FOOD RETAIL IN 2030

Tomorrow's issues today

ThoughtWorks®

A STUDY OF CONSUMER AND BUSINESS LEADER VIEWPOINTS BY THOUGHTWORKS

Introduction

This report takes a detailed look at the main drivers shaping the supermarket sector today, in a bid to predict how this key retail segment will change over the next 12 years.

Many of our predictions are based on in-depth research, conducted by YouGov on behalf of ThoughtWorks. These surveys polled both consumers and retailers to get a clearer understanding of how customer needs are changing, and how well prepared the food retail sector is to meet the challenges ahead.

The following pages take a closer look into the key findings from this ThoughtWorks research, to give some insight into the future of food retail and what supermarkets might look like in 2030.

Methodology

The business research was conducted by YouGov among 225 decision makers from the UK food retail sector in September 2018.

The consumer research was conducted by YouGov among a nationally representative sample of 2,041 adults between 8-9 August 2018. The research was conducted online.

About ThoughtWorks

ThoughtWorks is a global software consultancy and a community of passionate, purpose-led individuals. Our team thinks disruptively to deliver technology to address our clients' toughest challenges, all while seeking to revolutionise the IT industry and create positive social change.

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FOOD RETAIL TODAY

Before looking into the future of food retail, it makes sense to take stock of how this sector stands today.

There is no questioning the fact that food is big business. Globally, the wider food and drinks market is expected to be worth $21.2 trillion by 2020. This figure includes supermarkets and food retailers, as well as companies involved in farming, packaging, processing and the promoting of food and drink items.

When looking at the UK, the food retail market is dominated by the big supermarkets - Tesco, Asda, Sainsbury's and Morrisons, although both sales and profits have been squeezed by the entrance of the so-called 'discounters' such as Lidl and Aldi.

As a result, within the sector, the focus has been on price, with supermarkets using their market share to drive down supplier costs and cut prices in a bid to attract customers and boost sales - often at the cost of margin.

This trend has led to more consolidation in the industry in recent years; the most recent being the proposed merger between Asda and Sainsbury's.

This drive to squeeze costs has come to the detriment of innovation. The last big shift was in the 1940s, when the first supermarkets started to sell packaged and fresh goods within one store.

There have been incremental changes to this basic supermarket model, with self-checkouts, digital loyalty cards and coupons, and the emergence of a range of home-brand products.

One more recent development has been the growth in online orders and delivery services, enabling more consumers to shop at home. But many argue that this is simply a digitisation of the existing model, without any significant change to the customer experience, or shake up of the retailer's own margin-restricted framework.

TOWARDS A NEW FOOD RETAIL MODEL

Change may have been incremental in the food retail market in recent decades, but the sector faces more significant challenges over the next 10 years and beyond.

On the one hand there are macroeconomic factors to contend with, such as an ageing population, climate change and the potential upheaval to supply chains and pricing caused by Brexit.

At the same time change is being driven by consumers. What we eat, and how we eat is changing. Food shoppers are becoming more discerning: they don’t just want good value and convenience, they want more transparency in the food chain so they can see where and how their food was produced. Nutrition and healthy eating are becoming more important, as are issues of sustainability.

Supermarkets have a vital role to play in reducing food and packaging waste, and consumers are more likely to hold them to account on their track record on a range of ‘green’ and ethical issues in future.

A new wave of business models is starting to emerge, as food retailers adapt to these changing consumer patterns across the globe.

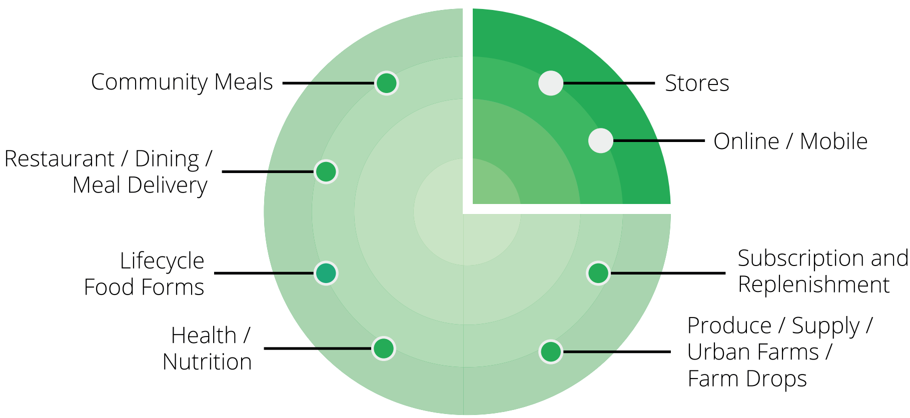
The San Francisco-based food retailer Habit offers consumers personalised healthy nutrition plans, and then the opportunity to purchase the items they need to create these meals.

