A support package to support small food manufacturing businesses in Wales in overcoming barriers to obtain food safety certification: A pilot study







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Introduction

Food safety schemes provide the framework for compliance and assist food and drink manufacturing businesses in the production of safe and legal food. 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 retailer-specific schemes¹. Compliance with a privately operated scheme is often a prerequisite

The Welsh Government aims to increase the Welsh food and drink sector and has identified, that to enable growth of the sector, there is a need to support food manufacturers to obtain food safety certification³.

Many food manufacturers in Wales don't have food safety certification and the barriers to obtaining certification relate to⁴:

- knowledge and skills
- time, cost and resources
- access to information

Consequently, the Welsh Government wants to determine the most appropriate way to support food manufacturers in Wales to overcome barriers and obtain food safety certification. In 2015 a research study⁴ was completed to identify the barriers to accreditation which made 25 recommendations which this study has addressed and has implemented with industry partners.

Purpose

The aim of the research was to develop and pilot a bespoke support package for small food and drink manufacturing businesses in Wales to obtain food safety certification. The SALSA scheme was selected as being most appropriate standard fro micro and small businesses.

SALSA (Safe and Local Supplier Approval) is a robust and effective food safety certification scheme appropriate for smaller food manufacturers which is seen as a precursor to obtaining more complex, international certification such as BRC (British Retail Consortium) Global Standard for food safety.

Methods

Welsh food-manufacturers (n=62) expressed an interest in joining the support-programme, eligible businesses (n=9) joined the programme.

Businesses evaluated each mechanism by completing a questionnaire. The data were analysed using SPSS.

Interviews were completed with business on completion of all interventions to gain insight and feedback on the effectiveness of the support mechanisms.

Ethical Approval was obtained from the Health Care and Food, Ethics Panel at Cardiff Metropolitan University, reference number 9954.

Results

Delivery of the food safety scheme accreditation support package

A support package was designed to overcome identified barriers by addressing three areas; 'knowledge and skills development', 'accessing financial support' and 'improving information and communication'. The package was delivered by designated, experienced and qualified food industry technologists. Support to address any technical issues identified at each phase was facilitated via Food Innovation Wales.

The food safety scheme accreditation support package consisted of six support-mechanisms (pathway indicated in figure 1):

Support mechanism 1. Self-assessment tool consisted of 19 statements with a 5-point Likert-type response scale indicating compliance to the standard, the questionnaire was completed independently.

Support mechanism 2. Internal systems review was completed on site by a qualified and experienced technologist, who completed the review for each business to ensure robust data collection.

Support mechanism 3. 'Audit-ready' workshop was delivered to all businesses at the University, the session comprised of information exchange, interactive group activities and peer group learnings to ensure all businesses were prepared for their audit.

Support mechanism 4. Pre-audit factory inspection was completed by a different, experienced and qualified technologist on site in order to verify closure of actions from internal systems review.

Support mechanism 5. Post-audit support, was offered to all businesses. Support including mentoring implement all improvements and close all non-conformities and collate all evidence into a report acceptable to the scheme holder.

Support mechanism 6. Audit-fee contribution, on successful receipt of the SALSA scheme certificate the businesses could claim a refund for £350 as financial support.

