

Appendix D

Survey Cover Letter and Questionnaire

Dear Sir/Madam,

I am a research student in the School of the Built Environment at Herriot-Watt University in the UK, conducting research under the supervision of Dr. Graeme Bowles and Dr. Zhen Chen. I am researching better management of variation orders in the Saudi public construction projects at the design stage.

A previous study in this research revealed that, the current practice of variation order management in the Saudi public construction projects follows the basic principles of any variation order management system, which can be described as *identifying, evaluating the variation order, estimation, approval, implementation and documentation*. However, the Saudi public construction industry shows some deficiencies in variation order management at the design stage due to the poor stakeholder engagement. Hence, this survey aims to integrate stakeholder power-interest matrix with the current process of variation order management to investigate the level of power and interest of the involved stakeholders (public clients and design consultants) in order to improve the variation order management process during the design stage.

Please, I respectfully ask you to complete the questionnaire and be assured that the data collected will be kept confidential and no firm, organisation or individual will be identified in the thesis or in any report or publication based on this research. A copy of the summary report will be made available if required.

I would also like to assure you that this study has been reviewed and received ethics clearances through the office of research ethics at Heriot-Watt University

Thanks in advance for your co-operation.

Yours sincerely
Jawad Al Suliman
E-mail: ja169@hw.ac.uk

Section (A): Personal background:

1. Name (Optional):
2. What is your work organisation?
 - Public sector
 - Private consulting firm (designer)
 - Other
3. What is your job in the design process of your organisation?
 - Project manager
 - Design manager
 - Architect
 - Civil engineer
 - Site engineer
 - Quantity surveyor
 - Other: specify
4. Have you been involved in designing public construction projects?
 - Yes
 - No
5. Please specify your years of experience:
 - 0-5
 - 6-10
 - 11-15
 - 16-20
 - More than 20

Section (B-1): the significance of stakeholder engagement in the variation order management

- Please indicate your response throughout the questionnaire by ticking the appropriate box where (1= not at all and 7= to a great extent)

6. To what extent do you agree with the following statements to better manage variation orders at the design stage?

Statement	1	2	3	4	5	6	7
a) Having a good relationship between the public client and the consulting firm to manage variation orders.							
b) Establishing an effective communication between the public client and the consulting firm to manage variation orders.							
c) Poor co-ordination between public client and consulting firm negatively affects the performance of variation order management.							
d) Understanding of stakeholder engagement helps for better management of variation order process.							
e) Identification of the stakeholders' responsibilities assists the design team to better manage the variation order							
f) Poor implementation of stakeholder management can negatively affect the performance of variation order management							
g) Engaging the stakeholders in the change process							
h) All stakeholders should know their own tasks and roles in the change process							
i) The stakeholder commitment is important to manage variation orders							

Section (B-2): the significance of stakeholder engagement in the process of variation order management

Please indicate your response throughout the questionnaire by ticking the appropriate box where (1= not at all and 7= to a great extent)

7. To what extent do you agree with the following statements during the process of variation order management at the design stage?

Statement	1	2	3	4	5	6	7
a) Interaction among stakeholders assists the design team to better manage the variation order.							
b) Stakeholder engagement depends on the size and cost of the variation order							
c) The client and designer should meet to manage every design change.							
d) Personalities and ethics of clients and consultants influence decision making in the design changing process.							
e) Cultural diversity between public client and consulting firm							

negatively influences the performance of variation order management							
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Section (C): Integration of stakeholder power-interest matrix with the current variation order management

8. In your opinion, what should the level of *power* and *interest* for public client and consulting firm in each principle of the variation order management process during the design stage? (Please: tick low or high for each principle and stakeholder)

Power: means the power the client and consultant hold

Interest: means interest in supporting change process

High: means the level of power and interest is high

Low: means the level of power and interest is low

Principle	Public client				Consulting firm			
	Power		Interest		Power		Interest	
	Low	High	Low	High	Low	High	Low	High
1- Identify variation								
2- Evaluate variation								
3- Estimate cost and time								
4- Approval								
5- Implementation								
6- Documentation								

- Please indicate your response throughout the questionnaire by ticking the appropriate box where (1= not at all and 7= to a great extent)

9. To what extent do you agree that the integration of the level of power and interest with the current practice of variation order management will assist to better manage variation orders?

1	2	3	4	5	6	7

Section (D): Effectiveness of integrating stakeholder power-interest matrix with the current variation order management

- Please indicate your response throughout the questionnaire by ticking the appropriate box where (1= not at all and 7= to a great extent)

10. To what extent do you agree with the following statements for the effectiveness of applying a system to manage variation orders at the design stage?

Statement	1	2	3	4	5	6	7
a) Not having a system to manage variation orders would increase the duration to implement the variation order.							
b) Not having a system to manage variation orders would lead to conflicts and disputes among stakeholders.							
c) Involving the stakeholders by identifying the level of power and interest for each one in a variation order management system would assist to have a good communication and speed up the process of implementing the variation order							
d) Identifying the level of power and interest for each stakeholder in a variation order management system would assist to avoid conflicts and disputes in the process of implementing the variation order							
e) Developing a model that integrates the level of power and interest with the basic principles of variation order management would better manage variation orders							

11. Please feel free to add any comments that you think are related to the integration of power and interest level with the current practice of variation order management to better manage variation order at the design stage

