

KEY CUSTOMER

identifying and implementing IT solutions that add
value to key account management strategies



Cranfield School of Management

July 20

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KEY CUSTOMERS

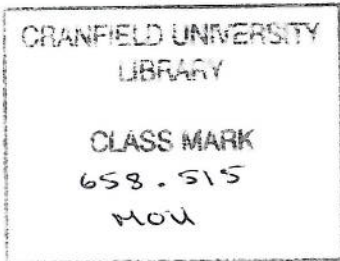
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1. EXECUTIVE SUMMARY OF RESEARCH FINDINGS

This section provides a summary of the key findings and recommendations from the research, including references showing where more detailed information on each topic can be found within the main report.

1.1 OBJECTIVES OF THE RESEARCH (SECTION 2)

Compared to other key business functions, sales and marketing have been late adopters of technology, for reasons described within the report. In addition, as described in the section on CRM systems (Section 6.3) such adoptions have not been without their share of problems and disappointments. Moreover, whilst the overall technology ‘map’ for sales and marketing has now been drawn (see Section 2.1) and continues to be developed, the role of IT in supporting key account management has not been clearly identified.

In order to try and fill this gap, the Cranfield KAM Research Club commissioned a research project with the specific objective of identifying current best practice: in terms of IT applications; and in the use of IT to facilitate best practice in KAM. This report describes the detailed findings from this project.

The research has clearly identified the key role currently played by IT throughout the KAM value chain. This role is growing and new applications are emerging rapidly.

Organisations interviewed within the research are using technology:

- To develop a complete picture of the relationship with global customers;
- As a basis for identifying likely key accounts and attractive prospects;
- To develop customised added value propositions for existing customers;
- To streamline the sales-to-order and procurement processes, delivering substantial benefits to themselves and their customers;
- To deepen the relationship with a customer and gain greater brand exposure;
- To ‘lock-in’ valuable customers;
- To facilitate the account planning and management processes;
- To provide customers with information.

1.2 RESEARCH METHODOLOGY (SECTION 3)

The basis of the research programme was seventeen in-depth interviews with leading companies to investigate their use of technology to support their key account management processes, supported by additional research with a number of Cranfield KAM Research Club members and a literature search. The methodology is described in detail within Section 3 of the report.

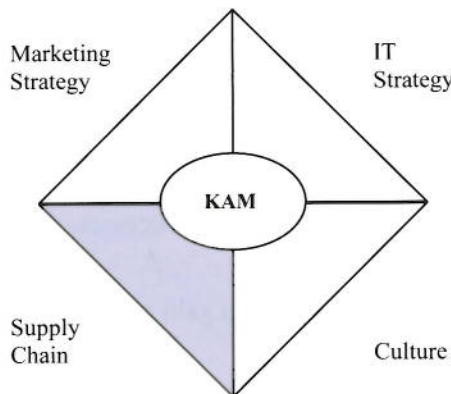
1.3 IDENTIFYING AND DEFINING THE ROLE FOR IT IN DEVELOPING KAM STRATEGY AND RELATIONSHIPS WITH CUSTOMERS (SECTION 4)

This section of the report describes the overall role for IT in supporting and facilitating KAM. In particular (see Section 4.1), it highlights the need to ensure that any investment in technology is firmly rooted in achieving clearly defined and agreed business goals and objectives, using a tool such as the Business Dependency Network (BDN) devised by the IS faculty at Cranfield.

As described in the report, a member of the KAM Research Club successfully applied this tool, within the research programme, to identify the IT solution best suited to achieving key goals within their KAM strategy. The key benefits of processes such as BDN are:

- Establishing whether, and where, the project will add value;
- Obtaining funds, winning hearts and minds;
- Early identification of issues;
- Establishing project measurement criteria;
- Identifying the core members of the IT project implementation team and their roles.

The report also describes the findings from recent research undertaken by the Cranfield CRM Research Forum (see Sections 4.2/3) and extends the three conditions identified in their work considered necessary within an organisation for successful CRM by describing the importance of the Supply Chain within KAM:

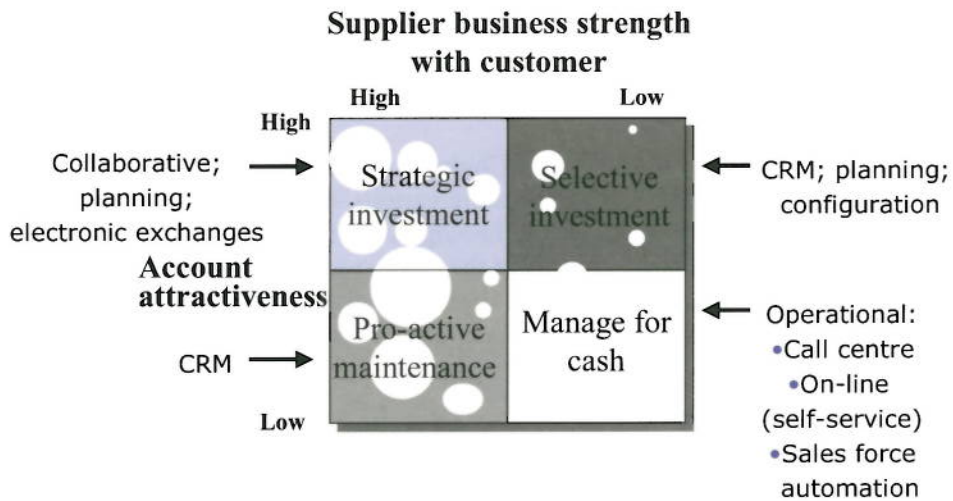


The section on e-business (Section 6.5) describes in detail the role played by technology in supporting aspects of the procurement process, the key findings being summarised in 1.5.5 below.

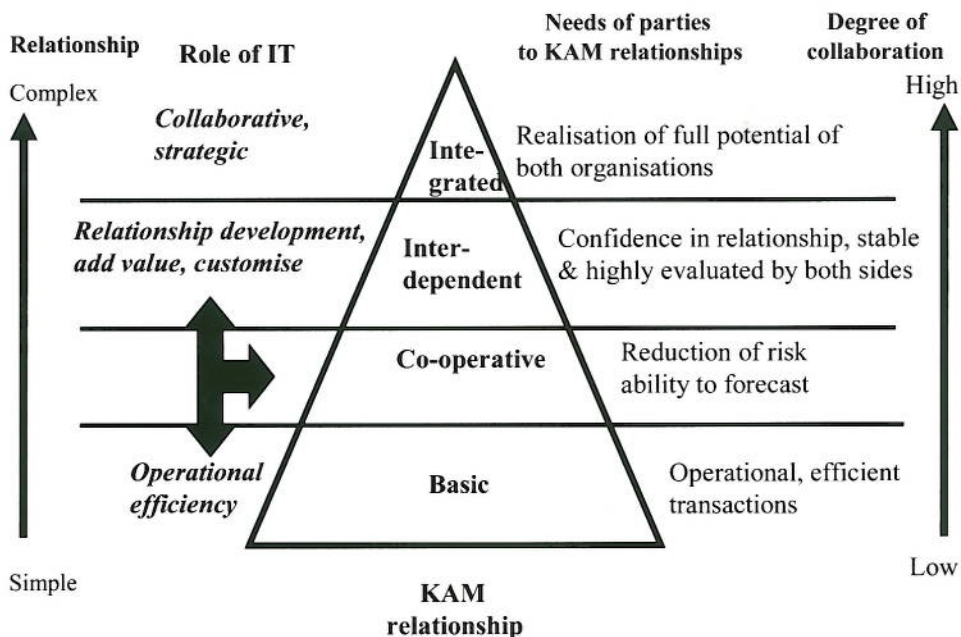
The research investigated the potential roles of technology in supporting and facilitating two of the core KAM models identified within the core research on key account management undertaken by Cranfield in recent years. These roles are described in detail within Sections 4.4 of the report.

The key findings from these sections are as follows:

- Firstly, the research identified the roles that IT can play in supporting the four quadrants within the **Customer portfolio strategy matrix** (Section 4.4.1). The findings are summarised within the following diagram. The key IT tools shown are described in detail within Section 6 of the report (summarised in part 1.6 below).



- The second core KAM model describes the **Hierarchy of Key Account Relationships** (Section 4.4.2) including the needs of the parties concerned and the degree of collaboration. As shown below, technology plays significantly different roles in supporting and facilitating the various levels of relationships:

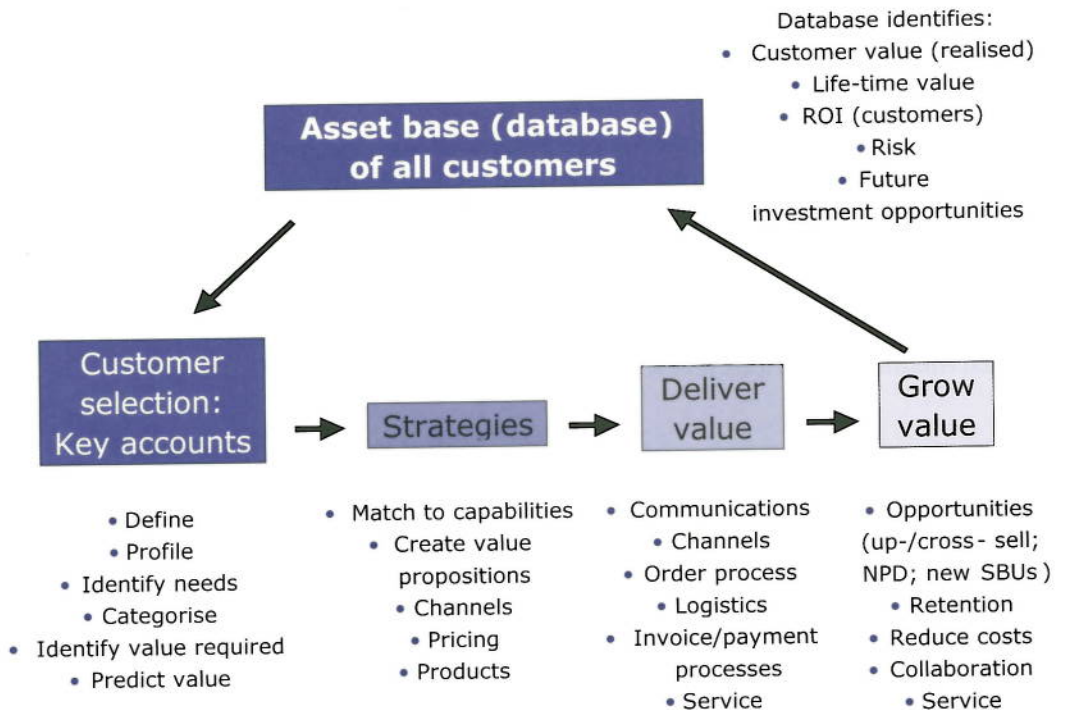


However, none of the roles shown in the above diagram should be considered as either discrete or prescriptive. In most organisations, the same technology tool may well be used to facilitate a variety of relationships, but to achieve differing ends. For example, at the Interdependent level,

where there is also Selective investment in the relationship with that customer, applications implemented primarily to provide operational efficiency and 24/7 service for other customers that are being Managed for Cash within the overall KAM portfolio, can still play an important role in meeting the basic service needs of the Interdependent level customer, as illustrated within the case studies.

1.4 TECHNOLOGY AND THE KAM PROCESS (SECTION 5)

Based on the research findings, a **KAM Value Chain** model has also been developed to illustrate the roles of technology in supporting and facilitating various stages within this overall process. In essence this takes the support role played by technology within Porter's generic Value Chain model, and provides a detailed analysis of this in the context of the key account management process. The following diagram summarises the business activities within the KAM value chain that could benefit from IT support and summarises Section 5.3 of the report:



Appropriate 'thumb-nail' versions of the above diagram appear for each case study within section 5.3 to indicate the relevant stages in the KAM Value Chain that they illustrate.

1.5 TECHNOLOGY TOOLS AND SOLUTIONS (SECTION 6)

The research identified specific IT tools and solutions that can be applied in supporting the stages in the value chain shown above. These applications are described in detail within **Section 6** of the report under the following headings. The coloured boxes indicate the processes supported within the above diagram:

	Selecting/ profiling customers	Strategies	Deliver value	Grow value
• Planning KAM Strategies (6.1)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Turning data into profit (6.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Customer relationship management (6.3)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Customising the offer (6.4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• E-business (6.5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Key account management and development (6.6)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The key conclusion is that all of the applications featured within the research can help grow the current value of the supplier-buyer relationship. However, whilst the process of selecting and profiling key accounts is supported by a narrower range of IT applications, these tools create the essential source of information about customers thereby establishing the core foundations for the whole value chain.

The following section summarises the key lessons for key account management derived from the case studies described in detail within Section 6 of the report.

1.5.1 PLANNING KAM STRATEGY (SECTION 6.1)

This section covers the application of integrated account planning tools. The main lessons are:

- Ensure that all users can easily access, use and maintain content through adequate training. This is vital to gaining commitment;
- Reduce complexity. A simple, stand-alone tool may prove more valuable to the organisation than developing modules within existing CRM systems or creating links with other internal data sources;
- Ensure content format is consistent by using standard templates;
- Provide opportunities for participants to exchange information and discuss issues to create the 'virtual meeting' environment and community spirit;
- Build in, or create access to, the key knowledge necessary to develop an understanding of each account;
- Include functionalities that enable the progress of the plan to be tracked, including prompts to remind team members of actions etc. and to identify where deadlines or other key milestones have been missed;
- Ensure that each account planning team feels that they 'own' the local process.

1.5.2 TURNING DATA INTO KNOWLEDGE (SECTION 6.2)

This section describes how data can be turned into knowledge to help identify key account potential, and to develop a customised value proposition. Key lessons are:

- Using market and customer data to develop models that can identify attractive customers;
- Using technology to provide key customers with an added value proposition. For example by providing highly decentralised conglomerates with a comprehensive reporting system that monitors all purchasing from the supplier throughout the company enables the customer to empower local management and staff;
- Providing a comprehensive, and highly responsive (e.g. next day delivery), service through multi-channels, supported by integrated information about customers and products.

1.5.3 CUSTOMER RELATIONSHIP MANAGEMENT (SECTION 6.3)

Many organisations have implemented CRM tools and systems, but industry commentators have reported disappointing returns on investment.

The Director of SAMA's Department of Education and Training (Cornell, 2001) listed five areas where CRM technologies can benefit account management:

- **Account planning** – plans can be centralised, and accessed by all staff authorised to review, monitor and update;
- **Internal alignment** – resource allocation can be managed in more cost-and-time effective ways, and coordinated with other resource requirements in the business;
- **Metrics** – provides a systematic basis for scanning customer profitability and assessing development potential;
- **Teams** – provides a range of collaborative work tools for teams to interact with each other;
- **KAM programme delivery** – systematises the identification of accounts, capturing customer knowledge and delivering appropriate strategies.

In the opinion of the Hewson group (SRT 2001), CRM technologies can only deliver competitive advantage if:

- The systems are designed to build and reinforce existing strengths of the organisation;
- They deliver value to customers at a cost they can afford;
- The emphasis is on revenue growth rather than cutting costs.

AMR Research Inc, a leading international IT industry research company, offers the following advice to those contemplating the purchase of CRM tools/systems (Johnson & Rufo 2001):

- Avoid overbuying and mismatched products by focusing on usability;
- Ensure that the IT team give sufficient emphasis to integration when reviewing vendors;

- Consider the potential benefits that might be gained by purchasing front end tools from the same vendor as already-installed back office systems to help minimise the integration challenges;
- Allow 3-4 times the cost of software to cover the costs of implementation, services, hardware and training;
- Some products are better suited to meet the needs of mid sized or smaller companies;
- The vendor's quoted implementation timescales often assume that the organisation has already completed the necessary, and often lengthy, pre installation work. The overall elapsed time for CRM technology projects can be considerable, if for example there are data quality/availability issues to be addressed, processes to be analysed or if any organisational re-structuring is necessary.

The key lessons from the case studies in this section (Sections 6.3.1, 6.3.2, 6.3.3) on CRM tools are as follows, under four headings:

Corporate strategy

CRM project implementation

KAM processes

Internal synergy

Corporate strategy

- The key role played by technology in facilitating a change from product to customer focus;
- The importance of gaining senior level commitment. A senior 'champion' can also ensure that the plan is not subverted by other agendas (e.g. resisting pressure for single 'quick-fix' solutions);
- The need for a vision and a structured plan;
- The need for a clearly defined business case, including detailed measures linked to clearly defined business goals, to monitor progress;
- The opportunities technology offers to create a comprehensive picture of global customers and their relationship with the supplier;
- Attracting higher quality staff - 'exciting developments attract excited recruits'.

CRM project implementation

- The need to prioritise implementations;
- The value of having an integrated technology solution;
- The need for flexibility in developing a business case for the initial stages of a technology project;
- 'Off-the-shelf' IT products may provide adequate initial functionality, additional options being added as experience is gained and when the need arises;
- The need in some cases to prove the case for investment in IT and gain commitment from senior management through a pilot project ('CRM/KAM by stealth').

KAM processes

- The need to review all relevant business processes and re-align where necessary to facilitate an end-to-end view of the customer ‘lifecycle’;
- The opportunities for significant cost savings, revenue growth and improved customer service;
- Apply this knowledge of the customer and the overall relationship to respond proactively instead of reactively – a faster and co-ordinated response;
- Easier to identify and compile ‘bundled’ product offers and value-added solutions;
- Using knowledge of the end user to support intermediaries and strengthen relationships with them;
- The role of technology in building an understanding of the *indirect* customer and their needs;
- Improved targeting for new business and expanding existing accounts;
- ‘Lost customer’ and retention marketing become possible;
- Using technology to improve productivity and target customer sales/support resources;
- Improved customer service by bringing the marketing and sales activities closer together, and by creating an effective centralised sales support team;
- Enabling all customer service teams to share information through a common database and technology platform;
- Value of using a database to support call centres;
- Motivating the sales-force to collect information about end-users thus moving the balance of power away from intermediaries;
- Structured and more productive meetings, and other contacts, between the sales team and end-users;
- Pipeline for orders now more transparent within the company;
- Higher level of company visibility to end-user customer;
- The value of enabling key customers/partners to access the system.

Internal synergy

- Demonstrating the value of a centralised database to other departments;
- Creating a closer relationship between marketing and IT (shared learning curve);
- Improved stock control;
- Exposure of the benefits to other areas of the company.

1.5.4 CUSTOMISING THE OFFER (SECTION 6.4)

This section covers the role of configuration tools in supporting the sales process. The benefits found by the research are:

- Opportunities to create a highly customised offer and price;
- Opportunities to reduce the lead-to-order cycle;
- Potential to increase order value and protect margins;
- Opportunities to reduce the transaction costs for producers of high margin, complex products by streamlining the process;
- Providing consistency across all channels;
- Improve the performance of the sales force;
- Opportunities to create a more in-depth understanding of a customer's needs and a deeper relationship.

1.5.5 E-BUSINESS (SECTION 6.5)

This section covers two levels of e-business:

*Web-sites and extranets
e-procurement (including electronic exchanges)*

The key points from the case studies are listed below.

Web-sites and extranets (Sections 6.5.1.1, 6.5.1.2, 6.5.1.3, 6.5.3)

- Using technology to create a joint 'virtual' community within the customer and supplier organisations;
- Assisting the customer in fostering cross-functional team building and changing the internal culture;
- Creating a knowledge centre accessible to all participants;
- Providing opportunities to re-enforce the supplier brand and associated values within the customer organisation;
- Creating 'lock-in' with the customer;
- Reducing administration costs;
- Opportunities to significantly reduce product specification costs and the order process – for the customer and the supplier;
- Opportunities to create differentiation;
- The need to understand customer business processes;
- Potential for providing 24/7 customer service;
- Using an established IT platform to develop new services (and deliver at lower cost) and revenue opportunities;
- The need to identify meaningful measures in order to measure ROI;

- The need to develop a persuasive case and provide incentives in order to encourage customers to invest in technology.

e-procurement (Sections 6.5.2.1, 6.5.3)

- IT related criteria for selecting likely key customers;
- Opportunities for substantial savings in procurement costs (supplier and customer);
- Significant reduction in error rates within orders and invoices;
- Opportunities to consolidate orders and invoices;
- Reduced 'order-delivery' timescale (e.g. facilitating next day delivery);
- Creating 'industry sector' standards for product descriptions within a consolidated electronic catalogue;
- Creates the basis for wider/deeper relationships that can focus on strategic opportunities rather than on resolving 'day-to-day' issues;
- Benefits of enabling customers to access supplier knowledge base;
- The need to provide centralised specialist support to customers.
- Significant investment required to establish the 'hub' and electronic catalogue;
- Solutions may be ERP platform dependent;
- Unlikely to cover all needs/supplies within a sector;
- Customer preference for multi-channel access.

1.5.6 KEY ACCOUNT MANAGEMENT AND DEVELOPMENT (SECTION 6.6)

This section describes the benefits of developing a consolidated database of account management information. Key benefits are:

- Facilitating the consolidation of account information;
- Creating the information base to measure costs and revenues per account, and, overall account performance against plan;
- Development and ownership by sales and marketing (rather than finance or IT);
- Establishing the benefits of KAM and gaining commitment.

1.6 IMPLEMENTING IT PROJECTS: KEY LESSONS FOR KAM (SECTION 7)

In addition to the specific points covering CRM technology projects described in the previous section, the report also contains a section (Section 7) devoted to the generic issues associated with the development and implementation of technology projects to support marketing, sales and customer service functions. The key points from this section are shown below:

- Ensure that the choice of IT solution is clearly derived from business goals using processes such as the Business Dependency Network (described in detail within Section 4.1 of the report);

- Ensure that senior management are fully committed;
- The KAM team need to be fully involved in defining needs, deciding solutions and implementation;
- If the project is totally KAM related, then ensure that the project is managed by the KAM team; if the investment is primarily for other purposes but has benefits for KAM, then ensure that the team is involved. The Benefits Dependency Network can help identify all those who need to be involved in the project;
- Fully involve end users in the development and implementation stages to build commitment, and ensure that the tools provide a viable solution for those expected to use them. Benefits to users need to be clearly identified and communicated, and, the training programme needs to be business rather than IT led/focused;
- Critical to success is an adequate strategy covering data issues within the overall plan or within the organisation. This needs to include factors such as data availability, undertaking a cost-benefit analysis, quality, and processes to keep the data up-to-date;
- Start with an 80% solution based on an 'off-the-shelf' package, rather than implementing an over-complex solution;
- Don't view technology as a catalyst to change the culture or business processes within the organisation. These issues need to be resolved before decisions on IT investments are made. However, change management is key to success of the overall programme;
- Ensure that all the relevant business processes are identified, mapped and reviewed before selecting IT tools and solutions;
- Ensure that the customer is fully involved wherever necessary.

The full findings are set out in the remaining sections of the report:

Section 2: This section contains an overview of the role played by IT in supporting and facilitating marketing, plus the detailed objectives of the research project;

Section 3: This contains a description of the research methodologies used in the project;

Section 4: Using as a base four models developed within previous Cranfield KAM and CRM research projects, this section applies the findings from the latest research to examine the role that IT can play in developing KAM strategy and relationships with customers;

Section 5: This section introduces a KAM value chain model developed from the current research. This model provides a route-map to help define the role of IT in supporting core KAM business processes;

Section 6: This section examines in detail the role for IT within each step in the KAM value chain and contains a number of detailed case studies from the research interviews to illustrate how leading global organisations are benefiting from the application of IT solutions;

Section 7: This final section provides guidance on how to help ensure that the maximum benefit can be gained from the investment in KAM related IT projects.

2. INTRODUCTION

2.1 THE EVOLUTION OF IT APPLIED TO MARKETING

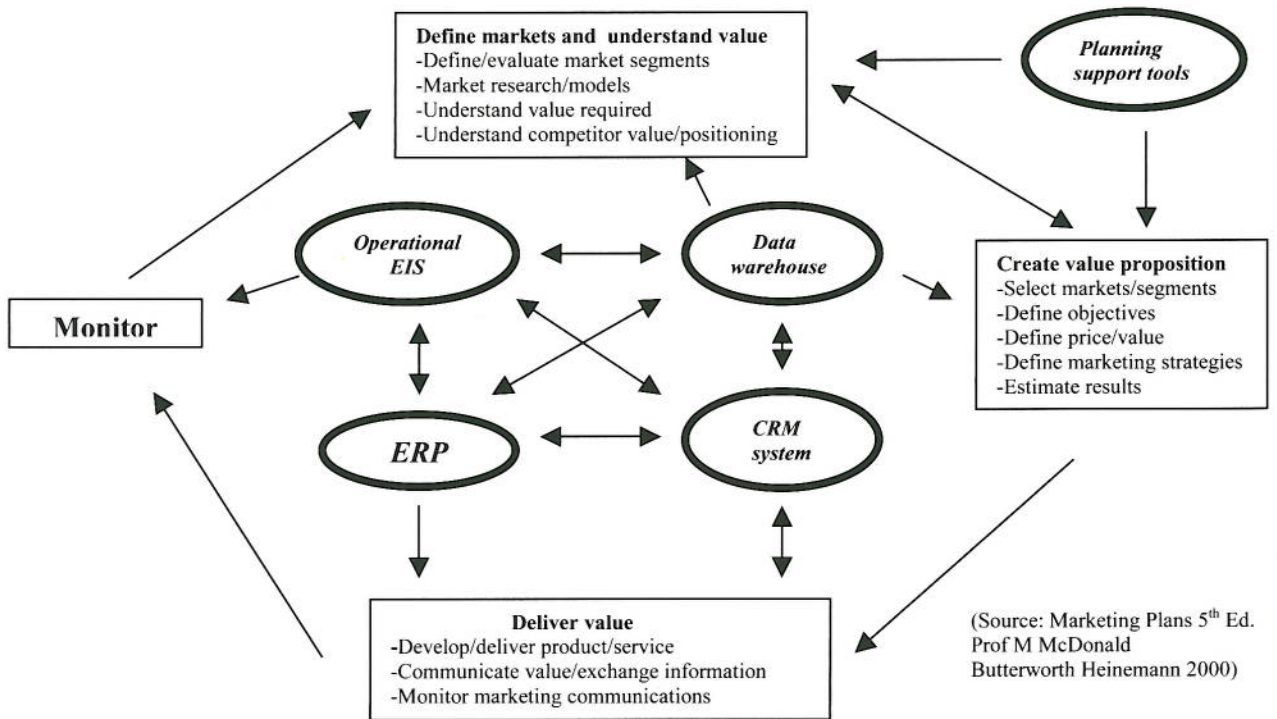
Until relatively recently, marketing and sales functions have benefited to a much lesser extent than other key business functions from specialist IT products. Generally, the applications used by these activities have been enterprise-wide products, such as finance/management accounting packages, SAP solutions, Microsoft Office desktop products, intranets etc. used by the marketing and sales teams as part of the overall business infrastructure. The one main exception was the development in the 1980s of computerised customer databases and associated systems to support volume direct mail campaigns, mainly in business-to-consumer organisations supporting data processing bureaux and mailing houses.

