THE ROLE OF ACTION RESEARCH IN THE STUDY OF SMALL BUSINESS MARKETING AND RETAILER LOYALTY CARD DATA

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Abstract:

The small business is challenged on a daily basis to compete in an ever demanding and ever expanding marketplace. As a result of new technologies such as market intelligence databases, small business owner-managers are playing catch—up with larger and more resource based firms in maintaining current insight into the market. Larger firms have typically been better positioned to afford and analyse the latest market intelligence data for internal marketing purposes. This study provides insight into three action research case studies through a participatory action research, investigating the ways in which traditionally informal small business owner-managers addressed marketing challenges through the utilisation of free access of formalised retailer loyalty card data for the first time in their daily business marketing activities.

Key words: Participatory Action Research, Small Business, Marketing, Retailer Loyalty Card Data

Introduction

In an increasingly knowledge intensive economy, small businesses are particularly challenged by their limited internal capabilities (Viljamaa, 2011: p472) and their inability to sense and respond to market changes quickly (Kumar et al., 2011). It is ultimately the unique nature of the small business that shapes and dictates the manner in which their marketing is performed (Nieto and Santamaria, 2010; O'Dwyer et al., 2009; Gilmore et al., 2006). Despite the typical disadvantages of size, small businesses demonstrate strong networking skills, flexibility and responsiveness to change (Moriarty et al., 2008). They also can overcome the

typical advantages of larger firms by being market oriented (Alpkan et al., 2007). Previous work in small business and market orientation (Pelham and Wilson, 1996; Blankson et al., 2006) demonstrates the informal market orientation of the small business as informal and unstructured in planning organised around the generation, dissemination of, and response to marketing intelligence (Kohli and Jaworski, 1990).

Marketing intelligence underpinning market orientation is being revolutionised by the emergence of new data sources such as the Tesco retailer loyalty card managed and profiled by leading marketing consultancy firm dunnhumby UK (Anstead et al., 2008). The Tesco Clubcard is regarded as legendary in the grocery world with over 40% of all UK households shopping within the retailer (Cannon, 2003). However, the business value of the Tesco loyalty card data being collated was recognised in 1997 when dunnhumby provided forty brand managers with access to this data at a cost. This marked the beginning of a business-tobusiness relationship with loyalty cards, as opposed to the traditional business-to-consumer relationship (Humby, Hunt and Phillips, 2007). Not surprisingly larger businesses actively purchase the loyalty card data to gain real time insight into actual consumer purchasing behaviour (Cacciolatti et al., 2009) as according to Kinsey and Ashman (2000) "...the competition for share of consumer's stomach has forced food stores and their suppliers to learn how to exploit the power of information available... and reorganise the way they do business". As a result of this, smaller businesses are playing catch up on larger firms as they lack the resources, financially and analytically to acquire and leverage retailer loyalty card data (Cacciolatti et al., 2009).

Recent studies such as Simmons et al., (2011) suggests that formalised marketing intelligence may potentially also compliment the more informal type of marketing practiced by the small

business. It is acknowledged that the small business is too important to be overlooked in relation to this access, as Day (2000: p1034) stated how crucial it is for future business generation, not to consider how it can be helped to survive and prosper. This is particularly pertinent given the evolving nature of the consumer (Gray, Armstrong and Farley, 2003; Johnson, 2010) accompanied by the increasing dominance of the multiple retailers (Hingley, 2005).

In this paper we explore for the first time the role and impact of the planned intervention of an action researcher within the small business context, addressing existing marketing problems and providing exposure to formalised marketing intelligence in the form of Tesco Retailer Loyalty Card Data. To address our research query, we joined with owner-managers of three small businesses within the agri-food industry in NI to develop understanding using participatory action research (PAR). Action research combines "theory, research and practice" (Heale, 2002) and is regarded as significant to the developmental needs of all societies, especially where people struggle with new and pressing changes, such as "those induced by modern technology and economic activity" (Stringer et al., 2006: p123).

The paper proceeds as follows. Literature from the small business market orientation and information on loyalty card data utilisation are presented. The description of the PAR will be presented as well as a narrative account of the project itself. The critical events that occurred during the process are then discussed, and captured through a theoretical model.

Literature Review

SME Market Orientation

Market orientation (MO) is believed to facilitate improved business performance, adapting to the needs of the consumer, and the changing market (Martin et al., 2009). Essentially MO has been defined as the application of the concept of marketing (Drucker, 1954), however, more focused research in the 1990's brought Narver and Slater (1990) cultural perspective incorporating a consumer, competitor and interfunctional coordination, alongside Kohli and Jaworski (1990) behavioural perspectives with focus on the generation, dissemination and responsiveness to market intelligence. This research aligns itself with a holistic view of MO supporting Homburg and Pflesser (2000) approach in which they reconciled the two contemporary definitions, with the culture of MO preceding behaviours characterising a MO organisation.

