Bangor Business School
Working Paper

MARKETING FOR SURVIVAL: A COMPARATIVE CASE STUDY OF SME SOFTWARE FIRMS

By

Sara Parry and Rosalind Jones
Division of Business Studies, Bangor Business School

Jennifer Rowley
Department of Information and Communications, Manchester
Metropolitan University

Beata Kupiec-Teahan
Scottish Agricultural College, Land Economy
and Environment Research

August, 2010

Bangor Business School
Hen Goleg
College Road
Bangor
Gwynedd LL57 2DG
United Kingdom
Tel: +44 (0) 1248 38227
E-mail: business@bangor.ac.uk

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Abstract

Purpose

This study explores the success and failure of two similar small software technology firms from a marketing perspective, where there is a paucity of research. Using a dyadic approach, this research compares the degree of customer orientation and innovativeness exhibited in both firms by investigating the companies and their customers. The paper seeks to understand contributing factors for success and failure with the acknowledgement that both marketing and innovativeness are drivers for competitive advantage, firm growth and sustainability.

Design/methodology/approach

A two-case comparative case study was employed as the primary method of investigation. Company B was investigated for a period of three months but went into liquidation after six years of operation, whilst Company A was investigated over a period of two and a half years. Both cases were based on the same technology park in the North Wales region. Participant-observation in both firms and 22 semi-structured interviews with owner-managers, employees and customers provided a holistic approach to how these firms perceived and prioritised marketing and innovation.

Findings

The findings confirm the need for small software firms to strike a balance between customer orientation and innovativeness in order to survive. In terms of customer orientation, the findings show that it is not only related to customer contacts and relationships, but is also about delivering on the promise. The small firm's ability to achieve this is highly dependent on managerial style, communication between the firms and their customers, business planning, market research, promotion and firm culture.

Practical implications

The benefits of this study which demonstrates the stark contrast between successful and unsuccessful behaviour can act as a useful guide to practitioners, and could be particularly valuable to SME managers who often have technical but less managerial competencies. The results can also offer a marketing benchmark for other SMEs within the software industry.

Originality/value

This is a unique study comparing two software SMEs, particularly one which failed and one which succeeded under similar conditions, thus illustrating good practice by contrasting with bad practice. It also contributes to the literature on how SMEs conduct marketing in the software industry and how to secure small firm sustainability and growth in developing regions.

Keywords: *Small to medium-sized enterprises, Marketing, Software industry, Case study research, Success and failure.*

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1. Introduction

This study explores the success and failure of two similar small software technology firms from a marketing perspective. The aim is to continue discussions about business development and marketing in SMEs (Reijonen, 2010) and to develop the understanding of contributing factors for SME success and failure (Forsman, 2008). Storey (2000) emphasises that SME's primary objective is survival and the recent economic downturn has highlighted the importance of survival strategies for entrepreneurs in developing regions. The research objectives are:

- To compare two software SMEs, their marketing practices and the impact on both firms
- To explore the degree of customer orientation and innovativeness in both firms by investigating both the company and the customer perspective
- To explore the internal factors which affect marketing in software SMEs.

Despite the widespread acceptance of the benefits of SMEs (Carson *et al.*, 1995; Gilmore *et al.*, 2001; Hill, 2001), including their innovativeness, flexibility and the provision of employment, much has been written about the lack of marketing competencies of SMEs, their limited marketing capacity and the constraints of SMEs to effectively leverage their products and innovations in the marketplace (O'Dwyer, 2009; Hatonen and Ruokonen, 2010; Hausman, 2005). Constraints include a lack of resources and lack of specialist expertise forcing them to handle their own marketing, distribution and support of the finished product (Carson *et al.*, 1995; Gilmore *et al.*, 2001).

