Identifying potential barriers to food and drink manufacturing and processing businesses in Wales obtaining food-safety scheme accreditation

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Introduction

Food safety schemes are essential to the food and drink industry, they provide the framework for compliance to assist food and drink manufacturing and processing businesses in the production of safe and legal food, and facilitate entry to the market place.

Over recent years, UK manufacturers have moved away from generic ISO certified food safety schemes towards bespoke 3rd party accredited schemes, specifically developed to closely match the requirements of the industry and rationalise retailer-specific schemes[1]. Compliance with a privately operated scheme is often a prerequisite to supply[2].

The Welsh Government has identified that to enable growth of the food and drink sector in Wales there is a need to support manufacturers to obtain and maintain food safety scheme accreditation.

Research has determined that accreditation to schemes such as British Retail Consortium (BRC) or Safe and Local Supplier Approval (SALSA) are lacking among Welsh micro and Small to Medium Enterprise (SME) manufacturers[3].

Consequently, there is a need to obtain an in-depth understanding of the potential barriers that exist to manufacturers in Wales from selecting, implementing, obtaining and maintaining food safety scheme accreditation.

Purpose

The aim of the study was to identify the potential barriers that exists for Micro and SME food and drink manufacturing businesses in Wales to select, implement, obtain and maintain food safety scheme accreditation

Methods

A series of focus groups were conducted with:
- Stakeholders (Government, Non-Governmental organisations (NGOs), procurement services, food inspectors, environmental health officers and scheme owners) (*n*=19).
- Food safety schemes auditors/mentors (*n*=9).
- Welsh micro/SME manufacturers with FSSC/TA (*n*=20).
- Welsh micro/SME manufacturers without FSSC/TA (*n*=17).

In-depth telephone interviews were conducted with representatives of major UK retailers (*n*=3).

Audio files from focus groups and interviews were transcribed and analysed with NVivo using a content analysis approach.

Acknowledgements

References

1. Grigg, N.P. & McAlinden, C. (2001). A New Role for ISO 9000 in the Food Industry?Indicative Data from the UK and Mainland Europe. British Food Journal, 103(9), 644-656.
2. Manning, L. & Baines, R.N. (2004). Effective Management of Food Safety and Quality. British Food Journal, 106(8), 598-606.
3. Evans, E.W., *et al.,* (2016). Identification of Factors Associated with Technical Accreditation and Food-Safety Compliance FDMPBs in Wales, UK. Poster presented at: IAFP, European Symposium on Food Safety. Athens, Greece. 11th – 13th May 2016

Results

Identified barriers to manufacturers obtaining and maintaining food safety scheme accreditation

Focus group and interview participants perceived differences between the barriers faced by manufacturers to achieve food safety scheme accreditation and the barriers faced to maintain accreditation as indicated in Figure 1.

> "There are barriers to achieving accreditation and there are barriers to maintaining. Achieving you've got your initial set up costs your resources, human and financial. For maintaining, I can put the procedures in and train them and do it. It's separate things."

Figure 1 Quote from participant 44 – Owner of a business without accreditation.

Figure 2, illustrates the words most frequently utilised by focus group and interview participants when discussing perceived barriers to accreditation. Content analysis of transcripts determined that all perceived barriers related to three key areas:
a) time, cost and resources
b) knowledge and skills
c) communication and access to information

Figure 2 Word cloud indicating word frequency when discussing barriers to obtaining and maintaining food safety scheme accreditation

a) Time, cost and resources as barriers

All focus groups identified 'time' as a potential barrier. The design, implementation, verification and review of food safety management systems were described as 'time consuming'. Activities to ensure food safety management systems such as daily checks and documentation were reported to slow down production.

'Money' was also identified as a significant barrier (see Figure 3). It was indicated that significant investment is required in people, processes, products, equipment and the manufacturing environment to achieve and maintain accreditation.

> "I can put it down to two things, time and money. Running the business takes up a lot of my time, the time that's left goes towards my accreditation, I can't afford to get a technical person."
> (Participant 43, manufacturer without food safety scheme accreditation).
>
> "It's the money and the resource, for smaller companies the cost of having the audit, but for big companies it's the people to input the standard."
> (Participant 66, Retail representative).
>
> "To achieve certain accreditations, there are certain requirements. The BRC standard for a high-risk factory, if you do not have positive air flow or a metal detector, both of which are very expensive, you cannot get your accreditation."
> (Participant 01, food safety scheme auditor).

Figure 3 Participant quotes relating to time, cost and resource barriers

b) Knowledge and skills as barriers

Numerous manufacturers indicated problems in recruiting skilled and experienced staff. Potential candidates often lack the knowledge and skills required to operate effectively in the sector, leading to increased costs in training/education. A shortage of technical graduates and how the image of the food industry should be more desirable for school leavers was a major discussion point (see Figure 4).

> "We don't have a technical manager. So to get BRC, we would need a technical manager, unless we could find an alternative way of resourcing that sort of technical help, the overhead of forty thousand pound for a small firm is a very big cost."
> (Participant 37, operations manager at a manufacturer without food safety scheme accreditation).
>
> "We've not got enough people coming through the right sort of courses to take the right sort of jobs to enable them to actually put these schemes in place."
> (Participant 05, food safety scheme auditor).
>
> "The food industry on the whole has got a shortage of qualified technical staff, there is a general shortage."
> (Participant 02, food safety scheme auditor/mentor).

Figure 4 Participant quotes relating to knowledge and skill barriers

c) Communication and access to information as barriers

Participants believed there to be too many schemes available and manufacturers find it difficult to select and work towards suitable schemes due to the lack of information and visibility from scheme owners.

Customers often require manufacturers to meet multiple schemes, which complicate obligations to compliance as scheme standards can vary and require different documentation to evidence the same action or activity.
Consequently, to enable food safety management systems to satisfy multiple scheme requirements consolidation of schemes was desirable (see Figure 5). Some believed that in smaller production sites, the relevance of some standards had not been considered by scheme owners.

> "There's so many different accreditations, that you don't know them all."
> (Participant 64, Food inspector).
>
> "So maybe one of the barriers is knowing which standard is appropriate for your business."
> (Participant 29, owner of a manufacturer with food safety scheme accreditation).
>
> "The fact that there are multiple standards out there, and always there's one that isn't recognised and different customers want different standards."
> (Participant 59, NGO stakeholder).

Figure 5 Participant quotes relating to communication and access to information barriers

Significance of study

- Completion of the research has identified the potential barriers that exist for manufacturers in Wales to obtain and/or maintain food safety accreditation relate to: a) the time, cost and resources required to develop FSMS, b) the limited availability of skilled staff that are knowledgeable and technically experienced, and, c) the lack of visibility and information available from FSS owners.
- Consequently, there is a need for further research to utilise the findings of this research to explore and inform the development of support mechanisms to increase food safety scheme uptake and accelerate food sector growth in line with Welsh Government aspirations.