APPENDIX-A: Pearson chi-square test

Decision to adopt E-HRM * SIZE Crosstabulation

		SIZE						
		<50	50-99	100-199	200-499	500-999	>1000	Total
DV 0	Count	6	4	3	5	0	3	21
	Expected Count	2.1	3.0	3.6	3.1	1.9	7.3	21.0
	% within DV	28.6%	19.0%	14.3%	23.8%	.0%	14.3%	100.0%
	% within SIZE	50.0%	23.5%	14.3%	27.8%	.0%	7.1%	17.4%
	% of Total	5.0%	3.3%	2.5%	4.1%	.0%	2.5%	17.4%
1	Count	6	13	18	13	11	39	100
	Expected Count	9.9	14.0	17.4	14.9	9.1	34.7	100.0
	% within DV	6.0%	13.0%	18.0%	13.0%	11.0%	39.0%	100.0%
	% within SIZE	50.0%	76.5%	85.7%	72.2%	100.0%	92.9%	82.6%
	% of Total	5.0%	10.7%	14.9%	10.7%	9.1%	32.2%	82.6%
Total	Count	12	17	21	18	11	42	121
	Expected Count	12.0	17.0	21.0	18.0	11.0	42.0	121.0
	% within DV	9.9%	14.0%	17.4%	14.9%	9.1%	34.7%	100.0%
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	9.9%	14.0%	17.4%	14.9%	9.1%	34.7%	100.0%

Chi-Square Tests (size)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.233[a]	5	.006
Likelihood Ratio	16.382	5	.006
Linear-by-Linear Association	10.328	1	.001
N of Valid Cases	121		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is 1.91.

decision to adopt E-HRM * ownership Crosstabulation

		Ownership form					
		Foreign	Joint venture	Gov-linked	private	Others	Total
DV 0	Count	2	1	4	11	3	21
	Expected Count	3.3	2.3	5.7	7.3	2.4	21.0
	% within DV	9.5%	4.8%	19.0%	52.4%	14.3%	100.0%
	% within ownership	10.5%	7.7%	12.1%	26.2%	21.4%	17.4%
	% of Total	1.7%	.8%	3.3%	9.1%	2.5%	17.4%
1	Count	17	12	29	31	11	100
	Expected Count	15.7	10.7	27.3	34.7	11.6	100.0
	% within DV	17.0%	12.0%	29.0%	31.0%	11.0%	100.0%
	% within ownership	89.5%	92.3%	87.9%	73.8%	78.6%	82.6%
	% of Total	14.0%	9.9%	24.0%	25.6%	9.1%	82.6%
Total	Count	19	13	33	42	14	121
	Expected Count	19.0	13.0	33.0	42.0	14.0	121.0
	% within DV	15.7%	10.7%	27.3%	34.7%	11.6%	100.0%
	% within ownership	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	15.7%	10.7%	27.3%	34.7%	11.6%	100.0%

Chi-Square Tests (ownership)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.542[a]	4	.338
Likelihood Ratio	4.612	4	.329
Linear-by-Linear Association	2.846	1	.092
N of Valid Cases	121		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 2.26.

Decision to adopt E-HRM * ind_typ Crosstabulation

			ind_typ										Total
			1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	
D V	0	Count	1	6	2	2	2	5	0	0	3	0	21
		Expected Count	3.1	3.0	2.1	1.6	.5	3.8	1.0	.5	1.7	3.6	21.0
		% within DV	4.8%	28.6%	9.5%	9.5%	9.5%	23.8%	.0%	.0%	14.3%	.0%	100.0%
		% within ind_typ	5.6%	35.3%	16.7%	22.2%	66.7%	22.7%	.0%	.0%	30.0%	.0%	17.4%
		% of Total	.8%	5.0%	1.7%	1.7%	1.7%	4.1%	.0%	.0%	2.5%	.0%	17.4%
	1	Count	17	11	10	7	1	17	6	3	7	21	100
		Expected Count	14.9	14.0	9.9	7.4	2.5	18.2	5.0	2.5	8.3	17.4	100.0
		% within DV2	17.0%	11.0%	10.0%	7.0%	1.0%	17.0%	6.0%	3.0%	7.0%	21.0%	100.0%
		% within ind_typ	94.4%	64.7%	83.3%	77.8%	33.3%	77.3%	100.0%	100.0%	70.0%	100.0%	82.6%
		% of Total	14.0%	9.1%	8.3%	5.8%	.8%	14.0%	5.0%	2.5%	5.8%	17.4%	82.6%
Total		Count	18	17	12	9	3	22	6	3	10	21	121
		Expected Count	18.0	17.0	12.0	9.0	3.0	22.0	6.0	3.0	10.0	21.0	121.0
		% within DV	14.9%	14.0%	9.9%	7.4%	2.5%	18.2%	5.0%	2.5%	8.3%	17.4%	100.0%
		% within ind_typ	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	14.9%	14.0%	9.9%	7.4%	2.5%	18.2%	5.0%	2.5%	8.3%	17.4%	100.0%

