

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE INFLUENCE OF ENGLISH COMPETENCY AND
COMMUNICATION CHANNEL SELECTION
IN KNOWLEDGE SHARING:
THE CASE OF A TYRE MANUFACTURING COMPANY**



**MASTER OF SCIENCE MANAGEMENT
UNIVERSITI UTARA MALAYSIA
SEPTEMBER 2017**

**THE INFLUENCE OF ENGLISH COMPETENCY AND
COMMUNICATION CHANNEL SELECTION
IN KNOWLEDGE SHARING:
THE CASE OF A TYRE MANUFACTURING COMPANY**



Thesis submitted to
**Othman Yeob Abdullah Graduate School of Business,
Universiti Utara Malaysia, in Partial Fulfillment of the Requirement for the
Master of Science (Management)**



Othman Yeop Abdullah
Graduate School of Business
Universiti Utara Malaysia

PERAKUAN KERTAS KERJA PROJEK

(*Certification of Project Paper*)

Saya, mengaku bertandatangan, memperakukan bahawa

(*I, the undersigned, certified that*)

FATHIN FATHIHA BT. AHMAD (811028)

Calon untuk Ijazah Sarjana

(*Candidate for the degree of*)

MASTER OF SCIENCE (MANAGEMENT)

telah mengemukakan kertas projek yang bertajuk

(*has presented his/her project paper of the following title*)

**THE INFLUENCE OF ENGLISH COMPETENCY AND COMMUNICATION CHANNEL
SELECTION IN KNOWLEDGE SHARING: THE CASE OF TYRE MANUFACTURING
COMPANY**

Seperti yang tercatat di muka surat tajuk dan kulit kertas projek

(*as it appears on the title page and front cover of the project paper*)

Bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.

(*that the project paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the project paper*).

Nama Penyelia : **DR. HAZLINDA BT. HASSAN**

(*Name of Supervisor*)

Tandatangan :

(*Signature*)

Tarikh :

(*Date*)

Permission to use

In presenting this dissertation in partial fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library make a freely available for inspection. I further agree that permission for copying of this dissertation in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence by the Dean of Othman Yeop Abdullah Graduate School of Business. It is understood that any copying or publication or use of this dissertation or parts thereof for financial gain shall not be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my dissertation.

Request for permission to copy or make other use of materials in this dissertation, in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman



ABSTRACT

Knowledge sharing has been regarded as key to long term organizational success. Recent trend in the field of strategic management has been to emphasize the role of organizational knowledge as a basis for competitive advantage of particular organizations. Therefore, the study is conducted related to knowledge sharing activities in organization and the factors that influence the process. Specifically, the main objective of the study is to examine the influence of English competency and communication channel selection on knowledge sharing among employees. The research was conducted quantitatively and 133 questionnaires were gathered from employees in tyre industry organization in Malaysia. Several tests such as Multiple Linear Regression, Independent Sample T-Test and One-Way ANOVA were performed to address the research objectives. The result shows that knowledge sharing was positively influenced by English competency and communication channel selection. It can be concluded that English competency and communication channel selection play an important role in determining the success of knowledge sharing among employees. Apart from that, knowledge sharing activities were found significantly differs between gender, nationality and among job position. The study contributes to better understanding in knowledge sharing and gives alternatives for improved practices in future.

Keywords: Knowledge sharing, English competency, Communication channel selection



ABSTRAK

Perkongsian ilmu merupakan salah satu kunci kejayaan jangka masa panjang bagi sebuah organisasi. Dalam bidang pengurusan strategik telah menekankan peranan pengetahuan organisasi sebagai asas persaingan positif kepada organisasi tertentu. Jadi, kajian yang dijalankan ini berkaitan dengan aktiviti-aktiviti perkongsian pengetahuan dalam organisasi dan faktor-faktor yang mempengaruhi proses tersebut. Secara khususnya, objektif utama kajian ini adalah untuk mengkaji kesan kebolehan berbahasa Inggeris dan pemilihan saluran komunikasi terhadap perkongsian pengetahuan dalam kalangan para pekerja. Kajian ini dijalankan secara kuantitatif dan sebanyak 133 kaji selidik dikumpul daripada para pekerja di organisasi tayar industri di Malaysia. Bagi menjawab objektif-objektif kajian, beberapa ujian seperti *Multiple Linear Regression*, *Independent Sample T-Test* dan *One-way ANOVA* telah dijalankan. Keputusan menunjukkan bahawa kebolehan berbahasa Inggeris dan pemilihan saluran komunikasi mempengaruhi perkongsian pengetahuan secara positif. Ini boleh disimpulkan bahawa kebolehan berbahasa Inggeris dan pemilihan saluran komunikasi memainkan peranan penting dalam kejayaan perkongsian ilmu dalam kalangan para pekerja. Selain itu, dapatan mencadangkan bahawa usaha bagi meningkatkan program perkongsian ilmu perlu direkabentuk berdasarkan jantina, kewarganegaraan dan jawatan kerja. Kajian ini turut memberi pemahaman yang lebih mendalam di dalam perkongsian ilmu serta memberi alternatif yang lebih baik di masa hadapan.

