decided to start Amazon and sell books on Internet in 1994. In the beginning his logistics organization was extremely poor and certainly not an USP. But to choose the books category for his internet business was a very good decision.

Many advantages for online sale of books:

- **Information:** selling books needs expertise
- **Margin:** physical books have a high sales price and gross margin
- **Digital products:** e-books have almost 100% gross margin
- **Logistics:** shipping books by mail is inexpensive
- **Expensive competition:** traditional bookstores must maintain large slow moving inventories.



In 1999 the online grocery store Webvan started with a number of highly sophisticated warehouses. But the founders did not realize that they selected the worst product category to sell online.

Many disadvantages for online sale of groceries:

- **Information:** grocery purchases are routine
- **Margin:** grocery items have low sales prices and low gross margins
- **Logistics:** shipping groceries to homes is expensive
- **Very efficient competition:** supermarkets are extremely efficient.



Webvan went bankrupt in 2001. Amazon is now the most successful retailer in the USA.

EXCELLENT EXECUTION OF THE AMAZON WEBSITE

Not only did Amazon select one of the best product groups to sell online, but the Amazon book webshop soon developed a number of excellent features:

- **Information.** Expert summary information about each book
- **Social proof.** Testimonials, book reviews and star ratings from readers
- **Extra selling:** the “frequently bought together” and “also viewed” features
- **Fast order funnel:** the 1-click ordering feature
- **Changing your mind:** the “recently viewed items” feature
- **E-book library:** Kindle makes books available now and here.

Since the start of Amazon, I have ordered 650 physical books (mailed from the USA to The Netherlands) and my Kindle library contains 185 e-books.

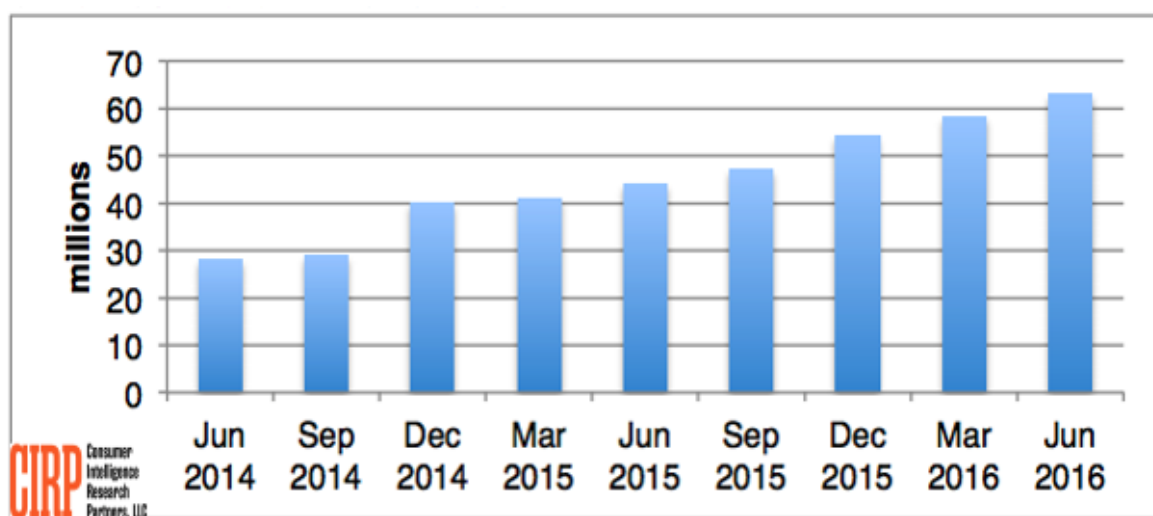
THE RIGHT CHOICE OF AMAZON TO START WITH A MEMBERSHIP FEE TO COVER DISTRIBUTION COSTS

Nine Battles of Online Grocery

Free 2-day shipping. Amazon started “Amazon Prime” in 2005 in the USA, a membership offering free 2-day shipping of non-food for an annual fee of \$79, and discounted 1-day shipping. The fee was increased to \$99 in 2007, and free 1-day shipping was offered to a number of cities.

International. Amazon prime was introduced to large cities in Germany, Japan and the United Kingdom in 2007, France (2008), Italy (2011), Canada (2013) and India (2016). The service also includes video and music streaming and photo storage.

More than 50% of US households. In July 2016, a study by Consumer Intelligence Research Partners (CIRP) estimated that Amazon’s Prime program had reached 63 million members in the U.S. This actually means that more than half of US households are Amazon Prime members! A huge success!



AMAZON HAS A CHANCE TO BE SUCCESSFUL IN GROCERIES AND FRESH DELIVERIES

Prime Fresh rolled out after 8-year test. In 2007 Amazon started testing to deliver groceries in hometown Seattle with “Prime Fresh”. In 2015 “Prime Fresh” grocery delivery was rolled out to 16 other cities in the US and to London UK. The service fee initially was \$299/ year, but was dropped to \$15/ month in 2016 for Amazon Prime members.

The prime Fresh subscription provides unlimited daily deliveries of fresh groceries:

- You have to be an Amazon Prime (\$99/year) subscriber
- You have to subscribe at (\$15/month) to Amazon Fresh
- You pay \$10 for deliveries under \$40, but deliveries of \$40 and above have no delivery charge.

Test with physical stores. Amazon is planning to operate a 20-location pilot program with grocery stores by the end of 2018, in places like Seattle, Las Vegas, New York, Miami and the Bay Area.

- 10 stores with “click and collect” service (“drive-through”)
- 10 traditional convenience stores (“walk-through”)

Amazon has already opened a few physical bookstores and a number of pop-up stores in malls to showcase other non-food products.

4.5 Service companies and memberships – Instacart case

SERVICE COMPANIES

Personal shoppers. New businesses are appearing, that offer personal shopping services. These new businesses don't have distribution centers. They don't have physical stores. But these organizations have an army of people, who provide personal shopping service for buyers. How does it work:

- **Ordering.** Consumers place orders directly with the service organizations
- **Matching.** The organizations distribute the orders to personal shoppers
- **Shopping.** Personal shoppers go to local stores to shop
- **Delivery.** Personal shoppers provide same-day deliveries in only a few hours.

Instacart, Google Express and Postmates are examples of these new businesses. Instacart is the featured case of this chapter. Google Express offers same-day and overnight delivery, starting in 2013 in San Francisco and in 2014 also in Chicago, Boston and Washington DC. Postmates delivers goods in more than 100 cities in the US with the help of human courier networks, which enables people to order anything from anywhere within the city.

Some of these businesses have direct relationships with local retailers and serve as their online grocery fulfillment arm. Others operate completely independently.

MEMBERSHIP BUSINESS MODEL

Subscription services. One factor that drives the increase in adoption of online grocery shopping in the US is the membership model. Many online players are already offering this alternative payment for deliveries, with some even turning into subscription-only services:

- Amazon Fresh: \$15/ month; free delivery for orders above \$40
- Instacart Express: \$99/ year
- Google express: \$12.99/month

The membership model brings many benefits to e-grocers, ranging from consumer loyalty and the increase of order frequency, to optimization of delivery operations and steady revenue streams.

The Instacart logo is written in a green, rounded, cursive-style font.

