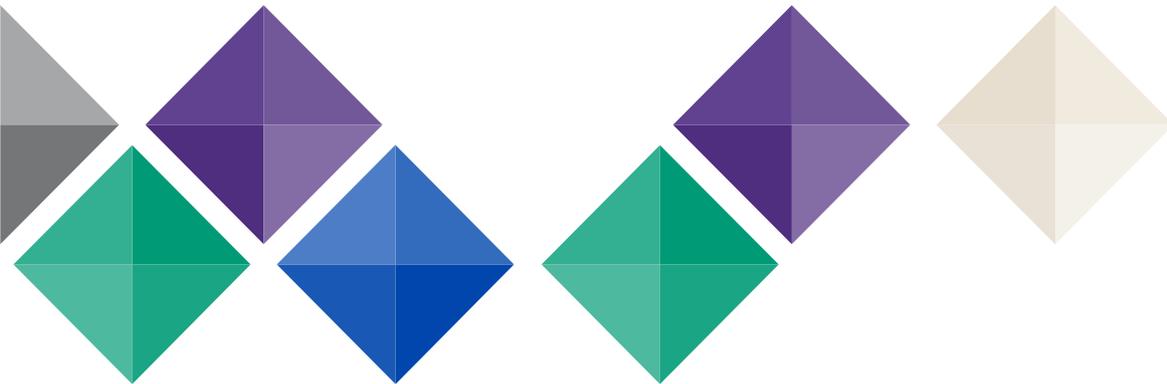


FDF Economic contribution and growth opportunities

June 2017



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Foreword



Foreword

Gavin Darby, Chief Executive of Premier Foods and Food and Drink Federation President

The food and drink industry is the UK's largest manufacturing sector, contributing £28.2 billion to the economy annually and employing 400,000 people. We are a key part of the nation's £110 billion 'farm to fork' food chain.

Our industry is critical to national security and the prosperity of our wider economy. We have a well-earned global reputation for provenance, quality and innovation.

The challenges we face in the next few years are unparalleled. The market environment in which we operate remains uncertain. We are a resilient and adaptable industry - we know there are huge opportunities available to our sector so we can sell more great British food. Therefore, it is key that we identify how best to harness our own growth potential and improve productivity.

With this in mind, FDF commissioned Grant Thornton to undertake this independent research project identifying both the opportunities available to manufacturers and the barriers to growth. This was done through the collation of the latest quantitative data and by speaking at length with FDF members to add a qualitative perspective.

This research focuses on three core areas: innovation, trade and skills. All are framed against the backdrop of the UK leaving the European Union. The findings highlight the diversity of our industry, and in particular, how risks and opportunities can vary from business to business and across regions.

The findings also highlight the work we need to do to increase growth and how we can achieve this. The report makes a compelling case for Government to invest in the food and drink industry, identifying clear actions and areas of support. Our sector has long been a manufacturing success story but it is clear there is still much untapped growth potential.

In partnership with Government, the food and drink industry will seize upon these opportunities, maximising growth and boosting productivity. We believe the food and drink industry can be an engine for economic growth in the UK, while continuing to provide safe, innovative and nutritious food and drink to the nation.

Approach



Methodology

Primary and secondary research approach

This report has been prepared based on extensive primary research supported by secondary research to build a robust picture of the FDM industry in the UK. The methodology comprised three strands: an **Online Survey**, **Semi-structured interviews with industry leaders** and **Desk Based Research and Data Analysis**.

- Following consultations with FDF, Grant Thornton developed a questionnaire that was sent out to members of the UK FDM industry via an online survey. The questions asked were directly linked to skills, innovation and trade
- The survey was addressed primarily to executives and other senior members of FDM (SME's and Corporates) in the UK. The survey was sent out to
 - FDF members;
 - The Regional Food Group Alliance members; and
 - Grant Thornton's FDM contacts
- The online survey ran from March to May 2017
- Parallel to the survey, Grant Thornton conducted 17 semi-structured telephone interviews with executives and senior staff of UK FDM businesses. The interviews were designed to gain in-depth views around some of the topics addressed by the survey questionnaire and included some additional questions
- The study was also supported by detailed desktop research and analysis drawing on a broad range of national statistics
- There were some limitations in relation to the desktop research. Wherever food and soft drinks specific data was not available, it was substituted for food, beverage and tobacco data. However, wherever this is the case, it has been clearly indicated
- The key findings from the analysis were presented, discussed and tested with various FDM businesses and senior members of the FDF team

Survey Population

Survey population

The survey and interview sample represents 11% of the FDM sector (including alcohol manufacturers) by turnover value.

