

# APPENDIX C

## Questionnaire Survey (Initial)

### Section A: Personal Information

(Please tick or state the appropriate answer)

Q1. Education level

- Certificate/Diploma
- Bachelor Degree
- Master Degree
- PhD
- Professional qualification/Others  
(Please indicate)

.....

Q4. Years of involvement in using e-procurement/  
e-purchasing within the construction industry  
environment?

- Less than 1 year
- Between 1-5 years
- Between 6-10 years
- Between 11-15 years
- More than 15 years
- Not involved in e-procurement  
/e-purchasing at all

Q2. Years of experience in the construction industry

- Less than 5 years
- Between 6-10 years
- Between 11-15 years
- Between 16-20 years
- Between 21-25 years
- More than 25 years

Q5. Gender

- Male
- Female

Q3. Years of involvement in using e-procurement/  
e-purchasing, in general

- Less than 1 year
- Between 1-5 years
- Between 6-10 years
- Between 11-15 years
- More than 15 years
- Not involved in e-procurement/  
e-purchasing at all

Q6. Job title

- Managing Director (MD)
- General Manager
- Project Manager
- IT Manager
- Procurement/Contract Manager
- Purchasing Manager
- Senior Officer
- Others (Please indicate) .....

### Section B: Business Information

Q7. Number of employees

- 1 - 50
- 51 - 100
- 101 - 150
- 151 - 200
- 201 - 250
- 251 - 300
- More than 300

Q9. Category(ies) that best describe your  
organization's activities

- Residential buildings
- Commercial & Office Buildings
- Industrial Buildings
- Infrastructure and Utilities construction
- Building Materials Supplier and Trading
- Manufacturer
- Others (Please indicate).....

Q8. Organization's turnover per year (RM Millions)

- Less than 10
- 10 - 50
- 51 – 100
- 101 – 150
- 151 – 200
- More than 200

Q10. Approximate ratio of the IT spending to your organization's annual turnover

- Less than 3 years
- Between 3 – 5%
- Between 6 – 8%
- Between 9 – 11%
- Between 12 – 14%
- More than 15%

Q11. Organization's Status:

- Bumiputra
- Non-bumiputra

### Section C: Electronic Purchasing Process Adoption

Q12. Please indicate your materials purchasing activities that are conducted electronically

- None
- Less than 10%
- 10 – 30%
- 31 – 50%
- 51 – 80%
- More than 80%

Q16. Which party your e-purchasing system is linked with? (You can indicate one or more of the following)

- Suppliers
- Manufacturers
- Others (please specify).....

Q13. Please indicate one or more of the following technology applications that are heavily used in your work for procurement of purchasing materials

- Phone
- Fax machines
- E-mail
- Word processing
- Spreadsheet
- Purchasing Software
- ERP (Enterprise Resource Planning)
- Suppliers Portal
- Others (please specify).....

Q17. Which type(s) of e-purchasing system is currently being employed in your organization?

- (You can select as many as applicable)
- E-Buyers
  - E-Suppliers
  - E-Sourcing
  - E-Marketplaces
  - E-Reverse Auction
  - Web-based Portal
  - Others (Please specify).....

Q14. Have your organization adopted an e-purchasing system in materials purchasing activities to purchase direct materials?

- Yes (Please proceed Q15 to Q37)
- No (Please proceed to Q21 to Q37)

Q18. Which IT Vendors are involved in developing e-purchasing system in your organization? (You can indicate one or more of the following)

- Ariba
- SAP
- IFCA
- Oracle
- In-house
- Others (Please specify).....

Q15. How long has e-purchasing system being implemented in your organization?

- Less than 2 years (1-2 years)
- Less than 5 years (3-4 years)
- More than 5 years

Q19. E-purchasing system initiative is rated by you as...

- Successful  
(met timescales, budget, performance and user satisfaction)
- Partially successful  
(met a few of its intended objectives)
- Failure  
(not meeting all expectations and cancelled before completion)
- never implemented or used

Q20. Briefly, what is/are the main reason(s) for your response to the above question?

