Appendix A: IT Capital - Indicator Applicability Evaluation

In this survey, the evaluation table of indicator applicability of IT capital will be divided into two dimensions: "**IT Input**" and "**IT Output**." Each dimension will be divided into several sub-dimensions and performance indicators further. Please evaluate the following performance indicators according to the significance and applicability in your company.

Note: The following score which ranges from 1 to 6 means "very low", "low", "little low", "little high", "high", and "very high" applicability, respectively.

Dimension 1: IT Input

IT Input	**(Significance/Applicability)**					
	Low					High
	1	2	3	4	5	6
➢ IT Human Resources						
▫ IT personnel expenditures	☐	☐	☐	☐	☐	☐
▫ The size of IT department	☐	☐	☐	☐	☐	☐
▫ Personnel turnover rate	☐	☐	☐	☐	☐	☐
➢ IT Infrastructure						
▫ IT budget	☐	☐	☐	☐	☐	☐
▫ PC/NB per person	☐	☐	☐	☐	☐	☐
➢ IT Application Capability						
▫ Certification items	☐	☐	☐	☐	☐	☐
▫ IT application level	☐	☐	☐	☐	☐	☐
▫ Problem handling	☐	☐	☐	☐	☐	☐
➢ IT R&D Capability						
▫ R&D budget	☐	☐	☐	☐	☐	☐
▫ The number of R&D employees	☐	☐	☐	☐	☐	☐
➢ Organizational Structure and Culture						
▫ IT department position	☐	☐	☐	☐	☐	☐
▫ CEO background	☐	☐	☐	☐	☐	☐
▫ Business model	☐	☐	☐	☐	☐	☐

Dimension 2: IT Output

IT Output	**(Significance/Applicability)**					
	Low					High
	1	2	3	4	5	6
➢ Strategy Contribution and Decision Quality						
▫ The contribution to business strategy and revenue	☐	☐	☐	☐	☐	☐
➢ Innovative Products and Services						
▫ The innovation capability	☐	☐	☐	☐	☐	☐
▫ The contribution to innovation	☐	☐	☐	☐	☐	☐
➢ Reducing Cost						
▫ The contribution of cost reduction	☐	☐	☐	☐	☐	☐
➢ Process Efficiency						
▫ The contribution to business process	☐	☐	☐	☐	☐	☐
➢ Supplier/Customer Relationship						
▫ The requirements of supplier/customer relationship	☐	☐	☐	☐	☐	☐
▫ The contribution of supplier/customer relationship	☐	☐	☐	☐	☐	☐
➢ Knowledge Management and Organizational Learning						
▫ Knowledge management execution	☐	☐	☐	☐	☐	☐
▫ The contribution to knowledge management	☐	☐	☐	☐	☐	☐
➢ Intellectual Property						
▫ The quality and quantity of intellectual property	☐	☐	☐	☐	☐	☐

Appendix B: IT Capital Questionnaire in Financial Industry

This questionnaire is mainly aimed at enterprises. The purpose is to understand the current status of IT capital in the company. It will be divided into two parts, which are "**IT Input**" and "**IT Output,**" and the questions in each part will be designed according to the research dimension we develop. All information collected is only for research analysis and be kept confidential. Thank you very much.

Note: In the Part II, we use the score, which ranges from 1 to 6, to represent "very low", "low", "little low", "little high", "high", and "very high", respectively.

Part I: IT Input

I. IT Human Resources

Please fill out the following questions according to the current status of **IT human resources** in "the year of 2004." (Expressed in New Taiwan Thousand Dollars)

1. The total expenditures of IT department is NT$_____.
2. The personnel expenditures of IT department is NT$_____.
3. The training expenditures of IT department is NT $_____.
4. The total number of IT department staff is _____. The percentage of IT department staff in the entire company is _____%.
5. The average professional tenure of IT department staff is _____ years.
6. The average age of IT department staff is _____.
7. The turnover rate of IT department staff is _____%.