Kata kunci: Perkongsian ilmu, Kebolehan berbahasa Inggeris, Pemilihan saluran komunikasi

Acknowledgement

I want to express my gratitude to people upon completion of the dissertation. I am deeply grateful to Dr. Hazlinda bt. Hassan, my supervisor for giving invaluable support, advice, guidance, dedication, many discussions, constructive comments and suggestions in completing this dissertation.

To my loving and supporting husband, Mohd Hafiez Afifi b. Mohd Helmi, my beloved parents, Ahmad b. Chik and Che Puan bt. Ahmad, my parents-in-law, Mohd Helmi b. Hassan and Hasniah bt. Kassim, thank you for all your prayers, patience, support and word of encouragement for me to keep going till the final end of this journey.

Finally, yet importantly, I would like to express my gratitude to all respondents from tyre industry organization in Malaysia for their involvement in this study. Without their sincere participation, this study will not be as successful as today.

TABLE OF CONTENTS

PERMISSION TO USE	i
ABSTRACT	ii
ABSTRAK	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF APPENDICES	x
LIST OF ABBREVIATIONS	xi



CHAPTER 1: INTRODUCTION

1.1	Research Background.....	1
1.2	Problem Statement	10
1.3	Research Questions and Research Objectives.....	18
1.4	Scope of the Study.....	19
1.5	Relevance of the Study.....	19

CHAPTER 2: LITERATURE REVIEW

2.1	Introduction	21
2.2	Knowledge Sharing	21
2.3	English Competency.....	23
2.4	Communication Channel Selection	25
2.5	Relationship between English Competency and Knowledge Sharing	27

2.6	Relationship between Communication Channel Selection and Knowledge Sharing.....	30
2.7	Theoretical Framework of the Study.....	33
2.8	Theoretical Background – Social Exchange Theory	33
2.9	Research Hypothesis	36

CHAPTER 3: METHODOLOGY

3.1	Introduction	37
3.1	Research Design	37
3.2	Population, Sample, and Unit of Analysis	37
3.3	Sampling Design	38
3.4	Data Sources.....	38
3.5	Data Collection Methods.....	38
3.6	Questionnaires Design and Measurement	38
3.7	Data Analysis	40
	3.7.1 Reliability Analysis	41
	3.7.2 Descriptive Analysis.....	41
	3.7.3 Multiple Linear Regression.....	42
	3.7.4 Independent Sample Test	42
	3.7.5 One-way ANOVA.....	42

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1	Introduction	43
4.2	Sample of Study	43
4.3	Demographic Background.....	43

4.4	Demographic Characteristics	43
4.5	Reliability Analysis	45
4.6	Descriptive Analysis on Data Distribution.....	46
4.7	Hypothesis Testing.....	48
	4.7.1 Multiple Linear Regression	48
	4.7.2 Independent Sample T-Test.....	49
	4.7.3 One-way ANOVA.....	52
4.8	Summary of Hypothesis Results	53

CHAPTER 5: DISCUSSION, CONCLUSIONS AND SUGGESTIONS

5.1	Introduction	54
5.2	Discussion of Findings	54
	5.2.1 RO1: English Competency and Knowledge Sharing	54
	5.2.2 RO2: Communication Channel Selection and Knowledge Sharing.....	55
	5.2.3 RO3: Employees Gender of Male and Female in Knowledge Sharing.....	56
	5.2.4 RO4: Difference of Knowledge Sharing by Nationality	57
	5.2.5 RO5: Difference of Knowledge Sharing by Races	58
	5.2.6 RO6: Difference of Knowledge Sharing by Job Position	58
5.3	Conclusions	60
5.4	Research Implications	61
5.5	Limitation and Suggestion for Future Research.....	62
References	63
Appendix	68