#### **Section D: Level of Computer Literacy**

Q21. Please indicate your level of computer literacy:

- None user
- Basic user
- Moderate user
- Proficient user

Q22. Please indicate the perceived level of complexity of your routine computer-based tasks

- Not complex
- Low complexity
- Moderate complexity
- Extremely complexity

Q23. Please indicate your confidence level in using an uncommon computer system literacy:

- No confident
- Low confident
- Moderate confident
- Highly confident

**Section E: Critical Success Factors or E-Purchasing Implementation**

1. This questionnaire measures a number of factors that are possibly critical to successful implementation of e-purchasing system in a construction enterprise. The success of the e-purchasing implementation are measured according to; (i) the project success, and (ii) the users' satisfaction. For the purpose of this study , project success is defined as the project which finishes on time; meet the budget and quality whereas users' satisfaction is defined as the users' satisfaction at the outcome of the project.
2. The success of a project is measured in terms of time of completion that is within the proposed budget, scope and the required quality and output.
3. Items to measure the users' satisfaction includes information quality, output and report, precise and clear information, useful format, information content, and accuracy of information.
4. Please select the number in the box, which best represents your opinion for the Organizational Critical Success Factors (CSFs) that contribute to the successful implementation of e-purchasing system in a Construction Enterprise, on a scale of 1 to 5.

**1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree**

	Please read the following statements and tick (✓) in appropriate box to express your degree of agreement or disagreement regarding your views about <b>Organizational Critical Success Factors (CSFs)</b>	<b>E-Purchasing Implementation Success</b>									
		<b>Project Success</b>					<b>User's Satisfaction</b>				
<b>Q24</b>	<b>Organizational Policy and Strategy Plan</b>										
a	The organization has clear mission, vision, strategies, objectives and direction	1	2	3	4	5	1	2	3	4	5
b	Incorporate e-purchasing policy into existing procurement policy	1	2	3	4	5	1	2	3	4	5
c	Availability of a strategy plan which sets deadlines, responsibilities and financing	1	2	3	4	5	1	2	3	4	5
d	Alignment of e-purchasing strategy with IT strategy	1	2	3	4	5	1	2	3	4	5
e	Decide an appropriate e-purchasing business model	1	2	3	4	5	1	2	3	4	5
<b>Q25</b>	<b>Project Plan</b>										
a	Project plans are consistent with information system plan	1	2	3	4	5	1	2	3	4	5
b	Organization provide a detailed project plan (time schedule, milestones and resources requirement)	1	2	3	4	5	1	2	3	4	5

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c	Define project scopes clearly	1	2	3	4	5	1	2	3	4	5
d	Project activities are properly coordinated and monitored	1	2	3	4	5	1	2	3	4	5
<b>Q26</b>	<b>Project Team (PT)</b>										
a	Have strong domain knowledge of business process and technical aspect	1	2	3	4	5	1	2	3	4	5
b	Roles and responsibilities are properly defined and delegated	1	2	3	4	5	1	2	3	4	5
c	Various cross-functional team members were selected	1	2	3	4	5	1	2	3	4	5
d	An experienced and reputable PM	1	2	3	4	5	1	2	3	4	5
e	Use of effective project management techniques to control implementation process	1	2	3	4	5	1	2	3	4	5
<b>Q27</b>	<b>Top Management Support and Commitment</b>										
a	Steering committee provides directions and guidance of implementation process	1	2	3	4	5	1	2	3	4	5
b	Commitment to enforce employees	1	2	3	4	5	1	2	3	4	5
c	Willingness to spend time and resources on the system implementation	1	2	3	4	5	1	2	3	4	5
d	Offers leadership in organization's e-purchasing efforts	1	2	3	4	5	1	2	3	4	5
e	Provides adequate training and education program for employees	1	2	3	4	5	1	2	3	4	5
f	Provide an appropriate organizational structure to support the implementation	1	2	3	4	5	1	2	3	4	5
g	Provide pro-active communication channel	1	2	3	4	5	1	2	3	4	5
h	Promote the implementation of the system	1	2	3	4	5	1	2	3	4	5
i	Offer a reward system to encourage ideas and innovation	1	2	3	4	5	1	2	3	4	5
<b>Q28</b>	<b>Stakeholder Involvement</b>										
a	Stakeholder early involvement	1	2	3	4	5	1	2	3	4	5
b	Identify at which level each stakeholder can or should be involved	1	2	3	4	5	1	2	3	4	5
c	Stakeholders provide information and set requirements	1	2	3	4	5	1	2	3	4	5
<b>Q29</b>	<b>Employee Commitment</b>										
a	Commitment to the organization's objectives	1	2	3	4	5	1	2	3	4	5
b	Loyalty to the organization	1	2	3	4	5	1	2	3	4	5
c	Employee cooperation	1	2	3	4	5	1	2	3	4	5
d	Good quality of work outcomes	1	2	3	4	5	1	2	3	4	5
e	Positive attitude towards e-purchasing implementation process	1	2	3	4	5	1	2	3	4	5