Meanwhile in China, Alibaba’s Hema store is broadening the scope of the traditional ‘supermarket’, by meeting the multi-faceted requirements of the consumer. This company provides a physical store, restaurant and home delivery service - which delivers day-to-day groceries, prepped ingredients or ready to eat meals.

In the UK, digital platforms like AmazonFresh and Uber Eats, and the meal kit services like Gousto are changing the way people approach the old weekly shop - buying ‘meals’ rather than ingredients.

These developments point towards a new model, where food is a service, rather than the old grocery model. This new model will be underpinned by technology, enabling companies not only to survive but thrive in this new landscape.

FaaS (Food as a Service) V Old Grocery Model



Under this new model, the focus for food retailers will be flexibility and speed to market, rather than scale. Consumer choices will be driven less by price - although this will still be a factor - and more by environmental and ethical considerations. A food revolution will replace over-supply and waste with more conscious consumption.

"This shift will be driven by intelligent interconnected digital platforms and smart logistics which will shift the industry towards providing food as a service, giving people far greater choice in how, what and when to consume the food they need and enjoy.

Today's supermarkets could well be part of this equation but they will need to dramatically change their business model and associated technology strategies if they want to remain dominant players in a rapidly changing food retail landscape."

Kevin Flynn, Director of Retail Strategy, ThoughtWorks UK

Next we look at the major factors that will shape this landscape over the next 10 years in more detail.

HEALTHIER PLANET: A GREEN REVOLUTION

Looking ahead to 2030, it is clear that environmental issues will shape and change many aspects of our lives. One of the most significant effects could be on the way we grow, process and buy our food.

Research conducted by ThoughtWorks shows such concerns are already at the forefront of many consumers' minds, and are set to become more prominent in the decade ahead, with a rise in more conscious consumption. It is the food businesses that reflect these values that should benefit in future.

Food shoppers want to do more to address environmental issues, and they want retailers and food manufacturers to do the same.

The research highlights three key environmental concerns for consumers when it comes to the food industry:

REDUCED PACKAGING/ MORE RECYCLING

The number one issue for British food shoppers is reducing pollution by using less packaging and using more recyclable materials.

Such concerns are clearly influenced by the recent reports demonstrating the harmful effects of plastic waste, particularly on marine environments. It is estimated that 10% of the 300 million tonnes of plastic produced every year ends up in the sea.

The ThoughtWorks research shows that consumers want the supermarkets to go further than the token charge on single use carrier bags, by reducing unnecessary packaging, and where it is necessary using only materials that can be recycled.

As the table below shows, this is the issue that consumers say is most likely to shape their food and shopping choices by 2030.

Which factors will become more important in food buying decisions by 2030?

Reducing packaging/ using more recyclable materials	62%
Price of food	57%
Reducing food waste	48%
Tackling obesity	41%
Nutritional value of food	38%
Where food comes from	36%
Greater focus on fresh food	36%
Supporting local farmers and producers	35%
Ethically sourced food	32%
Scarcity of certain food	32%
Convenience	31%
Carbon footprint/ energy used in production	24%

More than six out of 10 food shoppers (62%) said in the next 10 years their choices would be influenced by the need to reduce packaging. To put this in some context, fewer people said the price of food, or convenience would have as big an influence on their shopping habits in the future.

A closer look at the figures shows that women are even more concerned about pollution and packaging. In total, almost seven out of 10 women (67%) said this factor would shape how they buy food and drink in the future.

The survey found such concerns were high among shoppers of all ages, with older age groups more concerned about pollution and plastic waste. A total of 70% of those aged in the 55+ age group said this would influence future buying decisions.

REDUCING FOOD WASTE

Consumers don't want to just reduce packaging, they want to cut food waste too. Almost half of those surveyed (48%) said their shopping habits would be influenced by the need to reduce food waste.

As the earlier table shows, this is the third biggest issue for UK shoppers.

It is not hard to see why this issue features so strongly, when it is estimated that at present UK households throw away around 11% of the food they buy each week[1].