In terms of subsector representation in the survey, the largest subsector by response was the manufacture of Other food products (42.7%) within which the largest subsector was tea and coffee, followed by sugars and syrups, chocolates and herbs seasoning and spices.

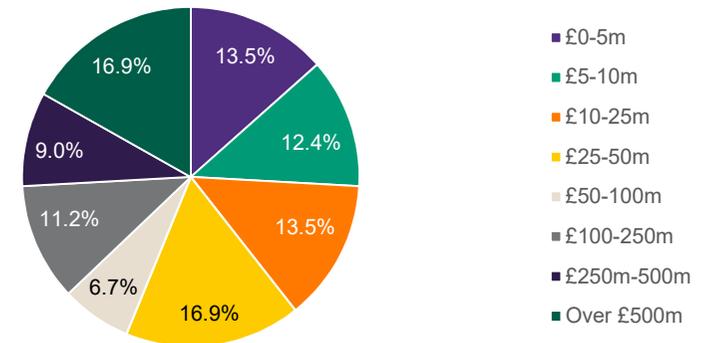
Outside of the Other food products subsector the largest number of responses came from the Bakery subsector (11.2%), followed by Grain and starch products, Fruit and vegetables and Meat and meat products, all of which had 7.9% of responses.

With regards to company size, the survey captures a broad mix of companies within FDM (see graphs opposite).

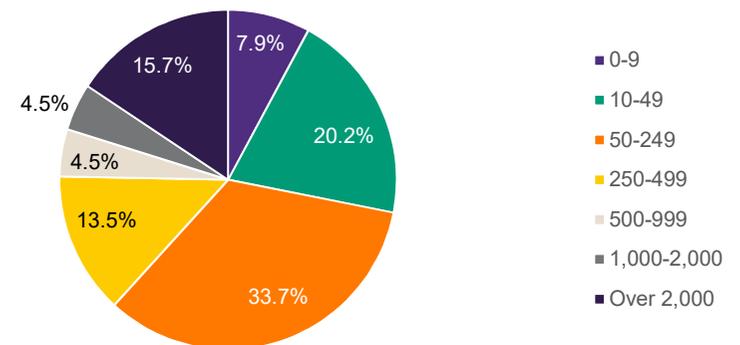
Just over half of the companies surveyed (56.3%) can be classed as SMEs, with an annual turnover of up to £50 million.

Survey respondents by size

Turnover



Number of employees



Notes: Based on 89 respondents
Source: Grant Thornton survey

Innovation



Chapter introduction

As the Food and Drink Manufacturing sector is the largest manufacturing sector in the UK, innovation, whether it be in products or process is a significant growth opportunity for the FDM sector and one that will also have an equally positive impact on improving productivity.