Under the umbrella of Customer Relationship Management (CRM) tools, there has in recent years been a rapid growth in IT products aimed at supporting marketing, sales and customer service. These solutions cover:

- **Customer databases and enterprise-wide data warehouses (and associated data marts to support specific applications)** – to process and store detailed information about customers and their relationships with an organisation;
- **OLAP, ROLAP and other data analysis tools** – to create information and knowledge from customer data and provide input to marketing, sales and customer service activities and planning;
- **Campaign management systems** – to automate the development, execution and response analysis of direct marketing campaigns through mail, telephone and on-line channels;
- **Contact management systems** – to support call handling centres and web-sites used for sales, marketing, operations and customer service activities;
- **Sales force automation** – to link the field sales team with back-office systems to support customer relationships, provide product information and facilitate remote order processing;
- **Call centres** – to support marketing, sales, customer service and operations;
- **Web technology** - to support e-commerce through web-sites/internet, extranets, intranets and e mail plus application service provider software;
- **On-line training** – to support or replace traditional face-to-face and distance learning training and education methods;
- **On-line procurement** – to facilitate exchanges and auctions;
- **Electronic data interchange (EDI)** – to support and facilitate procurement.

The following diagram provides a simplified overview of the various roles that IT can play in supporting marketing activities and functions, throughout the value chain:

Figure 2.1: IT support for marketing



This diagram represents the *generic* roles for IT tools and solutions within marketing. In Section 5 of the report, the value chain *specific to key account management* is described together with the roles played by IT at each stage in that process. Section 6 then drills down into the KAM value chain and describes specific tools and solutions that can add value to the various stages, illustrated by case studies drawn from the research interviews.

The above diagram also shows where 'CRM systems' fit into the overall marketing processes. Section 6.3 covers the role of CRM tools in more detail and includes two more detailed diagrams showing firstly the component tools, and secondly how these interface with back office systems (such as enterprise resource planning and transaction processing systems etc), and the customer. There is a widely held belief that many of the new front office (customer facing), CRM technologies, such as contact management systems, were originally developed to support 'business-to-consumer' relationships. In reality, these application tools were initially used in 'business-to-business', where the number of relationships, volumes of data and contact levels were generally relatively small. When applied to 'business-to-consumer', these early tools were often of insufficient power to support the much larger volumes of customers, contacts and transactions. The same evolutionary process applies to extranet development and the early phases of e-commerce.

However, much of the earlier application of these tools within a 'business-to-business' environment was to automate individual existing processes often at business unit or function level, such as sales, in order to create efficiencies and reduce costs, rather than to help achieve the key goals of what is now called customer relationship management – selecting those customers of greatest potential value to the supplier at an enterprise-wide level and developing long term mutually beneficial relationships with them. This is, however, the basis of Key Account Management (KAM).

There have been several, well-documented problems with implementing successful CRM solutions, as described in later sections of this report. Some of the key causes leading to perceived failure of the solution or apparent inability to meet expectations include:

- Problems in developing effective business cases through difficulties in identifying precise benefits;
- A vendor-led push to install new technology without adequate consideration by the purchasing organisation of the need, benefits or fit with corporate goals and strategy;
- Viewing CRM as simply an IT project rather than focusing on the real issues of restructuring a business round the customer;
- Data quality and information management issues;
- Insufficient commitment from the board and business units plus inadequate internal communication;
- Setting unrealistically short horizons or attempting to achieve too much;
- Poorly documented business processes in the marketing, sales and customer service functions;
- Culture clash between the disciplined approach required by IT ('hard' skills and 'fixed' data formats) and the less formalised world of marketing and consumer related data ('soft' skills and 'soft' data);
- Lack of understanding of the market/customer, their needs, and an inability to see the world from a customer's perspective;
- Lack of experience in managing and implementing cross-functional IT programmes.

Whilst the application of technology to marketing activities, especially under the banner of CRM and sales force automation, has been the basis for numerous conferences, exhibitions, training, articles, academic papers, books, forum etc, etc. in recent years – and an industry with, according to the Economic Intelligence Unit (Monasco, Hopkins and Luscher, 2000), an estimated global value of \$16.8bn by the end of 2003 - there appears to be no overall review of how technology is being used to support KAM, whether under the CRM heading, or for other purposes, and, more importantly, to provide examples of best practice. Despite a growing interest in the overall concept of building relationships with key customers through KAM principles, the IT sector appears to view this opportunity as primarily a segment, or a derivative, within the overall market for CRM tools rather than identifying and meeting any specific needs within these organisations.

The Cranfield KAM Research Club therefore identified the need to research the application of IT within KAM as a priority within the 2002/3 programme of work.

2.2. OBJECTIVES OF THE RESEARCH

The overall objective of the research project was therefore to identify best practice in the application of IT in supporting KAM. This covers the use being made by organisations, and, identifying any particular solutions that could lead to achieving best practice. Best practice at the ultimate level would constitute the use of IT within a given organisation to support an enterprise-wide KAM strategy. However, it could also be examples of single applications that help an organisation achieve one or more specific objectives – at functional or business unit levels. Some of these solutions might be confined to processes supporting a selling organisation; others to the buying processes, or supporting relationships between the seller and buyer.

A further issue is to identify the extent to which IT can help facilitate the different stages in the development, or evolution of KAM strategy, including the opportunities that technology can provide organisations to progress relationships from one step to the next.

Whilst the organisations covered in the project are likely to use IT to support many, or most, business process and activities, the research focused only on applications that do, or might, impact on KAM functions. Finally, the emphasis is on providing KAM Research Club members with practical advice and guidance when investing in IT to support KAM processes and strategy.

3. METHODOLOGY

The research was divided into two main phases:

Phase One: Secondary Research

Literature and web-site search, including discussions with Cranfield School of Management personnel where relevant, and discussions with other contacts to identify firstly the IT solutions being used to support KAM processes, and secondly the sample of organisations to be included in the interview phases

Phase Two: Primary Research

This phase comprised 17 personal interviews with a number of 'supplier' organisations, 'customer' organisations, software vendors and industry specialists:

Sector	IT Application
Healthcare (2 interviews)	e-procurement
Software vendor (2 interviews)	Sales configuration; planning tool
Financial services (2 interviews)	Web service; account management
Management education	Web-site design
Engineering	CRM/on-line services
Packaging products (2 interviews)	Planning; contact management
Document printing	Account management
Health & safety products manufacturer	CRM, call centre, sales force automation
Telecommunications systems	CRM
IT products retailer	Contact centre, customer selection, reporting systems
Industrial products	Planning tool
IT research consultancy	Applications, integration
Component supplier	e-business

An initial list of prospective organisations was compiled following discussions with industry experts, Cranfield KAM Research Club members, members of the Cranfield faculty, and published papers and articles. The final selection was based on an initial telephone discussion and e-mail exchange with the prospective contact within each organisation to establish, firstly, suitability in terms of the research objectives and, secondly, willingness to participate in the project.

The following list of topics was covered in the interviews (see Appendix 1):

- Description of the organisation - business areas, structure, customer base, key accounts, detailed information on key accounts/KAM processes including importance (eg revenues), structure, key managers, stage in relationships (basic, cooperative, interdependent or integrated);
- Identify commitment towards investment in technology within the organisation and current priorities;
- Identify current role of information technology in supporting/facilitating KAM;
- For each IT application used in *supporting/facilitating KAM relationships and processes*, explore the following in detail:
 - the business processes/activity(s) covered,
 - origins of and objectives to be achieved through investing in IT,
 - outline of the business case,
 - current progress against project plan,
 - impact of issues faced in the technology project(s),
 - structure/composition of project team(s) – including role of vendors, consultants, business partners,
 - selection process for technology solution(s),
 - description of the technology (eg generic, bespoke),
 - role of consultants/specialists,
 - training programme(s)/new skills required /impact on core competencies,
 - impact on structure & culture,
 - involvement of “buyer” organisations/business partners and other stakeholders in the solution(s),
 - benefits to the KAM relationship(s),
 - lessons learned to date,
 - measures used to monitor success against objectives/impact on the organisation & third parties;
- Future or emerging issues in KAM relationships requiring/might benefit from either extension of existing IT solutions or new investment.

Further primary research, was conducted through a new syndicate group formed from within the KAM Research Club in 2002 to identify IT issues and develop solutions. This group also provided critical evaluation of the models developed within the research and the initial findings.

4. IDENTIFYING THE ROLE FOR TECHNOLOGY IN SUPPORTING AND FACILITATING KEY ACCOUNT MANAGEMENT STRATEGY

As described in the Introduction to this report, many organisations struggle to gain a satisfactory return on their investment in technologies to support marketing, sales and customer service activities. This section of the report describes how research already undertaken by Cranfield School of Management can be used to help organisations implement technologies that add real value to KAM strategies.

The first part describes a tool, originally developed by the Information Systems group within the Cranfield School of Management, that can be readily applied to helping to ensure that investment in technology is solidly linked to supporting defined business objectives. It includes a real example from the KAM IT research programme.

The second and third parts of this section utilise the findings from ongoing research undertaken by a sister research club within the Cranfield School of Management, the CRM Research Forum. The KAM IT research programme has clearly identified that many of the issues facing management when deciding to invest in technology to support or facilitate KAM are essentially similar to those faced within the wider customer relationship management (CRM) sector, as illustrated by the definition of CRM derived in the Forum's initial research programme:

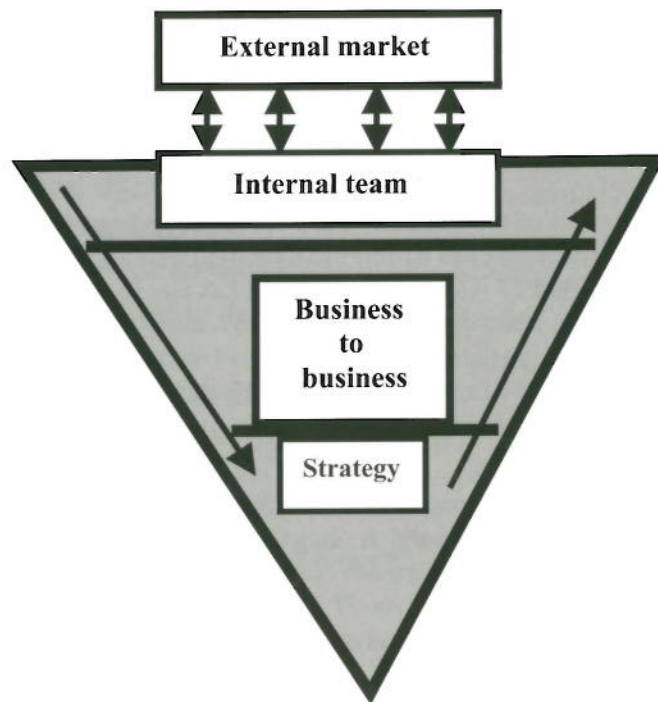
'Customer Relationship Management is the management process that uses individual customer data to enable a tailored and mutually valuable proposition. In all but the smallest of organizations, Customer Relationship Management is characterized by the IT enabled integration of customer data multiple sources' (Clark, McDonald & Smith 2002).

The difference is that KAM focuses on individual relationships, rather than segments of customers. Recent research has identified some of the key issues faced by organisations when implementing CRM technologies and identified the factors that contribute towards success. The second and third parts of this section of the report demonstrate how the findings from this earlier programme can be used to help identify the extent to which an organisation could benefit from investing in generic CRM technologies.

4.1 IDENTIFYING AND DEFINING THE ROLE FOR IT

The Key Account Research Club IT Syndicate concluded that the main role for IT is *'to empower people to be successful'*, providing the tools and solutions to help manage the relationship at the interface between the internal teams and the external customers or market:

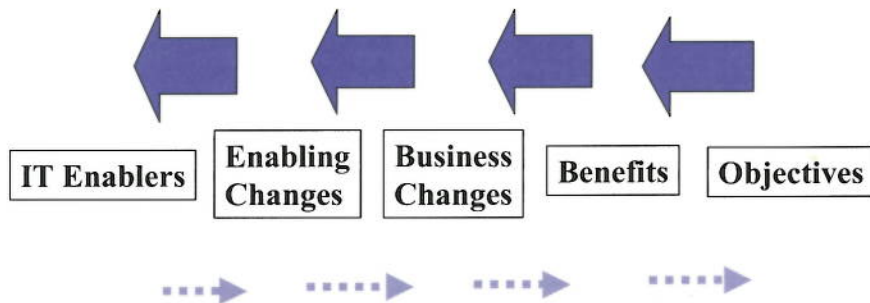
Figure 4.1: Supporting the internal/external interface



Based on the research undertaken for this project, and the experience of KAM Research Club members, many organisations have failed to develop or implement a disciplined framework that identifies the technologies most appropriate to achieving the defined goals of the company. This can lead to organisations being seduced by the overtures of vendors and investing in IT solutions that are inappropriate to their needs.

One proven tool to help organisations match IT solutions to business objectives is the **Business Dependency Network (BDN)**, developed by the Cranfield Information Systems group. This tool was originally developed to identify the technology needs of the organisation from the start point of business objectives, but it can also help organisations achieve increased return on their existing investment in technologies (the dotted arrows in Fig. 4.2, below).

Figure 4.2: Identifying the role for IT: Benefits Dependency Network

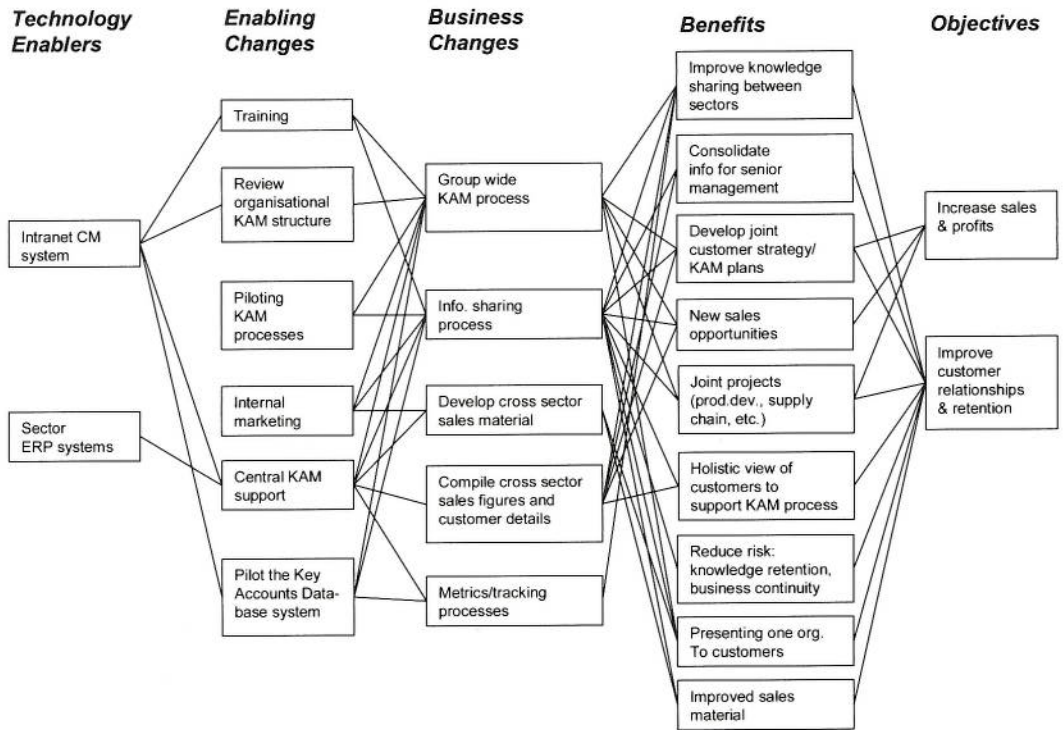


The general application of this model to marketing related IT applications is fully described in 'The New Marketing' (McDonald & Wilson, 2002) and a CRM related adaptation is described by the Hewson Group (Sistrum, 1999). The above diagram provides a simplistic representation of this model.

The process is based on holding cross-functional workshops to develop and refine a detailed BDN 'map'. The start point is a listing of the key relevant business *goals or objectives* and objectives; these are followed by listing the *benefits* that will accrue through these objectives for the organisation, and its customers and any other stakeholders; next, the *changes* that will be necessary within the business to achieve the desired goals (e.g. new processes and procedures to improve data quality); followed by the other *changes* necessary to enable the business changes to be successfully implemented (e.g. training call handlers in the new data collection procedures); the final step is to list the potential *IT enablers*, or solutions, that will support or facilitate the overall process. The block arrows indicate the usual flow for the model. The dotted arrows show the reverse process where an organisation is seeking to maximise the return on technology that has already been implemented. What this simplified version does not show is that the model also needs to include the links between the detailed sub-processes within the final 'map', as shown in the actual example described below.

Figure 4.3, below, shows a completed BDN 'map', derived within the KAM research programme to assist an organisation resolve a real issue. It was initially developed in a Cranfield facilitated workshop by representatives from a leading international manufacturing company to identify the technology solutions appropriate to supporting and facilitating their key account management strategy. The initial 'map' was then refined and developed within the organisation.

Figure 4.3: Benefits Dependency Network for a leading global manufacturer



In this particular example, the organisation had already invested in a CRM database system that recorded details of customers, for management information purposes. However, the company was finding it difficult to gain commitment from the sales team to use the tool to record information on customers. Firstly, the benefits of doing so were not widely recognised, and secondly, the process for recording data was additional to the normal methods used for managing the sales process. In addition, management were finding that the system did not fully meet their requirements. Attempts by the database manager to resolve these issues had proved unsuccessful.

Instead of simply applying the BDN model to help identify ways to improve the ROI of the existing tool, the decision was taken to check out the overall appropriateness of this solution by starting with the overall **objectives** of the organisation's key account strategy, shown on the right in Figure 4.3, and work through the various steps to derive the ideal IT solutions. The benefits underpinning the overall KAM strategy were identified and these were then linked to the individual objectives. Five key changes to current business processes were identified as being necessary if the benefits were to be realised. This identified six important 'enablers' that would be needed to ensure that the changes to the business processes were effective, and the links between them established. Finally, two potential IT enablers were identified as potential solutions to support and facilitate the processes and benefits required to achieve the overall KAM strategy. These were linked to the appropriate 'enablers'. The BDN process clearly identified to the company that the current product could not easily meet the needs of the key account strategy. As a result of this new thinking, the decision was taken to replace the existing tool and invest in a lower cost intranet based customer management solution by utilising the existing intranet software. In addition, the BDN model also provided a detailed roadmap of the issues that needed to be addressed in order to ensure success. In particular, the model helped identify the key people, or functions, throughout the organisation that must be represented on the implementation project team – a further benefit of the BDN model.

In the organisation concerned, the nucleus of the implementation team was identified as needing to comprise:

- Sales director representing one of the main market sectors
- Executive sponsor
- IT/data strategist
- Member of the sales team
- Project manager.

Organisations within the KAM Research Club confirmed that the key benefits of using the BDN model were:

- **Economic** – establishing whether, and where, the project will add value;
- **Political** – obtaining funds, winning hearts and minds;
- **Change management** – early identification of issues (eg feasibility, desirability, resources, ownership, organisational impact);
- **Control** – establishing project measurement criteria (eg benefits, costs, resources etc).

'The BDN helped us work through the requirements needed to implement a new system that was more appropriate to our business than the previous one. Looking at the objectives first and working through the benefits and the requirements in detail was very beneficial. Looking at the graphical representation helped to visualise and work through some of the changes required.' (Global manufacturer)

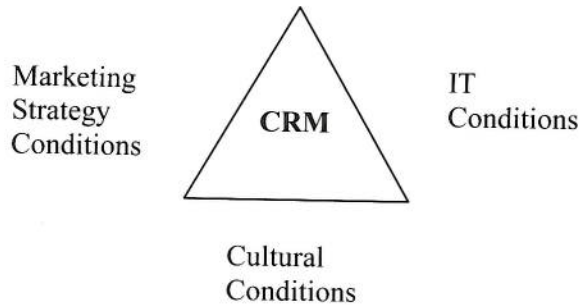
'It enabled us to understand better, what we were actually trying to achieve'. (Global information company)

A further example of how an organisation identified the role of technology in achieving business objectives is shown in Section 6.3.2.

4.2 FOUR ESSENTIAL PRE-CONDITIONS FOR CUSTOMER RELATIONSHIP MANAGEMENT

The research undertaken by the Cranfield CRM Research Forum identified three pre-conditions necessary to the successful implementation of CRM within organisations:

Figure 4.4: CRM conditions



As described within the CRM Research Forum report, *marketing strategy* comprises ‘the set of management decisions concerning the definition and selection of target customers and the propositions made for them’. In terms of KAM, this is the essential progression from a focus purely on the short term achievement of sales targets to a strategy that focuses on understanding the needs of selected customers and using this knowledge to establish deeper relationships with the customer organisation and thereby develop customised propositions that widen, or deepen the business opportunities. The key role of IT in these processes is to facilitate the collection, processing and analysis of information about the customer’s needs, and the market, and apply the resulting knowledge in the development and execution of marketing strategy.

Culture is probably the key factor contributing towards success. Unless the organisation has a KAM focused cultural environment that is positive, strong, market-orientated and encourages learning, supported by clearly defined policies, practices, procedures and rewards that build commitment amongst employees, then the strategy will tend to fail. In the context of IT applications, this means that employees clearly perceive the adoption of technology as a benefit to the organisation, and themselves – they feel involved in the development and implementation of the programme, and, are confident in operating the new systems due to having been provided with adequate training.

The key factors leading to success in utilising *technology* to support and facilitate KAM strategy are strongly linked to the culture of the organisation, as described in the previous paragraph. There needs to be a clear and positive overall policy and heritage within the organisation towards IT. Employees need to perceive that IT projects:

- Are clearly derived from and support the key goals of the organisation’s strategy;
- Have the full commitment of senior management;
- Are adequately resourced for development and implementation – including employee training and support;
- Are professionally managed and incorporate a sufficient degree of flexibility to cope with changing conditions.

Three further issues that particularly apply to CRM and KAM IT projects are that, unlike many IT applications, they:

- Often have enterprise-wide implications;
- Are iterative;
- Are fed by data needs new to the organisation.

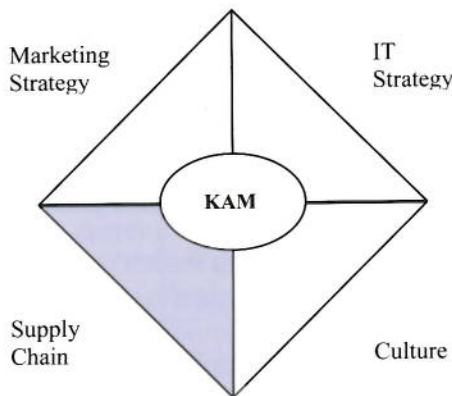
Therefore, organisations also need to:

- Have proven experience in developing and implementing cross-functional programmes;
- Be committed to the long view;
- Have implemented an enterprise-wide information management strategy.

In particular, to ensure success in applying IT to support and facilitate KAM and CRM, organisations need to view the collection and processing of customer and market information as fundamental to the strategic future of the company, thereby treating the technologies necessary to achieving this as a core part of the company's infrastructure requiring continuous investment.

However, we believe that a fourth condition is also critical to the success of key account management – the *supply chain* management process:

Figure 4.5 KAM conditions



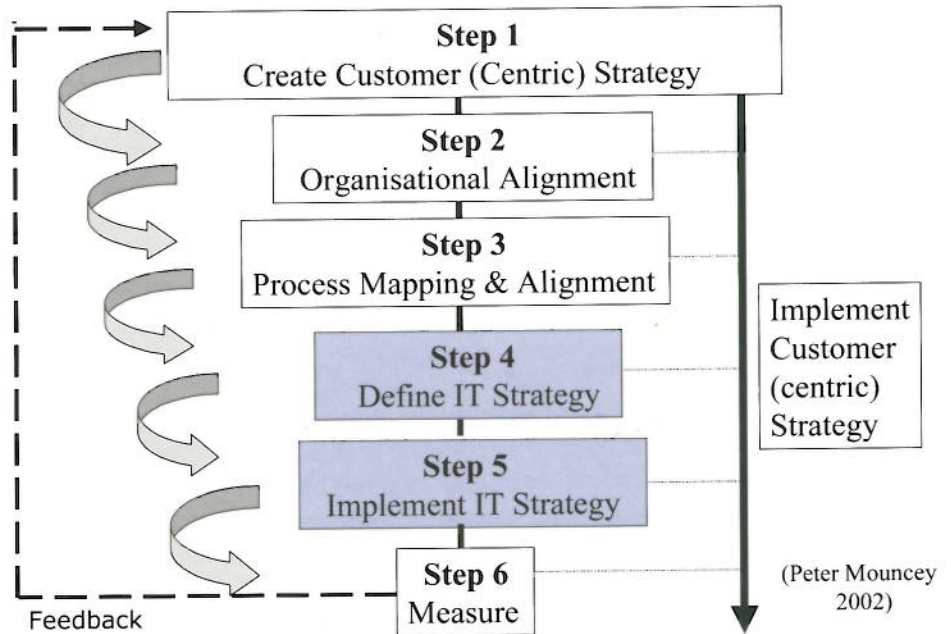
Evidence based on the contents of key account plans reviewed within KAM education programmes at Cranfield and discussions within the KAM Research Club indicate that supply chain/logistics issues are often critical to developing and sustaining a strategic relationship. Reducing the costs of, or adding value to, the supply chain is often a key consideration for both supplier and customer. It may also be a prime opportunity for customising the value proposition. The development of e-procurement has also underlined the potential opportunities for technology to support and facilitate the overall supply chain process. This is described in detail within Section 6.5, including examples.

Some of the key benefits that IT can provide when applied to the supply chain are as follows:

- Reducing costs to serve/supply;
- Minimising errors in order taking and processing;
- Creating fast, flexible and controlled purchase/supply environments;
- Speeding up payment processing;
- Provide customers with information on stock availability and pricing;
- Providing up-to-date and detailed management information.

To summarise this section of the report, the hierarchical strategic framework shown in Figure 4.6 illustrates the positioning of IT in the overall development and implementation of CRM and KAM strategy:

Figure 4.6: CRM strategic framework



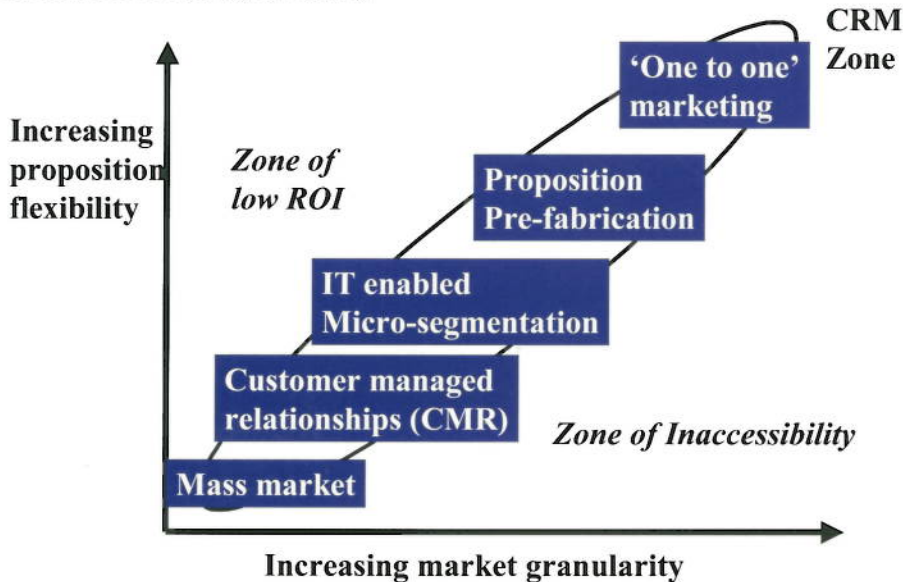
Step 6 is the creation of the necessary feedback loops based on the measurement of performance and return on investment against the objectives set throughout the other steps within the framework.