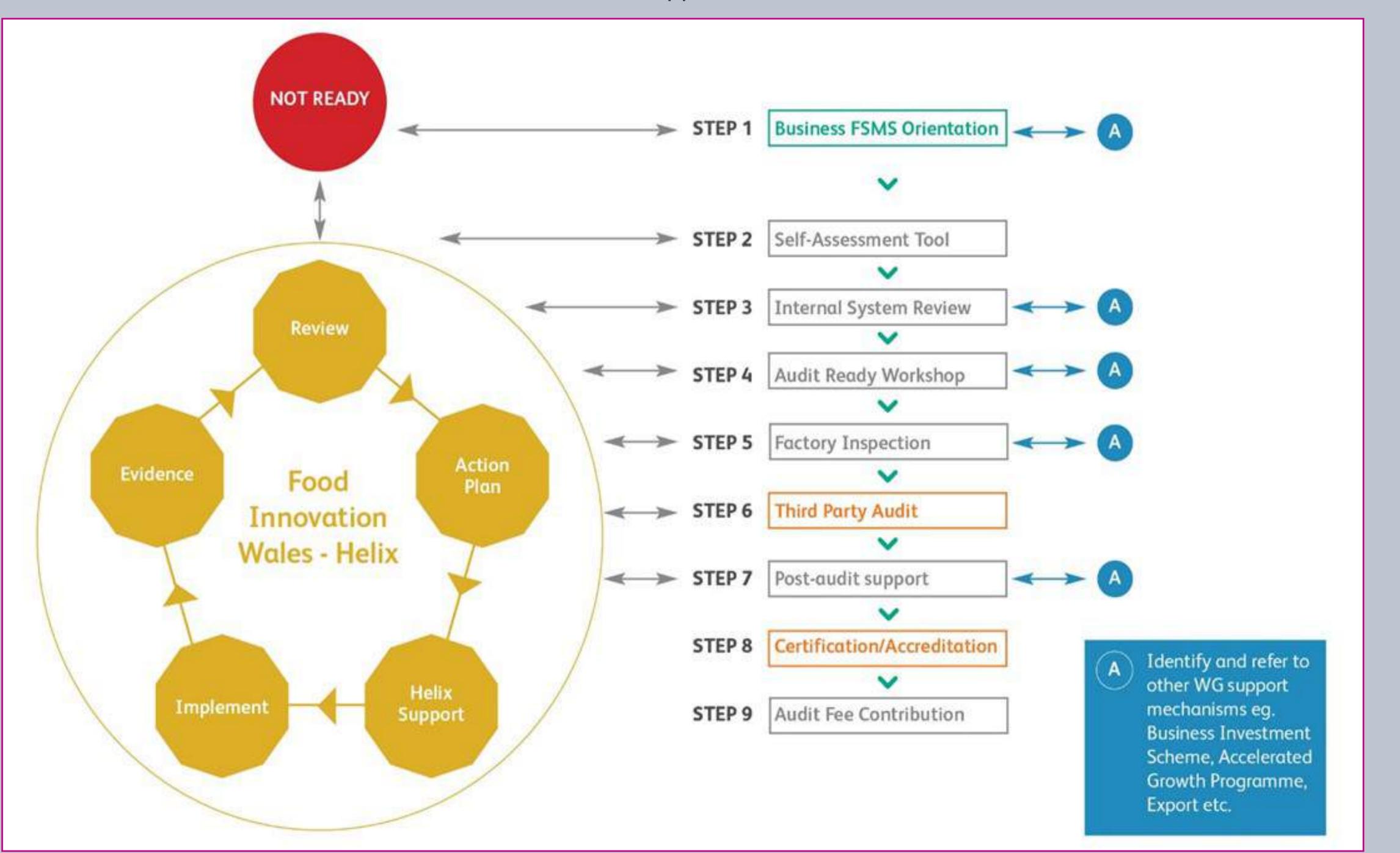


Figure 1. Food safety scheme accreditation pathway support package

Assessment and evaluation of the support package

Support mechanisms 1, 2 and 3 enabled businesses to identify insufficient company resource to implement the SALSA standard and withdrew from the programme (n=3). Remaining businesses (n=6) engaged with support mechanisms 1, 2, 3 and 4 to become "audit ready".

Support mechanisms 2, 3 and 4 significantly increased business attitudes towards SALSA standard requirements. Statistical analyses determined the internal systems review (p<0.05), the workshop (p<0.05) and the pre-audit inspection (p<0.05), all significantly increased business awareness of the SALSA standard compared to pre-intervention baseline.

Table 1. Business awareness of SALSA Requirements following support mechanisms.