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<b>Q30</b>	<b>Experience with New Technology</b>												
a	The organization needs to have experiences in dealing with technologies application	1	2	3	4	5	1	2	3	4	5		
<b>Q31</b>	<b>Change Management</b>												
a	Recognize change management strategy	1	2	3	4	5	1	2	3	4	5		
b	Commitment to change	1	2	3	4	5	1	2	3	4	5		
<b>Q32</b>	<b>Close Collaboration with Trading Partners</b>												
a	Encourage the organization to build long-term relationship with trading partners	1	2	3	4	5	1	2	3	4	5		
b	Mutual understanding of needs and capabilities	1	2	3	4	5	1	2	3	4	5		
c	Partnership agreement	1	2	3	4	5	1	2	3	4	5		
d	Readiness of trading partners	1	2	3	4	5	1	2	3	4	5		
e	Relationship of trust with trading partners	1	2	3	4	5	1	2	3	4	5		
f	Communication with trading partners	1	2	3	4	5	1	2	3	4	5		
<b>Q33</b>	<b>User Adoption</b>												
a	Users' knowledge and skills	1	2	3	4	5	1	2	3	4	5		
b	Appropriate training sessions	1	2	3	4	5	1	2	3	4	5		
c	Previous experience in using IT application	1	2	3	4	5	1	2	3	4	5		
<b>Q34</b>	<b>Organizational Culture</b>												
a	Encourage innovation and learning processes	1	2	3	4	5	1	2	3	4	5		
b	Encourage sharing of knowledge and information	1	2	3	4	5	1	2	3	4	5		
c	Allow work cultural transformation towards a new initiatives implementation	1	2	3	4	5	1	2	3	4	5		
<b>Q35</b>	<b>Reengineering Business Process</b>												
a	Design and document important business processes	1	2	3	4	5	1	2	3	4	5		
b	Change the process according to organizational needs	1	2	3	4	5	1	2	3	4	5		
c	Simplify processes and eliminate redundancy of activities	1	2	3	4	5	1	2	3	4	5		
<b>Q36</b>	<b>Vendor/Consultant Support</b>												
a	Own business and technical knowledge	1	2	3	4	5	1	2	3	4	5		
b	Able to recommend an appropriate e-purchasing system	1	2	3	4	5	1	2	3	4	5		
c	Support the project team during the implementation process	1	2	3	4	5	1	2	3	4	5		

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37	<b>Performance Measurement</b>	1	2	3	4	5	1	2	3	4	5
a	Create performance measures for new systems initiatives	1	2	3	4	5	1	2	3	4	5
b	Conduct post-implementation review										

If you would like to receive the summarized version of results, please specify the mode of receiving the information.

- Hardcopy by regular mailing services
- E-mail with attachment
- Others (please specify).....

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**-THANK YOU FOR YOUR COOPERATION-**

**-YOUR RESPONSE WILL BE TREATED AS FULL CONFIDENTIAL-**





