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8. VALUE PROPOSITION

8.1. Knowledge management value proposition

8.1.1. Knowledge management supports the strategic direction of an organisation

Knowledge management supports the strategic direction of an organisation in terms of future strategic products, processes, services and business models, i.e. it contributes to its long-term development (GartnerGroup, 2000a; Havens & Knapp, 1999; Parlby & Taylor, 2000 PricewaterhouseCoopers, 1999d, pp.1-2). Respecting and institutionalising the role of knowledge and learning may be the most effective approach to building a solid and endurable foundation for organisations (KPMG, 2000; O'Dell & Grayson, 1999; Parlby & Taylor, 2000). "Firms can derive significant benefits from consciously, proactively, and aggressively managing their explicit and explicable knowledge" (O'Dell & Grayson, 1999).

According to the researcher, it supports the strategic direction of the organisation through provision of critical knowledge and information on customers, markets (of the organisation as well as its customers), competitors, products and services, processes and methods, employee skills and the regulatory environment, to enable executive decision-making and action on a strategic level.

8.1.2. Knowledge management increases organisational agility

Knowledge management can assist an organisation to reduce its time to market by creating a more efficient working environment, thereby designing and commercialising products and services more quickly and successfully. Knowledge management provides knowledge in the right format at the right time to the right person, enabling an organisation to identify and seize new business opportunities. The knowledge assists in the decision-making process relating to new business opportunities. This leads to increased revenue, market leadership and growing of profit margins (Havens & Knapp, 1999; Kennedy, 1996; KPMG, 2000; O' Dell & Grayson, 1999).

8.1.3. Knowledge management allows quicker adaptation to the eBusiness model

Knowledge management allows an organisation to transform to an eBusiness model more easily. "eBusiness is primarily externally focused (between an enterprise and external parties); KM is initially an internal focus (between business units and employees). However, eBusiness processes rely on leveraging intellectual assets of individual enterprises as

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contributors to the value chains; thus, KM is crucial to enabling the transformation implied by eBusiness" (GartnerGroup, 2000a).

8.1.4. Knowledge management provides the basis for improved decision-making

Knowledge management provides quality knowledge on a timely basis to aid decision-making (GartnerGroup, 2000a; KPMG, 2000; Parlby & Taylor, 2000; Turner & Hudig, 2000, p.5). According to the researcher this knowledge will be mainly focused on markets, customers, competitors, processes, products and services, employee skills and the regulatory environment.

"Decision quality can often be improved by ensuring that the right knowledge is available when and where it is required in the process and by sharing best practices and insights of experts" (Parlby & Taylor, 2000).

8.1.5. Knowledge management reduces organisational complexity

Organisational complexity can be reduced as organisations' knowledge management solutions assist in identifying and tracking knowledge experts or owners, and as these employees are provided with processes to locate and connect to theses expert resources (GartnerGroup, 2000a). According to the researcher it thus makes it easier to navigate the knowledge base of the organisation, whether the knowledge is in tacit or explicit format.

8.1.6. Knowledge management facilitates integration

Knowledge and knowledge management is used to build common denominators across functional groups in organisations, thereby streamlining internal integration (Kennedy, 1996; Temkin, 2001). According to the researcher knowledge management facilitates transparency and therefore assists in organisational integration.

8.1.7. Knowledge management increases collaboration

Good organisation and access to all knowledge assets will stimulate more collaboration in more communities, and the quality of the collaboration will be improved as well (GartnerGroup, 2000a; Van der Kamp, 2001). According to the researcher knowledge management increases collaboration through the provision of appropriate technology, as well as forums, e.g. virtual communities or centres of excellence.

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The insight and knowledge shared in a collaborative effort will also improve as employees are given the ability to identify experts to resolve issues (GartnerGroup, 2000a).

8.1.8. Knowledge management prevents duplication

Knowledge management leads to less reinvention of the wheel, i.e. duplication of work, through the use of knowledge in different contexts (GartnerGroup, 2000a; Hickins, 1999; KPMG, 2000; O'Dell & Grayson, 1999). "How many times has the same presentation or proposal been recreated by the sales force? Identifying what works best requires effort and discipline, but you can then replicate these practices throughout the organisation. The better you do that the more competitive you are" (Mudge, 1999).

Reusing knowledge stimulates staff to improve on past solutions or to create new knowledge, thereby creating a culture of innovation (GartnerGroup, 2000a).

8.1.9. Knowledge management improves innovation

Knowledge management allows faster innovation and getting these innovations to the market quicker (Havens & Knap, 1999).

Integration and application of knowledge across different contexts opens an organisation to new insights. An organisation's exposure to how its knowledge can be applied in other contexts increases the scope and value of the knowledge (GartnerGroup, 2000a; Gerber, 2001; KPMG, 2000; O'Dell & Grayson, 1999; Parlby & Taylor, 2000; Turner & Hudig, 2000, p.5). GartnerGroup (2000a) is of the opinion that the highest benefits from mature knowledge management will come from innovations that support strategic direction.

"Ask any CEO in the world to write a top-five wish list, and we guarantee that "more ideas-better ideas" will show up in some form. CEOs know that ideas and innovation are the most precious currency in the new economy – and increasingly in the old economy as well. Without a constant flow of ideas, a business is condemned to obsolescence" (Hargaddon & Sutton, 2000).

8.1.10. Accelerated learning and skills development

Knowledge management can assist in acceleration of learning and skills development of staff (Gerber, 2001; Havens & Knapp, 1999; KPMG, 2000; Temkin, 2001). It can also ensure that skills are not duplicated in different divisions unnecessarily (Parlby & Taylor, 2000).

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"...the enterprise can raise the level of individual learning when employees have access to insight and experience of others and when they interact with expanded communities (outside their own work teams)" (GartnerGroup, 2000a).

According to the researcher, knowledge management also creates an innovation culture, which in turn fosters learning and skills development.

8.1.11. Knowledge management provides easy access to knowledge resources

Knowledge management provides easy access to knowledge, through a single point of entry, which enhances staff productivity (GartnerGroup, 200a; Temkin, 2001; Van der Kamp, 2001Van Niekerk, 2001). Individuals are able to find needed and relevant knowledge, processes and people more quickly and efficiently. Knowledge management brings order to the knowledge base, thus enabling employees to find and focus on business and task relevant knowledge. This results in quicker and more effective decision-making. Ease of access to knowledge will compress waiting time and work delays spent trying to find sources of knowledge (GartnerGroup, 2000a). According to the researcher it therefore improves the agility of the organisation.

8.1.12. Knowledge management leads to improved communication

Knowledge management will lead to better communication through simplification of communication paths (GartnerGroup, 2000a; Mudge, 1999; Temkin, 2001). According to the researcher, communication of knowledge can also be clearer due to the provision of platforms for communication, whether in tacit or explicit format.

8.1.13. Knowledge management provides inputs towards building customer relationships

Knowledge management can provide knowledge on current and potential customers to enable staff to build better relationships with the customers and to become more responsive to their needs (Havens & Knapp, 1999; KPMG, 2000; PricewaterhouseCoopers, 1999d, pp.1-2). According to the researcher this will in turn lead to cost savings due to efficiency and the expansion of markets and customers.

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8.1.14. Knowledge management ensures the leveraging of intellectual assets

Knowledge management allows the leveraging of intellectual capital, both internal and external to the organisation (Havens & Knapp, 1999; KPMG, 2000). According to the researcher knowledge management ensures that an organisation leverages its intellectual capital as an organisational resource, by continually expanding its knowledge base and building on its capacity to innovate.

8.1.15. Cost saving

Knowledge management brings about cost saving in terms of productivity improvements and re-use of knowledge (Havens & Knapp, 1999; KPMG, 2000). According to the researcher it also leads to cost efficiency due to more efficient product design and the introduction of new products and services.

8.1.16. Increased productivity

Knowledge management can make employees more productive by increasing their efficiency, thereby collectively increasing organisational efficiency and productivity (GartnerGroup, 2000a; Havens & Knapp, 1999; KPMG, 2000; PricewaterhouseCoopers, 1999d, pp.1-2). According to the researcher efficiency and productivity increase due to more efficient decision-making, reuse of knowledge in various contexts and prevention of duplication, and quicker access to knowledge through increased navigation abilities.

8.1.17. Improved quality of work life

According to PricewaterhouseCoopers (1999g, p.8), users of knowledge management systems individually and collectively improved their job performance, experienced career enhancement as well as direct incentives and rewards, and richer job experiences.

Knowledge management can help to create a learning environment and make employees more efficient, thus creating an improved quality of work life (Havens & Knapp, 1999; PricewaterhouseCoopers, 1999g, p.8). "...the effective implementation of KM should make an organisation more attractive to staff by making their jobs easier" (KPMG, 2000).

GartnerGroup (2000a) is of the opinion that work enrichment is a secondary benefit of increased collaboration, of access to a broader range of ideas, and of enhanced learning opportunities. Individuals can see their own learning and growth expanded within a knowledge management environment (GartnerGroup, 2000a).

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8.1.18. Knowledge management manages knowledge as resource in business process design

Knowledge is used to optimise processes thus creating efficiency. The focus is specifically on the contribution of knowledge towards business performance measurement (Kennedy, 1996).

8.1.19. Examples of the value proposition of knowledge management

- Chevron has reduced its operating cost structure by more than \$2 billion in the last seven
 years due in no small part to sharing best practices. In energy usage alone, its best
 practice team has saved \$650 million (O'Dell & Grayson, 1999).
- Texas instruments generated \$1.5 billion in annual increased fabrication capacity by comparing and transferring best practices among its 13 fabrication plants (O'Dell & Grayson, 1999).
- Skandia has leveraged internal know-how to dramatically reduce start-up time for new ventures to seven months, compared with an industry average of seven years (O'Dell & Grayson, 1999).
- Arthur Andersen's Global Best Practice Knowledge Space has improved the quality of services, helped lower research costs and shortened delivery time in business consulting (O'Dell & Grayson, 1999).
- HP Consulting is of the opinion that their success is highly dependent on their ability to manage and leverage organisational knowledge, and that this knowledge, if appropriately leveraged, is as valuable as financial assets (Martiny, 1998).

8.1.20. The knowledge management value proposition in South Africa

South Africa is not considered to be one of the world's competitive countries. If international economic battle is seen as a driver for knowledge management, competitiveness as the objective and technology as the tool, the question is through which process are these elements tied together. The answer is innovation. Once the link between competitiveness, innovation and industry has been established, the challenge is to improve the capacity of South African industries to innovate (Havenga, 2001). According to the researcher, knowledge is the key to innovation, therefore knowledge management will be of critical importance.

8.1.21. Conclusion

From the discussion above, it is clear that the value proposition of knowledge management lies in efficiency improvements for organisations. According to the researcher, these

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effectiveness and efficiency improvements are mainly process based, i.e. knowledge management provides processes to facilitate other business processes and to improve their efficiency.

8.2. eBusiness value proposition

"The Internet has set in motion a series of changes that will have a profound impact on business and society in the new millennium. Individuals can now plug in to an unbelievably rich and rewarding, if sometimes confusing and overwhelming, world of information. Enterprises can interact with their customers, suppliers and communities in ways not previously possible. Industries will transform and redefine themselves. At the geographical level, eBusiness will be a major catalyst for change in society, and will in turn be affected by those changes" (Stewart, 2000).

8.2.1. Global reach

A company's reach is its ability to connect to potential customers in new markets (see Figure 27). The Internet's global reach means organisations can capitalise on business opportunities anywhere in the world more efficiently, without increasing IT costs or creating more fragmented business information. An eBusiness can use a virtual sales force to reach global markets with product information while targeting new demographics within current markets. It can also leverage its brand across several dissimilar industries (AT Kearney, 2000b; Deise et al, 2000, pp.196, 198; E-business Transformation, 1999; Means & Schneider, 2000, p.141; Plummer, 1999; PricewaterhouseCoopers, 1999b; PricewaterhouseCoopers, 2000a, p.148; Reilly, 1999; Subramanian, 2000). Due to the fact that businesses have more global opportunities, greater choice is created for the customer (Timmers, 1998, p.5).

Greater reach provides a company with the opportunity to recognise competitive threats in the market earlier, and provides opportunities to respond appropriately, thus increasing its agility (see Figure 27) (Deise et al, 2000, p.201).

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	Firms with lower capabilities	Firms with higher capabilities		
Higher GNP economies	Improve customer service Enhance company image Competitive position Better info exchange with customers Enhance customer loyalty	Improve customer service Enhance company image Better info exchange with customers Competitive position Access international markets		
Lower GNP economies	Improve customer service Better info exchange with customers Competitive position Enhance company image Enhance customer loyalty	Better info exchange with customers Improve customer service Competitive position Enhance company image Access international markets		

Figure 27. Perceived benefits of electronic commerce: mapping of priorities

8.2.2. Increased agility

Agility is the ease with which a company is able to change strategic direction quickly and smoothly, and to provide customers with what they want, even if that is not a standard product or configuration. A well-crafted eBusiness infrastructure promotes scalability, that is, the ability to add volume quickly without overwhelming the system. This in turn leads to flexibility in mergers and acquisitions and quick reconfiguration of the virtual value chain. Better marketing information supports real time resource allocation, thus increasing agility (Deise et al, 2000, pp.196, 198, 199).

eBusinesses are more agile due to changes in the supply chain. The Internet provides flexibility not previously available. It allows eBusinesses to respond to evolving trends and to enter new markets quickly (Deise et al., 2000, 63; Means & Schneider, 2000, p.143; Subramanian, 2000). Business models can be rapidly reconfigured as market conditions change (Means & Schneider, 2000, p.143).

According to the literature, agility is becoming increasingly important. "The bottom line: eBusiness is about speed, flexibility, and relationships" (Deise et al, 2000, p.195).

8.2.3. Decreased time to market

Time to market is a product cycle beginning with design and concluding with revenue recognition. eBusinesses participate in collaborative product design, often over great distances. In addition, as companies link tightly with their supply chain partners, they engage

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in collaborative research and development, concurrent engineering, and other methods to reduce time to market (Deise et al, 2000, p.196).

8.2.4. Improved customer service and improved customer relationships

eBusinesses can deliver improved customer service and stronger customer relationships (see Figure 28) (Means & Schneider, 2000, p.141; Online purchasing frees buyers for strategic work, 1999; Plummer, 1999; PricewaterhouseCoopers, 1999b; PricewaterhouseCoopers, 2000a, pp.144, 153; PricewaterhouseCoopers, 2000d; PricewaterhouseCoopers, 2000e; Subramanian, 2000).

eBusiness provides organisations with the opportunity to expand their customer bases (Kaplan & Sawhney, 2000). eBusiness is revolutionising the way business can reach new customers while more adequately fulfilling the needs of pre-existing ones (Subramanian, 2000). "Electronic commerce enables firms to be more responsive to customer needs and more efficient in interacting with and servicing business and consumer needs" (PricewaterhouseCoopers, 1999b).

Examples of how improved customer service and relationships can be achieved, include:

- eBusiness can sometimes reduce the price they pay for products and services through such devices as aggregation, auctions, decoupling of product offerings and pay-per-use payment models which increases the transparency of company pricing. In all cases the "market of one" where products are priced individually for each customer, keeps eBusiness pricing flexible. eBusinesses can price more effectively because of their better understanding of their customers' buying behaviours and of the level of real-time local demand. Also eBusinesses are also able to customise offerings by rebundling related products and services into attractive "baskets" (Deise et al, 2000, p.195).
- Web technology reduces the cost of serving customers. Online information is available 24 hours a day. Customers can use self-service features 24 hours a day, seven days a week. The company and its value-adding partners can share information with customers on a real-time basis (Deise et al, 2000, p.199).
- eBusiness saves time due to less time spent looking for the right product at the right price with efficient service (Timmers, 1998, p.5).
- Reduced order fulfilment and customer buying time with reference to searching, selection and purchasing increases overall customer value (Deise et al, 2000, p.198).

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8.2.5. Cost saving and revenue increase

eBusiness creates efficiencies and cost savings, as well as revenue growth, that were not possible before, thereby increasing shareholder value (see Figure 28) (Deise et al, 2000, p.198; E-business Transformation, 1999; p.xvii; Plummer, 1999, PricewaterhouseCoopers, 1999b; PricewaterhouseCoopers, 2000a, p.153; PricewaterhouseCoopers, 2000d; PricewaterhouseCoopers, 2000e; Reilly, 1999).

Service	↓ Price	Quality	Fulfillment time	Agility	Time to market	1 Reach	Net driver effect
•	•	•	•	•	•	•	•
•		•	•	•		•	•
		•	•	•			•
				•	•	•	•
				•			•
•		•	•	•	•	•	•
	•	• •	• • •	• • • •			

Figure 28. Driving shareholder value

Cost saving and increased efficiency is a way to gain competitive advantage (Deise et al, 2000, p.196; PricewaterhouseCoopers, 2000d).

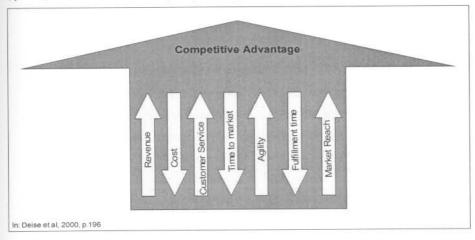


Figure 29. Aligning value drivers to achieve competitive advantage

Cost saving and revenue increase can take the following forms:

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- The disintermediation of non-value-added processes reduces overall costs and also allows a closer interface between the customer and the supply chain, thus driving additional revenue (Means & Schneider, 2000, pl.143).
- Cost saving can take the form of cheaper products and services, as well as lower transaction costs (Nevans, 1999; Ovans, 2000). Eliminating manual steps and reducing the cost of inventory also offers significant advantages (Deise et al, 2000, p.75).
- "The Internet's single most significant effect is to cut the cost of interaction the searching, co-ordinating, and monitoring that people and companies must do when they exchange goods, services and ideas. The cost of searching for a mortgage, executing a bank transaction and obtaining customer support, for example, drops by as much as 80 percent or more when these activities are handled electronically" (Nevens, 1999).
- eBusiness slashes transaction costs for both non-production and production related materials. Lower purchasing costs, shorter cycle times, tighter manufacturing cycle times, pre-negotiated agreements and minimised inventory levels help companies to reduce cost. Service and logistics costs are also dropping, as are overhead costs, which can be reduced and ultimately eliminated (Deise et al, 2000, p.193).
- According to Deise et al (2000, p. 1999) working capital is reduced in the following ways:
 - Improving quality through minimising errors in order processing and demand planning reduces safety stock requirements.
 - Order fulfilment time decreases the amount of inventory held across supply chains.
 - Sourcing from a large base of potential suppliers results in reduced working capital needs and better credit terms.
- Capital expenditures can be curbed through the agility of the eBusiness. Redeploying assets in response to changing market conditions creates greater fixed asset efficiencies. Sourcing inputs, finished products and complimentary products and services from the marketplace, rather than producing them internally in the organisation, reduces overall capital expenditure needs. Decreased time to market and increased reach drives more and better asset utilisation (Deise et al. 2000, p.200).
- An eBusiness can also save cost through diversifying its value chain, which reduces
 the organisation's overall global tax burden. Shared service, typically back office
 functions, can be easily distributed to low tax regimes (Deise et al, 2000, p.200).

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 eBusiness only has an impact on cost of capital in the sense that its "e-nabled" status increases its share price and decreases cost of equity. However, this effect may be transient (Deise et al, 2000, p.200).

Cost reduction will be the largest eBusiness opportunity for current and future companies (Deise et al, 2000, p.193).

8.2.6. Access to knowledge and information

eBusinesses, their customers and suppliers have access to strategic knowledge and information 24 hours a day (Deise et al, 2000, p.xvii; Online purchasing frees buyers for strategic work, 1999; PricewaterhouseCoopers, 1999b; Stewart, 2000).

Customers' growing computer literacy is redefining the market. By using the Internet to obtain more and better knowledge and information on products and services, they are putting new pressure on companies to increase the level of their service (Deise et al, 2000, p.193).

eBusiness increases the level of service by providing personalised and accurate customer information (Deise et al, 2000, p.195). "An e-nabled sell channel allows for much more efficient collection and aggregation of customer information. Companies are increasingly realising that customer information is a valuable asset. Knowing what customers buy, why they buy it, and what they buy in conjunction with it, can assist an organisation in developing new product configurations and effective pricing models for markets of one, where prices are tailored per customer" (Deise et al, 2000, p.8).

eBusinesses allows organisations to standardise customer information and update it efficiently and at lower cost (PricewaterhouseCoopers, 1999b). Small and medium enterprises believe that eBusiness will enable them to gather and compile better market intelligence on customers, suppliers and competitors through Internet research and better develop and update databases, including online databases and customer databases. By providing a higher quality of service and better information exchange with customers, small and medium enterprises believe that eBusiness will offer important benefits in improving longer term customer loyalty and retention. Many small and medium sized enterprises suggest that the Internet and other electronic networks are creating more sophisticated and demanding customers with higher expectations, in terms of 24-hour access to company and product information and quicker response times to information requests (PricewaterhouseCoopers, 1999d).

Access to knowledge and information provides the following results:

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- eBusiness provides organisations with the opportunity to lower cost and time required for obtaining and distributing information and transaction processing (Subramanian, 2000).
- Sharing timely and accurate knowledge and information reduces the possibility of inaccurate and/or incomplete services, e.g. deliveries (Deise et al, 2000, p.74).
- Promotes better customer relationships, according to the researcher (refer Figure 29).

8.2.7. Automation and streamlining of custom business processes

Custom business processes are automated in the eBusiness. eBusinesses see process streamlining and automation as key operational concerns (Deise et al, 2000, p.22; Online purchasing frees buyers for strategic work, 1999; PricewaterhouseCoopers, 1999b; PricewaterhouseCoopers, 2000d; Subramanian, 2000).

Many non-core business processes are outsourced, e.g. human resources, finance, and procurement. Electronic business process outsourcing can create dramatic new sources of shareholder value and competitive advantage by creating new products and services, reaching new markets, building customer loyalty, achieving market leadership, optimising business processes, enhancing human capital, harnessing technology and managing risk and compliance (see Figure 29) (Vales & Eng, 1999).

8.2.8. Increased efficiency

eBusiness creates efficiencies and cost savings that were not possible before (E-business Transformation, 1999; PricewaterhouseCoopers, 2000a, p.153; Timmers, 1998, p.5).

eBusiness provides organisations with the opportunity to lower cost and time required for obtaining and distributing information and transaction processing (Subramanian, 2000). It reduces the time people take in doing their jobs (Ovans, 2000).

"eBusiness helps companies improve their internal business processes, thereby reducing fulfilment time. E-nabled companies use automated order-to-payment and streamlined purchase initiation processes. Delaying product differentiation to a point as close to the customer as possible produces production/configuration time. So does just-in-time production. Networked and outsourced shipping enables well-timed product departures and optimises time en route" (Deise et al, 2000, p.196).

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8.2.9. Greater choice of suppliers and products/services

Organisations now have a wider choice of suppliers due to a lack of geographical boundaries. This in turn leads to lower cost, better quality, improved delivery, reduced cost of procurement (Deise et al, 2000, p.22; Kaplan & Sawhney, 2000; Timmers, 1998, p.5). In turn, suppliers will have more tendering opportunities due to the lack of geographical boundaries (Timmers, 1998, p.5).

eBusinesses also expand the choices available to buyers in terms of products and services (Kaplan & Sawhney, 2000).

8.2.10. More effective communication

Communication with suppliers and business partners is a critical component of any company's ability to develop, produce, and deliver products or services. The e-nabled company communicates more effectively, and in real time, with its suppliers and business partners. The first way this helps an organisation is by taking cost and time out of its purchasing activities. Effective communication can also allow an organisation and its suppliers to jointly design products, collaborate on forecasts and transmit production schedule changes in real time. eBusiness communication with suppliers also lowers costs by coordinating and simplifying procedures to determine product specifications, develop designs, and execute design changes (Deise et al. 2000, pp.71 –74, 195).

"Because communication in the eBusiness world is faster and more flexible, companies have the opportunity to sit down with their business partners and redesign business processes across companies to realise joint gains" (Deise et al., 2000, p.87).

8.2.11. Better connectivity

eBusiness technology is improving business performance through connectivity. Among other benefits, it connects the value chains between and across businesses and their customers and suppliers in ways that improve service, reduces costs and opens new channels for new markets (Vales & Eng. 1999).

8.2.12. Increased quality

Integrated supply chains made possible by technology increase quality at every point in the value chain. Organisations also lower the cost of delivering high quality products or services by minimising inaccurate order processing information and by electronically linking order processing, production, suppliers, order fulfilment and logistics (Deise et al, 2000, p.199).

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In eBusiness, quality refers to more than just goods and services – it refers to the customers' buying experience. eBusiness improves this experience through customisation and provision of better information on products and services, as well as by enabling customers to form communities. As transactions become standardised, it leaves the organisation free to focus on those activities adding more value to the customer relationship, e.g. notifications of related or new products (Deise et al, 2000, p.195).

8.2.13. Increased convenience

Convenience in the digital world is higher due to the ease of selection, buying and delivery, which includes 24-hour availability (Timmers, 1998, p.5).

8.2.14. Examples of value propositions in the eBusiness environment

- Sun saved 30% on accounting transactions, 75% on travel and expense processing costs, \$50 million through Internet procurement, 30% on global invoice processing costs, and 30% on payroll transactions (E-business Transformation, 1999).
- Thompson Corporation saved the following through ordering office supplies online: \$425 000 in administrative costs, 1.5% in cost-plus pricing, 30% annual increase in volume in 1999 versus 1998. Other benefits include reduced time (5 minutes in stead of 25 minutes) to order office supplies (Online purchasing frees buyers for strategic work, 1999).

8.3. Customer relationship management value proposition

8.3.1. More effective customer targeting and retention

Customer relationship management leads to customer retention by cementing customer relationships (Conlon, 1999; Ernst & Young, 2000b; Patmore & Renner, 1997).

More focused customer segmentation can take place due to customer relationship management (Ernst & Young, 1999a). Customer relationship management allows organisations to prevent overspending on low-value clients or under spending on high value ones (Handen, 2000a, p.8).

Customer relationship management improves the use of the customer channel, thus making the most of each contact with the customer (Ernst & Young, 2000b; Handen, 2000a, p.8).

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8.3.2. Reduced marketing cost and improved effectiveness

Customer relationship management leads to reduced marketing cost through improved targeting (Dunster, 2001; Ernst & Young, 2000b; Maoz, 2001; Patmore & Renner, 1997). Customer relationship management has an advantage over mass advertising, because it reduces advertising cost and it makes it easier to target specific customers by focusing on their needs (Handen, 2000a, p.17). Through customer relationship management, effectiveness of marketing campaigns can be tracked more readily. It also speeds up the marketing cycle (Handen, 2000a, p.8).

The efficiencies of automation will enable more investment in the content of marketing, segmentation, messages and offerings. Increased response rates, effective demand generation and greater efficiencies are the results that the new marketing paradigm will deliver (Harris, 1999).

8.3.3. Development of strategic partnerships

Strategic customer care allows the forming of strategic customer partnerships. These customers depend on the organisation to provide solutions as a business partner and, in return, both the organisation's and the customer's profit will increase (Brown, 2000c, p.85).

8.3.4. Access to knowledge and information

Through creation of one view of the customer, organisations are becoming invaluable to customers (Frook, 2000). The process of gathering information and intelligence during transactions or customer contact is crucial to the success of a business due to the fact that it improves efficiencies (Gordon & Roth, 2000, p.28).

Examples of the impact of access to knowledge and information in customer relationship management:

- Better information flow, facilitated by breaking down interdepartmental silos, leads to better communication (Conlon, 1999).
- "Armed with rich and precise knowledge about its customers, a financial institution can potentially reap numerous rewards. It can boost profits by understanding the needs of different types of customers more thoroughly and targeting its marketing and product development efforts more effectively. It can measure the profitability of various customer segments and direct its sales and customer services efforts accordingly. It can deepen relationships with desired customers, attract new customers, and discourage unprofitable customers. These are just a few of the promises of customer relationship management" (Ernst & Young, 1999d).

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Access to real-time sales reports, collateral, pricing and product updates, customer information and competitive intelligence saves organisations lots of time and cost. In April 1998 McGraw Hill saved \$75 000 by not having to print sales reports, and \$125 000 by not having to print and distribute sales collateral. The organisation is of the opinion that the time saving benefits are the most important (Conlon, 1999).

8.3.5. Cost saving and increased revenues

Customer relationship management leads to increased cost saving and increased revenues due to increased productivity (Conlon, 1999).

8.3.6. Streamlined processes

Customer relationship management allows organisations to streamline customer related processes (Conlon, 1999).

8.3.7. Improved communication

Customer relationship management improves communication with customers and suppliers due to the more effective and faster tracking of leads, and through getting information to distribution and manufacturing entities faster (Conlon, 1999).

8.3.8. Better utilisation of resources

Due to customer relationship management, organisations will be able to better focus its resources. Using principles such as strategic outsourcing and the implementation of invaluable research in the development of customer care processes, organisations will effectively realign the organisation and focus their limited resources on key market areas" (Brown, 2000c, p.85).

8.3.9. Increased stability

Building and strengthening customer relationships provides stability in an increasingly dynamic market. Customer churn will be less (Dunster, 2001; Patmore & Renner, 1997).

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8.3.10. Competitive advantage

Systematically building and maintaining customer relationships is a competitive necessity. It enables an organisation to differentiate itself in the marketplace in terms of price and service (Assabi, 2001; Conlon, 1999; Dunster, 2001; Handen, 2000a, p.18; Patmore & Renner, 1997).

8.4. Conclusion

(Refer Figure 30 for summary)

8.4.1. The value proposition of knowledge management in the eBusiness environment

8.4.1.1. Knowledge management as change agent in the adoption of the eBusiness model

Knowledge management acts as change agent in the eBusiness environment.

Knowledge management allows staff members to adjust to their new roles and responsibilities in the eBusiness environment quickly and easily, through the provision of knowledge that facilitates the transition, e.g. knowledge on new organisational structures and new business processes.

Knowledge management also faciltates the transition so that all staff become knowledge workers in their own right, integrating knowledge management activities into their day to day work. Some may have additional knowledge management responsibilities, e.g. acting as internal informediaries.

Knowledge management also assists in institutionalising the knowledge as a corporate asset, managed like any other asset, e.g. capital and labour. This is becoming more prevalent in the eBusiness environment as organisations realise that they operate in the knowledge economy and are dependent on knowledge as a resource in order to be competitive.

Knowledge management also assists staff in getting the necessary skills and competencies within the new environment, and it facilitates integration of new business units (see 8.4.1.6. and 8.4.1.11).

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8.4.1.2. Knowledge management assists in determining the strategic direction of the eBusiness

Knowledge management ensures the availability and accessibility of knowledge on the issues strategic to the business, including markets, customers, suppliers, products and services, competitors, employee skills, processes and procedures and the regulatory environment.

Due to the fact that knowledge management focuses on knowledge strategic to the business, it will inevitably tie into the business strategy of the organisation and will therefore support the execution of the business strategy. It also provides the business with a better understanding of the market it plays in, enabling the eBusiness to match buyers and sellers in new value added markets and thereby positioning itself in the market.

Knowledge and knowledge management improves the quality and speed of strategic as well as operational decision making, and also improves the agility of the eBusiness by decreasing time to market.

8.4.1.3. Knowledge management assists in overcoming increased organisational complexity in the eBusiness model

eBusinesses are by nature more complex than traditional bricks and mortar businesses. Knowledge management can assist in overcoming this complexity through managing the knowledge base, therefore making the adoption of the new business model easier and allowing knowledge to flow across boundaries, including interorganisational, intraorganisational and geographical boundaries. It also assists in overcoming complexity as by identifying experts within the organisation, thereby ensuring everyone in the organisation knows the sources of both tacit and explicit knowledge.

8.4.1.4. Knowledge management increases organisational agility

Knowledge management increases organisational agility. It allows for flexible and more accurate decision making due to the availability and accessibility of relevant knowledge at the right time to the right person. Knowledge management also provides the knowledge to enable quick adaptation of the business to suit new market conditions through the availability of real time knowledge and information. It also improves agility by decreasing the eBusiness' time to market.

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8.4.1.5. Knowledge management increases general organisational efficiency

Knowledge management increases eBusinesses' efficiency by providing 24-hour access to knowledge through a single point of entry, which prevents duplication and increases productivity. Staff can find knowledge they need faster and easier through adequate structuring of the knowledge base, which allows easier access and retrieval. This increases staff productivity. Duplication is also prevented, because staff now have access to work has been done before or what knowledge is available, which allows them to reuse the available knowledge in different contexts.

Knowledge management can also provide knowledge on business process inefficiencies, thus assisting an organisation to redesign its processes to make it more efficient and effective. When redesigning the organisational processes, the related knowledge flow is also changed and can be managed explicitly due to a better understanding of how the processes work and which knowledge is created, shared, harvested and leveraged in the various phases of processes.

8.4.1.6. Knowledge management makes integration more effective

Knowledge management facilitates integration between disparate groups or departments within an eBusiness. These disparate groups may be in different business units, or in different geographical locations, or in different organisations where supply chain integration is taking place. Knowledge management facilitates the flow of knowledge between the groups, thereby facilitating quicker and more effective integration. Knowledge management also facilitates transparency, which assists in the integration process.

8.4.1.7. Knowledge management assists in managing an expanded knowledge base

eBusinesses invariably wind up with a widening customer and supplier base, which inevitably leads to more knowledge to be managed. Knowledge management provides processes and systems to address these expanding knowledge management requirements in view of the knowledge management lifecycle, i.e. creation, sharing, harvesting and leveraging of knowledge.

Knowledge management increases the organisational agility in these expanding markets due to more efficient decision making and response to market changes. Knowledge management also allows an organisation to adapt its business model in reaction to market changes by facilitating communication and knowledge sharing within the new or changed business processes.

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Knowledge management can also assist in the branding and marketing of the organisation in these expanding markets by providing branding and marketing knowledge on the market and customer base the organisation serves, and the need for the organisation's products and services. Marketing and branding can therefore be done more accurately and effectively.

8.4.1.8. Knowledge management enables the management of knowledge across organisational and geographical boundaries

Knowledge management facilitates transparency in terms of the availability of knowledge. It does this by providing an "inventory" of knowledge assets available in the eBusiness. Access is provided through a single point of entry to the knowledge base, irrespective of location or business unit. This saves a lot of time as staff has only one port of call to find the knowledge they need. Knowledge management also provides navigation tools, e.g. taxonomies, to enable staff to retrieve the knowledge they require quickly and efficiently. This transparency ensures that staff in different organisational units or geographical locations will know what knowledge is available to them, and will be able to retrieve it easily, thus eliminating duplication and increasing productivity. This means that the eBusiness can decrease its time to market and increase its agility.

8.4.1.9. Knowledge management facilitates collaboration

In the eBusiness environment collaboration is becoming increasingly prevalent. eBusinesses collaboratively design products across geographical boundaries and sometimes across organisational boundaries. There is also collaboration in the form of virtual communities internal and external to the organisation, e.g. through intranets and extranets. These communities share knowledge on a wide variety of issues. Knowledge management provides the technology, processes and platforms to enable the said collaboration. Knowledge management also ensures the retention and structuring of the knowledge shared in these collaborative forums that can be used as input to further knowledge creation within these and other forums.

Knowledge management also ensures that processes and platforms exist to convert tacit knowledge to explicit knowledge within knowledge exchanges in virtual communities or collaborative forums. Value can thus be extracted from tacit knowledge, and knowledge attrition can be minimised.

Due to collaborative design taking place across geographical and organisational boundaries through provision of collaboration forums and related knowledge management tools and processes, the organisation's time to market decreases and agility increases.

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8.4.1.10. Knowledge management supports innovation

Knowledge management fosters a culture of innovation and creativity. Knowledge management plays a part in the creation of a culture of innovation through the availability and accessibility of knowledge that can serve as an input to the innovation process, and through recognition and rewarding of innovative ideas in the organisation. Innovation is a key element in ensuring agility for an eBusiness by keeping it one step ahead in the marketplace.

8.4.1.11. Knowledge management creates a learning environment

A new skills profile will be required to conduct business in the virtual world. Knowledge management can assist in expanding staff skills and knowledge by creating a learning environment, through the provision of knowledge on specific areas of expertise strategic to the business. Knowledge management therefore creates a self learning environment where staff has access to knowledge that enables them to acquire certain skills and competencies.

Working in a learning environment increases the quality of work life for staff members, making them more productive. The learning environment created through knowledge management is usually suited to the individual, team and organisation, i.e. learning and knowledge transfer takes place on all three levels. Quality of work life is thus improved on all three levels.

The learning environment leads to the institutionalising of knowledge created, shared and harvested. The organisation therefore continues to use its knowledge base to create more knowledge, i.e. a spiral effect of knowledge creation and leverage is achieved.

8.4.1.12. Knowledge management improves the communication process

Knowledge management plays a role in facilitating communication through the provision of technology, processes and platforms that enable communication. These technologies, processes and platforms are especially useful in eBusinesses with diverse geographical locations and associated timezones, or where organisational silos are present that inhibit communication and knowledge sharing. Knowledge management also ensures the retention of knowledge shared in these communication forums for future use.

8.4.1.13. Knowledge management provides one interface for interaction with business partners

Knowledge management provides the structure, tools and processes to provide one single interface with multiple business partners. This interface may take the shape of an Internet

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webpage. The organisation's knowledge management function should be responsible for the structuring of the website content, to ensure that knowledge and information is structured effectively to ensure easy and logical organisation and retrieval of knowledge.

Knowledge management processes will also ensure that the knowledge on the interface is accurate and up to date and that knowledge is retained during any interactive knowledge sharing taking place through the interface, whether with customers, suppliers or visitors.

8.4.1.14. Knowledge management enables customer relationship management

Knowledge management enables customer relationship management through the creation, sharing, harvesting and leveraging of knowledge on an organisation's customers. Knowledge management ensures the creation of one view of the customer that can be shared across geographical and divisional boundaries in the organisation, thus ensuring that staff work with one updated set of knowledge on the customer irrespective of where they work.

This allows a better understanding of customers and their needs, and therefore enables more effective and more accurate development of product, channel and marketing strategies.

8.4.1.15. Knowledge management leads to standardisation of knowledge

Knowledge management provides standards for the creation, sharing, harvesting and leveraging of knowledge within the eBusiness environment. This leads to greater efficiency and lower cost for the organisation in terms of updating and managing the knowledge base, but also in terms of increased productivity of staff members. This is due to quicker and easier access and leverage of the available knowledge.

Standardisation also makes customer and supplier access and retrieval of knowledge more efficient, thus increasing customer and supplier satisfaction rates.

8.4.2. The value proposition of knowledge management in the customer relationship management environment

8.4.2.1. Knowledge management provides one view of the customer

Knowledge management provides the technology, processes and platforms to create, share, harvest and leverage knowledge on customers in one central location, thus providing one view of the custumer, irrespective of geographic location or functional area in the business. The knowledge management system can provide real time knowledge and information on the

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customer spanning the customer relationship lifecycle. The knowledge management system provides tools, processes and forums to enable the creation, sharing, harvesting and leveraging of knowledge throughout the customer relationship lifecycle, thus providing adequate knowledge gained during all stages of the customer's contact with the organisation.

This ensures that staff work with one updated set of knowledge on the customer irrespective of where they work, allowing a better understanding of customers and their needs, and therefore enables more effective and more accurate development of product, channel and marketing strategies.

8.4.2.2. Knowledge management leads to delivery of superior customer service and customer retention

Knowledge management ensures one view of the customer. This allows for a better understanding of their operating environment, their needs, demands and behavior and therefore for creating a "market of one", i.e. customising products and/or services to client needs and pricing it accordingly. It can also lead to new product or service development according to identified customer needs, as well as customer values. Service to the customer can be quicker, more effective and more efficient.

Knowledge management can also provide customers with 24-hour access to the knowledge they require on the organisation. This reduces the customer buying time and complexity of the customer buying process, including searching, monitoring and co-ordinating, thus increasing customer satisfaction and customer retention.

8.4.2.3. Knowledge management facilitates integration

Knowledge management facilitates integration of knowledge between disparate groups or departments within a customer relationship management environment. These disparate groups may be in different business units, or in different geographical locations. Knowledge management facilitates the flow of knowledge around customer issues between the groups, thereby facilitating quicker and more effective integration of customer related knowledge. It provides one view of the customer, irrespective of what context the knowledge is used in or where it originates or is utilised. Knowledge management also facilitates transparency, which assists in the integration process.

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8.4.2.4. Knowledge management assists in managing a greater customer base

When implementing customer relationship management, the knowledge management program can assist in managing the increased amount and flow of knowledge related to an expanding customer base, which is caused by to the explosion of richness and reach in the virtual world. Knowledge management programmes can structure knowledge management processes and systems to ensure that all relevant knowledge is retained and made accessible, to add value to the organisation as well as the customer.

8.4.2.5. Knowledge management acts as change agent in institutionalising customer relationship management

Knowledge management provides the tools, processes and platforms for staff to share knowledge on customers. It enables them to see the value of pooling customer knowledge, through which superior customer service can be delivered. Staff are therefore more willing to share customer knowledge as they can see the value that is derived from it. Knowledge management therefore creates the vehicle through which customer relationship management can be institutionalised.

8.4.2.6. Knowledge management enables knowledge flow across geographical boundaries

Knowledge management facilitates transparency in geographically dispersed organisations in terms of the availability of knowledge. This ensures that staff in different geographical locations will know what knowledge is available to them, thus eliminating duplication and increasing productivity. Customer knowledge can therefore be captured in and shared from one central point, enabling one view of the customer. Quality and speed of decision-making and customer service can increase dramatically due to the pooling of customer knowledge and creation of customer profiles.

8.4.2.7. Knowledge management facilitates collaboration

In the customer relationship management environment collaboration is becoming increasingly prevalent due to organisations expanding their reach and working across geographical boundaries. These organisations use collaboration in the form of virtual communities (sometimes called virtual customer teams) internal and external to the organisation to ensure the harvesting, sharing and leveraging of customer knowledge (e.g. through use of intranets and extranets). Knowledge management provides the technology, processes and platforms to enable the said collaboration. Knowledge management also ensures the retention of the

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knowledge shared in these collaborative forums. The knowledge harvested and shared in these collaborative forums are used to build customer profiles, and is used as business intelligence to do market, customer, as well as product and service segmentation and marketing.

8.4.2.8. Knowledge management improves the communication process

Knowledge management plays a role in facilitating communication through the provision of technology, processes and platforms that enables communication. These technologies, processes and platforms are especially useful in organisations with diverse geographical locations and associated timezones, as well as in cases where there are functional silos in the organisation that hamper communication and knowledge flow. Knowledge management also ensures the retention of customer knowledge shared in these communication forums for future use.

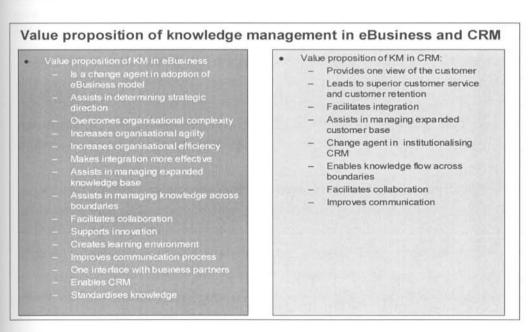


Figure 30. The value proposition of knowledge management in eBusiness and CRM

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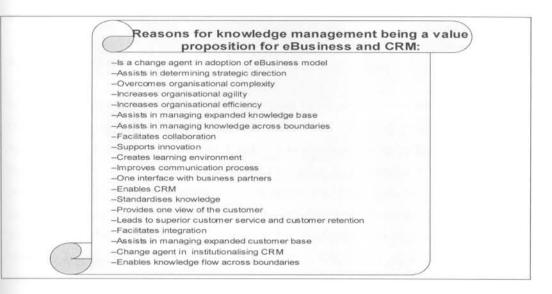


Figure 31. Summary: the value proposition of knowledge management in eBusiness and CRM