INSTACART CASE

Instacart was founded in 2012. CEO is Apoorva Mehta, who used to work at Amazon. Headquarters are in San Francisco. Available in more than 21 US cities, of which San Francisco, Chicago and New York City are most important. Revenue 2014: \$100 million. Limited dollars spend on marketing. "Worth of mouth": people talk about it because of the novelty and excellent service.

Nine Battles of Online Grocery

The business model of Instacart:

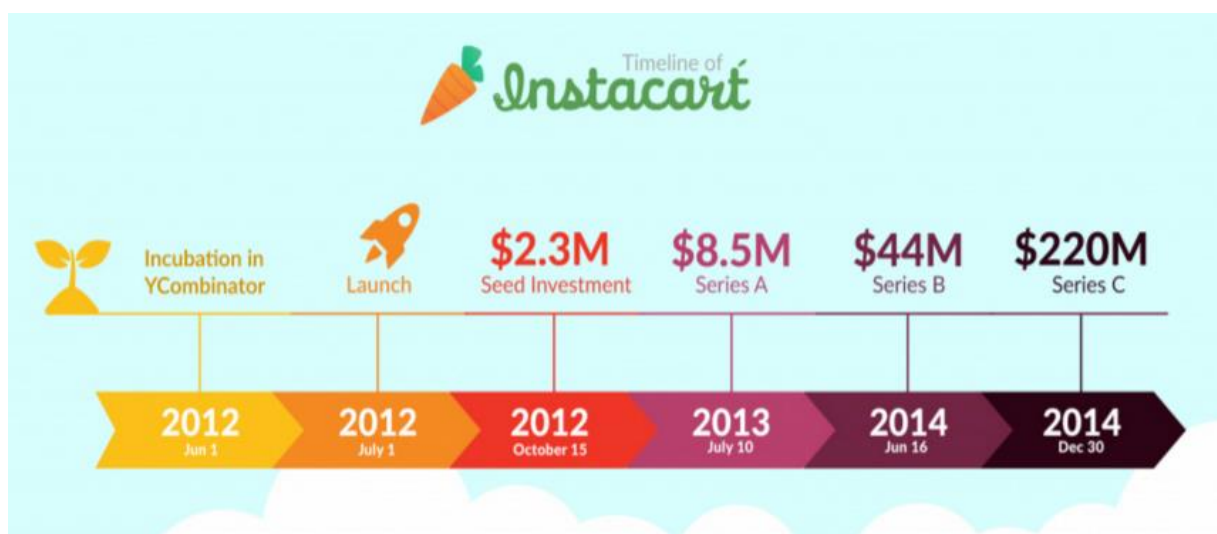
- Users are connected with a smartphone app to personal shoppers who shop for ordered items and deliver at home; these personal shoppers look for the best quality for their own customers
- Customers place orders from their favorite store or to mix items from different stores
- Shoppers use the Instacart shopper app. (ordering at different stores, store planning, traffic planning etc.)
- Home delivery in as little as one hour
- Exact timing of delivery, as promised (being early is as bad as being late)
- Part-time workers (freelancers) with their own vehicles. Every delivery is rated and feedback is given. Freelancers with the best ratings get the most work.
- Instacart works with retailers Safeway, Kroger, Fairway and WholeFoods as well with regional and local grocers. Some retailers have fast POS lanes for Instacart shoppers.
- No warehouses, no inventory, no trucks, only software.

No special cold storage infrastructure for fresh and frozen perishables for longer than an hour; just like normal shoppers

Smart finance:

- Revenues: surcharge on the store price, delivery fees, membership fee for Instacart Express
- Delivery fees: \$4 till \$15 (within an hour); OK for small businesses (it is expensive to send your secretary to the supermarket)
- Cost structure: set-up costs, salaries to a small crew of permanent employees, commissions based payments to shoppers
- Shoppers can earn up to \$15 per hour, but Instacart is cutting the pay for “some” workers.

In March 2016 Whole Foods Markets (one of the most important retail partners of Instacart) invested an undisclosed amount in Instacart. The diagram shows earlier investment series.



Source: Juggernaut

Nine Battles of Online Grocery

Difference between Instagram and home deliveries by local supermarkets:

1. Delivery within one hour or two hours; no warehouse/black store and fleet of trucks, or large number of employees
2. Ability to order from several different stores in one session; example: the national brands from one store and the produce from another store
3. The ability to expand to new market extremely quickly, because all the infrastructure is software. The main investment for Instacart is training the personal shoppers.

New development: “isle mapping”

Instacart also obtains inventory and store layout data from major grocery chains with which it partners in order to create “aisle mapping.” Aisle maps guide shoppers to the specific items on their grocery lists. This helps them navigate to items quickly, without hunting around and staring at shelves, searching for something they’ve possibly never purchased before.

HOW IS ONLINE GROCERY DOING IN THE UK?



5. ONLINE GROCERY WAR IN THE UNITED KINGDOM

5.1 UK grocery market

The UK grocery retail market size was £ 179 Billion in 2016.

Price war. The UK's grocery market has been embroiled in a price war for a long time. Tesco, Asda, Sainsbury's and Morrison's, also known as "The Big Four", have been forced to cut prices to compete with the discounter chains Aldi and Lidl. The Big Four lost significant market share to the discounters: their combined market share went from 80% in 2013 down to 72.8% in 2014. Especially Tesco has suffered from the increasing competition.

5.2 UK grocery online market

Online 6% market share. The UK online grocery retail market size was £10.5 bn in 2016. This is 6% of the total grocery retail market. The penetration of online grocery shopping (% of total population) is 25.0%

Market growth. According to IGD, the online grocery market is set to grow to £17.6 bn or 9% in 2021. Growth is stimulated by aggressive new entrants like Amazon Fresh and meal kit providers like HelloFresh.

Online warehouse space. Grocers are cutting back on megastores, but rising internet food sales made supermarkets develop increasing online warehouse space in 2014.

Expanding unpopular pick-up points. The UK's Big Four are also expanding their pick-up point network all over the country. 73% of UK's shoppers use pick-up points (Internet Retailer, 2015). But only 1% of the British prefer pick-up points (eMarketer).

Membership schemes. In 2015, 26% of British online grocery shoppers belong to one of the available home delivery membership schemes in the country (Tesco, Asda, Sainsbury's and Ocado). See par. 14.3 for the membership battle.

5.3 UK supermarkets go omni-channel – Tesco and Asda cases

Before we discuss the two elaborate cases of Tesco and Asda, first a short impression of the online activities of the three other major traditional supermarkets.

MORRISONS

Morrisons signed a 25-year agreement with Ocado to outsource its online operations through Ocado's logistics network. Ocado is a pure player with 15 years of ecommerce and online distribution experience. Morrisons.com launched in January 2014, closing the year with a 2.6% online grocery market share.

See the Ocado case in par. 5.4.



SAINSBURY'S

Sainsbury's has 15% of the UK online grocery market. The retailer has optimized its online infrastructure by building new dark stores, opening new pick-up points and expanding home delivery reach.



Delivery charges discussion. Sainsbury's ecommerce boss Robbie Feather believes supermarkets have "destroyed" the value in grocery ecommerce by under-charging for deliveries (RetailWeek, 20 October 2015).