LIST OF TABLES

Table 2.1	Literature review matrix of researchers whose conducted studies on the English competency with knowledge sharing.....	28
Table 2.2	Literature review matrix of researchers whose conducted studies on communication channel selection with knowledge sharing.....	31
Table 3.1	Summary of variable measurement used in survey questionnaire.....	38
Table 3.2	Operational definition and measurement of variables summary.....	39
Table 3.3	Cronbach's alpha reliability coefficient range.....	40
Table 4.1	Demographic of participant's characteristic.....	43
Table 4.2	Cronbach's alpha value for the variables.....	44
Table 4.3	Descriptive statistic for all variables.....	46
Table 4.4	Correlation result.....	47
Table 4.5	Multiple linear regression result.....	48
Table 4.6	Knowledge sharing by gender.....	49
Table 4.7	Knowledge sharing by nationality.....	49
Table 4.8	One-way ANOVA result for races and job position.....	50
Table 4.9	Post hoc test result for job position of knowledge sharing between employees.....	51
Table 4.10	Summary of hypotheses result.....	51

LIST OF FIGURES

Figure 1.1 Organizational culture framework	5
Figure 2.1 Theoretical framework of the study.....	32
Figure 4.1 Frequency of language used in daily work by employees.....	44



LIST OF APPENDICES

Appendix A: Cover Letter for Survey.....	66
Appendix B: Survey Questionnaire (Malay version).....	67
Appendix C: Survey Questionnaire (English version).....	71
Appendix D: Table for determining sample size of a known population	75
Appendix E: Pearson Correlation result.....	76
Appendix F: Multiple linear regression result for English competency	77
Appendix G: One-way ANOVA result for races	78
Appendix H: One-way ANOVA result for job position	79



LIST OF ABBREVIATION

Abbreviation	Definition
ANOVA	Analysis of variance
DV	Dependent variable
HRM	Human resource management
HSD	Honestly significant difference
ICC	Information and communication channel
ICT	Information and communication technologies
IV	Independent variable
HQ	Headquarter
SECI	Socialization, externalization, combination and internalization
SPSS	Statistical package for the social sciences
UUM	Universiti Utara Malaysia

CHAPTER 1

INTRODUCTION

1.1 Research Background

Knowledge is defined as a combination of experience, values, contextual information and expert insight that help evaluate and incorporate new experience and information (Gammelgaard & Ritter, 2000). Knowledge is important key in business where it has become one of resources to organization. Knowledge exploitation is the key source of competitive advantage for organizations (Marouf, 2016).

The resource (knowledge), if managed well by organization, can be one of the strategic moves in business. The distribution of knowledge resources would be successful if the required knowledge at the right time is received by the right people take right action (Al-Hosani, 2011). Organizations are being competitive in this challenging industry, and knowledge can play its role to strengthen the business.

According to Al-Hosani (2011), knowledge is regarded as set of tools, skills, rules, procedures, data, technique and concepts that is embedded in people or process or routine in organization. This is similar to knowledge definition which defined as an organized body of data, information, skills and expertise for the purpose to create new information when carrying out task (Hamid, 2015). Daud (2010) also defined knowledge as experience, values, contextual information and expert insight. Furthermore, Nonaka and Takeuchi (1995) defined knowledge as a dynamic human process of justifying personal belief toward the truth.

Somehow, there are researchers that defined knowledge and information differently, thus might have different interpretation. Information is defined as a set of meaningful facts in