4.3 THE KAM ECO-SYSTEM

Recent research has also led to a new model being developed to help organisations identify whether a CRM focused strategy was feasible or beneficial:

Figure 4.7: CRM Eco-system

(Source: Dr M Clark & Dr B Smith, Cranfield School of Management 2002)

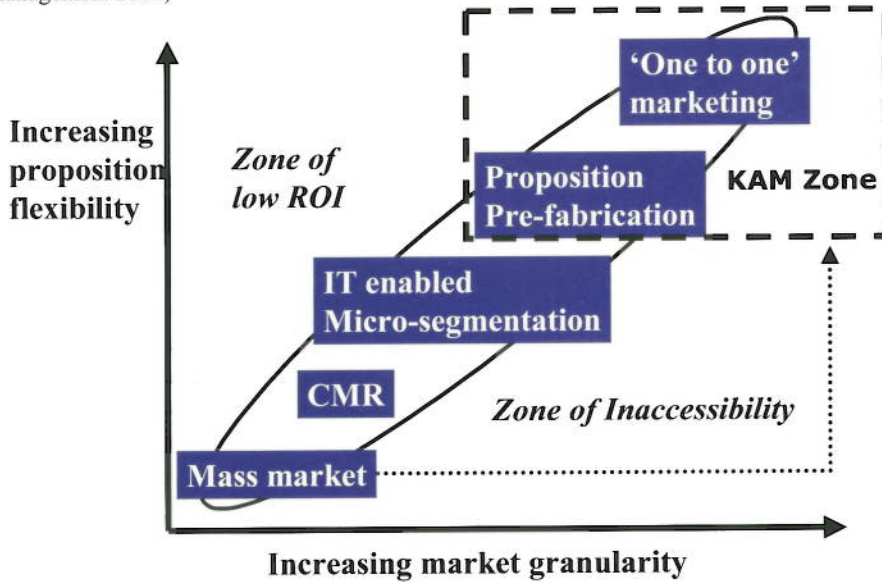


In Clark and Smith's model, the *Zone of Low ROI* represents situations where there is such a high level of homogeneity in customers' needs that any investment in customised propositions, or the technologies to facilitate them, could not be justified. In the *Zone of Inaccessibility*, it would either not be readily possible, or profitable, for organisations to meet the disparate needs of customers, thereby rendering CRM strategies uneconomic. An example that might fit the criteria for either of these Zones might be a manufacturer of low-value, high-volume items (e.g. plumbing fittings) who uses distributors or retail outlets to reach the fragmented SME and consumer market sectors. In this situation, the manufacturer would be unlikely to know either the names of individual customers or their specific needs. The *CRM Zone*, however, provides differing opportunities to apply CRM strategies, and identifies where investment in technologies to support and facilitate relationships with customers is likely to be cost-effective.

The criteria necessary for being able to implement KAM places organisations that have this as their strategy at the top end of the CRM Zone - Proposition Prefabrication and 'One to one', where market granularity is high and the supplying organisation is able to flex its propositions to meet the needs of individual key customers. It also applies to organisations where a key issue for some KAM relationships is to reduce the cost-to-serve, by applying technologies useful in supporting CRM in the Mass Market sector of the Zone:

Figure 4.8: KAM Eco-system

(Source: after Dr M Clark & Dr B Smith, Cranfield School of Management 2002)



The criteria for the KAM Zone are as follows:

CRM Sub-species	Data gathering and organisation	Data analysis and value identification	Value creation and delivery	Justification, monitoring and control
Proposition prefabrication	Data held at individual customer level covering higher motivations & contextual buying behaviour.	Analysed to reveal in-depth needs of individual customers. Value identified in terms of extensions to the value proposition up and down the customer's value chain	Value created by extension of the proposition along customer's value chain. Value delivery by building competencies in new areas and integration of previously fractured value chain	Justified by sharing of newly created value with customer via larger per customer contribution and greater retention. Monitored at customer level by activity based costs against targets for lifetime value and share of spend
One to one	As above	As above	Value created by continual variation of the proposition in the light of changing customer needs. Value delivery by the establishment of highly flexible organisation, using partnering where appropriate	Investment justified by necessity of flexibility to customer needs. Monitored and controlled at customer level by activity based costs against targets for lifetime value and share of spend

(Clark & Smith 2002)

The two CRM Sub-species detailed above typically describe the role played by IT where suppliers are developing Interdependent or Integrated level key account relationships with selected customers – the investment being justified through the higher value return from these levels of relationship.

However, organisations that have customers where the relationship is at a Basic level, may apply CRM related technologies to create greater efficiency and cost savings in order to protect margins, or, to start building a stronger, higher level relationship. The application of CRM technologies at this level may be closer to the criteria used by Clark & Smith to describe the Mass Market sub-species:

CRM sub-species	Data gathering and organisation	Data analysis and value identification	Value creation and delivery	Justification, monitoring and control
Mass market	Basic quantitative data gathered concerning product or service performance, volume requirements and customer descriptors. Organised only at product and channel level.	Data analysed to reveal value in proposition expansion or rationalised. Value identified in terms of changes to core proposition or service levels to optimise supply chain management processes.	Value created by changes to product range or distribution process. Delivery achieved by product management and supply chain management.	Investment justified in terms of cost savings, derived from supply chain management efficiencies, or from revenue optimisation, based on product portfolio management. Monitoring against financial criteria based on internal measures only.

(Clark & Smith 2002)

This section of the report has explored the links between generic technology facilitated CRM solutions and key account management. The next section focuses on the established models describing the categories of relationships suppliers might have with customers and the role IT can play in developing and supporting these relationships.

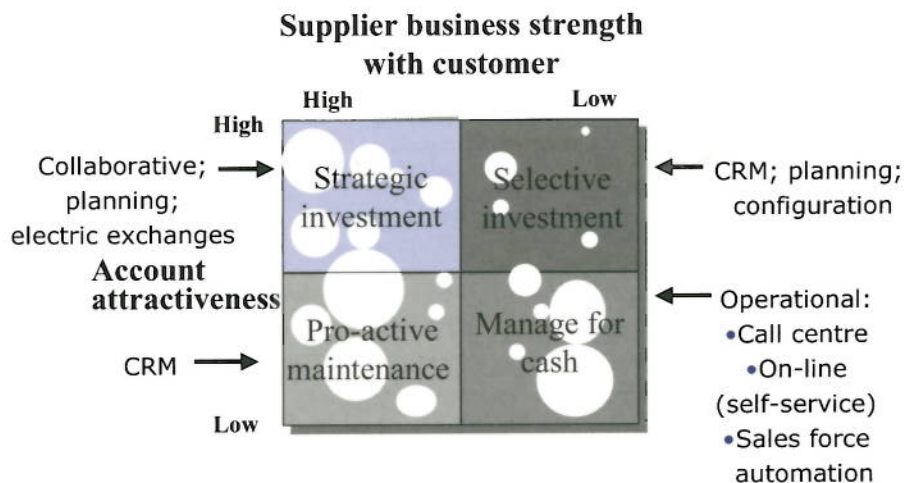
4.4. TECHNOLOGY AND KEY ACCOUNT MANAGEMENT RELATIONSHIPS

The published research undertaken by Cranfield on key account management (McDonald, Rogers & Woodburn, 2000; Woodburn & McDonald, 2001) identified and described the key building blocks necessary to establishing a successful key account strategy. In particular, the research provided frameworks for understanding the different types and levels of relationship linking suppliers to their customers. This section of the report focuses on the role of IT products, tools and solutions in supporting and facilitating the key account management processes and relationships builders. Section 5 describes the KAM value chain from a high level perspective and examines how technology acts as a key enabler in maximising the return on investment in customer relationships.

4.4.1 TECHNOLOGY AND THE KEY ACCOUNT PORTFOLIO

A key model identified in the earlier research on KAM helps organisations categorise the strategic importance of individual customers. This maps the supplier's business strength with the portfolio of key customers against how attractive each customer is to the supplier. The resulting matrix helps identify the appropriate strategies that should be adopted in managing relationships. This matrix is reproduced below, showing the technology solutions appropriate to each quadrant:

Figure 4.9: The customer portfolio strategy matrix and the role of IT



(after Woodburn & McDonald 2001)

By holding detailed information about a customer, and their relationship with the business, CRM systems may help identify new opportunities to deliver added value to customers (Selective Investment segment), or, ensure that the level of investment in an account does not exceed that necessary to maintain a level of profitable business (Pro-active Maintenance segment). The investment in applications such as collaborative planning tools may only be fully justified for developing accounts in the two upper segments in the model. This is not just due to the cost of the software, which might be relatively low, but the high costs of integration with other systems and the time needed in order to develop and maintain detailed plans for

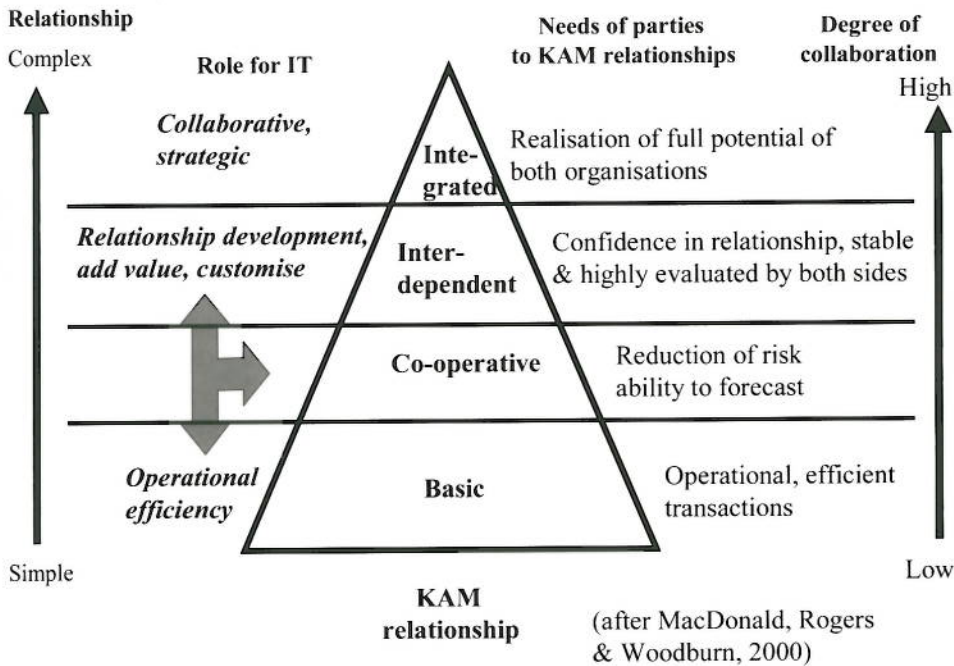
each relationship (see Section 6.1.2). Where accounts are simply being managed for cash, then the investment might be focused on applications that will reduce costs, such as call centres to provide customer support and a web site to facilitate self-service ordering. Whilst electronic exchanges may lead to substantial savings in procurement, this might be limited to trading with only selected customers (Strategic Investment segment). This particular issue is described in detail within Section 6.5.2/3.

The matrix in Figure 4.9 does not provide any indication of the level of investment in IT that might be appropriate to support relationships in different quadrants. This might depend on such issues as the number of customers, the level of likely cost savings or the impact on revenues and margins. The key issue is the need to determine the likely ROI. So, for example, the decision to invest in a call centre to reduce the operational costs of providing customer service to key accounts in the bottom right hand quadrant – accounts being managed for cash – may depend on the value this centre might also deliver firstly to other accounts within the overall key account portfolio. A similar situation might also apply when investing in a ‘self-service’ web-site.

4.4.2 THE ROLE OF IT IN FACILITATING AND BUILDING RELATIONSHIPS

The role of IT can also be mapped against the hierarchy of key account relationships:

Figure 4.10: Hierarchy of key account relationships and the role of IT

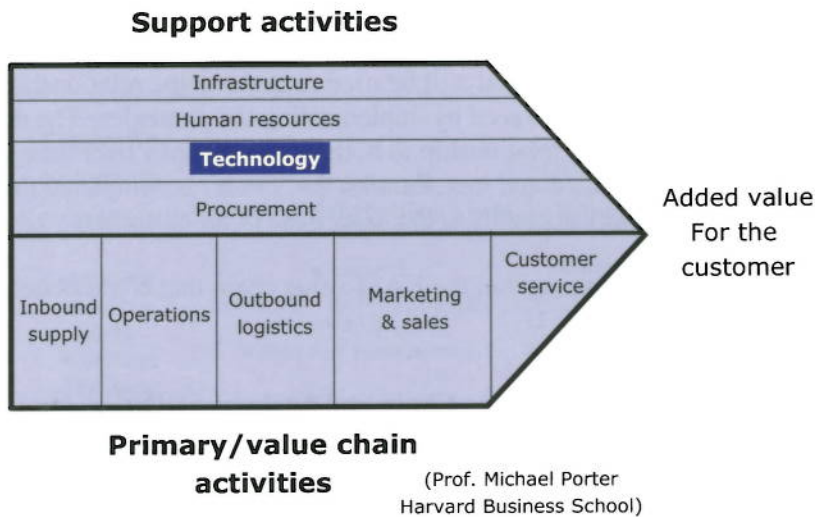


In essence this reflects the matrix shown in Figure 4.9 but links the role of IT to the objectives that suppliers might be pursuing with customers within the overall portfolio. For example, IT can help provide the additional information about a customer, and gain insight from it, that can be utilised in moving a relationship from the Co-operative to the Interdependent level. Tools that minimise cost-to-serve, such as call centres and web sites may be key to improving the profitability of Basic relationships.

5. THE ROLE OF IT IN FACILITATING KAM PROCESSES: THE KAM VALUE CHAIN

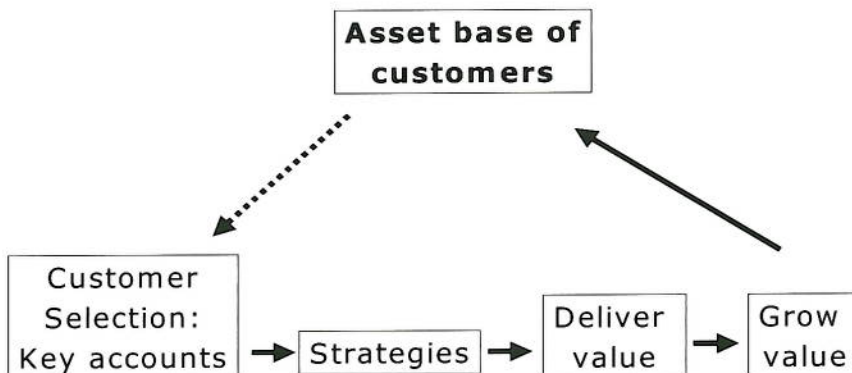
Shown below in Figure 5.1 is the classic Value Chain model derived by Michael Porter showing the role of technology as a key supporting activity in a business's capability to deliver value to customers. Technology can be applied to some extent in supporting or facilitating all other elements within the overall chain.

Figure 5.1: Technology and the Value Chain



Based on the research within this project, a KAM value chain has been developed related to the application of IT tools and solutions. The following diagram describes the key account management value chain:

Figure 5.2: Key Account Management Value Chain



This model identifies how the value is created within a KAM strategy. The model is driven by the *asset base* of customers. The KAM plan identifies the criteria used to *select* those customers that are to be given key account status, identifies the current level of the relationship, and, the desired future level. The selection process is based on a thorough understanding of those accounts considered to deserve this status, in terms of, for example:

- Market position;
- Positioning, strategies, needs;
- Financial ratios;
- Internal value chain;
- Procurement process.

The next step is to define the *strategies* that will be used to develop the relationship with each individual customer. Value is then *delivered* by implementing the strategies. The deepening relationship enables the value of the relationship to both parties to *grow* over time as new opportunities and needs are identified and met. Finally, the ‘circle’ is completed through the enhanced value contributed by key accounts to the *asset base* of all customers.

A summary of the business activities within the KAM value chain that could benefit from IT support is shown below in Figure 5.2.1:

Figure 5.2.1: KAM Value Chain and business activities

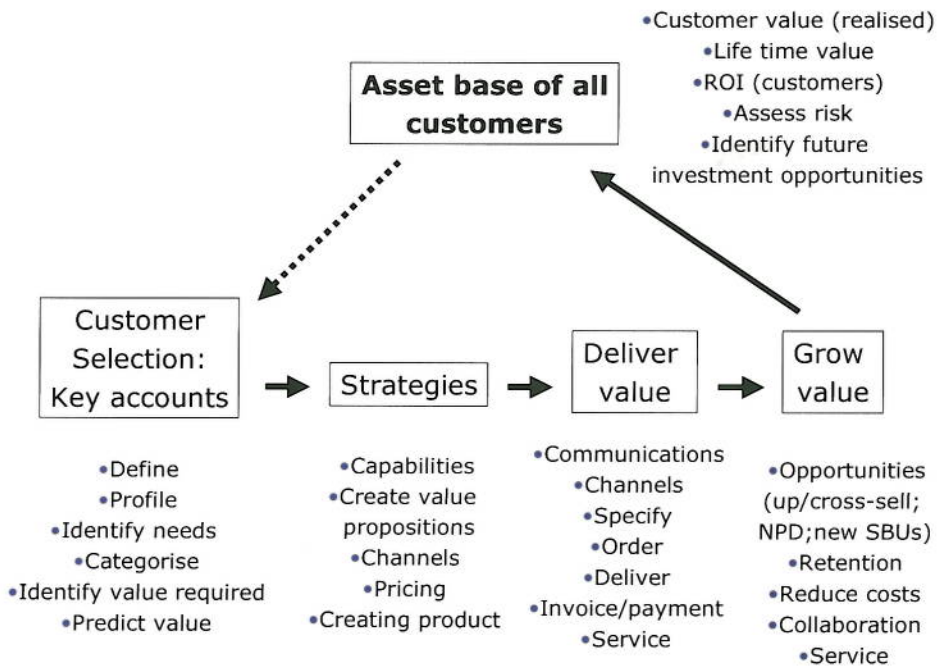
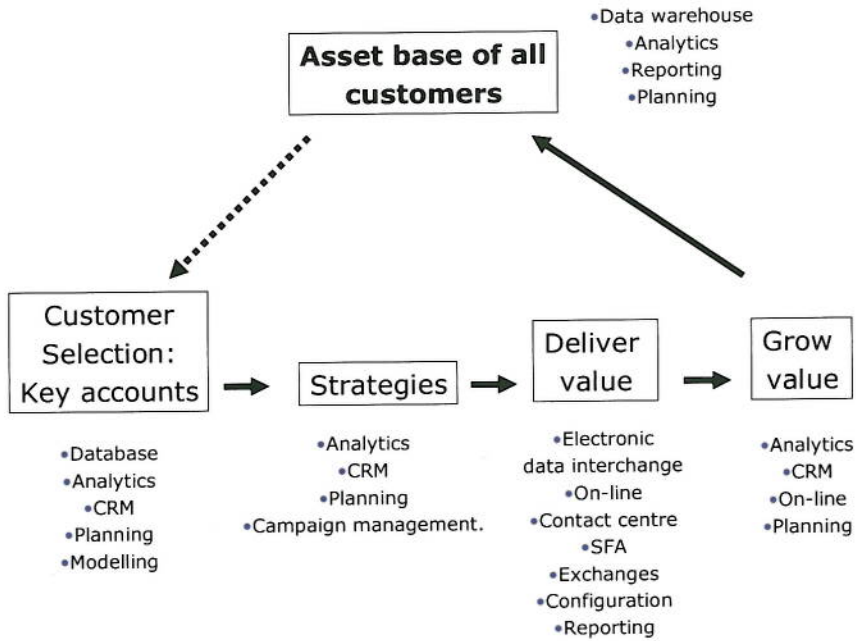


Figure 5.2.2 below provides a high level, overview of the generic IT products and applications that could be utilised to support and facilitate each stage in the overall value chain.

Figure 5.2.2: KAM Value Chain and IT applications



The role played by IT throughout the five key steps in this value chain is described in **Sections 5.1-5.5, below**. Detailed examples of the tools and applications, plus case studies from the research, are described within Section 6 of the report.

5.1 ASSET BASE OF CUSTOMERS

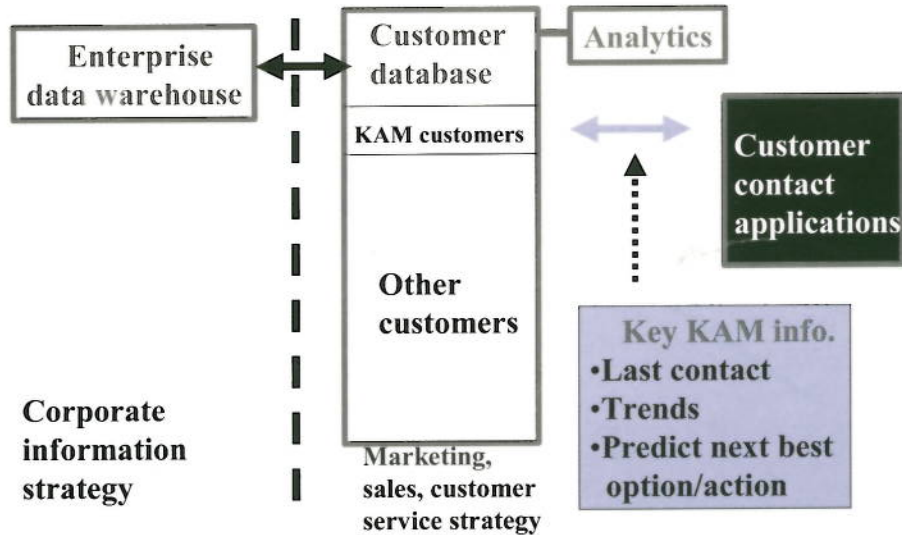
Key to the overall success of adopting a customer focused corporate strategy is being able to identify all the customers of the organisation, profile them, and calculate the current, and potential, value that each one contributes. This can only be achieved by creating a customer database, preferably as a sub-set of the overall information management strategy (data warehouse) within the organisation, together with appropriate analytical tools to drive the development of customer related strategy and feed contact applications.

The KAM IT Syndicate concluded that the key information required to support customer contact were as shown in Figure 5.3, below:

- Details of the last contact with that customer;
- Trends over time. For example, order volumes etc;
- Using the data to identify appropriate future courses of action with the customer.

In addition, input from the customer database would be used to drive other key IT tools such as management reports and planning systems, described later in the report (Section 6).

Figure 5.3: KAM customer contact information



5.2 CUSTOMER SELECTION

The main role for IT here is to ensure that the organisation develops a detailed knowledge base that can fully support the development and implementation of individual key customer account plans. This may include tools that can be used for modelling, forecasting, and reporting. The database may also be used to drive IT applications such as customer contact and sales force automation tools.

5.3 STRATEGIES

The third stage is the development of strategies appropriate for individual customers. Tools here are analytic and planning tools, CRM systems, and campaign management systems (for developing and executing targeted marketing communications).

5.4 DELIVERING THE VALUE

Tools here focus on facilitating:

- the provision of information;
- sales, order and payment processes (including sales force automation, product/order configuration);
- e-commerce/on-line (including e-procurement/electronic exchanges/hubs/auctions, intranets, extranets, web-sites etc);
- customer service;
- reporting.

This covers all channels used for contact between supplier and customer.

5.5 GROW THE VALUE

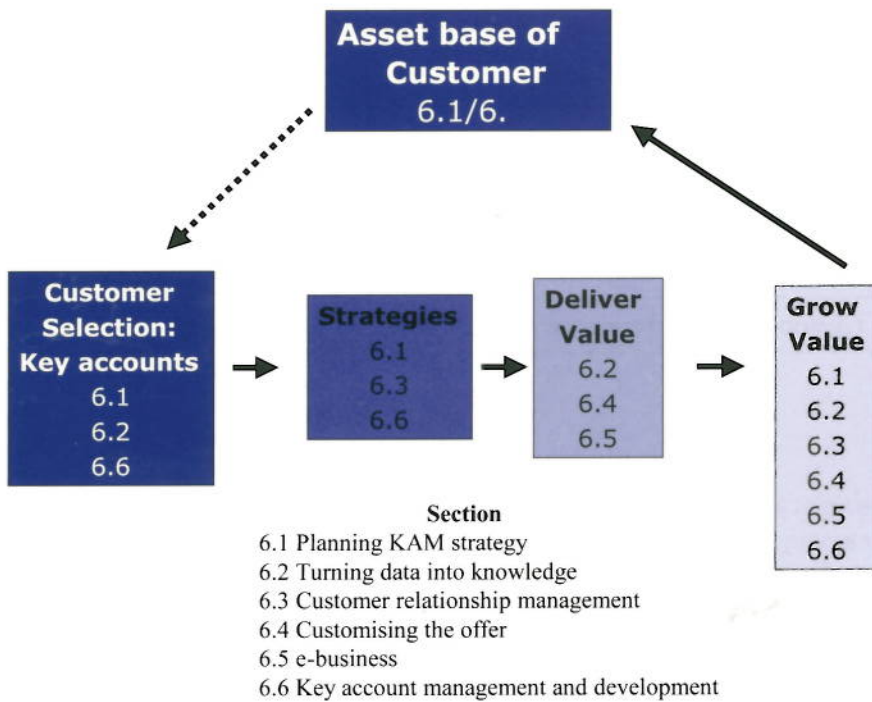
At this stage in the value chain, the key issues are to ensure that the customer database content reflects the increased knowledge gained through a deeper relationship, and that this is fully utilised to identify new opportunities to grow the value. If the relationship has reached the Integrated level in figure 4.10, there may be collaborative developments in technology to facilitate joint initiatives and activities such as planning, procurement and product development.

The key role of IT in the KAM value chain (Figure 5.2.2, above) is to help demonstrate all customers are not equal, and facilitate the different relationships that are necessary.

6. KAM VALUE CHAIN: TECHNOLOGY TOOLS AND SOLUTIONS

This section focuses on the IT tools and solutions identified within the 17 research interviews that were delivering value to the KAM process within the organisations concerned. The section is structured by application, rather than by product, in order to emphasise the role played by IT in delivering value within KAM processes. The following diagram shows how the applications covered in this section relate to the KAM value chain model discussed within Section 5.3:

Figure 6.1: KAM Value Chain - technology tools and solutions



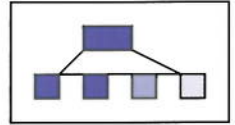
Each sub-section is supported by one or more case studies drawn from the interview material. At the end of each case study is a summary of the *key lessons for key account management* in terms of the particular application of IT described.

As such, the applications described do not represent the full range of potential tools or solutions that organisations might apply, but they do provide examples that illustrate how organisations apply IT solutions in pursuit of business goals.

