***The impact of customer relationship management systems in small businesses***

*By Martin Wynn, Phillip Turner, Amitave Banik and Gary Duckworth*

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***Abstract***

*Larger companies have for some years used customer relationship management systems to support increases in turnover and market share, but the benefits of these systems for small businesses has often been viewed with scepticism. With more limited financial and human resources, the successful acquisition and implementation of systems of this scale can be problematic for small companies; and yet the potential benefits are nevertheless attractive to companies that are often continually striving to increase market share and profitability, whilst retaining a firm control on revenue costs and capital expenditure. This article addresses this issue through an analysis of three case studies of small businesses where customer relationship management systems have been recently implemented and their impact monitored over a three to four year period. It discusses the key issues that have produced different degrees of success in these cases. It highlights the significance of identifying the appropriate business strategy, and then developing a coordinated and balanced approach to enhancing people skills, making process improvements across an extended supply chain, and introducing new systems functionality.*

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# *Introduction*

Electronic customer relationship management (e-CRM) systems have emerged as a major component of information systems strategy in the last decade as companies have realised the importance of integrating all customer facing systems as an element of their business strategy, to manage and build stronger customer relations. Initially, e-CRM adoption was largely restricted to the bigger organisations that had the necessary resources to identify the opportunities, define requirements and implement new processes and technologies that were often part of a broader e-business strategy. More recently, however, an increasing number of small to medium sized businesses (SMEs) have embarked upon e-CRM projects, attracted by the possibilities of growth and innovation in their customer related activities and processes; but smaller businesses have been more reluctant to invest in these new systems, deterred by the risks associated with new investment, process change and possible disruption of business operations. These small business enterprises (SBEs) are defined by the European Union as having between 10 and 49 staff and less than 10m euro annual turnover, and are the focus of this research.

The e-CRM concept pre-dates the widespread adoption of the internet by companies and organisations. It was originally seen as an integrated sales, marketing and service strategy, but “this activity has taken on an increased importance in many organisations with the increasing use of the internet” (Chen, 2001). This article examines three case studies of e-CRM deployment in SBEs in the internet age. The ensuing literature review establishes the theoretical framework for the case study analysis and there then follows a brief discussion of the case study research method used in this study. The findings and analysis sections then discuss and assess the e-CRM projects in the three case study companies and distil from these cases the key strategic and operational issues that can guide other similarly sized companies in maximising the benefits of e-CRM deployment. In two of the case studies - at EnergistUK and TPG DisableAids - the e-CRM projects are seen as relative successes, but at the third case study, the e-CRM project was a factor in the ultimate collapse of the company and its move into administration. This third company is thus discussed as an alias - CXSS Ltd – as is its CRM software -CharityDonor.

# *Theoretical Framework*

Over the past decade, a number of concepts and models have been developed and applied to companies and organizations in an attempt to assess the impacts of e-CRM. Holland and Naude (2004) argued that marketing should be viewed as an information handling problem due to the central role of information technology within the marketing process. Technological advances have enabled innovative organizations to make product and service developments that provide distinctive benefits to their customers, and there have been a number of guides published in recent years that have tried to pinpoint the key actions needed for small and medium sized companies to successfully implement e-CRM (Chari, 2012; Ziff Davies Research, 2012; Epicor, 2014). These advances, however, can prove illusory, especially to SBEs, who may be put under cost and service level pressures by bigger partners in their extended supply chain.

 **Figure 1**

**e-CRM Integration points**

 It is thus critical for SBEs to understand and execute a strategy that allows them to build an e-CRM capability that delivers benefit across their supply chain. This can be viewed as the alignment of business processes with customer service strategies and techniques to build and develop customer loyalty (Rigby, Reichheld, and Schefter, 2006). The link between business strategy, business model and related tactics underscores the importance of clearly identifying what role e-CRM systems will play within overall business development, thereby determining the appropriate tactics and measures for implementation (Casadesus-Masanell and Ricart, 2010). In systems terms, the objective is to integrate the range of customer facing applications into a single, integrated system, available to customers and consumers via the internet (Figure 1). An e-CRM solution will typically be based on a customer and consumer database, with full order capture and tracking capability. There will normally be some marketing functionality, allowing companies to plan and track marketing and promotional campaigns and monitor return on investment. Modern systems are now fully “web-enabled” allowing access to them via the internet. These systems will thus also provide a “web portal” capability, constituting the web front end to the order capture function. The web front end to an e-CRM system may become the company’s main website, or it may be linked to, or be part of, that main website.

