

Appendix A-1: Complete Questionnaire for the Supply Chain Capability Survey (English Version)

The purpose of this survey is to assess Supply Chain Capability within your trading partners and your organization. Please complete all sections by selecting the best response for each question based on your view of your organization. Thank you in advance for your participation.

SECTION 1: The questions below relate to the Technology when you doing business with your trading partners through interorganizational systems (IOS).

1. What types of IOS is mostly used in your company?

- Web browser systems
 EDI/EOI systems
 RosettaNet systems
 Other systems, please specify _____

2. For the system you select above, please estimate its usage level in your company.

Percentages of transactions that are exchanged by IOS links, _____%

Number of partners that are connected to your company through IOS, _____ Links

3. Please rate the degree of each of the following process integration in business operation through IOS in your company. (1: don't integrate, 7: highly integrate)

	DON'T INTEGRATE			HIGHLY INTEGRATE			
	↓				↓		
Logistics processes.....	1	2	3	4	5	6	7
Payment and billing processes.....	1	2	3	4	5	6	7
Product development processes.....	1	2	3	4	5	6	7
Procurement processes.....	1	2	3	4	5	6	7
Materials management processes.....	1	2	3	4	5	6	7

4. Please rate the degree of each of the following IT infrastructure for IOS in your company.
(1: don't integrate, 7: highly integrate)

	STRONGLY DISAGREE							STRONGLY AGREE
		↓						↓
1. The IOS is too complex to integrate with current information systems.....	1	2	3	4	5	6	7	
2. It is easy to integrate the IOS with enterprise systems (e.g., ERP).....	1	2	3	4	5	6	7	
3. In order to implement the IOS efficiently, your company put in large degree of technical investments in implementing the IOS.....	1	2	3	4	5	6	7	
4. Your company has a good telecommunications infrastructure. (e.g., E-mail, Internet, or Intranet).....	1	2	3	4	5	6	7	
5. Your company has integrated IS applications (e.g., ERP) encompassing different business areas.	1	2	3	4	5	6	7	

PLEASE RANK THE STATEMENTS BELOW FROM (1) STRONGLY DISAGREE TO (7) STRONG AGREE.

SECTION 2: The questions below relate to the Transactions when you doing business with your trading partners by interorganizational systems.

	STRONGLY DISAGREE							STRONGLY AGREE
		↓						↓
1. Your company has related successful implementation experience (e.g., experience of implementing ERP).....	1	2	3	4	5	6	7	
2. Your company believes the previous experience in developing interorganizational systems can help you to implement other interorganizational systems in the future.....	1	2	3	4	5	6	7	
3. Your company has followed industrial standards (e.g., RosettaNet or RFID standards) to exchange information with trading partners.....	1	2	3	4	5	6	7	
4. Your company has installed security infrastructure (e.g., firewall) to protect the data on the Internet.....	1	2	3	4	5	6	7	

SECTION 3: The questions below relate to the Relationships between your trading partner and your organization.

	STRONGLY DISAGREE				STRONGLY AGREE		
	↓				↓		
1. You and your corporate customers are undergoing some supply chain collaboration projects (e.g., product design, quality control, as well as forecasting and inventory management).....	1	2	3	4	5	6	7
2. There exists an equal sharing of risks, burden, benefits, and appropriate incentives between you and your corporate customers.....	1	2	3	4	5	6	7
3. Your company trusts that confidential/proprietary information shared with your corporate customers will be kept strictly confidential.....	1	2	3	4	5	6	7
4. There exists an open and frequent communication between you and your corporate customers.....	1	2	3	4	5	6	7
5. You and most of your corporate customers have very similar IT infrastructure in terms of the IT availability, maturity, compatibility, and reliability.....	1	2	3	4	5	6	7
6. You and your corporate customers have compatible company culture. (e.g., business mission or value).....	1	2	3	4	5	6	7
7. You and your corporate customers have similar decision processes to handle transactions (e.g. having similar procedures to handle order change).....	1	2	3	4	5	6	7
8. You and your corporate customers' top management provide similar support with regard to the development of IOS.....	1	2	3	4	5	6	7
9. Your corporate customer rewards for business process reengineering efforts related to the IOS adoption (e.g., providing the technological supports or cost premiums)	1	2	3	4	5	6	7
10. Your corporate customer provides educational seminars or system implementation expertise to help your IOS implementation.....	1	2	3	4	5	6	7

SECTION 4: The questions below relate to the Environment within your industry.

