

## รายการอ้างอิง

### ภาษาไทย

การคลัง, กระทรวง. สำนักงบประมาณ, อ้างถึงใน ปองสุข อนุดิศย์. 3 พฤศจิกายน 2548. เจ้าหน้าที่บริหารการเงินและบัญชี 7. สัมภาษณ์.

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ภาคผนวก

ภาคผนวก ก.

ตัวอย่างแบบสอบถาม



**QUESTIONNAIRES FOR SURVEYING**  
**CONSTRUCTION CLAIMS MANAGEMENT:**  
**CASE STUDIES FROM SOUTHEAST ASIAN COUNTRIES**

Dear Sir:

I am a Master student of the Construction Engineering and Management Division in the Department of Civil Engineering, Faculty of Engineering at Chulalongkorn University, Thailand. I am interested in learning more about the Construction Claim in Southeast Asian Countries as a partial fulfillment of the requirements for the Master's Degree in Engineering. This study aims to identify problems and constraints in the Southeast Asian countries associated with the construction contracting processes, i.e. Construction claim management processes, organization and claim management procedure. The research will provide the exchange of knowledge among Thailand, Laos, and Vietnam.

To do this, of course, means going to someone such as yourself who *knows*. Your help with the few questions on the attached pages will take only a few minutes and will make a real contribution to the accuracy and success of this study.

Your answers will be treated in strict confidences and will be used only as parts of my thesis study for analysis. Any publication will be only statistical totals for groups of companies.

Your assistance will be greatly appreciated. Thank you for your cooperation.

Sincerely,

Monthathip Thongthammachat

**PART 1 GENERAL INFORMATION**

**ABOUT YOU**

1. Name: \_\_\_\_\_ Surname: \_\_\_\_\_
2. Your position: \_\_\_\_\_
3. Office address: \_\_\_\_\_  
 \_\_\_\_\_ Phone no.: \_\_\_\_\_
4. Your experience relating to Construction Claims (years): \_\_\_\_\_
5. The highest contract value you ever worked with (USD): \_\_\_\_\_  
 \_\_\_\_\_

## PART 2 COMMON PROCEDURES

Your opinion within these statements during the construction claim processes.

Based on your experience in construction claim management, what is your opinion of the following questions? (Please indicate your opinion by checking in the block number 1 to 5)

### ***CLAIM IDENTIFICATION AND NOTIFICATION***

Your opinion within these statements during the process of claim identification and notification.

	(5)	(4)	(3)	(2)	(1)
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
<b>Claim Identification</b>					
1. The contractor is sensible of job factors giving rise to a claim.					
2. The issues claims stated by contractors are always accurate.					
3. The contractors always keep records regarding to the work. When the problems faced, they can recognize them quickly.					
4. Claims are always recognized and filed during construction. They are uncommonly solved after project completion.					
<b>Claim Notification</b>					
5. Contractors always notify the existing claims within limit of time requirement in the contract.					
6. Notices submitted by Contractors are deliberately well-organized with a standard form.					
7. The documents attached along with notice are always suitable.					
8. The notice of claims always submitted by contractors in writing.					
9. The Claim notices are always short and clear easy to understand.					
10. The contractors always alert you of a potential problem in a manner that is non-adversarial.					
11. The Claims notified by contractor are often reasonable with legal and factual grounds referred to the contract documents.					
12. Other opinion related, please specify: _____ _____					

## CLAIM EVALUATION

Your opinion within these statements during the process of claim evaluation.

	(5)	(4)	(3)	(2)	(1)
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
<b>Claim Examination</b>					
1. The formula that used in claims calculation is suitable, reasonable and reliable.					
2. The contractor's claims are always calculated correctly. The over inflated claims are not too often found.					
3. The entitlement factors are always shown and referred. (Entitlement factors: foreseeability, control, causation, and legal responsibility).					
<b>Claim Documentation</b>					
4. Inaccessibility of documents when required.					
5. Expensive to remedy required information.					
6. Imprecise recorded information.					
7. Ineffective record keeping system of Contractors.					
8. Overdue process in retrieving the documents back.					
9. Some information is not kept in writing.					
10. No standard form used to record the data during construction.					
11. The documentation system is lack of computerized technology applied.					
<b>Claim Presentation</b>					
12. The full details of claim submitted by contractors are always logically built up.					
13. The contractor's claim submissions are always well organized with evidence substantiating the entitlement.					
14. The full detail reports of claim submitted by contractors are always well organized with standard form.					
15. The contractors are always submitting clear and using simple words of claims, it is easy to understand.					
16. The contractors always submit a full detail of claims with a good faith.					
17. The claims submitted by contractors are always reasonably referred to the legal and factually grounds for the entitlement.					
18. The full details of claims are always submitted within time limit requirements.					
19. Other problems, please specify: _____ _____					

How often are these required documents missing submitted by Contractors?	(5)	(4)	(3)	(2)	(1)
	Very Often	Often	Some times	Rarely	Never
20. Preliminary and baseline schedules.					
21. Updated project schedules.					
22. Relevant correspondences between parties.					
23. Clarification memos.					
24. Minutes of meeting.					
25. Photographs represent the problems.					
26. Daily report and logs.					
27. Change order logs.					
28. Submittal logs.					
29. Cost of report and records.					
30. Oral instructions.					
31. Reports of quality control.					
32. Chart of labor power.					
33. Other documents, please specify _____ _____					

**CLAIM NEGOTIATION**

Your Opinion within these statement during the process of claim negotiation.

	(5)	(4)	(3)	(2)	(1)
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
<b>Claim Negotiation</b>					
1. The contractors are always submitting the logical built up of the full details of claims.					
2. The contractor's claims submissions are always well-documented with fully evidence substantiating the entitlement.					
3. The contractors are always submitting the well-organized with a standard format of the full detail reports of claim.					
4. The statements in a claim submission from the contractors are factually convincing and influential.					
5. The contractors always submit a full detail of claims with a good faith.					
6. The contractors are always submitting clear and using simple words of claims, it is easy to understand.					
7. The claims submitted by the contractors are always reasonably referred to the legal and factually ground for entitlement.					
8. The full details of claims are always submitted within time limit requirements.					
9. The contractor always put the most effort to mitigate the settlement by Litigation and Arbitration.					
10. Claims are always resolved as soon as possible concerning their effects to the project's performance.					
11. Most of the claims are settle concerning mutual satisfaction of both sides.					
12. The negotiation of claims is always objective directed to the problems.					
13. The negotiation of claims for completion is conducted professionally and cooperatively.					
14. Other problem, please specify: _____ _____					

**PART 3 OPEN-END QUESTIONS**

**The questions below are to investigating the practice in construction claims.**

1. Normally, who are responsible for identifying the problems during the construction work?

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2. Do you have any standard procedure when someone is facing a problem during the work?

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3. Which document is often used to indicate any claims issue or problems?

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4. What are the problems that always occurred in construction claims?

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5. The suggestion about construction claims.

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ภาคผนวก ข.

ผลการวิเคราะห์ข้อมูลจากแบบสอบถาม

ภาคผนวก ข-1

ผลการวิเคราะห์ข้อมูลจากแบบสอบถาม  
ในประเทศลาว



ตารางที่ ข-1.1 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Identification and Notification

No.	Statements regarding to the process of contractor's Claims		No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
				5	4	3	2	1		
				Strong agree	Agree	Neutral	Disagree	Strong disagree		
1	Identification	The contractor is aware of job factors giving rise to a claim.	6	0	3	2	1	0	20	0.67
2		The issues claims alleged by contractors are always accurate.	6	0	2	1	3	0	17	0.57
3		The contractors always keep records regarding to the work. When the problems faced, they can recognize them quickly.	6	1	3	0	2	0	21	0.70
4		Claims are always recognized and filed during construction. They are rarely solved after the completion of the project.	6	1	2	2	1	0	21	0.70
Average of Relative Index =									0.66	
5	Notification	Contractors always notify you existing claims within time limit requirement in the contract.	6	1	4	1	0	0	24	0.80
6		Notices submitted by Contractors are deliberately well-organized with a standard form.	6	0	4	1	1	0	21	0.70
7		The documents attached along with notice are always adequate.	6	0	5	1	0	0	23	0.77
8		The contractors always submit the notice in writing.	6	2	4	0	0	0	26	0.87
9		The Claim notices are always short and clear easy to understand.	6	0	2	3	1	0	19	0.63
10		The contractors always alert you of a potential problem in a manner that is non-adversarial.	6	0	0	2	4	0	14	0.47
11		The Claims notified by contractor are often reasonable with legal and factual grounds referred to the contract documents.	6	1	2	3	0	0	22	0.73
Average of Relative Index =									0.71	
Average of Claim Identification and Notification's Relative Index =									0.69	