ALDI

Testing online in UK. Beginning 2015, announcements in the German media hinted that Aldi, was planning to test the online grocery market in the UK. Aldi still had not entered the online market due to high online costs, which clash with the discounter's low-cost model.

No profitability. Aldi will launch wine and non-food special buys, but its UK boss Matthew Barnes admitted in an exclusive interview with Retail Week that he could not see a path to profitability in online grocery "anywhere in the market" (RetailWeek, 16 October 2015).





TESCO CASE

Tesco has nearly a 50% share of total UK online grocery sales (total UK online grocery sales: 10.5 billion in 2016). But customers' resistance to paying for the full cost of delivery means that Tesco is aiming for far lower than the traditional 5.2% margins they make on in-store sales.

Changing online business models. Tesco began with in-store picking, then switched to a dedicated warehouse model. It began with only a direct home delivery service, but Tesco now offers click and collect as well.

Focus on omni-channel. Tesco has announced that every arm of its business will feature a digital aspect. Tesco is cutting back on physical store openings to focus on the online channel. In an attempt to improve the omni-channel experience for shoppers, the company is expanding its pick-up point network and increasing capacities through “dark stores”.

Tesco virtual store (Korea). More facings for margin rich products:



This example is the Tesco (Homeplus) QR Code Store in South Korea. In 2009 Homeplus took over a subway station and created a QR Code virtual store to provide their customers with an ultimate shopping convenience. The QR Code virtual store was branded exactly in the look & feel of the Homeplus formula, so people felt like they were inside the Homeplus store doing their groceries.



Tesco's 3D virtual store

Tesco has unveiled a prototype of a Virtual Reality supermarket, in which customers can browse a 3D supermarket using Oculus Rift virtual reality eye gear. Although they can't yet pick anything off the shelves, customers can travel through the store and look at the brands on offer. All without leaving the comfort of their home.



ASDA CASE

Pick-up points. Asda UK is a subsidiary of Walmart. Asda has 15% of the online grocery market share. The company announced a plan to almost triple online sales to €3.8 billion by 2018. Asda has in 2015 around 640 sites and had planned to roll out to 1,000 pick-up point locations, and make same-day procurement the norm.

But Asda is putting online on hold. Asda is putting the roll-out of click-and-collect sites on hold to focus on revamping its existing store portfolio (Retail Week, 10 October 2015).



Unattended pick-up points. ASDA opened in November 2015 the first unattended pick-up point in Dt. Helens UK. Asda used Dutch SuperDirect technology. Customers have to show a QR-code, and then pick up their groceries at a temperature controlled area.

New ToYou service for extra traffic and turnover. Asda is to allow customers to collect orders from other retailers within its supermarkets in an attempt to revitalize its larger stores and take advantage of its nationwide delivery network. The grocer calls the new service “ToYou”. It means shoppers will be able to pick up and return online orders of George clothing and non-Asda brands at any of the retailer’s 614 shops.

40 million extra customers. The online fashion retailer Missguided has signed up to the ToYou service and Asda is close to signing deals with other brands. Asda believes ToYou could lead to 40 million extra customer visits to its shops every year by 2019.

5.4 UK online-only grocery distributors – Ocado case



Large and finally profitable. Ocado is an interesting case for several reasons. Ocado is a large online-only grocery retailer, and has built up a 11% market share of the 10.5 bn online grocery market (2016) in the UK. Retail sales were reaching £1,267 million in 2016.

After declaring a loss of £12.5 million in 2013, Ocado announced its first profit before tax of £7.3 million in 2014, growing to £12.1 million in 2016.

NB: A net profit is remarkable for an online-only grocer!

Nine Battles of Online Grocery

Very transparent. Ocado earns also much attention for the unusual high transparency of its business operation on its website and especially its 2016 annual report. This transparency of Ocado makes it possible to make this case quite rich of relevant information.

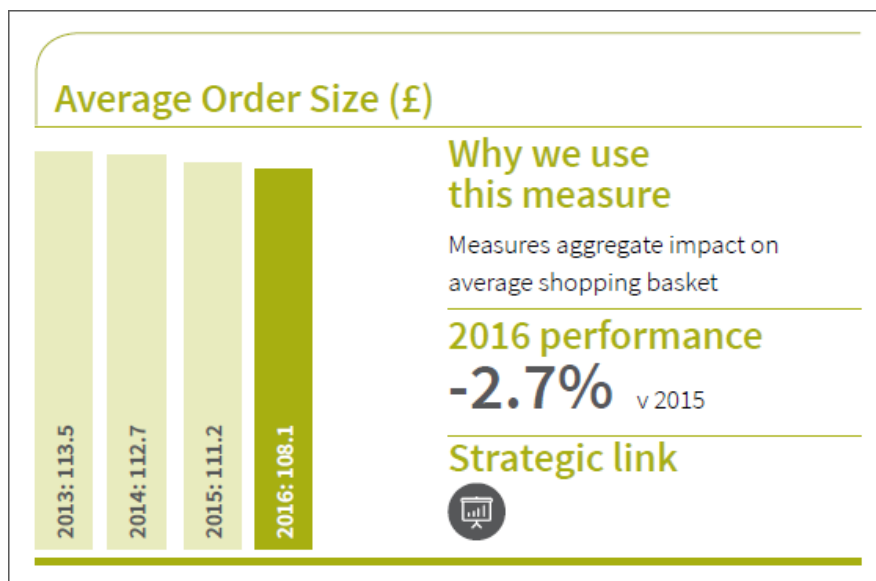
Founded by bankers. Ocado was founded in 2000 by three former Goldman Sachs bankers – Tim Steiner, Jason Gissing and Jonathan Faiman. These bankers have made Ocado a company with market capitalization of £2.35 billion, after investing £400 million! Not bad at all, but these figures are anticipating tremendous growth of turnover and profitability.

Customer service plus operational efficiency. *Personally I am not a great fan of retail companies founded or run by ex-bankers, but Ocado appears to have a reputation for its excellent customer service, combined with a focus on operational efficiency. This golden combination is the ultimate driver for profitability. More about this golden business model in chapter 18.*

Will life-time-value match investments? We will describe in par. 6.6 another new online-only grocer HelloFresh, backed by venture capitalists, that focusses on fast growth by pouring millions into expensive marketing campaigns. The question is if these high investments in attracting new customers will result in a high enough customer life-time-value, in order to earn back these investments.

Partnership with Morrisons. Online-only retailer Ocado has since 2013 a partnership with the UK no. 4 traditional retailer Morrisons, to outsource their online operations. Before Morrisons, the Ocado company worked with Waitrose, which decided to start its own online operation.