This isn't just a question of economics. After years of austerity, households may wonder whether they can afford to be as profligate in future. Reducing waste means changing shopping and cooking habits, buying fewer items in bulk, particularly when it comes to perishable and fresh goods. This may explain why 'meal-plans' and prepped ingredients are becoming more popular.

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[1] *YouGov survey, March 2015. UK households spend an average of £251.60 on food a week and throw away groceries worth an average of £28.36 a week.*

Retailers that help make this an easier process are likely to win business.

But there is also an environmental aspect to cutting food waste. Not all food waste ends up being recycled or used as compost; some will inevitably contribute to landfill.

Added to this is the problem of climate change, and the reality of more severe and less predictable weather patterns, which may make food scarcity more of a problem in future.

The ThoughtWorks survey shows one in three respondents (32%) thought food shortage issues will shape their future buying habits. With such widespread concerns it is not surprising that issues of managing and reducing food waste are becoming more important.

REDUCING THE FOOD SECTOR'S CARBON FOOTPRINT

Today, UK shoppers are used to a global array of goods in the supermarket aisles, be it lamb from New Zealand, Spanish strawberries or avocados from the US.

However, a quarter of all shoppers (24%) say they expect to be more mindful of the carbon footprint of their groceries in future. This includes the amount of energy used in producing, processing, refrigerating and transporting the goods they buy.

This could have wide-reaching effects on the food retail business. If shoppers become keen to reduce 'food miles' then this may signal more of a shift towards products that are locally sourced and produced.

This is certainly borne out in the ThoughtWorks research. When asked what supermarkets will look like in 2030, more than one in three respondents (35%) said they expected them to sell more locally-sourced food.

It isn't just food miles that consumers are looking to reduce. Many also expect to be reducing their own carbon footprints, including driving on a regular basis to an out-of-town supermarket.

Again the research suggests a significant difference in this behaviour moving forward. Although the majority of people still expect to buy food from a supermarket in future, the way they do this may radically change.

This could signal a significant reduction in footfall for more traditional supermarkets.

Where will you buy food in 2030?

Supermarket	66%
Order via computer	45%
Order via mobile	32%
Grow my own	25%
From a high street shop	25%
Direct from farmer/ producer	25%
From a virtual retailer	22%
Order via wearable tech	17%

The larger chains cannot rely on customer loyalty: with more people using computers or phones to buy their groceries, many may cut out the middle-man altogether and order direct from farmers or producers, smaller high street shops or virtual retailers.

These environmental reasons may drive some of these changes and the research highlighted that one in four people (25%) expect to reduce their food miles to zero by growing their own food.

While many people may not be able to be self-sufficient, any renewed interest in 'grow your own' and seasonally produced and locally sourced products requires supermarkets to adapt to reflect these priorities.

SUSTAINABLE SUPERMARKETS

This ThoughtWorks research shows that retailers, like consumers, are addressing many of these issues, with tackling food waste the number one priority.

Almost one in two retailers (48%) said reducing food waste would have an impact on their business in the next 10 years. This was deemed more important than managing costs (cited by 36% of retailers) and focusing on technological innovation (15%).

It is smaller retailers who are leading the charge when it comes to tackling food waste. This was cited as a priority by 53% of retailers with fewer than 50 staff.

Retailers are also addressing wider issues to do with climate change.

More than a third (36%) of respondents said that energy supply would be a major issue for the future of food retail, and using less energy in food production, and buying more local produce will become a bigger issue than it has been in the past.

Retailers are also gearing up for much greater scrutiny on the sourcing and origin. Four out of 10 (40%) decision makers in food retail businesses said they would be putting more emphasis on this issue in the years ahead.

The question for these businesses is: can they shift their business models in line with consumer thinking on these topics, or do they risk being left behind?

"Despite today's seemingly one-dimensional industry focus on cheap food, food retailers are aware of the sea change that is coming. There are signs today of a shift in consumer attitudes but in reality this is the calm before the storm. Extreme weather and its impact on global food supply and prices and the rising cost of energy will create a new food retail landscape in the next 10 years."

Ruth Harrison, Managing Director, ThoughtWorks UK

CHANGING FOOD HABITS: A HEALTHIER SOCIETY

UK shoppers are not only concerned with the health of the planet; they are concerned about the health and wellbeing of themselves, and the societies they live in.

HEALTHY EATING

This trend can most obviously be seen in changing diets. People want food that tastes good, but is also good for them.

Today we can see this trend in the growing number of people who are choosing vegetarian or 'flexitarian' diets - where people reduce the amount of meat in their diet - as well as the growing popularity of 'clean eating' regimes, which prioritise the nutritional value of certain foods.