Technology SMEs are recognised as generating capacity for innovation as well as creating opportunities for local and regional economic development (Harris, 1988; Keeble, 1997), and there is increasing interest in how SMEs market technology products in highly competitive environments (Acs and Audresche, 1990; Borg, 2009; Hatonen and Ruokonen,

2010). Yet, there is a limited research conducted on the marketing of software technologies in general (Alajoutsijarvi *et al.*, 2000; Helander and Ulkinemi, 2006; Ojasalo *et al.*, 2008), especially in SMEs (Jones and Rowley, 2009). Also small, innovation based technology organisations tend to struggle in the marketplace to survive competition with large, resource-rich companies with well established brands and international reputation (Salavou, 2004). Thus a detailed insight is required into how small software companies approach marketing and how they can provide fast response, mass customised, yet innovative products and services with limited resources.

This article begins by reviewing the literature on marketing in SMEs and the marketing of software. Then, an outline of the comparative case study methodology is presented. The findings are discussed by cross-case comparisons and inform the conclusion which embeds the learning from both the successful and the failure cases. The article concludes with consideration of implications for practitioners and makes recommendations for avenues of further research.

2. Marketing in SMEs

SMEs are recognised for their unique and particular characteristics affecting the way in which they approach marketing (Hill, 2001; O'Dwyer *et al.*, 2009). Indeed the marketing styles of SMEs have been referred to as simplistic, informal, reactive, and haphazard (Carson and Cromie, 1990; Fuller, 1994). A study by Hogarth-Scott *et al.*, (1996) found that small business owners were often generalists as opposed to specialists and thus complex marketing models may not be appropriate for SMEs. However, SME's are also considered to be significant sources of innovation, arguably due to their smaller and flatter structures, and the absence of bureaucracy which improves communication, knowledge sharing, and collaboration (Laforet and Tann, 2006). Other advantages of SMEs include their flexibility and rapid ability to respond to environmental needs, their ability to satisfy rapidly changing customer needs, and their potential for close

relationships with customers (Simpson *et al.*, 2006; Storey, 2000). SMEs often find it difficult to make an impact in large, competitive markets with established players, and therefore create their own market by developing an innovative product/service, or commit to supplying a neglected, untapped niche market. Both paths can provide them with the opportunity to create competitive advantages (Walsh and Lipinski, 2009). In terms of survival, one of the most vital marketing activities for SMEs is selling (Stokes, 2000), which consequently involves developing relationships with customers (Reijonen, 2010).

Networking, or the development of Personal Contact Networks (PCNs) in SMEs has been identified as an important and instinctive SME marketing strategy, practised in order to increase market knowledge, access marketing resources, identify new opportunities, and enable the sharing of knowledge and experiences (O'Donnell, 2004; Tersvioski, 2003). Furthermore, networking and proactive marketing can increase the sophistication of SME planning and decision making processes (Gilmore *et al.,* 2006).

Many authors within the SME literature have cited problems inherent in SMEs (Carson *et al.*, 1995; Hill, 2001; Simpson and Taylor, 2002). These problems include: the lack of resources, limited finances, a lack of strategic expertise, and the fact that the power and decision-making is concentrated solely in the owner-manager (Hausman, 2005). Further disadvantages include a limited customer base, limited access to competitive markets, a lack of formal and strategic planning, and decisions made without a logical analysis of opportunities and the environment, but instead determined by the personal preference of the owner-manager (Chaston, 1997). With regards to the IT industry, there are additional problems for SMEs. These include the difficulties of gaining credibility in a highly competitive, rapidly evolving and uncertain market (Ruokolainen, 2008).

3. Marketing in the software industry

The specific focus of this study is the software industry and the marketing of bespoke software products and services by SMEs. In contrast to the literature on marketing of high tech products and services, there is an evident gap in the literature addressing the marketing of software by SMEs (Alajoutsijarvi *et al.*, 2000; Helander and Ulkinemi, 2006; Ojasalo *et al.*, 2008).

Software products are characterised by a high degree of complexity and intangibility, making the offering's support and service elements of paramount importance in the process of value creation for the customer (Ruokonen and Saarenketo, 2009). As small software firms tend to be managed by technical specialists, SMEs often seek inter-firm co-operation and partnership opportunities in order to share resources and capabilities (Rao and Klein, 1994). This is echoed by a study by Ojasalo *et al.*, (2008) who suggest that cooperation with a bigger and trustworthy actor in the market is also the key to strengthening software SME's marketing communications and customer relationships. The software industry tends to move forward quickly with rapid technological evolution, shorter product life cycles, and fast obsolescence of products, making it an extremely fast moving and competitive market (Kulmala and Uusi-Rauva, 2005; Ruokolainen and Makela, 2007).