Small businesses often face difficulty in trying to appreciate, understand and practice market orientation (Pelham and Wilson, 1996; Harris and Watkins, 1998; Blankson, Motwani and Levenburg, 2006). Such barriers include ignorance of market orientation, limited resources, perceived inappropriateness, contentment with status quo, short-termism, an unclear view of the customer and finally lack of competitive differentiation (Harris and Watkins, 1998). Essentially these impediments originate from the SME's perception of 'marketing'. These perceptions according to Stokes (2000) have grown from the belief that SMEs, particularly the owner-managers can successfully achieve sales without planning their marketing activities. Current market orientation literature suggests that through appreciation and acknowledgement of these impediments, firms could present ways to avoid or minimise these

barriers in their bid to increase market orientation and success (Blankson, Motwani and Levenburg, 2006).

Much of the market orientation studies to date have focused on the larger firm (Van Raaij and Stoelhorst, 2008; Hooley et al., 2005; Narver and Slater, 1990; Jaworski and Kohli, 1993), but the most progressive study on SME market orientation was carried out by Pelham and Wilson (1996). This study adapted the contemporary market orientation scales as defined by Kohli and Jaworski (1990) in terms of cultural and Narver and Slater (1990) in terms of behavioural into nine questions used for a longitudinal study measuring the impact of market structure, firm structure, strategy, and market orientation on the dimensions of small firm performance. The issue of formalisation emerged within this study, in which Pelham and Wilson (1996) argued that because of the typically low levels of formalisation in SMEs, greater formalisation and control systems will not significantly reduce the innovative aspects of a market oriented culture. Instead the study believed that it will reinforce market oriented behaviours. Therefore market oriented SMEs can better use structural characteristics to consistently provide higher levels of customer service and value (Pelham and Wilson, 1996: p30) as opposed to rules which restrict or are less adaptive to the environment. Essentially SMEs have fewer built-in barriers to communication and are more informal in business processes, and are therefore more flexible to change and adaptation within a market-place.

A study performed on market orientation within the SME agri-food context (Lewis, Pick and Vickerstaff, 2001) provided insight into two types of agri-food SMEs. The first being, SMEs which perceive their business to be market oriented, but in reality lack focus on consumers. The second being, SMEs who are cynical of marketing practices but yet display inherent market orientation traits. In the study titled "*Trappings versus substance*", all firms analysed

held the misconception that marketing was merely about advertising and selling in deception of the consumer. But findings suggested that despite agri-food SMEs being informal and intuitive in their marketing structure, their process and activities are market oriented and perform marketing well. At no point during this research did the agri-food SMEs engage in formalised market information to understand actual consumer purchasing behaviour, therefore presenting a gap in the literature in relation to the exploration of formalised market information by typically informal market oriented SMEs.

Loyalty card data utilisation

With great insight, Rapp (1988) cited in Kinsey and Ashman (2000) that, "The 'currency' of the next millennium is information. Competitive advantage hinges on harnessing it and figuring out how to use it". This research has focused on one form of formalised market intelligence, Tesco loyalty card data and will explore the utilisation of such data by agri-food SMEs.

Loyalty card programmes therefore create an incredibly data rich environment for retailers exploring real purchasing behaviour of consumers. Despite being in possession of such rich data it has taken years for the retailers to maximise the data being processed by scanners and the loyalty cards. In more recent years this data has been shared or sold by the retailers with third party aggregators (Kinsey and Ashman, 2000: p87). Once firms are in possession of loyalty card data it may provide a source of useful data that can be used to design better marketing strategies (Cortiñas, Elorz and Mugica, 2008). However, there is a gap in the literature in relation to the actual utilisation of loyalty card data by agri-food SMEs. Utilisation of data can take three forms, conceptual, instrumental and symbolic (Moorman, 1995).

This study will explore the forms of utilisation in addressing the relationship between SME MO and SLCD. The conceptual utilisation process refers to the indirect use of information by the party for business use. This requires the party to recognise the value in the information as well as to process the information. This also requires conversion of the market information into knowledge in order to create an understanding when interpreted, for purposes such as decision-making (Moorman, 1995). In contrast, this type of utilisation is more subtle and not as immediate in comparison to instrumental utilisation (Souchon and Diamantopoulos, 1996). The instrumental process refers to the direct application of the information of the information on the party in relation to their business, in making, implementing and evaluating marketing decisions. The third dimension of action oriented utilisation, which is not documented in Moorman's (1995) market information model, is symbolic utilisation. According to Rich (1997) symbolic utilisation can be performed in three ways: Firstly, in a manner to make another party feel included in the decision-making; secondly, in a cynical manner without seeing the value in it, but the user thinks other third parties may see value; and finally, to portray a positive message within the business. Previous limited studies have looked at the utilisation of information by the agri-food SME (Cacciolatti et al., 2009), but longitudinal research is required to give a real and true picture of utilisation forms by SME ownermanagers on a daily routine basis.

Summary

Literature describes market orientation as rare, valuable and inimitable firm level resource (Day, 1994; Hunt and Morgan, 1995). Building upon literature reviewed on market orientation and SME market orientation, research has established that typically larger agrifood firms will adopt a more formalised and structured market orientation (Narver and Slater, 1990), while their SME competitors will adopt a more informal and intuitive market

orientation (Pelham and Wilson, 1996). This research therefore aims to explore this gap in knowledge pertaining to the relationship between informal SME MO and formalised SLCD.