หมายเหตุ : "a" Relative Index =  $\frac{\sum w}{A \times N}$

ตารางที่ ข-1.2 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Evaluation

No.	Statements regarding to the process of contractor's Claims		No. of respondents	Frequency of occurrences					Sum w	Relative Index *
				5	4	3	2	1		
				Strong agree	Agree	Neutral	Disagree	Strong disagree		
1	Examination	The formula that used in claims calculation is suitable, reasonable and reliable.	6	0	1	4	1	0	18	0.60
2		The contractor's claims are always calculated correctly. The over inflated claims are not too often found.	6	0	0	0	6	0	12	0.40
3		The entitlement factors are always shown and referred. (Entitlement factors: foreseeability, control, causation, and legal responsibility)	6	1	5	0	0	0	25	0.83
<b>Average of Relative Index =</b>									<b>0.61</b>	
4	Documentation	Inaccessibility of documents when required.	6	0	3	3	0	0	21	0.70
5		Expensive to retrieve required information.	6	0	3	2	1	0	20	0.67
6		Imprecise recorded information.	6	0	5	1	0	0	23	0.77
7		Ineffective record keeping system of Contractors.	6	0	3	1	2	0	19	0.63
8		Overdue process in retrieving the documents back.	6	0	1	5	0	0	19	0.63
9		Some information is not kept in writing.	6	0	3	0	1	2	16	0.53
10		No standard form used to record the data during construction.	6	0	1	1	2	2	13	0.43
11		The documentation system is lack of computerized technology applied.	6	0	3	2	1	0	20	0.67
<b>Average of Relative Index =</b>									<b>0.63</b>	
12	Presentation	The full details of claim submitted by contractors are always logically built up.	6	0	1	3	2	0	17	0.57
13		The contractor's claim submissions are always well organized with evidence substantiating the entitlement.	6	0	0	4	2	0	16	0.53
14		The full detail reports of claim submitted by contractors are always well organized with standard form.	6	0	2	4	0	0	20	0.67
15		The contractors are always submitting clear and using simple word of claims, it is easy to understand.	6	0	1	4	1	0	18	0.60
16		The contractor always submit you a full detail of claims with a good faith.	6	0	0	0	6	0	12	0.40
17		The claims submitted by contractors are always reasonably referred to the legal and factually grounds for the entitlement.	6	0	1	2	3	0	16	0.53
18		The full details of claims are always submitted within time limit requirements.	6	1	1	4	0	0	21	0.70
<b>Average of Relative Index =</b>									<b>0.57</b>	
<b>Average of Claim Evaluation's Relative Index =</b>									<b>0.60</b>	

หมายเหตุ "a" Relative Index =  $\frac{\sum w}{A \times N}$

ตารางที่ ข-1.3 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Negotiation

No.	Statements regarding to the process of contractor's Claims	No. Of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
			5	4	3	2	1		
			Strong agree	Agree	Neutral	Disagree	Strong disagree		
1	The contractors are always submitting the logical built up of the full detail of claims.	6	0	2	3	1	0	19	0.63
2	The contractor's claims submissions are always well-documented with fully evidence substantiating the entitlement.	6	0	2	3	1	0	19	0.63
3	The contractors are always submitting the well-organized with a standard format of the full detail reports of claims.	6	0	0	5	1	0	17	0.57
4	The statements in a claim submission from the contractors are factually convincing and influential.	6	0	1	3	2	0	17	0.57
5	The contractors always submit you a full detail of claim with a good faith.	6	0	1	3	2	0	17	0.57
6	The contractors are always submitting clear and using simple words of claims, it is easy to understand.	6	0	1	3	2	0	17	0.57
7	The claims submitted by the contractors are always reasonably referred to the legal and factually ground for entitlement.	6	0	1	2	3	0	16	0.53
8	The full details of claims are always submitted within time limit requirements.	6	0	2	4	0	0	20	0.67
9	The contractor always put the most effort to mitigate the settlement by Litigation and Arbitration.	6	0	0	5	1	0	17	0.57
10	Claims are always resolved as soon as possible concerning their effects to the project's performance.	6	1	1	2	2	0	19	0.63
11	Most of the claims are settle concerning mutual satisfaction of both sides.	6	1	3	2	0	0	23	0.77
12	The negotiation of claims is always objective directed to the problems.	6	1	4	0	1	0	23	0.77
13	Claims negotiation for completion is conducted professionally and cooperatively.	6	0	2	3	1	0	19	0.63
Average of Claim Evaluation's Relative Index =								0.62	

หมายเหตุ : "a" Relative Index =  $\frac{\sum w}{A \times N}$

ตารางที่ ข-1.4 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Relevant documents

No.	List of relevant documents	No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
			5	4	3	2	1		
			Very often	Often	Sometimes	Rarely	Never		
1	Preliminary and baseline schedules.	6	0	2	3	1	0	19	0.63
2	Updated project schedules.	6	0	3	1	2	0	19	0.63
3	Relevant correspondences between parties.	6	0	5	0	1	0	22	0.73
4	Clarification memos.	6	0	4	1	0	1	20	0.67
5	Minutes of meeting.	6	1	3	0	2	0	21	0.70
6	Photograph represents the problems.	6	1	2	3	0	0	22	0.73
7	Daily report and logs.	6	0	4	2	0	0	22	0.73
8	Change order logs.	6	0	3	3	0	0	21	0.70
9	Submittal logs.	6	0	4	2	0	0	22	0.73
10	Cost of report and records.	6	1	4	0	0	1	22	0.73
11	Oral instructions.	6	0	4	2	0	0	22	0.73
12	Reports of quality control.	6	0	4	1	1	0	21	0.70
13	Chart of labor power.	6	0	4	2	0	0	22	0.73
<b>Average of Relative Index =</b>								<b>0.71</b>	

หมายเหตุ "a" Relative Index =  $\frac{\sum w}{A \times N}$

ภาคผนวก ข-2

ผลการวิเคราะห์ข้อมูลจากแบบสอบถาม  
ในประเทศไทย

ตารางที่ ข-2.1 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Identification and Notification

No.	Statements regarding to the process of contractor's Claims		No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>	
				5	4	3	2	1			
				Strong agree	Agree	Neutral	Disagree	Strong disagree			
1	Claim Identification and Notification	Identification	The contractor is aware of job factors giving rise to a claim.	5	0	1	4	0	0	16	0.64
2			The issues claims alleged by contractors are always accurate.	5	0	0	3	2	0	13	0.52
3			The contractors always keep records regarding to the work. When the problems faced, they can recognize them quickly.	5	1	1	2	1	0	17	0.68
4			Claims are always recognized and filed during construction. They are rarely solved after the completion of the project.	5	0	3	1	1	0	17	0.68
Average of Relative Index =										0.63	
5		Notification	Contractors always notify you existing claims within time limit requirement in the contract.	5	1	4	0	0	0	21	0.84
6			Notices submitted by Contractors are deliberately well-organized with a standard form.	5	0	2	3	0	0	17	0.68
7			The documents attached along with notice are always adequate.	5	0	2	2	1	0	16	0.64
8			The contractors always submit the notice in writing.	5	3	2	0	0	0	23	0.92
9			The Claim notices are always short and clear easy to understand.	5	0	2	3	0	0	17	0.68
10			The contractors always alert you of a potential problem in a manner that is non-adversarial.	5	0	2	2	1	0	16	0.64
11	The Claims notified by contractor are often reasonable with legal and factual grounds referred to the contract documents.		5	0	1	3	1	0	15	0.60	
Average of Relative Index =										0.71	
Average of Claim Identification and Notification's Relative Index =										0.68	

หมายเหตุ:

$${}^a \text{Relative Index} = \frac{\sum w}{A \times N}$$

ตารางที่ ข-2.2 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Evaluation

No.	Statements regarding to the process of contractor's Claims		No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
				5	4	3	2	1		
				Strong agree	Agree	Neutral	Disagree	Strong disagree		
1	Examination	The formula that used in claims calculation is suitable, reasonable and reliable.	5	0	1	3	1	0	15	0.60
2		The contractor's claims are always calculated correctly. The over inflated claims are not too often found.	5	0	1	2	2	0	14	0.56
3		The entitlement factors are always shown and referred. (Entitlement factors: foreseeability, control, causation, and legal responsibility)	5	0	3	1	1	0	17	0.68
Average of Relative Index =									0.61	
4	Documentation	Inaccessibility of documents when required.	5	0	1	4	0	0	16	0.64
5		Expensive to retrieve required information.	5	0	0	5	0	0	15	0.60
6		Imprecise recorded information.	5	0	1	4	0	0	16	0.64
7		Ineffective record keeping system of Contractors.	5	0	1	2	2	0	14	0.56
8		Overdue process in retrieving the documents back.	5	0	1	4	0	0	16	0.64
9		Some information is not kept in writing.	5	0	2	3	0	0	17	0.68
10		No standard form used to record the data during construction.	5	0	1	4	0	0	16	0.64
11		The documentation system is lack of computerized technology applied.	5	0	0	2	3	0	12	0.48
Average of Relative Index =									0.61	
12	Presentation	The full details of claim submitted by contractors are always logically built up.	5	0	0	4	1	0	14	0.56
13		The contractor's claim submissions are always well organized with evidence substantiating the entitlement.	5	0	1	3	1	0	15	0.60
14		The full detail reports of claim submitted by contractors are always well organized with standard form.	5	0	1	2	2	0	14	0.56
15		The contractors are always submitting clear and using simple word of claims, it is easy to understand.	5	0	1	3	1	0	15	0.60
16		The contractor always submit you a full detail of claims with a good faith.	5	0	2	3	0	0	17	0.68
17		The claims submitted by contractors are always reasonably referred to the legal and factually grounds for the entitlement.	5	0	1	3	1	0	15	0.60
18		The full details of claims are always submitted within time limit requirements.	5	0	4	1	0	0	19	0.76
Average of Relative Index =									0.62	
Average of Claim Evaluation's Relative Index =									0.62	

หมายเหตุ:  ${}^a$  Relative Index =  $\frac{\sum w}{A \times N}$

ตารางที่ ข-2.3 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Negotiation

No.	Statements regarding to the process of contractor's Claims	No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
			5	4	3	2	1		
			Strong agree	Agree	Neutral	Disagree	Strong disagree		
1	The contractors are always submitting the logical built up of the full detail of claims.	5	0	2	2	1	0	16	0.64
2	The contractor's claims submissions are always well-documented with fully evidence substantiating the entitlement.	5	0	1	3	1	0	15	0.60
3	The contractors are always submitting the well-organized with a standard format of the full detail reports of claims.	5	0	1	2	2	0	14	0.56
4	The statements in a claim submission from the contractors are factually convincing and influential.	5	0	1	3	1	0	15	0.60
5	The contractors always submit you a full detail of claim with a good faith.	5	0	2	3	0	0	17	0.68
6	The contractors are always submitting clear and using simple words of claims, it is easy to understand.	5	0	1	3	1	0	15	0.60
7	The claims submitted by the contractors are always reasonably referred to the legal and factually ground for entitlement.	5	0	0	4	1	0	14	0.56
8	The full details of claims are always submitted within time limit requirements.	5	1	2	2	0	0	19	0.76
9	The contractor always put the most effort to mitigate the settlement by Litigation and Arbitration.	5	0	2	3	0	0	17	0.68
10	Claims are always resolved as soon as possible concerning their effects to the project's performance.	5	0	3	2	0	0	18	0.72
11	Most of the claims are settle concerning mutual satisfaction of both sides.	5	0	3	2	0	0	18	0.72
12	The negotiation of claims is always objective directed to the problems.	5	0	2	3	0	0	17	0.68
13	Claims negotiation for completion is conducted professionally and cooperatively.	5	0	2	3	0	0	17	0.68
<b>Average of Claim Negotiation's Relative Index =</b>								<b>0.65</b>	

หมายเหตุ: <sup>a</sup> Relative Index =  $\frac{\sum w}{A \times N}$



ตารางที่ ข-2.4 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Relevant documents