e-CRM systems can facilitate a more personal relationship with customers and consumers, through providing tailored routing through the website, based on a customer’s previous history and known product preferences. This routing, known as personalisation, is a rule based function that allows the company to make educated guesses about special offers, promotions and information that the company provides to visitors to the website. Customer information regarding, for example, buying trends, interests, average spending, location and gender can be captured and used to manage individual customer relationships and provide a consistent interface to the customer, as opposed to a number of functions often based on a disparate set of non-integrated systems.

Vendor selection is also a significant factor for SBEs. There exists a range of e-CRM package suppliers, from the so called ‘mega-vendors’ like Microsoft to the mid-range companies and the smaller independent software houses. Sabherwal and Becerra-Fernandez (2011) note that mega-vendors may appear to offer a number of advantages such as their financial and operational stability, considerable experience and easier integration with existing, potentially disparate, legacy systems. However, these large software houses may offer a less personal and tailored service in comparison with the smaller independent software companies. Smaller scale vendors may also be more accommodating in systems customisation (Gartner 2011). SBEs may also choose to use a licensed reseller - a company that has legally purchased licenses, normally at a discounted price, from the software manufacturers to sell, install and support the software in client companies to earn commission. These resellers can also develop a good rapport with customer companies but may not offer customisation nor have the same level of understanding of the product in comparison with the independent or mega-vendors. Since there are often multiple resellers for mega-vendors, this also provides contingency for on-going support should the specific reseller used go out of business.

Integration of e-CRM with existing systems, particularly the financial ledgers packages, is another issue examined by some authors. Cooper, Gwin, and Wakefield (2008) suggest that poor planning and the inability to effectively integrate technology with sales processes is to blame for most e-CRM failure. This integration does not have to be addressed immediately after implementation, as manual interfaces can be used in the short-term. Swedroe (2010) asserts that data validation is critical in ensuring bad data is not simply transferred to new e-CRM systems. Integration of new e-CRM systems with existing systems can be achieved using various methods - application programming interfaces (API’s), or “middleware” products, which are commercially available software for linking systems together, or bespoke links, written and maintained by in-house IT staff. Related to this issue is the manner in which new e-CRM systems are implemented - a phased approach is seen as crucial for achieving project success by some authors (Boardman 2010; George 2009). A phased methodology allows company personnel to become more comfortable with the end solution and to more carefully consider each step in the project life cycle.

 e-CRM can be viewed as part of a broader e-business strategy that encompasses the entire company and inter-company supply chain. Frank (1997) was one of the earliest authors to suggest a process for developing e-business strategy to take advantage of the growing opportunities for internet trading. He identified a number of components of strategy development that are still relevant today – processes, structure, people, applications and technology. Other authors have built on this model in a number of systems contexts, including Heeks (2002) who identified people, processes, technology and structure as the four key elements for transitioning organisations through major systems changes. Chen and Popovich (2003) also emphasise that people, processes and technology are the three key aspects for understanding the outcomes of e-CRM projects, and this was also supported by the DTI (2004) who identified these as the “three pillars” for success in the transition to e-business for SMEs. In similar vein, Faed, Radmand, and Talevski (2010) emphasise the importance of change management in e-CRM projects; and Chaffey (2009) has suggested that it is the organisation’s ability to adapt to such change in a balanced manner that is particularly significant, often evidenced by the adoption of processes and activities prior to project initiation, that underpin the successful deployment of an e-CRM system.

Bearing in mind the issues discussed above, this research addresses three research questions:

1. Why are SBEs adopting e-CRM solutions?
2. What are the different strategies and business models that underpin successful e-CRM projects in SBEs?
3. What are the key operational issues that can leverage strategic benefit when implementing e-CRM projects in SBEs?

# *Research Method*

This research study centres on three qualitative case studies. Case studies can be done by using either qualitative or quantitative evidence that may come from fieldwork, archival records, verbal reports, observations, or any combination of these. A case study examines an organization or series of organizations in depth over time. Saunders, Lewis and Thornhill (2007) identified a case study as “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence”. One of the main strengths of this approach is its depth, and the amount of detail it can generate. Several different methods were used to collect data, all of which are associated with a qualitative approach, including interviews, observation, and documentation analysis. Three important strengths of such qualitative research were highlighted by Silverman (2005): (1) It takes account of the local context; (2) It provides a complex and rich understanding. (3) It happens over a period of time, which also allows for an understanding of causality and history.

