

Fresh start: Rising consumer income and broadband connections will expand the industry

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IBISWorld Industry Report OD5085 Online Grocery Sales in the US

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2 About this Industry

- 2 Industry Definition
- 2 Main Activities
- 2 Similar Industries
- 2 Additional Resources

3 Industry at a Glance

4 Industry Performance

- 4 Executive Summary
- 4 Key External Drivers
- 6 Current Performance
- 9 Industry Outlook
- 11 Industry Life Cycle

13 Products and Markets

- 13 Supply Chain
- 13 Products and Services
- 16 Demand Determinants
- 17 Major Markets

- 18 International Trade
- 19 Business Locations

21 Competitive Landscape

- 21 Market Share Concentration
- 21 Key Success Factors
- 21 Cost Structure Benchmarks
- 23 Basis of Competition
- 24 Barriers to Entry
- 25 Industry Globalization

26 Major Companies

- 26 Amazon.com Inc.
- 27 Walmart Inc.
- 28 Peapod
- 29 Kroger
- 30 Safeway Inc.
- 30 Fresh Direct LLC.

31 Operating Conditions

- 31 Capital Intensity
- 32 Technology and Systems
- 32 Revenue Volatility
- 33 Regulation and Policy
- 34 Industry Assistance

35 Key Statistics

- 35 Industry Data
- 35 Annual Change
- 35 Key Ratios

36 Jargon & Glossary

About this Industry

Industry Definition

Operators in this industry sell grocery items through online channels. The industry comprises companies that are

based online and those that have both a physical presence and also sell food products on the internet.

Main Activities

The primary activities of this industry are

Selling canned goods
Selling dry goods
Selling frozen goods
Selling produce

The major products and services in this industry are

Beverages (including alcohol)
Dairy products
Drugs and healthcare items
Frozen foods
Fruits and vegetables
Meat, fish, poultry and other deli items
Other foods
Other nonfood items

Similar Industries

42449 Soft Drink, Baked Goods & Other Grocery Wholesaling in the US

Operators in this industry primarily wholesale specialized grocery products, such as soft drinks or baked goods.

44511 Supermarkets & Grocery Stores in the US

Operators in this industry sell general lines of food products, including fresh and prepared meats, canned and frozen foods, fresh produce and various dairy products.

45411a E-Commerce & Online Auctions in the US

Operators in this industry sell goods exclusively online.

Additional Resources

For additional information on this industry

www.fmi.org
Food Marketing Institute
www.internetretailer.com
Internet Retailer
www.worldalliance-retail.org
World Alliance for Retail Excellence & Standards

Industry at a Glance

Online Grocery Sales in 2018

Key Statistics Snapshot

Revenue

\$25.7bn

Annual Growth 13–18

13.6%

Annual Growth 18–23

6.1%

Profit

\$1.3bn

Wages

\$1.0bn

Businesses

2,386

Market Share

Amazon.com Inc.

16.2%

Walmart Inc.

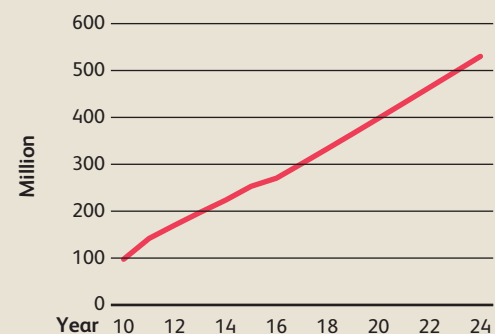
5.3%

p. 26

Revenue vs. employment growth



Number of mobile internet connections



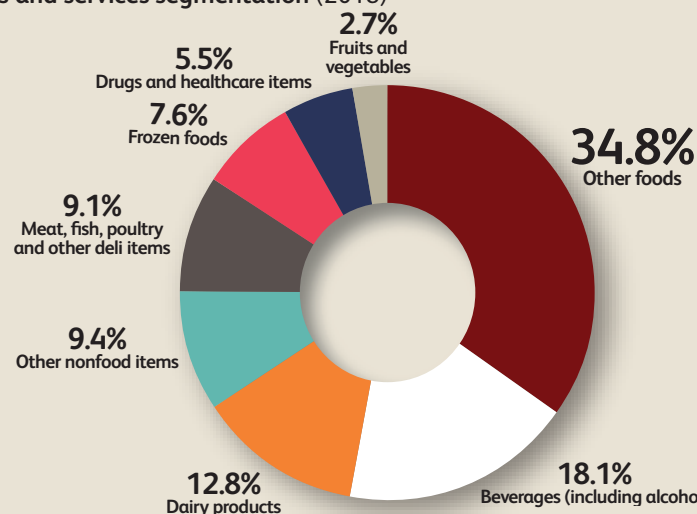
SOURCE: WWW.IBISWORLD.COM

Key External Drivers

Number of mobile internet connections
Per capita disposable income
External competition
Agricultural price index

p. 4

Products and services segmentation (2018)



SOURCE: WWW.IBISWORLD.COM

Industry Structure

Life Cycle Stage	Growth	Regulation Level	Medium
Revenue Volatility	Medium	Technology Change	Medium
Capital Intensity	Medium	Barriers to Entry	Low
Industry Assistance	Low	Industry Globalization	Low
Concentration Level	Low	Competition Level	High

FOR ADDITIONAL STATISTICS AND TIME SERIES SEE THE APPENDIX ON PAGE 35

Industry Performance

Executive Summary | Key External Drivers | Current Performance

Industry Outlook | Life Cycle Stage

Executive Summary

Online Grocery Sales resumed rapid growth following a slowdown during the recession. Over the five years to 2018, Americans' affinity for the internet has driven industry growth. Broadband connections have increased and industry revenue has grown at an average rate of 13.6% to \$25.7 billion. Moreover, thanks to a strong gain in the number of mobile internet connections and the number of services conducted online over 2018, IBISWorld expects revenue will increase

are targeting niche markets across the country by selling organic groceries online. Companies have expanded over the past five years, building up their infrastructure to service new territories across the country. In turn, the number of industry establishments is expected to increase at an annualized rate of 4.9% to 2,497 during the five years to 2018.

Looking ahead, revenue growth for the Online Grocery Sales industry is expected to increase during the five years to 2023. Driven by low unemployment and increased internet usage, industry revenue is forecast to grow at an annualized rate of 6.1% to \$34.6 billion in 2023. Steady employment rates will keep leisure time for consumers at a minimum, making internet food shopping more convenient and attractive. Moreover, as people return to work, incomes will grow, further stimulating industry demand by making online grocery shopping more affordable. However, larger competitors, such as AmazonFresh, will help drive down prices in an attempt to crowd out their competition, hampering industry profit growth, resulting in just a slight increase from 4.9% in 2018 to 5.0% in 2023.

Declining unemployment and increased internet usage are driving revenue

9.4% in over the same year, as more consumers try online grocery shopping.

Overall increasing incomes, falling unemployment and rising food prices have benefitted industry revenue and profit margins over the five-year period. Sensing heightened demand for Internet-based delivery services, major companies like Amazon and Walmart are scaling up their operations. Meanwhile, a new group of highly focused online grocers, like Relay Foods and Door-to-Door Organics,

Key External Drivers

Number of mobile internet connections

The number of mobile internet connections represents the number of consumers that have an active internet connection on devices such as smartphones and tablet computers. As the number of mobile internet connections rises, Americans' accessibility to online shopping increases, boosting demand for the Online Grocery Sales industry. The number of mobile internet connections is expected to increase in 2018, presenting a potential opportunity for the industry.

Per capita disposable income

Personal disposable income measures an individual's ability to purchase goods and services. As per capita disposable income increases, Americans are more willing and able to shop online for their groceries, even though these services often require an additional service fee for delivery. Per capita disposable income is expected to increase during 2018.

External competition

Online grocery retailers face competition from traditional brick-and-mortar retailers. Competition exists on the basis

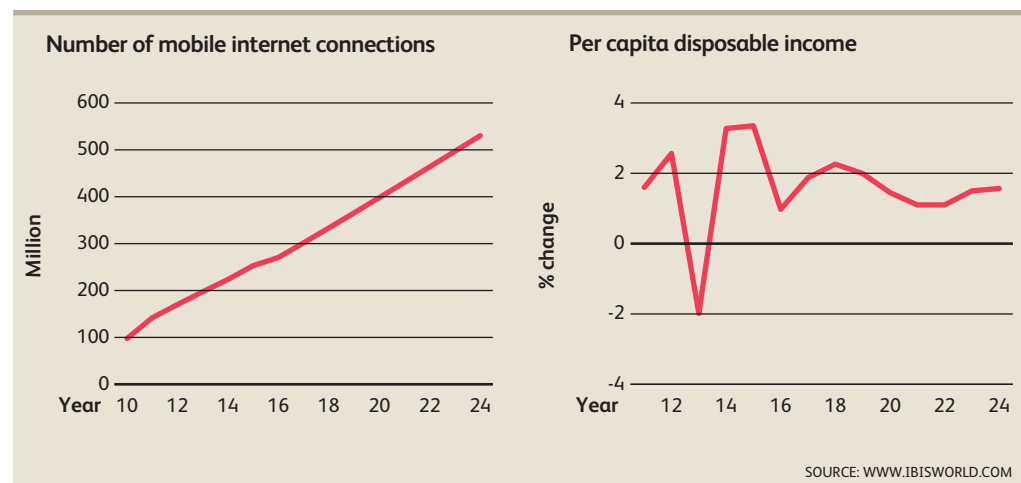
Industry Performance

Key External Drivers continued

of price (including delivery fees), product selection and delivery time. Consumers may often opt to visit a physical grocery store in order to purchase an item they require right away, or to buy perishable foods that may not be offered through online sellers. Additionally, traditional grocers often engage in customer loyalty programs, offering patrons discounts for return visits. External competition is expected to increase slowly during 2018, presenting a potential threat to the industry.

Agricultural price index

The agricultural price index indicates trends in the overall price of food. Since crops are used in a wide range of downstream products (e.g. wheat is used in flour, pasta, bread and desserts), the on-farm price plays a significant role in determining food prices at the retail level. Most grocery stores (on and offline) often pass price increases on to the consumer. When the agricultural price index climbs, retail prices and industry revenue increase as well. The agricultural price index is expected to fall in 2018.

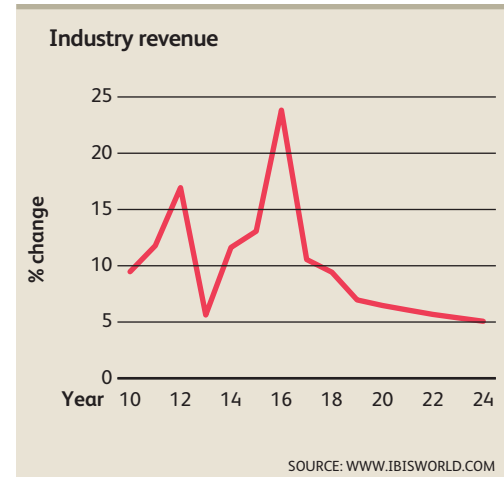


Industry Performance

Current Performance

The Online Grocery Sales industry benefited from the spread of the internet and wireless and mobile devices over the past five years. The internet offers users easy access to a variety of products, the ability to make quick price comparisons and the convenience of shopping from home. These characteristics helped internet sales skyrocket over the past five years. Additionally, per capita disposable has steadily increased, allowing consumers to spend more money at online grocery stores. Industry revenue has grown each year since 2013, and profit margins have improved as shoppers continue to buy regular- and luxury-priced goods that are higher quality. Revenue grew at an aggressive annualized rate of 13.6% during the five years to 2018; online groceries now account for about 3.4% of total grocery sales within the United States. Sales are expected to increase by as much as 9.4% to \$25.7 billion in 2018 alone. Profit increased to 4.9%, up from 3.5% in 2013 when the industry was still small, and operators' margins remained low.