Helander and Ulkiniemi (2006) recognise that the purchase of software is a high involvement and relatively high risk purchase decision for business customers, requiring commitment from both the buyer and seller. They argue that software companies should therefore develop a relational competency involving comprehensive understanding of the technology as well as the customers' business. Hedaa and Ritter (2005) also emphasise the importance of understanding customer requirements. However, others contend that 'productization' or delivering standardised software products, is a key prerequisite for continuing growth in the software industry (Alajoutsijarvi *et al.*, 2000; Easingwood *et al.,* 2006). Other marketing tactics employed in the software industry particularly during the software launch stage include: versioning by modifying the product to suit different

segments and emphasising regular technical innovations; and, pre-announcement of products or vapourware strategies (Alajoutsijarvi *et al.*, 2000).

The issues around marketing software solutions are illustrated by a study conducted by Berry (1996) who found that technology driven companies were the least successful group in terms of corporate performance, highlighting the need for companies to evolve from a technological posture to a marketing led company using a strategic management approach and long term planning. Other challenges include communication and management support (Akgun *et al.*, 2004), and the development of interpersonal trust between marketing and research departments which is essential for the development of innovative solutions (Keaveney, 2008; Massey and Kyriazis, 2007). Another problem is that technology firm culture tends to value technical knowledge more than marketing knowledge as they are more likely to be managed by technology entrepreneurs rather than business-oriented entrepreneurs (Mohr *et al.*, 2005).

Although the difficulties of marketing high tech and software solutions are highlighted in the literature, most of the research has been conducted on larger software companies. Recent research in this journal have confirmed the importance of marketing (Reijonen, 2010; Walsh and Lipinski, 2009) and examined the role of innovation and entrepreneurship in high tech firms (Burger-Helmchen, 2009). This paper seeks to understand contributing factors for success and failure by an in-depth comparative case study of the marketing activities of two similar software SMEs with contrasting fates in terms of business success.

4. Methodology

Comparative case study

A two-case comparative case study approach was selected as the primary method of investigation. The case study approach is especially appropriate when conducting

exploratory research in previously under-investigated areas (Eisenhardt, 1989). This method has previously been used for exploring SMEs where issues with marketing tend to be sector specific (Bonoma, 1985; Chetty, 1996; Romano, 1989). The method has also been successfully applied in investigations of high tech SMEs (Partanen *et al.*, 2008; Ruokolainen, 2008, Westerlund and Svahn, 2008).

Two software SMEs were investigated during the course of the research; Company B was investigated for a period of three months during 2006 but went into liquidation after six years of operation, whilst Company A was investigated over a period of two and a half years (until 2008). Both cases were based on the same technology park in the North Wales region. Indeed they were both operating in the same technology incubator building. Therefore this study provided a unique opportunity to analyse two companies that were of similar size and subject to similar conditions, but whose fates were at opposite poles. Further information on both SMEs are provided in Table 1.

Table I. A summary of both cases

Company ID	Company A	Company B
Products/Services	Bespoke software solutions company, providing a range of customised database solutions, IT services and standard software products	1 product, a project management software tool based on new technologies.
Firm Age	9 (in 2008)	6 (liquidated in 2006)
Employees	12 full time, 1 part-time	10 full time, 4 part time
Annual Turnover in 2008	£375,000	n/a
Number of Customers	20	2
Qualified Marketing Employee	Sales Person	Sales Person
Management	1 x Owner-Manager	2 x Owner-Managers (Partners)

Semi-structured interviews

In order to investigate the dyadic relationships between the firms and their customers, and to obtain a holistic view of the marketing in both SMEs, 17 face-to-face semi-structured interviews were conducted with respondents from 15 of the firm's customers in order to uncover their attitudes and opinions of the firms. The respondents' organisational positions ranged from IT Manager and Programme Manager to Managing Director, with the aim being to target the person responsible for software purchase in each organisation (See Table 2 for further respondent data). A list of themes to cover in interviews was compiled based on previous research in SME marketing and customer expectations of B2B relationships. Care was taken to avoid the use of jargon and academic terms and an open approach was taken in encouraging customers to talk about their relationship and experiences with their software SME. The interviewer was prepared with prompts to ensure that rich but focused information was gathered (Carson *et al.*, 2001; Willig, 2008). Therefore a list of topics generally discussed in most interviews included the following:

- Background to the relationship

- Perceived benefits and problems which may have arisen during the relationship

- Satisfaction with the product and service

- Communication with the software company

- Behaviour of the staff and their approach to customer service

- Likelihood of recommendations and consideration of further purchases

- Responsiveness of the company to customer needs

- Relationships with other software companies-thoughts and comparisons with current company

- Overall expectations of a software company

Table II. Interview Respondent Data (Customers)

Customer	Industry	No of Employees	Number of Interviews and Role of Respondent	Private/Public Sector
1	Financial Services	20	1-Managing Director	Private
2	Chemical	560	1 –IT Manager	Private
3	Information Services	10	2 -Managing Director and Head of Systems (separately)	Not For Profit
4	Government	9000	1 - IT Manager	Public
5	Government	20000	1-ProgrammeManager	Public
6	Public Services	50	1 –IT Manager	Public
7	Agriculture	1	1 –Managing Director	Private
8	Sustainable Development	5	1 -Managing Director and Website Officer (combined)	Public
9	Utilities	15	1 -Finance Assistant	Private
10	Manufacturing	350	1 –IT Manager	Private
11	Government	3000	1 –IT Manager	Public
12	Emergency Services	1700	1 -ICT Software Engineer	Public
13	Government/ Economic Development	1000	2 -IT Manager and Project Manager (separately)	Public
14	Government	50	1 –Research and Grants Manager	Public
15	Medical	2000	1-Project Manager	Private

Five additional semi-structured interviews were also conducted with Company B's employees after it had gone into liquidation, in order to gather their perceptions regarding why the company failed. Extended participant observation with Company A throughout the study allowed informal conversations to take place with employees and the owner-manager and a recording of conversations and observations was made in a diary covering two and a half years.

Cross-case analysis

The analysis of both cases draws upon the following sources of data: semi-structured interviews, public documentation, archival records and the researcher's participant observation diary. Construct validity was established by using these multiple sources of evidence and having key respondents check their interview transcripts. The data analysis consisted of an iterative analysis of the various methods following Miles and Huberman (1994)'s three phase procedure. The first phase refers to the process of focusing and simplifying the collected data, the second to an organised and compressed assembly of information and the third to the actual drawing of conclusions. In this respect, the data was firstly analysed separately by conducting content analysis of documents and transcripts, then an overall cross-case analysis was conducted whereby a list of common themes were identified and cross case comparisons were made by using a pattern-matching technique (Yin, 1994).

5. Findings: cross case comparisons

The findings below are reported under the main themes surfaced in the cross-case analysis and include selected quotations from interview respondents.

Communication

Communication was a recurring theme within both SMEs, both internally and externally. Company A proactively and frequently communicated with customers throughout the buying process and following delivery of the software solution. A dialogue between the SME and its customers was deemed necessary in order to develop a match between customer need and software solution. In Company B, communications with customers were also frequent, but not as proactive. Customers normally had to contact the company with issues which were mainly complaints with regards to product modifications and

software delivery. Internal communications were also weak due to a lack of information sharing within the organisation:

'The idea was that all data would be contained in a central repository and would overcome the need for communications to a certain extent. But this didn't work in practice as important information was never shared' (Company B Employee).

This resulted in a lack of collaboration among employees:

'there was very little collaboration between the team as a whole…all team members had separate modules. We didn't work as a team' (Company B Employee).

