

6. REFERENCES

- A Guide to the project management body of knowledge*. (1996). USA: project management institute PMI.
- Baary, j. (2004). supply chain risk in an uncertain global supply chain environmental. *International journal of physical distribution and logistics management* , vol.34,no.9,pp.695-7.
- British Standard Institute. (1987). *BS 302-2:Stranded Steel Wire Ropes*. London: British Standard Institute.
- Cagno,E and Micheli,G.J.I. (2007). Procurement management in Projects:a risk analysis model. *Proceedings of International project management association* , pp.185-92.
- Chan,A.P.C. and Chan,D.W.M. (2004). Developing a benchmark model for projects construction time performance. *Building and Environment* , Vol.39,No.3,pp.339-49.
- Christoper, M. (2004). *Logistic and supply chain management* .
- Christoper,m and Torit,D. (2004). An integrated model for the design of agile supply chains. *international journal of physical distribution and logistics management* , vol.31,no.4,pp.235-46.
- Clarke, A. (1999). A Practical use of key success factors to improve the effectiveness of Project management. *International Journal of Project Management* , Vol.17 (No.3), 139-145.
- Cox, E. (1999). *The fuzzy system hand book*. New York: AP professional.
- Cucchiella,F and Gastaldi,M . (2006). Risk management in supply chain:a real option approach. *Journal of Manufacturing Technology Mangement* , Vol.17,No.6,pp.700-20.
- Dickson, G. (1966). An Analysis of vendor selection:system and decisions. *Journal of Purchasing* , Vol.1,No.2,pp.5-17.
- Diekmann,J.E. and Sewester,E.F. (1988). *Risk management in capital projects*. Austin,TX: Construction Industry Institute.
- Flanagan,R. and Norman,G. (1993). *Risk Management and Construction*. Blackwell: Oxford.
- Granfland,J.J. and Nijhof,A. (2007). Transparency, market operation and trust in the Construction industry:An explorative study. *Construction management and economics* , Vol.25,pp.195-205.

- Guido, J.L. Enrico, C. and Marta, Z. (2008). *Supply risk management vs supplier selection to manage the supply risk in the EPC supply chain*.
- Harland, C. Brenchly, R. and Walker, H. (2003). Risk in supply networks. *Journal of Purchasing and supply management*, vol.9, pp.51-62.
- Khalfan, M.M.A. and McDermot, P. (2006). Innovating for supply chain integration within construction. *Construction Innovation*, Vol.6, pp.143-57.
- Macneil, I. (1974). The many futures of contract. *Southern California law review*, Vol.47, pp.691-738.
- Miles, M.B. and Huberman, A.M. (1994). *Qualitative Data analysis: An expanded source book*. Thousand Oaks, CA: Sage Publication.
- Peck, H. (2006). Reconciling supply chain vulnerability, risk and supply chain management. *International journal of Logistics: Research and Applications*, Vol.9, No.2, pp.127-42.
- Sunil Chopra, P. M. (2009). *Supply Chain Management: Strategy, Planning and Operation*. India: Dorling Kindersley (India) Pvt. Ltd.
- Tah J.H.M., Cary V., Howes R. (1998). An Application of case based reasoning to the planning of high way bridge construction. *Engineering construction management*, 5(4); 328-38.
- Tang, C. (2006). Perspectives in supply chain risk management. *International Journal of Production Economics*, Vol.103, pp.451-88.
- Thompson, A. (1990). *Architectural design procedures*. London: Edward Arnold.
- Thompson, P.A. and Perry, J.G. (1992). Engineering construction risks. *Journal of project management*, Vol.19, pp.123-95.
- Tompson, P.A. and Percy, J.G. (1992). *Engineering construction risk*. An SERC project report.
- Waterrs, C. (2007). *Supply Chain Risk Management: vulnerability and resilience in logistics*. London: Kogan Page Limited.
- William, T. (1993). Risk management infrastructure. *International Journal of project Management*, 11(1); 5-10.
- www.emeraldinsight.com. (n.d.).
- Yeo, K. (1995). Strategy for risk management through problem framing in technology acquisition. *International Journal of project Management*, 13(4); 219-24.

7. ANNEXES

Questionnaire

Part – A

Company Details	Name of the company		
	Address		
Company's Capital/Grade			
No. of Employees			
Respondent's detail	Designation of the Respondent		
	Qualifications		
	Total Experience		
	Experience in this company		
	Positions held		
 University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk			
Projects Detail	Project 1	Project 2	Project 3
Client Name			
Project Cost			
Project Period			
Nature of the project			
Time Extension Given			
Cost variation			
Major changes in Scope of the project			

PART - B

The following table consists 20 No. of statements that involving construction supply chain risk. Besides each statement tick the opinion according to your own. The data will be keeping confidently and your identity will not be exposed.

Statement	No	Slightly	Averagely	Acceptably	Strongly
2 Management • The ability to Plan, Resources, administer, monitor, control and generally run the project					
a) Do the project managers have the necessary skills and experience?					
b) Can Project managers meet the corporate goals?					
c) Do the corporate management keeping strong relationship with project manager?					
d) Does the project have adequate document procedure?					
e) Do project manager know all stakeholders and understand their priorities?					
f) Are the administrative arrangements reasonable?					
g) Are the project budget, cost and time schedule reasonable?					
h) Are there enough resources to finish the project on time?					
i) Are the stakeholders' contributions reasonable?					
j) Would additional resources need additional funding?					
k) Is the project given high enough priority?					
l) Are project managers committed to delivering a high quality end product?					
2. Purpose • Defining the overall aims of the project					
a) Have all the project requirements been identified?					
b) Are these clearly stated and understood?					
c) Does frequently changes in project scope?					
d) Have the requirements been successfully met in similar projects?					