The failure of Webvan, an early online grocery delivery service founded in the late 1990s, discouraged most operators from selling online groceries for almost a decade. Nevertheless, the prevalence of internet shopping, combined with improving economic conditions, have enticed new entrants back to the Online



Grocery Sales industry. A number of tech-savvy retailers, including e-commerce giants like Amazon and Walmart, see the internet as the next big channel for grocery sales. Startups have entered the industry as well, shipping customers' groceries from Trader Joes, Costco and other independent brick-and-mortar stores. Furthermore, a number of traditional brick-and-mortar grocery stores (e.g. Kroger) have entered the online arena in an effort to recapture and offset some of their stolen in-store sales. Overall, this massive influx has driven the number of industry enterprises up at an annualized 4.7% over the past five years to 2,386 in 2018. New entrants have also helped the industry's workforce increase at an annualized rate of 4.1% to 28,865 employees.

Low penetration

Despite rapid growth as of late, the Online Grocery Sales industry has not yet been able to penetrate the Supermarkets and Grocery Stores industry in the same way other areas of e-commerce have disrupted traditional industries. As of 2018, the industry still accounts for only a small portion of total grocery sales, which is despite the fact that internet penetration has grown exponentially over the past decade. There are a number of

unique conditions that exist within the industry and relate to online grocery sales that have held the industry back over this period. First, while online shopping is less time consuming than going to the store, it often requires consumers to be at home to ensure their orders were properly processed. Furthermore, it is not cost effective to purchase small orders of miscellaneous articles online due to high delivery fees

Industry Performance

Low penetration continued

and delayed delivery times. Finally, many consumers prefer to shop for perishables in person at brick-and-mortar stores, where they can inspect the products from bruises, gashed and other imperfections.

Operators have also struggled to make online shopping available to every American consumer. This is because operators have struggled to manage distribution costs, which are estimated to be twice as high as the cost of traditional food retailing. Additionally, there are regulations involved with food handling and delivery that require operators to be especially diligent when delivering products. Traditional grocery store channels remain more efficient in this respect because consumers perform most of the labor-intensive lifting required for transporting purchases; they carry products directly from the store to their homes on their own. Internet grocery sales companies require well-trained employees to do similar work. Furthermore, additional costs come in the form of spending on information technology, order management and after-sales services. These costs are

typically passed along to customers, many of whom have proven they would rather travel to the store than pay for delivery. As a result, the number of operators that currently exist in the industry is somewhat limited compared with other areas of e-commerce.

Online grocery retailers adopt a number of strategies to cope with high distribution costs. Some operators focus on selling to niche markets, which tend to consist of more affluent consumers. Customers from this market segment are willing to pay more for the convenience of having specialty food products delivered directly to their homes. Others have focused on providing only margin-rich products. Products in this category include wine and craft beers and other items that carry high markups. Some retailers focus on selling only in specific geographic locations, such as high-density urban markets, where there are more potential customers who are better acquainted with online shopping for food. Still, some operators have accepted extremely low profit margins in an attempt to make their delivery prices low.

Entrance of a giant

Although the industry remains as a relatively small share of the overall grocery industry, it has increased its foothold over the last five years. In the latter half of the five-year period, two major operators entered and revamped the Online Grocery Sales industry. In 2017, Amazon, the mega online retailer, entered the online grocery industry by launching its AmazonFresh division. This was huge for industry revenue as it attracted a large amount of Amazon's already giant consumer base to the idea of online groceries. The company originally launched their AmazonFresh services in a few select cities in California. By the end of 2017, they have expanded the AmazonFresh services to places such

Many brick-and-mortar stores have entered the industry through store-based home delivery

as New York City, Chicago and Dallas. This growth continued, in-part due to its immense popularity, to reach over 30 different city regions across the US. While consumers need to be AmazonFresh members in order to benefit from many of the services offered by AmazonFresh, it allows non-members to purchase select goods with no membership at all. Additionally, the

Industry Performance

Entrance of a giant continued

AmazonFresh membership is just a small addition to the full Amazon Prime membership which orders consumers free tv show, movies, shipment and more.

Moreover, Walmart Inc. has enhanced its own grocery delivery service to compete with AmazonPrime. Walmart has lost a large amount of business to Amazon

in other segments over the past decade and online grocery sales provide the company with an area that it may be able to regain dominance. The recent growth in industry demand coupled with Walmart's existing dominance in the grocery segment set up Walmart to successfully access a large share of industry revenue.

Business models

Operators have also adopted different operating models based on the markets they intend to capture. Most large established brick-and-mortar supermarkets have chosen to enter the online grocery industry through the store-based home delivery channel. This allows them to sell and distribute goods that they already have in stock within their grocery locations and distribute them from there. For these operators, each one of their already existing retail locations is used as a distribution center, limiting their upfront costs. However, this approach requires that operators set up delivery networks to deliver goods to customers, which can involve significant capital and labor investments.

While traditional operators offer store-based home delivery, in which consumer purchases are delivered directly to households, others offer customers the option to come to the store to pick up pre-packaged groceries ordered online. The store-based pickup model is used by grocery stores such as Publix, Albertsons and Kroger in the United States. This approach has been widely adopted in suburban areas. While this approach is easy for traditional grocery stores to adopt and reduces a good deal of the distribution costs operators face, some consumers

Online grocery retailers adopt a number of strategies to cope with high distribution costs

see very little value-add in this model and are often unwilling to pay a premium for the service.

Finally, some online grocery sellers operate using a warehouse model. These operators save on purchasing and maintaining physical store locations by storing their merchandise in large distribution centers that serve as warehouses for goods. Products are then delivered from the distribution center to customers' homes. Some operators also offer pickup services for customers who would like to avoid paying higher distribution fees. While this approach is appealing to some, it is often considered overly expensive for many who see little difference between traveling to a grocery store to pick out products and traveling to a pick-up warehouse. Finally, these operating options are not mutually exclusive; many companies, including some of the most prominent traditional retailers, have adopted a mixture of different business models.

Industry Performance

Industry Outlook

The Online Grocery Sales industry is poised for strong growth, thanks to economic improvements and technology advancements that will drive industry performance. While the national unemployment rate is forecast to increase slightly over the five years to 2023, unemployment is still expected to remain low, stabilizing at about 4.7%. In spite of this increase, per capita disposable income is still forecast to increase at an annualized 1.9% over the five-year period. This increase will enable consumers to spend more on home-delivered goods and grocery items in general, benefiting the industry. Furthermore, time spent on leisure and sports is expected to remain stagnant, exhibiting no growth over the next five

years, thereby limiting their ability to visit the grocery store. Greater disposable income and small gains in precious leisure time will lead many consumers to see the value in paying more for online groceries to be delivered directly to their homes, rather than tying up leisure time at brick-and-mortar locations. Operators that can tap into emerging technology platforms, such as mobile applications, are likely to benefit more than the average industry player.

The combination of these trends and the entrance of Amazon and Walmart into the industry will help drive the Online Grocery Sales industry's growth. Consequently, IBISWorld forecasts revenue to increase at an annualized rate of 6.1% to \$34.6 billion over the five years to 2023.

New industry entrants

The Online Grocery Sales industry is on the cusp of experiencing a major influx of new industry operators. Several big-name tech companies, such as Amazon and Google, are beginning to offer and promote same-day delivery services for food. These companies, with established delivery infrastructure, are positioned to capture market share from traditional food retailers within the Supermarkets and Grocery Stores industry. As tech companies begin to scale up their grocery delivery services, brick-and-mortar stores are expected to react by developing their own services. Many of these operators are well positioned to expand into the online arena by leveraging their existing assets, which include their physical distribution and store networks, strong relationships with customers and deep grocery experience. Meanwhile, small tech companies will continue to enter the industry and serve as intermediaries between brick-and-mortar stores and individual consumers by setting up pure delivery services online. Overall, the number of industry operators is expected

Several big-name tech companies are offering same-day delivery services for food

to increase over the next five years at an annualized 5.1% to 3,067 enterprises. This will simultaneously increase the industry's workforce at an annualized rate of 5.2% to 37,197 in 2023.

Meanwhile, as the industry grows increasingly crowded, operators are likely to experience heightened price-based competition. Amazon, in particular, is expected to implement its well-known policy of lowering prices dramatically at the expense of margins in order to gain market share from competitors. While this bodes well for large operators such as Amazon that benefit from economies of scale, competition is expected to affect industry operators' profit margins, resulting in stagnant growth. Consequently, the average industry profit

Industry Performance

New industry entrants continued

margin is expected to exhibit a small relative change from 2018, increasing just slightly to 5.0% of revenue in 2023.

Penetration increases

The past five years have shown that the Online Grocery Sales industry is an outlier within the e-commerce sector. Despite rising internet traffic volume and greater connectedness through new devices such as mobile phones and tablets, online shopping has yet to emerge as a widely accepted mode of buying groceries. This will likely change over the next five years as more enterprises enter the industry and consumers become more familiar with the channel's format. According to the Food Marketing Institute, a food retail advocacy group, only 23.0% of US adults have purchased general food items online. That number is expected to rise in the coming year as certain consumer segments become more affluent and accustomed to online food shopping. As millennials advance through their careers and begin to accumulate greater wealth, they will begin spending more on online groceries. This cohort is already extremely familiar with internet shopping and will have little trouble adjusting to purchasing food online.

Nonetheless, the industry will continue to face a number of challenges that will prevent it from greatly disrupting traditional grocery stores and supermarkets. First, it will take time for many operators to scale up beyond what

As the industry grows increasingly crowded, price competition will endure

markets they currently serve. AmazonFresh started out serving small areas of Seattle before expanding its services after it purchased the WholeFoods Market chain of retail locations. The buildup of infrastructure necessary to make a regional or national distribution network of grocery stores work will take time and capital to produce unless operators already have retail locations. Without achieving economies of scale, small distribution centers have proven costlier to run. This will help rule out many smaller retailers from entering the industry. At the moment, the majority of the Supermarkets and Grocery stores industry is made up of smaller, independently owned operators across the country. Furthermore, operators will need to figure out a way to deal with persistently high distribution costs. However, as major companies enter the industry and expand their market share, online grocery sales will continue increasing at a strong pace over the five years to 2023.