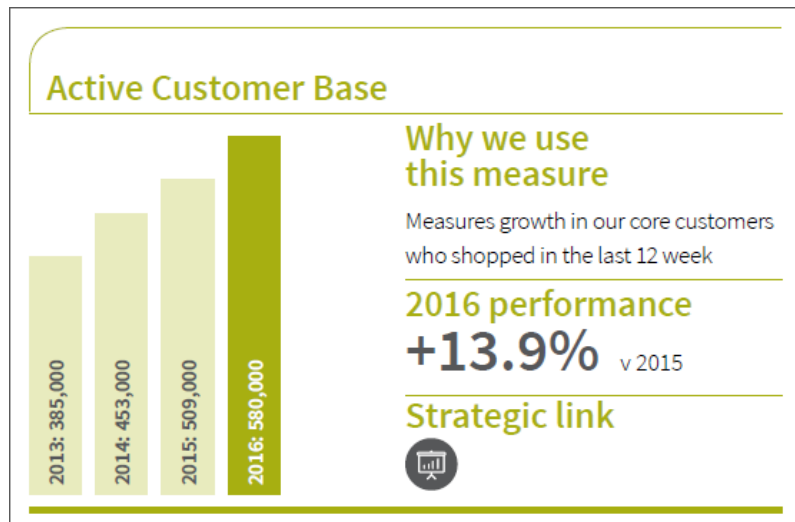
Large assortment and average order size. Ocado carries 50,000 SKUs (Stock Keeping Units). In 2016 the customer base was 580,000 active users with 230,000 weekly orders. The average shopping basket of Ocado is quite large: £108.10. The next diagram from the informative Ocado.com website and annual report shows the development per year of this important performance indicator. For this book it is important to discover the drivers behind this KPI.



Ocado claims that the reduction of the (still very high) order size is due to price deflation.

Nine Battles of Online Grocery

Steady growth. Ocado publishes a customer growth rate KPI that is not only steady and impressive, but also not open for discussion. Only customers are counted that shopped in the last 12 weeks. In 2016 the customer growth rate was 13.9%, based on 580,000 customers.



OCADO'S INNOVATIVE STRATEGIES AND TRADE-OFFS

Disrupting. Ocado claims that it is disrupting the UK grocery marketplace by a number of innovative strategies. "We have two primary considerations – improving the quality of our proposition for our customers while delivering best in class service at the lowest economic cost".

The "disruptive innovative strategies" are explained on the Ocado website and the 2016 annual report. But for each strategy I have included the most important trade-offs: the "BUT's".

Here are some of Ocado's tactics to grow the number of customers:

- **Targeting vegetarians** and broadening its product range. Ocado gives customers a massive choice of 50,000 products, of which 650 are vegetarian and vegan.
- **Selling slimming products.** Ocado's sports nutrition and slimming products was the largest category in its non-food sector.

Mobile ordering. Ocado exceeds the European average of mobile ordering, with its mobile orders corresponding to 45% of the total amount. This high mobile share is realized by the development of several apps.

The "Scan and Shop" app. Ocado's mobile apps and algorithms show digital innovation. The Scan & Shop app lets shoppers add items to their baskets by scanning barcodes.

The "Instant Shop" function. To further facilitate online shopping experiences, Ocado also offers an Instant Shop function that predicts a consumer's basket, based on previous purchases.

Boosting basket size. De webshop of Ocado uses several other intelligent mechanisms to boost basket size:

- **"Incomplete offers in your trolley":** promotional items that have been purchased before, including date of last purchase

Nine Battles of Online Grocery

- **“Did you forget?”**: other items that have been purchased before, including date of last purchase
- **“Switch and save”**: suggestions to switch a purchased product to another product (higher weight but lower price per 100g) to improve margin
- **“Special offers you might like”**: tailored special offers.

Until now, no BUT’s, only extremely intelligent software.

No checkout process: Ocado has no checkout process that is necessary in physical stores. NB: the checkout process is one of the two most expensive processes in supermarkets.

BUT each online retailer suffers additional costs of “Single SKU Picking” and home delivery, activities that are executed for free by customers in physical stores. And online retailers also have to solve the problem of substitutions for out-of-stock products, that customers of physical stores will solve themselves.



Ocado truck with home delivery impression

Large Customer Fulfillment Centers (CFC’s). Ocado has several CFC’s. The Dordon CFC, which opened in 2013, has the capacity to generate over 180,000 orders per week, equivalent to around £1 billion in annualized sales. Most customer baskets contain over 50 different items across three different temperature zones.

BUT Ocado massive CFC’s have large internal distances, and delivery trucks have to drive longer distances to consumer homes, which increases transportation costs. Ocado solves this disadvantage by working with a hub and spoke system. The CFC’s deliver the customer orders to different spokes with large trucks, and from these spokes the customer orders are delivered to customer homes with small vans. Picnic (NL) uses the same system.

New CFC’s have lower capacities: the third CFC in Andover has a capacity of 65.000 order per week.

Short supply chain from suppliers to order-picking. The fact that consumer orders are picked in a central warehouse (and not in a store), means that the supply chain is short in time. This short supply chain is especially favorable for fresh merchandise. Ocado uses the short supply chain as a unique selling proposition.

Nine Battles of Online Grocery

No buts! Fresh merchandise often has higher gross margins than dry groceries, especially in comparison with branded grocery products. The higher the share of fresh merchandise, the higher the average gross margin of total sales! And Ocado claims that:

- *proportion of sales of fresh and chilled products is 40% (very high for online retail)*
- *product waste is less than 1% of sales (low for any food retailer)*

Relatively cheap real estate. Ocado employs only warehouses in industrial areas, where real estate is cheaper than in busy shopping areas in highly populated neighborhoods. Ocado has been experimenting with the first UK virtual store, also called Shopping Wall, in London in August 2011.

BUT while supermarkets suffer high costs of floor space, the more important performance indicator of space-efficiency is sales per square meter floor space. And successful supermarkets often show a high turnover per unit floor space.

Automation and mechanization. Ocado has automated many tasks in the CFC's to drive down operating costs. Example of automation is the "put away" process.

BUT automation requires high investments in equipment and systems. And automation makes a warehouse operation less flexible in adjusting to high and low production flows.

Optimizing operations. Ocado developed proprietary technology, software and algorithms to optimize operations. A fast stock turn and advanced picking systems reduces product waste, representing both a cost saving and a more sustainable food supply chain.

No buts! Developing proprietary software is often very expensive, but so is buying of-the-shelf software, that often does not have all necessary features. More interesting even: Ocado tries to capitalize on the specialized software by selling it to other retailers worldwide. And retailers love software that has a solid track record.

Routing software in the CFC's. Ocado uses sophisticated routing software for the automated internal transportation system.

BUT routing software is rather common for automated warehouses, and it is absolutely necessary to operate a large warehouse for storing and picking consumer orders.



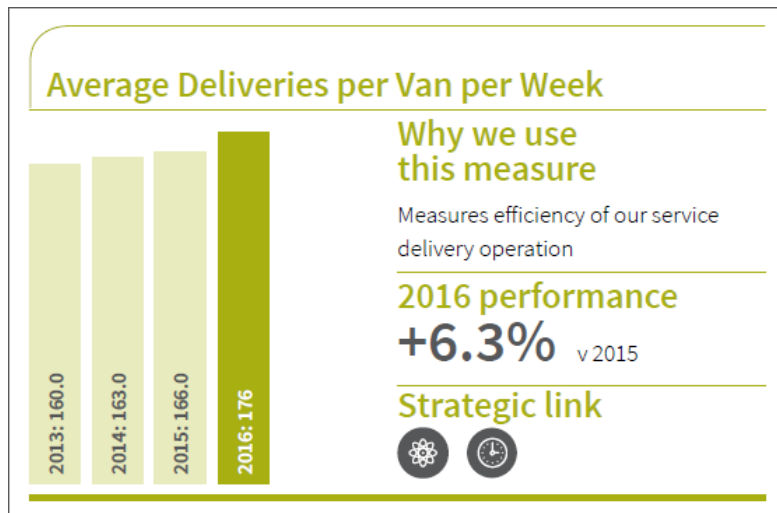
Accuracy of picking and delivery. Ocado does not suffer from stocks shrinkage due to customer theft, which makes inventory accounting much more accurate than in supermarkets. The resulting predictability and precision with which Ocado operates the fulfillment processes enables the

Nine Battles of Online Grocery

company to provide excellent service to customers, in terms of accuracy of picking and delivering on time (in a one-hour time slot).