Industry types represented by number

number	Industry type
1	Computers/Telecommunication
2	Architecture/engineering
3	Education
4	Retail/wholesale/trade
5	Travel/tourism/hotel
6	Business service
7	Logistics/transportation
8	Banking/finance
9	Manufacturing
10	Others

Chi-Square Tests(industry type)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.657[a]	9	.028
Likelihood Ratio	21.912	9	.009
Linear-by-Linear Association	1.519	1	.218
N of Valid Cases	121		

a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .52.

APPENDIX-B1: Survey questionnaire (English version)

UNIVERSITY OF MALAYA
Master of Business Administration
Graduate School of Business
Faculty of Business and Accountancy

"An Empirical Study on Factors that Influencing the Adoption of E-HRM among Firms in Northeast of China"

Dear Sir/ Madam,

This research is conducted as part of completion of the Master of Business Administration from University of Malaya.

The main aim of this study is to examine the factors that significantly influence the E-HRM adoption among China's firms. This includes the influences of attitude, subjective norms of HR manager, departmental relative advantage, system compatibility, complexity, E-HRM expertise, top management support and industry pressure.

Please be assured that the information you provide in this survey is for academic purposes only and will be kept strictly confidential. The findings from this survey will be reported in aggregate forms and the anonymity of the respondents will be guaranteed.

I anticipate that the questionnaire will take approximate 10 minutes to complete. Thank you in advance for your invaluable assistance in participating in this survey.

Yours sincerely,
Bian Linlin
Email: linlinbian2009@yahoo.com

Supervised by,
Dr. Norizah Mohd Mustamil
Faculty of Business & Accountancy
University of Malaya

PART A: COMPANY BASIC INFORMATION:

This section is about some basic information about your company. Please cross only one box for each question as below:

X

1. **Form of ownership of your company**

	Government-linked company		Local ownership
	Foreign ownership		Joint venture
	Others		

2. **Size of your company**

	< 50 employees		50-99 employees
	100-199 employees		200-499 employees
	500-999 employees		>1000 employees

3. **The industry that your company belongs to:**

	Architecture/engineering		Banking/finance
	Computers/communication		Education
	Logistics/transportation		Manufacturing/construction
	Retail/wholesale/trading		Business services
	Travel/tourism/hotel		Others

Please complete the following questions which reflect your opinions as accurately as possible.

PART B: This section examines whether your company has some E-HRM facilities. Please cross (X) the E-HRM facilities that your company has:

e-recruiting	
e-training	
e-evaluating	
e-salary	
e-communicating	
There is no E-HRM facilities In my company	

PARTC: This section examines individual factors that influence E-HRM adoption. Please cross (X) your answer. (1 denoting STRONGLY DISAGREE and 5 denoting STRONGLY AGREE)

		Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
	HR manager's attitude	**1**	**2**	**3**	**4**	**5**
Att1	I believe that adopting E-HRM to my company is a wise decision.					
Att2	I believe that adopting E-HRM is helpful to my company's business.					
Att3	I believe that E-HRM application contribute to HRM technical effectiveness.					
Att4	I believe that E-HRM applications contribute to HRM strategic effectiveness.					
	HR manager's subjective norm	**1**	**2**	**3**	**4**	**5**
Sub1	People who are important to me think that I should use E-HRM applications.					
Sub2	People who influence what I do think that I should use E-HRM applications.					
Sub3	Expert opinions influence me to use E-HRM application.					
Sub4	People who influence my decisions think that I should use E-HRM application.					