(See Figure 1)

Research Methods

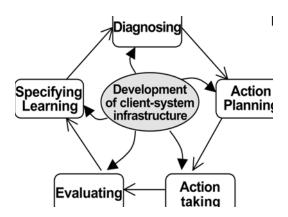
In April 2005, a joint venture was established between a leading UK based University and dunnhumby a global leader in analysing brand and retailer data from over 350 million people in 25 countries, helping businesses to put customers at the centre of decisions. This partnership provided the basis for three longitudinal action research case studies through a mechanism for the small business involved to access shopper insight from Tesco Clubcard data.

The case businesses agreed to be involved as they perceived themselves as limited in resources when competing against the larger competitor, particularly within the area of market information but were at various stages of the business lifecycle (start up to established). They therefore wanted to see whether the access and analysis from the retailer loyalty card data could help them perform marketing more efficiently and competitively, addressing existing business needs and identifying solutions.

The approach adopted in this study was that of action research based on the conceived notion of Lewin (1946) in which he defined action research "...as a way in which researchers could bridge the gap between practice and theory" (Blichfeldt and Anderson, 2006: p2). In addition to this, is the more recent description of action research by Coghlan and Shani (2005) as "...undertaking action and studying action as it takes place" (p.533).

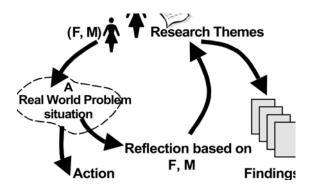
A participatory action research (PAR) was adopted due to the collaborative nature of the study, in which the researcher involved was able to engage directly with the small business case studies on daily basis. Communication was two-way, with the diagnosis of the problems presented and discussed by the small business owner and the researcher at the very first stage of the longitudinal study, aligning the action research process with Sussman and Evered (1978). They characterised AR by an iterative cycle of problem identification/ diagnosis, planning, action taking, and evaluation of the outcomes (Bargal, 2008: p17).

Figure 2: Action Research Model (Sussman and Evered, 1978)



Both set of goals of the Client (Small Business owner-managers) and the Researcher were identified upfront at the beginning of the research so as to ensure the success of the relationship and the PAR going forward (Warmington, 1980). Essentially the client wanted to address marketing challenges, mainly their inability to sense and respond to market changes quickly (Kumar et al., 2011) through the utilisation of free access of formalised retailer loyalty card data, whilst the Researcher wanted to investigate and understand the potential impact when formalised market intelligence data was utilised by typically informal market oriented small business owner-managers. This appreciation resonates with the view of Checkland (1991) in the cycle of action research.

Figure 3: The cycle of action research (Checkland, 1991)



A criterion was developed for the selection of case businesses eligible to engage in this study. The main determinant was on the firms being small in size, with a restriction on turnover and number of employees in accordance with the agreement with dunnhumby, the provider of the market intelligence data deriving from the Tesco retailer loyalty card.

Data Collection

The PAR took place over a longitudinal period of six months and consisted of three stages of data collection to achieve the depth and relevance of the data required to address the research dual aim as agreed by the client and the researcher.

Stage 1: In-depth semi structured interviews were conducted with the owner-managers from the case businesses sampled. Face-to-face interviews were completed with two owner-managers from each business in order to provide a full and rounded picture of the day-to-day marketing activity within the small business. This stage set out to explore Narver and Slater's (1990) cultural market orientation (MO) adopting questions from Pelham and Wilson (1996) study, prior to exposure to the retailer loyalty card data, in order to identify existing challenges in sensing and responding to market changes in relation to the consumer, the competitor, and the coordination within the firm interfunctionally.

Stage 2: Kumar et al., (2011: p16) emphasised that few studies in MO and business performance literature have been carried out over a longitudinal period, which is critical considering the importance of business sustainability for business owner-managers. This research builds upon previous longitudinal studies carried out (Lee and Tsai, 2005; Kropp, Lindsey and Shoham, 2006; Pelham and Wilson, 1996). Over the six month period, small business owner-managers were exposed to at least once a month interactions with the researcher delivering and interpreting the retailer loyalty card data through a PAR. Owner-managers were responsible for initiating any further contact in between the standard monthly meetings.

Discussions were recorded via face-to-face interviews, through telephone conversation, by email and or through observations. Each owner-manager adopted a communication form which fitted with their day-to-day operations. This also was reflected in the length of observations as they varied from 6 minutes to 1 hour 30 minutes in any case firm.

(See Figure 4)

Interestingly, at stage 2 the PAR typically involved one out of the two owner-managers engaged in stage 1. During the six month period, the researcher engaged with the owner-manager, providing bespoke market intelligence reports relating to their pressing needs. This data was simplified and delivered to the owner-manager. Data was broken down and was available in various formats, such as charts, tables, statistics or profiles. Based on this reading of the data, the owner-manager engaged with the researcher, asking questions, evaluating and possibly generating further queries for the generation of more insight into the market

intelligence dataset. Overall stage 2 provided in-depth insight into the generation, dissemination and response (behavioural market orientation) to the retailer loyalty card data.

Stage 3: After six months exposure to the loyalty card face-to-face interviews were carried based upon Pelham and Wilson (1996) market orientation questions originally asked in Stage 1. This stage involved interviews with only clients (owner-managers) who had actively been engaged in PAR.

Reporting the Action Research Findings

The research will focus on all three stages of the study, investigating the market orientation culture and behaviour evident within the cycle of action research based on the three case businesses.