BUT offering accuracy of picking and a narrow time slot makes it difficult to satisfy customer expectations during busy seasons and in case of complications in the supply chain (power cuts, strikes etc.). And narrow time slots are expensive to operate.

High delivery truck (“Van”) productivity. Ocado is controlling the high home-delivery costs by constantly improving the number of deliveries per week per truck.



Delivery productivity is an important fulfillment KPI

No BUT's. 176 deliveries per week per truck is an excellent score. The combination of high truck productivity and a very high average basket size is key for operating above break-even from 2014.

NEW OCADO DEVELOPMENTS

Ocado Smart Platform. Ocado introduced a new supplementary business, Ocado Smart Platform. The company is leveraging its logistical services by offering its infrastructure and operating capabilities to power third-party online retail businesses. Ocado expects new partnerships with international retailers to materialize in the near future.

Also click-and-collect. The company is testing a locker system where customers can collect their purchases, thus avoiding delivery costs. Ocado does not hide the fact that, in addition to its original business model, based on home delivery, there is room for Click & Collect. This sales method is thriving in the UK and could provide an interesting lever to develop Ocado's business and future profitability.

HOW ABOUT ONLINE GROCERY IN MAINLAND EUROPE ...



6. ONLINE GROCERY WARS IN GERMANY, FRANCE AND THE NETHERLANDS,

6.1 German grocery market – traditional and online



GERMANY: TRADITIONAL GROCERY MARKET

Germany, with a GDP of €3.1 trillion, is the 4th largest economy in the world and the largest in Europe. Germany also represents the second-largest ecommerce market in Europe, after the UK, worth €42.9 billion.

Germany's grocery industry is the largest in Europe, with sales of €247 billion in 2014. The grocery market in Germany is characterized by three factors:

1. **Few different supermarket formats.** Years of ongoing mergers and acquisitions have created a market dominated by a handful of players. Market leader Edeka has 4,100 stores and holds a 26% market share. Aldi and Lidl together hold 44%.
2. **Saturated market.** The German grocery market is highly saturated. It is estimated that every German household has 3.5 food stores within a 10-minute radius
3. **EDLP market.** Discounters Aldi and Lidl play a very prominent role in Germany with a combined market share of 44% in 2014. This has created a fierce price war in the country where traditional service grocery retailers are forced to drastically cut prices in order to stay competitive.

Nine Battles of Online Grocery

GERMANY: ONLINE GROCERY MARKET

Low online market share. The German online grocery retail market was €2.0 billion in 2014. This is a 0.8% market share of the total grocery market. The penetration of online grocery shopping (% of the total population) is 11.0%. The front runner of online grocery retailing in Germany is Edeka, with an online market share of 14.5% in 2014.

Amazon is the online market driver. The landscape changed when international players like Amazon started to gain traction in the German market selling grocery products online. Amazon had an online market share of 10.9% in 2014. Afraid of missing out on the online movement, traditional players had to follow and start developing their online businesses.

Traditional retailers have been investing significantly to expand their online offerings. Another example besides Edeka is REWE, which has invested heavily in its online grocery business and now delivers in 63 cities. These efforts made REWE's online sales almost quadruple in 2014 to an online market share of 13.2%.

Allyouneed Fresh is a DHL owned online grocer

operating in Germany with a 6% share of the online grocery market. Since 2012, the company has been selling more than 20,000 products, with a large offer of organic and fair-trade products. Products are picked up from the wholesalers' markets in the morning and home delivered that same day. Produce goes through a continuous cold chain from pick-up to delivery, to ensure freshness.



Online niche players. For a long time, fierce price competition and high starting costs made the German online grocery market only attractive for niche players. Examples are Gourmondo (delicatessen) and Natur.com (organic Food and delicatessen). To stay cost-efficient, these specialized online food shops focused on urban districts with high population densities.

Personal shopper start-up has stopped. One case worth mentioning is that of ShopWings, the "German Instacart", backed by Rocket Internet. The company, with a network of personal shoppers, collected and delivered groceries to consumers in Berlin and Munich within a two-hour range. Operating since the last quarter of 2014, ShopWings ended operation in Germany in October 2015.

6.2 French grocery market – traditional and online



FRANCE: TRADITIONAL GROCERY MARKET

Hypermarket country. Grocery retail sales in France accounted for €231 billion in 2014. In France, hypermarkets are a success: there are more than 1000 large hypermarkets in the country. Carrefour has opened the earliest French and European hypermarket in 1963 and now runs 222 hypermarkets.

The large stores and low population density in France is cause of the popularity of pick-up points (drives) with retailers and consumers.

Less discounters. France is the only country in Europe where discounters have seen a significant drop in market share compared to traditional retailers. The discounters Aldi and Lidl together experienced a drop in market share to 7.3% in 2015. Consequently, German discounters Aldi and Lidl are closing stores and the Spanish player DIA even left the country.

The market shares of the largest French traditional grocery chains in 2015 are:

- Carrefour: 21.9%
- Leclerc: 20.2%
- Intermarché: 14.2%
- Auchan: 11%
- Casino: 11.4%
- Systeme U (retailers' cooperative): 10.5%

FRANCE: ONLINE GROCERY MARKET

In 2014, 11% of French consumers shopped for groceries online. The online grocery market accounted for 3.6% of total grocery sales with a total revenue of €8.4 billion.

Almost no home delivery. France's large geographical surface area causes low population density with an average of 120 people per square kilometer. This factor, together with the price sensitivity of French consumers, who don't want to pay extra for delivery, have made home delivery economically challenging.

"Drive" pick-up points. As a result, pick-up points - called "Drive" in France - have been the primary delivery model of online grocery in France. Drive points have expanded almost exponentially in France over recent years with a total that exceeds 3000 points. This method is used for 80% of online

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grocery orders in France. This extensive network of pick-up points enables 80% of French to reach a Drive point within 10 minutes from their home or office.

Casino Group leads the online grocery sector with 25% market share, followed by Leclerc with 18%. They also aim to have a broader reach to consumers by offering home delivery services.

Houra online-only grocer. Out of all the players, the online grocer that stands out is an affiliate of Belgium Groupe Louise Delhaize: Houra.fr. Launched in 2000, Houra was the first online-only marketplace for groceries in France. Today, the company claims to offer the largest online grocery assortment in the country with more than 55,000 products, of which 3000 are organic (“biologique”).