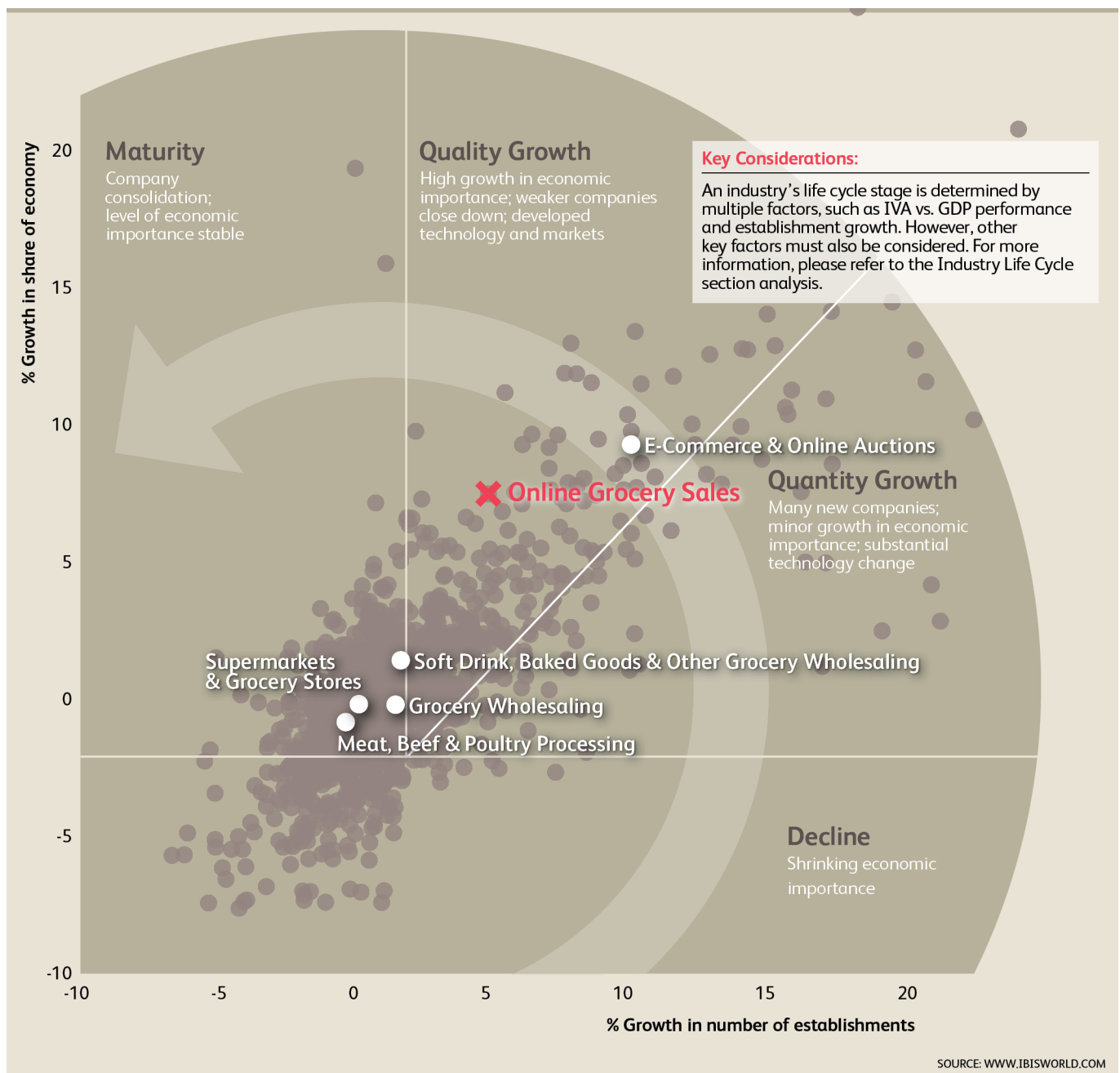
Industry Performance

Life Cycle Stage

The industry's contribution to the economy is forecast to outpace GDP growth over the 10 years to 2023

The number of industry participants is expected to grow strongly over the 10 years to 2023

Technology change has underpinned industry growth



Industry Performance

Industry Life Cycle

This industry
is **Growing**

The Online Grocery Sales industry is in the growth stage of its life cycle; its contribution to the US economy is outpacing general economic growth. Over the 10 years to 2023, the industry's value added (IVA) is forecast to increase at an annualized 9.9%, primarily driven by the recent sharp increase in industry revenue in the past three years. Meanwhile, US GDP is anticipated to grow 2.2% per year on average. This extremely growth is due to the fact that the industry remains in its infancy and is starting from a small base, but many major players have entered the industry in recent years in addition more individuals have utilized the service, expanding the industry. This swift expansion indicates that it is rapidly increasing in size.

The growth of this industry is also seen in the number of industry participants, which is also expected to increase over this period. During the 10 years to 2023, the number of industry participants is anticipated to grow at an annualized rate of 4.9% to 3,067. This increase indicates

the opportunities available to new entrants. Moreover, grocers have stocked a mounting array of products to meet customer demands. The expanding product range is also indicative of the industry's growth stage.

Additionally, technology change has underpinned industry performance over the past five years. Applications for mobile devices and tablets have been developed to allow consumers to make grocery purchases from virtually anywhere with ease. Software systems have been introduced to enhance industry performance. Secure payment systems and inventory tracking programs have streamlined the online shopping process and increased customer acceptance of internet-based grocery stores. Furthermore, developments in technology for the delivery of products, such as cooler bags and keyless entry have also improved industry services. These advancements have also limited the industry's reliance on labor.

Products & Markets

Supply Chain | Products and Services | Demand Determinants
Major Markets | International Trade | Business Locations

Supply Chain

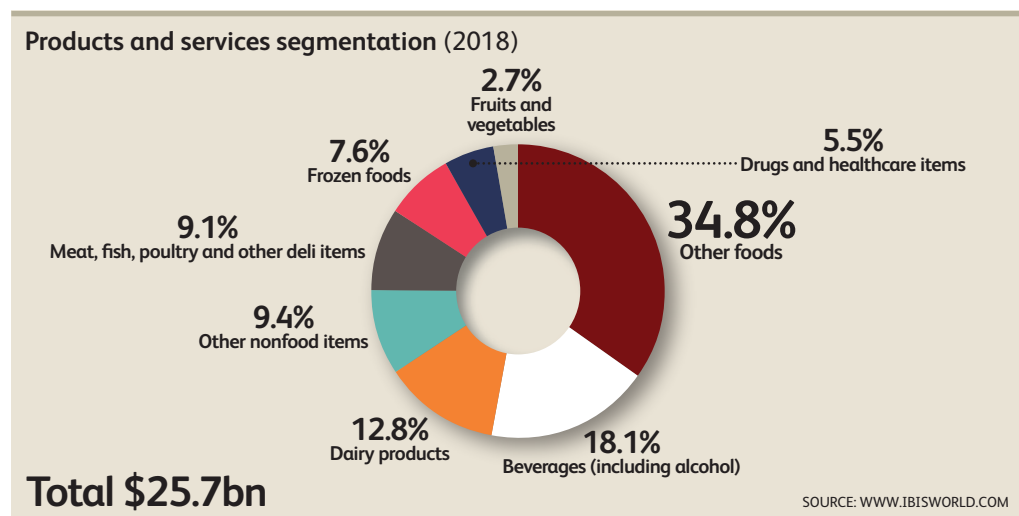
KEY BUYING INDUSTRIES

9901 Consumers in the US
Consumers of various ages and income levels are the key buying group for this industry.

KEY SELLING INDUSTRIES

31161	Meat, Beef & Poultry Processing in the US Certain large meat processors will sell directly to this industry, bypassing the wholesaler to save on handling and transportation costs.
42441	Grocery Wholesaling in the US This industry supplies a wide range of groceries to online grocery retailers.
42442	Frozen Food Wholesaling in the US Frozen food wholesalers supply online grocery retailers with frozen meals.
42443	Dairy Wholesaling in the US This industry supplies milk and other dairy products to online grocery retailers.
42444	Egg & Poultry Wholesaling in the US This industry supplies egg and poultry to online grocery retailers.
42445	Confectionery Wholesaling in the US This industry supplies a range of confectionery to online grocery retailers.
42446	Fish & Seafood Wholesaling in the US This industry supplies fish and other seafood products to online grocery retailers.
42447	Beef & Pork Wholesaling in the US This industry supplies a range of meat products to online grocery retailers.
42448	Fruit & Vegetable Wholesaling in the US This industry supplies a wide range of fresh fruits and vegetables to online grocery retailers.

Products and Services



Online grocery sales have grown strongly over the past five years. However, many obstacles still remain for industry operators, as the prospect of ordering

certain grocery items online still represents a hurdle for consumers. For example, according to a survey conducted by the global management consulting

Products & Markets

Products and Services continued

firm, A.T. Kearney, over 60.0% of respondents expressed major concerns over the quality and freshness of the products offered online. These concerns have affected online buying decisions, as many consumers still prefer to shop at brick-and-mortar locations for specific items, such as produce and other fresh foods or prepared items. As a result, many nonperishable foods, such as bakery products, packaged products, cereals, beverages, pasts and nonfood items comprise a larger share of industry revenue within the Online Grocery Sales industry. Nevertheless, this obstacle has become less insurmountable over the past five years, as chilled storage containers, scheduled delivery options and other innovations have made it easier for operators to match the consistency and quality of in-store perishables.

Other foods

Other food items make up 34.8% of revenue in 2018. Other foods include bakery products, canned foods, pasta, condiments, cereals, cookies and other non-perishable packaged items. The most commonly purchased products in this segment include various types of bread and rolls, salty snacks and cold cereal. Other foods' share of industry revenue has expanded in recent years, driven by the growing demand for snacks and condiments. Product innovation and new flavors have driven the demand for snacks and condiments. As per capita disposable income improved over the past five years, many consumers began trading up from generic products to branded and premium goods, such as organic and gluten-free snacks. As consumers turn to nutrient-enhanced bread, pasta and snack foods, this segment's share of industry revenue is anticipated to improve in the upcoming years. Additionally, as consumers remain skeptical about purchasing perishable items from online retailers, consumers

will continue to use these online services for their nonperishable items.

Beverages

Beverages constitute about 18.1% of revenue in 2018 and include both alcoholic and non-alcoholic drinks. Carbonated beverages, followed by beer and wine, were the most popular by unit sales in 2016. Due to an increasingly health-conscious customer base, soda sales declined as a share of revenue in the past five years. Also, the demand for sugary beverages, such as fruit juices and drinks, has waned due to health concerns. To counteract the falling demand for sugary beverages, manufacturers introduced a variety of healthier drinks, such as lightly sweetened iced tea and kombucha, helping maintain this segment's performance. Additionally, sales of flavored carbonated water such as LaCroix have increased over the past five years, making up for the declining revenue from other beverage services. Wine consumption rates have also risen, especially due to the widely advertised health benefits of drinking small volumes of wine. Due to these trends, this segment's share of revenue has increased slightly but remained relatively stable over the past five years.

Dairy products

Dairy products account for about 12.8% of revenue in 2018. Products in this segment include milk, milk alternatives (e.g. soy, almond and rice milk), cheese, yogurt and butter. This segment of industry revenue has increased over the past five years, driven by a greater variety of premium products. For instance, Greek yogurt's popularity has grown drastically in recent years, helping boost this segment's performance. Also, new plant-based milk beverages have appealed to consumers who are lactose-intolerant or do not consume regular

Products & Markets

Products and Services continued

dairy milk, helping drive sales among different consumer groups. This segment's share of industry revenue is expected to expand over the next five years as producers introduce a variety of new products.