The contents of
the thesis is for
internal user
only

References

- Al-Alawi, A., Al-Marzooqi, Y., & Mohammed, Y. F. (2007). Organization culture and knowledge sharing: critical success factors. *Journal of Knowledge Management*, 11(2), 22-42.
- Alawamleh, H. S., & Kloub, M. A. (2013). Impact of organizational structure on knowledge management in the Jordanian insurance companies: from the perspective of the supervisory leadership. *International Journal of Business and Social Science*, 4(11), 82-95.
- Al-Hosani, A. A. (2011). *Job satisfaction and knowledge sharing in oil and gas industry: Case of ADNOC company, Abu Dhabi* (Master thesis, The British University, Dubai). Retrieved from <https://bspace.buid.ac.ae/bitstream/1234/259/1/70033.pdf>.
- Anasi, S. N., Akpan, J. I., & Adedokun, T. (2014). Information and communication technologies and knowledge sharing among librarians in south-west Nigeria. *Library Review*, 63, 352-369.
- Annadatha, J. V. (2012). Sociocultural factors and knowledge sharing behaviors in virtual project teams. *Robert Morris University*, (Doctor of Science, Robert Morris University, India). Retrieved from <https://pqdtopen.proquest.com/doc/1095406893.html?FMT=ABS>.
- Argote, L., & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes*, 82(1), 150-169.
- Bernard, R. H. (2013). *Social research methods qualitative and quantitative approaches*. United States: Vicki Knight.
- Bisen, V. P. (2009). *Business Communication*. Lucknow: New Age International.

- Blanc, B. L., & Boiillon, J.-L. (2012). Organizational Devices for Knowledge Management. *The Journal of Information and Knowledge Management Systems*, 42, 382-395.
- Boslaugh, S. (2005). *An intermediate guide to SPSS programming using Syntax for data management*. United States: Sage Publications.
- Courtney, L., & Anderson, N. (2009). Knowldge transfer between Australia and China. *Journal of Knowledge-based Innovation in China*, 1(3), 206-225.
- Eisinga, R., Grotenhuis, M., & Pelzer, B. (2012). The reliability of a two-item scale: Pearson, Cronbach or Spearman-Brown?. *International Journal of Public Health*, 58, 637-642.
- Fatemeh, N. (2014). Success factors of inter-organizational knowledge sharing: A proposed framework. *Journal of Knowledge Management*, 32(2), 239-261.
- Fiske, J. (2010). *Introduction to communication studies*. London; New York: Routledge.
- Fowler, Floyd J. (2014). *Survey Research Methods*. United States; Sage Publications.
- Gammelgaard, J., & Ritter, T. (2000). *Knowledge retrieval process in multinational consulting firms*. Retrieve from https://www.researchgate.net/publication/265535920_Knowledge_Retrieval_Processes_in_Multinational_Consulting_Firms.
- George, D., & Mallery, P. (2003). *SPSS for windows step-by-step: A simple guide and reference 11.0 update*. United States: Pearson Education (US).
- Grauss, R. (2012). The impact of race on knowledge sharing barriers. *Tillburg School of Organisational and Behavioural Sciences*, 1, 5-53.
- Gruber, H.-G. (2000). Does organizational culture affect the sharing of knowledge? The case of a department in a high technology company. *National Library of Canada*, 1, 217.
- Gumus, M. (2007). The Effect of Communication on Knowledge Sharing in Organizations. *Journal of Knowledge Management Practice*, 8(2), 15-26.
- Gupta, A. K., & Govindarajan, V. (2000). Knowledge Management Social Dimension: Lessons from Nucor Steel. *Sloan Management Review*, 42(1), 71-81.

- Guthrie, J. P. (2001). High-involvement work practices, turnover and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180-190.
- Hair, J. F., Wolfinbarger, M., Money, A. H., Samouel, P., & Page, M. J. (2011). Essentials of business research methods. *Library of Congress Cataloging*, 2, 352.
- Heath, A. (1976). *Rational choice and social exchange: A critique of exchange theory*. Cambridge: Cambridge University Press.
- Islam, M. Z., Ahmed, S. M., Hasan, I., & Ahmed, S. U. (2011). Organizational culture and knowledge sharing: Empirical evidence from service organizations. *Journal of Business Management*, 5(14), 5900-5909.
- Lauring, J., & Selmer, J. (2011). Multicultural Organizations: Common Language Sharing and Performance. *Personnel Review*, 40(3), 324-343.
- Lee, S., Dahui, L., & Merrier, P. (2010). The effects of utilitarian and Hedonic attributes on voluntary media selection: The case of messaging tools. *Journal of International Technology and Information Management*, 19(2), 57-77.
- Li, W. (2010). Virtual knowledge sharing in a cross-cultural context. *Journal of Knowledge Management*, 14, 38-50.
- Lin, H.-F. (2007). Knowledge sharing and firm innovation capability: An empirical study. *International Journal of Manpower*, 28, 315-332.
- Maki, E., Jarvenpaa, E., & Ziegler, K. (2005). Communication and Knowledge Sharing in a Decentralized Organization. *Department of Industrial Engineering*, 1, 1-10.
- Marouf, L. (2016). The role of knowledge sharing culture in business performance. *Journal of Information and Knowledge Management Systems*, 46(2), 154-174.
- Miller, D. L., & Karakowsky, L. (2005). Gender influences as an impediment to knowledge sharing: When men and women fail to seek peer feedback. *The Journal of Psychology*, 139(2), 101-118.