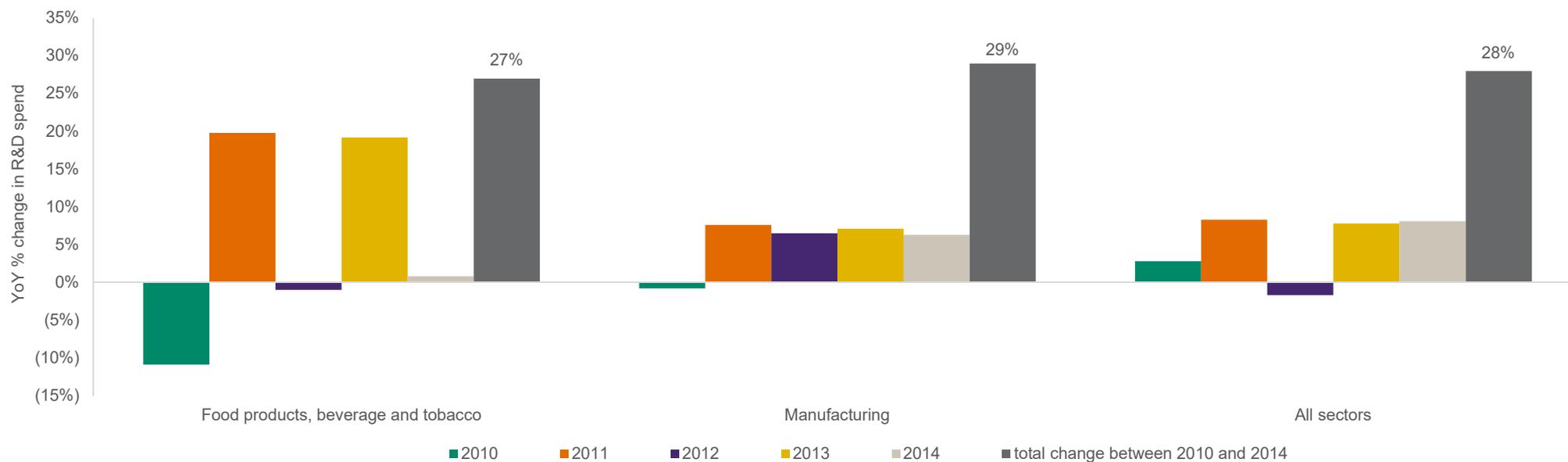
Through the Grant Thornton 'Economic contribution and growth opportunities' report it is apparent that the sector is embracing innovation in a range of different ways and doing so in partnership with different organisations. The evidence not only shows the positive contribution the sector is making to the economy but it highlights some important lessons around how to better support and encourage innovation.

There has been growth in the level of expenditure on R&D within the sector, this is in line with other industries

Research & Development expenditure trends over time

In 2016 the OECD classified food products, beverages and tobacco as “medium-low R&D intensity” industry (at 4th place on a scale of 1-5 in terms of intensity). The medium-low category ranks at 4th place on a scale of 1-5 in terms of intensity). This compares to subsectors such as vehicle manufacturing which is classed as a “medium- high R&D intensity” industry and pharmaceuticals, computer and electronic manufacturing which are classed as High R&D intensity industries.

Looking more specifically at overall R&D expenditure in the sector the graph below shows that it has grown by 27% between 2010 and 2014. This is comparable to expenditure growth in both all manufacturing sectors (29% growth) and indeed all sectors in the economy (28%). Although it is interesting to note how expenditure growth has fluctuated significantly year on year within the sector. The relatively stable levels shown by both manufacturing and all sectors are most likely a reflection of the ‘smoothing’ that results from combining multiple industries.



Source: OECD R&D statistics

When compared to other countries there is however more variation

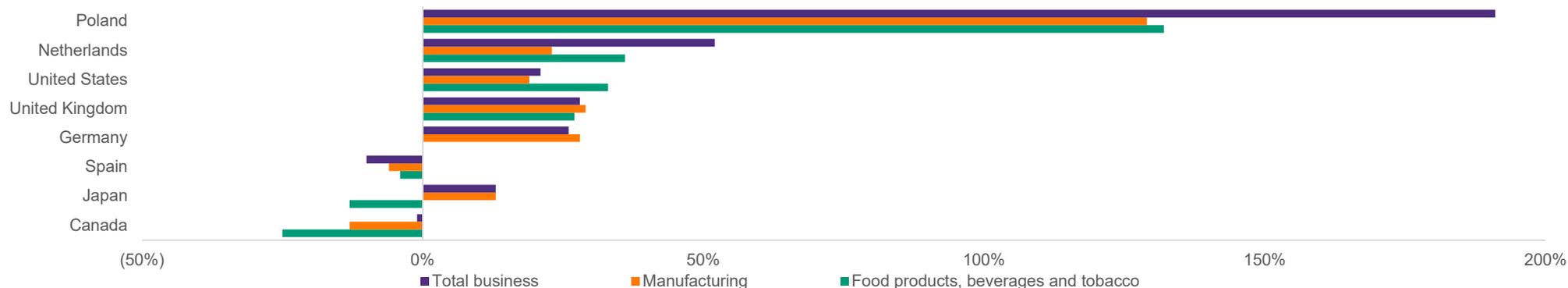
Research & Development expenditure trends over time

When comparing the change in R&D expenditure with a range of international comparators a number of interesting findings emerge:

- Most notably is Poland's significant investment in R&D across all businesses with significant growth in expenditure in the food products, beverages and tobacco sector – way beyond any of the comparator areas analysed. This increase saw investment rise by 132% in food products, beverages and tobacco from PLN 176.5 million (GBP £36.5 million) in 2009 to 409.7 million (GBP 85 million) in 2014. In the UK investment stood at GBP £260 million in 2009, increasing by 27% to GBP £330 million in 2014
- The Netherlands has seen the next largest investment with food products, beverages and tobacco seeing higher levels of expenditure than the country's manufacturing sector as a whole
- The USA has also seen a significant increase in R&D expenditure on food products, beverages and tobacco, and of particular note is how this expenditure growth is tracking above the average for the economy as a whole and the wider manufacturing sector
- Spain, Japan and Canada have all seen negative growth in R&D expenditure on food products, beverages and tobacco, and in the case of Japan this has been in contrast to positive growth in the wider economy and the manufacturing sector

The biggest implication of these findings is in relation to the ongoing competitiveness of the UK, particular with the emergence of new competitors such as Poland and the continuing higher levels of R&D expenditure in the sector in the Netherlands and the United States.

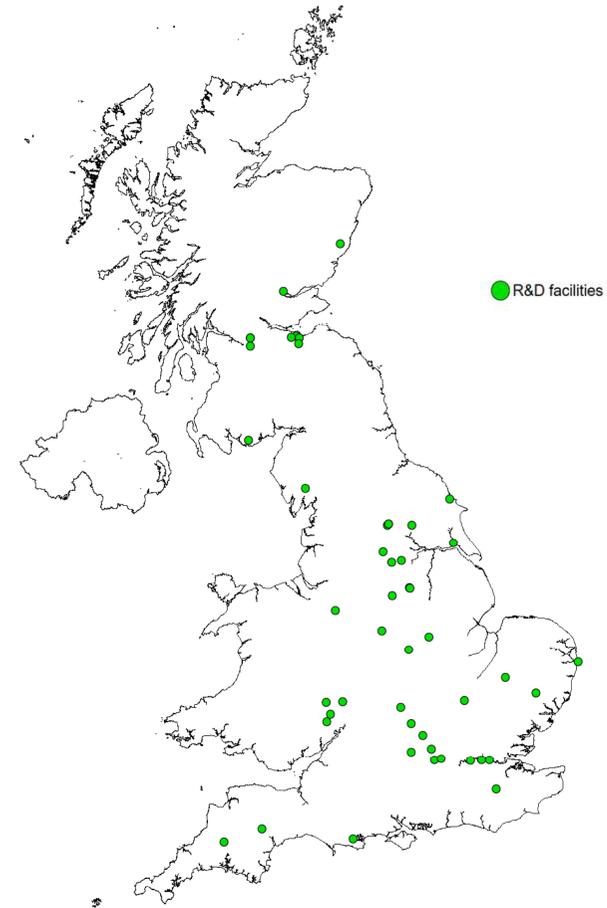
Change in R&D expenditure between 2009 and 2014 (local currency)



Note: France and Ireland have been excluded from the table as data was not available in 2015.
Source: OECD R&D statistics

As with other parts of the industry, R&D occurs across Great Britain

Of the 89 respondents to the Grant Thornton Survey, 69.7% had a UK R&D facility. The map to the right shows the location of these facilities and in doing so further reinforces findings from earlier in the study around the geographical spread across Great Britain.



Note. 89 survey responses
Source: Grant Thornton survey and interviews

It is a sector that is continually innovating

The Grant Thornton Survey asked respondents what types of innovation their company engaged in with the three most common being: new product development/reformulation (89.2%), manufacturing process automation (73%) and efficient resource use (67.6%). The fact that nine in ten of the businesses surveyed are involved in new product development/reformulation underlines the critical role that this plays in the sector. It was a fact that was backed up in the interviews with industry leaders talking repeatedly about the importance of new product development, with one noting that it was “crucial for the success of the business”. This dynamic nature of the sector underlines its importance to the economy as it is continually investing and evolving and is future evidence that the sector is insulating itself against changing consumer trends or economic cycles.

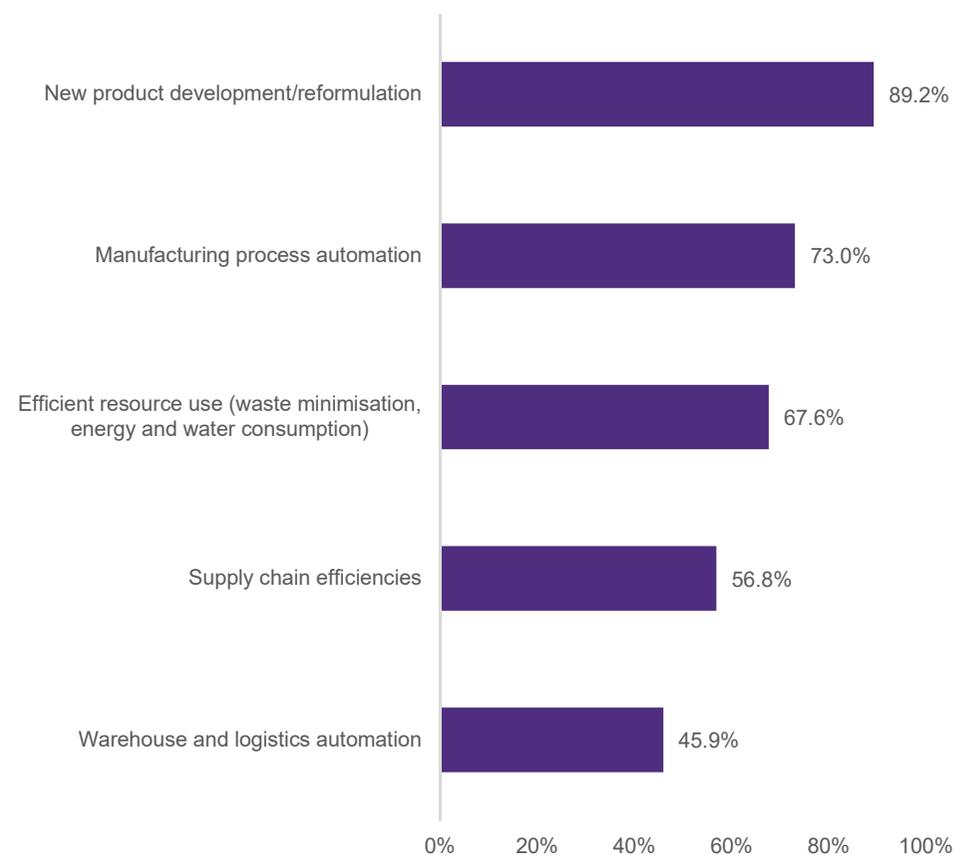
Alongside the investment in new products the industry leaders also backed up the findings of the survey. This included references to investment and innovation in automation, particularly the role that robotics has played and will continue to play in transforming the sector. With one industry leader noting: “robotics, that is where the new investment is going.”

To support the investment in improving the supply chain and associated logistics, industry leaders noted the work they had done in aligning, farmers, manufacturers and retailers in order to get scale and drive efficiency.

New product development originates with a consumer need or response to consumer choices and preferences, therefore companies are constantly thinking about how consumer choice will impact on their businesses, with one industry leader explicitly identifying the “trends towards wellness, convenience and wastage”. This translated for one company in vacuum packing innovation to enable greater ease of convenience for the consumer, while for others innovation was focused on radically changing the product to reduce levels of sugar, with one industry leader noting that 70% of their products are now in a reduced sugar format.

This is an important findings as it highlights the adaptability of the sector both in relation to wanting to provide the most suitable products for the consumer, but also in the role the sector can play in helping Government to deal with particular policy issues such as obesity.

What type of innovation does your company engage in?

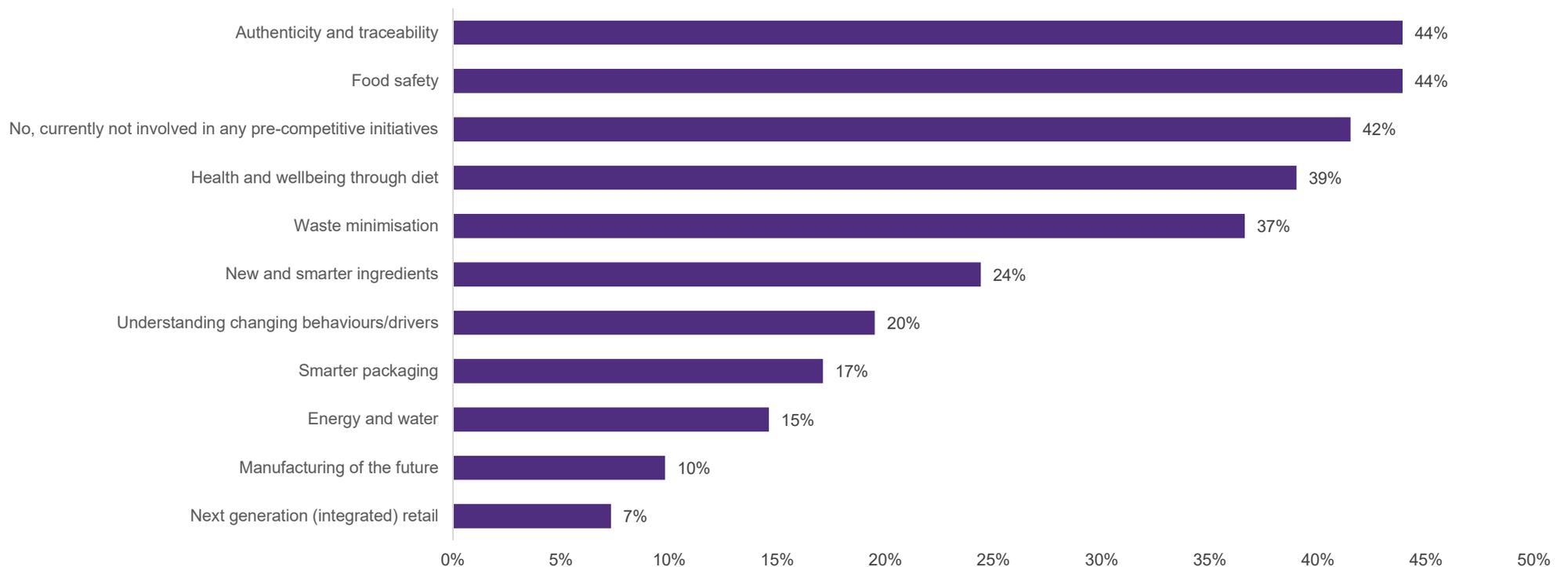


Note. 37 survey responses
Source: Grant Thornton survey and interviews

There is also engagement in a wide range of pre-competitive initiatives

Through the Grant Thornton survey it was apparent that 59% of respondents were involved in pre-competitive initiatives. The most common of which were in relation to food safety (43.9%), authenticity and traceability (43.9%) and health and wellbeing through diet (39%). These findings further support the point that the important role that the sector can play in addressing a number of key health policy priorities. As such it is vital that Government and industry continue to explore how best they can work with each other for mutual benefit.

Is your company involved in any pre-competitive initiatives?



Note: 41 survey responses
 Source: Grant Thornton survey and interviews

There is however a need to look beyond tax-credits if Government is to best support innovation in the industry

The Grant Thornton Survey found that just over half (54%) of respondents had accessed R&D tax credits in order to support innovation. The view from industry leaders was that while these tax credits were a positive, they were not the whole answer in terms of how industry can be best supported to innovate. The perception was that Government needs to better understand the range of factors that effect business investment decisions so that suitable support can be designed and implemented. This was felt to be particularly important because the perception amongst some industry leaders was that other EU nations are better at supporting innovation in the sector – although limited examples were given – with clear national strategies to guide activity.

Note: 41 survey responses
Source: Grant Thornton survey and interviews



There is a willingness to work with others on innovation

In seeking to innovate, the survey also found that nearly half (46%) of the respondents have an on-going collaboration with higher education or research initiatives. This is encouraging although there remain some barriers to knowledge transfer between higher education and research institutes and industry with the following challenges cited: academic language and misalignment of cultures; a lack of capacity in the business to absorb and implement the recommendations; intellectual property rights; a lack of knowledge about what research is being undertaken; and a preference amongst research bodies to only work with large organisations. Given the importance of innovation to the sector and the general willingness to work together there is an opportunity to support the industry in addressing these different barriers.

Through the interviews with the industry leaders it was also clear that collaboration does not just take place with higher education or research initiatives. A range of different examples were cited of industry working with different organisations throughout the supply chain. This includes collaboration with those responsible for packaging; other industry bodies (eg Age UK); closely working across the agri-supply chain to help better manage yields; technical companies looking at specific technical processes that don't currently exist in the market; and other FDM companies that can bring new flavours to existing products.

How best to support and facilitate this collaboration between the supply chain is another area that may warrant further investigation.

Note: 41 survey responses
Source: Grant Thornton survey and interviews



Understanding consumer behaviour is vital when it comes to innovation

Consumers have rarely been more influential. Where once companies and Governments set the agenda on consumption, across the consumer sector the rise of smartphones and social media have meant that consumers have reclaimed a huge amount of power. These days products can become overnight successes at the press of a “Like” button. This trend is perpetuated by an increasing shift towards consumers demonstrating their lifestyle choices, whether that’s a once-in-a-lifetime holiday or a meal the hottest new restaurant, and what those choices say about them. This prioritisation of having less, but doing more is an interesting new development in the age of fast food and fast fashion and demonstrates a desire on behalf of consumers to not only regain their leisure time and reassess their lifestyle priorities, but also to allow them to create a sense of individuality in an increasingly globalised world.

For the FDM sector, this behaviour has several implications. The first is that they must keep track of what’s hot, and what’s not. Recent years have seen massive surges in the popularity of certain food types, such as kale and avocado, which has led to some innovations such as one leading supermarket now stocking peeled, frozen avocado halves.

Consumer perception and what buying a particular brand says about them is a growing issue. For example, sustainability is a big issue across the consumer sector with many fashion retailers now highlighting products which have been made using sustainable fabrics. For the food and beverage sector there has long been an association with fair trade but recent legislation, such as the Modern Slavery Act, as well as growing consumer awareness of food miles, environmental sustainability and waste has forced the issue even more.

Another implication is the growing market for out of home dining which places pressure on the sector, not only from the perspective of trying to maintain its share of wallet for customer spending, but also in ensuring that their products can compete with the out of home dining experience.

When consumers do eat at home, convenience and changing dietary habits have changed. The palate of the British consumer has changed over the past century, with global influences playing an increasingly fundamental role in modern British cuisine. This, coupled with the need for the consumer to be able to cook their food quickly has forced innovation onto FDMs. One senior industry leader highlighted how the changing of consumer tastes was impacting the sector: *“People have moved away from meat and two veg, its more a question of ingredients now... Sunday roasts used to be traditional but that’s not a given any more... how do we fit the modern lifestyle? [We] look at new cooking methods.”*

Another said that; *“It [innovation] starts with the customer and the product as that drives everything, but as soon as you start innovation with customers that drives a need for innovation in the supply chain.”*

This investment in the supply chain can be incredibly costly for FDMs, as one senior influencer noted: *“We will invest heavily in product innovation and customer, if that means we enter more complex supply chains, for example, cafes and restaurants with smaller pack runs, if we have to have more sophisticated warehousing and distribution we will. It is needed to enter more valuable markets.”*

For the FDM sector, understanding consumer behaviour in a fast-moving consumer world, is more vital than ever before.

Conclusions and recommendations

The FDM industry possess a global reputation for being at the forefront of product innovation, with its R&D capability being spread across the UK. When surveyed about innovation type, 90% of respondents said they were engaged in new product development, with more than 70% engaged in manufacturing process automation and almost 70% engaged in efficient resources use, including the reduction of water and energy use. Almost half of the survey respondents are currently engaged in an on-going collaboration with higher education or research initiatives. There is close work being undertaken with businesses in the agri-supply chain but further support on how to facilitate cross-supply chain working remains a priority.

With consumer demand driving product innovation, the industry is dedicated to providing consumers with a wide range of quality, safe and nutritious products. The industry is committed to reducing sugar levels and working with Government on key issues, such as obesity. With many manufacturers engaged in long term calorie reduction programs, the sector is looking to work with Government on a holistic calorie reduction programme alongside manufacturers. Any further taxes on food will cause uncertainty for the sector.

The ask of government for Food and Drink manufacturers is to help facilitate further innovation through the support of fundamental and applied research which could encourage understanding of how healthier foods can become the foods of choice for consumers. They are also identifying opportunities for pre-competitive innovation, particularly around automation. In order to build best practice, business within the sector are also looking to innovation in other industries.





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