



**Appendix A:**

**Knowledge Management Maturity Assessment Matrix (KMMAM)**

<p><b><u>Phase 1: ICT and Information management as enablers of knowledge management</u></b></p> <p>Are ICT related relationships of a sound nature?</p> <p>Can the organization arrange, make accessible, protect, store, retrieve, analyse, filter, evaluate, package and dispose of information?</p> <p>Is there an inventory of information entities in the organisation?</p> <p>Can the organization organise, plan/design and evaluate an ICT system?</p> <p>Is the organization capable of shifting data and information by means of ICT, i.e. is there an ICT infrastructure in place that can support Information management?</p> <p>Is the organization capable of determining information needs?</p> <p>Are there measures in place to procure information?</p> <p>Can the organization determine the value and cost of information?</p> <p>Does the organization have an information policy in place?</p> <p><b><u>Phase 2: Deciding on Knowledge Management Issues</u></b></p> <p>Is the organization aware of the power vested in knowledge, and/or the importance of knowledge as a strategic resource?</p> <p>Is there a commitment from top management towards bestowing a knowledge culture within the organization?</p> <p>Is there a commitment from top management for the establishment of a formal knowledge management function?</p> <p>Is the organization capable of identifying issues, success factors, and elements prone to vesting knowledge culture and knowledge management architecture within the organization?</p> <p>In order to focus all knowledge management efforts, are there distinct expressions of the future state of knowledge (the formulation of a knowledge vision) within the organization.</p> <p><b><u>Phase 3: The ability to formulate an organization-wide Knowledge Policy</u></b></p> <p>Are ICT systems capable of going beyond a point of merely supporting operations to a point of being capable of supporting management decisions, and knowledge work?</p> <p>Is there an organizational-wide knowledge management policy in</p>	<p><b>Adapted from Sources</b></p> <p>Boon (1990), Gurteen (1998), Applegate McFarlen and McKenny (1999), Kazimi Dasgupta and Natarajan (2004); Kochikar (2004) and Kruger and Snyman (2005).</p> <p>Davenport (1998), Mitre cited in Taylor, Small and Tatalias (2000), Gartner in Logan (2001) and Kruger and Snyman (2005).</p> <p>Davenport (1998), Gurteen (1998), Mitre</p>
--	---

<p>place?</p> <p>Is knowledge shared throughout the organization, and are there forums in place to provide governance to knowledge management activities, i.e. is there a working knowledge management function, and/or are knowledge domains established within the organization?</p> <p>Do functional owners send employees on formal training programs, brainstorming sessions, self enrichment- and learning exercises?</p> <p><b><u>Phase 4: Building knowledge strategy/strategies</u></b></p> <p>Does the organization know what constitutes knowledge resources (both tacit and explicit), where knowledge resources are situated, and why resources are strategic?</p> <p>Is the organization capable of conducting a successful knowledge audit?</p> <p>Are there efficient and effective ICT architectures and knowledge infrastructures in place?</p> <p><b><u>Phase 5: Formulation of knowledge management strategies</u></b></p> <p>Is the management of knowledge (all knowledge management tools) supplying a direct input to the strategic management process (Is the Chief Knowledge Officer (CKO), and the knowledge management function an active participant in the strategy formulation process of the organization)?</p> <p>Is the organization capable of formulating knowledge management strategies, and are these strategies prone to increasing knowledge in a particular area and/or leverage existing knowledge?</p> <p>Do knowledge management strategies lead to efficient and effective plans, capable of transforming the organization's knowledge structure and supporting ICT structure from the "as is" to the required "should be" structure?</p> <p>Are individuals being evaluated or appraised on his/her knowledge capabilities and output? Is there a culture conducive to knowledge sharing in your organization?</p> <p><b><u>Phase 6: Ubiquitous knowledge</u></b></p> <p>Is knowledge shared among value chain partners (Are trans-organizational forums in place)?</p> <p>Are there holistic knowledge management strategies and plans formulated between members of the value chain, plans and projects to further explore and exploit the power vested in knowledge?</p> <p>Is the organization's ICT architecture capable of transcending the borders of the organization, e.g. capable not only of sharing data and information, but also knowledge and expertise with all stakeholders in the organization's extended value chain?</p> <p><b><u>Phase 7: The future</u></b> Supply a clairvoyant perspective on the future evolution of knowledge management</p>	<p>cited in Taylor, Small and Tatalias (2000); Gartner in Logan (2001) Laudon and Laudon, (2004) and Kruger and Snyman (2005).</p> <p>Orna (1998), Zack (1999); Bater (1999); Ndlela and du Toit (2001) Kazimi Dasgupta and Natarajan (2004) and Gallagher and Hazlett (2004) and Kruger and Snyman (2005).</p> <p>Zack (1999); Bater (1999), Pearce and Robinson (2000); Von Krogh, Nonaka, and Aben (2001), Laudon and Laudon (2004) and Kruger and Snyman (2005)</p> <p>Applegate McFarlen and McKenny (1999), Kochikar (2004) and Kruger and Snyman (2005).</p>
---	---



--	--

**Appendix B:**  
**Knowledge Management Maturity Assessment Questionnaire (KMMAQ)**



**Knowledge Management Maturity Assessment Questionnaire**

Student Number:

V1    1

**GENERAL INSTRUCTIONS**

Please answer the questions by drawing a circle around an appropriate number in a shaded box or by writing your answer in the shaded space provided.

*Unless specifically instructed otherwise, please answer ALL questions, one answer per item.*

1. What is the name of the organization on whose behalf you are answering this Questionnaire?

V2    4

2. What is the type of organization being assessed?

Automobiles/Transport	<b>1</b>
Banks	<b>2</b>
Capital Goods	<b>3</b>
Chemicals	<b>4</b>
Construction, Building, Materials and Steel	<b>5</b>
Consumer Goods	<b>6</b>
Insurance	<b>7</b>
Media	<b>8</b>
Oil and Gas	<b>9</b>
Pharmaceuticals	<b>10</b>
Technology	<b>11</b>
Telecom Services	<b>12</b>
Utilities	<b>13</b>
Retailers and Distributors	<b>14</b>
Other (Please specify below)	<b>15</b>

V3  7

2. Please specify the level of management being assessed?

Operational level	<b>1</b>
Middle management	<b>2</b>
Senior management	<b>3</b>

V4  8



**SECTION 1            ICT Management**

*Please use the code:*

- |          |   |   |          |
|----------|---|---|----------|
| <b>1</b> | = | <b>Yes definitely</b>                           | <b>Y</b> |
| <b>2</b> | = | <b>Yes, but not significantly</b>               | <b>S</b> |
| <b>3</b> | = | <b>No, but probably within the next 5 years</b> | <b>P</b> |
| <b>4</b> | = | <b>No</b>                                       | <b>N</b> |

**1.1** To what extent do your organization's Information and Communications Technology (ICT) activities comply with the following statements:

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>		
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>		
<b>1</b>	The organization is capable of <b>evaluating</b> an ICT system					V5	<input type="text"/> 9
<b>2</b>	The organization is capable of <b>designing</b> an ICT system					V6	<input type="text"/> 10
<b>3</b>	The organization is capable of <b>planning</b> an ICT system					V7	<input type="text"/> 11
<b>4</b>	The organization has an <b>effective</b> ICT infrastructure					V8	<input type="text"/> 12



1.2 The organization regards **ICT** and the management thereof as ...  
(Please mark only **one** answer)

an enabler of knowledge management	<b>1</b>
knowledge management	<b>2</b>

V9  13

## SECTION 2 Information Management

*Please use the code:*

<b>1</b>	=	<b>Yes definitely</b>	<b>Y</b>
<b>2</b>	=	<b>Yes, but not significantly</b>	<b>S</b>
<b>3</b>	=	<b>No, but probably within the next 5 years</b>	<b>P</b>
<b>4</b>	=	<b>No</b>	<b>N</b>

2.1 To what extent does your organization **comply** with the following statements?

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>	
<b>1</b>	The organization has a clearly defined information management (IM) policy	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V10 <input type="checkbox"/> 14
<b>2</b>	The organization has a clearly defined information management (IM) strategy	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V11 <input type="checkbox"/> 15
<b>3</b>	The organization understands which information resources are crucial to the business	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V12 <input type="checkbox"/> 16
<b>4</b>	It is clear which managers are accountable for information resources	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V13 <input type="checkbox"/> 17
<b>5</b>	Key information is easily available	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V14 <input type="checkbox"/> 18
<b>6</b>	All employees are trained to access sources of information relevant to their job	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V15 <input type="checkbox"/> 19

2.2 Is your organization **proficient** in the following Information Management activities?

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>	
<b>1</b>	Identification of information needs	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V16 <input type="checkbox"/> 20
<b>2</b>	Acquisition of information	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V17 <input type="checkbox"/> 21
<b>3</b>	Information storage	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V18 <input type="checkbox"/> 22
<b>4</b>	Information distribution	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V19 <input type="checkbox"/> 23
<b>5</b>	Information retrieval	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V20 <input type="checkbox"/> 24
<b>6</b>	Information disposal	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V21 <input type="checkbox"/> 25
<b>7</b>	Protection of information	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V22 <input type="checkbox"/> 26
<b>8</b>	Determination of the value and cost of information	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V23 <input type="checkbox"/> 27

2.3 In your organization, the following Information management **tools and services** have been institutionalized:

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>	
<b>1</b>	Inventory of information entities	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V24 <input type="checkbox"/> 28
<b>2</b>	Information management systems	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V25 <input type="checkbox"/> 29
<b>3</b>	Databases	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V26 <input type="checkbox"/> 30
<b>4</b>	Information service / Library	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V27 <input type="checkbox"/> 31



2.4 The organization regards Information Management (IM) as ...  
(Please mark only **one** answer)

a prerequisite for knowledge management	<b>1</b>
knowledge management	<b>2</b>

V28  32

**SECTION 3 Formulation of Knowledge management principles, policy and strategy**

*Please use the code:*

- 1** = *Yes definitely* **Y**
- 2** = *Yes, but not significantly* **S**
- 3** = *No, but probably within the next 5 years* **P**
- 4** = *No* **N**

3.1 How would you **rate** the following statements?

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>
<b>1</b>	Your organization is aware of the power vested in knowledge, i.e. knowledge is seen as a strategic resource	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>2</b>	Good knowledge management is one of the top five (5) internal priorities of your organization	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>3</b>	The management of knowledge is supplying a direct input to the strategic management process i.e. the Chief Knowledge Officer is an active participant in the formulation of business strategy	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

V29  33

V30  34

V31  35

3.2 Are the following goals important in **motivating** the establishment of knowledge management **practices** in your organization?