The following list summarises the full range of tools identified within the wider research, and indicates where those described fit within the overall structure of this section:

IT Tool/Solution	Sub-section
Planning software	6.1
Forecasting tools	6.2
Databases, data warehousing, analytical tools	6.2, 6.3
Web-sites	6.5
Electronic catalogues	6.5
Electronic procurement	6.5
<i>Sales force automation</i>	
Product/order configuration	6.4
Contact/relationship management	6.3
<i>Campaign management software</i>	
<i>Call centres</i>	
Customer account management	6.6

6.1 PLANNING KAM STRATEGY



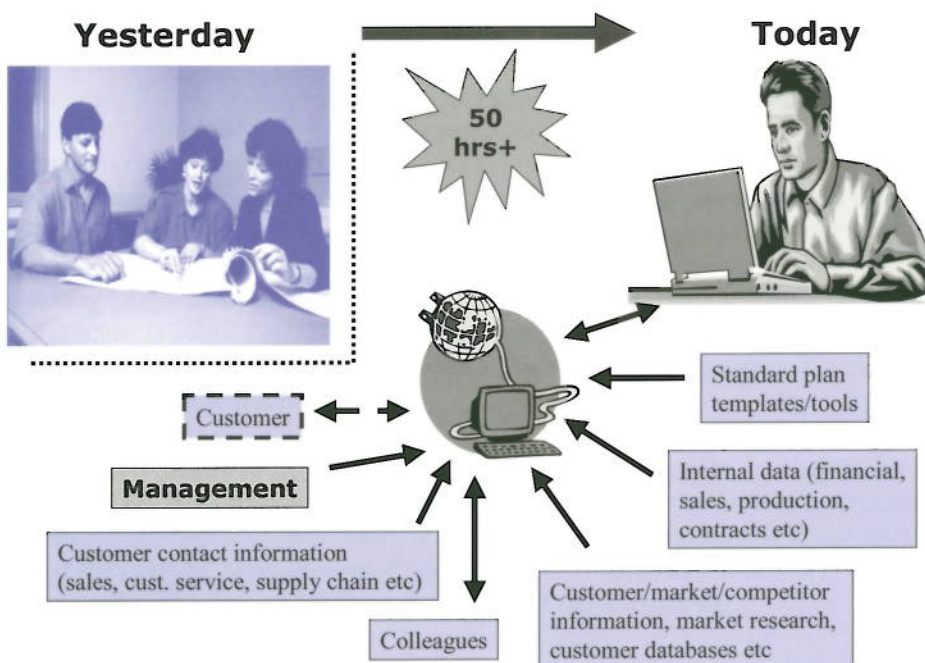
The Cranfield key account management education programmes and academies have identified that it takes around *fifty hours* to create a detailed first-cut single key account plan. Plan building to support KAM increasingly involves a team whose members are either infrequently in the same office at the same time, or are located in different places. Often, plans are being created outside the normal office hours in spare moments, remote from the normal work location. Plans are therefore being created in relative isolation – away from colleagues with whom communication would be valuable; senior management – who may want to review progress regularly, and remote from key sources of information. If KAM planning is a new activity within the organisation, it is also probable that access to the necessary background information on customers and their markets is limited – if this information exists at all within the organisation. Also, the most successful plans need input from the customer.

Usually, organisations will want to use a standard format for all key account plans, probably based on a series of detailed templates, including the analysis tools commonly used in order to understand the customer and their market place:

- Market map
- PESTE/Five forces
- SWOT (customer; supplier)
- Contact maps/organigrams
- Sales forecasts
- Risk analysis.

Ideally, organisations need an electronic solution that brings all these needs together within one, simple and readily accessible tool enabling collaboration in the development of plans within the organisation, and with the customer in Integrated relationships:

Figure 6.2: Developing key account plans



The various information inputs shown above are often available within the organisation but difficult to access. The internal data sources will often include an ERP system.

This research identified two technological approaches to supporting the planning process. In both cases, the common requirements that needed to be addressed included:

- Account planning teams scattered across the globe and unable to hold regular meetings;
- The need for consistency in terms of format and content across all plans;
- Ensuring plans are accurate and kept up-to-date;
- Insufficient information readily accessible;
- Tracking progress in the development and implementation of each plan;
- Accessibility for all concerned, and a 'user friendly' application;
- Multi-lingual.

Essentially, the requirements were: for solutions that enable the plan to be a living, dynamic document; for providing a virtual meeting room environment for the planning team; containing prompts to ensure that actions and updates are progressed; for allowing progress to be monitored; identifying when key deadlines/actions have not been met; for logging changes (by whom and when); for including training and support modules.

6.1.2 Case Study: KAM planning within a global manufacturing company

The collaborative solution developed by this company, which manufactures components, utilises an existing IT tool installed by human resources to facilitate and encourage team working. The decision to use this tool for supporting sales planning followed an earlier attempt to develop a web based comprehensive sales support system by adding a CRM module to an existing sales configuration tool. However, piloting of the system identified that, due to its complexity, commitment to using it and maintaining the content was low. The need was to find a simpler process to support account planning that would be actively used by the sales team. Rather than completely abandon the initial goal, the decision was taken to find a less complex way that would enable key account teams and managers to share information about accounts. The solution was found within a newly installed system, the Documentum product eRoom - implemented by the group Human Resources department at around the time that the initial CRM pilot was being abandoned - to support and facilitate team working within the company. The product offered the following advantages:

- Simple web-browser front-end access;
- Being widely implemented with many trained users and welcomed as a key tool to facilitate team collaboration;
- Simple template driven structure incorporating standard facilities such as databases, calendars, diaries, file attachments, questionnaire design, discussion forums etc;
- Secure environment (password access);
- Operated as an application service provider (ASP) tool, minimising the need for in-house expertise and development/maintenance resources within IT.

The tool's potential to support account management was initially piloted within one geographic region. Once the decision had been taken to adopt this team support tool for account planning purposes the development and implementation of the first system was discontinued.

The tool is hosted by the application service provider, accessed via a web-browser and utilises templates to enable users to build content. The key advantage is that many employees throughout the company readily recognise the value of this tool and are already competent users. This helps overcome any objections to the tool being viewed locally as a head office imposed solution. The system is being rolled out across the company in line with the account planning process. The software enables users to create and access databases, calendars/diaries, attach files (e.g. notes of meetings, presentations etc), build and administer questionnaires to collect information and create an environment for discussion forums. Security is maintained through passwords. Access and content is controlled at team co-ordinator level, including the development of archives (e.g. contracts, contact reports etc), knowledge libraries and contact details for all team members. The information can be accessed through keywords, dates, names etc. As the tool uses common templates, access and creation of content is simplified. The system also includes a Key Account Action Tracker facility using prompts and alerts linked to planned actions. Details of each account also includes customer satisfaction data.

Whilst it is company policy to share account plans with the customer, currently this is done separately, 'off-line' from the system, but the longer term objective is to extend access to key customers once confidentiality and security concerns have been addressed, together with ensuring that the current development of portals for key customers does not create unnecessary confusion in terms of contacts with these organisations.

Training takes one day, and templates for an account take a further day to create. Ongoing support needs are minimal. The discussion forum facility fosters a team spirit and encourages knowledge management, content being transparent to all team members. The tool is also being used to raise the competency of key account team members and their managers by identifying KAM 'best practice' and the factors that contribute towards success. A further step in the development will be to implement a module that holds a central database of all plans across the company.

Planning strategy technology: key lessons for KAM

- ***Ensure that all users can easily access, use and maintain content through adequate training. This is vital to gaining commitment;***
- ***Reduce complexity. A simple, stand-alone tool may prove more valuable to the organisation than developing modules within existing CRM systems or creating links with other internal data sources;***
- ***Ensure content format is consistent by using standard templates;***
- ***Provide opportunities for participants to exchange information and discuss issues to create the 'virtual meeting' environment and community spirit;***
- ***Build in, or create access to, the key knowledge necessary to develop an understanding of each account;***
- ***Include functionalities that enable the progress of the plan to be tracked, including prompts to remind team members of actions etc. and to identify where deadlines or other key milestones have been missed;***
- ***Ensure that each account planning team feels that they 'own' the local process.***

6.2 TURNING DATA INTO KNOWLEDGE

The need to ensure that data can be effectively turned into information is common to all organisations. However, the development of knowledge should be the real goal:

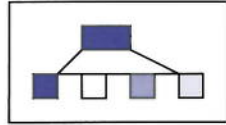
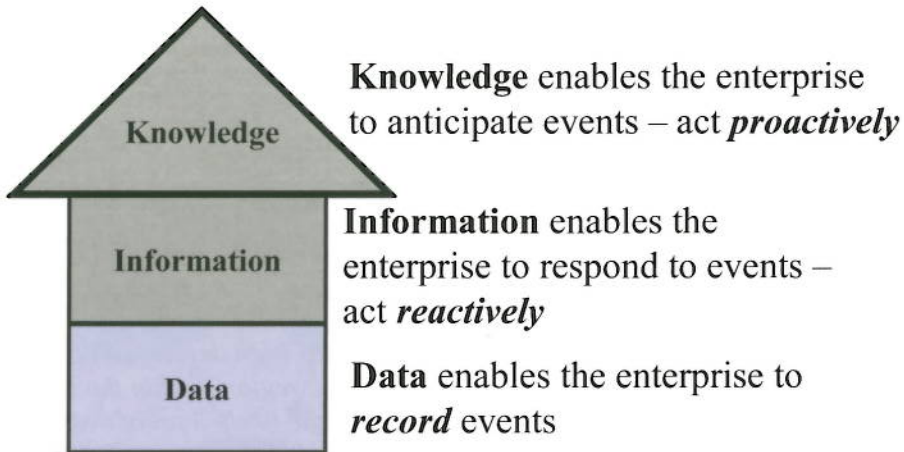


Figure 6.3: Turning data into knowledge



(Sean Kelly, Data Warehousing in Action, Wiley, 1997))

Recent years have seen a transformation within the analysis tools market to enable organisations to gain maximum value from their investment in customer related data. Ten years ago, analysis of customer data was essentially the province of market research or market analysis teams – often outsourced to specialist bureaux or consultancies – using complex analytic or modelling tools (e.g. SAS, SPSS). Marketers briefed these specialists and then waited for the output – often leading to a second round of briefings and delays as the batch run queries were re-run, and so the process developed. The situation has been revolutionised by the development of simple query, analysis and reporting tools, either as imbedded functionality within a CRM database application or a campaign management system, or, as a stand-alone tool that could be readily linked to customer data drawn from a customer database or data warehouse. These user friendly tools enable those responsible for marketing, sales and customer service activities, such as key account management, to get much closer to customers and develop products, communications, strategies etc. and become more in tune with their needs. A further benefit is the ability to respond quickly to new information – such as adjusting the targeting of future phases of an ongoing direct marketing campaign based on the initial results - creating a more responsive organisation. Intranets can be a powerful tool for ensuring that the resulting knowledge is instantly available to all those who need it.

6.2.1 Case Study: Gaining competitive advantage through data management within a leading supplier of office technology products

A very good illustration of an organisation harnessing these new opportunities to gain competitive advantage through the proactive application of knowledge was provided by this company and its strategy for developing and serving the business-to-business side of its operation.

This particular company serves the needs of business customers at a local 'face to face' level through its retail chain and centrally through call handling teams that take and process orders, and, provide service and support. Major accounts are also supported by a field sales team.

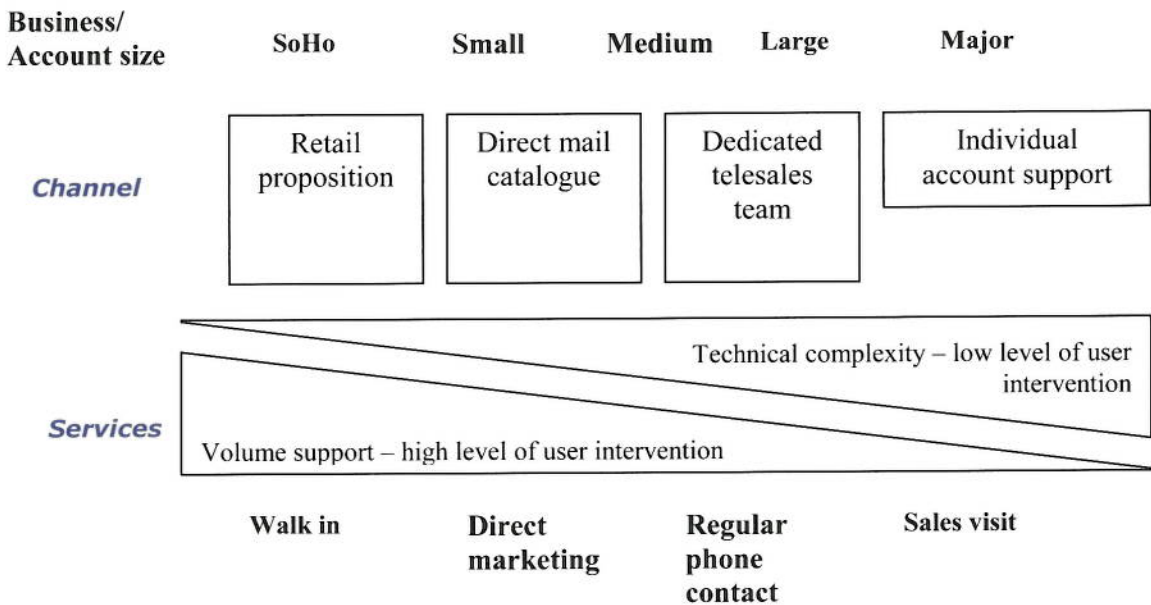
Analytics are used in three key ways to support the development of their business and to provide their business customers with a valued service:

- *Identifying new profitable customers;*
- *Segmenting customers;*
- *Providing customers with bespoke consolidated reports on expenditure by their employees.*

In terms of identifying new customers, a simple model has been developed based on the standard industrial classification (SIC) code, geographic region (within the UK) and number of employees. This enables the organisation to forecast the likely level of overall annual expenditure on products across the relevant categories, and, the potential share of that business that might be secured. This model can be used to access the value of any available third party prospect lists.

Customers are segmented as shown below. This segmentation also identifies the level of service an account will receive:

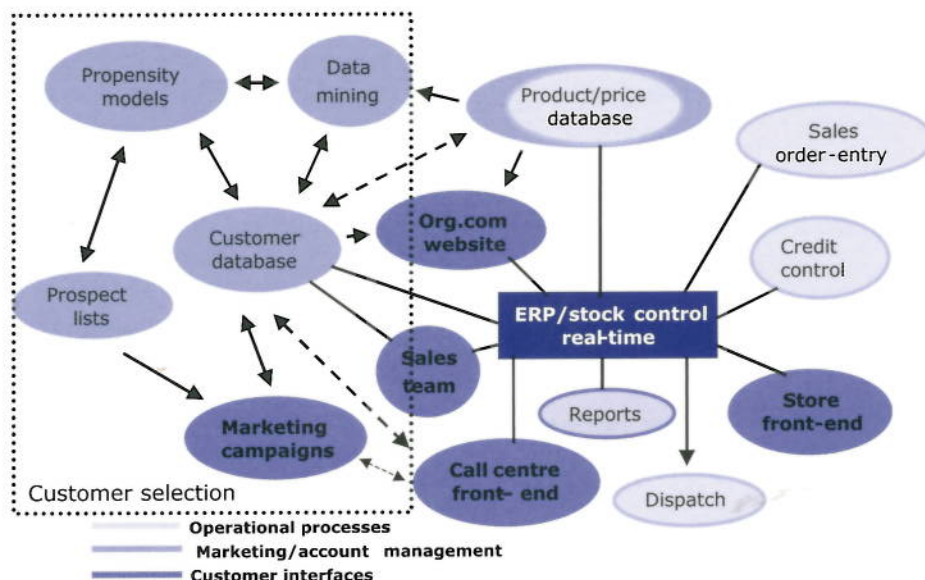
Figure 6.4: Customer segmentation strategy in the office IT market



Target key accounts are large conglomerates – comprising many or several constituent companies and a multiplicity of local buying points, serviced either through the retail network (e.g. small value purchases by individual employees) or the central facility (e.g. high ticket items not stocked within the retail network). Essentially, these are organisations that look like a major corporation, but their procurement is fully decentralised across the companies and mirrors the buying behaviour normally associated with SMEs. The role of IT here is to analyse purchases across the entire group and provide the overall holding company, or head office, with detailed management information reports showing expenditure across the entire group, consolidated to the level desired by the customer. The reporting facility is only available to major/large customers through a dedicated web-site, with security-protected access for differing needs (e.g. specific products) and to individual sites within an organisation. Ordering/reporting can also be restricted to certain categories of products.

The application of IT by this organisation can be summarised within the following diagram:

Figure 6.5: IT ‘map’ for a an office IT supplier



The lightest coloured activities indicate operational processes; the mid-coloured indicate marketing/account management related processes; the darkest indicate interfaces with customers. The dotted box identifies all the processes used to select new customers.

The ERP system is the ‘hub’ of the total business, apart from HR activities. The ERP and Product Database operate in real time – each completed order depletes the stock level in the former; price information is constantly updated in the latter. The Product/Price Database is updated nightly.

The product catalogue is currently only available in hard copy, as this format is preferred by many customer; but an electronic version is in development. However, the current web-site holds an electronic version providing product and price information to support customers’ specification of requirements through the customer management process.

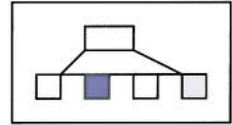
E-mail is a core communication medium. Marketing messages via e-mail currently total around 400,000 per year, plus 100,000 ‘welcome’ e-mails to new customers.

Metrics within the company focus on marketing spend, average order value and margin, recency/frequency of order (up to within the previous hour) and product mix.

Turning data into knowledge: key lessons for KAM

- *Use market and customer data to develop models that can identify attractive customers;*
- *Use technology to provide key customers with an added value proposition. In this case by providing highly decentralised conglomerates with a comprehensive reporting system that monitors all purchasing from the supplier throughout the company. This enables the customer to empower local management and staff;*
- *Provide a comprehensive, and highly responsive (e.g. next day delivery), service through multi-channels, supported by integrated information about customers and products.*

6.3 CUSTOMER RELATIONSHIP MANAGEMENT



Key account management is about building more effective, in-depth and longer term relationships with customers. However, as described within Section 6.5 e-business, technology can provide an opportunity to remove or minimise the costs of using more expensive channels, possibly to the detriment of relationships.

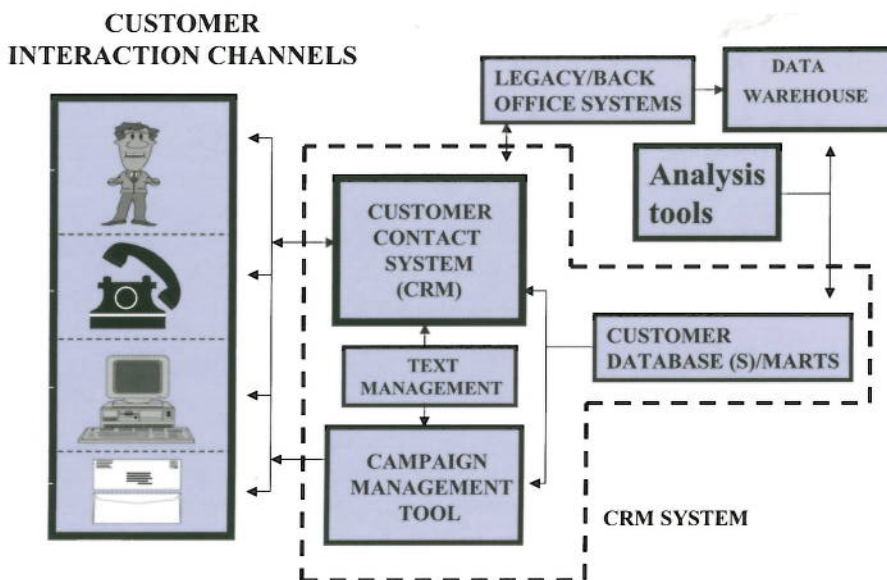
This section covers the reverse opportunity – technologies that enable the supplier to use a 360 degree view of the customer, and their relationship with the supplier, to support and facilitate all aspects of managing and developing the account across the whole company.

These technologies are generically called customer relationship management (CRM) tools and are typically deployed by companies operating in the CRM Zone as described earlier in the report, within Section 4.3. However, in addition to supporting the ‘one-to-one’ organisational level relationship within key account management, the technology must also support the ‘many-to-many’ contacts within the two organisations. These relationships need to be managed with more flexibility than is often the case with the rules based predictive modelling that drives the automated decisioning at the heart of most contact management packages commonly used in ‘business-to-consumer’ and volume based ‘business-to-business’ marketing. Therefore, if an organisation simply views its key accounts as a sub-set within the overall customer base within a CRM system, then it is unlikely that this will lead to effective management of the relationships.

However, those organisations that recognise the need to use these technologies as an aid to effective decision-making have the opportunity to transform the relationships with key customers.

The following diagram illustrates a typical, simplified, CRM technology map. The area within the dotted lines shows the CRM tools:

Figure 6.6: CRM technology map

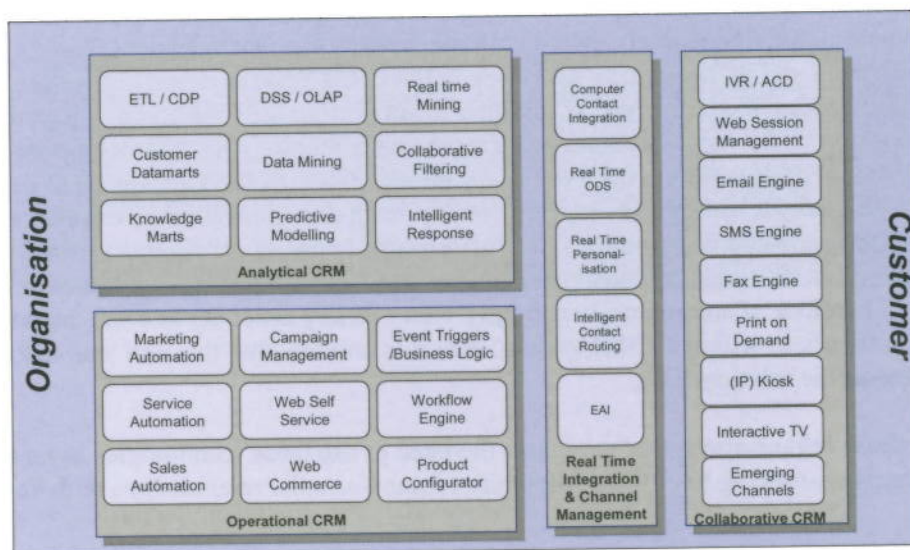


The customer database holds the 360° view of the relationship between the customer and the supplier drawn from across the whole organisation, supported by analysis tools. The

Campaign Management tool (for executing direct marketing campaigns) and CRM systems may be driven by their own integral databases. Text management helps provide personalised scripting and letter content and can also provide access to correspondence (e.g. history of a complaint).

However, the full range of IT tools that can comprise a full CRM solution is somewhat more comprehensive and complex, as illustrated by the following diagram, provided by the KPMG consulting group:

Figure 6.7: CRM technologies



(KPMG 2002)

The diagram shows the four main modules within CRM technologies:

- **Analytical CRM** – to create information and knowledge to support decision making (tactical and strategic);
- **Operational CRM** – applying information within front-office applications to support or automate sales, marketing and customer service decisions;
- **Real-time integration & channel management CRM** – technologies that enable instantaneous updates to the information store, rather than batch runs, and ensure consistency between the messages across the channel mix;
- **Collaborative CRM** – supports multi-channel access by customers.

All commentators on the IT industry have reported high levels of disappointment within many organisations that have invested in CRM technologies (Rigby, Reichfeld & Schefter, 2002; Rufo & Sodano, 2002); failure levels of up to 70% have even been quoted. This failure to meet expectations is due to a number of factors:

- Inadequate business cases;
- Insufficient pre-planning;

- Insufficient involvement of key end-user teams;
- Inadequate investment in training and new skills/competencies;
- Insufficient attention to gaining commitment top-down and bottom-up;
- Inadequate strategies for information management/data quality;
- IT led, rather than business led, change;
- Purchasing expensive 'IT packages' as the 'silver bullet' solution to transform marketing;
- Undocumented processes within sales and marketing.

CRM technologies can only deliver competitive advantage if (Hewson group, 2001):

- *the systems are designed to build and reinforce existing strengths of the organisation;*
- *they deliver value to customers at a cost they can afford;*
- *the emphasis is on revenue growth rather than cutting costs.*

One of the challenges faced by organisations thinking of implementing CRM technologies to support KAM strategies has been the cost and level of perceived difficulties relative to the small number of customers involved. However, a sign that these obstacles needed to be overcome is illustrated by the fact that whilst at the 36th SAMA conference (2000) only about 10% of delegates had access to CRM technologies, half of those attending the 2001 event rated 'utilisation of CRM tools' as important as assessing the performance of key account relationships.

At the 2001 conference the Director of SAMA's Department of Education and Training listed five areas where CRM technologies can benefit account management:

- *Account planning – plans can be centralised, and accessed by all staff authorised to review, monitor and update;*
- *Internal alignment – resource allocation can be managed in more cost and time effective ways, and coordinated with other resource requirements in the business;*
- *Metrics – provides a systematic basis for scanning customer profitability and assessing development potential;*
- *Teams – provides a range of collaborative work tools for teams to interact with each other;*
- *KAM programme delivery – systematises the identification of accounts, capturing customer knowledge and delivering appropriate strategies.*

Some of these benefits are achieved outside the 'standard' CRM software modules within many organisations, and these applications are described elsewhere in this report.

Integration has been another issue faced by implementers of CRM technologies – either between different CRM modules or with back-office/legacy systems. One factor is that most CRM vendors specialise in either one module within the overall system, or have developed specialisms to meet the needs of particular market sectors, as illustrated by the following table showing the extent to which the leading CRM system vendor demonstrates commitment to meeting the specific needs of three market sectors. The blank cells indicate that the vendor concerned does not provide suitable solutions for that sector:

Figure 6.8: CRM vendors

Vendor	Industrial Products	Logistics	High Tech/ Electronics
Siebel			Limited
Oracle	Heavy	Limited	Heavy
SAP	Heavy		Heavy
Peoplesoft			Some
Onyx	Limited		Heavy
Pivotal			Limited
E.pithany	Limited	Some	Some
Clarify	Limited	Some	Heavy
JDEdwards	Heavy	Limited	Heavy
Chordiant			Some

(AMR Research
USA 2002)

AMR's advice to those contemplating the purchase of CRM tools/systems is as follows:

- *Avoid overbuying and mismatched products by focusing on usability;*
- *Ensure that the IT team gives sufficient emphasis to integration when reviewing vendors;*
- *Allow benefits to be gained by purchasing front-end tools from the same vendor as already installed back office systems to help minimise the integration challenges;*
- *Some products are better suited to meet the needs of mid sized or smaller companies;*
- *Allow 3-4 times the cost of software to cover the costs of implementation, services, hardware and training;*
- *The vendor's quoted implementation timescales often assume that the organisation has already completed the necessary, and often lengthy, pre-installation work. The overall elapsed time for CRM technology projects can be considerable, if for example there are data quality/availability issues to be addressed, processes to be analysed or if any organisational re-structuring is necessary.*

Two leading manufacturers in different sectors that had implemented integrated CRM projects were interviewed. In both cases the research explored the background to decisions that transformed both organisations from a product to a customer focus. The impetus for both was a failure to answer simple questions such as:

- *'Who is our single most important customer?'*
- *'Why do we seem to have no information about the needs and attitudes of our main product users?'*

The actions in response to these questions are illustrated by the following case studies from the research covering the development and implementation of CRM system solutions.

6.3.1 Case Study: CRM within a leading global engineering company

The newly appointed marketing director of a leading international engineering company interviewed in the research had found it difficult to identify the largest customers of the company and assess:

- *the value of individual customers;*
- *the contribution from individual products;*
- *how components purchased from the company were assembled by customers into complete systems;*
- *the value of geographic markets;*
- *the structure of the market etc., etc.*

The first step was a comprehensive audit of the market at regional level. Overall, 250,000 customers were identified worldwide, and these were segmented by sales value and type/location/sector/buying characteristics. The segmentation also factored in future growth potential for individual accounts.