Other non-food items

Other non-food items have increased as a share of industry revenue over the past five years as consumers seek out the convenience of purchasing these products online and having them delivered to their doorstep. Additionally, operators such as Amazon often allow consumers who do not have a Prime Pantry or Fresh account to order these items. This product segment includes items such as paper towels, toilet paper, laundry detergent, trash bags and other household items and cleaning supplies. Many of these items are bulky and can make carrying them home a challenge for many consumers, especially consumers that live in city environments that walk or take public transit for their grocery shopping. In 2018, other non-food items are estimated to account for 9.4% of industry revenue.

Fresh and frozen meat

The fresh and frozen meats segment accounts for 9.1% of revenue in 2018. Products in this segment include poultry, fish and deli items. The most commonly purchased products in this category include eggs, lunch meats and breakfast meats. Demand for fresh meat has dwindled in recent years due to inflationary prices. For instance, in the five years to 2018, the price of red meat is expected to decrease at an annualized 2.7%, while the price of poultry is anticipated to fall 2.0% per year on average during the same period. Lower prices have caused some consumers to increase the volume of meat they purchase, while other consumers have traded to meatless products due to

vegetarian and vegan diet trends. Nevertheless, this segment's share of revenue has expanded over the past five years because of these reduced prices.

Frozen foods

The frozen foods segment accounts for 7.6% of revenue in 2018. This segment includes prepared frozen dinners, burritos, pizzas and desserts. Frozen food provides convenience and great taste; furthermore, as more consumers have returned to work, resulting in time-poor circumstances for many, demand for these items has increased as many consumers choose these items over other food items that may require more preparation. Growth in this segment has remained pressured, however, even as producers have introduced a variety of healthier products, such as reduced-sodium and low-fat frozen meals. Health concerns have kept consumers from purchasing these items in larger quantities, relying on a select amount as meal substitutes during periods in which preparing a fresh at-home meal is not possible. Nevertheless, Frozen foods' share of industry revenue is anticipated to remain steady as inflationary prices for fresh food make frozen goods more attractive, and purchasing frozen foods online remains more popular among consumers than purchasing larger quantities of perishable items.

Drugs and healthcare products

Drugs and healthcare products include items such as soaps, toothpaste, cold medicine and other personal care products that individuals may shop for at a brick and mortar retailer. This segment is forecast to represent 5.5% of industry revenue in 2018. This segment has grown slightly as a share of revenue over the past five years as consumers are able to easily price compare similar items and have access to a much broader product range than they may have in a physical

Products & Markets

Products and Services continued

location. However, this segment is forecast to remain a small segment of industry revenue as consumers often shop for these items on an as-needed or last-minute purchases.

Fruits and vegetables

Fruits and vegetables, including fresh and frozen varieties, are expected to account for 2.7% of revenue in 2018. Despite growing health concerns and the popularity of fruits and vegetables, which have encouraged consumers to eat more leafy greens and fruits, this segment's share of industry revenue has declined in recent years. Moreover, over the five years to 2018, the price of fruits grew an annualized 4.5% and

the price of vegetables declined 3.9%. Price increases in fruit have caused per capita consumption of fruits to decline over this period, according to the US Department of Agriculture. Conversely, more consumers are purchasing vegetables due to the reduction in price. Consumers are still skeptical about ordering fruit and vegetable products from online retailers due to their perishability. Many consumers are also picky about their fruit and vegetables and like to inspect them for bruises or other imperfections prior to purchase. Consequently, this segment's share of revenue has fallen and is expected to remain relatively stagnant over the next five years.

Demand Determinants

Households are regular consumers of industry products and services and therefore the quantity and quality of their purchases is determined by the level of real household disposable income. Households with relatively low levels of disposable income purchase essential goods, and very few (if any) high-end grocery items whereas households with higher levels of income are able to afford a variety of goods. Furthermore, affluent consumers are less concerned about the price of goods or delivery charges and more about time-saving and convenience.

Generally, strong consumer sentiment indicates that households have positive perceptions of the economy and future spending. Over the five years to 2018, consumers have increased their spending and as the economy and employment rebound, consumer sentiment has increased. This indicates that individuals have been considerably more positive about future prospects, thereby causing them to increase purchases as they return to work and earn a steady income. This is likely to increase demand for industry products and services as consumers will have less time after returning to work

and have more income to spend on products supplied by this industry.

Demand for products is also affected by the price charged in most industries, but price is even more important to this industry because very little product differentiation exists. In a highly saturated market, online grocery retailers compete fiercely for the consumer's dollar, employing various marketing campaigns as well as weekly specials and coupons to attract consumers and drive sales. Delivery fees can also determine demand for the industry. If the price to ship a product offsets the cost savings of online shopping, consumers will likely purchase from a brick-and-mortar retailer or from an online retailer with lower or no shipping costs. In addition, the quickness of delivery also determines industry demand. If the wait time between buying and receiving groceries is substantial, consumers may shop elsewhere.

The number of broadband and mobile internet connections also determines demand for industry products. As the number of connections increases, consumers' accessibility to online shopping rises, boosting demand for

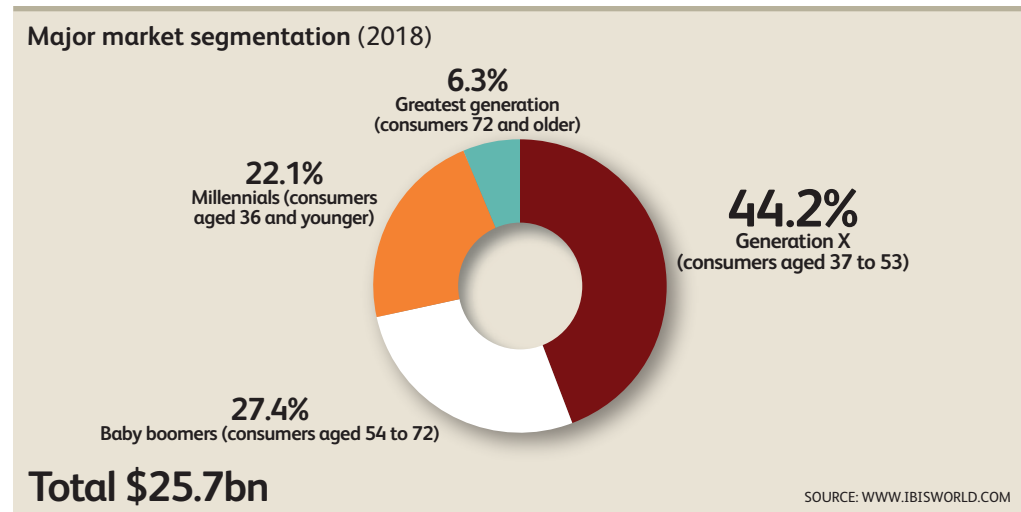
Products & Markets

Demand Determinants continued

industry products and services. In addition, as more Americans return to work over the next five years, the

decrease in their free time will push them to seek out time-saving options like online grocery shopping.

Major Markets



Markets for online grocery retailers could be segmented by several factors such as race, gender, household income, geographic location and family structure. However, due to the nature of this industry, consumption is best determined by the age of consumers. This is because a majority of online grocery shoppers include single- or dual-income households who are technically savvy, generally affluent and time-poor. Convenience is the main factor for this group, which has little concern about product price and delivery charges. These characteristics are often determined by the stage of a consumer's life cycle.

Millennials

Millennials, or consumers below the age of 36, are the third largest market for industry operators. Often these consumers are in single- or dual-income households and are among the most technologically savvy. This makes them ideal for consumers for online grocery retailers. However, consumers in this age

range are typically in the beginning phases of their careers and have generally lower levels of income compared to older generations. For this reason, individuals are often more inclined to frequent physical grocery locations in lieu of paying delivery charges and possible tip for delivery personnel. This lower level of capital is the main reason individuals in this age range are not the largest market segment and are forecast to represent 22.1% of industry market share in 2018.

Generation X

Similar to Millennials, consumers that are part of Generation X include single- or dual-income households who are technically savvy and time-poor. Individuals in this generation are between the ages of 37 and 53 in 2018 and typically are further in their career than millennials, typically providing them higher levels of disposable income. Additionally, this segment has a large number of families with young children, which also includes single parents.

Products & Markets

Major Markets continued

Children usually further limit the available free time that consumers have to run errands, such as shop for groceries. Convenience is the main factor for this group, which generally has little concern about product price and delivery charges. For these reasons, consumers in this generation represent the largest market for industry operators at an estimated 44.2% of industry revenue in 2018.

Baby boomers

Baby boomers represent one of the largest segments of the US population in 2018. Consumers in this generation fall between the ages of 54 and 72 and are forecast to represent 27.4% of industry revenue in 2018. Many individuals in this group are at the ending stages of their career or in retirement. While this may provide them with additional free time compared to younger generations, they are generally not as technologically savvy. These individuals are more accustomed to stopping at a brick and mortar grocery

location for their food purchases and may be reluctant to purchase food online. However, the advent of ordering online and picking up in-store has appealed heavily to these individuals that may not be willing or able to carry large loads of grocery items.

The greatest generation

This consumer segment is comprised of consumers aged over the age of 72 years old. This segment is not very technologically savvy and typically rely on other individuals for their care, especially as they age. This limits their ability to take advantage of online grocery services. However, some of these consumers may find it difficult to get out of the house make up a significant share of online grocery shoppers. The share of senior citizens and disabled individuals has grown over the past five years and is expected to continue growing in the future. In 2018, consumers in this age range are anticipated to make up 6.3% of industry revenue.

International Trade

International trade of groceries does not occur at the retail level; however, a significant share of goods retailed by operators is sourced from international

locations. Due to the nature of this industry, the majority of goods imported into the United States are of a nonperishable nature.

Products & Markets

Business Locations 2018



SOURCE: WWW.IBISWORLD.COM

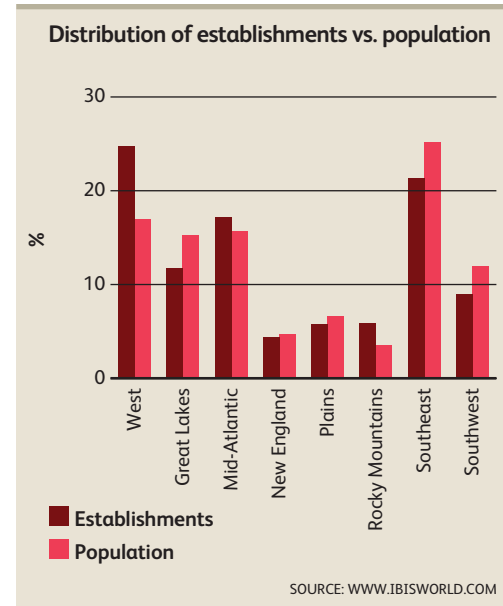
Products & Markets

Business Locations

Operators in the Online Grocery Sales industry do not always establish operations following the distribution of the population. However, densely populated regions is an important factor to an operator's geographic location, but not as much as with physical retailers. Also, online grocery companies choose their location with rental and transportation costs in mind because most e-commerce dealers require large amounts of warehouse space.

Operators in the Online Grocery Stores industry are largely concentrated in the Southeast, West and Mid-Atlantic, which together account for nearly three-quarters of total industry establishments. The West, which holds about 24.7% of industry establishments, is also attractive for its population density (an estimated 17.3% of the total population) and proximity to international suppliers. This region is also home to a large number of highly populated and technically driven cities, many of which are located in California. Home to 18.0% of business locations, California distributes a large number of groceries from online retailers by state.