II. IT Infrastructure

Please fill out the following questions according to the current status of **IT infrastructure** in "the year of 2004." (Expressed in New Taiwan Thousand Dollars)

8. The computer hardware expense is NT$_____.

9. The computer software expense is NT$_____.

10. The Maintenance expense of IT is NT$_____.

11. The ratio of personal computers to total employees is _____%.

12. The ratio of notebook computers to total employees is _____%.

III. IT Application Capability

Please fill out the following questions according to the current status of **IT application capability** in "the year of 2004."

13. The main information system(s) in your company is(are) (multiple-choice)
    ☐ ERP ☐ SCM ☐ CRM ☐ KM ☐ Other _____

14. The IT quality certification item(s) which your company owns is(are) (multiple-choice)
    ☐ CMMI ☐ ISO ☐ BS(Information Security) ☐ Other _____

15. The percentage of jobs completed through the Intranet is _____%.

16. The average time of IT project from analysis to completion:
    ☐ The percentage of 1-3 months is _____%.
    ☐ The percentage of 3-6 months is _____%.
    ☐ The percentage of 6-12 months is _____%.
    ☐ The percentage of 1-2 years is _____%.
    ☐ The percentage of more than 2 years is _____%.

17. The average time which IT department solves user and system problems:
    ☐ The percentage within one day is _____%.
    ☐ The percentage of 1-3 days is _____%.
    ☐ The percentage within one week is _____%.
    ☐ The percentage within one month is _____%
    ☐ The percentage of more than one month is _____%

IV. IT R&D Capability

Please fill out the following questions according to the current status of **IT R&D capability** in "the year of 2004." (Expressed in New Taiwan Thousand Dollars)

18. The total IT R&D expense is NT$_____.

19. The number of employees who are actually engaged in the IT R&D is _____.

V. Organizational Structure and Culture

Please fill out the following questions according to the current status of **organizational structure and culture** in "the year of 2004."

20. Which is the position of IT department in your organization structure?
    - ☐ One centralized IT department exists within the company
      (Belonging to: ☐ First division ☐ Second division ☐ Third division)
    - ☐ Several IT departments exist in each business unit within the company.
    - ☐ Other. (please specify) _____

21. What is the background and experience of the CEO in your company?

☐ Finance	☐ under the age of 40
☐ Marketing	☐ 40-50 years old
☐ Information	☐ 50-60 years old
☐ R&D	☐ 60-70 years old
	☐ over the age of 70

22. Which business model does your company operate? (multiple-choice)
    - ☐ B2B ☐ B2C ☐ C2B ☐ C2C
    - ☐ Other. (please specify) _____

Part II. IT Output

I. Strategy Contribution and Decision Quality

Please fill out the following questions according to the current status of **strategy contribution and decision quality** in "the year of 2004."

	low 1	2	3	4	5	high 6
23. The effect of CIO on CEO's strategy-making is	☐	☐	☐	☐	☐	☐
24. Other departments generally consider that the influence of IT department on strategies is	☐	☐	☐	☐	☐	☐
25. The contribution of IT is _____ % for *strategy making* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐
26. The contribution of IT is _____ % for *revenue* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐
27. The contribution of IT is _____ % for *the decision quality of the executive* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐
28. Compare with other companies in the same industry, the degree of revenue and profit in your company is	☐	☐	☐	☐	☐	☐
29. Compare with other companies in the same industry, the degree of enhancing the decision quality of the executive in your company is	☐	☐	☐	☐	☐	☐

II. Innovative Products and Services

Please fill out the following questions according to the current status of **innovative products and services** in "the year of 2004."

	low					high
	1	2	3	4	5	6
30. The ratio of proposals to IT department staff is _____ : _____.						
31. The average number of innovative proposals from IT department is _____ per year.						
32. The degree of the relationship between innovative proposals of IT department and IT infrastructure is	☐	☐	☐	☐	☐	☐
33. The degree of the relationship between innovative proposals of IT department and business model is	☐	☐	☐	☐	☐	☐
34. The degree of the relationship between innovative proposals of IT department and processes is	☐	☐	☐	☐	☐	☐
35. The degree of the relationship between innovative proposals of IT department and new products is	☐	☐	☐	☐	☐	☐
36. The contribution of IT is _____ % for the *innovative product and service* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐
37. Compare with other companies in the same industry, the degree of innovative products and services in your company is	☐	☐	☐	☐	☐	☐