Alpha

Case business One 'Alpha' started baking bread to sell to the public in 1955. When interviewed in stage 1 they had 40 employees and supplied their range of bakery products (breads, buns and cakes) to independents and multiple stores throughout NI. Although a family business, the owner-managers engaged in the PAR were non-family members. The diagnosis at stage one, prior to the exposure to the retailer loyalty card data was that the business had survived for years on informal market information which was generated by word of mouth and was often outdated. Typically the most recent type of information generated through the van sales employees was reported back to head office. It appeared that although the business on the surface performed well, the clients were conscious that this was not the case internally due to break down in internal coordination and communication.

Management acknowledged their lack of clear understanding of the consumer, but they did

however perceive that they had a good understanding of competitors. Stage 1 also diagnosed an underlying problem of the business which was instilled from first operations. This challenge was the focus on the business within production as opposed to the market.

Stage 1 and stage 2 therefore seen action planning undertaken by the clients and the researcher highlighting areas where the firm felt most challenged in terms of consumer insight as they were currently designing sweet breads to suit the 'Young Adult' market and required factual data to support their decision making. Alpha owner-managers requested seven bespoke reports over the longitudinal study, with insight requested into the Bakery sector, competitor activities, specific product lines as well as customer segmentation profiling on products. This information was requested in order to take action in preparation for two separate Retailer Buyer's meeting. The information was utilised to support the decision making behind the consumer profile of the new sweet product line, to identify the opportunity within the current market for this line, and the new product's line position in relation to competitors.

After thorough evaluation of the retailer loyalty card data, pitches were created to support the meetings with two larger multiple buyers. Although both meetings with retailers were deemed successful by the clients, products were listed within one out of the two retailers. Alpha therefore evaluated the feedback from both Buyers, taking on board current challenges from the own brand product within the multiple. However, during this time there appeared to be underlying challenges existent within the firm interfunctionally, with a change in management back to a family member. One of the two clients within the PAR left the case business.

This change in management saw a change in culture, from a market orientation back to a production orientation. The PAR was ultimately affected, with contact between the client and the researcher reduced and Alpha requested no further intelligence reports in the second half of the six month longitudinal study.

The case business was experiencing serious challenges to its future, with the impact of the recession, change of management and overall poor performance of the business priority has had a knock on effect to the utilisation of the data.

"We have a lot less resources now as there are less people and we have been sorta stretched and we haven't had time to be analysing the market or spend time on analysing the data, sharing information or talking... we are more doing and reacting to the situation as opposed to building strategy".

Ultimately the culture of the firm has shifted from a market focus back to the original focus of a production orientation. Focus would remain on production with requests for market intelligence usually driven or centred upon the category review window of multiples.

There were several learning outcomes deriving from the PAR with Alpha. The main observation was that interfunctional coordination within the firm was non-existent, with a lack of shared communication in what emerged as a fractured organisation.

"The data probably wasn't shared with the rest of the Company... it didn't become a part of the business strategy or become a part of the way we operated".

Therefore any information coming into the firm was not being shared or communicated amongst management or production staff. Competing agendas and the impact of the recession had heightened tension within the firm.

"I don't think the management wanted to hear what the market was doing".

This in effect inhibited Alpha in truly engaging with consumer information, and it appeared that production was provided with a higher priority in contrast to the understanding of the market. The firm ultimately was relying on a 'hit or miss' approach to get the right product out to market, competing with major rival businesses on price as opposed to a differentiated offering.

Beta

Case Study 2 'Beta' was a family business, run and managed by family members who specialised in home-made ready meals for the convenience markets. Founded in the kitchen of the family home in 1988, the business in stage 1 had purpose built unit for production and 55 employees, delivering products to Independent retail outlets and Butchers. Beta perceived itself as an innovative and proactive firm, but on diagnosis in stage 1, it emerged that much of the market information generated and used by the case business derived from informal sources such as the sales van man or the retail buyer. The business had limited contact with the end consumer. Ultimately the owner-managers of this firm held the belief that if their product was good enough, people would come to them.

On exposure to the retailer loyalty card data in stage 2, the owner-managers acted prompting in planning to extract as much information about the top performing ready-meal products in

the sector in NI and the UK. Based on the information, the client purchased the top performing products, and both the client and the researcher under took a review of each top performing product, reviewing the brand, flavour, size, price and packaging. As a result of this the client worked with production staff to take action on the production of potential new lines in curry ready meals. This was a new product offering that the business did not have in their portfolio. This process was also repeated for home-made convenience desserts, with action taking in the production of new crumble dessert.

Beta requested eight bespoke reports into various sectors of the ready meal market however, contact with the firm was limited and often infrequent due to the busy schedule of the owner-managers. Through the client's evaluations, they believed that the retailer loyalty card data did in fact aid their understanding of the consumer, however they were restricted in their use of the data as they had reached their desired volume and output capacity and were therefore happy to retain their current consumers as opposed to creating more.

In terms of specifying learning, it was clear that the firm restricted their uptake in the retailer loyalty card data due to the limitations of their current production facility. They appeared to be satisfied to maintain current production, without giving thought to longer-term challenges. It was clear that the owner-manager adopted a generalist role within the business, therefore keeping 'tabs' and maintaining control on all aspects of the business. Interfunctional coordination was improved through the delivery of the data in driving product imitation, as opposed to further insight into the consumer.

