APPENDICES

	1994	1995	1996	1997	1998	1999
Malaysia	17	21	23	17	20	27
Singapore	2	2	2	2	2	2
Thailand	23	26	30	29	39	34
Indonesia	31	33	41	39	40	46
Philippines	33	35	31	31	32	32
USA	1	1	1	1	1	1
UK	14	18	19	11	12	15
France	13	17	20	19	21	21
Germany	5	6	10	14	14	9
Japan	3	4	4	9	18	38
Korea	24	25	27	30	35	29
China	30	30	26	27	24	35
Brazil	38	37	37	33	37	33
Argentina	27	29	32	28	31	35

Appendix 1: Source: World Competitiveness Yearbooks 1994-1999

Year 1997 Countries	K-Skills Workforce (As % of total workforce)	R & D/GDP (%)	K-Skills in R & D (Per million population)
Malaysia	10.7	0.3	87
Singapore	26.4	1.4	2512
Korea	15.1	2.8	2636
Taiwan	15.5	1.9	3340
Japan	22.9	2.8	5677

Appendix 2: Source: NITC 1997

	Ownership	Annual Turnover	Average IT Investment
No of PCs	9.639 (0.648)	18.397 (0.104)	16.928 (0.152)
No of Servers	5.812 (0.121)	5.812 (0.121)	1.905 (0.592)
LAN Availability	1.556 (0.669)	1.316 (0.725)	3.241 (0.356)
Home Page	4.228 (0.238)	4.525 (0.210	1.659 (0.646)
All Users Internet Access	2.774 (0.428)	3.933 0.269	9.125 (0.028)

Values in parentheses ( ) indicate the significance level of each relationship

Appendix 3: Cross Tabulation of Organisational Characteristics and IT Infrastructures

	Ownership	Annual Turnover	Average IT Investment
Financial System	4.281 (0.639)	7.324 (0.292)	7.409 (0.285)
Human Resource System	5.447 (0.488)	14.944 (0.021)	1.223 (0.976)
Marketing Information System	11.197 (0.082)	4.349 (0.630)	12.618 (0.050)
Relational Database Management System	2.474 (0.871)	8.145 (0.228)	4.662 (0.588)
E-mail	0.758 (0.859)	3.077 (0.380)	3.533 (0.317)
Videoconferencing	7.658 (0.859)	5.237 (0.514)	11.296 (0.080)
Voice Mail	6.000 (0.423)	9.021 (0.172)	11.645 (0.070)
Electronic Fax	4.934 (0.552)	8.452 (0.207)	9.354 (0.155)
Decision Support Systems	8.194 (0.224)	4.923 (0.554)	7.040 (0.317)
Data warehousing	20.603 (0.002)	7.426 (0.283)	13.990 (0.030)
Data mining	21.400 (0.002)	8.712 (0.190)	16.239 (0.013)
Executive Information Systems	13.315 (0.038)	4.694 (0.584)	11.528 (0.073)
Document Management Systems	8.583 (0.198)	8.066 (0.233)	1.809 (0.936)
Knowledge Repositories	12.562 (0.051)	5.391 (0.495)	6.436 (0.376)
Groupware/Workflow	9.160 (0.165)	2.487 (0.870)	13.189 (0.040)

Appendix 4: Cross Tabulation Organisational Characteristics and IT Applications

		Perception on KMS Benefits	Perception on KMS Importance
Perception on KMS Benefits	Pearson Correlation	1.000	.601**
	Sig. (2-tailed)	.	0.000
	N	40	40
Perception on KMS Importance	Pearson Correlation	.601**	1.000
	Sig. (2-tailed)	.000	.
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Appendix 5: Correlation between Perceived Importance and Benefits of KMS

		Perception on KMS Importance	Perception on KMS Challenges
Perception on KMS Importance	Pearson Correlation	1.000	.037
	Sig. (2-tailed)	.	.822
	N	40	40
Perception on KMS Challenges	Pearson Correlation	.037	1.000
	Sig. (2-tailed)	.822	.
	N	40	40

Appendix 6: Correlation between Perceived Importance and Challenges of KMS

			Require KMS-Non Exec		Total
			Yes	No	
Benefits KMS-Non Exec	Yes	Count	18	2	20
		% within Benefits KMS- Non Exec	90.0%	10.0%	100.0%
		% within Require KMS- Non Exec	85.7%	10.5%	50.0%
	No	Count	3	17	20
		% within Benefits KMS- Non Exec	15.0%	85.0%	100.0%
		% within Require KMS- Non Exec	14.3%	89.5%	50.0%
Total		Count	21	19	40
		% within Benefits KMS- Non Exec	52.5%	47.5%	100.0%
		% within Require KMS- Non Exec	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	22.556	1	.000		
N of Valid Cases	40				

a) Computed only for a 2x2 table

b) 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.50.

Appendix 7: Cross-tabulation of Categories of Employees Requiring and Benefiting from KMS.

Appendix 8: Knowledge Management System Questionnaire

DEFINITION: Organisational Knowledge Management System has been defined as "a system that provides for the creation of new knowledge, the assembly of externally created knowledge, the use of existing knowledge, and the finding of knowledge from internal and external sources". Further, the technical perspective holds that it is an advanced assembly of software and its associated hardware infrastructures (Meso and Smith, 2000). With this definition in mind, we would appreciate if you could spend some time responding to the questions contained herein.