This research adopted a qualitative, inductive case study approach. It entailed the active involvement of the authors as project supervisors or managers in three e-CRM projects that were part funded by the UK Government’s Knowledge Transfer Partnership (KTP) scheme (Wynn and Turner, 2013). This allowed first-hand involvement in the project implementation process over a one to two year period. To some degree, these case studies constitute action-research, as defined by Mansell (1991), who notes that “action-research must involve analysis of a problem situation not controlled by the researcher, the making of plans for intervention in the situation, and the attempted execution of these plans.” The three case studies exhibit varying small business profiles and e-CRM strategies, providing a relevant cross-section of cases for investigation of the research questions.

# *Findings*

**EnergistUK**

 EnergistUK (EUK) is a small family business based near Cirencester, Gloucestershire. They operate within the construction consultancy market, employ 40 people and had a turnover of £1.1m in 2009/10 when the e-CRM project started. Founded in 2004, EUK wanted to improve utilisation of their 8,000 customer profiles through the utilisation of an e-CRM system. Their main objectives as a company include providing customers with all assessment needs regarding compliance with environmental regulations, and, more generally, to understand, deliver and exceed all customer needs. Prior to e-CRM deployment, EUK adopted a rudimentary approach to building customer relations, recording all customer details, conversations and past and on-going project work in Microsoft Outlook within numerous shared folders. This approach was reasonably easy to implement but had a number of weaknesses including poor reporting capability and weak version control, with data frequently being lost or duplicated; and the approach was not scalable as the organisation grew.

Table 1

The three company case studies

|  |  |  |  |
| --- | --- | --- | --- |
| **Company** | **Industry sector** | **Staff Nos** | **e-Crm solution**  |
| EnergistUK | Environmental compliance systems | 40 | Microsoft CRM software package |
| TPG DisableAids | Equipment for the elderly & disabled |  48 | Bespoke web portal |
| CXSS Ltd | Outsourced charity fund-raising |  30 | CharityDonor software package |

EUK selected the Microsoft CRM product as the core software product around which to base their e-CRM processing and related activities. They already used Microsoft Office applications, and to expand the software suite to include an e-CRM product seemed logical. The initial software implementation was supported by a licensed distributor, chosen on the criteria of cost, capability and customer rapport. EUK decided to select specific modules from an off-the-shelf package that allowed a degree of configuration and yet, because of Microsoft’s reputation and market position, was likely to remain technically robust, scalable and, therefore, future proofed. The modules selected were the Sales module for data capture purposes (supporting customer management from sales lead to invoicing), and Marketing, so that customers could be targeted and sold the correct services on the basis of increased customer knowledge.

A phased approach was adopted for project implementation, spanning a nine month period in 2010-2011. The requirement to parallel run new and old systems resulted in problems around data updates and staff resourcing, but the relatively speedy implementation limited any overall negative impact. The project was directed by the EUK IT manager, and managed on a day-to-day basis by a full-time project manager, made available via the KTP scheme.

Two methodologies for managing the project were adopted. Initially, SSADM - a mainstream methodology for systems projects - was used, until product selection was made. From then on, Microsoft’s rapid application development (RAD) approach was adhered to, for reasons of cost and practicality. External consultants were also used throughout the implementation. The implemented solution allowed integration with both Outlook and the company’s Sage accounting package, although the Sage integration required the use of Sage Redware, a middleware product which allows a 2-way data exchange between the two packages.

 A major benefit has been the centralisation and consolidation of sales and marketing data, facilitating more effective marketing and customer profiling. The user-friendliness and configurability of the package allowed the system administrators and key users to enhance their core customer data with new details and concepts (data entities and attributes). Data entry screens and views of data have been customised for individual users’ requirements and job roles. Benefits include improved management reporting and better systems integration (in invoicing and servicing) as new versions of the package are released. The system is now well bedded in and upgrades to the new version of the package are planned for 2015. It continues to support the company well and turnover increased significantly since implementation in 2011 to £2.2m in 2013/14.