The top segment, 'Mega OEMs', comprised those organisations identified as global key accounts. This segment, totalling sixty companies, represented 25% of overall potential sales and 50% of the OEM market. The buyer characteristics of this segment are:

- *the supplier's products are fundamental to their business;*
- *they buy internationally;*
- *they require added value products (designed in solutions, distributed to order) which creates a particularly close relationship between supplier and customer;*
- *purchases are not price driven.*

Due to their size, these organisations also create a disproportionate 'pull-through' in subsequent sales of other products within the replacement end-user market and distribution channels.

A further change of direction was to re-think the approach to a customer around the overall spend on products and calculate the 'share of wallet' to identify the overall potential for each key customer.

The audit identified that, whilst each manufacturing unit had its own MIS, there was no capability to share this information to the benefit of the group. It also underlined the importance of sales engineers as key players and identified that they were incapable of dealing with the level of business generated by the larger accounts.

The solution was threefold. Firstly, it was decided to create new teams to manage the top sixty accounts, reporting to the main board director responsible for that market segment. Secondly, the sales teams were trained to deal effectively with these strategically valuable top accounts. Thirdly, standardised information flows and processes were defined and implemented. The account segmentation system was a key input, plus information identifying any likely opportunities for the future development of an individual account.

To facilitate the new focus on the customer, five key IT investment programmes have been implemented, three of which are relevant to this section of the report:

- *A data warehouse containing all global sales data, including component identification and customer account numbers;*
- *A CRM system covering the sixty Mega OEM accounts only;*
- *A COGNOS ROLAP tool for data analysis and reporting the Mega OEM segment.*

The data-warehouse was built in-house using standard SQL tools, with a one-person resource. The budget covered some consultancy, licenses and hardware. The database is updated monthly with sales data for all customers from all global sites. The data-warehouse is also the source of product data. The data is held at component granularity. Each component can be identified through a range of part numbers, as these can differ between customers and geographic regions. In total, the warehouse is fed from eight types of systems, with fifty variations of these core feeds.

The CRM application system covers only the top sixty global Mega OEM accounts. This was implemented in parallel with the development of the data warehouse. Prior to implementing a software solution, the first year of the project was spent in defining data needs and developing the processes to deliver the information in the required format. This was all planned "on paper" before building the required functionalities within the chosen CRM software product (Pivotal). Software selection criteria included the capability to be operated internationally, plus web- and Windows- based operating options. The web-based option was initially operational, but was subsequently abandoned in favour of Windows due to bandwidth limitations. The software has been customised to meet the company's requirements, but many of the standard options in the package have been switched off as they are currently unnecessary. The system contains a detailed record of each customer relationship, covering:

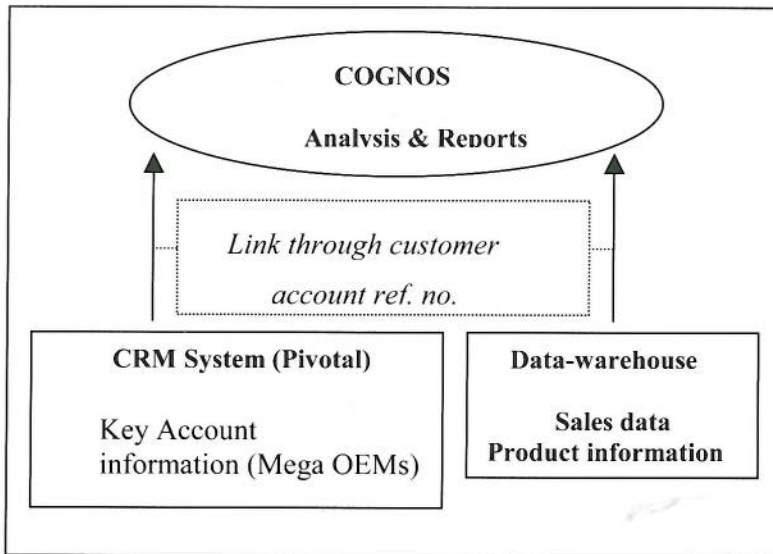
- *Account plan;*
- *Risks and concerns;*
- *Activities;*
- *Product developments;*
- *Competitor/market intelligence.*

Currently, details of marketing activities (now mainly e-mail based and centralised through one team in head office) are not fed into the system and the content of the Activity Plans are not sufficiently controlled or consistent in quality and content.

The system is updated directly by the individual teams, but access at local level is limited to the accounts(s) managed by each team. Competitor intelligence is processed via e-mail through the sector marketing teams in two regions. This information has enabled the company to identify situations where customer behaviour as recorded in the CRM system is out of step with market conditions, providing an early warning of emerging issues and the opportunity to develop options for handling the account.

An OLAP tool (COGNOS) links the data held in the data warehouse with the CRM system to enable a full picture of the individual accounts to be generated. COGNOS provides detailed analysis and reporting functionalities:

Figure 6.9: CRM tools in a global engineering company



The above structure enables individual key accounts, manufacturing units, industry sector groups and geographic regions to be analysed in terms of profitability and added value. The data held in the CRM system is a mixture of data and text fields, the latter for describing the current state of the account, product developments etc. The system also identifies the individuals responsible for managing different aspects of the account, or within other parts of the organisation (e.g. product development, engineering, production, order delivery etc). From the screens, a full picture of the current status of an account can be derived, including an assessment of future potential and, for example where there are apparent delays in order fulfilment, including reasons (e.g. customer requested a delay on delivery), using the drill-down facilities within the COGNOS Powerplay module.

Key IT investments have been on the Pivotal CRM system and the data warehouse.

The IT vision was developed by Marketing and is focused firmly around implementing IT solutions that meet clearly defined business needs. The implementation of all the key solutions was managed by Marketing and developed with minimal input from the in-house IT department, except where links were needed to existing systems and hardware. The climate

within internal IT has changed since the programme commenced and there is now a more collaborative and supportive approach.

Apart from the initial cultural issues within the in-house IT team, the main issue has been data ownership within countries and individual accounts, and holding back key information. Despite the impact on culture created through the sales training programme and the benefits of having a 360° view of an account, this issue is still not fully resolved.

Future plans include:

- **Automating marketing processes:** *to create a consistent structure for the execution of marketing campaigns – planning, targeting, KPIs, content and format etc. Currently, all this work is undertaken off-line;*
- **Implementing KAM customer service:** *to build customer contact information into the CRM system to manage contacts more efficiently and reduce costs, and, further refine the value proposition based on customer needs;*
- **Reducing sales costs:** *to reduce the level of sales costs for smaller customers. This will focus on developing a more efficient strategy for channel management within the sales teams;*
- **Processing orders:** *to develop an automated system.*

CRM (1): key lessons for KAM

- *The key role played by technology in facilitating a change from product to customer focus;*
- *The importance of gaining senior level commitment;*
- *The opportunities technology offers to create a comprehensive picture of global customers and their relationship with the supplier;*
- *Using this knowledge of the customer and the overall relationship to respond proactively instead of reactively;*
- *The need for flexibility in developing a business case for the initial stages of a technology project;*
- *‘Off-the-shelf’ IT products may provide adequate initial functionality, additional options being added as experience is gained and when the need arises.*

6.3.2 Case Study: CRM within a leading global health & safety products manufacturer

Sales of products from the health and safety division of an international manufacturer have traditionally been mainly through distributors (95%) and other third parties, plus direct sales to some key accounts. Indirect sales via distributors remains the preferred route to market, with direct business being limited to certain circumstances, such as where a high level of technical complexity is required. Historically, the culture of the organisation was highly product focused and did not view end customers, or product users, as an important element within the overall supply chain.

Relationships were primarily between the sales teams and intermediary customers, this being reflected in an infrastructure where the level of support to end users has been limited by the number of people in the field sales team. The discovery that end-user customer service in particular was of low priority and unstructured throughout the sales, operations and technical support teams, led to a major review by Marketing Operations of the overall interface between the division and its direct (intermediaries) and indirect customers (end-user organisations).

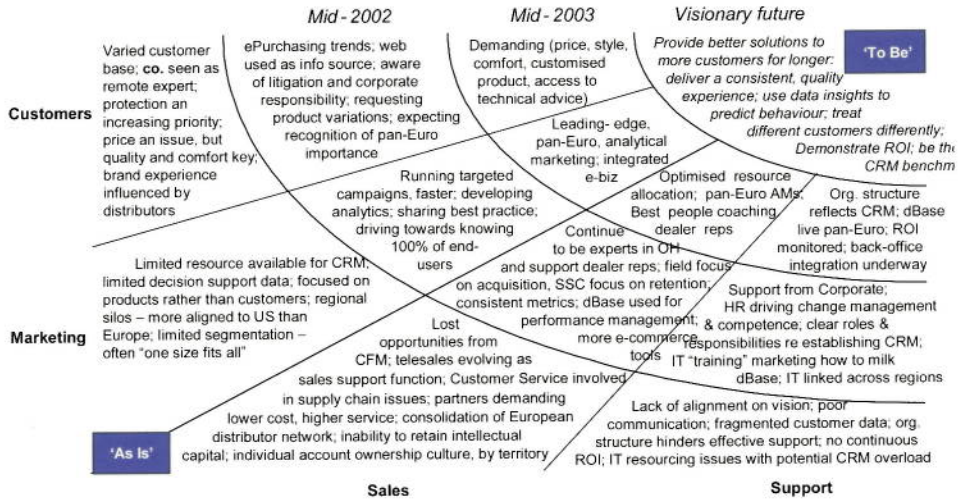
This review identified the following key issues:

- *There was no comprehensive list of end-user customers - leaving the company vulnerable to competitors, either whenever a member of the sales force left the company, or due to the dependence on the performance of the intermediary;*
- *The sales force was responsible for the relationships with intermediaries, with no account taken of the cost-effectiveness of relying on this channel to cover all sizes and types of account;*
- *The lack of any effective end-user customer service/technical support infrastructure was confirmed. For example, no records were kept of inbound service contacts (the issues raised, how they were dealt with or by whom) in effect, no-one owned this activity;*
- *Research amongst end users and distributors identified a very high regard for the company brand in this market, with operational excellence being rated best in class, particularly in terms of product quality and logistics. Research also indicated a need to address limitations in after-sales service. Whilst being viewed as an expert in the field, the company was also seen as rather remote from the user expert, often with only a minimal understanding of end users' businesses and their needs. Overall, there was no relationship with key end-user organisations many of whom were often highly dependent upon the company's products;*
- *The structure of the global market was rapidly changing;*
- *The sales force was the main point of continuing contact between the company and the market;*
- *Marketing was essentially a source of sales support activity and market intelligence;*
- *Technology played a minimal role in the sales, service, or marketing functions;*
- *The cost and effectiveness of the overall sales process were unknown.*

The review also identified that the key blocks for building better relationships with customers through a CRM strategy were not in place. Figure 6.10 describes the overall plan split into

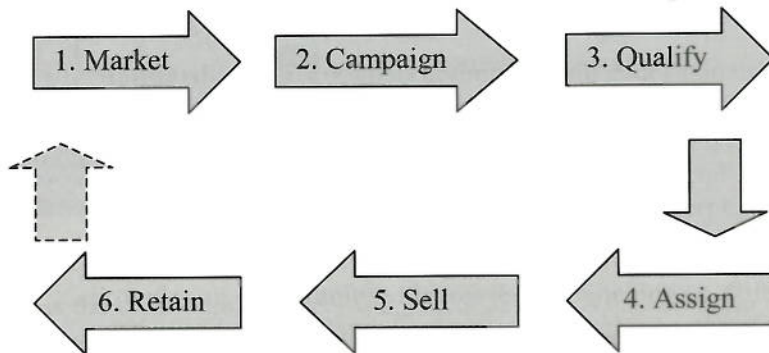
the strategies for customers, marketing, sales and the support needed from other parts of the company in order to transform the organisation from the 'As Is' in 2001 to the customer-centric vision shown as 'To Be'. This vision comprised a customer-centric business model for end-users and distributors embracing customer service, marketing, internal sales-contact centre; lead management; account management; field sales; technical support and e business.

Figure 6.10: CRM strategic map (global health & safety manufacturer)



The overall strategy covered the following stages in targeting new prospects, gaining sales and retaining customers:

Figure 6.11: Customer acquisition and retention cycle



Within each of the above steps, the plan identified strategies under common headings:

- Process
- Functionality
- Benefits
- Metrics.

The main investment in technology to support and facilitate the overall strategy was in a Siebel CRM system to support field sales and the Sales Support and Technical Support call centres. The programme was a collaborative development between IT and Marketing Operations, based on the Siebel suite of products:

- *Sales force automation*
- *Call centre operations*
- *Database*
- *Analytics (standard Siebel MIS reports).*

A key role for the IT team was to help select the vendor. The strategy was to initially install and operate a 'vanilla' version of Siebel, as excessive configuration would lead to unnecessary complications and additional cost. The internal IT team has, however, experienced some problems in supporting the Siebel platform.

The investment to date in the UK has been funded from Marketing Operations budgets by diverting money from other projects/campaigns, with a payback period in the plan of 17 months. The roll-out into other geographic markets has been at a lower cost, and funded out of local sales and marketing teams budgets.

Whilst orders for many customers are still fulfilled by distributors, the sales team use the system to specify a customer order (and thereby also impress the customer).

The benefits of the investment include:

- *Building and applying a database of customers/prospects (now data rich);*
 - *Improved targeting for new business (campaign response rates have increased from 0.1% to 40%) and expanding existing account business;*
- *'Lost customer' and retention marketing now possible;*
 - *Improved customer service by bringing the marketing and sales activities closer together, and by creating an effective, centralised Sales Support team;*
 - *Intelligent scripting within call centres and motivating the sales-force to collect information about end-users. This is shifting the balance of power away from distributors;*
- *Structured meetings between the sales team and end-users;*
- *Demonstrating the value of a centralised database to other departments;*
- *Improved management of seasonal cycles;*
- *Closer relationship between marketing and IT – shared learning curve;*
- *Faster and co-ordinated response to emergencies;*
- *Easier to identify and compile 'bundled' product orders;*
- *Pipeline for orders now more transparent within the company;*
- *Higher level of company visibility to end-user customer;*

- *Improved stock control;*
 - *Attracting higher quality staff - 'exciting developments attract excited recruits';*
 - *Exposure of the benefits to other product teams located in the centralised customer service centre.*

The measures of success include:

- *The UK company now generates more sales per head than any other similar divisions within Europe;*
- *Value of accounts – 60% of all UK business now accounted for within the CRM system;*
- *Improved speed and lower cost of producing and implementing marketing campaigns.*

Responsibility for training in the use and application of the technology is now vested in those that fully understand the market and business issues with fully trained team leaders, or management now training their own teams, rather than using IT trainers. Problems encountered include training marketing people to be database literate, remunerating the sales-force to provide data and setting up an effective customer service team composed of people with either sufficient technical knowledge or experience of the sales process.

The key priorities in the short term are to complete the European roll-out and to link main distributors to the Seibel system. The success of the latter will be dependent upon the willingness of distributors either to invest in IT, or to share their IT plans with the company.

Further plans for supporting the business through IT will build on the benefits accruing from the initial stage:

- *Using the information held in the database to improve the sales and operating planning process, especially demand planning. This will also help provide an early warning of any downturns or upturns in customer economic activity;*
- *Supporting R&D and NPD by using the database to identify new opportunities and trial customers;*
- *Integrating web-sites into Seibel. Currently these provide information (including product catalogues) and links to distributors sites;*
- *Gaining further investment to fund data quality initiatives and tools/resources for data analysis.*

CRM (2): key lesson for KAM

- *The need for a vision and a structured plan;*
- *The need in some cases to prove the case for investment in IT and gain commitment from senior management through a pilot project ('CRM/KAM by stealth');*
- *The role of technology in building an understanding of the indirect customer and their needs;*
- *Using technology to improve productivity and target customer sales/support resources;*
- *The need to ensure that effective measures to monitor progress are in place that are based on clearly identified business goals;*
- *Improved targeting for new business and expanding existing accounts;*
- *'Lost customer' and retention marketing become possible;*
- *Improved customer service by bringing the marketing and sales activities closer together, and by creating an effective centralised sales support team;*
- *Value of using a database to support call centres;*
- *Motivating the sales-force to collect information about end-users thus moving the balance of power away from intermediaries;*
- *Structured and more productive meetings, and other contacts, between the sales team and end-users;*
- *Demonstrating the value of a centralised database to other departments;*
- *Creating a closer relationship between marketing and IT – shared learning curve;*
- *Faster, pro-active and coordinated response to customer and market needs;*
- *Easier to identify and compile 'bundled' product offers and value added solutions;*
- *Pipeline for orders now more transparent within the company;*
- *Higher level of company visibility to end-user customer;*
- *Improved stock control;*
- *Attracting higher quality staff - 'exciting developments attract excited recruits';*
- *Using knowledge of the end user to support intermediaries and strengthen relationships with them;*
- *Exposure of the benefits to other areas of the company.*

6.3.3 Case Study: CRM within Nortel Networks

Nortel, a leading global telecommunications systems provider, claims to have one of the most diverse and widespread installed base of customers in the telecommunications industry. Customers include both service providers and enterprises throughout the world, including all sizes of organisations and within sectors as diverse as financial services, health care, retail, government, education and system integration.

At Nortel Networks, everything begins and ends with the customer – listening to and responding to their needs, strengthening relationships and marshalling the entire organisation to deliver innovation.

Nortel Networks, through the use of its own technologies, have created a secure, high performance global corporate network. Spanning over six continents and nearly 270 locations, the network connects employees, partners, customers and suppliers, giving access to corporate information anytime, anywhere.

Nortel Networks is extending the reach of its integrated supply chain to create competitive advantage for its customers, by making it easier, faster and more cost-effective for them to do business with Nortel.

A key IT priority, stated in the interview, for Nortel Networks, related to CRM, is to:

‘Reduce multiple customer touch points at Nortel Networks through consolidation of disparate systems and multiple processes by implementing one single instance of CRM across the globe.’

Nortel Networks strategy is establishing an end-to-end CRM environment that supports the customer and the customer-facing teams in sharing business critical (sales, service and design) information in a collaborative work environment. Through information sharing, Nortel Networks can enhance customer intimacy, improve customer service, decrease response time, shorten the length of the sales cycle and deliver clean orders to the customer; all of which contributes to customer loyalty and process efficiencies, resulting in incremental revenue and profit margins for both Nortel Networks and the customer.

The CRM strategy is built around four common themes:

- *Define and implement global business processes;*
- *Build an environment around a single instance technology with focus on the customer;*
- *Minimise technology customisation that is not driven by increasing customer profitability;*
- *Leverage critical success factors.*

To deploy CRM solutions effectively, Nortel Networks modified and aligned all customer-facing processes, ensuring an end-to-end view of the customer life cycle. The key processes that were re-visited and modified were:

- *Lead, opportunity and account management;*
- *The design solution process;*

- *Customer service;*
- *Service contracts and quotes.*

The objectives behind the programme were to:

- *define & implement global business processes,*
- *build a single instance technology environment with focus on the customer,*
- *minimise technology customisations to only those that increase customer profitability,*
- *leverage critical success factors.*

Nortel Networks use a range of technology products and modules from the CRM tools vendor, Clarify. ClearSales and ClearCallCenter Clarify products are used to manage Nortel Networks sales leads through a single process without handoffs or system interfaces. Process efficiencies are giving the sales teams early visibility of major opportunities, and allowing better management of sales activities globally. At the same time, having a common CRM platform means sales leads can be moved from the call centre to sales in minutes.

All opportunity information is now visible in a global data warehouse - a single data system for global information access and reporting - for direct, web access by account teams, support staff and executives.

The simplified Opportunity Management Process has allowed the corporation to overlay Delivery Collection Assurance (DCA) deliverables, so that Nortel Networks can effectively manage key milestones in the overall business process.

ClearSupport is the Clarify application used for the online service centre, available to customers through nortelnetworks.com. It gives customers direct access to online product support including: opening, tracking and managing their customer service requests (CSRs); self help tools; downloading the software they are entitled to; retrieving keycodes to activate product features; and, accessing training schedules, registering and obtaining online training. By making these tools available online, customers experience expedited installation of their Nortel Networks products.

A further Clarify module, ClearQuality, is a quality management system that channels a direct flow of information from the customer to the product designers. It enables the efficient handling of software bugs, hardware defects and product enhancements, tracking progress through to resolution. Once an issue has come to light, the shared information available in ClearQuality gives designers the ability to address similar issues on other platforms quickly. When customer requests for new product features and functionality have reached a defined "feature" that is in development, it is tracked within ClearQuality.

Clarify ClearContracts gives a single view of a customer's warranty, their service and support plan entitlement. Immediate availability of this information helps speed decisions that get customers' problems ironed out more quickly than in the past.

Clarify ClearLogistics enables inbound EDI capabilities that reduce order entry time, provide the ability to manage higher volume of service orders and improve delivery time to customers.

Implementation of the CRM programme began in phases starting in 2000. The business case for implementing Clarify was driven around allowing customer service, sales and design to

share and manage customer information in a collaborative way. The goal is to run it on a single global platform supporting all business units to fix disparate processes used by customers and employees around the globe as well as to reduce the sales cycle and improve problem tracking.

The key goals are:

- *One instance, one solution globally;*
- *Modified and aligned customer-facing processes;*
- *Leveraged Nortel solutions for a fault-tolerant technology infrastructure.*

The problems that these goals are designed to alleviate include:

- *Twenty five different sales & customer service support systems;*
- *Over one hundred day sales lifecycle (lead to fulfilment);*
- *Three main service and sales call centres;*
- *Fifty seconds to answer a customer's call;*
- *7% abandon call rate.*

To date, the following progress has been achieved:

- ***Cost Reductions***
 - *\$14M in system decommissioning*
 - *\$21.6M in service reduction savings*
- ***Increased Service Revenues***
 - *\$226M service revenues through entitlements*
 - *\$12M in incremental per incident billing*
- ***Increased customer service efficiencies***
 - *95% of calls answered within 20 seconds*
 - *Average speed to answer a customer call reduced from 50 seconds to 14 seconds*
 - *Abandon call rate reduced from 7% to <2%*
- ***e-Service Response***
 - *\$2.4M in cost avoidance since September 2001.*

While most of the implementation was immediately successful due to solid cross-functional planning, the intricacies of introducing numerous leading-edge, redundant technology elements seamlessly was a particular challenge. Although simultaneous implementation of multiple redundant elements was considered, the team chose to introduce one new element at a time, testing performance and recording data traffic analysis at every step. With this method, each additional redundancy layer was quickly and effectively introduced. Throughout this process, it was important to overcome the desire for the "quick fix" or "band-aid" solution. The chief information officer provided full support for the implementation team, giving them the necessary time and resources to deliver the required results in order to enable its CRM solutions.

The implementation of Clarify has been project managed by the Information Services team, with full business sponsorship. To implement CRM solutions, high collaboration was required between sales, service and design. Once the fundamentals were established, each of the business groups drove the process changes throughout their respective teams. In the early stages of the implementation, external consultants who had Clarify experience were used. These helped fast-track some of the development early on and build up the knowledge base within the Nortel Networks teams. After the first year and a half, internal teams took over the knowledge and have taken full responsibility for all consulting, development and deployments. Training remains a key focus.

Nortel Networks looked at all leading CRM vendors including SAP, Siebel and Clarify. Most of the initial priorities were around customer service and case management. After a careful evaluation and prioritisation, Clarify was selected as the vendor of choice. Nortel believed that integrating sales, contracts and design into a common platform would bring a much quicker ROI than looking for different vendors for each process area.

The CRM environment is supported by an integrated architecture that directly supports the information management strategy. The architecture is built upon a single-instance strategy and runs over a global enterprise network using Nortel Networks solutions.

The fault-tolerant infrastructure was built by consolidating key CRM applications into two global e-business centres, enabling integration with other critical applications. A parallel test environment was enabled through user acceptance, global performance and reliability testing. Real-time performance of key transactions from major customers is measured and web templates have been re-designed.

The most significant organisational challenges were encountered in the two areas of process change and change management. Once a clear CRM direction was identified, the challenge was to align the sales, service and design process. After six months simplifying each of these three main process areas, the system architecture was mapped in. Once implementation began, a change management process was initiated, with the help of process and enhancement steering committees, to evaluate and make decisions on changes.

Nortel Networks' key business partners and customers have secure access to the CRM system.

Nortel Networks' key goal is to help customers achieve their profit potential from the internet by driving constant improvements and innovations that help carriers and enterprises unlock new streams of revenue, accelerate time-to-market for the delivery of unprecedented services, and reduce the cost of networking.

Nortel Networks is aligned to customer segments, and the company now has one single, global CRM solution that directly supports and integrates the vision. The system supports 19,000 customer-facing workstations and has created the ability to respond and manage customer questions, concerns and issues in hours and minutes rather than days.

With all customer-facing information captured through common processes, residing in one global data warehouse, the company can manage the customer more effectively - sales processes are streamlined and customer service and design opportunities are identified and resolved quickly. Customers have a more in-depth and end-to-end view of their relationship with Nortel Networks, as they can access their information through an e-service portal, which also allows them to communicate directly with key customer-facing personnel.

One of the most valuable lessons learned was to focus initially on the essential processes and technology required to succeed in a CRM initiative and to deploy this basic package first and foremost. Once the fundamentals were deployed, most change management issues were addressed and it was then possible to make the necessary changes to the process and tools that add functionality and fine-tune processes. This provides the leverage required to build on, and increase, the overall effectiveness of the CRM implementation in the eyes of the customer through:

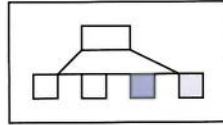
- *'Follow-the-sun' support;*
- *Focus on process first; technology second;*
- *Eliminating manual processes;*
- *Avoiding 'scope creep', quick-fix temptation, or 'band-aid' solutions.*

Nortel Networks customer-centric metrics are layered. To achieve the customer goals, satisfaction and loyalty are measured based on level of contact, timely response to requests, understanding of customers business, providing innovative solutions, keeping promises and quality of proposals. Increases in customer loyalty were shown for 2001 and 2002.

CRM (3): key lessons for KAM

- *Enabling all customer service teams to share information through a common database and technology platform;*
- *The need to review all relevant business processes and re-align where necessary to facilitate an end-to-end view of the customer 'lifecycle';*
- *The need to prioritise implementations;*
- *The value of having an integrated technology solution;*
- *The need for a clearly defined business case, including detailed measures to monitor progress;*
- *The opportunities for significant cost savings, revenue growth and improved customer service;*
- *The role played by a senior 'champion' in ensuring that the plan is not subverted by other agendas (e.g. resisting pressure for single 'quick-fix' solutions);*
- *The value of enabling key customers/partners to access the system.*

6.4 CUSTOMISING THE OFFER



The days when the old Ford maxim ‘you can have it in any colour, as long as it is black’ held sway over mass produced items are long gone. Instead, there is now the potential to offer almost infinite versions based on a standard product, to meet the varying needs of individual customers. The classic example is the wide range of colours, engines, trim, suspension, accessories etc available as options to purchasers of the average family car. However, these are often consolidated into priced packages to reduce the overall complexity of choice.

Within many business markets, the above example would be viewed as a relatively simple challenge, compared to those faced within other sectors. In today’s demand driven markets, manufacturers and sellers of many products need to be able to match highly customised specifications if they are to remain competitive. The real challenges are to ensure that these individualised specifications:

- can be assembled from the available stock of components;
- produce a final product that is truly ‘fit for purpose’;
- can be realistically priced;
- can be rapidly finalised – preferably in real time, whilst the sales representative is still with the customer.

If these requirements can be met, then the supplier has the opportunity to impress the customer, improve margins and develop such a customised offering that it might be difficult for the customer even to undertake an effective price comparison against competitors. Obviously, this situation applies in only certain markets, especially those where product specifications tend to be particularly complex and the need for customisation is likely to be high. Examples of this include: fitted office furniture; agricultural and commercial vehicles; certain insurance products.

Traditional ‘lead-to-order’ processes using paper-based catalogues and handwritten orders or even sales force automation tools, cannot easily deal with the level of complexity or transaction speed required. This led to the sales configuration tool, such as the software suite developed by Firepond which enables the sales force to discuss the most complex needs of a customer and confirm specification and price on the spot, without the consequent delays in negotiating – with production and with the customer - a final specification and price.

6.4.1 Case Study: Firepond configuration software

Firepond was founded 20 years ago in the mid west of the USA and today provides guided selling and online customer assistance solutions that help companies acquire and retain customers. The origins, however, were within an agriculture equipment sales company seeking ways to compete successfully against a local main dealership. The objectives were firstly to generate interest amongst customers and prospects in buying higher margin new equipment rather than low margin used products; and secondly, to increase overall sales levels.

The product developed to achieve this goal was a computerised tool which the sales team could use in the field to configure the breadth of options available from within their tractor ranges to meet the varied needs of individual customers, covering criteria such as type of

farming, soil/land conditions, acreage, ancillary equipment, budget etc. The sales team used one of the earliest portable computers ('luggable') to configure the customised product and derive a price, plus the farmer's VCR and TV to display the catalogue.

The success of this initial tool led to the establishing of Firepond, that since 1997 has depended solely on a software products portfolio. The functionality within the technology has expanded to include modules for needs analysis (based on a questionnaire), generating prices, proposals, direct ordering and supporting the bundling of products within an order.

The market niche for Firepond is described as follows by their chairman and CEO:

'As the primary heritage of Firepond, our mission remains one of helping large companies more profitably acquire and retain new customers through intelligence-driven software solutions. Specifically, we help companies that produce complex goods and services optimize their "lead to order" business process, shrinking cost and time from the sales cycle and increasing both top and bottom line returns.'

(Klaus P. Besier, Firepond Chairman, 2001)

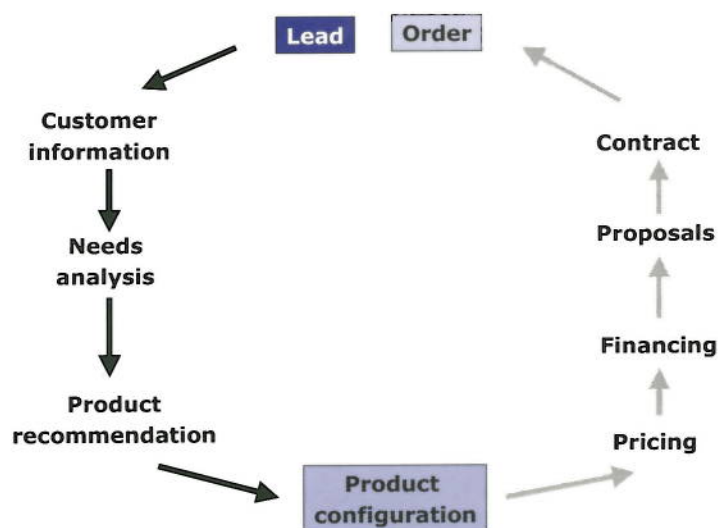
Firepond's mission statement underlines that aim:

'To deliver best-in-class intelligent software systems that increase sales effectiveness from lead-to-order, and improve online customer assistance from question to answer.'

Firepond is now a global company, based in Minneapolis with offices in Europe and Japan with a turnover in 2001 of \$30m.

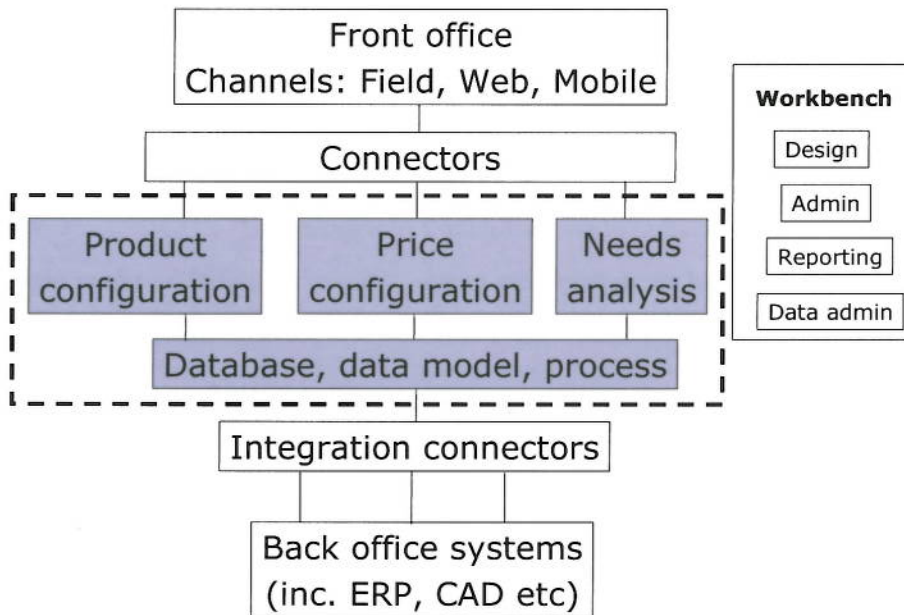
The Firepond product covers the full 'lead-to-order' process:

Figure 6.12: Lead-to-order process



The individual modules within the overall suite of products can be implemented separately and cover all channels, but there is a single package for automated e-mail response and customer service. The following diagram shows the suite of products within the overall product:

Figure 6.13: Firepond configuration system



The core product comprises the sales configurator module components, shown within the dotted box in Figure 6.13, above. This tool uses supplier information about the product and customer information about needs (based on a questionnaire) in order to develop an achievable customised solution, create orders and apply variable pricing by:

- Analysing customer needs and then providing customised recommendations;
- Configuring products based on complex data by applying rules, constraints and unique relationships within the information to identify the most appropriate combination within thousands of possible options;
- Modelling complex pricing, promotions, discounts and tax calculations;
- Facilitating the build and a view of rules, constraints etc that had been applied in arriving at the recommended solution;
- Enabling external data to be imported into the configuration model.

The tools can be deployed across all main channels.

The business advantages include:

- Reduced error levels within orders, and therefore reduced costs;
- Product formulations and pricing that are customised and consistently applied;
- Identifying and facilitating up and cross-selling opportunities;

- One data set to support multi channels;
- Multi user access and flexible editing to simplify rule creation;
- Quicker ‘lead-to-order’ process;
- Increased margins.

The configurator uses complex algorithms called ‘solvers’ to organise the relevant information drawn from the company ERP systems (products and pricing) and dialogues with the customer (profile and needs) to develop data models and provide interpretation. These ‘solvers’ are in effect pre-defined sets of rules that can be applied to any configuration problem. This potentially enables all the sales contact points to match the knowledge and skills demonstrated by the best performing members of a sales team in terms of:

- *Engaging customers in an interactive dialogue and making product recommendations based on this knowledge of the customer’s real needs;*
- *Helping buyers find the appropriate products based on questions about intended use and weighted preferences, rather than forcing a customer to select from limited lists of features and options;*
- *Bundling associated products that have been configured to complement each other and work together, naturally supporting efforts to cross-sell and up-sell;*
- *Providing customers with the reasoning behind a recommended solution to enable them to re-assess their preferences in order to arrive at the best choice;*
- *Delivering unique content to a user of the tool based on stored profiles or responses to the sales dialogue.*

The configurator also supports all key pricing scenarios, whether based on rules, package, quantity, date, uplift factors, margin, customer, geographic etc and multiple currencies.

Traditional sales force support tools focus on sales management and lowering the cost of sales: they concentrate on improving the efficiency of the sales process. Firepond’s data models also enable the effectiveness of the sales process to be increased as they enable the salesperson to influence the customer’s decision at the point of sale.

Data models are industry sector specific. The models currently developed provide templates for the following industries:

*High tech/telecommunications
Manufacturing
Automotive/trucks
Insurance/financial services.*

The current emphasis is on developing software that builds strong interfaces with key ERP vendors such as SAP and Oracle.

In certain manufacturing sectors (such as industrial sectors, aerospace, automotive), many of the benefits of CRM are likely to be in terms of costs savings rather than revenue generation. These savings will be generated by streamlining the lead-to-order process:

- *Product configuration*

- *Pricing configuration management*
- *Closed-loop lead management*
- *Proposal generation*
- *Quotation generation*
- *Content management*
- *Partner relationship management.*

However, Gartner also see the potential for these tools to generate increases in revenue:

‘Through 2004 product configuration deployments provide sales organisations with increased win rates and order sizes resulting in a 5%+ increase in revenue.’

(Robert DeSisto, Gartner Group, Firepond press release, 8th February, 2002)

Research by Forrester, quoted by (Firepond, 2001), predicts that the need for ways to reduce transaction costs for manufacturers selling high margin, high complexity products whilst at the same time creating a multi channel consistency within the sales process, will lead to numerous industries adopting configuration-based e-business applications. This view is supported by Forrester’s own research findings.

Renault, a customer of Firepond, state that the configuration software has provided the company with the following benefits:

- *Reduced sales cycle;*
- *Increased focus by dealers on closing sales;*
- *Major reductions in order administration costs;*
- *Strengthened key account relationships;*
- *Multi-lingual capability (14 languages).*

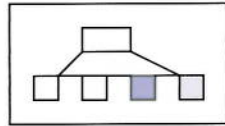
6.4.2 Case Study: On-line configuration

A further company interviewed in the research, a leading international engineering company, has applied configuration-type technologies to support its web-site based services. In this case, a customer can access an on-line 'web-store', containing an electronic catalogue, to specify a sub-assembly or customise the fittings on a standard product. This specification is automatically submitted to a CAD package for configuration and design. This might identify changes necessary to the specification, the recommended three-dimensional design, and any amendments to the component list being submitted by the web-site direct to the customer. The customer can then submit the order on-line once the specification and price have been finalised. This provides customers with a fast and highly flexible service that also reduces the need for designers in both companies. Further details of this case study, and key lessons, are described within Section 6.5.1.

Customising the offer: key lessons for KAM

- *Opportunities to create a highly customised offer and price;*
- *Opportunities to reduce the lead-to-order cycle;*
- *Potential to increase order value and protect margins;*
- *Opportunities to reduce the transaction costs for producers of high margin, complex products by streamlining the process;*
- *Providing consistency across all channels;*
- *Improving the performance of the sales force;*
- *Opportunities to create a more in-depth understanding of a customer's needs and a deeper relationship.*

6.5 E-BUSINESS¹



'The internet enables entrepreneurs to rewrite the traditional rules within a framework that both reduces transaction costs and gives unprecedented access to customers. The new flexibility this creates could transform the scale of businesses on the internet, even while blurring the distinction between business-to-business and business-to-consumer propositions. At the same time, the notion that the internet offers 'friction-free capitalism' may only be a euphemism for profitless'

(Electronic Commerce Task Force report, DTI Insight, 2000).

In the context of Porter's model, **'e-business'** can be defined as the use of the internet and other related electronic media to improve the organisation's competitiveness across the full value chain. e-business might be used in order to:

- increase revenue;
- reduce operating, sales, marketing and administration costs;
- create improved customer satisfaction and loyalty;
- create new value propositions and customised products;
- create an innovative image with customers, the stock market and within the overall market;
- increase working capital turnover;
- reduce the physical infrastructure.

The research interviews within e-business covered the use of **web-sites, extranets** and **electronic exchanges**.

Internet web-sites can be either open to all ('public' sites), or private **'extranets/customer portals'** - the latter linking one organisation to another through a secure, protected site to support business-to-business activities such as exchanging information or conducting transactions. Extranets also support the overall supplier-customer (or customer-supplier relationship). They may be supplier or customer owned or collaborative.

Extranets are a key sub-set within the overall concept of **'e-marketplaces'**, defined as:

'web-based systems which enable automated transactions, trading or collaboration between business partners' (White & Daniel, 2003)

¹ The Information Systems Research Centre at Cranfield has investigated the sustainability of e marketplaces in great depth through the 'Beyond e-Procurement' project. This section contains several references to findings reported within papers published by those involved in this research.

Whilst extranets provide 'one-business-to-one-business' functionality, 'exchanges' and 'auctions' facilitate either 'one-to-many' or 'many-to-many' business-to-business connections.

The generally accepted classification of e-marketplaces defines three key types:

- **Public:** owned or operated by parties independent from buyers and suppliers (e.g. BT Ignite);
- **Private:** formed by a single company to facilitate trading with suppliers, customers or both (e.g. RS Components);
- **Consortia:** set up and owned by a number of organisations that trade as buyers or sellers in a market (e.g. Automotive: Covisint; Consumer goods: Transora; Healthcare: GHX).

Auctions also form part of the e marketplace landscape:

- **Forward auctions:** driven by a supplier, where buyers bid for specific volumes. Often used to dispose of excess capacity, they can lead to price increases when demand exceeds supply;
- **Reverse auctions:** driven by a buyer aggregating demand and tends to push prices down. Suppliers gain an insight to competitors' cost bases, strategies and pricing and lead to rapid decisions by the customer on the outcome. The Ford Motor Company was one of the first organisations to claim that reverse auctions were a massive success, but suppliers have been less enthusiastic, seeing the removal of negotiation, margins eroded, or even destroyed along with supplier-buyer goodwill in the last minute frenzy of bidding activity. They also create a pseudo-relationship with customers. Consequently, suppliers have become increasingly wary of participating, whilst buyers are recognising the negative impacts on relationships with core suppliers and brand image.

There appear to be two trends within e-marketplaces:

- **Standardisation:** common definitions and data standards lead to lower transaction costs, transparent pricing and the need to conform or loss of business. Suppliers leading the development of standards in a market have the potential to become attractive leading-edge partners with key customers, but once this becomes the dominant model in a market, any perceived long-term advantage will be lost.
- **Collaboration:** whilst cost savings to suppliers are likely to be minimal, this provides an opportunity to increase the switching costs for customers due to the customised offering and more control over this sector of the customer's business. The customer benefits from a more responsive supply chain and consequent cost savings.

At the heart of many e-business propositions, or e-marketplaces, are **electronic catalogues**, providing up-to-date information about available products - and in some cases pricing - and **on-line ordering/processing** facilities.

However, many organisations are failing to maximise the sales and customer relationship building opportunities offered by the internet (Hewson, Meekings, Russell & Fuller, 2003). Whilst their extensive research focused on business-to-consumer experiences, the factors

outlined in the report could apply equally well to any organisation trading through this medium within the business-to-business sector. For example, the authors estimate that 28% of visitors who want to buy online are prevented from doing so by hurdles such as poor web-site design, usability, functionality, or misleading or poor copy – the ‘leaky pipe’. The report demonstrates that the return on investment in improving user experience can be enhanced by:

- Fixing the ‘leaky pipe’ by matching the end-to-end user experience of the best competitors;
- Ensuring that self-service is as good as it can be;
- Investing in assisted service provided through telephone, email, live chat, etc, but ensuring that the investment is fully controlled by matching defined needs.

The return on investment of adopting these strategies will be measured through:

- Protecting business through other channels (recognising that a poor experience online jeopardises future business from that customer through other channels);
- Savings in the cost to serve;
- Increases in repeat business;
- New business through referrals;
- New business through improved customer service;
- New business through improved self service;
- New business through fixing the ‘leaky pipe’.

6.5.1 Web-sites and extranets

Sites provide support across the life cycle of the sales and relationship processes, as shown below in Figure 6.14:

Figure 6.14: Web-sites and the sales process

Pre sales	Sales process	Post sales
List of contacts	Customised catalogues/parts lists	Management information (eg sales, products etc)
Company and product news	Contracts, prices	Order tracking
Sales support material	Special offers	Financial information (eg invoices paid, outstanding etc)
Frequently asked questions	Alternative/complementary products	Information library/links to other sites
Notice boards/’chat rooms’	Product availability	Training information/courses etc
Project development areas	Logistics/delivery information	Customer service
Electronic catalogue	Ordering facility	
Expert support tools to find products, design solutions (eg CAD) etc	Invoicing/payment facility	
’White papers’, case studies etc	Customer service	
Customer service		

Sites should include ‘hot buttons’ (to contact the call centre) and offer e mail facilities as part of the functionality – plus easily downloadable content (eg sales materials, information, contracts etc).

There has been a tendency within some companies to see the web as an opportunity to reduce costs by closing down, or limiting access to, more expensive channels and ‘force’ customers to use this medium, whether appropriate or not. Such sites may also suffer from poor customer service support (see next paragraph) and insufficient investment in functionality and ongoing development and maintenance. Many organisations seem to underestimate the resource levels necessary to manage, support and develop this channel, and the costs/logistics of fulfilment.

Research undertaken on web-site performance indicates that many site owners fail to meet the customer service expectations of users:

Figure 6.15: Customer service on the internet

	%
Sites with no facility to ask questions	23
Requested brochure never received	48
No answer received to query	41
Proportion of site visitors unable to find all the required information on the site	25
Users could not find link/FAQ	23
Inadequate answer to query	42
Unresolved problem	17

(Hewson Group, 2002)

The benefits of web-sites/extranets/portals to KAM relationships can be summarised as follows:

Figure 6.16: Benefits of internet sites to KAM

Supplier	Customer
Cost-effective customer management and processes	Customised information
Improved service to customers/responsiveness	Customised catalogues, part numbers, pricing
Improved customer satisfaction/loyalty/retention	Lower ordering costs*
Customers ‘locked-in’	Improved stock control
New opportunities to add value	Value added services
Track customer usage	24/7 access
Differentiation	Improved/stronger supplier relationship
Expanded contact with the customer organisation	Lower prices
Provides global capability	

**Cambridge Consultants, an e-customer of RS Components, estimated that, prior to the launch of the RS site, it took 8/10 people to raise, process, pay and reconcile an order at a cost of £60-120. The average cost per order using the site was reduced to £10, an annual saving for that customer alone of £100,000 (Reed D, 2000).*

The expectation of cheaper prices for customers is not always realised and the opportunity to order in seconds over the web also sets up expectations of instant delivery, whereas the supplier may still use a logistics network set up to support traditional channels.

Web-sites need to be used carefully in terms of key account relationships. Self-service at the limits is the antithesis of KAM, which is built on the principles of developing relationships through increased contact. Therefore, self-service and electronic contact must not be seen as replacing the need for personal contact, wherever the customer deems this as essential to the supplier-customer relationship.

Most of the organisations interviewed in the research utilised web-sites/extranets to support relationships with customers. These might be available to all customers, or include specialist sites to support higher value accounts.

6.5.1.1 Case Study: Using web-sites to create added value in the management education market

A leading management education centre builds bespoke sites to support major management education programmes developed for individual organisations, thus adding additional value to the relationship. These sites help build a true on-going community amongst those on, or managing, the programme over time. Content/functionality includes:

- *Access to the learning support material deposited by course organisers and students;*
- *Course programme material;*
- *Administration information;*
- *'Round Table' – a virtual discussion forum to enable past and present students to share knowledge and discuss issues;*
- *Links to other internal and external sites;*
- *Contact details for all past and present students, and those responsible for managing the programme at the university and within the client organisation.*

The development of such sites leads to a much more in-depth discussion about the objectives of the programme and creates a more open and deeper relationship between the university and the customer. The benefits to the customer and the university can be summarised as follows:

Benefits for the customer

- *Provides the core infrastructure for ensuring that the programme becomes the start of a continuous learning process rather than a "one-off" experience. Students entering the programme join a "club" facilitated by the web-site, providing access to the combined knowledge of all participants, the course organisers and the university plus*

the opportunity to seek advice and guidance when needed. This also creates an effective environment to foster team building;

- *The ability to provide effective and consistent management of the programme throughout a dispersed organisation, which could be on a global scale;*
- *Reduced programme administration costs;*
- *Enables participants to have easy access to up-to-date information;*
- *Provides a growing and highly accessible “knowledge centre” within the organisation on all aspects of corporate leadership, including the database of participants and their specialisms;*
- *Facilitates more effective measurement of the return on the investment in management training;*
- *Brings the programme into the customer organisation rather than being simply focused on the external university campus – fostering a spirit of shared ownership, where both parties have responsibilities for guiding future development;*
- *Provides the opportunity for more thinking time;*
- *Growing familiarisation with this type of technology to build the skills necessary to amend and develop the site.*

Benefits for the supplier

- *Provides cost savings in the administration of the programme;*
- *Provides the opportunity continually to re-enforce the university brand experience and add extra value to clients and their students beyond the boundaries of the campus;*
- *Develops the skills necessary to build and maintain sites of this type, resulting in substantial savings in development costs and increased “speed to market”;*
- *Provides the opportunity to differentiate the university offer and add extra value for clients at very low cost. Sites become part of the basic product for future clients, although this maybe a short term gain as this technology is easily replicable by competitors, despite false starts elsewhere;*
- *Raises the stakes in terms of client expectations from providers of corporate education;*
- *Increases the revenue opportunities;*
- *Creates greater “lock-in” with the client;*
- *Provides the opportunity to utilise the site infrastructure, and the experience in site development, to add online learning functionality so further increasing the value of the university brand experience beyond the campus. This could require substantial investment in technology, skilled people and the creation of suitable material, plus commitment from the wider faculty in developing and supporting the end products.*

The technology and the site itself is usually managed and developed on the university campus, but the clients make the final decisions on how the site is developed and maintained. One site, although built by the university team, is managed and maintained by the client within their intranet.

e-business (1): key lessons for KAM

- *Using technology to create a joint 'virtual' community within the customer and supplier organisations;*
- *Assisting the customer in fostering cross-functional team building and changing the internal culture;*
- *Creating a knowledge centre accessible to all participants;*
- *Providing opportunities to re-enforce the supplier brand and associated values within the customer organisation;*
- *Creating differentiation;*
- *Creating 'lock-in' with the customer;*
- *Reducing administration costs;*
- *Opportunities to use an IT platform to deliver new services at lower cost and develop additional sources of revenue.*

6.5.1.2 Case Study: Adding value through the internet within engineering

To facilitate on-line product ordering, a leading global engineering company has developed 'web-stores' based on web-browser technology supported by an electronic catalogue. The aspect of the site unique to this company within its market sector market is that a customer can specify a detailed sub-assembly, or customise the fittings for a component etc., submit the resulting specification, which CAD technology on the supplier's server then turns into a three-dimensional engineering drawing for the customer to view. The customer can then submit any amendments to the specification and input the final order into the system.

This process provides an added value, highly flexible service to the customer, saving time and the necessity of producing individual drawings of what is required. For the supplier, the automated CAD facility creates a significant cost saving of £5 per drawing, or £2,500 per week based on the average weekly demand for 500 drawings.

The site is supported by a 24/7 centralised multi-lingual customer service contact centre handling queries from phone calls or the web-site.

Overall, the site has 24,000 visitors per week and generates 11% of UK turnover for the company.

Whilst the initial Webstore development was not subject to a detailed justification, the subsequent business cases were primarily based on reducing the average cost of order processing, plus measuring:

- *Overall levels of system usage (measured as 'Traffic');*
- *Number of downloads;*
- *Sales generated;*
- *Number of registrations.*

A further important measure is provided through a monthly report comparing benefits with costs.

A key future development will be to expand the functionality of the site and developing strategies to maximise the opportunities for additional business from site visitors, especially from the large proportion who only visit the Home, news or technical information pages.

*The same company has also built **extranets** for individual clients. These work from information held in back-office systems, using standard templates. Due to the high degree of standardisation, production costs are low.*

In reality, customers do not tend to make much use of these sites. The reasons for this are firstly, that regardless of the customers' enthusiasm for a dedicated bespoke online facility, the links do not fit their own business processes. Secondly, the web-store better meets the customer's actual needs. However, these extranets are seen by the company as part of the overall value proposition, as they do not incur significant development or operation costs.

e-business (2): key lessons for KAM

- ***Opportunities to significantly reduce product specification costs and the order process – for the customer and the supplier;***
- ***Opportunities to create differentiation;***
- ***The need to understand customer business processes;***
- ***Potential for providing 24/7 customer service;***
- ***Using an established platform to develop new services and revenue opportunities;***
- ***The need to identify meaningful measures in order to measure ROI.***

6.5.1.3 Internet usage within the financial services sector

Another market sector identified within the research that is benefiting from web-site technology is personal insurance and investment. For example, extranets/web-browsers form an important link between the product provider (insurance company) and the intermediary (IFA) for providing information, submitting application forms and undertaking transactions. Web tools also provide an important channel for IFAs to search the market and compare current offers. The main benefits are reduced supply chain costs and speed. One leading provider interviewed in the research intended to increase the level of business through this channel from 8% to 80% over a three year period. A key challenge is encouraging some IFAs to use this channel. Strategies to overcome this hurdle include:

- *Providing additional commission fees;*
- *Underlining the cost of errors and delay using traditional channels;*
- *Giving priority to business through this channel;*
- *Providing training programmes;*
- *Introducing new remuneration schemes for sales staff focused on this channel.*

In some cases, IFA processes and low investment in technology are inhibiting the growth in the application of e-based solutions, particularly within smaller companies. However, some of the larger IFA groups are migrating to this channel and are expecting providers to integrate with their systems and standards. Within the group pensions market, 'e' has become a key hygiene factor in an otherwise commodity market. Resistance to the use of this channel is still an issue within some participants, but increasingly the inherent strength of a business case that promises lower administration costs and higher levels of productivity is successfully securing investment in e-commerce.

e-business (3): key lesson for KAM

- *Developing a persuasive case and providing incentives to encourage customers to invest in technology.*

6.5.2 Electronic exchanges

As described within this section of the report, exchanges can play a significant role in supporting and facilitating key account relationships.

Electronic exchanges operate in a number of different ways:

- On-line directories of buyers and suppliers
- Catalogue based requisitioning
- e-procurement
- Transaction support
- Supply chain integration.

However, participation currently remains largely tactical and opportunistic. ROI expectations remain low, but businesses are becoming increasingly concerned about value. In addition, partner readiness and legacy systems/business models create significant barriers. Also, a key supplier may fail to join a public exchange if they already have substantially invested in their own private exchange system (e.g. RS Components).

The exchanges market has experienced problems with development, due to funding issues (liquidity – low margins and lower than forecast sales volumes, withdrawal of funds, high R&D costs); politics; integration hurdles (leading to delays); the current economic climate. These factors have led to some projects being abandoned or to mergers, leading to a contraction in the number of solutions. Some continue to operate as loss-leaders. These have influenced potential new starts and participants, but there are signs that the market is re-awakening.

Research (Barling B, 2002), has identified that e-exchange marketplaces is still an emerging sector, with many of the problems described above to be overcome in terms of establishing a clear business proposition to constituent partners.

The main reasons for participating in an exchange according to this research are:

Figure 6.17: Reasons for participating in an electronic exchange

	%
Improvement in both customer- and supplier-facing relationships	47
Improvement in supplier-facing relationships only	24
Improvement in customer-facing activities only	23
Other factors	6

Factors encouraging interest in an exchange solution include:

- lower infrastructure costs through sharing;
- access to specialist IT and best practice in procurement;
- high quality and common standards covering processes and data, leading to improved interoperability;
- ‘ready-made’ content and access to a wider supply base.

In addition to these public exchanges, a number of private exchanges exist, such as that built by RS Components.

As is often the case with IT projects, the specific technology is not the prime hurdle, these being culture, integration, change management, internal politics – the latter covering factors such as criticisms from senior management based on the projected scale of the savings (‘why were some of these savings not possible before?’) and the loss of power if budgets are substantially reduced due to the savings and de-centralisation of buying. There need to be clear benefits to all stakeholders in the process.

Research undertaken in 2001 (Miller, J, 2001) indicated that there were probably around one hundred marketplaces *actually undertaking transactions* worldwide, compared with the 2233 *in existence* reported in the same year (Laseter T; Long B & Capers C, 2001). Following a period of negative perceptions – savings being lower than expected and delivered over a much longer time period, AMR reported in 2002 (Barling B) that interest is beginning to be revived, with many companies feeling that exchanges deliver value and plan to join the market. Many industry consortia exchanges still exist and others continue to survive, albeit as loss leaders for the investing partners.

Many organisations use a number of exchanges. For example, the Dow Chemicals group uses four exchanges downstream for procurement, and four upstream in the supply process – two of which are Dow owned channels, and two others that are used for both procurement and supply purposes.

Many suppliers and customers have taken a cautious approach to the advent of e-procurement through electronic exchanges. Based on the findings from the two interviews in this sector, the advantages and disadvantages can be summarised as follows:

Figure 6.18: Advantages and disadvantages of e-procurement

Advantages	Disadvantages
Reduces procurement/order processing costs	Limited number of suppliers
Reduces errors in orders	Limited product coverage
Provides up-to-date product information in a consistent format	ERP platform dependent
Provides simplified ordering process	Creating and maintaining catalogue material
Provides system integration	Product coverage can represent a small proportion of the overall operation cost base
Provides automatic order confirmation	Price focused relationships
Creates industry wide standards	Reduces choice
Provides consolidated ordering	High level of investment required
Re-focuses relationships on building relationships/collaboration instead of on 'fire-fighting'	
Identifies new business opportunities	
Creates customer 'lock-in'	

6.5.2.1 Case Study: Electronic procurement in the UK healthcare market (GHX and BUPA)

The KAM research programme investigated the role of exchanges within one sector – the UK healthcare market, looking in particular at the role of the Global Healthcare Exchange (GHX), connecting medical equipment suppliers with NHS hospital trusts, and, the e-procurement strategy within the UK's leading private provider, BUPA.

Current UK Healthcare NHS procurement model

The NHS spends around £11bn a year (2001) with suppliers. According to the Audit Commission, the average NHS trust processes around 23,500 orders per year. Procurement is fragmented, individual hospital trusts, or groups of trusts, negotiate their own individual supply contracts for medical products and services.

In the UK National Health Service, individual hospital trusts use a variety of software platforms, linked to individual suppliers, to obtain supplies. Whilst these systems enable procurement to take place through system links with suppliers, the quality of the processes are highly variable, and there are separate links and processes for each individual supplier. Catalogues from individual suppliers differ in content, product descriptions etc and may be out of date or inaccurate, leading to numerous errors within orders and the possibility that incorrect supplies and invoices are dispatched, leading to significant levels of increased cost in checking orders and invoices, plus rectifying any errors. GHX calculate that traditional order systems tend to generate a minimum 25% error rate. In addition, there are several

different software platforms used by hospital trusts to facilitate current processes, thereby providing varying levels of functionality.

Key parties at both ends of this supply chain, worth £3.8bn per year (2002) in England alone for just clinical supplies and services, have a lot to gain from re-structuring around common processes and software platforms, thereby gaining the benefits from an enhanced level of quality through adopting standardised and disciplined approaches to the information used to drive the full pipe-line.

Supplier driven web-browser based front-ends are starting to emerge, but the problem is that users have to access these outside the normal procurement platform and order processes, leading to greater complexity and further opportunities for error.

Two main exchanges currently serve the NHS Trust market:

- *UK Procure – formed by ex-NHS trust employees*
- *GHX – set up by medical supply organisations.*

Neither of these exchanges has as yet established significant market shares, mainly due to the problems and costs faced by hospitals in developing the required interfaces within their ERP platforms.

Following part devolution, the Welsh Assembly formed Welsh Health Services to manage the NHS within Wales. WHS are planning to develop either an exchange for the Welsh NHS hospital trusts, or encourage the development of common ERP platform interfaces that key suppliers would be expected to use in order to facilitate the implementation of e-procurement. This could provide opportunities for those suppliers prepared to invest in the necessary technologies to expand their current levels of business with WHS trusts. Currently, the Scottish situation mirrors the position within England.

A decision to develop Foundation Hospitals will potentially create an additional layer of complexity, and possibly a further opportunity for autonomy, within the NHS market.

The fragmented picture painted in the above paragraphs above is not just specific to the UK market, it is replicated in many countries throughout the world.

Global Healthcare Exchange (GHX)

In order to streamline the procurement process and reduce costs, several leading global medical manufactures in the USA decided to address the current deficiencies in the healthcare supply chain by setting up a new venture to develop an integrated process for this market. GHX was established in the USA in March 2000 by an equity-owning consortium of medical equipment suppliers. The basic GHX model is as shown below, connecting member medical supplier organisations with hospitals:

Figure 6.19: GHX overview



The key founding principles of GHX are:

- *Private ownership by a consortia of independent supply organisations;*
- *To remain open and neutral to all members in the supply chain;*
- *To ensure confidentiality for all parties as all data remains owned by the buying and selling organisations;*
- *All members treated as equals;*
- *A break-even business model with the objective of reducing transactional costs rather than seeking to maximise profitability. The ROI is derived from efficiency gains (there are no transaction fees to any parties in the chain and no dividends to shareholders);*
- *No influence exerted on the existing contractual terms, conditions and prices negotiated between buyer and seller.*

Suppliers in the GHX consortium comprise:

- *Johnson & Johnson*
- *GE Medical Systems*
- *Baxter International Inc*
- *Abbott Laboratories*
- *Medtronic Inc*
- *Becton, Dickinson & Company*
- *Boston Scientific Corporation*
- *CR Bard Inc*
- *Guidant Corporation*
- *Siemens Medical Solutions*
- *Tyco International Ltd*

The mission of GHX is as follows:

‘GHX simplifies procurement processes by providing web-based solutions that streamline information among all participants, thus driving true cost reductions into the supply chain’.

By April 2001, the number of supply companies, either equity holders or subscribers, had risen to over 100, with over 600 hospitals linked to the systems in the USA, Canada, Europe, and Asia Pacific. The company is based in Boulder, Colorado and a headquarters for the European market has been established in Brussels, currently managing developments in Germany, Belgium and the UK.

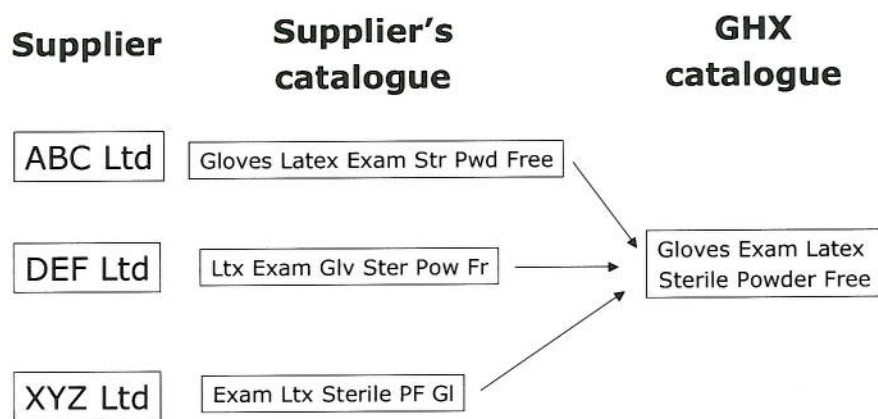
The systems and business models are based on a central systems hub, located in Boulder, acting as the sole global interface between the suppliers in the GHX network and hospitals.

Investment to date by equity partners totals £180m (sterling equivalent). The principal equity member suppliers have, for example, each injected £23m, plus annual equity member fees, into this venture. The ROI for investors is based on three key factors:

- improved cash-flow
- reduced costs due to fewer errors and re-working
- a gain in the competitive edge over non-GHX suppliers and improved customer satisfaction, leading to increased levels of business.

At the heart of GHX is the AllSource™ catalogue comprising the items offered by suppliers in the network, compiled into an industry standard format:

Figure 6.20: GHX AllSource™ catalogue entry



The catalogue is maintained electronically by the suppliers. Key issues are:

- adherence to GHX's Style Guide
- data quality
- ensuring that the catalogue entries remain up-to-date.

A key feature of the GHX process from a customer perspective is that it does not impact on the routing of orders – it uses the customer's existing processes and system platforms. However, the platform needs to be GHX-compatible, usually necessitating investment in a suitable upgrade to their ERP system by the hospital. Likewise, suppliers continue to use their existing sales order systems into which orders are received, unless they specifically request use of the web-based browser version. The three main connectivity solutions available to customers can be summarised as follows:

- **GHX Advantage™ Channel Partner:** creating GHX functionality by working with leading ERP vendors;
- **GHX Connect™:** version specific interfaces to link ERP systems with the GHX exchange;
- **GHX Axiom™ Browser-Based Tool:** enabling customers that do not have ERP type systems to access the GHX exchange through a web link.

The main cost to the supplier, and determinant of how quickly a new supplier can utilise the GHX hub, is the conversion of existing catalogues into a GHX-compatible format, based on templates, style guide, product ID codes, IT system requirements etc. This is a very significant task for a large organisation, requiring the re-formatting of every catalogue entry. The elapsed time for creating a supplier link to GHX can therefore be three to six months in the case of full integration, compared to eight weeks for a hospital to link into the exchange.

Prices are not held in the GHX catalogues and remain subject to negotiated arrangements between individual suppliers and customers, but the system can detect and flag any discrepancies within orders between a price held in a hospital database for a given supplier and that held in the supplier's price for that particular customer. The exchange did not include invoicing or payment facilities at time of interview, but these functionalities are planned.

Hospitals linked to GHX pay only a nominal membership fee to GHX, but as described above, customers will also incur either a moderate increase in their ERP platform software licence fee (where the relevant software company has implemented its product with 'GHX-inside') or a slightly larger fee where GHX itself has developed a bespoke adapter for any of a number of other ERP systems.

Currently, the GHX hub only covers a range of medical and surgical products, including medical equipment, but discussions are also in train with computer supplies companies and other non-medical suppliers. The system will also handle the trading of pharmaceutical supplies, the overall strategic objective being to create one market place meeting all hospital needs. Further potential developments include automated stock replenishment and consolidated delivery.

GHX in the UK NHS Hospital Trust market

At the time of interview, GHX had secured three pilot contracts in the UK NHS hospital Trusts market. The first transactions through GHX in Europe took place in the Leeds Teaching Hospitals Trust (Europe's largest healthcare provider) in early February 2002². The investment necessary by GHX to support the Leeds project was \$250,000.

The pilots illustrate the strategy adopted by GHX for entering and then rapidly expanding their presence in the UK market. Currently, hospital trusts use a variety of ERP or procurement platforms. Some of these are from major international software vendors who have gained significant shares of this market, whilst other systems are from more peripheral suppliers. The overall market is consolidating in favour of the major vendors due to mergers between individual trusts to form more cost-effective units, leading to the smaller and less developed platforms being replaced. The three UK pilots are with hospitals that each use different platforms built by two of the more dominant and 'state of the art' vendors – EROS³ (Plymouth), Oracle (Leeds), Integra⁴ (Leicester). Once a given platform has been modified to include GHX connectivity, this version can then be rolled out to other hospitals using the standard platform as part of the next update release. By targeting hospitals using three of the leading vendors, GHX uses these as 'pilots' to gain market share rapidly. The forecast is to grow from one hospital (Plymouth), to more than 150 by the end of 2003, the potential market for the three initial platforms being:

- *EROS = 40 trusts*
- *Oracle = 30 trusts*
- *Integra = 67 trusts*

Other factors influencing growth include:

- *Continued commitment of investors at a global level;*
- *Catalogue integration;*
- *The level of investment necessary to support GHX and/or unacceptable costs for IT development;*
- *Supplier coverage (but trusts are able to encourage suppliers to become compliant);*
- *The actual benefits delivered to trusts;*
- *Platform vendors developing their own connectivity products (eg Oracle);*
- *Being perceived as having a monopolistic position.*

To counter the final point, GHX plan to create a business case for the Department of Health, demonstrating the overall return on investment possible across the NHS if the GHX model were to be adopted as standard.

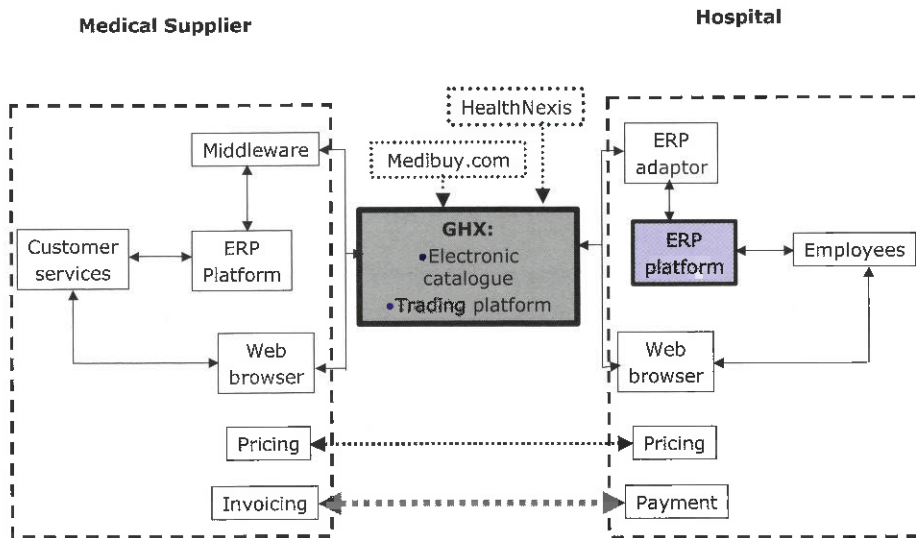
² Pilots have also been implemented in Dortmund and at Hannover's Medical University, MHH Germany on SAP platforms.

³ EROS has been developed by the joint venture company, Crown Agents Purchasing Services Ltd (CAPS) formed between The Crown Agents & the Belmin Group Ltd, as an e purchasing system and currently used by over 60 NHS Trusts.

⁴ Torex, McKeown Integra

The overall systems model for GHX is shown in the following diagram:

Figure 6.21: GHX e-procurement model



The diagram also shows the two other exchanges, HealthNexis and Medibuy.com, that have been merged into GHX, in November 2001 and December 2002 respectively. As mentioned above, pricing information is not included within GHX, and invoicing/payment facilities will be added in due course.

GHX is not the only electronic marketplace serving the NHS:

- **UK Procure:** formed by private and institutional investors to develop an electronic marketplace covering the UK public sector, including hospital trusts;
- **Rx-e.com:** internet based supplier of prescription pharmaceuticals;
- **NHS Logistics:** offers trusts in England and Wales electronic procurement – including invoicing and payment facilities – based on a catalogue of 27,000 consumables, plus fulfilment based on distribution centres and liveried delivery vehicles.

GHX has been selected by hospitals for three key reasons:

- The track record within the USA underpinned by its perceived financial strength due to the level of investment made by the founding partners;
- Providing a single connection to existing key suppliers;
- The potential for GHX to create an industry standard catalogue.

The main benefit specific to GHX for current UK customers has been the elimination of errors within orders and invoices. Product returns fell from 2.5% to 0% for one supplier (White & Daniel), with a consequential reduction in the debt being funded by suppliers. A press release from Healthlogistics.co.uk in February 2003 announced:

‘ - this month sees the anniversary of a year’s 100% error-free trading between Trusts and suppliers using GHX’.

Hospitals have also been able to introduce efficiencies through consolidating orders, with resulting benefits in terms of reduced numbers of deliveries and volume of order processing. A further major benefit resulting from these improvements at operational level, especially in terms of key account management, is a shift in the overall supplier/buyer relationship. Customer contact is now on a broader front and relationships can concentrate on the longer term issues and identifying opportunities for collaboration or innovation, rather than revolving round the resolution of day-to-day disputes.

However, as described in the introduction to this section on e-business, standardisation does not necessarily lead to leadership in the longer term. The real benefits will be derived from the new opportunities for harnessing IT to facilitate collaborative ventures between suppliers and customers and other value added services.

The competition to GHX, in addition to UK Procure, comes from ERP system vendors, developing their own integration tools covering key procurement sectors and any moves to centralise procurement throughout the NHS.

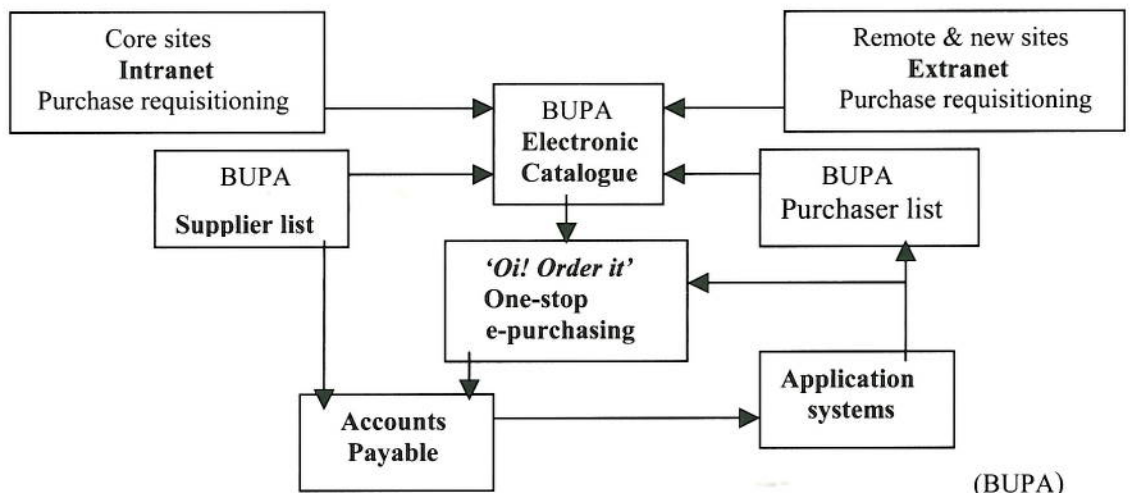
UK private healthcare sector (BUPA)

In the private healthcare sector, the leading provider, BUPA represents the other end of the supply chain, as a buyer rather than a supplier of medical supplies. BUPA has developed its own e-marketplace with the vision of creating one stop e-purchasing:

‘A single window on the world through which all BUPA people and business interact with suppliers for requisitioning, authorization, ordering, receipt, payment. In addition it will become the primary tool for the purchasing team to carry out purchasing category and supplier management’. (Mark Ralf, BUPA Group Purchasing, Property & e-commerce Director).

The electronic supply chain within BUPA is shown diagrammatically below:

Figure 6.22: Electronic procurement within BUPA



The diagram shows the BUPA-created electronic catalogue and e-purchasing module at the heart of the process, plus the use of intranet and extranet access for purchase requisition across the organisation. Contracts include an electronic pricing schedule as attachments.

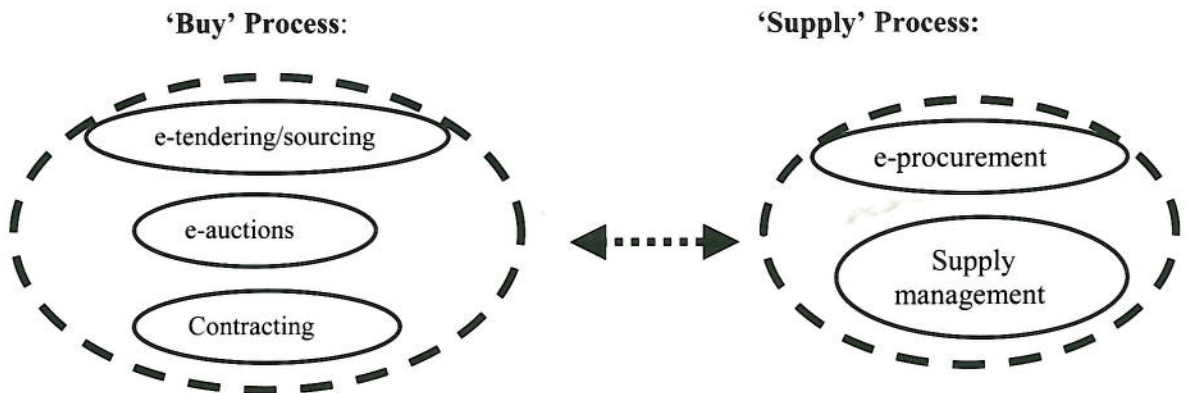
BUPA see this electronic procurement process providing significant cost savings through:

- Reduced purchase to fulfilment cycle
- Reductions in administration
- Improved control and management of inventory (around £1m.)
- Lower prices (5-10% reduction)
- Reduced volume of orders (down by 60-70%).

The fragmentation of the overall healthcare market is reflected in the 14,000 suppliers to BUPA, and the fact that medical equipment accounts for a relatively small proportion of overall hospital resources – well behind labour and pharmaceuticals costs.

One of the issues identified by BUPA is the need for improved integration, either within the key 'buy' and 'supply' processes/tools, or between them:

Figure 6.23: Integration within the 'buy' and 'sell' processes



The 'supply' side benefits from increased efficiency within integrated back-office processes, whilst the 'buy' cycle gains from using decision engines to add value to the process.

e-business (4): key lessons for KAM

- *Opportunities for substantial savings in procurement costs (supplier and customer);*
- *Significant reduction in error rates within orders and invoices;*
- *Opportunities to consolidate orders and invoices;*
- *Reduced 'order-delivery' timescale;*
- *Creating 'industry sector' standards for product descriptions within a consolidated electronic catalogue;*
- *Significant investment required to establish the 'hub' and electronic catalogue;*
- *Creates the basis for wider/deeper relationships that can focus on strategic opportunities rather than on resolving 'day-to-day' issues;*
- *Unlikely to cover all needs/supplies within a sector;*
- *ERP platform dependent.*

6.5.3 Case Study: e-commerce within Electrocomponents Plc

Electrocomponents Plc, the holding company for RS Components and Allied Electronics Inc (USA & Canada), is Europe's leading distributor in its field, with operating companies in 25 countries and serving 160 countries in total. The UK product range totals 300,000 items, comprising electronics, electrical and mechanical components, health & safety products, office equipment and IT products, associated tools and books. The range in other countries varies between 50,000-140,000. Customers total 1m worldwide. The company has 3000 suppliers (in the UK).

RS Business Model

The RS value proposition is:

'RS is the most cost-effective and reliable way to buy your small volume industrial products'.

This proposition covers reliable product availability, and fast delivery; a convenient one-stop-shop; rich technical support; reduced purchasing costs for the customer.

Customers can be categorised into five types:

- *Research & development, design & prototype development*
- *Small volume production of highly customised products*
- *In-house maintenance & repair (inc. service industries)*
- *Servicing and maintenance of other products*
- *Other general product needs that are not part of large volume orders.*

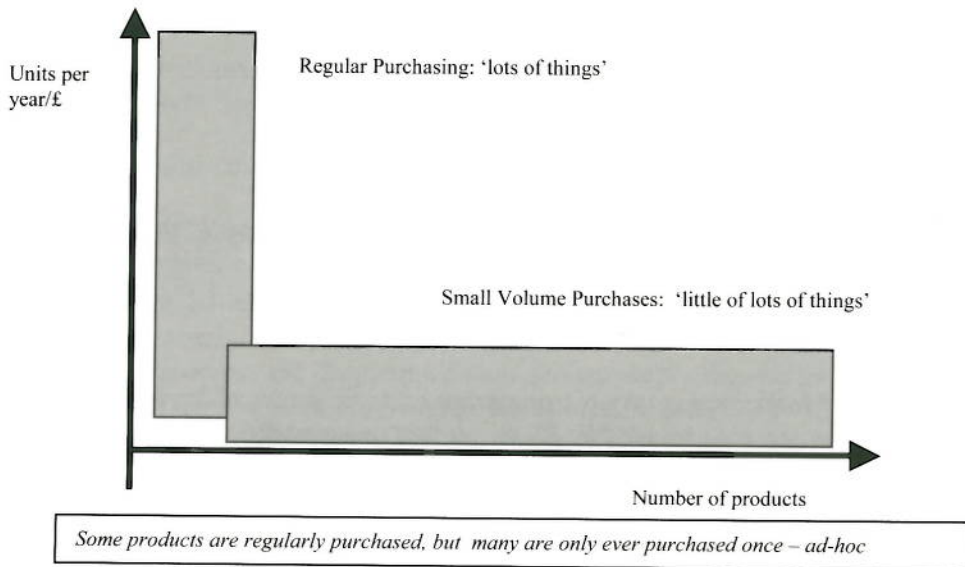
Product availability and customer service are important considerations for these accounts.

RS does not support mass production units and therefore does not supply the market at a commodity level. The defined market is divided into two key sectors:

- Regular purchasing of 'lots of a few things'
- Small volume purchases – 'little of lots of things'.

These target purchasing profiles can be shown as below:

Figure 6.24: Purchasing profiles of RS customers



RS compete in the market for small/medium volume industrial products. The needs of customers using RS can be summed up as:

- Small orders
- Many different products purchased infrequently
- Low repeat orders
- Wide range of product technologies purchased.

Whilst the customer needs are fundamentally different within the two core market sectors, the unifying principle is that the customer purchases products to meet a particular application requirement and not on a commodity basis:

Regular Purchases:

- used day-to-day based on regular applications
- specific to a job or industry
- customer has known supplier for this limited range at agreed prices
- key supplier criteria are price, scheduled delivery, trade counter (call & collect), limited product range
- specialist suppliers within commodity groups

- *local supply network*
- *serviced by manufacturers and wholesalers*

Small Volume Purchases:

- *products used infrequently*
- *products are non-specific*
- *customers struggle to find supplier with stock*
- *key supplier characteristics are availability, reliability, broad product range, strong technical support*
- *logistics based on mail order with same day dispatched*
- *serviced by high service level catalogue distribution.*

RS does not sell high volumes of any one commodity or product. An analysis of the typical RS customers purchasing profile shows that 72% of product is supplied once a year; 14% is supplied twice a year. To underline the fragmented picture of demand, only 1.5% of items are purchased on more than ten occasions a year.

Comparative analysis of product value versus transaction costs for a typical buying organisation requiring the service provided by RS shows that using traditional supply routes, 20% of product value consumes 80% of transaction costs.

Two other key factors in the RS business models are:

- *Delivery on a next day basis for orders placed up to 8.00pm*
- *Technical support provided through a call centre manned by 50 engineers.*

e-commerce at RS Components

RS was an early adopter of the internet as a major channel to market (1998):

- *First plc to provide line level purchasing card details for Visa/Amex (1995)*
- *First B2B catalogue on CD (1995)*
- *First UK plc to launch a fully transactional web-site (1998)*
- *Developed e-Purchasing model (1999)*
- *Developed global hub to support 'PunchOut/Round Trip' e-procurement (2000)*
- *UK site rolled out across Europe in 11 languages (2001)*
- *First to offer free e-procurement via RS PurchasingManager (2002).*

RS Components e-commerce developments have won many awards or commendations in recent years including:

- *Revolution award (FT.com): best use of new media for business-to-business marketing (1999)*

- *European Catalogue & Mail Order Days (ECMOD): Best transactional web-site for business-to-business, European catalogue & mail order (2001)*
- *ECMOD: Best multi-channel business (2002)*
- *E-Business Strategy of the Year Award (2003).*

Internet trading accounts for 15% of all RS UK sales, but across the group e-commerce sales increased by 55% in the latest financial year. 70% of orders placed by customers to RS in the UK are made by 'phone, but fax is the dominant order channel in Europe (70%). There are also 15 local trade counter serving the UK marketplace.

The basis is a 'one supplier to many companies' model, with buyer-side managed content but enhanced with PunchOut functionalities, unlike sites such as Covisint, GHX etc which are 'many suppliers linked to many customers' through a hub.

Specific facilities that create a complete e-transaction solution for a customer include:

PurchasingManager

This software, developed by RS enables customers to instigate full control of on line spending through customised spending limits and automated approval for each user, plus full analysis of purchasing across the company down to individual product per order level. Orders exceeding an agreed spending limit are automatically e-mailed to nominated approvers. The terminology can be fully customised to meet an organisation's needs.

PunchOut™

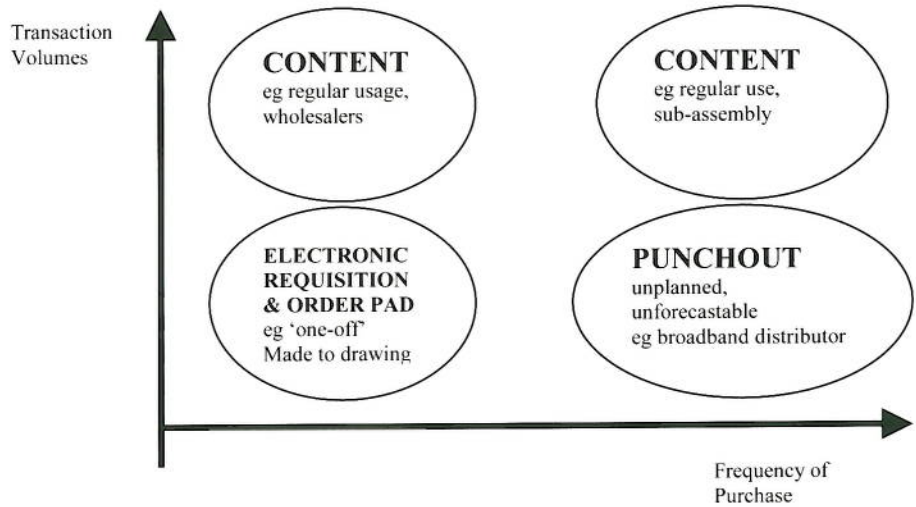
Normally, a supplier provides a static content file to customers that is loaded into their e-procurement package and held behind the customer's firewall. The supplier periodically re-issues content updates. This means that the buyer has difficulties in managing the content, pricing may prove difficult, and, complex or technical products require more detailed supporting information. To overcome these issues, PunchOut, from Ariba enables the customer to use their e-procurement package to exit the organisation's firewall and enter a nominated supplier's web-site (e.g. RS Components). The advantage is that the customer can access the up-to-date detailed product, pricing and technical information held in the supplier's system, as a more dynamic option than providing the information as static files. PunchOut leaves the responsibility with the supplier to compile and maintain data. It allows access to richer information and well structured search engines together with integration of workflow. The disadvantages are variations in site navigation necessary by users, and possibly reduced firewall security. However, the rich technical content accessible through PunchOut could be essential for accurate product identification and selection for many customers in RS's target market.

e-Invoicing

Through membership of OBE's OB10™ network, RS can provide electronic invoicing for customers. This provides electronic invoice data directly into the customer's finance system, in the required format. A parallel e-mail version is provided for approval and dispute resolution and a copy is stored in a secure data warehouse for reporting and audit purposes. This eliminates paper processing of invoices without needing to install any specific software.

The drive to reduce the number of suppliers results in the need for a hybrid management solution, as illustrated below:

Figure 6.25: Hybrid web-site content management solution at RS Components



Currently, *rswww.com* has:

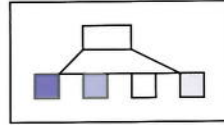
- Over 600,000 registrations
- Around 900,000 visits per month
- Around 170,000 repeat visits per month
- Around 20,000 new registrations per month
- Highest order of £15,500

e-commerce is also important in terms of purchases by RS in the UK, of the 2,750 consignments received daily by the company from suppliers in 2002/3, 70% of the purchase orders made by RS were electronic.

e-business (5): key lessons for KAM

- *IT related criteria for selecting likely key customers;*
- *Opportunities for substantially reducing the procurement costs for customers;*
- *Benefits of enabling customers to access supplier knowledge base;*
- *The need to provide centralised specialist support to customers;*
- *Facilitating a next day delivery service;*
- *Customer preference for multi-channel access.*

6.6 KEY ACCOUNT MANAGEMENT AND DEVELOPMENT



Account management are increasingly being faced with three key issues:

- Establishing the profitability of individual accounts;
- Large global companies increasingly want to calculate the overall spend with individual key suppliers but may find it difficult to collate this information within their own organisation and therefore ask the supplier to help;
- Deciding whether the investment in creating added-value solutions for key customers leads to a more profitable outcome in the long term compared with simply selling product.

6.6.1 Case Study: Account management within a global office equipment manufacturer

To help provide answers to these questions, a leading global office equipment manufacturer has developed an account management database system holding financial details of 'tier one' (around 60) and 'tier two' accounts (around 90). For 'tier one' accounts the system enables detailed profit and loss accounts to be created for individual accounts built around the level of investment necessary to support the account. This has helped foster senior management commitment to key account management, as it is now possible to measure spend on the top accounts and assess both the value generated by each account, and the benefits delivered by the KAM programme. For 'tier two' accounts, the system simply produces consolidated global management information reports, often to meet the requirements of the customer.

The system was built and implemented in modules (basic P&L data; additional P&L information; invoice details; activity reporting) and rolled out globally over a two-year period. The database holds historic sales information (product and financial). A further module holds information covering the legal and financial status of each customer. The key difference between traditional reporting and the new system is a process to allocate costs to individual accounts. 'Virtual sales accounts' have been created within the system enabling, for example, the differential costs of service by channel to be identified (for example, personal visits versus call centre contact). At the time of interview, the system only covered product transactions, but a planned enhancement will cover services provided to customers.

The success of the system is measured by the growth in profitable business from the accounts concerned. Whilst the system is used to help manage the relationship with the customer, the wider information needed to implement a 360 degree view of the relationship is currently unavailable electronically. However, a strategic analysis of key resources within the company has identified account management as a function critical to the success of the corporation, on a par with production management. This analysis has also underlined the difficulties of retaining knowledge of customers within the KAM process when key team members move on. The average 'life' of a key account manager in North America was identified as 10 years, but much lower in other markets, such as Europe. This strategic review has provided the impetus to develop and implement a CRM tool which will be linked to the account management system in order to provide a complete view of the account. The company also uses a specific system for developing account plans – shared with clients.

A final key factor leading to success was that unlike earlier attempts by the company to develop a comprehensive view of customer accounts, this tool is managed by sales and marketing.

Account management: key lessons for KAM

- *Facilitating the consolidation of account information;*
- *Creating the information base to measure costs and revenues per account, and, overall account performance against plan;*
- *Development and ownership by sales and marketing (rather than finance or IT);*
- *Establishing the benefits of KAM and gaining commitment.*

7. ENSURING SUCCESS WITH KAM TECHNOLOGY PROJECTS

This final section of the report reviews some of the key reasons why IT projects supporting and facilitating marketing and sales appear to have such a high profile failure rate. Three key factors have already been addressed in Sections 4 and 5:

- Matching IT needs to the goals and objectives of the overall KAM strategy using a tool such as the Benefits Dependency Network model;
- Ensuring that IT needs are developed in the context of a customer-centric vision and the impact of adopting this vision on the culture and structure of the organization;
- Ensuring that the IT solutions are aligned to the processes within the KAM value chain.

Other key factors that are necessary components are:

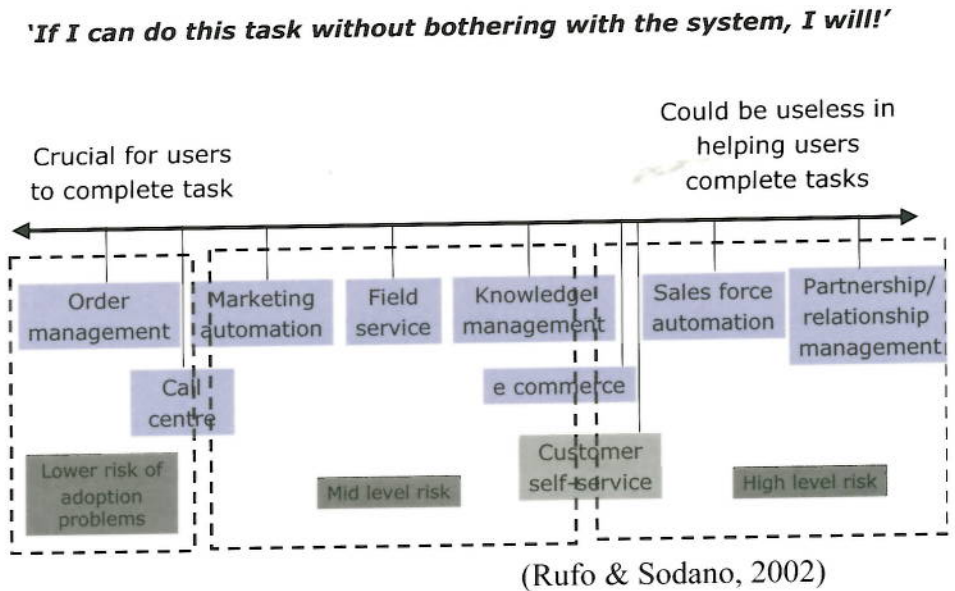
- Gaining commitment – at all levels, and in all key functional areas of the organisation;
- Developing an information strategy;
- Analysing and reviewing the key business processes that support and deliver the KAM strategy throughout the organisation;
- Ensuring high quality project management, and an effective implementation team;
- Ensuring that adequate training programmes are implemented, at all necessary levels.

7.1 GAINING COMMITMENT

All of the organisations interviewed within the research concurred with the accepted view that at some stage, commitment at Board, or at CEO level, will be vital to the success of major IT programmes in areas such as marketing and sales. This will generally need a well-developed business case. However, in some cases commitment at the top may only be secured once a case has been proved, for example, through a pilot programme – ‘CRM by stealth’ as described by one leading consultant. This was the case with one company interviewed in the research, where the CEO was known to be sceptical about the value of a customer-focused strategy. The positive results of the pilot led to a marked change of attitude.

Research has indicated that CRM implementations are much more likely to succeed if end users are fully committed to using the technology. Success is higher where the system is essential to undertaking the set tasks - for example call centre software for order taking/tracking. Marketing staff also rapidly adopt campaign management tools which automate complex and time-consuming tasks. The most commonly reported problem was where end-users could still meet their targets by continuing to use traditional work practices, for example, within field sales teams. Revised incentive schemes may not resolve the problem, the only solution being through the delivery of real benefits to end-users. The overall picture is summarised in Figure 7.1 which illustrates the spectrum of risk in terms of achieving a projected rate return on investment in CRM technology nodules due to end-user adoption issues:

Figure 7.1: The spectrum of risk associated with CRM end-user adoption



The biggest inhibitors to achieving end-user commitment are:

- Projects that, whilst fully supported from a business perspective, lacked full support from the IT team. This led, for example, to an installation that was poorly integrated with other systems. The solution is to ensure a high level of integration with those systems that end-users need and enjoy using;

- Rolling out information-dependent systems before the critical data was available;
- Poor system performance that tested the patience of end-users. This is due to either insufficient testing, or time pressures on implementing the system;
- Over-complex systems where only some of the functionality was really necessary to do the job. A more effective route is to start with an 80% ‘vanilla’ product and add extra functionality later;
- Executives failing to demonstrate their personal commitment to the system. This can be resolved by ensuring that they are trained to use the tool, and incorporate usage into their day-to-day roles;
- Top management failing to demonstrate their commitment continually once the implementation has been completed;
- Confusing the role of technology – processes and culture change the direction of a business, not IT;
- Insufficient attention to change management as part of the overall programme;
- System vendors paying insufficient attention to the real needs of the end user. This gap can often be filled through site visits to other users and/or the use of consultants.

Key to achieving a smooth implementation is adequate training, coupled with high quality communication focused solely on the tasks possible within each clearly defined phase of the overall roll-out plan. Users also need to feel that the new tools will help build their careers rather than undermining their roles – ‘if I empty my store of knowledge into the new system, will I still have a future?’

However, once the system is deemed acceptable to end-users, then organisations take tough action to ensure that the new working practices are adopted, such as only incentivising orders captured through the sales automation tool.

7.2 ESTABLISHING A KNOWLEDGE MANAGEMENT STRATEGY

Many organisations underestimate the need to implement a knowledge management strategy to support the investment in technology for CRM/KAM applications. The importance of developing an information strategy within an organisation embarking on projects such as developing a data warehouse is well documented (English L, 1999). A vital foundation for this strategy is to encourage a 'data literate' culture within the organisation that leads to an appreciation of the need for the right data, and that the data is collected to an appropriate level of quality. The importance of the latter is underlined by the following quotations by leaders in the customer relationship IT field:

'Managers wishing to fail at CRM or sabotage a CRM project need look no further than 'data' to find the weakest link in the project' (Nick Siragher, Carving Jelly, Chilton 2001)

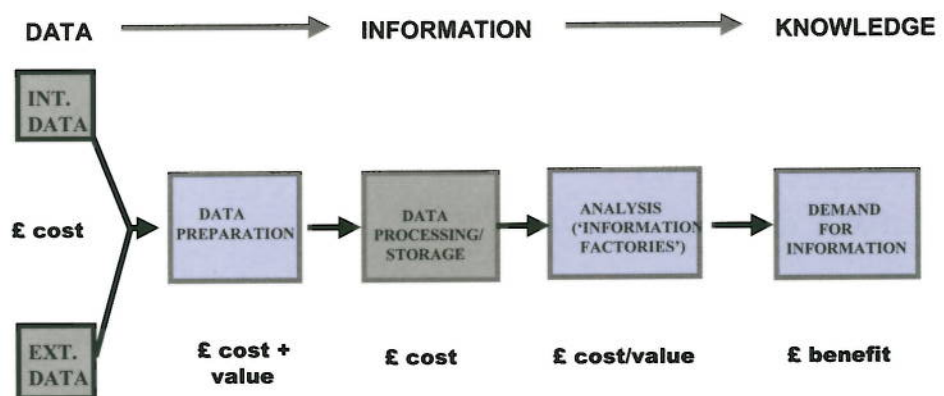
'Data is very much the poor relation in CRM and e-commerce projects. The number of cases where companies have spent millions on projects but swept data issues under the table is frightening' (Simon Jennings, ETI)

'42% of the customer information collected and held by companies was inaccurate' (AnswerSets survey)

To underline this point, a survey of marketers (Mouncey, Tzokas, Hart & Roslender, 2002) found that the most frequently mentioned factor inhibiting the role of the customer database within their organisation was data quality.

Whilst the costs of collecting, processing and storing data has fallen rapidly in recent years, the demand and opportunities to acquire data have also sharply risen. Organisations therefore need to implement a process to control the flow of potential data and ensure that it meets the defined needs of the business objectives. One solution is the concept of an information supply chain (Figure 7.2), where the costs of collection, processing, storage, analysis of data etc are offset against the value to the business in terms of achieving objectives, in other words, developing an ROI for data:

Figure 7.2: Information supply chain



7.3 PROCESSES

A further key requisite to the successful implementation of technology to support marketing is to ensure that the processes used by the sales, marketing and customer service activities are fully mapped out and reviewed as an initial step in the development programme. As Nick Siragher points out in his book, 'Carving Jelly', the successful implementation and operation of CRM systems has often been hindered by process-related issues. These are particular to IT projects in this area of the business. Siragher cites seven key reasons for this situation:

- Process has often had nothing to do with the real business of selling;
- Sales and marketing have been late adopters of technology;
- IT and marketing people speak very different languages and tend to have fundamental differences in attitude;
- 'Best practice' cases in marketing are not well documented or readily available;
- Marketing and sales rely on 'soft skills' that historically more difficult to automate compared with the closely defined 'hard skills' in areas such as finance;
- As sales and marketing are subject to less legislative control compared to some other business activities, there has historically been less necessity to develop rigorous processes and procedures to ensure adherence with the law;
- Process maps are 'alien' concepts to marketers, compared to operational areas.

Without attention to the business processes, IT programmes to support and facilitate CRM/KAM will fail.

7.4 PROGRAMME MANAGEMENT

As with all IT implementation projects, top quality management of the programme is essential. The difference between KAM/CRM and many other projects is the extent to which they tend to involve the whole enterprise, across functions and departments, at all levels. The development and implementation team structure needs to reflect this situation. Also, because this programme will be creating significant change to established and often informal disparate working practices involving a wide range of 'soft skills', it is particularly important that the team comprises individuals who are both committed to the programme, and are key people within their sphere of activity – the 'ouch' factor, where the secondment of an individual to the programme team from a particular department causes some degree of real short-term pain for the area concerned. Using tools such as the Benefits Dependency Network help ensure that the project team comprises the key people necessary to achieving a successful implementation.

Implementing IT projects: key lessons for KAM

- *Ensure that the choice of IT solution is derived from business goals using processes such as the Business Dependency Network (see Section 4.1);*
- *Ensure that senior management are fully committed;*
- *The KAM team need to be fully involved in defining needs, deciding solutions and implementation;*
- *If the project is totally KAM related, then ensure that the project is managed by the KAM team; if the investment is primarily for other purposes but has benefits for KAM, then ensure that the team is involved. The Benefits Dependency Network can help identify all those who need to be involved in the project;*
- *Fully involve end users in the development and implementation stages to build commitment, and ensure that the tools provide a viable solution for those expected to use them. Benefits to users need to be clearly identified and communicated, and, the training programme needs to be business rather than IT focused;*
- *Critical to success is an adequate strategy covering data issues within the overall plan or within the organisation. This needs to include factors such as data availability, undertaking a cost-benefit analysis, quality, and processes to keep the data up-to-date;*
- *Start with an 80% solution based on an 'off-the-shelf' package, rather than implementing an over complex solution;*
- *Don't view technology as a catalyst to change the culture or business processes within the organization. These issues need to be resolved before decisions on IT investments are made. However, change management is key to success of the overall programme;*
- *Ensure that all the relevant business processes are identified, mapped and reviewed before selecting IT tools and solutions;*
- *Ensure that the customer is fully involved wherever necessary.*

8. REFERENCES

- Barling B**, Sourcing Competitive Advantage through Public Exchanges, Beyond Procurement Conference, Cranfield School of Management, June 2002 (unpublished)
- Clark M, McDonald M, Smith B**, Achieving Excellence in Customer Relationship Management, Cranfield School of Management, 2002
- Cornell E**, Address to the 37th Strategic Account Management Association conference, USA, 2001
- Daniel EM, Wilson H, MacDonald M, Ward J**, Marketing Strategy in the Digital Age, Cranfield University/Financial Times Prentice Hall, 2001
- Daniel EM, Hoxmeier J, White A, Smart A**, A Framework for the Sustainability of E-Marketplaces, UKAIS Conference, Leeds, April 2002
- Daniel EM, White A, Ward JM**, Exploring the Role of Third Parties in Inter-Organisational Web Service Adoption, submitted to Journal of Logistics Information Management, 2003
- English LP**, Improving Data Warehouse and Business Information Quality, Wiley, 1999
- Firepond.com** (no author stated), Sales Configurator 9.0, business white paper, March 2001
- Goldenberg BJ**, CRM Automation, Prentice Hall PTR, 2002
- Johnson R, Rufo J**, Picking the right CRM vendor: It's more than a one horse race, AMR Research Inc, 2001
- Johnson R, Rufo J, Scott K**, Rethinking CRM, Parts 1,2,3AMR Research Inc, June/October/November 2002
- Kelly S**, Data Warehousing in Action, Wiley, 1997
- Laseter T, Long B, Capers C**, B2B Benchmark: The State of Electronic Exchanges, Booz, Allen & Hamilton, Usa, 2001
- McDonald M, Rogers B, Woodburn D**, Key Customers How to Manage them Profitably, Butterworth Heinemann, 2000
- McDonald M, Wilson H**, The New Marketing, Butterworth Heinemann, 2002 **McDonald M, Wilson, H**, Effective strategies for electronic commerce, Cranfield School of Management, May 1999
- McDonald M, Woodburn D**, Key account management, Financial Times Prentice Hall, 1999
- Manasco BH, Hopkins WS, Lusher CJ**, CRM redefined: Beyond the front office and out to the consumer, KCG Market View, 2001
- Meekings A, Russell C, Fuller M, Hewson W**, Profit or Pain from your user experience, Hewson Group 2002
- Miller J**, Pharmaceutical Technology, Vol 25, No 5, P52-54, 2001
- Mouncey P, Tzokas N, Hart S, Roslender R**, Core strategic asset or just a tactical tool: How UK companies view the value of their customer databases, Interactive Marketing, Vol 4 No1, July/September 2002
- Reed D**, Developing and Implementing a CRM Strategy, Business Intelligence, 2000
- Rigby DK, Reichheld FF, Schefter P**, Avoid the Four Perils of CRM, Harvard Business Review, February 2002
- Rufo J, Sodano L**, CRM: Inflicting Pain or Profit, AMR Research Inc, December 2002

- Rufo J**, Evaluating Vertical CRM – It's about Risk Mitigation, AMR Research Inc, May 2002
- Sistrum Management Insight**, A new way of presenting ROI – an adaption of the Cranfield Benefits Dependency Network, Hewson Group, September 1999
- Swain C**, Reverse auctions – friend or foe? Information Age Business Briefing, No 3, 2002
- Siragher N**, Carving Jelly, Chilton Publishing International, 2001
- Swift RS**, Accelerating Customer Relationships, Prentice Hall PTR, 2001
- White A, Daniel E**, Electronic Marketplaces: An Emperical Study in the UK Healthcare Sector, 4th World Congress on E-Business, McMaster University, Canada, January 2003
- White A, Daniel EM**, The Impact of E-Marketplaces on Dyadic Buyer-Supplier Relationships: Evidence from the Healthcare Sector, Journal of Logistics Information Management, Vol 8, No 4, 2003
- Wilson HN, Daniel EM, McDonald MHB**, Factors for success in customer relationship management, Journal of Marketing Management, Vol 17, 2001
- A new way of presenting ROI – an adaptation of Cranfield Benefits Dependency Network, Hewson Group, 2000
- Wilson H, Daniel E**, Profiting from eCRM, Cranfield University/Financial Times Prentice Hall, 2001
- Woodburn D**, Customer relationship management: Hard lessons learned in B2B pose tough questions for B2C, , Interactive Marketing Vol 4 N0.1 July/Sept 2002
- Woodburn, D, Mcdonald, M**, Key Customers, Cranfield School of Management, July 2001
- Zahay DL, Handfield RB**, Using the value chain concept to improve interactive marketing, Interactive Marketing, Vol 4, No 4, 2003
- The Marketer's Guide to Effective Customer Management, Marketing, May 2003.

APPENDIX 1

Interview questionnaire

Cranfield KAM IT Research Project: Interview

Organisation:

Contact(s): Name(s) Job Title(s)

Date of interview:

- Description of the organisation: business areas, structure, customer base, key accounts, detailed information on key accounts/KAM processes including importance (e.g. revenues), structure, key managers, stage in relationships (basic, cooperative, interdependent or integrated)
- Identify commitment towards investment in technology within the organisation and current priorities (especially marketing)
- Identify current role of information technology in supporting/facilitating KAM, (*list from Section 1*)
- For each IT application used in *supporting/facilitating KAM relationships and processes*, explore the following in detail:
 - the business processes/activity(s) covered
 - origins of and objectives to be achieved through investing in IT
 - outline of the business case
 - current progress against project plan
 - impact of issues faced in the technology project(s) (*list from Section 1; Gartner list*)
 - structure/composition of project team(s) – including role of vendors, consultants, business partners
 - selection process for technology solution(s)
 - description of the technology (e.g. generic, bespoke, ASP etc)
 - role of consultants/specialists
 - training programme(s)/new skills required /impact on core competencies (*inc sources internal v external; channels used etc*)
 - impact on structure & culture
 - involvement of “buyer” organisations/business partners and other stakeholders in the solution(s) – *inc type/stage of relationship supported*

- explore in detail the benefits to the KAM relationship(s)
 - lessons learned to date (*refer back to list of issues in Sec 1; Gartner list*)
 - measures used to monitor success against objectives/impact on the organisation & third parties (*list*)
 - identify whether to interview other personnel and/or other business partner organisations/technology vendor(s)/management consultants
- Future or emerging issues in KAM relationships requiring/might benefit from either extension of existing IT solutions or new investment

APPENDIX 2

Glossary of Terms

ASP	= Application Service Provider: Uses the intranet/extranet to host, manage and support applications for companies. Enables companies to access software solutions without needing to invest in the software, hardware, other resources etc.
Auction	Driven by either a supplier (<i>forward auction</i>) where buyers bid for specific volumes, or, by a buyer aggregating demand (<i>reverse auction</i>).
CAD	= Computer Aided Design
Collaborative computing	Enables communication within workgroups, facilitates chat rooms, document exchanges/access, updates to diaries/schedules etc. Can be within an organisation or shared between organisations.
Configuration	Software that enables the lead-to-order process to be customised around the needs of an individual customer, including the product specification.
CRM	= Customer Relationship Management: The management process that uses individual customer data to enable a tailored and mutually valuable proposition. In all but the smallest of organisations, CRM is characterised by the IT enabled integration of customer data from multiple sources (Cranfield CRM Research Forum).
Analytical CRM	Creating information and knowledge to support strategic & tactical decision making.
Operational CRM	Applying information within front-office applications to support or automate sales, marketing and customer service decisions.

Real time integration & channel management CRM	Technologies enabling instantaneous updates to the information store, rather than batch runs, and ensure consistency between messages across the channel mix.
Collaborative CRM	Supports multi-channel access by customers.
Data warehouse	A single source of data (e.g. about customers, products, sales, financial etc) serving the needs of an enterprise
Data mart	An extract of data from a data warehouse to support a particular application (e.g. customer analysis, call centre etc).
Data mining	Using software tools to analyse data in order to identify hidden relationships, patterns or associations in large datasets.
e-business	Using the internet to conduct business, including customer service.
e-marketplaces; e-procurement	Web-based systems which enable automated transactions, trading or collaboration between business partners (White & Daniel).
Public	Owned by one or more parties independent of the suppliers/buyers.
Private	Owned by a single company.
Consortia	Set up and owned by a number of organisations trading as either buyers or sellers in a market.
Electronic exchanges	Facilitate one-to-many' or 'many-to-many' transactions within business-to-business. A form of e marketplace.
EDI	= Electronic data interchange: Computer-to-computer transmission of data between companies to a standard format.
ERP	= Enterprise resource planning: A computerised system for integrating all 'back-office' business functions within a company.
Extranet	Private web-site/portal linking one organisation to one or more organisations for exchanging information or undertaking transactions.
Intranet	Internal electronic network accessed by employees.

PunchOut™	Enables a user/customer to use an e procurement package to exit their firewall to access live information held by a supplier.
OLAP	= Online analytical processing: Decision support software providing a multidimensional view enabling users to quickly and easily analyse data that has been pre-structured.
ROLAP	= Relational OLAP: Works with data in a relational form.
SFA	= Sales force automation: Providing a sales-team with a tool to automate contact and sales management.