It can also be seen in growing calls for more political action to tackle the obesity epidemic, through better labeling, and increased taxes on foods with higher sugar or fat content.

The ThoughtWorks survey shows that most people expect this trend to continue. Many of those surveyed predicted that the nutritional value of food will be a key consideration when buying food in future.

A total of 41% of respondents said tackling obesity would influence their food choices by 2030. Almost as many (38%) said the nutritional value of food will be a key factor in future buying decisions.

A further 30% said they predicted their buying habits would be shaped by a greater interest in food as an intrinsic part of health and wellbeing.

Key factors that will influence future food buying choices

Tackling obesity	41%
Nutritional value of food	38%
Health and well-being consideration	30%

Many retailers and food producers are starting to reflect demand from more health-conscious consumers. This is being supported by developments in the AgTech industry, with a lot of interest in companies like Impossible - who make plant-based meat substitutes.

Of course, there is a significant crossover between the wellbeing of an individual and that of the planet. Many people choose to eat less meat for health reasons, others because a switch from the energy-intensive meat industry to a more plant-based diet can help reduce overall greenhouse gases and is a more sustainable use of land.

A MORE ETHICAL APPROACH

Consumers are on the verge of asking a lot more questions about where their food comes from and how it was produced. This trend clearly feeds into the environmental and health-conscious concerns that are outlined above, but also extends beyond them.

The ThoughtWorks research indicates that in future, consumers will want more information about where their food is grown, fished, or reared. A total of 36% of respondents say this will shape their future shopping habits.

This transparency needs to extend to all parts of the supply chain. There is likely to be an increased focus on a foodstuff's provenance, with 32% of respondents saying they are likely to seek assurance that food has been ethically sourced and from a sustainable supply chain.

Those operating in the food retail industry will have to rise to this challenge, as a demand for more transparent labelling, not only of the food contents but its full production history - from farm to shelf - will make bad practice or unacceptable short-cuts to save money harder to hide.

Consumers have learned the lessons of recent events, be it the horse meat scandal, or tragedies that have arisen from the failure to label ingredients for allergy sufferers.

LEANER FITTER SUPERMARKETS?

Food retailers acknowledge that major change is on the way, in terms of consumer attitudes to health and well-being. This is their second priority, after reducing food waste.

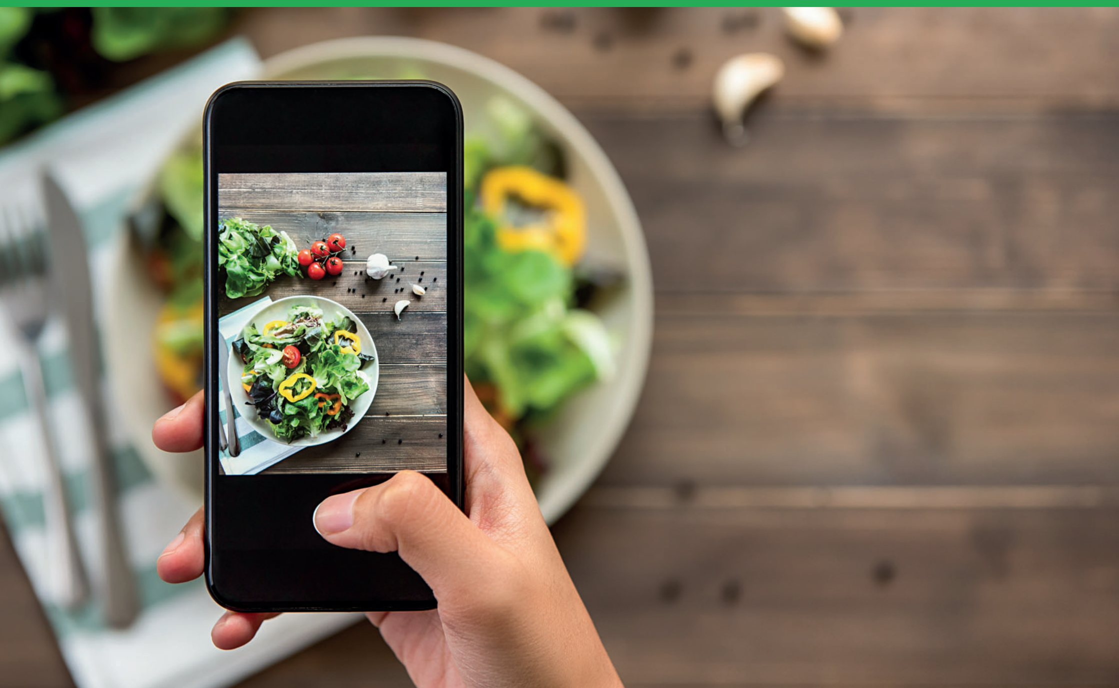
For many in the food retail market, this is an opportunity as much as a challenge. For example, the research found that business leaders in this sector see the advent of new superfoods as a game changer, as will be the consumer's changing attitudes to meat. Products that use many of these newer ingredients may be an effective way to attract customers and stand out from the competition.