The Southeast region has the second largest number of industry establishments, representing 21.3% of all locations. This region has the largest national population concentration, which is the primary driver behind business saturation. The Mid-Atlantic region is home to highly populated cities such as New York City, Philadelphia and



Washington DC, which are target demographics for industry operators. An estimated 17.2% of business locations are in the Mid-Atlantic for this reason. New York alone represents an estimated 9.2% of establishments. Additionally, the Southeast and Mid-Atlantic have ease of access to international trade ports also allows retailers to source foreign-made goods, helping to cut down on purchasing costs.

The remaining regions make up one-quarter of establishments and roughly follow the distribution of the population. For example, the Rocky Mountains, which is the least populated region (3.7% of total population), accounts for about 5.9% of the industry's total establishments.

Competitive Landscape

Market Share Concentration | Key Success Factors | Cost Structure Benchmarks
Basis of Competition | Barriers to Entry | Industry Globalization

Market Share Concentration

Level
Concentration in
this industry is **Low**

IBISWorld estimates that the Online Grocery Sales industry has a low level of concentration, with the top four players accounting for less than 35.0% of total industry revenue in 2018. Many online grocery retailers are small to medium size private establishments that operate on a state and regional level and serve niche markets. Although online grocery retailers offer similar products and services, low industry concentration stems partly from the diversity of regions covered by industry operators as well as problems related to scale.

However, in recent years, many large grocery chains have launched their own online grocery stores, expanding market share. One example is the e-commerce giant Amazon, which launched AmazonFresh, an online grocery store in 2017 after its purchase of WholeFoods Market. While AmazonFresh only delivers to consumers in select regions, they are located across the US in most major cities. This, coupled with the parent company's online reputation nearly doubled market share at the end of the five-year period.

Key Success Factors

IBISWorld identifies 250 Key Success Factors for a business. The most important for this industry are:

Ability to control stock on hand

Industry operators need to be able to control stock on hand to ensure that they have adequate stock of popular items.

Having a loyal customer base

It is important to have a loyal customer base to attract repeat buyers and ensure continued sales. Establishing a loyal customer base may take time and will occur through strong before- and after-sales customer service.

Company's website is user-friendly

Having an easy-to-navigate website helps companies attract more consumers and drive more purchases.

Economies of scope

Successful operators need a range of grocery products at different levels of price and quality. Offering a wide variety of products will help attract a larger customer base.

Ability to quickly adopt new technology

Ever-changing software systems, broadband and mobile internet connections and personal information security systems require operators to update their business to keep pace with recent technology.

Ability to provide goods and services in diverse locations

Industry operators must move into new geographic areas to increase the size of their potential market.

Cost Structure Benchmarks

Profit

Profit, or earnings before interest and taxes (EBIT), varies significantly throughout the industry, as larger industry operators typically are able to leverage their economies of scale to reduce costs and increase their profit margins. Nevertheless, profit is expected to account for 4.9% of revenue in 2018, up from 3.5% in 2013. The industry has benefited from a widening selection of

products as well as heightened consumer interest in the convenience of shopping for food online. When shoppers seek out essential items, they are also increasingly exposed to higher margin products. Earnings have also benefitted from lower unemployment and rising per capita disposable income. The recovering job market has reduced the amount of leisure time available to consumers, promoting more to use online services for making

Competitive Landscape

Cost Structure Benchmarks continued

purchases including food. Meanwhile, higher per capita disposable income has allowed consumers to afford to pay online grocery sale delivery fees. Profit margins are likely to remain steady moving forward as consumers are increasingly adopting online grocery services and continue ordering high margin items from online retailers.

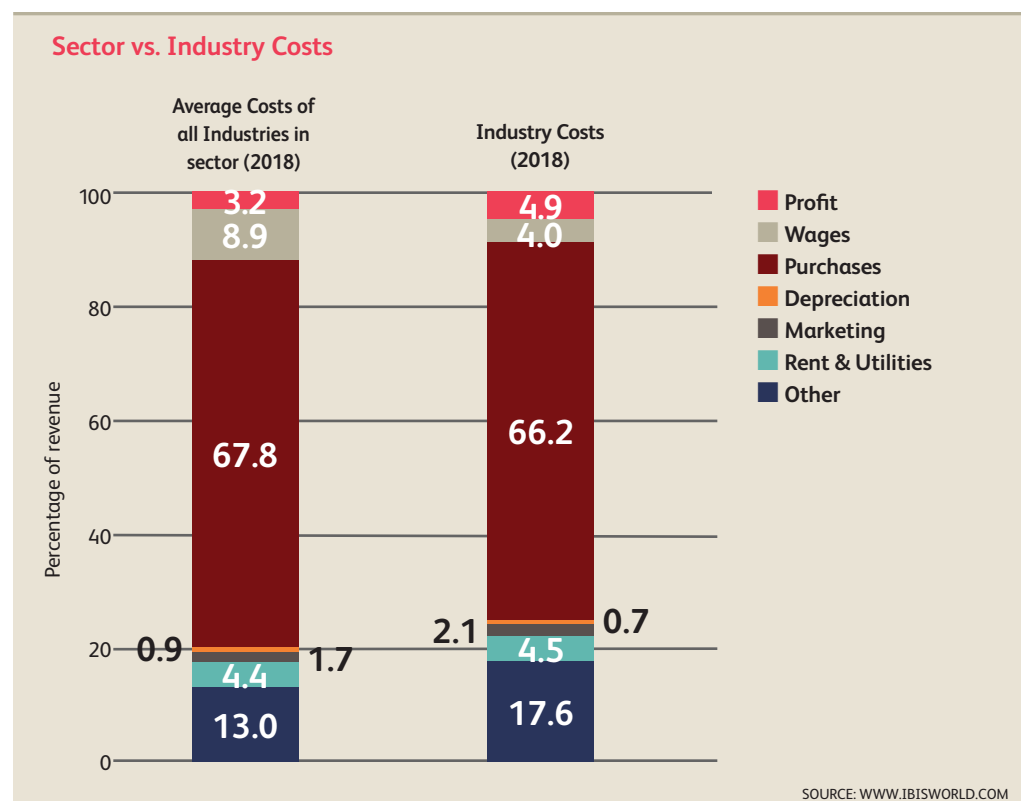
Purchases

Purchases are the single largest expense item for the typical online grocery retailer, accounting for 66.2% of revenue in 2018. Purchases include all goods sold via the online store in addition to packing materials such as boxes, crates and bags. Over the past five years, the agricultural price index, representing nominal prices received by farmers for all US agricultural products, has declined, pushing down food prices across the board over the past five

years. Likewise, the price of cardboard and plastic also determines purchasing costs. Additionally, through mergers and acquisitions, many industry players have increasingly been connected to physical retail grocery locations. This has also reduced purchase costs as they are incorporated into much larger wholesale purchases.

Wages

Wages represent another significant cost category for the industry. In 2018, IBISWorld estimates these costs to account for 4.0% of revenue. Employees are necessary for order processing, inventory tracking and product delivery. Over the past five years, wages have decreased as a share of industry revenue. This decline is primarily from the substantial increase in revenue that the industry has experienced over the five-year period. The increase in revenue



Competitive Landscape

Cost Structure Benchmarks continued

surpassed wages, which as a whole have increased over the period as the operators higher more people to meet increasing demand.

Marketing

The average industry operator spends 2.1% of their revenue on marketing and advertising expenses. With nearly 3,000 participants, competition among online grocers is intense. Additionally, competition from traditional supermarkets remains a threat to the industry, acting as an incentive for operators to dedicate more money to marketing. However, many companies are able to market their services through inexpensive platforms such as social media such as YouTube or Instagram, rather than traditionally expensive TV ads. Additionally, some operators such as Amazon, are able to market their online grocery services through their own website or in their physical retail locations. As a result, marketing costs have climbed over the past five years.

Other costs

The industry also incurs other miscellaneous costs, including rent, utilities, vehicle insurance, overhead and hosting expenses. Rent and utilities are higher for grocery retailers than they are for other Internet-based operators due to the perishable nature of some food, which requires refrigeration. Rent and utilities account for 4.5% of industry revenue, representing an increase over the five-year period. As more consumers seek to use online grocery services, operators must have a larger inventory to fill orders, increasing their rent and utility costs.

Depreciation has remained steady at about 0.7% of revenue over the past five years. Costs in this category include warehouse equipment (such as forklifts), delivery vehicles and computer software. Credit conditions have been tight, restricting operators from making significant capital investments. However, software systems have enabled players to rely less on human capital and streamline operations.

Basis of Competition

Level & Trend
Competition in this industry is **High** and the trend is **Increasing**

Internal competition

Within the Online Grocery Sales industry, operators compete with regard to the size of their customer base, local presence and understanding, ability to offer a high volume of relevant deals, product variety, brand recognition, extra services and price. Providing quality customer service allows industry operators to expand their customer base and ensure repeat purchases. Consumers are using online grocery services for the added convenience that it provides them, so high customer service is paramount.

Many operators often offer various delivery methods to consumers based on their order sizes, such as two-hour delivery or locker service to meet the needs of various clients. Operators can choose from a number of standard

business models when establishing their operation. Established brick-and-mortar supermarkets and grocery stores may decide to provide delivery or in-store pickup services for customers who order online their website. However, other companies, such as pure e-commerce retailers like Instacart, may choose to avoid opening retail space and simply ship and deliver products from distribution centers across the country. Both types of operators have their advantages and disadvantages, however, competition between both is mainly center on pricing which can vary from operator to operator.

Furthermore, because it is very easy to compare product prices across websites, the price is an extremely important factor for industry players. Therefore, online

Competitive Landscape

Basis of Competition continued

grocery retailers offer their customers various discounts, promotions, deals and club cards in addition to offering discounts for delivery charges. Product variety is important as well. Many consumers are accustomed to walking down grocery store aisles and having a plethora of options for any given item, many more may have brand loyalty to specific products. For these reasons, consumers may opt to use an online grocer with their selected products. Operators that have a wide range of brands and product offerings will benefit from appealing to a wide variety of consumers.

Location is also important for industry operators. Although this industry is based online, the location of distribution centers and their delivery radius is important. Many operators only provide online grocery services to select markets, often city environments, due to the large consumer base and general proximity of clients to distribution locations.

However, operators with brick and mortar locations may benefit from having physical retail locations in more remote areas to use as a distribution center, providing them access to an even broader consumer segment.

External competition

Online grocery retailers face a high amount of competition from physical supermarkets and grocery stores and large warehouse stores, particularly Walmart and Costco. Many consumers still prefer to make their purchases in brick-and-mortar grocery stores rather than over the internet because they want to be exposed to their food before they purchase them. This is especially true for perishable items. However, online purchases of packaged goods (e.g. canned foods, pasta, condiments) and household items (e.g. detergent, cleaning supplies) are expected to increase, especially among consumers in city environments.

Barriers to Entry

Level & Trend
Barriers to Entry
in this industry are
Low and Increasing

Entry into the online grocery market is relatively easy, although barriers to entry are rising. The capital required to start an online grocery company remains limited to internet technology infrastructure, the procurement of inventory, transportation and storage space. These factors pose as minimal barriers to new industry operators, especially among retailers that already have physical grocery retail locations. However, operators are subject to the increasing barriers to entry that stem from the rapid rate of technological change and potential increases in federal regulation with regard to the shipment and sale of certain food items.