**TPG DisableAids**

TPG DisableAids (TPG) is a provider of equipment for the elderly and disabled and has grown steadily since 1984 to employ 48 full-time staff today. The company provides a wide range of goods and services ranging from the sale of small items to large home adaptations for the disabled. They provide both to private individuals and large public sector organizations. Products range from daily-living aids, stair-lifts and mobility scooters, through to bespoke patient moving equipment installed into the fabric of homes and public sector buildings. Significant turnover comes from after-sales service. They have numerous suppliers and manufacturers, many of whom manufacture personalised products, such as stair lift products from Stannah. The company had an annual turnover of £3.9m in 2007-8, with stair lift products generating about one-third of turnover but over 50% of profits.

The company’smarket can be divided into different segments (National Health Service, local authorities, district councils, residential & nursing homes, private individuals). Nationwide, this is a multi-billion pound market, which is growing as the age profile of the population increases. At project outset, it was clear that the business opportunity was there to rapidly grow market share, particularly in the new market segments driven by public authority care management, insurance industry home equipment provision, and lifestyle products for the elderly. It was important that the company had the e-business trading capability to respond to the equipment and service requirements of the National Health Service (NHS) and related bodies at short notice as the elderly and disabled leave hospital and return to their homes. The NHS e-procurement initiatives require specific inter-organisational systems integration capabilities which the company had hitherto not had. This alignment was seen as critical to retention of larger public sector organizations and expansion plans of the company.

In particular, there was a requirement on larger public sector organizations to demand systems integration capabilities from its suppliers, to facilitate, amongst other things, contract renewals for the future. Some seven years later, many public sector organizations have failed to implement the integration on their side, but some have. In most instances, integration efforts by public sector bodies was through federated purchase of outsourced systems – none of which included supply chain considerations beyond the public sector members. Growing developments in the provision of personalized custom manufactured or complex assemblies of large value items (such as stair lifts and patient lifting equipment and specialized wheelchairs) required the company to manage larger numbers of complex customer requirements and supply chain considerations. Explicit supply chain management, which had hitherto been *ad hoc*, became increasingly important. Growing personalization for end-users began to cut across multiple customer sectors. Up to this point, processes and technology in the company were aligned to customer sector on the one hand, and to suppliers on the other. But similar consolidation within suppliers and manufacturers allowed the company to develop cross sector processes for customer and supplier information management and inter-organisation communication. Supply chain processes and operations have thus become aligned to both product and customer, rather than to solely customer sector or supplier. This suggests an alternative view to the customer-centric realignment that is often associated with e-CRM implementations, and arguably more closely represents the reality of operations in many SBEs.

Meetings with suppliers and manufacturers highlighted that small companies *per se* were in a poor position from a resource point of view (people and technology), compared to large public sector collectives or multi-national manufacturers. As regards the need to embrace and adopt e-CRM to facilitate customer retention, it was clear that agility to adapt was a main strength of small businesses and critical to their survival. The company embarked on trialing an e-CRM software package following a full review of information systems strategy in 2008. The selected package was Le Grand CRM, which was used for storing marketing and customer data and was linked to the company’s sales order processing software, although it was never used as the order entry system in the manner in which many e-CRM packages are. It was seen as a low cost pilot to help determine functional requirements, which was concluded after 9 months. The problems with interfacing this package effectively with the company’s existing legacy systems led the company to pursue a bespoke software development strategy to provide on-line order capture capabilities for its key customers. Through the KTP scheme, a project leader with appropriate technical skills was engaged to develop and implement a web portal linked to the company’s sales order processing legacy systems by bespoke middleware.

There were several main stages to the project: Stage One achieved the design of the required systems architecture to support flexible e-trading with key customers, particularly public bodies such as the NHS. In Stage Two, the technology infrastructure was upgraded to support e-trading with key customers. The need for flexibility to respond in different ways with different clients, and also to allow for changes in internal systems, led the company to build bespoke middleware products that link the company’s internal legacy systems with the new web portal. In this manner, customer orders can now be captured via the web site and fed through to existing sales processing and back end financial systems.

 Stage Three focused on the design and coding of bespoke software elements, notably the web portal front-end and enhanced middleware connectivity components. Stage Four involved the implementation of e-trading with key customers, including new e-procurement/order capture capabilities to allow transaction processing with NHS and other key customers. The company can now trade electronically with NHS Shared Business Services and local authority organisations responsible for the provision of disabled facilities grants and associated products and services. The web portal went live in 2012 and has allowed the company to meet the e-trading demands of its key public sector customers. This has helped the company maintain and grow its place in the market, turnover increasing to £4.5 m in 2013/14.