Attractive website with an obstacle. Houra offers 24-hour delivery service in 23 regions of France and has a strong mobile focus. The website of Houra.fr is a feast for the eye, but to enjoy it you have to input a postal area number (for example 75008 for Paris).



6.3 Dutch grocery market – traditional and online

NETHERLANDS: TRADITIONAL GROCERY MARKET

Many small stores. The total grocery retail market in my homeland The Netherlands is valued at €35.9 billion (IRI). Strict zoning regulations have kept the number of hypermarkets low and the average size of supermarkets small: less than 1000 m² (10.000 square feet). But there is an advantage of many small stores: every household is close to a number of different grocery stores.

Albert Heijn 35%. The market is led by Albert Heijn, which controls 35% of the market. Jumbo follows with 19% market share and is still growing as a result of spectacular acquisitions of two large former competitors. The other half of the market is shared by smaller regional players and the two German discounters Aldi and Lidl, that are gradually gaining a larger share of the Dutch grocery market. These two discounters together control 16% of the grocery market.

NETHERLANDS: ONLINE GROCERY MARKET

High internet access. Ninety-six percent of Dutch people have access to the Internet, and 71% of the population shops online. This makes the Netherlands an interesting country for online retail. In 2014 and 2015 the Dutch online grocery market has developed fast, as a result of aggressive newcomers Jumbo and HelloFresh. But online grocery did not reach the level of the leading European markets UK and France.

Low online grocery share. In 2014, online grocery retail accounted for roughly 1.3% of the total grocery retail sales in the Netherlands with an estimated value of €450 million, most of it realized by Albert Heijn.

Increasing online competition. One of the reasons behind the slow online grocery development has been a lack of serious competition to the market leader Albert Heijn (AH.nl). But the rise of aggressive competition in 2014 by Jumbo, HelloFresh and Picnic accelerated the online channel development.

Jumbo started online again. Since November 2014, Jumbo opened 300 pick-up points. Jumbo plans to earn 5% of its total revenue from online sales by 2017.

Smaller traditional grocers like Coop, Deen, Dekamarkt, Spar, and PLUS are also investing in online expansion. These grocers are opening pick-up points in their stores to enable online shoppers to receive products ordered online. Some are also testing delivery in specific areas of the country where they have strong positions.

Pick-up points or direct home delivery. Pick-up points are the retailers' preferred model due to its lower cost structure and higher coverage, but it is not what consumers prefer. Dutch consumers highly prefer direct home delivery (80%) and are willing to pay on average €4 to get their groceries delivered to their doorsteps. Direct home delivery is viable almost nation-wide in The Netherlands, because the population density is high.

6.4 Dutch omni-channel supermarkets – Albert Heijn case

Pick-up points. Dutch market leader Albert Heijn has been the main force in online grocery retailing. See the case on the next page. A number of smaller supermarket chains also started their online business, using pick-up points to keep costs low. The grocery chains with the largest number of pick-up points are:

- Jumbo (300)
- Spar (81)
- Deen (70)
- Hoogvliet (56)
- Coop (53)

Jumbo entered the online grocery market again in 2014, after experimenting with online retailing in 2000. Jumbo experimented with a small number of pick-up points, but expanded the number of pick-up points to 300. Direct home delivery started in March 2016.

Jumbo is increasing the online basket size and gross margin by selling office supplies and daycare center supplies (nappies) to small businesses.

Discussions with Albert Heijn franchisers. The agreements between franchisors and franchisees about online retailing have been problematic. The lack of detailed arrangements has created tensions that have affected the growth of online grocery of Albert Heijn. The big question is who is responsible for delivery or how much the franchisees will earn from online orders picked up at their

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stores. A group of 32 Albert Heijn franchisers even started their own online business with a (very basic) own webshop.

Jumbo seems to be more successful in establishing conventions with their franchisees. The company has set protocols about the distribution of online sales, the presence of pick-up points at franchisees, and has agreed upon guarantees in case of sales cannibalization.



ALBERT HEIJN CASE

Royal Ahold NV, the mother company of Albert Heijn (NL) and a number of US supermarket chains, is an experienced omni-channel player in different markets.

In The Netherlands, Albert Heijn supermarkets is the grocery market leader with a 34% market share in 2015. Albert Heijn Online sells not only groceries online, but also wines of Gall & Gall and cosmetics of drugstore Etos, both subsidiaries of Ahold. The online customer orders were first picked in-store. Later Albert Heijn developed two dedicated warehouses for online orders.

Albert Heijn has a long and rich online retailing history in the Netherlands.

- **James Telesuper** was the first experimental online store of Albert Heijn in 1983. Ordering was first by telephone and fax, and later by Videotext.
- **Albert Heijn Home Service** became the name of the online store in 1999. The online turnover was 0.25% of total Albert Heijn sales.
- **Albert.nl**. In 2002 the name of the Albert Heijn online grocer changed into Albert.nl. In 2007 Albert.nl became the online delivery company for Albert Heijn, Etos and Gall & Gall.
- **Albert Heijn Online** became the new name in 2014, with webshop AH.nl.

Peapod (USA) is one of the oldest online-only grocery retailers of the USA. Peapod was acquired by Royal Ahold NV in 2000, when Peapod was experiencing much competition of start-up Webvan in the Chicago market.

BOL.com is the Dutch version of Amazon.com. This latest acquisition of Ahold delivers books and other products by the postal service, but also uses the Albert Heijn supermarkets as pick-up points.

Assortment and pricing. Albert Heijn Online carries a larger assortment and the same prices as the physical stores of the three companies Albert Heijn, Etos and Gall & Gall. The 27,000 SKU's are:

- AH-XL assortment plus
- 1,500 Gall & Gall wine products
- 1,300 Etos drugstore products

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- 600 superfoods
- 800 Belgian products

Large basket size. Albert Heijn Online reports an average basket size of 74 items, resulting in a basket amount of €139. Of all online sales, 51% are “own-branded” products (private labels) and 47% are fresh products. Since 2015 the online grocer is also selling a Food Box, that contains all ingredients of 3 complete meals. One box with 3 meals for 2 persons is priced €35; a box with 3 meals for 4 persons costs €49.

Delivery fee depends of delivery time. The minimum order size is €70. That explains the high average basket size. Delivery fees are between €3.95 and 12.95, depending of the delivery moment of the day. The new Food Box of Albert Heijn Online is delivered without delivery fee, as defense against the fierce competition of HelloFresh. But Ahold CEO Hans de Boer has claimed, that free delivery is a cash burning proposition. I agree.

Logistics. Albert Heijn Online delivers the next day and mainly to consumer homes, but is rolling out pick-up points since 2012. The next proud slide of an Ahold presentation shows the structure of online distribution.



Overall productivity of the “Home Shop Centers is 142 units per hour. The picking productivity is 405 units per hour.

6.5 Pure players and online service providers – Picnic case

SOME DUTCH FAILURES AS LEARNING OPPORTUNITIES

In The Netherlands many entrepreneurs have started online-only grocery businesses and failed. Some entrepreneurs were funded by their wholesale suppliers, who stopped supplying when the bills

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were not paid. Other online businesses were well funded and ditto managed, but the business model appeared not to be profitable and sustainable.