Primarily, e-commerce operates in the high-tech world of computer-based platforms and online systems. Recent developments in mobile technology have led retailers to increase their social

Barriers to Entry checklist

Competition	High
Concentration	Low
Life Cycle Stage	Growth
Capital Intensity	Medium
Technology Change	Medium
Regulation and Policy	Medium
Industry Assistance	Low

SOURCE: WWW.IBISWORLD.COM

presence and offer a diversified range of applications designed to specifically for smartphones and other devices. This can lead to substantial upfront costs for both time and money spent developing appropriate technologies. Additionally, online security remains paramount to the success of e-commerce companies, as data leaks or privacy breaches can ruin a

Competitive Landscape

Barriers to Entry continued

company's reputation and drive away customers. This is especially prominent after data misuse and leaks from social sites such as Facebook and Google in recent months. Lastly, the government institutions like the Food and Drug Administration place

regulations on the sale and shipment of some food items due to their perishability. Understanding of and adherence to such regulations can increase operating costs and may prove prohibitive for smaller companies to function profitably.

Industry Globalization

Level & Trend

Globalization in this industry is **Low** and the trend is **Steady**

Most industry operators are domestically owned and operated as they cater their products and services to consumers in the United States. While some operators may sell groceries to foreign buyers, the effect of trade and international relations is not significant. For example, one of the industry's prominent players, Safeway, operates in the United States and Canada. However, globalization is

expected to increase as the internet allows for easy transactions across country borders. Additionally, many grocery chains that are owned by international conglomerates are increasingly entering the Online Grocery Sales industry. One such example is Peapod, a predominant online grocery retailer that is owned by Ahold Delhaize, which is headquartered in the Netherlands.

Major Companies

Amazon.com Inc. | Walmart Inc. | Other Companies

Major Players

(Market Share)

Walmart Inc. 5.3%



Amazon.com Inc. 16.2%

SOURCE: WWW.IBISWORLD.COM

Player Performance

Amazon.com Inc.
Market Share: 16.2 %
Industry Brand Names
AmazonFresh

Amazon.com, Inc. was established as an online retailer in July on 1995 from a headquarters in Seattle, WA. As a whole, Amazon.com has grown exponentially over the past decade, growing from selling primarily books to offering in-home services and electronic devices. This has further grown the company's bottom line, increasing total revenue an annualized 25.6% to 323.9 billion over the five years to 2018. Amazon is in the process of rapidly building up the infrastructure to service various markets outside of its select Seattle and California locations and has sought to establish a second headquarter somewhere along the east coast. Amazon operates through several segments but operates in the Online Grocery Sales industry through its AmazonFresh division.

Amazon seized the opportunity to grow online grocery shopping and launched an online grocery delivery

service, AmazonFresh in 2017. The website includes everything that a customer can find at a local grocery store, including locally grown fresh fruits and vegetables, the retailer's full range of non-perishable items and various organic products. Most orders qualify for free delivery, which can be earned through a minimum order amount or through the retailer's "Big Radish" recognition program. Shoppers can also opt to pick up their groceries, typically from a WholeFoods location or AmazonPantry locker set up, which is free for any size order. Most AmazonFresh customers use the doorstep delivery option, which allows customers to choose a three-hour time slot that works best for them. The company offers regular and pre-dawn delivery of perishables in temperature-controlled tote bags to the customer's home or designated pickup location. Additionally, the company launched

Amazon.com, Inc. (US industry-specific revenue) - financial performance*

Year	Revenue (\$ million)	(% change)	Operating Income (\$ million)	(% change)
2013**	N/A	N/C	N/A	N/C
2014**	N/A	N/C	N/A	N/C
2015**	N/A	N/C	N/A	N/C
2016**	N/A	N/C	N/A	N/C
2017	3,137.8	N/C	72.4	N/C
2018	4,160.4	32.6	117.8	62.7

*Estimates ** They did not participate in the industry in these years

SOURCE: ANNUAL REPORT AND IBISWORLD

Major Companies

Player Performance continued

AmazonKey which allows consumers to install smart locks on their door. These locks have cameras and specialized codes for delivery personnel that allow them to drop off the packages or groceries inside the consumer's home when they are not there. While this service has been subject to backlash from skeptical consumers, it provides an additional alternative and convenient service.

At the initial launch of AmazonFresh, only select cities in California were able to utilize the service. Since then, the company has expanded the reach of AmazonFresh, launching its operations in New York City, servicing three neighborhoods across Brooklyn. Its new campus in New Jersey includes a warehouse in Avenel, which sits a little more than 20 miles southwest of Park Slope, one of the new neighborhoods it plans on servicing. Currently, AmazonFresh services over 30

different US cities, and their surrounding areas, that range from Chicago to Denver to Dallas.

Financial performance

Over the five years to 2018 Amazon has not only entered the online grocery space but has begun to dominate other operators that have been in the industry for years. The launch of AmazonFresh and the company's purchase of WholeFoods Markets have expanded and diversified the company's revenue streams. Since the launch of their online grocery segment on 2017, their revenue from AmazonFresh has increased 32.6% year over year to reach an estimated \$4.2 billion in 2018. This expansive growth is expected to continue as more people, especially those with Prime memberships, adopt the AmazonFresh service. Additionally, the company plans to continue expanding the regions of service to capture more consumers.

Player Performance

Walmart Inc.
Market Share: 5.3 %

Walmart Inc. (Walmart) was founded as a small discount retailer in Rogers, Arkansas and has expanded to become one of the world's largest retailers. In 2017, the company reported total company-wide revenue of \$500.3 billion.

This includes all of their domestic and international online and in-store sales across all retail segments.

Since the launch of in-store grocery services Walmart has immersed as one of the United States' largest grocery

Walmart Inc. (US industry-specific segment) - financial performance*

Year	Revenue (\$ million)	(% change)	Operating Income (\$ million)	(% change)
2013**	N/A	N/C	N/A	N/C
2014**	N/A	N/C	N/A	N/C
2015	1,013.0	N/C	50.6	N/C
2016	1,274.2	25.8	59.7	18.0
2017	1,318.1	3.4	53.8	-9.9
2018	1,371.8	4.1	52.4	-2.6

* Estimates ** They did not participate in the industry in these years

SOURCE: ANNUAL REPORT AND IBISWORLD

Major Companies

Player Performance continued

merchants. Since the rapid expansion of the online retail space over the past decade, Walmart has expanded their online retail segments, included online grocery sales. In 2015, the company rolled out its latest concept called Walmart Pickup – Grocery, a service that allows customers to order online from a selection of 10,000 grocery and household products and pick up their groceries from a distribution center. Walmart's pick-up service is offered at no additional charge above the cost of customer's order; the model has only been tested at one location.

From there, Walmart launched online grocery stores. Walmart only recently began selling and delivering online groceries, despite the fact that it has operated the nation's largest network of warehouse and retail locations for several years. Nevertheless, it is this massive nationwide distribution hub that makes Walmart the ideal company to enter the online grocery stores industry. Their online grocery service features snacks, beverages, condiments, cleaning supplies and thousands of other items and was designed to combat Amazon's AmazonFresh. In order to deliver

perishable items to a customer's house before they spoil, Walmart uses its own refrigerated trucks. The company also charges the same competitive prices online as it does in its stores, and certain grocery items are priced lower than those of its competitors. Furthermore, Walmart features store brands that are familiar and trusted by consumers.

Financial performance

Since the launch of their online and in-store pickup service in 2015, Walmart has worked to expand their online grocery sales. Over the past three years, Walmart's online grocery sales are forecast to increase an annualized 10.6% to reach \$1.4 billion in 2018. While growth remains strong, Walmart will experience growing competition from Amazon as they offer many of the same products at similarly discounted prices to Walmart. This is especially true in cities and densely populated areas where Walmart has yet to enter for online grocery orders. It will become increasingly difficult for Walmart to enter these regions as many consumers will have adopted online grocery services from other retailers that have already penetrated the market.

Other Company Performance

Peapod
Market Share: 4.4 %

Founded in 1989, Peapod LLC is a wholly owned subsidiary of international food provider Ahold Delhaize and works in partnership with Ahold USA supermarket companies, including Stop & Shop and Giant Food Stores LLC. The company delivers products to more than 350,000 customers annually in 12 states and the District of Columbia. In 2011, Peapod expanded into Philadelphia and Delaware, serving customers in the Giant Carlisle market area for the first time. The company also expanded further into Manhattan and currently serves the Midtown, Upper West Side and Upper East Side neighborhoods. The Illinois-

based online grocer has also expanded to pockets of the Midwest in addition to its traditional markets on the East Coast. During 2018, the company is anticipated to generate \$773.6 million in total company revenue.

Peapod offers more than 8,000 products in a variety of categories, such as produce, meat and seafood, deli items, prepared foods, natural and organic foods, pet items and health and beauty items. Although the company serves a range of demographics, typical Peapod customers are dual-income couples and dual-income families. On October 1, 2013, the company announced the launch

Major Companies

Other Company Performance continued

of more than 100 virtual grocery stores at commuter rail stations in Boston, Connecticut, New York, New Jersey, Philadelphia, Washington D.C. and Chicago. These virtual stores consist of billboards that display typical grocery items and allows commuters with iPhones, iPads and Android phones to scan a QR code, download a free Peapod Mobile app and shop by scanning bar codes of the products displayed on the billboards.

Over the five years to 2018, Peapod exhibited strong financial performance. Although many consumers still prefer to shop in a physical grocery store rather than on the internet, some shoppers shifted their spending online in search of

money-saving deals and promotions. However, the company has experienced heightened competition from retail giants such as Walmart and Amazon, both of which have expanded their services in the next few years. Its market share has stagnated as the market for online groceries has expanded at a faster pace than the company's sales. This is due to the fact that Peapod has been careful to expand its services slowly to new locations in order to avoid overextending itself. Nevertheless, Peapod remains an established operator in this industry. Overall, during the five years to 2018, revenue increased at an annualized rate of 14.3% to reach \$1.1 billion.

Other Company Performance

Kroger
Market Share: 4.3 %

Founded in 1883 by Barney Kroger, The Kroger Company (Kroger) was established as a single location grocery store in Cincinnati, OH. Over the past 130 years, the Kroger family worked to expand their supermarket chains to be the largest grocery retailer in the US that it is today. As on 2018, Kroger operates over 2,800 stores in 35 different states. The company operates these locations under several brand names such as Kroger, Harris Teeter and Foods Co. Kroger also operates over 260 fine jewelry locations and 38 manufacturing facilities. In 2014, Kroger launched ClickList which was its entry into online grocery sales. Clicklist allowed consumers to order their groceries online and then pick them up in-store or in a pickup drive-thru. The company operated under this model until 2017.

After Amazon launched AmazonFresh and Walmart announced its grocery delivery services, Kroger began to revamp their online grocery sales segment. In 2017, Kroger released Kroger Ship in response to the services offered by these major competitors. Consumers of Kroger Ship will have access to all items they typically find in their local Kroger grocery locations, representing over 50,000 different product options. This service will offer free shipping on orders of \$35.00 or more, while orders below that minimum will be charged shipping of \$4.99. This addition of Kroger Ship to its already established ClickList platform has enabled steady growth for Kroger's online grocery sales. Over the past 4 years, Kroger's online grocery sales have increased an annualized 12.6% to reach \$1.1 billion in revenue in 2018.

Major Companies

Player Performance

Fresh Direct LLC.
Market Share: 2.8 %

Established in 1999 in Long Island City, NY, FreshDirect is an online grocer that currently employs about 2,000 workers. The privately-owned company serves about 600,000 customers primarily in New York and New Jersey. As of October 2013, the company also delivers to Philadelphia, PA and offers a wide range of food items, from custom-cut meat to ready-made meals. The grocer also carries and is well known for, organic and locally grown foods. FreshDirect also caters for local events such as supplying Easter and Passover meals, which are chef-prepared, family-size meals featuring salmon, brisket, lamb or a selection of other entrees. The meals also include a choice of side dishes and wines. Moreover, FreshDirect charges \$5.99 for delivery within its service area and its prices are comparable to those found in brick-and-mortar locations.

During the past five years, FreshDirect performed strongly in the Online Grocery Sales industry, solidifying itself as the

second largest player in the industry. Its growing product line, area expansion and competitive prices have allowed the company to expand over the five-year period. Company revenue is estimated to have grown an annualized 9.8% to about \$717.9 million in 2018. Nevertheless, Fresh Direct faces mounting pressure from e-commerce giant Amazon which moved into the New York market in 2017. In response to this encroachment, FreshDirect struck a deal with website Foodily to create Popcart, a service that will compete with startups like Blue Apron and Plated that delivery ready-to-be-cooked meal ingredients. Expanding into services may be the best strategy for the company, which is expected to face extremely intense price competition from Amazon. Most recently, the company announced its plans to expand into the Washington DC area, though competition is expected to be fierce, as major competitors Peapod and AmazonFresh already have vested stakes in the region

Player Performance

Safeway Inc.
Market Share: 0.0 % -
1.1 %

Founded in 1915, Safeway has grown into one of the largest food and drug retailers in North America, operating more than 1,300 stores across the United States and Canada. The company owns and operates Groceryworks.com, an online grocery channel that provides online shopping and delivery services under the name Safeway.com for Safeway and its subsidiaries, Vons and Genuardis. The company offers three main ways to shop on its website: shopping by aisle, where consumers can browse the entire online store through virtual aisles; shopping history, which saves all customers' purchases in-store or online using their club card; and Express List, which allows consumers to enter product names into

the express shopping list and an online search feature finds the best matching products for the customer. Currently, Safeway and Vons offer delivery services to residential and business locations in the major cities of California as well as Portland, Seattle, Phoenix, Tucson, Las Vegas and the Washington metropolitan area. Additionally, delivery rates vary depending on the amount of items ordered and the time window given, while a \$49.0 minimum purchase amount is required. IBISWorld estimates Safeway Inc. will generate industry-specific revenue of \$280.0 million in 2018, representing an annualized increase of 5.9% over the five year period.

Operating Conditions

Capital Intensity | Technology & Systems | Revenue Volatility
Regulation & Policy | Industry Assistance

Capital Intensity

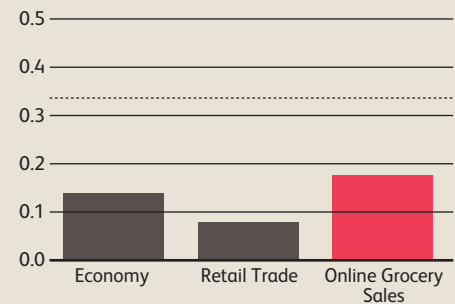
Level

The level of capital intensity is **Medium**

Capital intensity for the Online Grocery Sales industry is moderate. For every dollar spent on labor, the average operator dedicates \$0.18 toward capital equipment. Over the past five years, online grocers have invested more capital on technological services such as their websites and mobile apps in addition to their vehicle fleets, other delivery platforms such as lockers, office hardware and software and warehouse equipment (such as forklifts). For this reason, capital intensity has increased slightly over the five-year period from \$0.14 in 2013. As this industry becomes increasingly popular operators are forced to spend more on their capital services. However, because this industry relies more heavily on delivering its

Capital Intensity

Capital units per labor unit

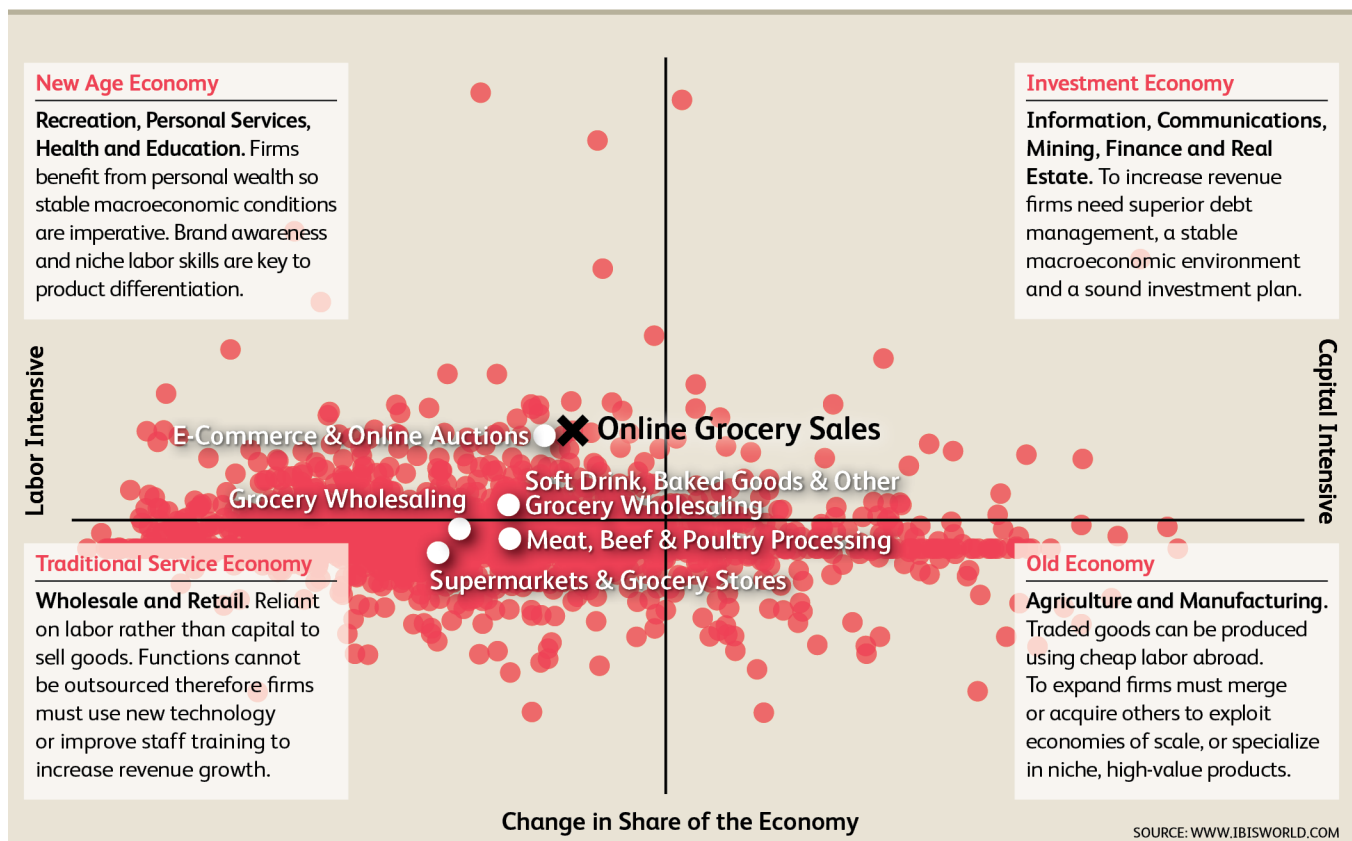


Dotted line shows a high level of capital intensity

SOURCE: WWW.IBISWORLD.COM

products to customers, its average labor costs are higher than those of other internet-based industries.

Tools of the Trade: Growth Strategies for Success



Operating Conditions

Technology and Systems

Level

The level of technology change is **Medium**

Technological change in the industry is moderate due to the advancement of websites and smartphone applications for product offerings and special deals. The development and maintenance of websites and smartphone applications do not often require new technology as their maintenance can be performed through existing computer programs. Another technological advancement that facilitates payment transactions is the PayPal payment system, which enables online shoppers to use their bank accounts to pay for goods and services. Companies that are based online can use internally developed systems and proprietary and commercially licensed technologies to accommodate large volumes of online internet traffic.

However, the recent surge in popularity of online grocery sales has led to minor technological changes for the industry. The most recent change has

been in-car or in-home delivery. Unlike traditional delivery services where products are dropped off at consumers home outside of their door, major play Amazon has changed that. In 2018, Amazon launched AmazonKey, a service that allows delivery personnel to entry a consumers home to drop off packages and groceries through a technological smart lock. While this has been subject to come controversy among consumers, it has influenced online grocery delivery. Additionally, many services have launched locker systems. AmazonFresh and Kroger's online grocery service both allow consumers to purchase their groceries online and pick them up from a drop off location. These drop off spots are made of lockers of various sizes that consumers can unlock from their phones or with designated codes. These have become a popular method of online grocery deliveries, especially in city locations.

Revenue Volatility

Level

The level of volatility is **Medium**

The industry's revenue fluctuates in response to consumer trends. One of the most significant determining factors over the past five years has been per capita disposable income and the unemployment rate. Over the past five years, the unemployment rate has fallen to the lowest levels in over a decade, putting a large number of Americans back to work. This has increased per capita disposable income over the five-year period. This has boded well for industry operators as consumers are increasingly pressed for time with a large amount of disposable income. This, coupled with an increasingly digital culture, has encouraged consumers to purchase groceries online.

Internet accessibility also determines fluctuations in revenue. As Americans increasingly gain access to the World

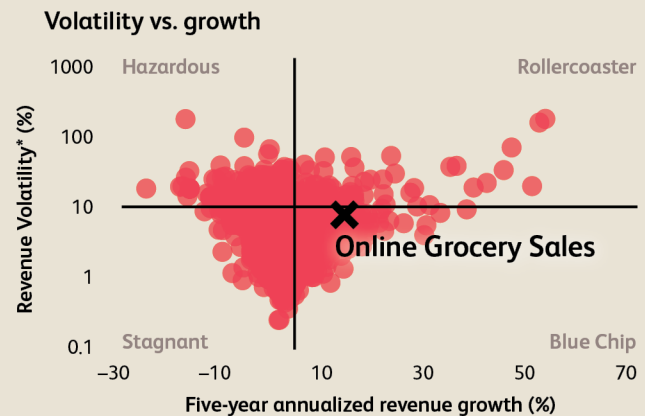
Wide Web, they are more likely to make online purchases, including groceries. Mobile internet connections allow busy consumers to place an order while on the go, supporting industry performance. Over the past five years, the rising adoption of smartphones and tablet computers has acted as a boon for the industry. Food prices also play a role in determining industry revenue. As farm prices rise, farmers and wholesalers pass on the higher cost to retailers. Retailers, in turn, mark up the final selling price that consumers pay. When prices increase, especially on essential food items, industry revenue grows as well. For these reasons, the Online Grocery Sales industry has exhibited moderate levels of revenue volatility as growth has been substantial in recent years.

Operating Conditions

Revenue Volatility continued

A higher level of revenue volatility implies greater industry risk. Volatility can negatively affect long-term strategic decisions, such as the time frame for capital investment.