"They (operatives) like to know I am coming out with ideas about doing curries and different things there, so just to back myself up, I would show them the information and then they would run with it you know".

A better understanding was held in relation to the competitor, particularly with relation to the role of the own brand products.

Omega

Case Study 3 'Omega' was a start up business, established 10 months at stage 1 with three employees in total including the two founding owner-managers. They were currently supplying fresh home-made soup to local independents and Butchers. At the first stage of the action research, the Omega gleaned insight into their consumers through informal store observations, demonstrations and feedback of the consumer. They also used these methods of insight alongside networking to inform their understanding of competitors. At this stage, they realised that due to the small size of the firm, they were limited in their ability to respond or to initiate innovative ideas. This was also accompanied by the firm's awareness of risk of taking uninformed decisions to advance the business at the early stages of their development however, if they did not make serious developments in the business within the next six months, they were fully aware that they would no longer be a viable business.

The firm's action plan was to develop an understanding of the market in order to establish a gap in the market for their new range of soups. By gaining a true understanding, they would feel more assured when pitching to the retailer buyers about potential listing of the products, over competitors. Through stage 2 exposure to the loyalty card market intelligence, Omega requested bespoke reports on a market overview of the soup category, alongside information

on seasonality of the soup market. During this stage, the owner-manager of Omega attended a networking event in which they managed to secure a meeting with a retail buyer on the potential listing of their products. This meeting drove the action with more focus and more purpose with four reports from the market intelligence data delivered over the four month period, in the run up to the meeting with the retail buyer. This data was delivered by the researcher to the client, with discussions arising in relation to the formation of a pitch to the retailer. Through this formulation of the pitch, the client's awareness of the consumer and the competitor was enhanced as the market intelligence provided Omega with fresh and new insight of the soup market in terms of who was buying and this helped aid differentiation of the firm's soup products from that of competitors. Interfunctional coordination was enhanced through this new awareness, with information from the market intelligence reports being shared informally on the production floor between the three firm employees.

As a result of the pitch, Omega secured listing for five of their soup flavours. This success drove the firm to look at differentiation in terms of their product offerings, such as sauces. The firm was conscious of the seasonality of the soup product, and wanted to glean insight into the Fresh Sauce category as a potential market for entry. They realised that without access to the market intelligence loyalty data they would not have statistical information on the overall value of the new sauces category, nor the actual consumer profile of those who purchase the sauces.

In terms of specifying learning, it was clear that as the firm engaged with the retailer loyalty card data and the researcher, the more confidence the owner-managers felt about pursuing the retailer for listings. Confidence within the firm's products and their ability to compete within what is typically considered a saturated market seemed a real and viable opportunity.

"It was brilliant to find where we do we fit, because before that you were kinda pulling things out of the air. We felt our product was better but we didn't have any concrete evidence".

Despite becoming accustomed to the data and the accompanying analysis, Omega carried on informal methods of networking and in store observations to gain understanding of the consumer and competitors to support their marketing activity.

"Yes you can get a lot of the information through the data, but again it is also effective when you are hearing it from the horses' mouth".

This informality was also evident through the communication of data into everyday business operations, but the business appreciated the strength of the retailer loyalty card data in supporting their thinking.

Discussion of Findings

The three action research case studies presented changes but each case being unique in application as not every case firm responded to the dynamic process of action research and the exposure to retailer loyalty card data in the same way. Findings did highlight the impact on cultural and behavioural market orientation through the action research process, as well as the role of the 'desire to grow' on the utilisation of the retailer loyalty card data for marketing purposes.

Finding 1: Cultural Market Orientation

The difficulty in appreciating, understanding and practicing market orientation (Pelham and Wilson, 1996; Harris and Watkins, 1998; Blankson, Motwani and Levenburg, 2006) was addressed through the action research process. For the first time, all these case studies demonstrated an appreciation of knowing the market through more formalised market intelligence. With all three firms demonstrating insight gained on both consumers and competitors through real consumer purchasing behaviour. This provided owner-managers with the realisation that they had in fact trusted their marketing based upon old and inaccurate data which skewed their view of the consumer, and that of the market as a whole as identified in stage 1. This new understanding provided the owner-managers with clarity, reassurance and most importantly confidence, in their ability to perform marketing and make decisions effectively.

Finding 2: Behavioural Market Orientation

Despite all three firms understanding market orientation gradually through the various stages within the research, the practice of market orientation was more difficult particularly for Alpha who experienced a negative impact through change in top management and loss in business performance. This change in management resulted in a shift of focus from the market back to production. The new management appeared to align themselves with the study of Stokes (2000) in which he found that some SMEs hold the belief that they can successfully achieve sales without planning their marketing activities. The behaviour of the owner-managers is central to the behaviour of the whole firm and ultimately the owner-manager dictates what happens, when and how (Moriarty et al., 2008). Beta and Omega's management positive engagement with the data resulted in the emergence of a more proactive MO, in utilising the data for the advancement of the firm.