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>
<b>1</b>	Improving work efficiency and/or productivity by producing and sharing knowledge more rapidly within your organization	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>2</b>	Decentralization of authority	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>3</b>	Releasing information more rapidly and making it more widely available to staff	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>4</b>	Promoting life-long learning	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	Improving transparency	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>6</b>	Improving working relations and trust within your organization	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>7</b>	Making up for loss of knowledge (due to staff turnover, retirements, etc.)	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

V32  36

V33  37

V34  38

V35  39

V36  40

V37  41

V38  42



Please use the code:

- |          |   |   |          |
|----------|---|---|----------|
| <b>1</b> | = | <b>Yes definitely</b>                           | <b>Y</b> |
| <b>2</b> | = | <b>Yes, but not significantly</b>               | <b>S</b> |
| <b>3</b> | = | <b>No, but probably within the next 5 years</b> | <b>P</b> |
| <b>4</b> | = | <b>No</b>                                       | <b>N</b> |

**3.3** In your organization, the following **initiatives** have been taken to manage knowledge

		Y	S	P	N		
<b>1</b>	There is a conscious decision to invest in knowledge management	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V39	<input type="text"/> 43
<b>2</b>	It is agreed upon that there is a need for hybrid knowledge management environments, i.e. technology and people	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V40	<input type="text"/> 44
<b>3</b>	High-ranking knowledge champions are identified	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V41	<input type="text"/> 45
<b>4</b>	There is a commitment from top management to the establishment of a formal knowledge management function	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V42	<input type="text"/> 46
<b>5</b>	A decision was taken by top management to judge people according to their ability to share knowledge	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V43	<input type="text"/> 47
<b>6</b>	A decision was taken by top management to constantly improve knowledge work processes	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V44	<input type="text"/> 48
<b>7</b>	There is a conscious drive to get all employees involved in knowledge sharing exercises	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V45	<input type="text"/> 49

**3.4** To what extent does your organization **comply** with the following statements?

		Y	S	P	N		
<b>1</b>	The organization has a clearly defined knowledge management (KM) policy	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V46	<input type="text"/> 50
<b>2</b>	The organization has a clearly defined Knowledge Management (KM) strategy	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V47	<input type="text"/> 51
<b>3</b>	The KM strategy has been communicated widely to staff	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V48	<input type="text"/> 52

**3.5** If your organization already has a knowledge management (KM) strategy/strategies, which key element does it include? (If your organization **does not have** a KM strategy, please continue with **Question 4** below)

		Yes	No		
<b>1</b>	Information management	<b>1</b>	<b>2</b>	V49	<input type="text"/> 53
<b>2</b>	Information technology aspects	<b>1</b>	<b>2</b>	V50	<input type="text"/> 54
<b>3</b>	Human resources management aspects (incentives, recruitment, training, mentoring, etc.)	<b>1</b>	<b>2</b>	V51	<input type="text"/> 55
<b>4</b>	Organizational aspects (communities of practice, decentralizing authority, networks, etc.)	<b>1</b>	<b>2</b>	V52	<input type="text"/> 56

Section 4 continues on the next page





## Section 4 Implementation of Knowledge Management

Please use the code:

1	=	Yes definitely	Y
2	=	Yes, but not significantly	S
3	=	No, but probably within the next 5 years	P
4	=	No	N

4.1 In your organization, the following **initiatives** have been taken and organizational **arrangements** made.

		Y	S	P	N		
1	Opening up bureaucratic divisions	1	2	3	4	V53	<input type="text"/> 57
2	The creation of a central co-ordinating unit for Knowledge Management	1	2	3	4	V54	<input type="text"/> 58
3	The appointment of a Chief Knowledge Officer (CKO) with executive status	1	2	3	4	V55	<input type="text"/> 59
4	Reorganization of offices (e.g. open plan offices)	1	2	3	4	V56	<input type="text"/> 60
5	Establishment of informal networks (e.g. Communities of practice - groups of practitioners working on the same topic but not on the same project, and regularly sharing knowledge)	1	2	3	4	V57	<input type="text"/> 61
6	Institutionalization of training and mentoring programmes	1	2	3	4	V58	<input type="text"/> 62
7	Communication with customers	1	2	3	4	V59	<input type="text"/> 63
8	Establishment of incentive schemes for knowledge sharing	1	2	3	4	V60	<input type="text"/> 64
9	Communication with suppliers	1	2	3	4	V61	<input type="text"/> 65

4.2 Which of the following groups has the **overall** responsibility for knowledge management in your organization?  
(Please mark only **one** answer)

Human resources management team	1	V62	<input type="text"/> 66
Information technology team	2		
Special knowledge management unit	3		
Top managers	4		
Other	5		

4.3 In your organization, **staff** members spend an increasing amount of time on the following **activities**:

		Y	S	P	N		
1	Informational meetings	1	2	3	4	V63	<input type="text"/> 67
2	Peer reviewing/quality reviews	1	2	3	4	V64	<input type="text"/> 68
3	Presentations of projects and activities	1	2	3	4	V65	<input type="text"/> 69
4	Information sharing by electronic device (e-mail, etc.)	1	2	3	4	V66	<input type="text"/> 70
5	Building databases	1	2	3	4	V67	<input type="text"/> 71



4.4 In your organization, good work practices have been outlined and updated on a regular basis, in **documents** such as:

		Yes	No
1	Training manuals	1	2
2	Best practices	1	2
3	Guidelines	1	2

V68  72  
V69  73  
V70  74

4.5 Which follow-ups are conducted to assess the progress made in **implementing** knowledge management practices in your organization?

		Yes	No
1	The use of indicators to assess the implementation of knowledge management practices	1	2
2	Use of scorecards	1	2
3	Written/oral feedback from staff on achievements in knowledge management	1	2
4	Comparisons are made between your organization and other organizations in your industry	1	2

V71  75  
V72  76  
V73  77  
V74  78

4.6 Do you consider that the **culture** of your organization has changed, in the following ways:

		Yes	No
1	Staff now consider that sharing knowledge will be good for their career in your organization	1	2
2	Staff spontaneously organize knowledge events such as meeting with staff from other divisions/departments	1	2
3	Staff make documents available to others more spontaneously	1	2

V75  79  
V76  80  
V77  81

4.7 Has your organization experienced **difficulties in implementing** knowledge management practices, because of the following factors?

		Yes	No
1	Your organization has put a strong focus on information and communication technology, rather than on people or organizational matters	1	2
2	Lack of time or resources to concretely share knowledge on a day-to-day basis	1	2
3	Resistance of certain groups of staff	1	2
4	Staff do not make documents available to others spontaneously	1	2
5	Difficulty in capturing employee's undocumented knowledge (know-how)	1	2
6	Concern that other organizations/general public would be able to access sensitive/confidential information	1	2
7	Knowledge and information management is not a top priority in the modernization programme of your organization	1	2

V78  82  
V79  83  
V80  84  
V81  85  
V82  86  
V83  87  
V84  88



**Section 5: Ubiquitous knowledge**

*Please use the code:*

- 1** = *Yes definitely* **Y**
- 2** = *Yes, but not significantly* **S**
- 3** = *No, but probably within the next 5 years* **P**
- 4** = *No* **N**

**5.1** Does your organization increasingly rely on **outside knowledge** coming from the following entities/organizations to carry out its activities?

		Y	S	P	N		
<b>1</b>	Between departments in your organization	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V85	<input type="text"/> 89
<b>2</b>	Local governments	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V86	<input type="text"/> 90
<b>3</b>	Peer organizations	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V87	<input type="text"/> 91
<b>4</b>	Universities/Research centers	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V88	<input type="text"/> 92
<b>5</b>	Suppliers	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V89	<input type="text"/> 93
<b>6</b>	Customers	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V90	<input type="text"/> 94
<b>7</b>	Consulting firms	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V91	<input type="text"/> 95
<b>8</b>	Trade Unions	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V92	<input type="text"/> 96
<b>9</b>	Other	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V93	<input type="text"/> 97

**5.2** **Staff** is encouraged to take up positions in:

		Y	S	P	N		
<b>1</b>	Other departments in your organization	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V94	<input type="text"/> 98
<b>2</b>	Local government	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V95	<input type="text"/> 99
<b>3</b>	Peer organizations	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V96	<input type="text"/> 100
<b>4</b>	Universities/Research centers	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V97	<input type="text"/> 101
<b>5</b>	Supplier organizations	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V98	<input type="text"/> 102
<b>6</b>	Customer organizations	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V99	<input type="text"/> 103
<b>7</b>	Consulting firms	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V100	<input type="text"/> 104
<b>8</b>	Trade Unions	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V101	<input type="text"/> 105
<b>9</b>	Other	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V102	<input type="text"/> 106
<b>10</b>	Secondees* from other organizations are frequently accepted (*Secondees: staff who are lent by one organization to another one - remain paid by their parent organization - for a limited amount of time)	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V103	<input type="text"/> 107



**SECTION 6 Assessment of Knowledge Management Growth**

*Please use the code:*

- 1** = *Yes, rapid growth (3+ maturity levels)* **Y**
- 2** = *Yes, but not significantly (1-2 maturity levels)* **S**
- 3** = *No growth, probably within the next 5 years* **P**
- 4** = *No growth, or decline in growth* **N**

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>		
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V104	108
<b>6.1</b>	Please reflect on the growth of knowledge management in your organization over the past 5 years					<input type="text"/>	