As wholesale director at Jumbo supermarkets, I personally pulled the plug in 1999 from two different online grocery retailers, who did not pay their bills. This was a wake-up call and the reason for me to develop and publicize a model to calculate costs and cost-drivers of all processes of an online grocery retailer.

Here are some examples of the Dutch online grocery start-ups that do not exist anymore. What can we learn from these courageous endeavors?

- **Box at Work** started in 1999, and experimented with a pick-up point in the head office of Sara Lee. The idea was that the retailer has a concentrated delivery point to reduce costs, and that employees can pick up their groceries at the reception of their office. The experiment did not deliver profitable results.
- **Boodschappenlijn** started in 1999 to deliver dry groceries and frozen foods nationwide at home. The company failed in December 2000. Dry groceries were (within 48 hours) delivered by TNT Post and frozen foods (within 5 days) by a specialized frozen foods service. But the software was too slow and customers were missing fresh products. This affair (and the dotcom crisis) was a wake-up call for venture capitalists to stop funding online-only grocers.
- **Max Foodmarket** started in 2000 and failed in December 2002. This online grocer was developed by owner Dick Groot, who was a seasoned grocery retailer and expert in logistics and internet software. Customers were enthusiastic about the service. But all these efforts were not enough to make the business profitable!
- **Truus.nl** started in 2011 with an assortment of non-food groceries and drugstore products. Distribution was nationwide. The online-only non-food grocer failed in September 2012. The driving force behind Truus.nl was Christian van Someren, an ex-manager of Procter & Gamble, who blames FAST GROWTH as one of the main causes of the failure of his company.

DUTCH ONLINE-ONLY GROCERY SUCCESSES

Grow gradually. The warning not to grow an online-only grocery business too fast appears to be important. This advice is embraced by the people behind start-up Picnic, to grow their business one city at the time. See the Picnic case later in this chapter.

Online retailer of Fresh Boxes “de Krat” (the Crate) started in 2010 with the first food box concept in The Netherlands and still exists in 2016. This company does not spend large amounts of money for marketing campaigns. It gradually grows as a result of mouth to mouth recommendations of satisfied customers, who share the love of cooking fresh food. De Krat started about the same time as Swedish food box retailer Linas Matkasse, who is considered the international pioneer of the Food Box.

The “Food Box Online” concept has many advantages and has the potential to be profitable. We will describe these advantages of food boxes in the HelloFresh case of par. 6.6.

Concierge services are also popping up in the Netherlands, following the success of Instacart in the US. Players like UberMart and Poqapp are offering personal shopper/delivery services in certain

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areas of the country. Ubermart delivers groceries within 2 hours for a delivery fee of €4.95. The groceries are picked at several Albert Heijn franchisers, who work together with Ubermart.



PICNIC CASE

Promising business model. After a long history of failed online-only start-ups in the Netherlands, Picnic is a newcomer since October 2015. This is a short case because Picnic still has to prove that it has a sustainable business model. But the company is well funded and well prepared, and it appears to have made a number of promising choices, using Ocado (UK) as a shining example.

Overly optimistic market prediction. But first an - in my opinion - dangerous assumption. Main investor and founder Michiel Muller has based the prediction of his growth potential on the ING bank report, that claims that in 2020 in The Netherlands 20% of groceries are ordered online. The same irresponsible statement of two respectable consultancy firms in 1999 was the main cause of the failure of Webvan, the biggest dotcom flop ever.

My prediction for the Dutch online grocery share in 2020 is not 20% but LESS THAN 5%, and I think that it might even take until 2025 to reach the 5% level of online grocery in The Netherlands.

Here are some of the key characteristics of the Picnic model:

- **Retailer supplier.** Products are ordered from one of the traditional retailers (same as Ocado).
- **App for easy ordering.** Customers use an app for ordering, that remembers and shows past orders to make the order process easy and fast. The fastest scenario is that a customer repeats the order of last week with the click of a button.
- **Short supply chain.** Picnic only orders from suppliers the products that are ordered by consumers. Produce is delivered overnight to the central warehouse, to be arranged into orders and sent out to the local hubs. From the hubs, the electric vans pick up the orders for delivery. This is a guarantee for fresh produce, dairy and meat.
- **Small and flexible assortment.** Picnic carries a relatively small assortment, which makes ordering easy and order-picking efficient. The absence of large inventories is also an advantage over physical stores, because it makes assortment tactics (product selection) very flexible.
- **Free home delivery.** One of the key USPs of the Picnic model is home delivery that is fast and free. Home delivery is - in my opinion - key for consumer enthusiasm. And free delivery is

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also fantastic for consumers and business growth, but - in my opinion - not sustainable in the long run for the retailer.

- **Electric Vans.** Picnic uses small electric trucks for home delivery. The production of these electric delivery Vans was in 2015 bottleneck for growth of Picnic. Picnic had to stop the inflow of new customers in the first city of operations. There is a customer waiting list in each new town!
- **Narrowing delivery window.** During ordering the delivery window is 60 minutes. On the delivery day the delivery window narrows down to 30 minutes. During the Van's trip the delivery window narrows down to 20 minutes. And just before delivery the customer can check the exact delivery time.
- **High Van productivity.** Each Picnic Vans make three shifts between 15.00 and 22.00 PM. Each shift contains 18 red (non-refrigerated) boxes and 18 black refrigerated boxes. The number of deliveries per shift depends of the average volume of customer orders, but will be between 8 and 12. This adds up to a maximum of 144 – 216 deliveries per Van per week. This is comparable with the high Ocado weekly Van productivity of 178 (par 5.4).
- **GPS app for delivery timing.** During the trip, customers can check the location of the Van on a map, and the estimated time when their delivery truck will arrive at their home.

6.6 The rise of the Food Box - HelloFresh case

HelloFresh provides subscription meal kits. The company offers locally sourced and pre-portioned ingredients that enable consumers to prepare home-cooked meals each week. HelloFresh delivers the food boxes to its subscribers' doors for roughly €8 per meal utilizing a soft subscription model. Meals are delivered in a box each week, taking away the need for consumers to do their own grocery shopping or plan out recipes.



Example content HelloFresh box

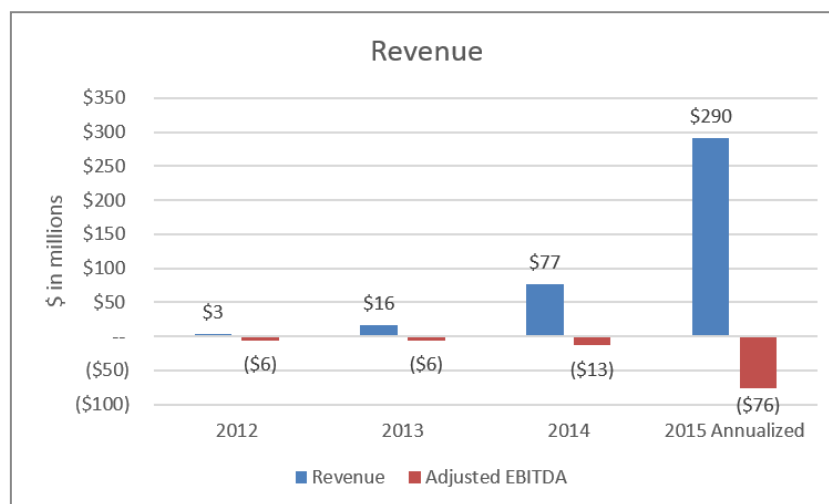
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HelloFresh is Food Box market leader in The Netherlands, and competes in the US directly with Blue Apron in the US. HelloFresh also operates in Australia, Austria, Belgium, Germany and the UK.