Conversely, internal communication within Company A was stronger as brainstorming and idea generation was encouraged at meetings, resulting in a culture of openness and sharing of knowledge. IT tools such as the intranet and CRM were used to facilitate such internal communication. Unlike Company B, Company A's employees also actively communicated with customers, which was useful when technical issues needed to be discussed:

'I know that if (owner-manager) is not there, then I can easily discuss any issues with the software developers' (Customer 2)

Management style

The management styles of both SMEs differed quite significantly. Company A's owner-manager had a fairly democratic and hands-on style, but all major decisions would be taken by him (Carson *et al.*, 1995). He was the 'face' of the company, liaising personally

with customers, creating partnerships and proactively networking. Moreover he was highly motivated and driven, with an ethical style with regards to the treatment of his employees. The employees clearly respected and admired their owner manager:

'(The owner-manager) is a 'hands on' manager who is keen to pass on his extensive knowledge and experience to the team. Though he does not suffer fools, he is approachable, a good motivator, and a great sounding-board for ideas.' (Company A employee).

Both partners of Company B exhibited a laissez-faire management style with the aim of encouraging innovation. However it became apparent that both partners did not share the same values, and had conflicting visions for the organisation. One partner had a technical and engineering background, and thrived in new product development, whilst the other partner, with a background in business and finance, wished to focus on commercialisation. These clashes gradually affected customer relationships:

'There was constant infighting, internal conflict which led to one director having one set of contacts/relationships and the other having another set of contacts/relationships. There were two different sets of conversations with clients which led to internal conflict then conflict with the client…no constructive communication between both directors' (Company B Employee).

'Problems between (both managers) affected client relationships' (Company B Employee).

An internal power struggle between the two directors was evident and as a result, the employees became demotivated.

Delivering on the promise

One of Company A's promises to prospective customers was timely and effective delivery of the software solution. On their home web page their tag-line is:

'We pride ourselves on our ability and proven track record in delivering 100% of projects on time and within budget'

In view of the problems regarding project overruns and failures within the software industry, this is an attractive assurance, and a promise which Company A aimed to keep. For most customers, delivery has been on time and on budget:

"They deliver everything they say they're going to deliver on time and if they can't meet that timescale, they phone us well in advance and we come up with an alternative". (Customer 14)

However for one key customer, initial delivery of the solution failed, and this was an instance that the owner-manager himself called a "disaster". The failure to deliver was due to internal problems and not enough information sharing across the company. Following these problems, Company A's owner-manager decided to restructure the company, which resulted in a general feeling of fresh start based on fixing remaining issues for existing clients, learning from mistakes, and creating a new business. This example is referred to in order to contrast with Company B, whereby mistakes were made with respect to delivery but nothing learned. In times of crisis, Company A's owner-manager re-evaluated the company and made changes accordingly. Company B struggled to deliver on their promise because the struggled to complete their product:

'No single application was ever finished and taken to the market, no sales, no customers' (Company B Employee).

This resulted in a damaged reputation and further hindered their quest for attracting new customers, as there were no references from past customers. Thus a high risk was associated with dealing with Company B. Company B's vision of the software product hindered their ability to adapt to customer needs or to learn from past mistakes, whereas Company A was prepared to modify the solution or even change market direction in response to market or customer feedback.

Planning

Company A's owner-manager was keen to formulate a plan in order to set objectives, list tasks, and to consider the budget and resources required to accomplish objectives. A short term plan and longer term plan proved an effective way of organising and managing work, following work schedules and achieving deadlines, helping the company to visualise opportunities for improvement and learn from past mistakes.

Company B had formulated plans to attract government funding and to satisfy lending from the bank, but they didn't have a strategic plan. They realised that it was important and aimed to formulate a business plan but claimed that product development took priority due to lack of a business or marketing manager.

Market research and promotion

Market research was generally weak in both cases, largely due to limited resources. In Company A, market information was collated via networking, talking to customers and other stakeholders, internet research and attending events. The information was often used to aid decision making, but rarely carried out in a systematic manner and not recorded in CRM. Similarly, Company B did not conduct market research and instead collated ad hoc information through contacts and networks. Unlike Company A, Company B did not have a database with prospective customers and contacts. As a result, each partner and the sales manager had their own list of contacts.