**BACKGROUND INFORMATION ON RESPONDENT**

Date of survey completion: \_\_\_\_\_

**1. Background information on your organisation**

Please indicate:

The total number of staff in your organisation 

--	--	--	--	--	--	--

**2. Please provide contact details for the person completing this survey:**

Title: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone \_\_\_\_\_

Facsimile \_\_\_\_\_

E-mail \_\_\_\_\_

**4. Please indicate how long it took you to complete this questionnaire**

\_\_\_\_\_ hours \_\_\_\_\_ minutes

***Your response is very much appreciated.  
Thank you for participating.***

# Knowledge Management Maturity Assessment Questionnaire: Rating System Capturing Sheet

## SECTION 1 ICT Management

### Section 1.1: Points allocated:

Y(1) -Yes, definitely – add 4 points.  
 S(2) - Yes, but not Significantly – add 2 points  
 P(3) -No, but Probably within the next 5 years – add 1 point.  
 N(4) - No – no points awarded

1.1		Y	S	P	N
1	The organization is capable of <b>evaluating</b> an ICT system	1	2	3	4
2	The organization is capable of <b>designing</b> an ICT system	1	2	3	4
3	The organization is capable of <b>planning</b> an ICT system	1	2	3	4
4	The organization has an <b>effective</b> ICT infrastructure	1	2	3	4

V5  9

V6  10

V7  11

V8  12

### Section 1.2: Points allocated:

(1) An enabler of knowledge management – add 4 points  
 (2) Knowledge management – no points awarded

an enabler of knowledge management	1
knowledge management	2

V9  13

<b>Total section 1.1 (add v5 – v8):</b>	<b>16</b>
<b>Total section 1.2 (add v9):</b>	<b>4</b>

<b>Total section 1: (add section 1.1 and section 1.2)</b>	<b>20</b>
---	-----------

**SECTION 2 Information Management**

**Section 2.1; 2.2; 2.3: Points allocated:**

Y(1) -Yes, definitely – add 4 points.  
 S(2) - Yes, but not Significantly – add 2 points  
 P(3) -No, but Probably within the next 5 years – add 1 point.  
 N(4) - No – no points awarded

2.1		Y	S	P	N		
1	The organization has a clearly defined information management (IM) policy	1	2	3	4	V10	<input type="text"/> 14
72	The organization has a clearly defined information management (IM) strategy	1	2	3	4	V11	<input type="text"/> 15
3	The organization understands which information resources are crucial to the business	1	2	3	4	V12	<input type="text"/> 16
4	It is clear which managers are accountable for information resources	1	2	3	4	V13	<input type="text"/> 17
5	Key information is easily available	1	2	3	4	V14	<input type="text"/> 18
6	All employees are trained to access sources of information relevant to their job	1	2	3	4	V15	<input type="text"/> 19

2.2		Y	S	P	N		
1	Identification of information needs	1	2	3	4	V16	<input type="text"/> 20
2	Acquisition of information	1	2	3	4	V17	<input type="text"/> 21
3	Information storage	1	2	3	4	V18	<input type="text"/> 22
4	Information distribution	1	2	3	4	V19	<input type="text"/> 23
5	Information retrieval	1	2	3	4	V20	<input type="text"/> 24
6	Information disposal	1	2	3	4	V21	<input type="text"/> 25
7	Protection of information	1	2	3	4	V22	<input type="text"/> 26
8	Determination of the value and cost of information	1	2	3	4	V23	<input type="text"/> 27

2.3		Y	S	P	N		
1	Inventory of information entities	1	2	3	4	V24	<input type="text"/> 28
2	Information management systems	1	2	3	4	V25	<input type="text"/> 29
3	Databases	1	2	3	4	V26	<input type="text"/> 30
4	Information service / Library	1	2	3	4	V27	<input type="text"/> 31

**Section 2.4: Points allocated:**

(1) A prerequisite for knowledge management - add 4 points  
 (2) Knowledge management – no points awarded

a prerequisite for knowledge management	1	V28	<input type="text"/> 32
knowledge management	2		

<b>Total section 2.1 (add v10 – v15):</b>	<b>24</b>	
<b>Total section 2.2 (add v16 – v23):</b>	<b>32</b>	
<b>Total section 2.3 (add v24 –v27)</b>	<b>16</b>	
<b>Total section 2.4(add v28)</b>	<b>4</b>	

<b>Total section 2: (add sections 2.1 to 2.4)</b>	<b>76</b>	
---	-----------	--

**Total**

**SECTION 3 Formulation of Knowledge management principles, policy and strategy**

**Section 3.1 – 3.4: Points allocated:**

Y(1) -Yes, definitely – add 4 points.  
 S(2) - Yes, but not Significantly – add 2 points  
 P(3) -No, but Probably within the next 5 years – add 1 point.  
 N(4) - No – no points awarded

3.1		Y	S	P	N		
1	Your organization is aware of the power vested in knowledge, i.e. knowledge is seen as a strategic resource	1	2	3	4	V29	<input type="text"/> 33
2	Good knowledge management is one of the top five (5) internal priorities of your organization	1	2	3	4	V30	<input type="text"/> 34
3	The management of knowledge is supplying a direct input to the strategic management process i.e. the Chief Knowledge Officer is an active participant in the formulation of business strategy	1	2	3	4	V31	<input type="text"/> 35
3.2		Y	S	P	N		
1	Improving work efficiency and/or productivity by producing and sharing knowledge more rapidly within your organization	1	2	3	4	V32	<input type="text"/> 36
2	Decentralization of authority	1	2	3	4	V33	<input type="text"/> 37
3	Releasing information more rapidly and making it more widely available to staff	1	2	3	4	V34	<input type="text"/> 38
4	Promoting life-long learning	1	2	3	4	V35	<input type="text"/> 39
5	Improving transparency	1	2	3	4	V36	<input type="text"/> 40
6	Improving working relations and trust within your organization	1	2	3	4	V37	<input type="text"/> 41
7	Making up for loss of knowledge (due to staff turnover, retirements, etc.)	1	2	3	4	V38	<input type="text"/> 42
3.3		Y	S	P	N		
1	There is a conscious decision to invest in knowledge management	1	2	3	4	V39	<input type="text"/> 43
2	It is agreed upon that there is a need for hybrid knowledge management environments, i.e. technology and people	1	2	3	4	V40	<input type="text"/> 44
3	High-ranking knowledge champions are identified	1	2	3	4	V41	<input type="text"/> 45
4	There is a commitment from top management to the establishment of a formal knowledge management function	1	2	3	4	V42	<input type="text"/> 46
5	A decision was taken by top management to judge people according to their ability to share knowledge	1	2	3	4	V43	<input type="text"/> 47
6	A decision was taken by top management to constantly improve knowledge work processes	1	2	3	4	V44	<input type="text"/> 48
7	There is a conscious drive to get all employees involved in knowledge sharing exercises	1	2	3	4	V45	<input type="text"/> 49
3.4		Y	S	P	N		
1	The organization has a clearly defined knowledge	1	2	3	4	V46	<input type="text"/> 50



	management (KM) policy				
2	The organization has a clearly defined Knowledge Management (KM) strategy	1	2	3	4
3	The KM strategy has been communicated widely to staff	1	2	3	4

V47  51

V48  52

**Section 3.5: Points allocated:**

- (1) Yes - add 2 points
- (2) No – no points awarded

3.5		Yes	No
1	Information management	1	2
2	Information technology aspects	1	2
3	Human resources management aspects (incentives, recruitment, training, mentoring, etc.)	1	2
4	Organizational aspects (communities of practice, decentralizing authority, networks, etc.)	1	2

V49  53

V50  54

V51  55

V52  56

<b>Total section 3.1 (add v29– v31)</b>	<b>12</b>	
<b>Total section 2.2 (add v32– v38:</b>	<b>28</b>	
<b>Total section 2.3 (add v39–v45</b>	<b>28</b>	
<b>Total section 2.4(add v46– v48</b>	<b>12</b>	
<b>Total section 2.5 (add v49– v52</b>	<b>8</b>	

<b>Total section 3: (add sections 3.1 to 3.5)</b>	<b>88</b>
---	-----------

**Section 4 Implementation of Knowledge Management**

**Section 4.1 and 4.3: Points allocated:**

Y(1) -Yes, definitely – add 4 points.  
 S(2) - Yes, but not Significantly – add 2 points  
 P(3) -No, but Probably within the next 5 years – add 1 point.  
 N(4) - No – no points awarded

4.1		Y	S	P	N
1	Opening up bureaucratic divisions	1	2	3	4
2	The creation of a central co-ordinating unit for Knowledge Management	1	2	3	4
3	The appointment of a Chief Knowledge Officer (CKO) with executive status	1	2	3	4
4	Reorganization of offices (e.g. open plan offices)	1	2	3	4
5	Establishment of informal networks (e.g. Communities of practice - groups of practitioners working on the same topic but not on the same project, and regularly sharing knowledge)	1	2	3	4
6	Institutionalization of training and mentoring programmes	1	2	3	4
7	Communication with customers	1	2	3	4
8	Establishment of incentive schemes for knowledge sharing	1	2	3	4
9	Communication with suppliers	1	2	3	4

V53  57  
 V54  58  
 V55  59  
 V56  60  
 V57  61  
 V58  62  
 V59  63  
 V60  64  
 V61  65

**Section 4.2 Points allocated:**

(1) Human resource management team – add 2 points  
 (2) Information technology team – add 2 points  
 (3) Special knowledge management unit – add 2 points  
 (4) Top managers – add 4 points  
 (5) Other – add 1 point

4.2		
Human resources management team		1
Information technology team		2
Special knowledge management unit		3
Top managers		4
Other		5

V62  66

4.3		Y	S	P	N
1	Informational meetings	1	2	3	4
2	Peer reviewing/quality reviews	1	2	3	4
3	Presentations of projects and activities	1	2	3	4
4	Information sharing by electronic device (e-mail, etc.)	1	2	3	4
5	Building databases	1	2	3	4