**CXSS Ltd**

CXSS Ltd (CXSS) provided a total outsourced service for fund-raising for charities, providing the ‘complete solution’ – direct mailing, call centre telesales, data capture and recording, and cash collection. Through aggressive marketing strategies, the company had grown rapidly, almost doubling turnover year on year between 2005/6 (£0.77m) and 2007/8 (£2.6m). Prior to the e-CRM project, the company had built a bespoke database solution to support its sales and marketing functions, but by 2007/8 it was clear that this was no longer fit for purpose. In early 2008, an internal review of the systems concluded that the company’s IT infrastructure was inadequate to support current and future operations. In the preceding years, when new business had been won, the lack of sound systems meant administrative and management personnel had been drawn in to support the extra workload. This resulted in fluctuations in turnover, profit and staffing levels.

The earlier database solution was used for e-CRM functions, and was developed by external consultants in 2007, using strategically sound products (Visual Basic and a Microsoft SQL database). However, the system suffered from poor requirements specification and a resultant mismatch with management expectations. As the business expanded, the amount of data being stored expanded accordingly and the system started to suffer operational problems including network outages, poor network performance and the lack of easily accessible storage space. The problems were exacerbated by inconsistent data input by untrained and/or inexperienced staff. The company concluded it needed to implement a new e-CRM system.

The project was initiated in September 2009 to reengineer business processes in advance of replacing the current e-CRM system, aimed at fully updating the business infrastructure and reducing central administration overheads. The replacement of the e-CRM system and rationalisation of associated processes and procedures was given top priority. There was, however, a degree of confusion regarding both strategy and tactics which was eventually to undermine the project and contribute to its demise.

The project approval document noted that “the company now intends to develop and implement an e-fundraising service, employing e-business technologies and processes, to parallel its current activities and develop a new revenue stream that will underpin a doubling of current revenues to £6.6m by 2012/13” (Technology Strategy Board, 2007).Some of the company senior team saw this not just as a systems project but also as the catalyst for a move to an e-business *per se*, operating almost entirely via the internet. Then, as the requirements analysis were being assembled, the managing director initiated the trialling of an e-CRM software package (CharityDonor) from the USA with which he was previously familiar. This cut across the intended package selection process and meant that requirements were never properly evaluated, nor were technical aspects suitably assessed. The selection of the proposed system was also influenced by the possibility of CXSS becoming the UK reseller for the software. This contributed to the rapid acquisition and deployment of the system, without there having been an appropriate evaluation of requirements and software options.

The project team had little alternative but to attempt to get the new e-CRM package up and running. Certain areas of functionality needed customising, such as conversion of date and monetary formats to European standards, inclusion of Gift Aid amounts, and reporting parameters. Within two months a test system was delivered and further changes were identified that were needed to make the system workable. The software vendor agreed a scheduled plan of development and released new versions of customised software, albeit with minimal user acceptance testing. The new system was implemented using a ‘big bang’ methodology, which was agreed in advance by the CXSS senior management team, having had very little testing. Data corruptions were identified by users but a lack of in-house database administrators hampered data correction. Delays in the payment of supplier invoices resulted in a loss of vendor support. Despite this, the company continued to use CharityDonor unsupported by the original vendor. Software problems were compounded by issues with migrating data to and from other in-house systems. Further data corruptions resulted, leading to major disruptions in work practice and customer service.

In June 2010, CXSS Ltd went into administration with many of its suppliers owed money. A new company - CXSS Fundraising – was set up and the 30 staff were transferred to this company. The e-CRM project was put on hold, with very little benefit to the new company. This new company also went into administration three years later in June 2013.

# *Analysis*

**Why are small businesses adopting e-CRM solutions?**

The case studies reveal a number of different drivers for the adoption of e-CRM solutions. At EUK, questionnaire and interview feedback suggested that the three main drivers for the e-CRM initiative were: first, internal process improvement, notably in the sales and marketing functions; second, stronger customer relations; and third, increased company performance (turnover and profitability). At TPG, however, the rationale was more complex, more about providing the e-CRM capabilities needed to meet the e-trading requirements of the NHS. Process change was not a major objective and was viewed by some in the company as a cause of unnecessary upheaval. This family run business was conservative in nature and dramatic increases in turnover or bottom-line profits were not expected; very tight control of costs had always been a major component of management culture and company operations and preservation of existing market share and customer relationships more important than growth or new market share.

For CXSS, there were two contrasting, and to some extent conflicting, drivers of the e-CRM initiative. On the one hand, the company aspired to transition to an e-business, operating almost exclusively via the internet with its customers, fund-providers and suppliers. Whilst this was a valid and achievable future vision, the day to day reality required the replacement of poorly supported legacy systems with a more robust system with improved functionality. This confusion in rationale, compounded by the apparent opportunity to become the UK reseller for the CharityDonor software package, was partly responsible for the implementation problems that ensued and the subsequent collapse of the company.

**What are the different strategies and business models that underpin e-CRM projects in small businesses?**

The case studies show the importance of identifying an appropriate e-business strategy for the company and then adopting the technologies and systems that will deliver specific objectives. A mismatch between strategy and adopted technology increases the risk of project failure. EUK introduced new e-CRM systems and processes to underpin a rapid growth in turnover and improvement on profit margins. At TPG, the company’s rationale for its new e-business capabilities was largely defensive, aimed at protecting revenue generation and meeting the demands of major public sector customers for e-procurement. The initial piloting of the LeGrand e-CRM product, although it did not lead to a full implementation, was in some regards a success because it helped the company clearly identify the e-business model it wished to pursue, and thereby develop a more appropriate technical solution. The company did not require the sophisticated sales and marketing functions that many e-CRM packages offer; more realistically it just required a web trading capability that would link effectively to its current sales order processing systems. This alignment of business model with strategic objectives underpinned a revised project scoping and effective technology implementation.

At CXSS, the business model being pursued was different again. Initially, the company management had aspirations to transform the company into an e-business, using an enhanced website and related systems to develop a new revenue stream, to parallel revenues from more traditional fund-raising activities. However, this aspiration was not adequately thought through; there was no development of the vision into clear objectives, and thus no proper evaluation of what technologies would best support the company’s aspirations. The lack of a shared vision amongst

Table 2

e-CRM case studies: three Business Models

|  |  |  |
| --- | --- | --- |
| **Business model and rationale** | **Tactical Considerations** | **Case Study Project Outcomes**  |
| Model 1 - Significant growth in market share, revenue and profits allied to process improvement in sales and marketing functions.  | Use of a major software vendor can provide stability, sound support and scalability as revenues grow.User ownership of project delivery and project outcomes is highly desirable.Carefully monitor associated process changes. Integrate new system with back office systems as soon as is practically possible. Process, People and Technology change management are incremental. | EUK pursued a proactive expansion of its marketing function for niche products in the energy consumers market.Implementation of the Microsoft e-CRM package was driven by user sub-groups which produced significant process improvements and associated efficiencies.Systems capabilities supported continued company growth with revenues reaching £2.2m in 2013/14 from £1.2m in 2008/9. |
| Model 2 - Steady growth in secure markets. Revenue protection and management of threats to customer retention. | Consider piloting low cost package option to clarify requirements and potential benefits.Upgrades to existing systems and/or bespoke developments may be feasible short to mid-term solutions. Implementation by gradual migration, reducing operational impact and limiting impact on manpower resources. Process, People and Technology change management incremental. | TPG initiated a 6 month pilot with Le Grand e-CRM package which helped evaluate process and systems issues and confirmed requirements. This led to bespoke portal developments with clearly identified functionality, which built on existing systems and investment. Systems usage is restricted to a few company staff and key clients but has supported steady growth in turnover from £3.9m in 2007/8 to £4.5m in 2013/14. |
| Model 3 - Dynamic sales growth with significant move to new forms of trading via e-business technologies. Greater exploitation of existing information assets (e.g. customer data base) via new e-CRM capabilities and associated process change. | In a small business, it is unlikely to be feasible to have two separate sets of processes and systems – one for the old ‘bricks and mortar business’, the other, the new e-business. So a new e-CRM system should accommodate both old and new transaction processing activities. The significant risks involved in such a major upheaval can be mitigated by careful implementation planning and sound project management. Implemented as ‘big bang’ significantly impacting operations and productivity at time of change. Process, People and Technology change management will be significant and possibly disruptive. | At CXSS, the overall business direction and intent regarding e-business was unclear. This resulted in inconsistent project direction and ownership from senior management, and a lack of clarity regarding project objectives. As a result, project implementation planning and execution were poor, and there was a misunderstanding of the capabilities of the new CharityDonor software product. The project failed to deliver any significant benefit for the company, which went into administration in 2010, with its successor company also collapsing in 2013. |

the senior management team produced a series of false starts and short-term stopgaps, followed by a rushed decision to acquire an e-CRM package geared to the American fundraising sector (CharityDonor). Although the product might have served the company’s requirements perfectly well post-customisation for the UK market, the implementation was poorly executed and the project remained largely in limbo as the company moved into administration in 2010.

The case studies suggest there are at least three distinct underpinning business models for small businesses pursuing e-CRM system projects, with each one requiring distinct tactics with implications for systems selection and management (Table 2).

**What are the key operational issues that can leverage strategic benefit when implementing e-CRM projects in small businesses?**

The case studies highlight certain operational factors that have a major bearing on the outcome of e-CRM implementations in small businesses. These can be grouped into three factor categories, relating to people, processes and technology, and a fourth, information quality, which is largely the result of progress in the other three areas.

People factors are of particular significance in determining e-CRM project outcomes in small businesses, where there is usually no great depth in the knowledge, skills and experience required for such projects. Like all systems projects that impact major parts of the business, leadership and support from the senior executives is a pre-requisite; equally important, the implementation must be well managed by someone with suitable experience and knowledge. Consultants can play a valuable role when the company does not have the necessary internal resources, which in small businesses is likely**.** The appropriate sourcing and deployment of expertise can have a dramatic effect on project outcomes. This was most clearly seen at CXSS, where the lack of clear project direction led to a hasty product acquisition that cut across the project management processes and procedures that had just been put in place. People competency is a key operational factor.

There needs to be an effective project management process in place to control an e-CRM project, although adherence to any one specific methodology is not necessary. A staged or modular approach to implementation will normally be beneficial, introducing systems functionality in stages and reducing operational risk; this also helps usher in new sales and marketing practices and allows company staff to get used to how the new system works over the implementation period. This also provides time and space for problems to be evaluated and resolved as they crop up, and changes to be prioritised and tested as required. The proactive involvement of end users and the training of key staff are also critical. Both EUK and TPG benefitted from adopting these process choices, ushering in the new technologies with appropriately skilled and motivated staff directing a carefully managed project implementation. This engendered the development and improvement of sales and marketing processes to take advantage of the new system. Process maturity is thus a second key operational factor.

One aspect of process maturity is the inclusion of an extended supply chain within project scope. At TPG, the new bespoke e-CRM capabilities involved liaison with key public sector clients (the “customer” in Figure 1) who were involved in determining systems requirements and systems trialling. The end consumers – the elderly and disabled – were not included in the original project scope, although an on-line shop for the general public to buy miscellaneous equipment via the website has since been set up. The project at TPG had clearly defined boundaries, was of limited scope, but did involve some extension of supply chain management (Figure 2). At CXSS, the underlying vision – although not clearly articulated or communicated - was for a radical expansion of supply chain management, allowing

**Figure 2**

**e-CRM at TPG DisableAids**



charities (the customer) on-line access to CXSS’s database, with the company also providing software to its customers for the end consumer (the donors themselves) to access both the charities’ and CXSS on-line as appropriate. This suggests that e-CRM will often require a step-change in supply chain management thinking and capabilities to encompass both B2B and B2C processes, if projects are to succeed. At EUK, the supply chain is simpler in that there are a range of different customer sectors but no distinct end-consumers, making the implementation less complex than in the other two SBEs.