Sales and marketing at Company B was limited. They preferred to aim at expensive marketing activities, such as advertising in quality Project Management magazines and attending exhibitions abroad. There was minimal marketing to local prospective customers. Furthermore, as tendering is a requirement to win high value contracts, the SME would fail at the pre-qualification stage due to their lack of financial stability.

Company B's promotional material consisted of an organisational leaflet and a website, however the content was extremely technical and contained jargon. The benefits to purchasing the product were not clear:

> *'There were some sales literature but it was written from a technical standpoint therefore not effective to present to customers...There was no exciting sales collateral –the product wasn't inviting to purchase'* (Company B Employee).

Although they strived to satisfy their customers, building long-term relationships with customers was not a priority. The SME had two customers from its inception and strived to retain them for their own survival instead of for mutual benefits. The interview with Company B's customer showed that the SME had some innovative ideas but couldn't deliver to the customer's satisfaction:

> *'(Company B) had some neat development concepts much earlier than other software houses. Very innovative. Good development concepts of rapid software evolution...The tools of development used could have been a massive competitive advantage for them if converted into delivery'* (Customer 15).

As a result, both customers dissolved their relationships with the SME.

Overall, Company A made an effort to market its products and services, and developed a foundation for such activities through their detailed planning. Marketing was conducted

mainly through developing relationships with customers and their activities within networks. Other tools used included web marketing, direct marketing, local and national events and trade exhibitions, telemarketing and use of local press. The SME's owner-manager was open to trying out new marketing methods and activities to see what worked best.

Customer orientation

Company A recognised the importance of customer orientation, which they considered listening to customer needs and tailoring solutions and services to customer requirements:

> "They understand what we are trying to achieve, they understand the way that we work and they bend over backwards to accommodate our wishes" (Customer 12).

They also believed that a balance was necessary between the level of innovation and customer needs, and that a comprehensive understanding of their business was vital in developing an optimal software solution for their needs. Similarly, they welcomed customer feedback on prototype software products and made the necessary amendments. As for Company B, their focus was not first and foremost on the consumer, but on creating its own visualised innovative software solution. No prior market research was undertaken to establish whether there was a demand in the market for such a product. Nevertheless the product was sold to two customers, but they struggled to adapt the software to the consumer's particular needs, resorting to amending the product the way it wanted to as opposed to the way the customer wanted:

> '(The SME) listened to our needs but went outside the scope, exploring further in the way of improvements, ideas, innovation' (Customer 15).

Company B's focus was on the product itself, innovation and re-developing the product. They believed that this is what a customer would want: the most innovative product on the market.

Culture

Company A's organisational culture was one of hard work, ambition and teamwork where employees were dedicated to getting the job done. The owner-manager encouraged the sharing of knowledge in order to stimulate growth, customer and employee satisfaction. The lack of customer orientation in Company B can be ascribed to the intrinsic research culture of the organisation. The culture ensured that ideas, innovation and research took priority over customer needs. This was apparent to employees and customers alike:

'they weren't a commercial business' (Company B Employee).

'(the customer) felt that interesting ideas were being followed as opposed to the project deadline...Research culture of (the SME)' (Customer 15).

Although the SME acquired extensive funding to develop ideas and create innovative products as a result of their research, the SME became reliant on funding as opposed to product sales. As it became apparent that the product was not going to be easily sold, employees became demotivated and worried for their positions in the company.

Table 3 summarises the behaviours identified as being relevant to marketing using the key themes surfaced for the cross case analysis, and compares the behaviours of Company A and Company B.