- Ojha, A. K. (2005). Impact of team demography on knowledge sharing in software project teams. *South Asian Journal of Management*, 12(3), 67-78.
- Peltokorpi, V., & Vaara, E. (2014). Knowledge transfer in multinational corporations: Productive and counterproductive effects of language-sensitive recruitment. *Journal of International Business Studies*, 45, 600-622.
- Ramayah, T., Yeap, J. A., & Ignatius, J. (2012). Assessing knowledge sharing among academics: A validation of the knowledge sharing behavior scale (KSBS). *Sage Publications*, 38(2), 160-187.
- Schomaker, M. S. (2006). *Knowledge transfer in multinational enterprises: A language and information processing view* (Doctor of Philosophy, University of Minnesota, United States). Retrieved from <https://search.proquest.com.eserv.uum.edu.my/docview/305305479/88DD2FD3859D4103PQ/2?accountid=42599>.
- Snyder, J., & Lee-Partridge, J. E. (2013). Understanding Communication Channel Choices in Team Knowledge Sharing. *Corporate Communications: An International Journal*, 18(4), 417-431.
- Steiger, J. S., Hammou, K. A., & Galib, M. H. (2014). An examination of the influence of organizational structure types and management levels on knowledge management practices in organizations. *International Journal of Business and Management*, 9(6), 43-57.
- Tingoi, O., & Efiloglu, O. (2009). Coomunication in knowledge management practice: a survey from Turkey. *Problems and Perspectives in Management*, 7(2), 46-52.
- Wei, K. (2009). *National culture in practice: Its impact on knowledge sharing in global virtual collaboration* (Doctor Philosophy, The Graduate School of Syracuse University, China). Retrieved from <https://search.proquest.com/docview/521702084/pq-origsite=gscholar>.

- West, R., & Turner, L. H. (2008). Understanding Interpersonal Communication: Making Changes in Changing Time. *Wadsworth Cengage Learning*, 2, 12-13.
- Xiangyi, L., & Qingpu, Z. (2007). *Optimization of knowledge Sharing & Transfer Network*. China: Harbin Institute of Technology.
- Yan, Z., Wang, T., Chen, Y., & Zhang, H. (2016). Knowledge sharing in online health communities: A social exchange theory perspective. *Information and Management*, 53(5), 643-653.
- Zin Aris, A. Z. (2014). *Examining relationship between individual, organizational factor and knowledge sharing behavior* (Master of Science, Universiti Utara Malaysia, Malaysia). Retrieved from <http://etd.uum.edu.my/4128/>.



Appendix

Appendix A: Cover Letter for Survey

Continental Tyre AS Malaysia Sdn. Bhd.,
No. 1, Jalan Tunku Abdul Rahman,
P.O Box 100, Mergong,
05710 Alor Setar, Kedah.

1st Feb 2017

Subject: Survey

Dear Respondent,

I, Fathin Fathiha Ahmad, a student of Master of Science (Management) in Universiti Utara Malaysia's is presently conducting a research relating to knowledge sharing factors among employees in Continental Tyre AS Malaysia Sdn. Bhd. Knowledge sharing is a practice where people working together exchange their valuable information with each other.

The research is being undertaken for a dissertation in School of Business, under supervision of Dr. Hazlinda Hassan. The purpose of the study is to examine the influence of English competency and communication channel selection on knowledge sharing.

The research consists of survey, where the questions will be asking related to daily used language and selection of communication channel in sharing knowledge between employees and general information of knowledge sharing understanding.

Please be assured that your individual responses to the survey will be kept strictly confidential and any result will be represented as a summary of respondents. If you have any question or concern, kindly contact me, Fathin Fathiha Ahmad at phone: +6012-6598363 and e-mail: fathin.fathiha@yahoo.com.

Thank you in advance for your help.