V63  67  
 V64  68  
 V65  69  
 V66  70  
 V67  71

**Section 4.4 – 4.6 Points allocated:**

(1) Yes add 2 points  
 (2) No – add no points

**4.4** In your organization, good work practices have been outlined and updated on a regular basis, in **documents** such as:

		Yes	No
1	Training manuals	1	2
2	Best practices	1	2
3	Guidelines	1	2
<b>4.5</b>		<b>Yes</b>	<b>No</b>
1	The use of indicators to assess the implementation of knowledge management practices	1	2
2	Use of scorecards	1	2
3	Written/oral feedback from staff on achievements in knowledge management	1	2
4	Comparisons are made between your organization and other organizations in your industry	1	2
<b>4.6</b>		<b>Yes</b>	<b>No</b>
1	Staff now consider that sharing knowledge will be good for their career in your organization	1	2
2	Staff spontaneously organize knowledge events such as meeting with staff from other divisions/departments	1	2
3	Staff make documents available to others more spontaneously	1	2
<b>Section 4.7 Points allocated:</b>			
(1) Yes – no points awarded			
(2) No – add 2 points.			
<b>4.7</b>		<b>Yes</b>	<b>No</b>
1	Your organization has put a strong focus on information and communication technology, rather than on people or organizational matters	1	2
2	Lack of time or resources to concretely share knowledge on a day-to-day basis	1	2
3	Resistance of certain groups of staff	1	2
4	Staff do not make documents available to others spontaneously	1	2
5	Difficulty in capturing employee's undocumented knowledge (know-how)	1	2
6	Concern that other organizations/general public would be able to access sensitive/confidential information	1	2
7	Knowledge and information management is not a top priority in the modernization programme of your organization	1	2

V68  72  
 V69  73  
 V70  74

V71  75  
 V72  76  
 V73  77  
 V74  78

V75  79  
 V76  80  
 V77  81

V78  82  
 V79  83  
 V80  84  
 V81  85  
 V82  86  
 V83  87  
 V84  88

Total section 4.1 (add v53 – v61)	36	
Total section 4.2 (add v62):	4	
Total section 4.3 (add v63–v67)	20	
Total section 4.4 (add v68– v70)	6	
Total section 4.5 (add v71 v74)	8	
Total section 4.6 (add v75– v77)	6	
Total section 4.7 (add v78– v84)	14	
<b>Total section 4: (add sections 4.1 to 4.7)</b>	<b>94</b>	

**Section 5: Ubiquitous knowledge**

**Section 5.1 and 5.2: Points allocated:**

Y(1) -Yes, definitely – add 4 points.  
 S(2) - Yes, but not Significantly – add 2 points  
 P(3) -No, but Probably within the next 5 years – add 1 point.  
 N(4) - No – no points awarded

5.1		Y	S	P	N
1	Between departments in your organization	1	2	3	4
2	Local governments	1	2	3	4
3	Peer organizations	1	2	3	4
4	Universities/Research centers	1	2	3	4
5	Suppliers	1	2	3	4
6	Customers	1	2	3	4
7	Consulting firms	1	2	3	4
8	Trade Unions	1	2	3	4
9	Other	1	2	3	4

V85	<input type="text"/>	89
V86	<input type="text"/>	90
V87	<input type="text"/>	91
V88	<input type="text"/>	92
V89	<input type="text"/>	93
V90	<input type="text"/>	94
V91	<input type="text"/>	95
V92	<input type="text"/>	96
V93	<input type="text"/>	97

5.2		Y	S	P	N
1	Other departments in your organization	1	2	3	4
2	Local government	1	2	3	4
3	Peer organizations	1	2	3	4
4	Universities/Research centers	1	2	3	4
5	Supplier organizations	1	2	3	4
6	Customer organizations	1	2	3	4
7	Consulting firms	1	2	3	4
8	Trade Unions	1	2	3	4
9	Other	1	2	3	4
10	Secondees* from other organizations are frequently accepted (*Secondees: staff who are lent by one organization to another one - remain paid by their parent organization - for a limited amount of time)	1	2	3	4

V94	<input type="text"/>	98
V95	<input type="text"/>	99
V96	<input type="text"/>	100
V97	<input type="text"/>	101
V98	<input type="text"/>	102
V99	<input type="text"/>	103
V100	<input type="text"/>	104
V101	<input type="text"/>	105
V102	<input type="text"/>	106
V103	<input type="text"/>	107

Total section 5.1 (add v85– v93:	36
----------------------------------	----

Total section 5.2 (add v94– v103:	40
-----------------------------------	----

<b>Total section 5: (add sections 5.1 and 5.2)</b>	<b>76</b>
--	-----------

**SECTION 6 Assessment of Knowledge Management Growth**

**Section 6.1: Points allocated:**

- Y(1)** Yes, rapid growth (3+ maturity levels)- add 4 points.
- S(2)** Yes, but not significantly (1-2 maturity levels)- add 2 points.
- P(3)** No growth, probably within the next 5 years - add 1 point.
- N(4)** No growth, or decline in growth- no points awarded.

		<b>Y</b>	<b>S</b>	<b>P</b>	<b>N</b>		
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	V104	108
<b>6.1</b>	Please reflect on the growth of knowledge management in the organization over the <b>past 5</b> years						

Total section 6.1 (add v104)						<b>4</b>	
------------------------------	--	--	--	--	--	----------	--

**Overall score achieved:**

**Add sections 1 to 6**

Total section 1 (v3 – v7):						<b>20</b>	
Total section 2 (v8 – v26):						<b>76</b>	
Total section 3 (v27 – v50)						<b>88</b>	
Total section 4 (v51 – v82)						<b>94</b>	
Total section 5 (v83 – v103)						<b>76</b>	
Total section 6 (v104)						<b>4</b>	
<b>Total all sections: (add sections 1 to 6)</b>						<b>358</b>	

**Appendix D**

**Knowledge Management Maturity Findings**

*Table1: Section 1 - ICT management*

QUESTION	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
<b>v5: Evaluating an ICT system</b>			
1. Yes, definitely	259	59.95	59.95
2. Yes, but not significantly	136	31.48	91.44
3. No, but probably within the next 5 years	25	5.79	97.22
4. No	12	2.78	100.00
<b>v6: Designing an ICT system</b>			
1. Yes, definitely	226	52.44	52.44
2. Yes, but not significantly	124	28.77	81.21
3. No, but probably within the next 5 years	47	10.90	92.11
4. No	34	7.89	100.00
<b>v7: Planning an ICT System</b>			
1. Yes, definitely	263	61.02	61.02
2. Yes, but not significantly	126	29.23	90.26
3. No, but probably within the next 5 years	33	7.66	97.91
4. No	9	2.09	100.00
<b>v8: Effective ICT Infrastructure.</b>			
1. Yes, definitely	196	45.27	45.27
2. Yes, but not significantly	162	37.41	82.68
3. No, but probably within the next 5 years	53	12.24	94.92
4. No	22	5.08	100.00
<b>v9: ICT is regarded as:</b>			
An enabler of knowledge management	336	78.69	78.69
Knowledge management	91	21.31	100.00

*Table 2: Section 2 - Information management*

QUESTION	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
<b>v10: Clearly defined IM policy</b>			
1. Yes, definitely	163	37.56	37.56
2. Yes, but not significantly	138	31.80	69.35
3. No, but probably within the next 5 years	92	21.20	90.55
4. No	41	9.45	100.00
<b>v11: Clearly defined IM strategy</b>			
1. Yes, definitely	158	36.41	36.41
2. Yes, but not significantly	150	34.56	70.97
3. No, but probably within the next 5 years	92	21.20	92.17
4. No	34	7.83	100.00
<b>v12: Understand which information resources are crucial to the business</b>			
1. Yes, definitely	229	52.76	52.76
2. Yes, but not significantly	157	36.18	88.94
3. No, but probably within the next 5 years	36	8.29	97.24
4. No	12	2.76	100.00
<b>v13: Is it clear which managers are accountable for information resources</b>			
1. Yes, definitely	171	39.40	39.40
2. Yes, but not significantly	177	40.78	80.18
3. No, but probably within the next 5 years	56	12.90	93.09
4. No	30	6.91	100.00
<b>v14: Key information is easily available</b>			
1. Yes, definitely	134	30.88	30.88
2. Yes, but not significantly	197	45.39	76.27
3. No, but probably within the next 5 years	72	16.59	92.86
4. No	31	7.14	100.00
<b>v15: Employees are trained to access sources of information</b>			
1. Yes, definitely	104	23.96	23.96
2. Yes, but not significantly	179	41.24	65.21
3. No, but probably within the next 5 years	115	26.50	91.71
4. No	36	8.29	100.00
<b>v16: Identification of information needs</b>			
1. Yes, definitely	177	40.78	40.78
2. Yes, but not significantly	175	40.32	81.11
3. No, but probably within the next 5 years	68	15.67	96.77
4. No	14	3.23	100.00



<b>v17: Acquisition of information</b>			
1. Yes, definitely	159	36.81	36.81
2. Yes, but not significantly	214	49.54	86.34
3. No, but probably within the next 5 years	47	10.88	97.22
4. No	12	2.78	100.00
<b>v18: Information storage</b>			
1. Yes, definitely	201	46.42	46.42
2. Yes, but not significantly	164	37.88	84.30
3. No, but probably within the next 5 years	62	14.32	98.61
4. No	6	1.39	100.00
<b>v19: Information distribution</b>			
1. Yes, definitely	139	32.03	32.03
2. Yes, but not significantly	201	46.31	78.34
3. No, but probably within the next 5 years	77	17.74	96.08
4. No	17	3.92	100.00
<b>v20: Information retrieval</b>			
1. Yes, definitely	152	35.02	35.02
2. Yes, but not significantly	199	45.85	80.88
3. No, but probably within the next 5 years	69	15.90	96.77
4. No	14	3.23	100.00
<b>v21: Information disposal</b>			
1. Yes, definitely	98	22.58	22.58
2. Yes, but not significantly	198	45.62	68.20
3. No, but probably within the next 5 years	104	23.96	92.17
4. No	34	7.83	100.00
<b>v22: Protection of information</b>			
1. Yes, definitely	180	41.47	41.47
2. Yes, but not significantly	158	36.41	77.88
3. No, but probably within the next 5 years	76	17.51	95.39
4. No	20	4.61	100.00
<b>v23: Determining the value and cost of information</b>			
1. Yes, definitely	101	23.33	23.33
2. Yes, but not significantly	155	35.80	59.12
3. No, but probably within the next 5 years	131	30.25	89.38
4. No	46	10.62	100.00
<b>v24: Inventory of information entities</b>			
1. Yes, definitely	137	31.57	31.57
2. Yes, but not significantly	156	35.94	67.51
3. No, but probably within the next 5 years	85	19.59	87.10
4. No	56	12.90	100.00
<b>v25: Inventory management systems</b>			
1. Yes, definitely	182	41.94	41.94
2. Yes, but not significantly	156	35.94	77.88
3. No, but probably within the next 5 years	69	15.90	93.78
4. No	27	6.22	100.00