Table III. A summary of cross case comparisons

Case Study Themes	Company A	Company B
Communication	Strong and consistent – internally and externally. Open and frequent. Essential for understanding of customer needs	Frequent, but of a negative nature –complaints. Lack of information sharing internally.
Management style	Hands-on style, part of the team, ambitious.	Power struggles among management Encouraged and supported innovation
Delivering on the promise	Effective, but also a learning process	Unsuccessful delivery due to lack of finished product
Planning	Business plans formulated.	Lack of formalised business planning
Market research and promotion	Ad hoc market research, a range of promotional activities carried out	Weak market research, basic promotional material
Customer orientation	A high degree of customer orientation, tailoring solutions to customers and welcoming feedback	Product first, customer second Lack of customer satisfaction
Culture	A balance between R&D and commercialism.	A predominant research culture

6. Discussion

The issues raised in the literature on marketing in SMEs were certainly evident in both case studies. The difficulties encountered included a lack of resources, limited finance and lack of marketing expertise (Carson *et al.*, 1995; Hill, 2001; Simpson and Taylor, 2002). Although Company A's owner-manager consulted with his employees, the power and decision making was concentrated solely in the manager and decisions were sometimes made based on instinct and personal preferences, as opposed to a strategic and logical assessment of the environment (Chaston, 1997). However, decisions often had to be made

quickly and were based on what information was available to the SME at that time. In Company B, decisions were made without adequate consideration of opportunities and the environment. Moreover different decisions were made by both partners, and their reluctance to communicate with each other caused conflict among the partners. The role of the employees themselves was also critical, echoing the findings of Forsman (2008) where business development success projects in SMEs included participative and highly motivated employees. A lack of formal planning is identified as a major issue in the SME Marketing literature (Carson and Cromie, 1990), and Company B had no long term plans in place. However careful planning was conducted at Company A, concurring with the literature that SMEs that conduct market planning are more likely to survive and take off (Gilmore *et al.,* 2006; Walker *et al.*, 1992). Company A seemed to conduct instinctive marketing, but which was carried out as part of a plan. They also conducted trial and error marketing as they endeavoured to try different marketing approaches. Thus, the marketing was often fragmented, and it was both reactive and proactive (Fuller, 1994). Reactive marketing was apparent in the sense that an opportunity would present itself in the form of an invitation to tender, or by identifying imminent opportunities via networking with personal contacts (Gilmore *et al.*, 2001; O'Donnell, 2004). However, their marketing was proactive in the sense that Company A made consistent efforts to develop relationships, they tried various marketing activities and aimed to plan most activities. Company A recognised that marketing was important, but sometimes struggled to decide which activities to focus on. As for Company B, their marketing was haphazard, reactive and very basic.

With regards to the software offering, both SMEs faced market uncertainty and buyer's reluctance to commit to purchase due to anxiety regarding non-standardised products and anxiety relating to functionality of the product. In Company A, the endorsement of their product by one customer meant that it was easier to attract the second customer (Ruokolainen, 2008). The concept of 'customers as innovators' seemed alien to Company B, as they did not wish to listen to customer needs and requirements, however Company

A did recognise the importance of listening to customer needs, particularly when developing bespoke solutions (Helander and Ulkiniemi, 2006). Moreover, it appeared that often customers did not know exactly what they wanted, and so further changes needed to be made following the development of a prototype (Thomke and Von Hippel, 2002). As Company A were tolerant in this respect, it ultimately strengthened their customer relationships.

The literature highlights the difficulties often encountered between Marketing and R&D within high-tech companies (Keaveney, 2008; Massey and Kyriazis, 2007). However no major difficulties were identified in Company A, and no function was considered superior. At Company B, problems were evident as the SME's culture valued technical knowledge more than marketing knowledge, which concurs with the literature proposing that spending on R&D in the high-tech sector is regarded as more important than spending on marketing (Ko, 2005). Company B was committed to innovation and new product development, but contrary to the literature, there was no early involvement of functional groups including marketing and no early market testing (Owens, 2007). Company B's fate seems to concur with Berry's study (1996) which found that technology-driven companies are less successful in terms of corporate performance. The findings of Company B also echoes the work of Hurley and Hult (1998) who contend that *'organisations may want innovation, but when their implicit norms and values reinforce the status quo, it is not forthcoming'* (Hurley and Hult, 1998 p.52). Indeed their study found that innovativeness is associated with cultures that emphasise participative decision making, communication and power sharing. The nature of the software industry requires companies to innovate but it seems that Company B was focussed on innovation only whilst Company A had worked out how to integrate innovation orientation with customer and market orientation to ensure success.