Finding 3: Utilisation of data for marketing purposes

Typically behaviour took three forms: conceptually, symbolically and instrumentally. Interestingly Harris and Watkins (1998) 'contentment with status quo' and 'short-termism' appeared within both Alpha and Beta, restricting the firm's full utilisation of the retailer loyalty card data for building the marketing activities of the firms. They tended to utilise the data on a more symbolic level, so as to engage in more networking activities. However, Omega demonstrated the value of conceptually and instrumentally utilising the data, producing new products, winning listings and gaining a better understanding on the market as a whole. The desire to grow ultimately impacted on the type of utilisation performed by the owner-managers.

(See Figure 5)

Finding 3: Role of Action Researcher

The role of management is central, however, management also acknowledged the importance of having both the right data and the right people in the firm. Essentially the data is only as good as the people that are using it. During stage 2, the action researcher was engaged in the delivery and analysis of the data. This facilitated a form of learning for the owner-managers, in which they too could start to look at the data from a more analytical view point. This supports Boog (2003) understanding that "action research is designed to improve the researched subjects' capacities to solve problems... increase their chances for self-determination and to have more influence on the functioning and decision making processes of organisations" (p.426). The nature of the engagement between the owner-manager and the action researcher was two-way, in which the owner-manager was learning to solve problems through the support and direction of the researcher. Ultimately the owner-manager would

become skilled in the data analysis and identify solutions to the firm's problems as they arose.

Based upon the literature reviewed and the findings emerging from the action research, the outcome has been conceptualised in Figure 6. This diagram illustrates the relationship created when formalised data meets the informal small business owner-manager, and the role played by the action researcher in delivering the data. The output of this interaction is captured through utilisation.

(See Figure 6)

Implications of Research

This research was undertaken between the clients and the action researcher in order to facilitate and contribute towards academic research, practice and industry.

Academically the research highlights the suitability of action research for understanding new technology and related developments within small businesses and particularly within the agrifood industry, which is conservative and highly private. Going forward, this research would advocate this method of delivery for future research projects of this kind. This method facilitates for a shared understanding of the task ahead, creates trust and builds upon this trust through frequent engagement and focus on solving problems. Through this relationship, a truly rich insight is gleaned which provides a thorough and open account of the intricacies of day-to-day life within a small business, the importance of the owner-manager and the challenges faced when small businesses are facing new technologies.

In practice, it is important to emphasise that small business owner-managers should not be apprehensive when considering loyalty cards as a source of marketing intelligence to inform their marketing. Rather, they need to realise that to compete with larger firms they must remain in tune with the market. One way of doing this is through intelligence access and interpretation skills. Developing these skills will be beneficial for the long term success of the firm. Government bodies could work in conjunction with small business owner-managers, to provide a one-stop-shop of support, information and training through a research action approach.

Taking into consideration the industry perspective, this research demonstrates the relationship that exists between the retailer loyalty card data and small business market orientation. Small business owner-managers can benefit from formalised market intelligence, utilising the data in ways which suits their current needs. However, the government bodies responsible for supporting and driving small business policy should recognise the importance of free access and analytical support going forward to such data- Tesco loyalty card data and other types of consumer purchasing behaviour data. The value of this data both to the firm and to the economy on a larger scale is significant, with small firms utilising insight to loyalty card data to drive new product development, meeting latent and expressed consumer needs as well as gaining successful listings within retail stores and independents.

Research Limitations

The research does acknowledge the limitations faced when designing and carrying out this research. The seven SME agri-food case firms chosen provided longitudinal insight into the impact of loyalty card data on SME market orientation. The research acknowledges that this sample is not a representative sample of all SMEs either in NI or beyond. However, future

research would be required to assess the generalisability of this research, expanding the number of action research case studies involved as well as exploring other industries and regions across the UK. Also, due to the nature of this study, focus was only based on one form of formalised market intelligence in the form of Tesco Clubcard. This dataset is legendary in its field and therefore this study provides a solid base upon which future studies of other retailing or non food retailing could continue to develop.

Conclusion

This research acknowledged and demonstrated the many challenges faced by small business on a daily basis. Competition is tough particularly within the ever expanding marketplace. As a result of new technologies such as market intelligence databases, small business owner-managers are playing catch—up with larger and more resource based firms in maintaining current insight into the market. However, through this research, we suggest that Small businesses too can benefit from access and analysis of this database. They can utilise the data in a way which compliments their existing informal tendencies. The study illustrates the role of action research in the delivery of the retailer loyalty card data and the necessary relationship required in order to facilitate learning and understanding of the value of the data within each case study. Therefore through this, small businesses are gaining a step up on the same level of that of their competitor as they compete for share of the consumers' stomach.

Bibliography

Alpkan, L., Yilmaz, C. and Kaya, N. (2007) 'Market orientation and planning flexibility in SMEs: performance implications and an empirical investigation', *International Small Business Journal*, 25(2), 152-172.

Anstead, J., Samuel, J. and Crofton, A. (2008) 'dunnhumby- A Retailer's Secret Weapon', *Citi-group Global Market*, Feeder's Digest(60), 1-25.

Bargal, D. (2008) "Action Research: A Paradigm for Achieving Social Change", *Small Group Research*, 39(1), 17-27.

Blankson, C., Motwani, J. G. and Levenburg, N. M. (2006) 'Understanding the patterns of Market Orientation among small businesses', *Market Intelligence and Planning*, 24(6), 572-590.