<b>v26: Databases</b>			
1. Yes, definitely	230	53.00	53.00
2. Yes, but not significantly	140	32.26	85.25
3. No, but probably within the next 5 years	47	10.83	96.08
4. No	17	3.92	100.00
<b>v27: Information services/Library</b>			
1. Yes, definitely	157	36.18	36.18
2. Yes, but not significantly	133	30.65	66.82
3. No, but probably within the next 5 years	105	24.19	91.01
4. No	39	8.99	100.00
<b>V28: Information management is regarded as:</b>			
1. A prerequisite for knowledge management	296	69.65	69.65
2. Knowledge management	129	30.35	100.00

**Table 3: Section 3 - Formulation of knowledge management principles, policy and strategy**

QUESTION	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
<b>v29: Aware of the power of knowledge</b>			
1. Yes, definitely	251	57.97	57.97
2. Yes, but not significantly	112	25.87	83.83
3. No, but probably within the next 5 years	51	11.78	95.61
4. No	19	4.39	100.00
<b>v30: KM is one of the top five internal priorities</b>			
1. Yes, definitely	148	34.18	34.18
2. Yes, but not significantly	130	30.02	64.20
3. No, but probably within the next 5 years	109	25.17	89.38
4. No	46	10.62	100.00
<b>v31: KM is supplying a direct input to strategic management</b>			
1. Yes, definitely	112	25.93	25.93
2. Yes, but not significantly	121	28.01	53.94
3. No, but probably within the next 5 years	125	28.94	82.87
4. No	74	17.13	100.00
<b>v32: Improving work efficiency</b>			
1. Yes, definitely	237	54.73	54.73
2. Yes, but not significantly	130	30.02	84.76
3. No, but probably within the next 5 years	55	12.70	97.46
4. No	11	2.54	100.00
<b>V33: Decentralization of authority</b>			
1. Yes, definitely	114	26.33	26.33
2. Yes, but not significantly	180	41.57	67.90
3. No, but probably within the next 5 years	70	16.17	84.06
4. No	69	15.94	100.00
<b>V34: Releasing info more rapidly and making information widely available</b>			
1. Yes, definitely	195	45.03	45.03
2. Yes, but not significantly	151	34.87	79.91
3. No, but probably within the next 5 years	74	17.09	97.00
4. No	13	3.00	100.00
<b>v35: Promoting life long learning</b>			
1. Yes, definitely	214	49.42	49.42
2. Yes, but not significantly	132	30.48	79.91
3. No, but probably within the next 5 years	63	14.55	94.46



4. No	24	5.54	100.00
<b>V36: Improving transparency</b>			
1. Yes, definitely	174	40.18	40.18
2. Yes, but not significantly	152	35.10	75.29
3. No, but probably within the next 5 years	81	18.71	94.00
4. No	26	6.00	100.00
<b>v37: Improving working relations</b>			
1. Yes, definitely	190	43.78	43.78
2. Yes, but not significantly	145	33.41	77.19
3. No, but probably within the next 5 years	69	15.90	93.09
4. No	30	6.91	100.00
<b>v38: Making up for loss of knowledge</b>			
1. Yes, definitely	164	37.88	37.88
2. Yes, but not significantly	132	30.48	68.36
3. No, but probably within the next 5 years	96	22.17	90.53
4. No	41	9.47	100.00
<b>v39: Decision to invest in KM</b>			
1. Yes, definitely	158	36.49	36.49
2. Yes, but not significantly	144	33.26	69.75
3. No, but probably within the next 5 years	95	21.94	91.69
4. No	36	8.31	100.00
<b>v40: Need for hybrid KM environments</b>			
1. Yes, definitely	176	40.65	40.65
2. Yes, but not significantly	150	34.64	75.29
3. No, but probably within the next 5 years	72	16.63	91.92
4. No	35	8.08	100.00
<b>v41: High ranking knowledge champions are identified</b>			
1. Yes, definitely	91	21.02	21.02
2. Yes, but not significantly	142	32.79	53.81
3. No, but probably within the next 5 years	132	30.48	84.30
4. No	68	15.70	100.00
<b>v42: Commitment to establish a formal KM function</b>			
1. Yes, definitely	116	26.98	26.98
2. Yes, but not significantly	133	30.93	57.91
3. No, but probably within the next 5 years	108	25.12	83.02
4. No	73	16.98	100.00
<b>v43: Decision to judge people according to their ability to share knowledge</b>			
1. Yes, definitely	36	8.35	8.35
2. Yes, but not significantly	110	25.52	33.87
3. No, but probably within the next 5 years	152	35.27	69.14
4. No	133	30.86	100.00



<b>v44: Decision to constantly improve work processes</b>			
1. Yes, definitely	96	22.22	22.22
2. Yes, but not significantly	149	34.49	56.71
3. No, but probably within the next 5 years	123	28.47	85.19
4. No	64	14.81	100.00
<b>v45: Drive to get all employees involved in knowledge sharing exercises</b>			
1. Yes, definitely	81	18.75	18.75
2. Yes, but not significantly	150	34.72	53.47
3. No, but probably within the next 5 years	126	29.17	82.64
4. No	75	17.36	100.00
<b>v46: Clearly defined KM policy</b>			
1. Yes, definitely	68	15.67	15.67
2. Yes, but not significantly	118	27.19	42.86
3. No, but probably within the next 5 years	157	36.18	79.03
4. No	91	20.97	100.00
<b>v47: Clearly defined KM strategy:</b>			
1. Yes, definitely	76	17.51	17.51
2. Yes, but not significantly	116	26.73	44.24
3. No, but probably within the next 5 years	154	35.48	79.72
4. No	88	20.28	100.00
<b>v48: KM strategy communicated to staff:</b>			
1. Yes, definitely	29	6.68	6.68
2. Yes, but not significantly	107	24.65	31.34
3. No, but probably within the next 5 years	161	37.10	68.43
4. No	137	31.57	100.00
<b>KM strategy include::</b>			
<b>V 49: Information management</b>			
1. Yes	197	85.28	85.28
2. No	34	14.72	100.00
<b>V 50: ICT aspects</b>			
1. Yes	186	80.52	80.52
2. No	45	19.48	100.00
<b>V 51: HR aspects</b>			
1. Yes	164	71.00	71.00
2. No	67	29.00	100.00
<b>V 52: Other organizational aspects</b>			
1. Yes	144	61.80	61.80
2. No	89	38.20	100.00

**Table 4: Section 4 - Implementation of knowledge management**

QUESTION	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
<b>v53: Opening up bureaucratic divisions</b>			
1. Yes, definitely	78	18.10	18.10
2. Yes, but not significantly	129	29.93	48.03
3. No, but probably within the next 5 years	115	26.68	74.71
4. No	109	25.29	100.00
<b>v54: The creation of a central co-ordinating unit for Knowledge Management</b>			
1. Yes, definitely	86	20.00	20.00
2. Yes, but not significantly	102	23.72	43.72
3. No, but probably within the next 5 years	125	29.07	72.79
4. No	117	27.21	100.00
<b>v55: The appointment of a Chief Knowledge Officer (CKO) with executive status</b>			
1. Yes, definitely	58	13.43	13.43
2. Yes, but not significantly	50	11.57	25.00
3. No, but probably within the next 5 years	135	31.25	56.25
4. No	189	43.75	100.00
<b>v56: Reorganization of offices (e.g. open plan offices)</b>			
1. Yes, definitely	122	28.18	28.18
2. Yes, but not significantly	100	23.09	51.27
3. No, but probably within the next 5 years	94	21.71	72.98
4. No	117	27.02	100.00
<b>v57: Establishment of informal networks</b>			
1. Yes, definitely	93	21.68	21.68
2. Yes, but not significantly	153	35.66	57.34
3. No, but probably within the next 5 years	114	26.57	83.92
4. No	69	16.08	100.00
<b>v58: Institutionalization of training and mentoring programmes</b>			
1. Yes, definitely	116	26.79	26.79
2. Yes, but not significantly	180	41.57	68.36
3. No, but probably within the next 5 years	93	21.48	89.84
4. No	44	10.16	100.00
<b>v59: Communication with customers</b>			
1. Yes, definitely	180	41.67	41.67
2. Yes, but not significantly	173	40.05	81.71
3. No, but probably within the next 5 years	56	12.96	94.68