It is not surprising that when asked which factors will have the most significant impact on the food and drink industry in the next 10 years, three out of the top four answers given by senior decision makers working in this sector related to healthy eating choices and diet.

Which factors will have a significant impact on the food and drink sector in the next 10 years?

Greater focus on reducing food waste	48%
Changes to diet *(moving away from meat, new superfoods etc)*	44%
Greater focus on ethical foods	40%
Greater focus on providing nutritional information/ promoting healthy lifestyle	39%

MAKING THE MOST OF SMART TECHNOLOGY



New technology is helping facilitate change within the food retail sector. This trend looks set to accelerate in the decade ahead, as supermarkets embrace automation, smart tech and artificial intelligence to revolutionise the way they source, serve and deliver groceries.

The ThoughtWorks survey shows that almost seven out of 10 shoppers (69%) expect technology to play a bigger role in future. These changes could mean fewer bricks and mortar stores by 2030, with the ones that remain looking very different in the services they provide.

HOW SHOPPERS BUY FOOD

Perhaps not surprisingly the report found more people expect to buy their groceries remotely and have them delivered, over the next 10 years. This builds on trends already established in the supermarket sector.

As the figures below show, this new 'smart' technology gives consumers new ways to do their weekly shop - be it by computer, phone or wearable tech.

How will you buy your food in 2030?

Expect to be buying their food via a computer in 2030	45%
Expect to be buying their food via a mobile phone in 2030	32%
Expect to be buying their food via wearable technology in 2030	17%
Expect AI to order food when it is needed	12%

One of the most interesting findings is that 12% of shoppers expect that they will never step into a supermarket at all. Instead they envisage that their AI-enabled devices - from laptops, fridges, or even recycling bins - will automatically reorder their food when they need it.

This figure is significantly higher among younger consumers.More than one in five millennials (22%) are predicting that they won't need to routinely shop for food by 2030 - with their technology re-ordering it, and the supermarkets delivering it.

It is clear that some retailers recognise this trend, and a significant number are investing to ensure they have the logistics and technology they need in place. This ThoughtWorks survey, though, suggests that not all food and drink retailers are addressing this issue.

A quarter of the larger retailers surveyed (25%) said that in the next 10 years there would be a greater focus on automating the delivery of food to customers. Among smaller retailers this figure was 22%.

Retailers also said technology would change the way that people ordered food from home. Again 25% of larger retailers, but just 19% of smaller ones cited this.

However, there was clearly more of a focus on environmental issues or healthier eating as being key factors that will change future food buying patterns. In most cases, around three quarters of the retail companies surveyed were not focusing on this particular trend.

THE CHANGING SHAPE OF SUPERMARKET STORES

There may be fewer supermarket stores in the future, if - as expected - online deliveries soar. But those that remain will look radically different, and may provide a range of different services.

By 2030 the supermarket trolley may be a thing of the past, and it may also be true of the traditional checkout. Many envisage supermarkets like vast Amazon warehouses, with robots to source and deliver items.

Automation looks set to increase convenience for shoppers, while helping drive down costs for retailers.

Almost half of all shoppers (49%) expect that by 2030 ‘drive-through’ supermarkets will be part of the retail landscape.

This trend was even more pronounced among younger consumers, with 65% expecting to drive up to a supermarket to pick up their groceries.

This shift reflects part of a wider pattern, where shoppers expect to see far more automation in stores.A third of consumers (32%) do not expect there to be any checkouts, while more than one in four (26%) expect there will be robot assistants to help people in store.

This automation is likely to replace some existing jobs, be they shelf-stackers, checkout staff or store managers. However, 14% of those surveyed expect this process to go much further - and that there will be no human staff in stores by 2030.

Again it is those in younger age groups who anticipate a more rapid pace of change when it comes to automation. Twice as many in this age group (a total of 28%) thought robots would replace supermarket staff by 2030. However, slightly less (32%) in this age group expected checkouts to completely disappear.