Blichfeldt, B. S., and Anderson, J.R., (2006) "Creating a Wider Audience for Action Research: Learning from Case-Study Research", *Journal of Research Practice*, 2(1), 1-12.

Boog, B. (2003) "The emancipatory character of action research: Its history and the present state of the art", *Journal of Community and Applied Social Psychology*, 13, 426-438.

Cacciolatti, L., Donnelly, C., Fearne, A., Ihua, U., Yawson, D., Armstrong, G. and Simmons, G. (2009) *Use of Supermarket panel data amongst small and medium sized business in the food industry*, translated by Academy of, M., Leeds, UK.: Academy of Marketing Annual Conference, 12-15 July 2009.

Cannon, D. (2003) *How can a supermarket be a corner shop?* available: http://crmguru.custhelp.com/cgibin/crmguru.cfg/php/enduser/std_adp.php?p_faqid=1025&p_created=1061237556 [accessed: 7 September 2011].

Checkland, P. "From framework through experience to learning: the essential nature of action research," in *Information Systems Research: Contemporary Approaches and Emergent Traditions*, H-E. Nissen, H.K. Klein, R.A. Hirschheim (eds.), North-Holland, Amsterdam, 1991, pp. 397-403.

Coghlan, D., and Shani, A., (2005) "Roles, politics and ethics in action research design", *Systematic Practice and Action Research*, 18(6), 533-546.

Cortiñas, M., Elorz, M. and Múgica, J. M. (2008) 'The use of loyalty-cards databases: Differences in regular price and discount sensitivity in the brand choice decision between card and non-card holders', *Journal of Retailing & Consumer Services*, 15(1), 52-62.

Day, J. (2000) 'Commentary: The value and importance of the small firm to the world economy', *European Journal of Marketing*, 34(9/10), 1033-1037.

Drucker, P. F. (1954) The Practice of Management, London: Heron Books.

- Gilmore, A., Carson, D., Grant, K., O'Donnell, A., Laney, R. and Pickett, B. (2006) 'Networking in SMEs: Findings from Australia and Ireland', *Irish Marketing Review*, 18(1/2), 21-28.
- Gray, J., Armstrong, G. and Farley, H. (2003) 'Opportunities and constraints in the functional food market', *Nutrition and Science*, 33(5), 213-218.
- Harris, L. C. and Watkins, P. (1998) 'The impediments to developing a market orientation: an exploratory study of small UK hotels', *International Journal of Contemporary Hospitality Management*, 10(6), 221-226.
- Heale, G. (2003) 'Applying theory to practice: an action research resource pack for professionals', *Clinical Chiropractic*, 6(1), 4-14.
- Hingley, M. K. (2005) 'Power imbalance in UK agri-food supply channels: learning to live with the supermarkets?', *Journal of Marketing Management*, 21(1/2), 62-88. Homburg, C. and Pflesser, C. (2000) 'A multiple-layer model of market-orientated organisational culture: measurement issues and performance outcomes', *Journal of Marketing Research*, 37(4), 449-462.
- Hooley, G. J., Greenley, G. E., Cadogan, J. W. and Fahy, J. (2005) 'The performance impact of marketing resources', *Journal of Business Research*, 58(Journal Article), 18-27.
- Humby, C., Hunt, T. and Phillips, T. (2007) *Scoring Points: How Tesco continues to win customer loyalty*, London: Kogan.
- Hunt, S. D. and Morgan, R. M. (1995) 'The comparative advantage theory of competition', *Journal of Marketing*, 59(2), 1-15.
- Jaworski, B. J. and Kohli, A. (1993) 'Market Orientation: Antecedents and Consequences', *Journal of Marketing*, 57(1), 53-70.
- Johnson, N. (2010) *Feeding Britain- What consumers want*, London: The Smith Institute. Kinsey, J. and Ashman, S. (2000) 'Information technology in the retail food industry', *Technology in Society*, 22(1), 83-96.
- Kohli, A. K. and Jaworski, B. J. (1990) 'Market Orientation: The Construct, Research Propositions, and Managerial Implications', *Journal of Marketing*, 54(2), 1-18.
- Kropp, F. L. N. J. and Shoham, A. (2008) 'Entrepreneurial orientation and international entrepreneurial business venture start up', *International Journal of Entrepreneurial Behaviour and Research*, 14(2), 102-117.
- Kumar, V., Jones, E., Venkatesan, R. and Leone, R. P. (2011) 'Is Market Orientation a Source of Sustainable Competitive Advantage or Simply the Cost of Competing?', *Journal of Marketing*, 75(1), 16-30.
- Lee, T. S. and Tsai, H. J. (2005) 'The effects of business operation mode on market orientation, learning orientation and innovativeness', *Industrial Management & Data Systems*, 105(3), 325-348.

Lewin, K. (1946) 'Action research and minority problems', *Journal of Social Issues*, 2(4), 34-46.

Lewis, C., Pick, P. and Vickerstaff, A. (2001) 'Trappings versus Substance: Market orientation in food and drink SMEs', *British Food Journal*, 103(5), 300-312.

Martin, J. H., Martin, B. A. and Minnillo, P. R. (2009) 'Implementing a market orientation in small manufacturing firms: from cognitive model to action', *Journal of Small Business Management*, 47(1), 92-116.