Regards,
Fathin Fathiha Ahmad
Master of Science (Management)
Universiti Utara Malaysia



Appendix B: Survey Questionnaire (Malay version)

Versi Bahasa Malaysia

Bahagian A: Informasi Umum

Arahan: Sila isikan informasi umum anda dengan menandakan (X) dalam kotak yang berkaitan.

1. Jantina : Lelaki Perempuan
2. Jawatan : Pengurus/ Ketua Eksekutif/ Jurutera
Penyelia Operator
3. Tahun berkhidmat : 0-5 tahun 6-12 tahun
13-20 tahun 21 tahun dan ke atas
4. Warganegara : Malaysia Bukan warganegara
5. Bangsa : Melayu China
India Lain-lain (sila nyatakan): _____
6. Berdasarkan pilihan Bahasa dibawah, sila nyatakan 2 bahasa yang paling kerap anda gunakan dengan rakan sekerja anda dalam kerja (1=bahasa ibunda/harian, 2=bahasa kedua).
- Bahasa Inggeris
- Melayu
- Tamil
- Mandarin
- Lain-lain (sila nyatakan): _____

Bahagian B: Kebolehan Bahasa Inggeris

Arahan: Penilaian di bahagian ini adalah bertujuan untuk menilai kebolehan bahasa Inggeris pekerja yang digunakan dalam kerja seharian. Sila tandakan jawapan anda (X) di dalam kotak berkaitan berdasarkan skala di bawah.

Sangat tidak bersetuju	Tidak bersetuju	Neutral	Bersetuju	Sangat bersetuju
1	2	3	4	5

	1	2	3	4	5
1. Saya boleh membaca dan memahami kebanyakan penulisan dalam bahasa Inggeris.					
2. Saya boleh menulis dalam bahasa Inggeris dengan mudah.					
3. Saya boleh bertutur dalam bahasa Inggeris dengan yakin.					
4. Saya sangat yakin dengan kebolehan saya menulis dalam bahasa Inggeris dengan betul.					
5. Saya boleh memahami rakan sekerja bercakap bahasa Inggeris dengan agak baik.					
6. Kebolehan saya dalam bahasa Inggeris membolehkan saya menghadapi hampir semua situasi yang memerlukan saya menggunakan bahasa tersebut.					
7. Saya selesa apabila perlu berbahasa Inggeris dalam perbualan telefon.					
8. Saya berasa selesa apabila berjumpa dan bercakap dengan rakan sekerja dalam bahasa Inggeris.					
9. Saya bercakap bahasa Inggeris dengan orang atasan dengan bersahaja.					

Bahagian C: Pemilihan Saluran Komunikasi

Arahan: Bahagian ini bertujuan menilai kemahiran pekerja dalam pemilihan saluran komunikasi dalam kerja seharian. Sila tandakan jawapan anda dengan (X) berdasarkan skala yang dinyatakan di Bahagian B.

	1	2	3	4	5
1. Syarikat selalu mengeluarkan buletin bulanan untuk diedarkan kepada para pekerja bagi tujuan pengetahuan.					
2. Bagi saya perjumpaan secara terus membantu mengelakkan salah faham dalam pertukaran maklumat.					
3. Pengalaman bekerja adalah lebih baik dikongsikan semasa mesyuarat atau perjumpaan sosial dengan rakan sekerja.					
4. Kerjasama atau kerja berkumpulan membolehkan maklumat dikongsi bersama-sama.					
5. Saya berkongsi maklumat melalui mesej atau perbualan telefon.					
6. Perisian sosial dan alat komunikasi yang mempunyai kemudahan menyimpan informasi dan maklumat digunakan di syarikat saya.					
7. Kebanyakan maklumat dikongsikan melalui emel.					

Bahagian D: Perkongsian Maklumat

Arahan: Bahagian ini bertujuan menilai pengetahuan perkongsian maklumat dalam kerja sehari-hari anda. Sila tandakan jawapan anda dengan (X) berdasarkan skala yang dinyatakan di Bahagian B.