4. No	23	5.32	100.00
<b>v60: Establishment of incentive schemes for knowledge sharing</b>			
1. Yes, definitely	29	6.71	6.71
2. Yes, but not significantly	65	15.05	21.76
3. No, but probably within the next 5 years	163	37.73	59.49
4. No	175	40.51	100.00
<b>v61: Communication with suppliers</b>			
1. Yes, definitely	121	28.07	28.07
2. Yes, but not significantly	171	39.68	67.75
3. No, but probably within the next 5 years	86	19.95	87.70
4. No	53	12.30	100.00
<b>v62: Which of the following groups has the overall responsibility for knowledge management in your organization?</b>			
1. Human resources management team	37	8.69	8.69
2. Information technology team	100	23.47	32.16
3. Special knowledge management unit	82	19.25	51.41
4. Top managers	169	39.67	91.08
5. Other	38	8.92	100.00
<b>v63: Staff members spend an increasing amount of time on informational meetings</b>			
1. Yes, definitely	119	27.48	27.48
2. Yes, but not significantly	179	41.34	68.82
3. No, but probably within the next 5 years	66	15.24	84.06
4. No	69	15.94	100.00
<b>v64: Staff members spend an increasing amount of time on peer reviewing/quality reviews</b>			
1. Yes, definitely	67	15.51	15.51
2. Yes, but not significantly	152	35.19	50.69
3. No, but probably within the next 5 years	127	29.40	80.09
4. No	86	19.91	100.00
<b>v65: Staff members spend an increasing amount of time on presentations of projects and activities</b>			
1. Yes, definitely	119	27.61	27.61
2. Yes, but not significantly	188	43.62	71.23
3. No, but probably within the next 5 years	80	18.56	89.79
4. No	44	10.21	100.00
<b>v66: Staff members spend an increasing amount of time on Information sharing by electronic device (e-mail, etc.)</b>			
1. Yes, definitely	213	49.53	49.53
2. Yes, but not significantly	163	37.91	87.44



3. No, but probably within the next 5 years	38	8.84	96.28
4. No	16	3.72	100.00
<b>v67: Staff members spend an increasing amount of time on building databases</b>			
1. Yes, definitely	102	23.67	23.67
2. Yes, but not significantly	157	36.43	60.09
3. No, but probably within the next 5 years	98	22.74	82.83
4. No	74	17.17	100.00
<b>Good work practices have been outlined and updated on a regular basis, in documents such as:</b>			
<b>v68: Training manuals</b>			
1. Yes	262	60.79	60.79
2. No	168	38.98	100.00
<b>v69: Best practices</b>			
1. Yes	207	48.25	48.25
2. No	221	51.52	100.00
<b>v70: Guidelines</b>			
1. Yes	288	66.82	66.82
2. No	143	33.18	100.00
<b>v71: The use of indicators to assess the implementation of knowledge management practices</b>			
1. Yes	107	24.71	24.71
2. No	326	75.29	100.00
<b>v72: Use of scorecards</b>			
1. Yes	128	29.63	29.63
2. No	304	70.37	100.00
<b>v73: Written/oral feedback from staff on achievements in knowledge management</b>			
1. Yes	178	41.40	41.40
2. No	252	58.60	100.00
<b>v74: Comparisons are made between your organization and other organizations in your industry</b>			
1. Yes	164	37.96	37.96
2. No	268	62.04	100.00
<b>v75: Staff consider that sharing knowledge is good for their careers</b>			
1. Yes	230	53.36	53.36
2. No	201	46.64	100.00
<b>v76: Staff spontaneously organize knowledge events such as meeting with staff from other divisions/departments</b>			
1. Yes	151	35.03	35.03
2. No	280	64.97	100.00



<b>v77: Staff make documents available to others more spontaneously</b>			
1. Yes	216	50.12	50.12
2. No	215	49.88	100.00
<b>Difficulties in implementing knowledge management practices, because of:</b>			
<b>v78: A strong focus on information and communication technology, rather than on people or organizational matters</b>			
1. Yes	201	46.64	46.64
2. No	230	53.36	100.00
<b>v79: Lack of time or resources to concretely share knowledge</b>			
1. Yes	322	74.71	74.71
2. No	109	25.29	100.00
<b>v80: Resistance of certain groups of staff</b>			
1. Yes	215	50.23	50.23
2. No	213	49.77	100.00
<b>v81: Staff do not make documents available to others spontaneously</b>			
1. Yes	219	51.29	51.29
2. No	208	48.71	100.00
<b>v82: Difficulty in capturing employee's undocumented knowledge (know-how)</b>			
1. Yes	354	82.52	82.52
2. No	75	17.48	100.00
<b>v83: Concern that other organizations/general public would be able to access sensitive/confidential information</b>			
1. Yes	215	50.00	50.00
2. No	215	50.00	100.00
<b>v84: Knowledge and information management is not a top priority in the modernization programme of your organization</b>			
1. Yes	184	42.89	42.89
2. No	245	57.11	100.00



*Table 5: Section 5 - Ubiquitous knowledge*

QUESTION	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
<b>Organizations increasingly relying on outside knowledge coming from the following entities/organizations to carry out their activities</b>			
<b>v85: Between departments in your organization</b>			
1. Yes, definitely	197	45.50	45.50
2. Yes, but not significantly	161	37.18	82.68
3. No, but probably within the next 5 years	21	4.85	87.53
4. No	54	12.47	100.00
<b>v86: Local governments</b>			
1. Yes, definitely	89	20.60	20.60
2. Yes, but not significantly	120	27.78	48.38
3. No, but probably within the next 5 years	59	13.66	62.04
4. No	164	37.96	100.00
<b>v87: Peer organizations</b>			
1. Yes, definitely	87	20.09	20.09
2. Yes, but not significantly	157	36.26	56.35
3. No, but probably within the next 5 years	70	16.17	72.52
4. No	119	27.48	100.00
<b>v88: Universities/Research centres</b>			
1. Yes, definitely	75	17.36	17.36
2. Yes, but not significantly	141	32.64	50.00
3. No, but probably within the next 5 years	95	21.99	71.99
4. No	121	28.01	100.00
<b>v89: Suppliers</b>			
1. Yes, definitely	120	27.78	27.78
2. Yes, but not significantly	160	37.04	64.81
3. No, but probably within the next 5 years	73	16.90	81.71
4. No	79	18.29	100.00
<b>v90: Customers</b>			
1. Yes, definitely	165	38.37	38.37
2. Yes, but not significantly	171	39.77	78.14
3. No, but probably within the next 5 years	51	11.86	90.00
4. No	43	10.00	100.00
<b>v91: Consulting firms</b>			
1. Yes, definitely	138	31.87	31.87
2. Yes, but not significantly	157	36.26	68.13
3. No, but probably within the next 5 years	49	11.32	79.45
4. No	89	20.55	100.00
<b>v92: Trade Unions</b>			
1. Yes, definitely	53	12.30	12.30
2. Yes, but not significantly	91	21.11	33.41
3. No, but probably within the next 5 years	62	14.39	47.80



4. No	225	52.20	100.00
<b>v93: Other</b>			
1. Yes, definitely	68	19.43	19.43
2. Yes, but not significantly	61	17.43	36.86
3. No, but probably within the next 5 years	27	7.71	44.57
4. No	194	55.43	100.00
<b>Staff is encouraged to take up positions in:</b>			
<b>v94: Other departments in your organization</b>			
1. Yes, definitely	108	25.06	25.06
2. Yes, but not significantly	121	28.07	53.13
3. No, but probably within the next 5 years	60	13.92	67.05
4. No	142	32.95	100.00
<b>v95: Local government</b>			
1. Yes, definitely	19	4.44	4.44
2. Yes, but not significantly	26	6.07	10.51
3. No, but probably within the next 5 years	53	12.38	22.90
4. No	330	77.10	100.00
<b>v96: Peer organizations</b>			
1. Yes, definitely	27	6.32	6.32
2. Yes, but not significantly	63	14.75	21.08
3. No, but probably within the next 5 years	53	12.41	33.49
4. No	284	66.51	100.00
<b>v97: Universities/Research centres</b>			
1. Yes, definitely	23	5.39	5.39
2. Yes, but not significantly	69	16.16	21.55
3. No, but probably within the next 5 years	80	18.74	40.28
4. No	255	59.72	100.00
<b>v98: Supplier organizations</b>			
1. Yes, definitely	16	3.75	3.75
2. Yes, but not significantly	46	10.77	14.52
3. No, but probably within the next 5 years	66	15.46	29.98
4. No	299	70.02	100.00
<b>v99: Customer organizations</b>			
1. Yes, definitely	28	6.54	6.54
2. Yes, but not significantly	64	14.95	21.50
3. No, but probably within the next 5 years	60	14.02	35.51
4. No	276	64.49	100.00
<b>v100: Consulting firms</b>			
1. Yes, definitely	24	5.62	5.62
2. Yes, but not significantly	49	11.48	17.10
3. No, but probably within the next 5 years	60	14.05	31.15
4. No	294	68.85	100.00
<b>v101: Trade Unions</b>			
1. Yes, definitely	19	4.52	4.52
2. Yes, but not significantly	31	7.38	11.90
3. No, but probably within the next 5 years	40	9.52	21.43



4. No	330	78.57	100.00
<b>v102: Other</b>			
1. Yes, definitely	20	5.54	5.54
2. Yes, but not significantly	27	7.48	13.02
3. No, but probably within the next 5 years	36	9.97	22.99
4. No	278	77.01	100.00
<b>v103: Secondees from other organizations</b>			
1. Yes, definitely	64	15.80	15.80
2. Yes, but not significantly	65	16.05	31.85
3. No, but probably within the next 5 years	52	12.84	44.69
4. No	224	55.31	100.00



*Table 6: Section 6 - Assessment of knowledge management growth*

QUESTION	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
<b>v104: Growth of knowledge management over the past 5 years</b>			
1. Yes rapid growth (3+ maturity levels)	86	20.28	20.28
2. Yes, but not significantly (1-2 maturity levels)	221	52.12	72.41
3. No growth, probably within the next 5 years	94	22.17	94.58
4. No growth, or decline in growth	23	5.42	100.00