Moorman, C. (1995) 'Organisational Market Information Processes: Cultural antecedents and new product outcomes', *Journal of Marketing Research*, 32(3), 318-335.

Moriarty, J., Jones, R., Rowley, J. and Kupiec-Teahan, B. (2008) 'Marketing in Small Hotels: a qualitative study', *Marketing, Intelligence and Planning*, 26(3), 293-315. Narver, J. C. and Slater, S. F. (1990) 'The effect of a market orientation on business profitability', *Journal of Marketing*, 54(4), 20-35.

Nieto, M. J. and Santamaria, L. (2010) 'Technological Collaboration: Bridging the Innovation Gap between Small and Large Firms', *Journal of Small Business Management*, 48(1), 44-69.

O'Dwyer, M. and Ledwith, A. (2009) 'Determinants of new product performance in small firms', *International Journal of Entrepreneurial Behaviour & Research*, 15(2), 124-136.

Pelham, A. M. and Wilson, D. T. (1996) 'Longitudinal study of the impact of market structure, firm structure, strategy, and market orientation culture on dimensions of small-firm performance', *Journal of the Academy of Marketing Science*, 24(1), 27-43.

Rich, R. F. (1997) 'Measuring knowledge utilization: Processes and outcomes', *Knowledge & Policy*, 10(3), 11.

Simmons, G., Armstrong, G. A. and Durkin, M. G. (2011) 'An exploration of small business Website optimisation: Enablers, influencers and an assessment approach', *International Small Business Journal*, First published on February 14, 2011.

Souchon, A. L. and Diamantopoulos, A. (1996) 'A Conceptual Framework of Export Marketing Information Use: Key Issues and Research Propositions', *Journal of International Marketing*, 4(3), 49-71.

Sussman, G., and Evered, R. (1978) "An assessment of the scientific merits of action research", *Administrative Science Quarterly*, 23, 582-603.

Stokes, D. (2000) 'Putting entrepreneurship into marketing: the processes of entrepreneurial marketing', *Journal of Research in Marketing & Entrepreneurship*, 2(1, Spring), 1-16.

Stringer, E., Guhathakurta, M., Masaigana, M. and Waddell, S. (2008) 'Guest editors' commentary: Action research and development', *Action Research*, 6(Journal Article), 123-127.

Van Raaij, E. M. and Stoelhorst, J. W. (2008) 'The implementation of a market orientation', *European Journal of Marketing*, 42(11/12), 1265-1293.

Viljamaa, A., 2011 "Exploring small manufacturing firms' process of accessing external expertise", *International Small Business Journal*, 29(5), 472-488.

Warmington, A. (1980) "Action Research: Its Method and Its Implications," *Journal of Applied Systems Analysis*, 7(4), 23-39.

Figure 1: Research Focus

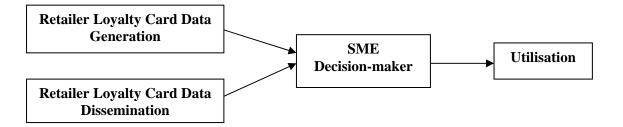


Figure 4: Action-Research Contact time with action research case studies

Case Studies	Month/ Methods	One	Two	Three	Four	Five	Six	Summary
Omega	Method	Telephone/ Meeting	Telephone/ Meeting	Meeting	Meeting	Meeting	Meeting	6 Meetings/ 2 Telephone with 1 main contact
	Contact	C2P1	C2P1/ C2P2	C2P1	C2P1	C2P1	C2P1	Total: 362 min/ 1hr
	Time	15 & 50 min	15 & 1hr 30 min	1hr 10 min	45 min	52 min	25 min	
Alpha	Method	Telephone	Meeting	Telephone	Telephone	Telephone	Meeting	4 Telephone/ 2 Meetings with 1 main contact Total: 194 min/ 32 min
	Contact	C4P2	C4P1/ C4P2	C4P2	C4P2	C4P2	C4P2	
	Time	50 min	1hr 12 min	18 min	21 min	27 min	6 min	
Beta	Method	Meeting/ Telephone	Telephone	Telephone	Email	Telephone	Meeting	4 Telephone/ 2 Meeting/ 1 email
	Contact	C7P1/ C7P1	C7P2	C7P2	C7P2	C7P2	C7P2	with 1 main contact Total: 154 min/ 27 min
	Time	55 & 17 min	25 min	20 min		26 min	11 min	

Figure 5: Types of Utilisation

Case Study/	OMEGA	ALPHA	BETA
Utilisation			
Conceptual	Better understanding of the end	Reinforced ideas and decisions already	Better understanding of top
	consumer and the gap in the Soup	undertaken- e.g. Indulgent brand line.	performing products in the ready
	market for the new offering.	Highlighted the limited nature of the retail bakery	meal category.
		market.	
Instrumental	Utilised the data to create the Tesco	Utilised data to support pricing strategy.	Developed two new dessert lines
	pitch, successfully getting five new		and three ready meal lines from
	lines listed.		the data.
Symbolic	Used to engage with Tesco buyers to	Utilised networking opportunities to engage with	No use.
	set up a meeting.	Tesco.	

Figure 6: Towards a Theoretical Framework