The Food Box concept started in Sweden. Both HelloFresh and Blue Apron essentially copied the business model from Swedish Linas Matkasse, who pioneered selling food boxes in 2010 and is still operational.

High revenue growth and high gross margin. HelloFresh has experienced astronomical growth, growing from €3 million of revenue in 2012 to €265 million of annualized 2015 revenue. Gross margin is high: around 50-55%, due to high fresh produce levels and low price transparency.

High marketing costs and net loss. But the high growth clearly comes at a cost. In 2014, EBITDA margin was negative (18%), and will worsen to about negative 26% in 2015. The main reason of this net loss figure is the extremely high investments (more than €100 per new customer) in traffic building marketing, to reach and convert new customers. The ultimate goal of investment company Rocket Internet was to bring HelloFresh to the stock market (IPO) at the end of 2015.



Revenue HelloFresh

The HelloFresh IPO was taken off the table, because potential investors were increasingly skeptical about the fantastic theoretical valuation of the business of €2,6 billion, which is about €9,400 per customer. This does not mean that the HelloFresh business model is not sustainable. It only means that the company was growing much too fast, with the objective to make a big hit on the stock market.

Questions about customer retention of the Food Box Online model. For Ocado (UK) an “active customer” has ordered at least once in the last 12 weeks. This is a rather weak and unclear definition of “active”. But it is entirely unclear how HelloFresh defines “customer”. As an investor I would demand a detailed definition, that contains also the average ORDER FREQUENCY of all active customers in the last 12 weeks. This would give an idea about customer retention and life-time value.

It is my professional and personal impression, that new customers attracted by heavy promotion and large discounts to the Food Box Online proposition, may end their subscription after a bad (menu) experience or by getting tired of the high variation in meals.



7. ONLINE GROCERY WARS IN INDIA

In January 2016 I gave two presentations about online food retailing at the India Food Forum in Mumbai. It became clear to me that India is a rising online retail giant.

This short chapter is to honor the many entrepreneurs who are revolutionizing retail business in developing India.



7.1 India's grocery market is extremely decentralized

The \$365 billion Indian grocery market has strikingly different dynamics in grocery retail than the other countries in former chapters of this book. Market stalls, kiranas (local shops) and kiosks account for 98% of the country's grocery retail sales, while modern retail chains control only 2% of the market. There are several reasons why India's grocery market is in its current state today.

- First, consumers prefer local shops as they are closer to home, stay open longer and offer credit to regular shoppers.
- Second, legal limitations have hindered foreign supermarket chains from entering the market for years. In 2012 India's government finally opened up the retail sector to international supermarket chains, allowing foreign direct investment (FDI) of up to 51% in multi-brand retail.

7.2 India's grocery online market has huge potential

India is one of the fastest-growing, and **potentially the largest online grocery market of the world.**

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The “milkman” still exists in India. In the 1950s and ‘60s, home delivery of milk and other daily necessities was a staple for many families in North America and Europe. In some markets, the milkman never really went out of fashion. In India the concept of a merchant delivering groceries and household staples or ready cooked meals to a home is very much alive.

Why is online shopping for FMCG so prevalent in Asia-Pacific compared to the rest of the world? A few factors are at play:

- The region’s **rapid urbanization and high population density** make the home delivery model economically viable, particularly when coupled with low labor costs
- **Booming smartphone ownership and usage** have created huge mobile retail opportunities

In 2014, India was one of the youngest countries in the world. Sixty-five % of India’s inhabitants were below 35 years old, representing one of the largest segments of potential online grocery shoppers in the world.

7.3 Pure players and online services still very fragmented



Online only. Favorable demographic and economic conditions, together with the absence of traditional supermarket chains operating online, have created an opportunity for a number of innovative online-only companies to emerge in the Indian online grocery market.

Venture Capitalists (VC's) invested over \$100 million into online grocery start-ups in the year 2014-2015. But most of them are still very local and run their operations in one city, with only a few companies having a larger scope. One of the heavily invested start-ups Dazo failed. Dazo was the first app-based meal delivery service.

Big Basket is the number one online grocery store in India. It has over 14,000 products and 1000 brands in its catalogue. This pure online player currently operates in six major cities (Bangalore, Mumbai, Hyderabad, Pune, Delhi and Chennai) and had \$40 million revenue in 2014. Its larger competitors are Localbanya and ZopNow.



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Different logistics. BigBasket.com delivers groceries from its own warehouses while Localbanya employs a mix of warehousing and just-in-time deliveries from a host of suppliers including FMCG companies, cash-and-carry outlets and other distributors.

ZopNow started with its own warehouses, has gone into a strategic partnership with two of the biggest offline retailers in India, Hypercity Retail and Aditya Birla Retail, and currently sources its products from them.

Competition in the Indian online grocery market is going to change. India's ecommerce giants Flipkart and Snapdeal have already started adding grocery products to their online ranges and Amazon.in launched a gourmet and specialty food store in October 2014.

Kirana shops go online. Some of the other online grocers in India like Grofers and Pepertap have taken a different approach to online grocery. Instead of owning their own inventories, they use local shops to process their online orders. This is beneficial for local grocery stores, since they satisfy the demand for online grocery shopping. There are more than 14 million kirana shops in India, representing a huge market for this type of service.

Amazon has also moved into the kirana business and has started "KiranaNow". It aims to provide local kirana stores with a technological base from which to run their operations online and help them deliver the goods within 2-4 hours, using their own logistics, the neighborhood store's staff, or one of Amazon's logistics partners.

7.4 Great growth potential for India's online food retail

In 2014, online grocery represented only a tiny fraction (\$100 million) of the total grocery retail market in India. But by 2020 the market is expected to grow more than 100 fold. Several factors are expected to drive this rapid growth.

Demographics. India's population comprises a very favorable demographic for online grocery market expansion, since millennials will be the main consumer group driving online grocery sales in the upcoming decade.

India's immense number of Internet users will be another factor driving online grocery adoption. In 2014, India already had a similar number of Internet users to the US. With the new government's internet infrastructure initiatives, as well as the rise of the smartphone, the number of internet users is expected to reach 600 million by 2020.

Convenience. The most populated cities in India (Mumbai, Bengaluru, Pune, Hyderabad, Delhi, Chennai, and Kolkata) are inhabited by between 4 and 12.5 million people each, and account for 60% of India's internet users. Metropolitan issues like traffic jams and time availability are becoming more of a problem for busy young professionals in India. These consumers are motivated by convenience to shop for groceries online.

Income differences. The middle class in India can afford home shopping, because the extra costs of order-picking and home delivery is cheaply executed by experienced but (very) low income workers.

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This was part 1 of “Nine Battles of Online Grocery”

The total e-book is 7 Mb, therefore it is split in two parts

You can download part 2 [by clicking here](#)

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