Supermarkets are also expected to diversify in future. As the figures below show, almost a third (29%) predict that supermarkets will be bigger, but will sell less food.

One clear function they may serve in future is as a hub to charge electric cars. Around 33% of shoppers expect supermarkets to offer this by 2030, effectively replacing the petrol stations offered by many out of town superstores.

What will supermarkets look like in 2030?

Drive-through supermarkets	49%
Main charging hub for electric cars	33%
No checkouts of any kind	32%
They will be bigger, but sell less food	29%
Robot assistants in-store	26%
No human staff in store	14%

ARE RETAILERS PRIORITISING TECH-INNOVATION?

Evidence suggests that retailers are starting to prepare for such changes, but many may not be doing enough.

Only one in four retailers surveyed (25%) said they needed to invest in technological innovation today to be more competitive over the next 10 years.

To put this in some context, 40% of these retailers said they needed to focus on cutting costs, and 30% were focusing on extending their customer base by appealing to different age groups.

As the figures below show, far more retailers thought that changing consumer shopping habits, driven by environmental or health concerns, would have more of an impact on their business in the next 10 years.

Which, if any, will have a significant impact on your business by 2030?

Greater focus on reducing food waste	48%
Changes to diets	44%
Greater focus on ethical foods	40%
Greater focus on nutrition/ healthy eating	39%
Greater focus on energy saving	36%
Greater focus on supply costs	36%
Greater focus on automating delivery	24%
Technology changing the way people order food	23%
Greater focus on combing online/ physical shopping experience	23%

Technology is important, but not the over-riding concern for food retailers when they are looking towards the future. However, this may prove to be short-sighted for the supermarket sector.

As part of this research ThoughtWorks asked business leaders in the food retail sector which factors will be most influential in creating tomorrow's market leaders. The list of answers they provided is dominated by tech-based solutions, designed to either improve the customer's experience or help control and drive down costs.

This includes factors such as mobile wallets to facilitate self-pay checkouts, as well as improved smart phone technology - enabling people to book their weekly grocery shop while on the move.

Also mentioned were investments in 'virtual assistants' to smooth the online buying process, and intelligent barcodes, using QR and RFID technology. The former allows shoppers to get more information on any product - potentially helping them track its supply chain, while the latter helps retailers keep track of items in store. Voice recognition technology, and connected home devices were also key issues mentioned.

The figures below show the factors most commonly cited:

Mobile wallets and automatic checkout	35%
Smartphones	31%
Social media	30%
New delivery models *(drones/ driverless vehicles)*	29%
Personalisation of shopping experience	23%
Virtual assistants	19%
QR codes	18%
RFID systems	15%
Voice Recognition	14%
Connected Home Devices	14%
Data science	14%
Internet of Things *(smart connected devices)*	13%

If the retailers surveyed want to be the leaders of tomorrow, it is clear their business models need to embrace this new technology as well as catering to changing consumer needs.

> *"Technology will enable much of this change both in terms of giving consumers greater access to information making possible big changes to food supply chain and in revolutionising local production methods. Technology will also change the way people buy and enjoy their food together - and it will redefine the look and the purpose of tomorrow's supermarket."*
>
> Kevin Flynn, Director of Retail Strategy, ThoughtWorks UK

CONCLUSION


amazon go
NO-LINE
BREAKFAST
LUNCH
SNACKS
GROCERY
ESSENTIALS
DINNER

Today's supermarket model is under pressure. The increased cost of premises, heightened regulation, the uncertainty of Brexit and instability of the supply chain, and rising costs of some foodstuffs are all squeezing margins.

The immediate reaction has to date been one of consolidation to try to deliver economies of scale.

But the future may be quite different, with new business models that prioritise flexibility and speed to market over scale.

The prospect of food scarcity demands that retailers adopt more flexible supply chains. At the same time, the consumer value proposition looks set to become more complex and more multifaceted - with environmental issues and health concerns becoming as important as price and convenience.

To gain market share in this new landscape, retailers will have to invest in innovation, logistics, and interconnected digital platforms to bring any ideas to market faster and with less expense.

Today's supermarkets are well placed to be part of this equation. But this research makes clear that they will need to dramatically change their business model and associated technology strategies to keep up with the rapidly changing context if they are to enjoy anything like the dominance they have enjoyed over the past 20 years.

ThoughtWorks is a global software consultancy that helps leading organisations capture market opportunities with technology.