## REFERENCES

- Ansoff, H.I. 1965. Corporate Strategy. New York: McGraw-Hill.
- Applegate, L.M., McFarlen, W.F. and McKenny, J.L. 1999. Corporate information system management: text and cases. Boston: Irwin/McGraw-Hill.
- Armistead C. and Meakins M. 2002. "A framework for practicing knowledge management", *Long Range Planning*, Vol 35, No 1, pp. 49 - 71.
- Arveson, P. 1998. What is the balanced scorecard? Balanced Scorecard Institute. [Online]. Available <http://www.balancedscorecard.org>. (Accessed 31 March 2005).
- Barney, J.B. 1995. Looking inside for competitive advantage. *Academy of Management Executives*, Vol. 9, No. 4, pp. 49 - 61.
- Bater, B. 1999. Knowledge Management: A Model Approach. *Managing Information*. Vol. 6, No.8, pp.38 – 41.
- Beer, M., Eisenstat, R.A. and Spector, B. 1990. Why change programs don't produce change. *Harvard Business Review*. Vol. 68, No.6, pp. 158 - 166.
- Birchall, D.W. and Tovstiga, G. 1999. The strategic potential of a firm's knowledge portfolio. *Journal of General Management*, Vol. 25, No. 1, pp. 1 - 6.
- Bontis, N., Dragonetti, N.C., Jacobson, K. and Roos, G. 1999. The knowledge toolbox: A review of the tools available to measure and manage intangible resources. *European Management Journal*. Vol. 17, No. 4, pp. 391 - 401.
- Boon, J.A. 1990. Information management: an educational perspective. *South African Journal of Library and Information Science*. Vol. 58, No. 4, pp. 319 - 326.
- Botha, D.F. and Fouché, B. 2002. Knowledge management practices in the South African business sector: preliminary findings of a longitudinal study. *South African Journal of Business Management*. Vol. 33, No. 2, pp. 13 - 19.
- Brown, S.L. and Eisenhardt, K.M. 1998. Competing on the edge: Strategy as structured chaos. Boston: Harvard Business School Press.
- Camillus, J. 1997. Shifting the strategic management paradigm. *European Management Journal*, Vol. 15 No. 1, pp. 1 - 8.
- Carneiro, A. 2000. How does knowledge management influence innovation and competitiveness? *Journal of Knowledge Management*, Vol. 4, No. 2, pp. 87 - 98.
- Chait, L.P. 1999. Creating a successful knowledge management system. *The Journal of Business Strategy*, Vol. 20, No. 2, pp. 23 - 26.
- Chandler, A.D. 1962. Strategy and Structure; Chapters in the history of the industrial enterprise. Cambridge, MA: MIT Press.
- Conner, K.R. 1991. A historical comparison of resource-based theory and five schools of thought within industrial organizations economics: Do we have a new theory of the firm? *Journal of Management*, Vol. 17, No. 1, pp. 121 – 154.



- Darroch, J. and McNaughton, R. 2001. Developing a measure of knowledge management. In: Bontis, N. (Ed), *Organizational intelligence: the cutting edge of intellectual capital and knowledge management*. Boston, MA: Butterworth-Heinemann/EMCI Press, pp. 210 - 222.
- Darroch, J. and McNaughton, R. 2002. Examining the link between knowledge management practice and types of innovation. *Journal of Intellectual Capital*, Vol. 3, No. 3, pp. 210 – 222.
- Davenport, T.H. 1998. Some principles of knowledge management. [Online]. Available <http://www.bus.utexas.edu/kman/kmprin.htm#TOC> (Accessed 5 August 2003).
- Davenport, T.H., DeLong, D.W. and Beers, M.C. 1998. Successful knowledge management projects. *Sloan Management Review*, Vol. 39, No.2, pp. 43 - 57.
- Davenport, T. H. and Prusak, L. 1998. *Working Knowledge: How Organizations Manage what they Know*. Boston, MA: Harvard Business School Press.
- Davenport, T.H., Thomas, R.J. and Cantrell, S. 2002. The mysterious art and science of knowledge-worker performance. *MIT Sloan Management Review*, Vol. 44, No. 1, pp. 13 – 30.
- De Long, D. and Miller, H. 1997. Caselets from knowledge management interviews. [Online]. Available <http://www.businessinnovation.ey.com> (Accessed 12 August 2004).
- Dove, R. 1999. Knowledge management, response ability, and the agile enterprise. *Journal of Knowledge Management*, Vol. 4, No. 1, pp. 18 - 35.
- Drucker, P.F. 1970. Entrepreneurship in business enterprise. *Journal of Business Policy*. Vol. 1, No. 1, pp. 3 - 12.
- Earl, M. 2001. Knowledge management strategies: Towards a taxonomy. *Journal of Management Information Systems*, Vol. 18, No. 1, pp. 215 - 233.
- Gallager, S and Hazlett, S. 2004. Using the knowledge management maturity model as an evaluation tool. [Online]. Available [www: http://s.gallagher@qub.ac.uk](http://s.gallagher@qub.ac.uk) (Accessed 12 August 2004).
- Gertler, M.S. 2003. Tacit knowledge and the economic geography of context, or The indefinable tacitness of being (there). *Journal of Economic Geography*, Vol. 3, No. 1, pp. 75 - 99.
- Grant, R.M. 1991. The resource-based theory of competitive advantage: Implications for strategic formulation. *California Management Review*, Vol. 33, No. 3, pp. 114 - 135.
- Grey, D. (1998), Knowledge management and information management: the differences. [Online]. Available: [www.smithweaversmith.com/km-im.htm](http://www.smithweaversmith.com/km-im.htm) (accessed 26 May 2006).
- Grover, V. & Davenport, T.H. 2001. General perspectives on knowledge management: Fostering a research agenda. *Journal of Management Information Systems*, Vol 18, No. 1, pp. 5 – 21.
- Gurteen, D. 1998. Knowledge, Creativity and Innovation. *Journal of Knowledge Management*, Vol. 2, No.1, pp. 5 - 13.
- Haag, S., Cummings, M. & Dawkins, J. 1998. *Management Information Systems for the Information Age*, New York: Irwin/McGraw-Hill.
- Hamel, G. and Prahalad, C.K. 1989. Strategic Intent. *Harvard Business Review*. Vol. 89, No. 3, pp. 63 - 76.



Hamel, G. and Prahalad, C.K. 1993. Strategy as stretch and leverage. *Harvard Business Review*. Vol. 71, No. 2, pp. 75 - 84.

Hamel, G. and Prahalad, C.K. 1994. *Competing for the future*. Boston: Harvard Business School Press.

Hamel, G. 1996. Strategy as revolution. *Harvard Business Review*. Vol. 74, No.4, pp. 72.

Henczel, S. 2000. The information audit as a first step towards effective knowledge management: an opportunity for the special librarian. *Inspel*, Vol. 34, No. 3/4, pp. 210 - 226.

Henderson, B.D. 1979. *Henderson on corporate strategy*. Cambridge, MA: Abt Books.

Hirvonen, A.P. 2004. Application portfolio models in practice: a comparative study with public sector and business organizations. [Online]. Available www: <http://ari.p.hirvonen@tietoerator.com> (Accessed 12 August 2004).

Huff, A.S. 1990. *Mapping strategic thought*. Somerset, NJ: Wiley.

Huffman, B. 2001. What makes a strategy brilliant. *Business Horizons*, Vol. 44, No. 4, pp. 13 - 20.

Kazimi, J., Dasgupta, R.R. and Natarajan, G. 2004. The rise, fall and rise of knowledge management. [Online] Available www: <http://www.zenar.com/pdfs/km2.pdf>. (Accessed 12 August 2004).

Klimko, G. 2001. Knowledge management and maturity models: building common understanding: Proceedings of the 2nd European Conference on Knowledge Management, IEDC Bled School of Management, Bled, Slovenia, 8 – 9 November 2001. Reading: Academic Conferences Limited: 269 - 279.

Kochikar, V.P. 2004. The knowledge management maturity model: a staggered framework for leveraging knowledge. [Online]. Available www: [http://www.infy.com/knowledge\\_capital/knowledge/KM](http://www.infy.com/knowledge_capital/knowledge/KM) (Accessed 12 August 2004).

Kruger C.J. 2002. The interdependability between Strategic Management, and the formulation of an Information and Communication Technology Strategy. M.IT Thesis. University of Pretoria. Unpublished.

Kruger C.J. 2005. Defining Performance measurement – Broadening the debate. *Perspectives on Performance*, Vol. 4, No. 3, pp. 19 - 20.

Kurtz, C.F. and Snowden, D.J. 2003. The new dynamics of strategy sense making in a complex-complicated world. *IBM Systems Journal*, Vol. 42, No. 3, pp. 462 – 483.

Laudon, K.C. & Laudon, J. P. 1998. *Management Information Systems*. (5th ed.) Upper Saddle River, New Jersey: Pearson Education.

Laudon, K.C. & Laudon, J. P. 2004. *Management Information Systems*. (8th ed.) Upper Saddle River, New Jersey: Pearson Education.

Leibold, M., Probst, G. & Gibbert, M. 2002. *Strategic management in the knowledge economy: New approaches and business applications*. Erlangen: Wiley.

Leibold, M., Probst, G. & Gibbert, M. 2005. *Strategic management in the knowledge economy: New approaches and business applications*. (2nd ed.) Erlangen: Wiley.

Leonard-Barton, D.A. 1995. *Wellsprings of knowledge: building and sustaining the sources of innovation*. Boston: Harvard Business School Press.

Logan, D. 2001. Knowledge management scenario: measuring and managing intellectual assets, Gartner Symposium/ITxpo Africa, Sandton, South Africa (Unpublished).