PARTD: This section examines technological factors that influence E-HRM adoption. Please cross (X) your answer. (1 denoting STRONGLY DISAGREE and 5 denoting STRONGLY AGREE)

		Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
	Departmental relative advantage	**1**	**2**	**3**	**4**	**5**
Dep1	E-HRM will enable human resource personnel to accomplish tasks more quickly					
Dep2	E-HRM will improve the quality of the work of human resource personnel.					
Dep3	E-HRM makes it easier for human resource personnel to do their work.					

		Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
Dep4	*E-HRM will enhance the job effectiveness of Human Resource personnel.*					
	Compatibility	**1**	**2**	**3**	**4**	**5**
Compa1	*The changes introduced by E-HRM application are compatible with existing operating practices.*					
Compa2	*Adoption of E-HRM application is consistent with our organization's values and beliefs.*					
Compa3	*E-HRM application is compatible with our organization's IT infrastructure.*					
Compa4	*E-HRM application is compatible with our organization's computerized data resources.*					
		Strongly Disagree	**Disagree**	**Neither Disagree nor Agree**	**Agree**	**Strongly Agree**
	Complexity	**1**	**2**	**3**	**4**	**5**
Compl1	*E-HRM is complex to use*					
Compl2	*E-HRM development is a complex process.*					
Compl3	*E-HRM is hard to learn.*					
Compl4	*Integrating E-HRM into our current work practice will be very difficult.*					

PART E: This section examines organizational factors that influence E-HRM adoption. Please cross (x) your answer. (1 denoting STRONGLY DISAGREE and 5 denoting STRONGLY AGREE)

		Strongly Disagree	**Disagree**	**Neither Disagree nor Agree**	**Agree**	**Strongly Agree**
	Top management support	**1**	**2**	**3**	**4**	**5**
Top1	*Top management enthusiastically supports the adoption of E-HRM.*					
Top2	*Top management has allocated adequate resources for the adoption of E-HRM.*					
Top3	*Top management is aware of the benefits of E-HRM.*					
Top4	*Top management actively encourages human resource personnel to use E-HRM in their daily tasks.*					

	E-HRM expertise	1	2	3	4	5
Exp1	*All human resources personnel know how information technology can be used to support HR functions.*					
Exp2	*All human resources personnel are computer-literate.*					
Exp3	*There is at least one computer expert in the human resources department.*					
Exp4	*Human resource personnel's understanding of computers is good compared with other organizations in the industry.*					

PART F: This section examines environmental factors that influence E-HRM adoption. Please cross (x) your answer.(1 denoting STRONGLY DISAGREE and 5 denoting STRONGLY AGREE)

		Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
	Industry pressure	1	2	3	4	5
Ind1	*It is a strategic necessity to use E-HRM application to compete in my industry.*					
Ind2	*The overall operational practices in my industry pressure me to adopt E-HRM.*					
Ind3	*Competitors' adoption of E-HRM places pressure on our organization to adoption E-HRM*					
Ind4	*Our organization actively keeps track of new and innovative uses of technology by competitors*					

Thank you very much for completing the questionnaire!!

APPENDIX-B2: Survey questionnaire (Chinese version)

关于影响中国东北部公司采纳电子化人力资源管理因素的实证研究问卷调查

尊敬的先生/女士：

本研究是用于完成马来亚大学工商管理硕士学位。

本问卷调查的目的是调查显著影响中国公司采纳电子化人力资源管理的因素，其中包括人力资源管理者的态度，主观规范，电子化人力资源管理的相对优势，系统兼容性，系统复杂性，员工的计算机能力，高层领导的支持以及行业压力。