	STRONGLY DISAGREE							STRONGLY AGREE
	↓							↓
1. Your company uses related technologies and systems to help gather information from the surrounding supply chain environment (e.g., a system to help your company to gather dynamic information to forecast the customer’s demand).....	1	2	3	4	5	6	7	
2. There exists an explicit regulation to measure selling/buying activities between you and your corporate customers (e.g., supplier score card).....	1	2	3	4	5	6	7	
3. You and your corporate customers can send the timely, accurate, and complete information to each other.....	1	2	3	4	5	6	7	
4. There are clearly known practices and procedures your employees can follow in doing the selling/buying tasks.....	1	2	3	4	5	6	7	

SECTION 5: Demographics: (Please tell us a little about yourself and your background)

1. Your job title is → _____
2. Your years experience in this job (years) →
 less than 2 2-5 5-10 10-15 over 15
3. Your organization has established (years) →
 less than 2 2-5 5-10 10-15 over 15
4. The industry that your organization belongs to →
 Electronics Electrical machinery Information product manufacture
 Semiconductor Import-export business Communications Logistics
 Others _____
5. The capital of your organization (in millions) →
 under \$10 \$10-30 \$30-\$80 \$80-\$500 \$500-\$1000 over \$1000
6. Number of employees in your organization →
 less than 50 50-200 251-1000 1001-5000 over 5000
7. The average net sales of one year (in millions) →
 under \$5 \$5-20 \$21-\$100 \$101-\$500 \$501-\$5000 over \$5000

THANK YOU FOR YOUR PARTICIPATION

Appendix A-2: Complete Questionnaire for the Supply Chain Capability Survey (Chinese Version)

在本研究中，『跨組織資訊系統』是指：涉及兩個或更多組織間之資源分享系統。這個系統包括了硬體、軟體、傳輸設備、規則與程序、資料與資料庫，以及專業知識等，以使資訊達到跨組織傳送以及利用的目的。一般來說，公司之間所使用的採購/訂單系統、物流系統、金融交易系統、協同設計系統等，都屬於跨組織資訊系統範圍。因此，請問貴公司最常使用的跨組織資訊系統是那一種？

- Web browser 系統
 EDI/EOI 系統
 RosettaNet 系統
 以上皆非，為其他系統（請說明_____）

請注意：在下列各節問題中（第一部份至第四部分），請您依據您上述所選之跨組織資訊系統，就貴公司的立場，來填寫最適當的答案。

第一部份、針對該系統的使用狀況，請您在下列問題中填寫適當的答案。

1. 貴公司

在交易中透過該系統完成交易的百分比，大約是_____ %

透過該系統和我們進行交易的合作夥伴，大約有_____家

2. 整體而言，使用該系統後，請圈選對作業流程的整合程度。(其中 1 表「極不同意」，7 表「極同意」)

	極不同意 ↓						極同意 ↓
	1	2	3	4	5	6	7
我們公司在物流作業上有高度整合。	1	2	3	4	5	6	7
我們公司在金流作業上有高度整合。	1	2	3	4	5	6	7
我們公司在協同設計上有高度整合。	1	2	3	4	5	6	7
我們公司在採購作業上有高度整合。	1	2	3	4	5	6	7
我們公司在物料管理上有高度整合。	1	2	3	4	5	6	7

3. 從資訊科技基礎建設角度而言，請勾選您對下列敘述的同意程度。(其中 1 表「極不同意」，7 表「極同意」)