The activities of Company A seem to correspond with some of the literature on the marketing of software (Alajoutsijarvi *et al.*, 2000; Easingwood *et al.,* 2006). Tactics

included collaborating with complementary organisations and forming alliances. Other marketing tactics include versioning software products and pre-announcing products as part of launching new solutions. The suggestion that software companies tend to run a business based on projects was true in both case studies, but neither case had developed into a 'productised' company, which is arguably key to sustained growth (Alajoutsijarvi *et al.*, 2000). Although Company A deemed it necessary to aim towards a productisation strategy, because of its associated benefits, their success was due to their ability to provide solution services which matched customer needs (Hedaa and Ritter, 2005). Moreover, Company B did not consider the development of relationships a vital aspect of marketing, aligning with the findings of Alajoutsijarvi *et al* (2000), however Company A clearly did view relationships as a vital aspect of their marketing. Helander and Ulkuniemi (2006) argue that the successful marketing of software requires a relational competency which involves a comprehensive understanding of the technology as well as the customers' business, and Company A seemed to have mastered both elements.

The comparative case study has demonstrated two different approaches of marketing by two similar SMEs in the software industry. Company B is a pivotal case in this study, and can be used to illustrate bad practice when marketing for survival. Therefore Table 4 summarises learning from both success and failure cases in order to generate a list of good practice to be adopted, and bad practice to be avoided.

Table IV. Learning from success and failure: Good and bad practice in Marketing for Survival

Good Practice	Bad Practice (To be avoided)
• Frequent and open communication with customers • Delivering on the promise • Being realistic about what can be achieved/ delivered • Effective internal communication • Working from a business plan • Developing solutions based on known customer requirements • Conducting market research (including customer feedback) • Promoting the SME via networking, local and regional events, developing promotional material which address solutions to customer problems • Achieving a balance between customer/market orientation and innovation	• Avoiding complaints • Not completing a software product before delivery • Using technical terms and jargon in promotional material • Lack of internal communication and teamwork • Power struggles and arguments between owners/managers • No business/marketing plan • No market research • Over-emphasis on innovation and research at the cost of providing customer satisfaction

7. Conclusions and recommendations

This comparative case study confirms the need for software SMEs to strike a balance between customer orientation and innovativeness in order to survive. In terms of customer orientation, the findings show that it is not only related to customer contacts and relationships, but is also about delivering on the promise. The SME's ability to achieve this is highly dependent on management style, communication within the firms and with their customers, planning, market research and promotion, and culture.

This is a unique study comparing two software SMEs, particularly one which failed and one which succeeded under similar conditions, thus illustrating good practice by contrasting with bad practice. It also develops the knowledge of how SMEs conduct marketing in the software industry as it investigates both the customer and the employees' points of view.

This research has some limitations that offer opportunities for further research. For instance, since it has taken a primarily qualitative approach, and consists of two case studies, additional case studies located in North Wales could be explored in order to increase validity of the findings. External reliability could be improved by carrying out a large-scale survey of high tech SMEs aiming to discover their perceptions of marketing, how they undertake marketing and how it affects their performances.

Further research is also required to fully explore customer perceptions and expectations of software suppliers, in order to understand the factors they deem important when selecting a software supplier and the perceived risk they associate with dealing with software SMEs. This is of particular importance in an industry which is fast-changing and where products are of a complex and intangible nature, suggesting a need for customer-supplier relationships, frequent communications and a mutual understanding of need.

The benefits of this comparative case study approach which demonstrates the stark contrast between successful and unsuccessful behaviour can act as a useful guide to practitioners, and could be particularly valuable to SMEs who often have technical but less managerial competencies (Scozzi *et al.*, 2005). This would be especially useful in light of some SMEs' tendency to focus on innovation which sometimes dominates customers' needs. The findings may also provide a benchmark for SME managers to evaluate how well their own firm meets the success criteria (Forsman, 2008). However, there is scope for further research that explores whether these elements of good and bad practice apply

solely to the software sector and technology sectors in general or whether they are appropriate to SMEs in other industry sectors.

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