As regards technology itself, most small businesses will opt for the purchase or leasing of an e-CRM software package, although in some circumstances, such as at TPG, bespoke developments and upgrades of existing software are worthy of consideration, especially if the required functionality is limited and builds on existing legacy systems capabilities. An assessment of requirements is necessary, as there are differences in the functionality and sophistication of existing e-CRM software packages. The selection of both the software package and the vendor will also be dependent on a number of other criteria, including experience, reputation, rapport, and financial stability of the vendor. EUK chose a mainstream product distributed and supported by a local third party, and this served them well, allowing a well-planned, staged implementation of the package. In addition, the e-CRM solution must be integrated with existing information systems - but the means of achieving this is less critical. Integration underpins the delivery of overall systems functionality, but this can be done via a number of technical routes. In a small business, if programming expertise is available (as at TPG), bespoke links may be an effective short to mid-term option, but the use of standard application programme interfaces (APIs) between packages is likely to be preferable in the long-term. This approach was adopted at EUK, and contributed to a sound technology platform that supported the company’s steady increase in transactions and revenues. Overall technology capability is the third key implementation factor.

**Conclusion**

These three factors – people, processes and technology – have been depicted as the three pillars for success in e-CRM projects (DTI, 2004; King-Turner, 2014). What these case studies emphasise is the importance of keeping progress in all three areas in balance, so that the project can move forward in a controlled and even manner (Figure 3). At EUK, process improvement, people skills development and technology upgrade went more or less hand in hand, with major progress in all areas. This produced significant improvements in information availability and quality, and underpinned the growth in turnover and bottom-line profit that followed. At TPG, advances in these three areas were less marked, but were still balanced – customer facing processes with the major public sector clients were streamlined and key personnel in the sales and stock management areas were retrained to provide new

**Figure 3**

**Balanced vs uneven change in people, process and technology elements in the e-CRM case studies**



skills and capabilities. This enabled them to work with the new systems functions introduced via the website portal that allowed e-procurement by key customers. The net progress in terms of information improvement and business performance was less dramatic, but the project was nevertheless deemed successful.

It was only at CXSS that advances in the three pillars were uneven, and this led to the collapse of the project, and ultimately, the company. The new e-CRM system was a major improvement from a technical perspective, but failure to upgrade staff technical skills to run and manage the system effectively, and a lack of recognition of the need for change in the selling and marketing processes, meant that the company was unable to complete the project and take advantage of the possibilities offered by the new system. The company would have been better off with a less advanced software product that was better geared to the UK market, allowing incremental improvements in technology to match the more limited changes in process efficiencies and people skills. This underlines the importance for small businesses of keeping all three elements of change in balance. Incremental change in all three areas is better than a major step forward in one area that is not matched by parallel improvements in the other two.

McAfee (2003), with reference to e-CRM and other major software packages, noted that “the coordination, managerial oversight and marshalling of resources needed to implement these systems make for a change effort like no other”. The management of this change can be particularly challenging for small businesses, yet the companies studied here indicate that these projects can be successfully pursued. In two of the three companies investigated, these systems projects delivered benefits in line with expectations - supporting a significant growth in annual turnover at EUK and the maintenance of steady organic year on year revenue increases at TPG. However, the failure of the project at CXSS highlights the risks of poor implementation planning and execution, and underscores the need for clarity regarding the purpose of the e-CRM project and the type of business the company aspires to be. Confusion on these issues will invariably lead to project failure.

A key lesson highlighted in these case studies is that, even in small businesses, the principles of sound management must be followed to achieve project success. There are no short cuts in this type of project for small businesses - e-CRM projects require alignment with overall business strategy, the support of senior management, clarity of vision regarding project objectives, sound project management, new supply chain thinking, and appropriately skilled and knowledgeable personnel. The absence of any one of these attributes constitutes a major risk to project outcomes.

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**Biographies**

Martin Wynn is Reader in Business Information Systems in the School of Computing and Technology at the University of Gloucestershire, UK. He spent 20 years in industry as an IT professional, and joined the University of Gloucestershire in 2002 and has worked on over 20 Knowledge Transfer Partnership projects with small businesses.

Phillip Turner is currently IT manager at TPG DisableAids and was previously their full-time KTP Associate. He has also been a KTP supervisor and part-time lecturer for the University of Gloucestershire. Previously he was a Research Fellow at the University of Southampton and Queen Mary and Westfield College (University of London) working on Artificial Intelligence.

Amitave Banik is a full-time PhD student at the University of Gloucestershire, where his research is focussed on the relationships between marketing strategy and technology deployment, particularly in SMEs and small businesses.

Gary Duckworth is a qualified Project Manager working in the Ministry of Defence, and has a Master’s Degree in Computing from the University of Gloucestershire. He was employed as an IT manager at CXSS Ltd in the period 2009-10 and then became their full-time KTP Associate in 2010.

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