	極不同意 ↓						↓ 極同意
1. 該系統技術架構太過複雜，以致難以與本公司現有資訊系統進行整合。	1	2	3	4	5	6	7
2. 我們公司內部資訊系統(如：ERP 或生產排程系統)，可輕易與該系統整合。	1	2	3	4	5	6	7
3. 欲使該系統有效地實施，需要相當多的專有技術投資。	1	2	3	4	5	6	7
4. 我們公司有健全的網路設備(如：E-mail, Internet, Intranet)。	1	2	3	4	5	6	7
5. 我們公司內部有建置資訊系統(如：ERP)，以協助我們的日常作業。	1	2	3	4	5	6	7

請注意：請勾選您對於下列敘述同意的程度。其中 1 表「極不同意」，7 表「極同意」。

第二部份、請您針對貴公司在該系統的導入狀況，請您在下列問題中圈選適當的答案。

	極不同意 ↓						↓ 極同意
1. 在導入該系統前，我們公司已有導入其他大型資訊系統(如：ERP)的成功經驗。	1	2	3	4	5	6	7
2. 我們深信該系統的導入經驗，將可被利用在我們日後導入其他跨組織資訊系統之上。	1	2	3	4	5	6	7
3. 我們公司遵循著國際性的產業標準(如：RosettaNet、RFID)，來和合作夥伴進行交易。	1	2	3	4	5	6	7
4. 我們公司建立健全的資訊安全機制(如：防火牆)，來保護公司在 Internet 的資料交換。	1	2	3	4	5	6	7

第三部份、請您評估在導入該跨組織資訊系統時，貴公司與合作夥伴間的「合作關係」程度。請圈選您對於下列敘述同意的程度。

	極不同意 ↓							極同意 ↓
1. 我們公司和合作夥伴之間，有持續進行供應鏈上相關的合作計劃，如：產品協同設計、全面品質提昇、存貨貨況管理等。	1	2	3	4	5	6	7	
2. 我們公司和合作夥伴之間有明確的責任分工及利益分享機制。	1	2	3	4	5	6	7	
3. 我們公司相信與合作夥伴分享的機密資料，會被確實的保密。	1	2	3	4	5	6	7	
4. 我們公司和合作夥伴之間，有建立一個開放性的溝通管道，並經常進行溝通。	1	2	3	4	5	6	7	
5. 我們公司和大部份的合作夥伴，有類似的資訊科技基礎建設，如：資訊技術成熟度相當、系統穩定度一致或資訊科技能力相當。	1	2	3	4	5	6	7	
6. 我們公司與某些合作夥伴之間，有類似的企業文化與價值觀。	1	2	3	4	5	6	7	
7. 在交易處理上，我們公司與合作夥伴之間，具有相近的決策流程，例如：類似的訂單處理程序。	1	2	3	4	5	6	7	
8. 我們公司和合作夥伴的高階主管，都很支持跨組織資訊系統的導入及推動。	1	2	3	4	5	6	7	
9. 我們公司的合作夥伴，對於我們公司在導入該系統所做的流程再造，願意給予支援，例如：技術支援、資金協助。	1	2	3	4	5	6	7	
10. 我們公司的合作夥伴，在我們導入跨組織資訊系統時，會提供教育訓練或是與我們分享導入經驗。	1	2	3	4	5	6	7	

第四部份、請您評估貴公司所面臨的「產業環境」對於使用該跨組織資訊系統的影響。請圈選您對於下列敘述同意的程度。

	極不同意 ↓							極同意 ↓
1. 我們公司擁有相關的技術或是系統，來收集周遭環境的相關資訊，例如：利用系統收集市場情報，來預測顧客需求。	1	2	3	4	5	6	7	
2. 我們公司和合作夥伴之間，有明確的機制來衡量彼此交易活動的績效，如：供應商計分卡。	1	2	3	4	5	6	7	
3. 我們公司和合作夥伴之間，經常分享彼此正確、即時、完整的資訊。	1	2	3	4	5	6	7	
4. 我們公司進行採購及銷售工作時，有明確且詳細的工作程序讓員工能遵循，故即使是面對例外狀況時，員工也能按部就班地處理。	1	2	3	4	5	6	7	