3. Facilities <ul style="list-style-type: none"> The buildings, equipments and other assets 					
a) Does the project need dedicated facilities or other capital equipments?					
b) Where these considered sufficiently during the project design?					
c) Are there enough infrastructures in terms of office space, facilities, suppliers etc?					
4. Systems engineering <ul style="list-style-type: none"> Ensuring that technical solutions provided by the project meet operational requirements? 					
a) Will the finished projects satisfy the end-users?					
b) Have the implications of the design been considered sufficiently?					
c) Does new technology changes effected to the project?					
d) Does the design rely on new or untried technology?					
5. Testing <ul style="list-style-type: none"> Procedures for giving information about performance 					
a) Is there any continues performance monitoring system?					
b) Are these follows acceptable standards for measures?					
c) Does the project budget include the testing cost adequately?					
d) Do the stakeholders satisfy with the measuring system?					
e) Are these test procedures designed early enough in the project?					
6. Human resources <ul style="list-style-type: none"> The number of people available 					
a) Have human resources requirements been identified properly?					
b) Are there enough skill people available to meet these requirements?					
c) Is there any continuous performance appraisal system adopted?					
d) Do the human resources retain throughout the project?					
e) Do stakeholders satisfy with the human resources utilized?					
f) Do the human resources properly utilized in the project?					
7. Skills <ul style="list-style-type: none"> The capabilities needed to complete the project 					

a) Have the knowledge, skills and abilities required by the project been properly identified?					
b) Are these skills available in management level?					
c) Are these skills available in junior management level?					
d) Are these skills available in worker level?					
e) Does the available skills enough to meet the quality requirements?					
8. Training • Giving everyone the necessary skills, knowledge, values and attitudes					
a) Does training is needed for people working on the project?					
b) Does the training required in management?					
c) Does the training required in Management?					
d) Does the training required in technical/Technology?					
e) Does the training required in Skills?					
9. Human Factors • The allowances for human abilities, characteristics, behavior, motivation and performance requirements					
a) Does the project make unusual requirements of its staff?					
b) Are there many manual operations to consider?					
c) Are there high levels of motivation?					
d) Are there high levels of stress?					
10. Cost • The funding available					
a) Where realistic cost objectives established early?					
b) Have realistic cost been assigned to each activity?					
c) Have cost variation happened to the project?					
d) Is enough funding available for the project?					
11. Accounting • Monetary control					
a) Is the funding under the control of the project manager?					
b) Are there adequate controls over cash flows?					

c) Does any software used for control the cash flow?					
d) Is expenditure reviewed periodically to monitor progress?					
12. Schedule • The timing of activities					
a) Have all activities been identified for the project?					
b) Has each been scheduled properly into an assigned time slot?					
c) Has enough resources allocated to meet the targets?					
d) Has enough time been allocated to complete the whole project?					
13. Tools • Supporting management tools, Techniques ,etc					
a) Does any management tools identify early in the project?					
b) Does these tools used in the project?					
c) Does project staff reluctant to use these tools?					
d) Are project staffs familiar with these tools?					
14. Software • Computer programs, Procedures, information processing and associated documentation					
a) Are the software requirements known and documented?					
b) Is appropriated software already available?					
c) Does the project information properly communicated with staff?					
d) Does proper information system used in the project?					
e) Do project staff familiar to use the software?					
15. Procurement • Procedure for acquiring materials					
a) Are the procurement procedures good enough?					
b) Does the suppliers been identified early in the project?					
c) Does single sourcing are used in the project?					
d) Does out sourcing been practiced in the project?					
e) Do the long term suppliers meet the quality, cost and timely targets?					
f) Do the short term suppliers meet the quality, cost and timely targets?					

g) Are there enough suppliers to meets the targets?					
h) Does supplier relationships are strong enough to meet the goals?					
16. Contracting • Specific arrangements for contracting services					
a) Are the sub contracting services have been identify early enough?					
b) Do the projects have proper methodology to chosen sub contractors?					
c) Can the sub contractors meet the specific requirements?					
17. Logistics • The inward and outward flows of materials					
a) Does project properly identifies how materials moved into and out of the project?					
b) Does project have reliable system to manage the transport?					
c) Does the project have reliable back up facilities to manage sudden breakdowns?					
18. Environment • The context which the project works					
a) Does the project comply with international and National lows?					
b) Does projects					
c) Do the political uncertainties impact on to the project?					
d) Do the social conflicts impact on to the project?					
e) Do the policy changes impact on to the project?					
19. Health Hazards • Potential risks to people employed					
a) Do projects identify any health hazards specific to project?					
b) Does any preventive measures taken to removed or minimized these hazards?					
c) Does any particularly hazardous materials or operations in the project?					
d) Does any procedures are available to deal with hazards?					
20. Safety • Procedure in place to minimized the occurrence of accidents and injuries					
a) Are there any specific sources of potential accidents?					
b) Does any preventive measures adopted to be eliminated or minimized?					
c) Does any accident occur frequently due to negligence?					



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk