



Minimizing dysfunctional internal competition: a strategy enabler model

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1 Introduction

According to Harvard Business School Publishing (2003), there are numerous weaknesses present in the ability of organizations to implement strategy effectively and fast enough to stay ahead of competition. Owing to the current impact of technology, knowledge management (KM) and performance assessment models have been developed and/or amended to formulate business strategies that incorporate the use of these managerial entities. Unfortunately, even though these issues are high on the agenda of strategic managers, there still seems to be a strong tendency for managers to exercise control in a deleterious way, aided and abetted by the application of performance assessment systems. Typically the balanced scorecard (BSC) technique is widely used, in which the business

drivers tend to gravitate towards financial aspects, customer satisfaction and the optimization of internal processes, with human capital being given a lesser priority.

Microsoft Corporation (2005) is of the opinion that strategy implementation only succeeds when the human capital is competent enough to keep up with the ever-increasing demand to utilize new technologies. The South African government, represented by the Department of Trade and Industry (DTI), recently engaged in a project with the Canadian Government to develop a strategy for developing the information and communication technology (ICT) sector. The findings of this survey (South Africa 2002) are in essence similar to the argument proposed by Microsoft, stressing that the development of human capabilities is crucial for successful strategy implementation, especially when technology plays a vital role in implementation.

When emphasis is placed on the optimization of financial, customer and internal processes, workers continuously labour under the threat of redundancy. Faced with downsizing, the quest for recognition becomes a game of survival, more often than not leading to dysfunctional internal competition. In these circumstances, competition, normally regarded as healthy, spurring individuals and teams on to achieve greater things, takes on a more sinister hue, aggravated by [performance appraisals](#) and salary adjustments. If incorrectly managed, competitive interactions not only pose a hurdle to strategic implementation, but can also present an obstacle to the effective integration of value chain activities. Dattner (2004) therefore argues that loss of control over HR components easily leads to narcissism at work, resulting in individuals becoming preoccupied with power and success. They begin to lack empathy, seek favourable treatment and exploit others in their efforts to satisfy their own needs. Narcissism unfortunately goes hand in hand with a culture in which competition is pursued to the point where there are losers and winners, with the organization ending up as the ultimate loser. Therefore, in order for organizations to optimize strategy formulation and implementation, dysfunctional internal competition needs to be minimized as far as possible. This necessitates a mind shift in the direction of recognizing the importance of vesting sound HR practice in strategic, technological and knowledge management practice, which inevitably means that these managerial entities must be revisited.

The aim of the research was therefore to develop a holistic strategy enabler model, capable of not only optimizing strategic endeavours but, more specifically, of minimizing dysfunctional internal competition.

To fulfil the above-mentioned aim, the following aspects were given prominence:

- Common links between strategic processes and HR practices;
- key success factors (KSFs) that render knowledge sharing possible;
- role of knowledge management in vesting a culture conducive to the sharing of knowledge;
- deriving a guide for setting up successive KM platforms; and
- organizational wisdom aimed at value chain optimization.

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2 Methodology

To develop a model capable of minimizing dysfunctional internal competition, while at the same time maximizing strategic endeavours, a grounded theory approach (Mouton 2004) was followed. In developing this model, different ideas, models and methodologies with regard to strategic management, knowledge management, and HR management were meticulously compared with one another. To add a dimension of authenticity to the line of reasoning

followed the value chain processes institutionalized between a [major corporation](#) and its value chain partners were scrutinized to identify how strategic processes within the value chain were influenced and/or aggravated by dysfunctional internal competition. As it was felt that a review of literature alone did not produce sufficient insight in finding solutions to the above-mentioned problem, interviews were also conducted with specialists in the field of strategic, HR and knowledge management.

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3 Common links between strategic processes and HR practices

In scrutinizing the value chain processes institutionalized between a major South African corporation and its value chain partners, the following problems were identified:

- Individual organizations made use of their own enterprise resource planning systems; no standardized electronic link existed between value chain partners;
- effective monitoring of the location of transportation by means of satellite was communicated by means of manual systems;
- control measures resulted in paperwork requiring multiple authorizations, and
- communication systems were only operated inside the boundaries of individual organizations within the value chain.

In an attempt to resolve some of the abovementioned issues, the organizations embarked on programmes heavily dependent on the use of technology and ICT systems. Unfortunately, even though sound and thorough planning in support of strategy endeavours took place, problems did not disappear overnight. The following malpractices had become commonplace:

- Information systems (IS) personnel were only called in when it was considered absolutely necessary;
- business managers developed strategies without the knowledge of IS managers;
- IS personnel worked on different solutions to various problems without being presented with an overall view of the value chain;
- business managers became reluctant to standardize on single best practices;
- knowledge sharing was limited because of prior ownership of the idea; and
- results achieved per individual weighed strongly during performance evaluations.

At first glance the abovementioned practice and problems seemed to arise from a number of conflicting managerial issues. However, careful scrutiny revealed that many of these factors were in fact symptoms of dysfunctional internal behaviour. On a managerial level, problems could also be accounted for by a lack of direction, leadership and commitment, especially with regard to implementation of strategies.

In an attempt to rectify the problems prevailing on different levels and in different spheres of the value chain, the expertise of various practitioners and [professional managers](#) was sought. In essence, the gist of solutions proposed emphasized that any attempt to rectify problems that originate in the strategic dimension not only necessitate a review of the business processes followed, but also require a thorough appreciation of how KSFs are positively influenced by HR processes and other soft issues. In corroboration of the abovementioned proposition, the following managerial activities (arguably not an exhaustive list) were analysed:

- The way organizations define strategy, that is, strategic intent, value chain, strategy map and strategic information systems planning (SISP);

- implementation of strategy, that is, risk management, decision support mechanisms, stakeholder management and project management; and
- measurement of the result of the strategy, that is, balanced scorecard (BSC) approaches, control objectives information related technology (COBIT) auditing process, ICT governance and the value of ICT.

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4 Identification of key success factors

In reviewing these managerial entities the following KSFs (examples given in Table 1) were identified and found to be directly or indirectly influenced by HR issues.

Table 1 Business strategy KSFs

Activity	Business strategy KSFs	Source*
Implementation of strategic intent	Involvement and utilization of human capital	1
Value chain integration	Correct application of ICT	2
Development of the strategy map	Processes are designed to be enablers for the employees	3
Strategic information systems plan (SISP)	SISP and business strategy managed as a holistic entity	4
Project management	KM culture	5
Development of BSC	BSC designed to promote functional behaviour	6
COBIT audit	Management practices optimize use of resources	7
ICT governance	Selection of control parameters not to stifle KM	7
*Sources: 1. Hamel and Prahalad (2005); 2. Porter (2005); 3. Kaplan and Norton (2004); 4. Kruger and Snyman (2002); 5. Mathi (2004); 6. Ward (2001); 7. IT Governance Institute (2000)		

Owing to the pertinent role HR plays in the successful institutionalization of the abovementioned managerial processes, the question inevitably arises whether any HR and human capital models or practices are available that can aid, encapsulate and/or enhance the successful institutionalization of the abovementioned processes. The following human capital models were therefore scrutinized to identify KSFs that positively influence the optimization of the abovementioned managerial processes:

- Development of human capital: human capacity, management capacity, management leadership and empowerment
- Aligning human capital: behaviour-based management, culture management and conflict management
- Performance management
- Communities of practice (CoP).

In reviewing the abovementioned activities, it became clear that the core of successful HR practices (refer to the examples of KSFs identified in Table 2) is encapsulated in acquiring and vesting an ability to guide organizational behaviour – organizational behaviour that

minimizes dysfunctional competition and, at the same time, encourages a culture conducive to knowledge sharing.

Table 2 Human capital KSFs

Activity	Human capital KSFs	Source*
Ensuring human capital	Superior HR processes are demanded in the strategy map	1
Culture management	Honesty and trust	2
Conflict management	Divisive power is not gained from knowledge	3
Performance management	Performance measures that influence the desired outcomes	4
Establishing CoPs	Promoting and rendering a CoP culture possible	5
*Sources: 1. Wyatt (2005); 2. Langen and Ehms (2004); 3. Gurteen (2005); 4. Somerset (1998); 5. Stultz (2001)		

Unfortunately, the HR processes needed to institutionalize HR activities (activities that support the successful institutionalization of business activities – refer to Table 1) are scattered in a number of disparate models. No holistic model was found (CMMI Product Team 2002) that linked the HR and business activities so that one of the outcomes would be to reduce dysfunctional internal competition. Of interest is the fact that human capital KSFs are complementary to managerial KSFs, with the work force competencies of management leadership and a supportive team culture being requirements for both sets of activities. Therefore, owing to the inability of any of the HR models to holistically complement all managerial KSFs, and owing to the vesting of a knowledge-sharing culture being pertinent in all HR and managerial KSFs, the question inevitably arises as to what role knowledge management plays in all of these [endeavours](#). Will a knowledge-sharing culture be able to further promote the organization's ability, within its management processes, to integrate the value chain successfully (as in the case of the major South African corporation)?

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5 Role of knowledge management in vesting a culture conducive to the sharing of knowledge

According to Chase (2005), eight knowledge performance dimensions are regarded as the drivers of a knowledge-driven enterprise:

- Dimension 1: Successful creation of an enterprise knowledge-driven culture
- Dimension 2: Leadership support from senior management
- Dimension 3: Organization's ability to deliver from a knowledge base
- Dimension 4: Enterprise intellectual capital is maximized
- Dimension 5: Ability to create a knowledge-sharing environment
- Dimension 6: Organization has a learning culture
- Dimension 7: Customer knowledge is utilized to deliver value
- Dimension 8: Enterprise knowledge generates shareholder value.

Although of great value, the dimensions proposed by Chase are criticized for neglecting to classify dimensions in a form of maturity sequence. Langen and Ehms (2000) therefore propose two models within the knowledge management maturity model (KMMM) for the development of a KM culture: Firstly, an analysis model which guides the assessment of the

current status and highlights future development areas. Secondly, a development model which sets out five maturity levels with a guide as to how to move the KM maturity to the next level as follows:

- Level 1: Initial – *ad hoc* knowledge-based activities are not defined
- Level 2: Repeated – Activities and projects are under the KM banner
- Level 3: Defined – KM shared through standardized processes
- Level 4: Managed – Knowledge integrated with measurements
- Level 5: Optimizing – KM is a self-sustaining, ongoing process.

Reflecting on earlier propositions, in summary it is established that:

- Strategy and tactics are jointly responsible for the present and future success of an organization;
- owing to soft and romantic perspectives, successful HR management plays a crucial role in the institutionalization of managerial issues;
- no single HR model can holistically aid in the successful institutionalization of managerial endeavours; and
- a culture conducive to the sharing of knowledge is crucial to successful institutionalization of strategy.

Successful institutionalization of strategy is therefore dependent not only on the implementation of relevant HR drivers per KSF, but also on the vesting of a culture conducive to the exchange of knowledge. However, in the following paragraphs it is argued that the establishment of a culture conducive to the exchange of knowledge should be a deliberate process, encapsulated within a maturity framework. Therefore, in equating managerial and HR success factors to KM maturity (refer to the examples given in Table 3), the approach used should be to determine the KSF required during each activity that will advance the level of KM to the next higher levels.

Managerial and HR KSFs are therefore not measures of maturity; instead they are seen to be guides for activities to improve the KM maturity level. Successful implementation of the organizational strategy is therefore (in theory) only achievable when the KM maturity level promotes the free interchange of knowledge to create organizational wisdom.

Table 3 Equating maturity phases and KSFs

Activity	KSFs	Tools
KMMM maturity level 1		
Implementation of strategic intent	Involvement and utilization of the human capital	Management leadership
Development of the strategy map	Processes are designed to be enablers for the employees	Management leadership
Development of the BSC	BSC designed to promote functional behaviour	Team culture
Performance management	Performance measures that influence the desired outcomes	HR processes
KMMM maturity level 2		
ICT governance	Selection of control parameters not to stifle KM development	ICT infrastructure
Ensuring human capital	Superior HR processes are	HR processes

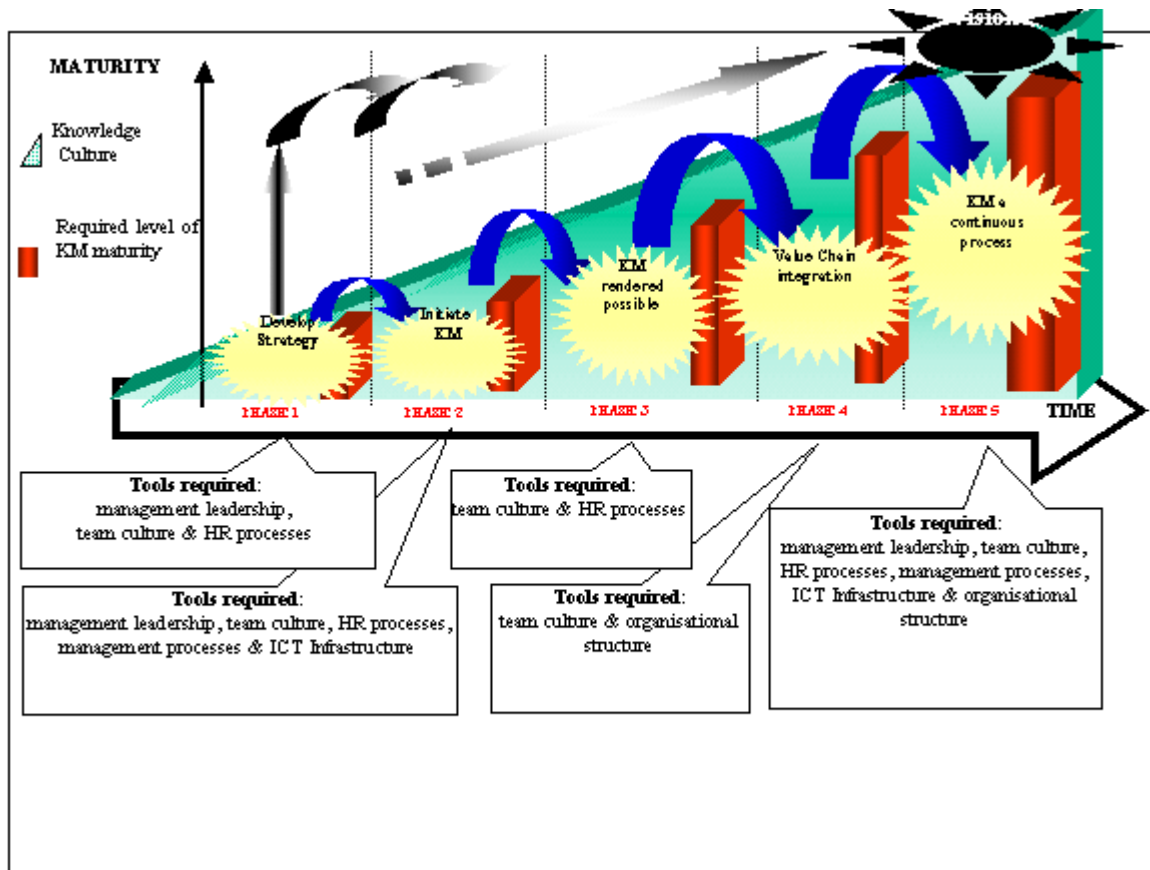
	demande in the strategy map	
Establishing CoPs	Promoting and enabling a CoP culture	Team culture
Culture management	Honesty and trust	Management leadership
Project management	KM culture	Management processes
KMMM maturity level 3		
Conflict management	Divisive power is not gained from knowledge	HR processes
SISP	SISP and business strategy managed as a holistic entity	Team culture
KMMM maturity level 4		
Value chain integration	Correct application of ICT	Team culture
COBiT audit	Management practices optimize use of resources	Organizational structure
KMMM maturity level 5 is the optimization of levels 1 to 4		

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6 Guide for setting up successive KM platforms

The tools required (Table 3) to achieve the different levels of maturity are in reality the HR issues that positively influence the KSF per activity identified in Tables 1 and 2. They begin with effective management leadership, which makes it possible to initiate a team culture functioning as a tool to share knowledge. The next level of tools is regarded as enablers: human resources (HR) processes, management processes, ICT infrastructure and organizational structure. The tools are incorporated into a guide to leading management processes to achieve successful value chain integration per KM maturity level with the phases depicted in Figure 1.

Figure 1 Tools required to achieve different levels of KM maturity



At the initial level (maturity level 1 in Table 3), KSFs address the development of the organization's strategy and the determining of the manner in which people will be measured to drive the desired behaviour. The main tools required during the initial level are management leadership, team culture and HR processes.

At the repeated level (maturity level 2 in Table 3), the KSFs drive the achievement of the level of human and management capital required to initiate the desired KM culture. With a culture directed towards KM, the development of CoP will start. At this stage the deployment of sustaining ICT will be required and therefore selection of technology must form part of the strategy formulation. The main tools required during the repeated level are management leadership, team culture, HR processes, management processes and ICT infrastructure.

At the defined level (maturity level 3 in Table 3), the KSFs promote activities that render KM possible. The HR processes are based on a culture of trust and honesty to facilitate a free-flowing exchange of knowledge. A strategic information systems plan must be ready to make the management of knowledge feasible. The main tools required during the defined level are team culture and HR processes.

At the managed level of maturity (maturity level 4 in Table 3), the KSFs seek integration across, for instance, the value chain, linking business processes. The COBiT auditing is brought in at this relatively more mature level so that, with the understanding gained, it can be better applied to promote KM. If done at an earlier maturity level there may be a tendency for management to attempt to achieve effective KM through controlling. The main tools required during the managed level are team culture and organizational structure.

The optimizing level (maturity level 5) relies on a fluid combination of the set of KSFs identified for Maturity Levels 1 to 4. The fluid combination is related to the manner in which alternative sets of KSFs are linked in an iterative process as the value chain is integrated. At

this level, KM is a continuous process, which will develop on the basis of the organization's inherent wisdom. As people move and change, so various and alternative KSFs may become more relevant within different subgroups. All six tools are required during the optimizing level, with management leadership playing a key role. This proposed guide will need to be applied within a management leadership environment where the value of human capital for the successful institutionalization of strategy is fully recognized.

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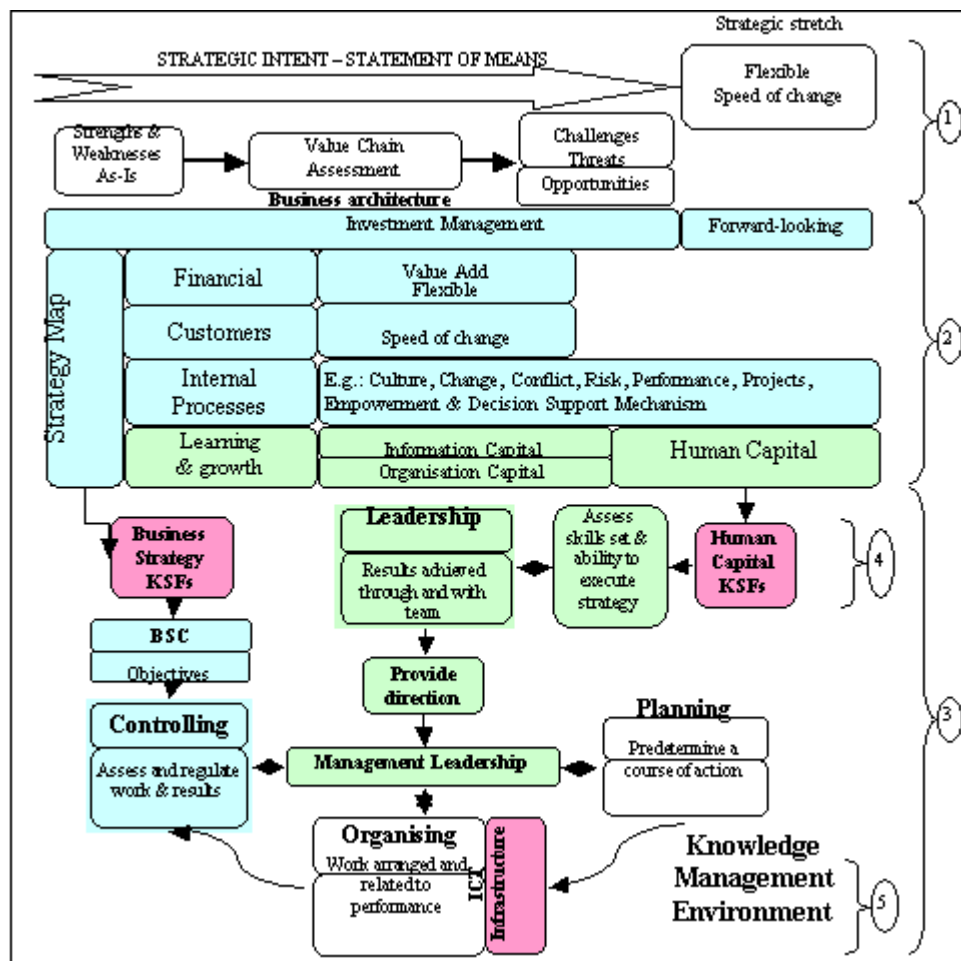
7 Organizational wisdom aimed at value chain optimization

Integration of the business strategy formulation process, and the development of the human and management capital, is therefore possible when institutionalizing the identified KSFs in a sequential manner (as depicted in Figure 1). As already indicated, the identified human-capital KSFs are complementary to the identified managerial KSFs. With an understanding of the KM needs being formed, a demand is created for an appropriate ICT infrastructure. ICT as an integrator (tool) between the different management and human capital processes can therefore be further deployed to integrate the value chain, utilizing the shared knowledge. The level of knowledge sharing achievable and the relevant tools required as per the guide to leading management processes will depend on the KM maturity levels reached (as set out in Figure 1). Utilizing ICT enables the human capital to achieve greater levels of success if the then-enabled human capital functions within a group-sharing culture.

Of importance is that the human capital KSFs must drive the style of leadership, while the business strategy KSFs, also with a human capital bias, must drive the controlling function. Controlling should be done as an enabling mechanism to promote KM and strategy implementation. When organizing the required infrastructure, the relevant ICT must therefore be identified and incorporated to meet the needs of KM. The business strategy and human capital models are linked using the identified KSFs and the tools required to achieve higher levels of KM maturity and are integrated into the organization's strategy map. In doing so a strategy enabler model (refer to Figure 2) capable of minimizing dysfunctional internal competition, while simultaneously maximizing the possibility of successful implementation of strategy, can be created.

By combining the five high-level activities (i.e. strategic intent, strategic mapping, HR models, KSFs, and KM) and in utilizing the integrated understanding formulated during the research on the various models pertaining to each of the individual activities, a strategy enabler model could be developed. The first component is the envisaged picture of the future represented by the strategic intent. Secondly, the strategy map captures the business strategy models while the third component introduces the human capital models (Schermerhorn, Hunt and Osborn 2003) within an adapted management leadership component. The fourth component is the KSFs, identified in this research, that drive the style of leadership and the controlling function. It is proposed that controlling be done as an enabling mechanism to promote KM and strategy implementation. Finally, the proposed strategy enabler model is encapsulated in a knowledge management environment, the fifth component that supports each of the strategy development and implementation activities to achieve an optimized value chain, which is the basis for organizational wisdom. The level of maturity of the knowledge management environment is therefore subject to the successful implementation of the proposed KSFs. Relying heavily on a successful ICT infrastructure, the model not only enables an ability to lead managerial processes to achieve successful value chain integration, but also, and more importantly, bestows a culture of trust and honesty – thus minimizing dysfunctional internal competition, achieving a true KM environment regarded as a route to a better life for all stakeholders.

Figure 2 Proposed strategy enabler model



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8 Conclusions and recommendations

Management processes to achieve successful value chain integration are heavily reliant on the identification and management of the appropriate KSFs that will support knowledge sharing. Unfortunately, owing to performance measures focusing strongly on financial reporting, soft, romantic and HR-related problems are seldom identified and, over time, these problems escalate, taking on a social dimension and resulting in an organizational culture conducive to dysfunctional behaviour. This led the researchers to propose that organizations should seek to find a symbiotic relationship between the way managerial endeavours are institutionalized and the vesting of a culture conducive to the transfer and sharing of knowledge.

The solution to the problem of the major corporation under discussion (i.e. how to optimize their value chain via ICT) is therefore seen to be a generic problem, a problem that can only be rectified successfully by finding the right balance between the implementation of KSFs and vesting a culture averse to dysfunctional behaviour, favourable to knowledge capture, knowledge sharing and exchange. It was discovered that KSFs to solve this problem were scattered between numerous strategic, HR or KM models. However, in relating KSFs to one another it was found that there was a strong tendency to find what is needed in the knowledge management domain. The solution therefore should be sought in acquiring an ability to incorporate into KM maturity levels (initial, repeated, defined, managed and optimizing) the following managerial tools:

- Effective managerial leadership to provide direction;
- a team culture embracing the use of communities of practice (CoP);
- HR processes that remove opportunities for dysfunctional behaviour;
- management processes that are designed to be KM enablers;
- an ICT infrastructure that is institutionalized and integrates the value chain; and
- an organizational structure that is based on a forward-looking business architecture.

The tools are incorporated into a guide to leading management processes to achieve successful value chain integration per KM maturity level while rendering it possible to increase the level of KM maturity. Each tool in the guide is associated with a set of KSFs in turn associated with the relevant management activities and processes required for the implementation of the organization's strategy. The guide therefore serves as an interpretation for implementation of the proposed strategy enabler model (Figure 2) whereby strategy implementation will be rendered possible with reduced dysfunctional behaviour. Gradual implementation of KM maturity therefore serves as a guide to successful implementation of strategy.

Owing to the scope and complexity of the field related to this research, issues may have been overlooked or misinterpreted. Further research is therefore proposed to establish the acceptability and viability of the proposed strategy enabler model by:

- Conducting further discussions and interviews with experienced specialists and practitioners to obtain additional information and confirmation of opinions;
- doing research on more management and HR activities in order to be able to compile a more comprehensive set of KSFs and guide;
- proposing a translation of the KSFs into required deliverables;
- proposing timing for KSFs and objectives in order to maintain momentum in the development and establishment of KM maturity; and
- refining and then testing the proposed strategy enabler model for applicability to both large and small organizations.

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9 References

Chase, R.L. 2005. European most admired knowledge enterprises (MAKE) report 2005. Teleos: [Online]. Available WWW: <http://www.knowledgebusiness.com>. (Accessed 19 August 2005).

CMMI Product Team. 2002. *Capability Maturity Model® Integration (CMMISM), Version 1.1. (CMMI-SE/SW/IPPD/SS, V1.1)*. Carnegie Mellon University, Software Engineering Institute: Pittsburgh. [Online]. Available WWW: <http://www.sei.cmu.edu> (Accessed 6 November 2005).

Dattner, B. 2004. *Narcissism at work*. [Online]. Available WWW: <http://www.dattnerconsulting.com/presentations/narcissism.pdf> (Accessed 19 August 2005).