	1	2	3	4	5
1. Saya selalu menyumbang idea dan pemikiran dalam mesyuarat.					
2. Saya aktif mengambil bahagian semasa aktiviti sumbang saran.					
3. Saya selalu bertanya dan menjawab soalan dalam perbincangan kumpulan.					
4. Pada pendapat saya, kisah kejayaan yang boleh memberi manfaat kepada organisasi patut dikongsi bersama rakan sekerja.					
5. Adalah menjadi keutamaan untuk berkongsi maklumat kegagalan atau kesilapan yang berkait dengan kerja agar dapat memberi pengajaran.					
6. Saya bersemangat membuat perbentangan dalam mesyuarat.					
7. Saya selalu membantu pekerja yang kurang berpengalaman membuat kerja baru.					
8. Saya akan membantu apabila rakan sekerja meminta bantuan (berkaitan kerja).					
9. Adalah menjadi kemestian setiap pekerja dalam jabatan untuk sentiasa mengemaskini maklumat untuk satu sama lain.					
10. Saya tidak keberatan meluangkan masa untuk membantu rakan sekerja dengan masalah yang berkaitan dengan kerja.					
11. Saya selalu berkongsi pengalaman yang boleh membantu mengelakkan risiko dan masalah.					
12. Saya suka terlibat dalam melatih pekerja baru untuk jangka masa panjang.					

Appendix C: Survey Questionnaire (English version)

English version

Section A: General Information

Instruction: Please fill in your general information by tick (X) in the appropriate box.

1. Gender : Male Female

2. Position : Manager/ Head Executive/ Engineer
Supervisor Operator

3. Years of working experience : 0-5 years 6-12 years
13-20 years 21 years and above

4. Nationality : Malaysian Expatriate

5. Race : Malay Chinese
Indian Others (please state): _____

6. Based on below language selection, please rate **TWO (2)** most languages used in daily communication with your college (1=native/daily language, 2=second language).

English

Malay

Tamil

Mandarin

Others (please state): _____

Section B: English Competency

Instruction: The purpose of this section is to assess the skill of employees regarding English competency in daily work. Please tick (X) in the appropriate box to represent your answer based on scale below.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

	1	2	3	4	5
1. I am capable of reading and understanding most texts in English.					
2. I know enough English to be able to write comfortably.					
3. I know enough English to speak confidently.					
4. I am very confident in my ability to write English correctly.					
5. I can understand my colleague speaking English quite well.					
6. My knowledge of English allows me to cope with most situations where I have to use that language.					
7. When I have to speak in English on the phone, I feel comfortable.					
8. Every time that I meet my colleague and speak with him/her in English, I feel at ease.					
9. I am relaxed when I speak English with my superior.					

Section C: Communication Channel Selection

Instruction: The purpose of this section assessment is to assess the knowledge of employees regarding communication channel selection in your daily work. Please tick (X) to represent your answer based on scale described in Section B.

	1	2	3	4	5
1. The company is keen on monthly bulletins for distribution of applications of knowledge workers.					
2. In person networking or face-to-face meeting helps me avoid miscommunication in information exchange.					
3. Personal experiences are better shared during meeting or socialization with college.					
4. Collaboration or working together in team enables knowledge sharing with each other.					
5. I share knowledge through messaging or chat.					
6. Social software and communication tools which support information and knowledge collection are used in our company.					
7. Most of my knowledge sharing is through emails.					

Section D: Knowledge Sharing

Instruction: The purpose of this section assessment is to assess your understanding in knowledge sharing activities in daily work. Please tick (X) to represent your answer based on scale described Section B.

	1	2	3	4	5
1. I always express ideas and thoughts in meetings.					
2. I actively participate in brainstorming sessions.					
3. I always ask and answer questions during team discussion.					
4. In my opinion, success stories that may benefit the organization should be shared together with colleges.					
5. It is important to share work-related failures or mistakes in meeting as lesson learned.					
6. I eagerly make presentation in department meetings.					
7. I always support less-experienced colleges to do new things.					
8. When my college ask for help (work related), I never say no.					
9. It is a tradition for our department members to keep each other updated with important information.					
10. I don't mind spending time to help my colleges with their work-related problems.					
11. I always share experiences that may help others avoid risks and trouble.					
12. I enjoy engaging in long-term coaching the junior college.					