第五部份、請填寫您公司與您的一些基本資料。

1. 我的工作職稱：_____
2. 我的工作部門：_____
3. 我在這個職位工作已： 2 年以下 2~5 年(含) 5~10 年(含) 10~15 年(含)
 15 年以上
4. 我們公司已成立： 2 年以下 2~5 年(含) 5~10 年(含) 10~15 年(含)
 15 年以上
5. 我們公司的產業別： 電子電器 電機/電纜線材 資訊產品製造 半導體
 進出口貿易 通訊 流通業 其他_____
6. 我們公司的資本額： 1000 萬以下 1000 萬~3000 萬(含) 3000 萬~8000 萬(含) 8000 萬~5
億(含) 5 億~10 億(含) 10 億以上
7. 我們公司的員工人數： 5 人以下 6 人~20 人 21 人~50 人 51 人~200 人
 201 人~1000 人 1001 人以上
8. 我們公司的平均年營業額： 500 萬以下 500 萬~2000 萬(含) 2000 萬~1 億(含)
 1 億~5 億(含) 5 億~50 億(含) 50 億以上

Appendix B: Correlation Matrix of Supply Chain Capability Measures

	TC1	TC2	TC5	TC6	TC7	TC8	TR1	TR2	TR3	TR4	GR1	GR2	GR3	GR4	GR5	GR6	GR7	GR8	GR9	GR10	EC1	EC2	EC3	EC4		
TC1	1.0																									
TC2	.32	1.0																								
TC5	.23	.21	1.0																							
TC6	.20	.20	.31	1.0																						
TC7	.56	.56	.44	.55	1.0																					
TC8	.36	.36	.44	.55	.74	1.0																				
TR1	.26	.26	.71	.44	.59	.73	1.0																			
TR2	.36	.36	.68	.38	.67	.54	.71	1.0																		
TR3	.34	.34	.54	.48	.62	.57	.58	.64	1.0																	
TR4	.47	.47	.45	.53	.91	.74	.64	.67	.74	1.0																
GR1	.48	.25	.46	.39	.62	.48	.41	.54	.66	.66	1.0															
GR2	.40	.48	.54	.28	.53	.37	.37	.53	.57	.56	.70	1.0														
GR3	.19	.40	.42	.20	.53	.34	.40	.47	.48	.52	.55	.58	1.0													
GR4	.34	.31	.60	.36	.54	.52	.57	.52	.52	.57	.74	.79	.64	1.0												
GR5	.34	.19	.35	.26	.46	.28	.42	.57	.53	.46	.57	.50	.43	.54	1.0											
GR6	.35	.34	.30	.23	.49	.31	.28	.43	.46	.52	.66	.61	.43	.56	.72	1.0										
GR7	.32	.35	.43	.21	.59	.39	.50	.56	.50	.58	.62	.55	.48	.50	.63	.70	1.0									
GR8	.27	.32	.57	.18	.54	.37	.48	.59	.56	.58	.58	.67	.55	.66	.65	.66	.78	1.0								
GR9	.22	.27	.57	.14	.37	.26	.42	.61	.63	.41	.53	.59	.46	.51	.56	.56	.58	.70	1.0							
GR10	.31	.22	.47	-.00	.49	.22	.38	.54	.37	.44	.59	.53	.61	.53	.55	.70	.78	.75	.68	1.0						
EC1	.11	.34	.40	.19	.38	.13	.31	.48	.40	.42	.36	.32	.13	.30	.46	.48	.49	.46	.43	.36	1.0					
EC2	.25	.11	.46	.13	.45	.24	.29	.39	.48	.47	.63	.54	.45	.52	.34	.58	.62	.56	.45	.57	.54	1.0				
EC3	.33	.33	.36	.18	.51	.27	.36	.60	.47	.54	.57	.49	.34	.43	.65	.63	.64	.54	.52	.57	.67	.51	1.0			
EC4	.39	.39	.45	.13	.64	.48	.57	.69	.48	.66	.60	.52	.43	.52	.56	.57	.73	.60	.47	.64	.54	.52	.69	1.0		