When a firm makes poor investment decisions it may face underutilized capacity if demand suddenly falls, or capacity constraints if it rises quickly.



Regulation and Policy

Level & Trend
The level of Regulation is **Medium** and the trend is **Increasing**

Operators in the Online Grocery Sales industry are subject to several regulations regarding the products they sell. In addition, industry operators are also subject to online sales tax collection, customer privacy and security and general environmental and competition statutes. The safety of food items is regulated by the US Food and Drug Administration (FDA) through its Federal Food, Drug and Cosmetic Act (FFDCA), which requires that all consumable products must be free of harmful ingredients. Also, all consumable products must be made in a clean environment and labeled clearly.

When making purchases over the internet, consumers are required to provide a credit card number and password. Therefore, industry operators must comply with online security laws. The Entertainment Software Rating

Board (ESRB) has established an Online Privacy Program, which helps its members adhere to complex privacy rules for internet applications. The ESRB's aim is to protect its members from potential misconduct and fines.

The most important regulation affecting e-commerce is the Streamlined Sales and Use Tax Agreement, which is organized by the Streamlined Sales Tax Governing Board. This board requires online retailers with a physical store, warehouse or office to collect applicable state and local sales tax from customers. However, if online retailers do not have a physical presence in a particular state, they are not required to collect sales taxes. Additionally, most states have tax exemptions on certain items, such as food or clothing. Many online retailers use online shopping card services to handle sales transactions.

Operating Conditions

Industry Assistance

Level & Trend

The level of Industry Assistance is **Low** and the trend is **Steady**

Tariffs apply to goods supplied by this industry but they are applied at upstream stages of the supply chain and are not applied at the retail level. Online grocery retailers purchase goods from importers and wholesalers after the tariff has been applied. However, a change in the tariff rate of a particular good typically determines where the good is purchased from as well as the purchase price.

The industry does not receive any formal assistance from the federal or state governments. However, the industry does receive indirect assistance from industry associations, such as the National Grocers Association (NGA). Similar to physical grocery retailers, the NGA represents grocers by providing industry operators with new working, educational and lobbying services.

Key Statistics

Industry Data

	Revenue (\$m)	Industry Value Added (\$m)	Establishments	Enterprises	Employment	Exports	Imports	Wages (\$m)	Domestic Demand	Percentage of services conducted online (%)
2009	9,006.5	1,028.1	1,792	1,706	27,805	--	--	568.7	N/A	5.7
2010	9,859.4	911.5	1,805	1,722	26,252	--	--	532.9	N/A	6.4
2011	11,021.1	933.7	1,857	1,773	24,973	--	--	528.1	N/A	7.0
2012	12,888.2	1,070.3	1,947	1,870	25,197	--	--	565.1	N/A	7.9
2013	13,613.3	1,294.5	1,964	1,894	23,576	--	--	717.3	N/A	9.6
2014	15,195.9	1,400.2	2,005	1,936	24,178	--	--	722.4	N/A	11.0
2015	17,181.6	1,788.2	2,089	2,008	24,547	--	--	795.1	N/A	12.7
2016	21,275.9	2,035.0	2,200	2,111	24,997	--	--	860.6	N/A	14.3
2017	23,521.9	2,265.8	2,345	2,245	26,926	--	--	941.0	N/A	16.0
2018	25,739.1	2,481.8	2,497	2,386	28,865	--	--	1,021.8	N/A	17.6
2019	27,531.8	2,651.4	2,643	2,524	30,540	--	--	1,090.6	N/A	18.5
2020	29,313.3	2,822.1	2,799	2,673	32,245	--	--	1,160.5	N/A	19.4
2021	31,092.4	2,992.4	2,928	2,793	33,917	--	--	1,229.8	N/A	20.4
2022	32,857.6	3,164.7	3,068	2,925	35,519	--	--	1,297.1	N/A	21.3
2023	34,622.0	3,336.5	3,217	3,067	37,197	--	--	1,367.1	N/A	22.2

Annual Change

	Revenue (%)	Industry Value Added (%)	Establishments (%)	Enterprises (%)	Employment (%)	Exports (%)	Imports (%)	Wages (%)	Domestic Demand (%)	Percentage of services conducted online (%)
2010	9.5	-11.3	0.7	0.9	-5.6	N/A	N/A	-6.3	N/A	11.7
2011	11.8	2.4	2.9	3.0	-4.9	N/A	N/A	-0.9	N/A	9.8
2012	16.9	14.6	4.8	5.5	0.9	N/A	N/A	7.0	N/A	11.9
2013	5.6	20.9	0.9	1.3	-6.4	N/A	N/A	26.9	N/A	21.7
2014	11.6	8.2	2.1	2.2	2.6	N/A	N/A	0.7	N/A	14.1
2015	13.1	27.7	4.2	3.7	1.5	N/A	N/A	10.1	N/A	15.7
2016	23.8	13.8	5.3	5.1	1.8	N/A	N/A	8.2	N/A	13.0
2017	10.6	11.3	6.6	6.3	7.7	N/A	N/A	9.3	N/A	11.6
2018	9.4	9.5	6.5	6.3	7.2	N/A	N/A	8.6	N/A	9.9
2019	7.0	6.8	5.8	5.8	5.8	N/A	N/A	6.7	N/A	5.3
2020	6.5	6.4	5.9	5.9	5.6	N/A	N/A	6.4	N/A	5.1
2021	6.1	6.0	4.6	4.5	5.2	N/A	N/A	6.0	N/A	4.8
2022	5.7	5.8	4.8	4.7	4.7	N/A	N/A	5.5	N/A	4.6
2023	5.4	5.4	4.9	4.9	4.7	N/A	N/A	5.4	N/A	4.4

Key Ratios

	IVA/Revenue (%)	Imports/Demand (%)	Exports/Revenue (%)	Revenue per Employee (\$'000)	Wages/Revenue (%)	Employees per Est.	Average Wage (\$)	Share of the Economy (%)
2009	11.42	N/A	N/A	323.92	6.31	15.52	20,453.16	0.01
2010	9.24	N/A	N/A	375.57	5.40	14.54	20,299.41	0.01
2011	8.47	N/A	N/A	441.32	4.79	13.45	21,146.84	0.01
2012	8.30	N/A	N/A	511.50	4.38	12.94	22,427.27	0.01
2013	9.51	N/A	N/A	577.42	5.27	12.00	30,425.01	0.01
2014	9.21	N/A	N/A	628.50	4.75	12.06	29,878.40	0.01
2015	10.41	N/A	N/A	699.95	4.63	11.75	32,390.92	0.01
2016	9.56	N/A	N/A	851.14	4.04	11.36	34,428.13	0.01
2017	9.63	N/A	N/A	873.58	4.00	11.48	34,947.63	0.01
2018	9.64	N/A	N/A	891.71	3.97	11.56	35,399.27	0.01
2019	9.63	N/A	N/A	901.50	3.96	11.56	35,710.54	0.01
2020	9.63	N/A	N/A	909.08	3.96	11.52	35,990.08	0.01
2021	9.62	N/A	N/A	916.72	3.96	11.58	36,259.10	0.02
2022	9.63	N/A	N/A	925.07	3.95	11.58	36,518.48	0.02
2023	9.64	N/A	N/A	930.77	3.95	11.56	36,752.96	0.02

Figures are in inflation-adjusted 2018 dollars.

SOURCE: WWW.IBISWORLD.COM

Jargon & Glossary

Industry Jargon

BRICK-AND-MORTAR A store that has a physical presence and location, as opposed to an online retailer.

SMARTPHONE A mobile phone that offers advanced PC-like capabilities.

TABLET A complete computer contained entirely on a flat, touch screen device.

IBISWorld Glossary

BARRIERS TO ENTRY High barriers to entry mean that new companies struggle to enter an industry, while low barriers mean it is easy for new companies to enter an industry.

CAPITAL INTENSITY Compares the amount of money spent on capital (plant, machinery and equipment) with that spent on labor. IBISWorld uses the ratio of depreciation to wages as a proxy for capital intensity. High capital intensity is more than \$0.333 of capital to \$1 of labor; medium is \$0.125 to \$0.333 of capital to \$1 of labor; low is less than \$0.125 of capital for every \$1 of labor.

CONSTANT PRICES The dollar figures in the Key Statistics table, including forecasts, are adjusted for inflation using the current year (i.e. year published) as the base year. This removes the impact of changes in the purchasing power of the dollar, leaving only the “real” growth or decline in industry metrics. The inflation adjustments in IBISWorld’s reports are made using the US Bureau of Economic Analysis’ implicit GDP price deflator.

DOMESTIC DEMAND Spending on industry goods and services within the United States, regardless of their country of origin. It is derived by adding imports to industry revenue, and then subtracting exports.

EMPLOYMENT The number of permanent, part-time, temporary and seasonal employees, working proprietors, partners, managers and executives within the industry.

ENTERPRISE A division that is separately managed and keeps management accounts. Each enterprise consists of one or more establishments that are under common ownership or control.

ESTABLISHMENT The smallest type of accounting unit within an enterprise, an establishment is a single physical location where business is conducted or where services or industrial operations are performed. Multiple establishments under common control make up an enterprise.

EXPORTS Total value of industry goods and services sold by US companies to customers abroad.

IMPORTS Total value of industry goods and services brought in from foreign countries to be sold in the United States.

INDUSTRY CONCENTRATION An indicator of the dominance of the top four players in an industry. Concentration is considered high if the top players account for more than 70 % of industry revenue. Medium is 40 % to 70 % of industry revenue. Low is less than 40 %.

INDUSTRY REVENUE The total sales of industry goods and services (exclusive of excise and sales tax); subsidies on production; all other operating income from outside the firm (such as commission income, repair and service income, and rent, leasing and hiring income); and capital work done by rental or lease. Receipts from interest royalties, dividends and the sale of fixed tangible assets are excluded.

INDUSTRY VALUE ADDED (IVA) The market value of goods and services produced by the industry minus the cost of goods and services used in production. IVA is also described as the industry’s contribution to GDP, or profit plus wages and depreciation.

INTERNATIONAL TRADE The level of international trade is determined by ratios of exports to revenue and imports to domestic demand. For exports/revenue: low is less than 5 %, medium is 5 % to 20 %, and high is more than 20 %. Imports/domestic demand: low is less than 5 %, medium is 5 % to 35 %, and high is more than 35 %.

LIFE CYCLE All industries go through periods of growth, maturity and decline. IBISWorld determines an industry’s life cycle by considering its growth rate (measured by IVA) compared with GDP; the growth rate of the number of establishments; the amount of change the industry’s products are undergoing; the rate of technological change; and the level of customer acceptance of industry products and services.

NONEMPLOYING ESTABLISHMENT Businesses with no paid employment or payroll, also known as nonemployers. These are mostly set up by self-employed individuals.

PROFIT IBISWorld uses earnings before interest and tax (EBIT) as an indicator of a company’s profitability. It is calculated as revenue minus expenses, excluding interest and tax.

VOLATILITY The level of volatility is determined by averaging the absolute change in revenue in each of the past five years. Volatility levels: very high is more than $\pm 20\%$; high volatility is $\pm 10\%$ to $\pm 20\%$; moderate volatility is $\pm 3\%$ to $\pm 10\%$; and low volatility is less than $\pm 3\%$.

WAGES The gross total wages and salaries of all employees in the industry. The cost of benefits is also included in this figure.

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