INSTRUCTIONS: Please answer the questions to the best of your knowledge. There is no right or wrong answer. We are interested in your opinion on the issues. All answers will be treated with high confidentiality and will be used for research only.

SECTION A: ORGANISATION CHARACTERISTICS

1   Core Business: _____

2   a) Number of employees: _____

    b) Number of IT personnel: _____

3   Percentage of employees in the following categories (based on positions held):

          Managerial _____ %

          Executive _____ %

       Non-Executive _____ %

4   Number of offices/branches/subsidiaries outside Malaysia: _____

5   Ownership:

    ☐ 100% local   ☐ 1- 49% local (Majority foreign)

    ☐ 50 – 99% local   ☐ 100% foreign

    If local, what is the percentage of Bumiputera shareholding? _____ %

6   Annual turnover or revenue:

    ☐ Less than RM 500,000   ☐ RM 1 million – RM 10 million

    ☐ RM 500,000 – RM 999,999   ☐ More than RM 10 million

7   Average Annual IT investment:

    ☐ Less than RM 200, 000   ☐ RM 500,000 – RM 1,000,000

    ☐ RM 200,000 – RM 499,999   ☐ More than RM 1,000,000

SECTION B: INFORMATION TECHNOLOGY

Infrastructures

8   a) Number of personal computers (PCs): _____

    b) Number of servers: _____

9   Do you have local area network (LAN)? ☐ Yes   ☐ No

10 Do you have Internet connection? ☐ Yes   ☐ No

    If yes, please specify your web site: _____

11 Do all users have access to the Internet? ☐ Yes   ☐ No

Applications and Tools

12 Is your organisation currently using any of the following applications or tools? Please tick the appropriate box for each category.

		Using	Intend To	Do not Intend
a.	**Operational Systems**			
	Financial System			
	Human Resource System			
	Marketing Information System			
b.	**Relational Database Management System**			
c.	**Messaging Systems**			
	E-mail			
	Videoconferencing			
	Voice Mail			
	Electronic Fax			
d.	**Business Intelligence Systems**			
	Decision Support Systems			
	Data warehousing			
	Data mining			
	Executive Information Systems			
e.	**Other Systems**			
	Document Management Systems			
	Knowledge Repositories			
	Groupware/Workflow			

SECTION C: BENEFITS OF KMS

13   Please tick any box that would best represent your opinion for **each** of the following benefits of KMS

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Enhance communication within the organisation					
Facilitate faster internal and external communication					
Increase staff participation					
Reduce problem-solving time					
Facilitate faster access and retrieval to information					
Better decision making results					
Reduce operational errors and rework					
Increase revenue					
Decrease in overhead cost					
Facilitate higher profitability					
Better customer services					

SECTION D: CHALLENGES OF KMS

14 Similarly, tick any box below to indicate your opinion for **each** of the following challenges of KMS.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Identifying the right knowledge					
Mapping KMS solutions to organisation's requirements					
New sets of skills and knowledge are required					
Enhancing knowledge sharing culture among employees					
Employees are reluctant to share knowledge with others					
Rewarding employees to minimise knowledge "walkouts"					
Collaborating intelligence from different functions and areas					
Catching-up with information technologies advances					
Dealing with security issue					
High infrastructures costs					
Gathering external knowledge and information					

SECTION E: IMPORTANCE AND INITIATIVES OF KMS

15 Please tick any box below to indicate your opinion for **each** of the following importance of KMS to your organisation.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Enabler of knowledge sharing among employees of all levels					
Foundation of a knowledge-based organisations					
Transformation tool towards a learning organisation					
An instrument of managing knowledge and stimulating learning					
A strategic management instrument					
A source of competitive advantage					

16 Please rate the importance of **each** following types of knowledge to your company by ticking the appropriate box.

	Very Not Important (1)	Not Important (2)	Neutral (3)	Important (4)	Very Important (5)
Customers					
Company's own markets, products and services					
Competitors					
Employee skills					
Regulatory environments					
Methods and processes					

17 Which categories of employees require KMS? (You may tick more than 1 box)

Managerial	
Executive	
Non-Executive	

18   Consequently, who will benefit from KMS? (You may tick more than 1 box)

Managerial	
Executive	
Non-Executive	

19   KMS initiatives in your company: (You may tick more than 1 box)

KM training/awareness	
Create KM strategy	
Benchmark/audit current situation	
Developing/measuring intellectual capital	
Establishment of formal KM network	
Incentives and rewards for knowledge sharing	

20   In your opinion, who should initiate KMS implementation in your company? (You may tick more than 1 box)

Senior level general management (CEO, COO, CFO, Senior VP, etc.)	
Senior functional managers (eg. Director of Marketing, Operations)	
Director of IT/IS	
Staff members	

21   In your opinion, is your company ready for the upcoming K-Economy?   **YES / NO**

If no, why?

_____

_____

_____

_____

_____

_____

You have now completed the questionnaire. Thank you for your time and cooperation.