- Main, J. 1992. How to steal the best ideas around. *Fortune*. Vol. 126, No. 8, pp. 102 - 3.
- Manville, B and Foote, N. 1996. Strategy as if knowledge mattered. [Online]. Available <http://www.fastcompany.com/online/02/stratsec.html> (Accessed 5 August 2003).
- Mark, P., Curtis, B., Chrissis, M. and Webber, S. 1993. Capability maturity model, version 1.1. *IEEE Software*, Vol. 10, No. 3, pp. 7 - 27.
- Martiny, M. 1998. Knowledge management at HP Consulting. *Organizational Dynamics*. Vol. 27, No. 2, pp. 71 - 77
- Mintzberg, H. & Waters, J.A. 1985. Of strategies, deliberate or emergent. *Strategic Management Journal*, Vol. 6, No. 3, pp. 257 - 272.
- Mintzberg, H. 1990. The design school: Reconsidering the basic premises of strategic management. *Strategic Management Journal*, Vol. 11, No. 1, pp. 171 - 195.
- Mintzberg, H. 1994. The rise and fall of strategic planning. New York: Free Press.
- Mintzberg, H., Ahlstrand, B. and Lampel, J. 1998. Strategy safari: A guided tour through the wilds of strategic management. New York: Free Press.
- Mintzberg, H. & Lampel, J. 1999. Reflecting on the strategy process. *Sloan Management Review*. Vol. 40, No. 1, pp. 21 - 29.
- Mistra. 2004. Values for money: Reviewing the quality of SRI research. [Online]. Available: <http://www.mistra-research.se/download/18>. (Accessed, 10 June 2005).
- Mouton, J. 2001. How to succeed in your master's and doctoral studies: A South African guide and resource book. Pretoria: Van Schaik.
- Murray, P. 2000. Designing for business benefits from knowledge management. In Depres, C. & Chauvel, D. (Eds). Knowledge horizons: the present and the promise of Knowledge Management, Boston, Butterworth Heinemann: 171 - 194.
- Ndlela, L.T. & du Toit, A.S.A. 2001. Establishing a knowledge management programme for competitive advantage in an enterprise. *International Journal of Information Management*, Vol. 21, No.1, pp. 151 – 165.
- Nicolas, R. 2004. Knowledge management impacts on decision making process. *Journal of Knowledge Management* Vol. 8, No. 1, pp. 20 - 31.
- Nonaka, I. 1994. The dynamic theory of organizational knowledge creation. *Organization Science*, Vol 5, No 1, pp. 14 – 37.
- Nonaka, I. & Takeuchi, H. 1995. The knowledge-creating company: How Japanese companies create the dynamics of innovation. New York: Oxford University Press.
- Orna, E. 1998. Practical information policy. Aldershot: Gower.
- Papp 1996. Alignment of business information technology strategy: how and why? *Information Management*, Vol. 11, No. 3/4, pp. 6 - 11.





- Parlby, D. 1999a. The Knowledge Journey. KPMG Consulting. [Online]. Available: <http://www.kpmg.co.uk> . (Accessed 22 February 2005)
- Parlby, D. 1999b. The Power of Knowledge. KPMG Consulting. [Online]. Available: <http://www.kpmg.co.uk>. (Accessed 22 February 2005).
- Pearce, J.A. & Robinson, R.B. 2000. Strategic management, formulation, implementation and control. 7th ed. Boston: Irwin: McGraw-Hill.
- Pearce, J.A. & Robinson, R.B. 2005. Strategic Management, Formulation, Implementation and Control. (9th ed.) Boston: McGraw-Hill.
- Polanyi, M. 1958. Personal Knowledge. Towards a post-critical philosophy. London: Routledge and Keegan Paul.
- Polanyi, M. 1966. The tacit dimension. New York: Doubleday.
- Porter, M.E. 1980. Competitive strategy: Techniques for analyzing industries and competitors. New York: The Free Press.
- Porter, M.E. 1981. The contributions of industrial organizations to strategic management. *Academy of Management Review*; Vol. 6, No. 4, pp. 609 - 620.
- Porter, M.E. 1985. Competitive advantage. New York: The Free Press.
- Porter, M. 1987. From Competitive Advantage to Corporate Strategy. *Harvard Business Review*, Vol. 65, No. 3, pp. 43 - 59.
- Porter, M.E. 1996. What is strategy? *Harvard Business Review*, Vol.74, No. 4. pp. 61 - 78.
- Porter, M.E. 2001. Strategy and the Internet. *Harvard Business Review*, Vol. 79, No. 3, pp. 63 - 78.
- Prahalad, C.K. & Hamel, G. 1990. The core competence of the corporation. *Harvard Business Review*, Vol 70, No. 3, pp. 79 - 93.
- Rajogapalan, N. & Spreitzer, G.M. 1996. Towards a theory of strategic change: a multi-lens perspective and integrative framework. *Academy of Management Review*, Vol. 22, No. 1, pp. 48 – 80.
- Rayport, J.F. and Sviokla, J.J., 1995. Exploiting the virtual value chain. *Harvard Business Review*, Vol. 73, No. 4, pp. 75 – 85
- Roffe, I. 1999. Innovation and creativity in organizations: a review of the implications for training and development. *Journal of European Industrial Training*, Vol. 23, No. 4/5, pp. 224 - 241.
- Romberg, D. 1998. Knowledge management market to hit \$5 billion. *Computing Canada* October 26.
- Ross, J.W., Breath, C.M. and Goodhue, D.L. 1996. Develop long-term competitiveness through IT assets. *Sloan Management Review*, Vol. 38, No. 1, pp. 31 - 42.
- SAM Insight. 2004. Human Capital Management: The key to more value added. [Online]. Available <http://www.sam-group.com>. (Accessed 20 June 2005).
- Scheraga, D. 1998. Knowledge management competitive advantages become a key issue. *Chemical Market Reporter*, Vol. 254, No. 17, pp. 3 - 6.



- Senge, P. 1990. *The Fifth Discipline: The art and practice of the Learning Organization*. New York: Doubleday.
- Shimizi, R. 1980. *The growth of firms in Japan*. Tokyo: Keio Tsushin.
- Skyrme, D.J and Amidon, D. 1997. The knowledge agenda. *Journal of knowledge management*, Vol 1, No. 1, pp. 27 - 37.
- Skyrme D.J. 2000. Developing a Knowledge Strategy: From Management to Leadership Knowledge, In Morey, D., Maybury, M. and Thuraisingham, B., Chapter 3 in *Knowledge Management: Classic and Contemporary Works*, Boston MA: MIT Press.
- Snyman, M.M.M. and Kruger, C.J. 2004. The interdependency between strategic management and strategic knowledge management. *Journal of Knowledge Management*, Vol 8, No. 1, pp. 5 - 19.
- South African Electronic Communications and Transactions Act (SA ECT Act) Act No. 25. 2002. [Online]. Available [http://www.acts.co.za/ect\\_act/electron.htm](http://www.acts.co.za/ect_act/electron.htm). (Accessed 15/01/2005).
- South African Public Finance Management Act (SA PFM Act). Act No 1 and 29. 1999. [Online]. Available <http://www.wrc.org.za/downloads/legislature/PFMA1-99.pdf>. (Accessed 15/01/2005).
- Stacy, R. 1992. *Managing Chaos: Dynamic business strategies in an unpredictable world*. London: Kogan Page.
- Stair, R.M. and Reynolds, G.W 2003. *Principles of Information Systems: a Managerial approach*. 6th ed. Boston: Thompson.
- Sun Tzu. 1971. *The art of war*. New York: Oxford University Press.
- Sviokla, J.J. and Rayport, J.C. 1995. Exploiting the virtual value chain. *Harvard Business Review*, Vol. 73, No. 6, pp. 75 - 85.
- Tapscott, D. 2001. Rethinking in a networked world (or why Michael Porter is wrong about the Internet). *Strategy + Business*, 24 (Third Quarter). [Online]. Available: <http://www.strategy-business.com/search> (Accessed, 10 September 2005).
- Taylor, J. 1997. How to develop a winning business strategy. *San Diego Business Journal*, Vol, 18 No, 41, pp. 26 - 28.
- Taylor Small, C. and Tattalias, J. 2000. Knowledge management model guides KM process. *The Edge Newsletter*, April 2000 [Online]. Available [http://www.mitre.org/pubs/edge/april\\_00.htm](http://www.mitre.org/pubs/edge/april_00.htm) (Accessed 10 September 2001).
- Teece, D.J. 1998. Capturing value from knowledge assets: The new economy, markets for know-how, and intangible assests. *California Management Review*. Vol. 40, No. 3, pp. 55-79.
- Thompson, A., Strickland, A.J. and Gamble, J.E. 2005. *Crafting and Executing Strategy: The quest for competitive advantage*. 14th Ed. New York: McGraw-Hill.
- Tiwana, A. 2000. *The knowledge management toolkit: practical techniques for building a knowledge management system*. Upper Saddle River: Prentice Hall.
- Von Krogh, G., Nonaka, I. and Aben, M. 2001. Making the most of your company's Knowledge: a Strategic Framework. *Long Range Planning*. Vol. 34. No. 1, pp. 421 – 439.



- Wainright Martin, E., Brown, C.V., De Hayes, D. W., Hoffer, J.A. and Perkins, W.C. 2005. Managing information technology – what managers need to know. New Jersey: Prentice Hall.
- Ward, J. & Peppard, J. 2002. Strategic planning for information systems, third edition. New York: John Willey and Sons Ltd.
- Watson, G.H. 1993. Strategic benchmarking: How to relate your companies' performance against the world's best. New York: John Wiley.
- Weill, P. & Broadbent, M. 1998. Leveraging the new infrastructure: How market leaders capitalize on information technology. Boston: Harvard Business School Press.
- Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal*. Vol. 5, No.2, pp. 171 - 80.
- Wessels P., 2003. Justifying the investment in information systems, *South African Journal of Information Management*, Vol.5, No. 2, [Online] Available: <http://www.sajim.co.za/default.asp?to=peer4vol5nr2>, (Accessed: 17 April 2006).
- Westley, F., and Mintzberg, H. 1989. Visionary leadership and strategic management. *Strategic Management Journal*, Vol. 10, No. 1, pp. 17- 32.
- Weyrich, C. 1998. The meaning of Innovation. *Electronic News*, Vol. 44, No. 2206, pp. 8 - 9.
- Zack, M.H. 1999. Developing a knowledge strategy. *California Management Review*, Vol. 41, No. 3, pp. 125 - 145.
- Zack, M.H. 2001 Developing a knowledge strategy: epilogue. [Online] Available: <http://web.cba.neu.edu/~mzack/articles/kstrat2/kstrat2.htm> (Accessed: 7 July 2004).
- Zeleny, M. 1997. The fall of strategic planning. *Human Systems Management*, Vol. 16, No. 2, pp. 77 - 80.
- Zwass, V. 1998. Foundations of information systems. Boston: Irwin/McGraw-Hill.