Gurteen, D. 2005. *The Gurteen knowledge Website*. [Online]. Available WWW: http://www.gurteen.com/gurteen/gurteen.nsf/ping?openagent&tb_id=A7C6DEBC07EC4C9880256ACC005083DB (Accessed 10 July 2005).

Hamel, G. and Prahalad, C.K. 2005. *Strategic intent*. [Online]. Available WWW: <http://www.valuebasedmanagement.net/> (Accessed 26 June 2005).

Harvard Business School Publishing. 2003. *Achieving strategic alignment: moving from promise to performance*. [Online]. Available WWW: <http://www.krm.com/strategy/> (Accessed 15 May 2005).

IT Governance Institute. 2000. COBIT framework. [Online] Available WWW: <http://www.ITgovernance.org> (Accessed 13 May 2005).

Kaplan, R.S. and Norton, D.P. 2004. *Strategy maps*. Boston: Harvard Business School Press.

Kruger, C.J. and Snyman, M.M.M. 2002. The interdependability between strategic management and the formulation of an information and communication technology strategy. *South African Journal of Information Management*. Vol. 4, No 2. Available WWW: <http://www.sajim.co.za/default.asp?to=peer2vol4nr2>.

Langen, M. and Ehms, K. 2000. *Holistic development of KM with the KM maturity model*. [Online]. Available WWW: http://www.providersedge.com/docs/presentations/Holistic_Development_of_KM_with_KM_Maturity_Model.pdf (Accessed 10 July 2005).

Langen, M. and Ehms, K. 2004. *Knowledge management maturity model – KMMM.®* [Online]. Available WWW: http://w4.siemens.de/ct/en/technologies/ic/beispiele/anlagen/kmmm_flyer_en.pdf (Accessed 10 July 2005).

Mathi, K. 2004. *Key success factors for knowledge management*. MBA dissertation. Lindau: University of Applied Sciences. [Online]. Available WWW: <http://www.dmreview.com/whitepaper/KavindraMathi.KnowledgeManagement.pdf> (Accessed 29 June 2005).

Microsoft Corporation. 2005. *Microsoft solutions for management: capacity management*. [Online]. Available WWW: <http://www.microsoft.com/technet/itsolutions/cits/mo/smf/smfcapmg.mspx> (Accessed 22 May 2005).

Mouton, J. 2004. *How to succeed in your master's and doctoral studies*. Pretoria: Van Schaik.

Pfeffer, J. and Sutton, R.I. 2000. *The perils of internal competition*. [Online]. Available WWW: http://www.gsb.stanford.edu/community/bmag/sbsm9911/feature_contest.html (Accessed: 19 August 2005).

Porter, M. 2005. Value chain framework. [Online]. Available WWW: <http://www.valuebasedmanagement.net/> (Accessed 8 June 2005).

Schermerhorn, J.R., Hunt, J.G. and Osborn, R.N. 2003. *Organizational behaviour*. 8th ed. John Wiley: New York.

Somerset, J. 1998. *Creating a balanced performance measurement system for schools*. [Online]. Available WWW: http://www.hallchadwick.com.au/05_publications/ra_creating.pdf (Accessed 13 May 2005).

South Africa. Department of Trade and Industry. 2002. Survey. *Progress toward ICT integration: a survey of SA government initiatives*. [Online]. Available WWW: http://africa.rights.apc.org/index.shtml?apc=ie_1

http://www.bridges.org/e-policy/sa/articles/ict_survey_june_2002.pdf (Accessed 12 June 2005).

Stultz, L.L. 2001. *NAVSEA enterprise transformation – Draft CoP practitioner's guide*. [Online]. Available WWW: <http://intwww.sasol.com/knowledge/> (Accessed 07 June 2005).

Ward, M. 2001. *The balanced score card in health care*. [Online]. Available WWW: <http://www.qualityaustralia.aq.org.au/Ward-Balanced%20Score%20Card.ppt> (Accessed 13 May 2005).

Wyatt, W. 2005. *Worldwide research reports*. [Online]. Available WWW:

<http://www.watsonwyatt.com/research/featured/hci.asp> (Accessed 17 July 2005).

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