	(Baseline) Mech. 1	% strongly agreeing with statement after each mechanism				
Attitudinal statements		Mech. 2	Mech. 3	Mech. 4	Mech. 5	Mech. 6
	(<i>n</i> =9)	(<i>n</i> =8)	(<i>n</i> =7)	(<i>n</i> =6)	(<i>n</i> =5)	(<i>n</i> =5)
he business has a good understanding of potential gaps within	0%	<i>p</i> >0.05	57%	67%	220.05	p>0.05
he existing food safety system			(p<0.05)	(p<0.05)	p>0.05	
thoroughly understand the process of a SALSA audit	0%	33%	57% (p<0.05)	83%	p>0.05	p>0.05
thoroughly understand the process of a SALSA audit		(p<0.05)		(p<0.05)		
The business has sufficient knowledge to implement SALSA	9%	33%	<i>p</i> >0.05	67%	p>0.05	p>0.05
he business has sufficient knowledge to implement SALSA		(p<0.05)		(p<0.05)		
The business has sufficient skills to implement CALCA	9%	50%	<i>p</i> >0.05	67%	p>0.05	p>0.05
he business has sufficient skills to implement SALSA		(p<0.05)		(p<0.05)		
have access to sufficient information to implement CALCA	0%	17%	43% (p<0.05)	67%	p>0.05	p>0.05
have access to sufficient information to implement SALSA		(p<0.05)		(p<0.05)		

To date, five of the "audit ready" businesses have undergone the independent certification audit, after which, support mechanisms 5 and 6 were delivered.

As indicated in table 2, all five businesses that engaged with the 6 mechanisms of the support package, have obtained certification. Duration of support package delivery was dependent upon business requirements. Time to obtaining certification ranged from 4–12 months. Business with previous SALSA experience, achieved the certification in the shortest timescale with the lowest number of non-conformances.

Table 2. Audit results of businesses participating in the programme

Business ID:	Interventions completed	Previous SALSA members	SALSA audited	SALSA certification achieved	Timescale to gain accreditation	
001	1 – 6	Yes	Yes	Yes	5 months	
002	1 – 6	Yes	Yes	Yes	6 months	
003	1 – 4	No	No	Awaiting audit	*	
004	1 and 3 only	Yes	Yes	No, company withdrew from project	N/A	
005	1 – 6	No	Yes	Yes	10 months	
006	1 – 6	No	Yes	Yes	11 months	
007	1 – 6	No	Yes	Yes	10 months	
800	1 – 2 only	No	No	No, company withdrew from project	N/A	
009	1 only	No	No	No, company withdrew from project	N/A	

* Awaiting audit at time of publication. Mechanisms 5 and 6 (post audit support and audit cost contribution) will be delivered following audit.

All support mechanisms were reported to be acceptable and effective by businesses (Figure 2). None of the support mechanisms were perceived to be superior, suggesting the multi-mechanism approach to be the most appropriate.

"Maybe, in five years' time I could afford to pay for technical support. I cannot warrant spending money on technical support at this time. All the support mechanisms were of value. They were all brilliant."

(Managing Director, Business 003).

"The programme motivated us to understand the standard, focused us to drive towards the standard as numerous customers set it out as a requirement to do business which is worth £400,000 per annum"

(Managing Director, business 001).

£100,000."

(Managing Director, Business 006).

A number of customers are interested i

our products and we believe from a

wholesale perspective we expect an

increase in turnover by at least

Figure 2. Business comments regarding the support package.

Significance of Study

This pilot study has successfully designed, developed, delivered and evaluated a support-package that has resulted in 100% of small food manufacturing businesses that completed the support package obtaining food safety certification.

The launch of the support package will assist to accelerate food industry sector growth in-line with Welsh Government aspirations.

There is a need to explore if the accreditation pathway designed in this study can be utilised to support food and drink manufacturing businesses to obtain more complex safety certification scheme such as BRC Global Standards.

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