Appendix D: Table for determining sample size of a known population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population size; S is Sample size

Source: Krejcie & Morgan (1970)



Appendix E: Pearson Correlation result

Correlations

		EC2	CCS2	KS2
EC2	Pearson Correlation	1	0.576 **	0.519 **
	Sig. (2-tailed)		0.000	0.000
	N	133	133	133
CCS2	Pearson Correlation	0.576 **	1	0.612 **
	Sig. (2-tailed)	0.000		0.000
	N	133	133	133
KS2	Pearson Correlation	0.519 **	0.612 **	1
	Sig. (2-tailed)	0.000	0.000	
	N	133	133	133

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



Appendix F: Multiple linear regression result for English competency

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.645 ^a	.416	.407	.49586

a. Predictors: (Constant), CCS2, EC2

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.751	2	11.376	46.265	.000 ^a
	Residual	31.964	130	.246		
	Total	54.715	132			

a. Predictors: (Constant), CCS2, EC2

b. Dependent Variable: KS2

Coefficients^a

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			
1	(Constant)	1.354	.256		5.296	.000
	EC2	.145	.048	.249	3.030	.003
	CCS2	.452	.079	.469	5.714	.000

a. Dependent Variable: KS2

Appendix G: One-way ANOVA result for races

Knowledge Sharing									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Group Variance
					Lower Bound	Upper Bound			
Malay	85	3.5421	.03489	.00219	3.4189	3.6653	2.92	4.62	
Chinese	16	3.7938	.03040	.00601	3.6597	4.0173	3.25	4.42	
Indian	7	3.4943	.54513	.19242	2.9593	3.9294	2.85	4.25	
Other	6	3.5071	.30501	.10800	3.6236	4.0366	3.25	4.33	
Total	132	3.5318	.06893	.00562	3.4846	3.7053	2.90	4.87	
Model:	Fixed Effects								
	Random Effects								
									.06429

Test of Homogeneity of Variances

Knowledge Sharing

Levene Statistic	d.f.	p.v.	Sig.
3.830	3	1.20	.058

ANOVA

Knowledge Sharing

	Degrees of Freedom	d.f.	Mean Square	F	Sig.
Between Groups	1,493	3	.494	1.130	.313
Within Groups	88.392	128	.418		
Total	89.715	132			

Appendix H: One-way ANOVA result for job position

Descriptives									
Knowledge Scoring									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean				Between-Component Variance
Managerial	24	3.8158	.87235	.10593	3.5703	4.8413	2.25	4.68	
Generalization	44	3.7473	.82457	.04465	3.0526	4.4123	1.57	4.55	
Supervisor	31	3.6760	.86374	.12553	3.2174	4.8356	1.35	4.87	
Operator	38	3.2168	.88026	.12874	2.2827	3.4743	2.23	4.68	
Total	138	3.6848	.74551	.03553	3.4243	3.7013	2.00	4.87	
Beta	Plant Effects				20.728	39.028	34.015	33.863	
	Random Effects				104.27	313.295	6.5549		.03028

81

Test of Homogeneity of Variances

Hypotheses Scoring

Levene Statistic	d.f.	Sig.	Sig.
3.323	3	0.03	.003

ANOVA

Hypotheses Scoring

	SUM of Squares	df	Mean Square	F	Sig.
Between Groups	7.969	3	2.659	6.212	.001
Within Groups	46.327	132	.348		
Total	54.295	135			

Post hoc test result

Multiple Comparisons

Dependent Variable: Knowledge Sharing

Turkey HSD

(I) Position	(J) Position	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Manager/Head	Executive/Engineer	.03243	.15294	.997	-.3656	.4305
	Supervisor	.24444	.16505	.452	-.1852	.6740
	Operator	.60299*	.15973	.001	.1873	1.0187
Executive/ Engineer	Manager/Head	-.03243	.15294	.997	-.4305	.3656
	Supervisor	.21202	.14270	.449	-.1594	.5834
	Operator	.57057*	.13650	.000	.2153	.9259
Supervisor	Manager/Head	-.24444	.16505	.452	-.6740	.1852
	Executive/Engineer	-.21202	.14270	.449	-.5834	.1594
	Operator	.35855	.14995	.084	-.0318	.7489
Operator	Manager/Head	-.60299*	.15973	.001	-1.0187	-.1873
	Executive/Engineer	-.57057*	.13650	.000	-.9259	-.2153
	Supervisor	-.35855	.14995	.084	-.7489	.0318

*. The mean difference is significant at the 0.05 level.

Homogeneous subset

Turkey HSD^{a,b}

Position	N	Subset for alpha = 0.05	
		1	2
Operator	35	3.2165	
Supervisor	30	3.5750	3.5750
Executive/Engineer	44		3.7870
Manager/Head	24		3.8194
Sig.		.089	.374

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 31.671.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.*