III. Reducing Cost

Please fill out the following questions according to the current status of **reducing cost** in "the year of 2004."

	low 1	2	3	4	5	high 6
38. The contribution of IT to the cost reduction of processes is	☐	☐	☐	☐	☐	☐
39. The contribution of IT to the cost reduction of customer service is	☐	☐	☐	☐	☐	☐
40. The contribution of IT is _____ % for *reducing cost* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐
41. Compare with other companies in the same industry, the degree of reducing cost in your company is	☐	☐	☐	☐	☐	☐

IV. Process Efficiency

Please fill out the following questions according to the current status of **process efficiency** in "the year of 2004."

42. The contribution of IT to the process efficiency of daily operation is	☐	☐	☐	☐	☐	☐
43. The contribution of IT to the process efficiency of customer services is	☐	☐	☐	☐	☐	☐
44. The contribution of IT to the process efficiency of delivery of goods is	☐	☐	☐	☐	☐	☐

	low 1	2	3	4	5	high 6
45. The contribution of IT is _____ % for *process efficiency* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐
46. Compare with other companies in the same industry, the efficiency of dealing with the same process in your company is	☐	☐	☐	☐	☐	☐

V. Supplier/Customer Relationship

Please fill out the following questions according to the current status of **supplier/customer relationship** in "the year of 2004."

47. The requirement of suppliers for IT infrastructure is	☐	☐	☐	☐	☐	☐
48. The requirement of customers for IT infrastructure is	☐	☐	☐	☐	☐	☐
49. Maintaining good supplier relationship through IT is	☐	☐	☐	☐	☐	☐
50. Maintaining good customer relationship through IT is	☐	☐	☐	☐	☐	☐
51. The contribution of IT is _____ % for *supplier relationship* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐
52. The contribution of IT is _____ % for *customer relationship* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐

	low 1	2	3	4	5	high 6
53. Compare with other companies in the same industry, the improvement of supplier relationship in your company is	☐	☐	☐	☐	☐	☐
54. Compare with other companies in the same industry, the improvement of customer relationship in your company is	☐	☐	☐	☐	☐	☐

VI. Knowledge Management and Organizational Learning

Please fill out the following questions according to the current status of **knowledge management (KM) and organizational learning** in "the year of 2004."

55. How many years does your company implement KM? _____ years.						
56. The degree of implementing knowledge raking mechanism and merging it into personnel salary and bonus is	☐	☐	☐	☐	☐	☐
57. The frequency which the executives use KM averagely is	☐	☐	☐	☐	☐	☐
58. The support of CEO for KM is	☐	☐	☐	☐	☐	☐
59. The manager in each department generally consider that the contribution of IT department to KM is	☐	☐	☐	☐	☐	☐
60. The contribution of IT is _____ % for *KM and organizational learning* in the year of 2004. Compare with the year of 2003, the improvement ratio is _____ %. (Please select the choice listed in the right if the answer is difficult to be quantified.)	☐	☐	☐	☐	☐	☐

	low					high
	1	2	3	4	5	6
61. Compare with other companies in the same industry, the degree of building the environment of knowledge sharing and organizational learning in your company is	☐	☐	☐	☐	☐	☐

VII. Intellectual Property

Please fill out the following questions according to the current status of **intellectual property** in "the year of 2004."

62. What kind of intellectual property does IT department own? How many?
    - ☐ Patent (_____ item(s))
    - ☐ Software (_____ item(s))
    - ☐ Business Model (_____ item(s))
    - ☐ Process Reengineering (_____ item(s))
    - ☐ Production Automation (_____ item(s))