您为本次调查所提供的信息将完全用于学术研究的目的，调查内容不涉及个人隐私，请放心填写。这份问卷将花费大约十分钟来完成，在此，非常感谢您的参与和支持，谢谢！

学生：边琳琳

电子邮箱：linlinbian2009@yahoo.com

指导教师：Dr. Norizah Mohd Mustamil

商业与会计学院

马来亚大学

一．公司基本信息：
　　请在相应空白画 "x"：

1．贵公司企业所有制形式：

☐ 国有企业	☐ 民营企业
☐ 外资企业	☐ 合资企业
☐ 其他	

2．贵公司规模：

☐ ＜ 50 人	☐ 50-99 人
☐ 100-199 人	☐ 200-499 人
☐ 500-999 人	☐ ＞1000 人

3．贵公司所在行业：

☐ 建筑/工程	☐ 银行/金融
☐ 计算机/通信	☐ 教育
☐ 物流/运输	☐ 制造业
☐ 零售/批发/贸易	☐ 商业服务
☐ 旅游/酒店	☐ 其他

二．请选择贵公司目前正在使用的电子化人力资源管理方式：（可多选）

☐ 网上招聘	☐ 电子化的员工薪酬管理
☐ 网上培训	☐ 电子化的员工交流平台
☐ 电子化的员工绩效考核	☐ 我公司目前没有采用任何 电子化人力资源管理方式

三．影响公司采纳电子化人力资源管理的个人因素，请选择您对贵公司采纳电子化人力资源管理的态度（1-强烈不同意，5-强烈同意）

		强烈不同意	不同意	中立	同意	强烈同意
	人力资源管理者的态度	**1**	**2**	**3**	**4**	**5**
Att1	我相信采纳电子化的人力资源管理（E-HRM）对我公司来说是明智的决定。					
Att2	我相信采纳电子化的人力资源管理（E-HRM）有助于提高公司的管理水平。					
Att3	我相信采纳电子化的人力资源管理（E-HRM）会提高人事部门的工作效率。					
Att4	我相信采纳电子化的人力资源管理（E-HRM）会提高公司人事策略的成效。					
	人力资源管理者的主观规范	**1**	**2**	**3**	**4**	**5**
Sub1	对我重要的人认为我部门应该采用电子化的人力资源管理（E-HRM）					
Sub2	影响我行动和行为的人认为我部门应该采用电子化的人力资源管理（E-HRM）					
Sub3	专家的意见会影响我部门是否采用电子化的人力资源管理（E-HRM）					
Sub4	影响我作出决策的人认为我部门应该采用电子化的人力资源管理（E-HRM）					

四．以下题目调查影响中国公司采纳电子化人力资源管理（E-HRM）的技术因素，请标明您对以下条目的态度：（1-强烈不同意，5-强烈同意）

		强烈不同意	不同意	中立	同意	强烈同意
	电子化人力资源管理的相对优势	**1**	**2**	**3**	**4**	**5**
Dep1	电子化的人力资源管理（E-HRM）能够使人事部门更快的完成工作任务					
Dep2	电子化的人力资源管理（E-HRM）会改善人事部门的工作质量					
Dep3	电子化的人力资源管理（E-HRM）会使人事部门更容易的完成他们的工作					
Dep4	电子化的人力资源管理（E-HRM）会强化人事部门工作的有效性					

		强烈 不同意	不同意	中立	同意	强烈 同意
	兼容性	**1**	**2**	**3**	**4**	**5**
Compa1	实行电子化的人力资源管理（E-HRM）与我公司目前的经营实践是相匹配，兼容的					
Compa2	采纳电子化的人力资源管理（E-HRM）是与我公司的价值观，信仰相一致的					
Compa3	采纳电子化的人力资源管理（E-HRM）是会与我公司目前的 IT 设施兼容的					
Compa4	采纳电子化的人力资源管理（E-HRM）是会与我公司计算机化的数据资源兼容的					
	复杂性	**1**	**2**	**3**	**4**	**5**
Compl1	电子化的人力资源管理（E-HRM）使用起来会很复杂					
Compl2	电子化人力资源管理（E-HRM）的发展是个复杂的过程					
Compl3	电子化的人力资源管理（E-HRM）的操作会很难学					
Compl4	把电子化的人力资源管理（E-HRM）整合进公司目前的工作实践是很困难的事					

五．以下题目调查影响中国公司采纳电子化人力资源管理（E-HRM）的环境因素，请表明您对以下条目的态度：（1-强烈不同意，5-强烈同意）

		强烈 不同意	不同意	中立	同意	强烈 同意
	行业压力	**1**	**2**	**3**	**4**	**5**
Ind1	我公司的管理高层非常支持采纳电子化的人力资源管理（E-HRM）					
Ind2	我公司的管理高层已经为电子化人力资源管理（E-HRM）的采纳或实施提供了足够的资源					
Ind3	我公司的管理高层意识到了电子化人力资源管理（E-HRM）的好处					
Ind4	我公司的管理高层鼓励人事部门将电子化的人力资源管理（E-HRM）应用于日常工作					

非常感谢您的参与！