No.	List of relevant documents	No. of respondents	Frequency of occurrences					Sum w	Relative Index *
			5	4	3	2	1		
			Very often	Often	Sometimes	Rarely	Never		
1	Preliminary and baseline schedules.	5	0	2	3	0	0	17	0.68
2	Updated project schedules.	5	0	1	4	0	0	16	0.64
3	Relevant correspondences between parties.	5	0	1	3	1	0	15	0.60
4	Clarification memos.	5	0	0	3	2	0	13	0.52
5	Minutes of meeting.	5	0	1	2	2	0	14	0.56
6	Photographs represent the problems.	5	0	1	1	3	0	13	0.52
7	Daily report and logs.	5	0	2	2	1	0	16	0.64
8	Change order logs.	5	0	0	4	1	0	14	0.56
9	Submittal logs.	5	0	0	3	2	0	13	0.52
10	Cost of report and records.	5	0	1	2	2	0	14	0.56
11	Oral instructions.	5	0	1	3	1	0	15	0.60
12	Reports of quality control.	5	0	2	3	0	0	17	0.68
13	Chart of labor power.	5	1	0	4	0	0	17	0.68
Average of Relative Index =								0.60	

หมายเหตุ: "Relative Index" =  $\frac{\sum w}{A \times N}$

ภาคผนวก ข-3

ผลการวิเคราะห์ข้อมูลจากแบบสอบถาม  
ในประเทศเวียดนาม

ตารางที่ ข-3.1 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Identification and Notification

No.	Statements regarding to the process of contractor's Claims		No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
				5	4	3	2	1		
				Strong agree	Agree	Neutral	Disagree	Strong disagree		
1	Identification	The contractor is aware of job factors giving rise to a claim.	4	0	3	1	0	0	15	0.75
2		The issues claims alleged by contractors are always accurate.	4	0	0	2	2	0	10	0.50
3		The contractors always keep records regarding to the work. When the problems faced, they can recognize them quickly.	4	0	2	2	0	0	14	0.70
4		Claims are always recognized and filed during construction. They are rarely solved after the completion of the project.	4	0	1	2	1	0	12	0.60
<b>Average of Relative Index =</b>									<b>0.64</b>	
5	Notification	Contractors always notify you existing claims within time limit requirement in the contract.	4	0	2	2	0	0	14	0.70
6		Notices submitted by Contractors are deliberately well-organized with a standard form.	4	0	1	3	0	0	13	0.65
7		The documents attached along with notice are always adequate.	4	0	1	2	1	0	12	0.60
8		The contractors always submit the notice in writing.	4	0	3	1	0	0	15	0.75
9		The Claim notices are always short and clear easy to understand.	4	0	1	2	1	0	12	0.60
10		The contractors always alert you of a potential problem in a manner that is non-adversarial.	4	0	1	2	1	0	12	0.60
11		The Claims notified by contractor are often reasonable with legal and factual grounds referred to the contract documents.	4	0	1	2	1	0	12	0.60
<b>Average of Relative Index =</b>									<b>0.64</b>	
<b>Average of Claim Identification and Notification's Relative Index =</b>									<b>0.64</b>	

หมายเหตุ : "a" Relative Index =  $\frac{\sum w}{A \times N}$

ตารางที่ ข-3.2 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Evaluation

No.	Statements regarding to the process of contractor's Claims						No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>	
								5	4	3	2	1			
								Strong agree	Agree	Neutral	Disagree	Strong disagree			
1	Examination	The formula that used in claims calculation is suitable, reasonable and reliable.						4	0	0	4	0	0	12	0.60
2		The contractor's claims are always calculated correctly. The over inflated claims are not too often found.						4	0	0	3	1	0	11	0.55
3		The entitlement factors are always shown and referred. (Entitlement factors: foreseeability, control, causation, and legal responsibility)						4	0	2	1	1	0	13	0.65
												Average of Relative Index =		0.60	
4	Documentation	Inaccessibility of documents when required.						4	0	3	1	0	0	15	0.75
5		Expensive to retrieve required information.						4	0	0	4	0	0	12	0.60
6		Imprecise recorded information.						4	0	0	4	0	0	12	0.60
7		Ineffective record keeping system of Contractors.						4	0	0	4	0	0	12	0.60
8		Overdue process in retrieving the documents back.						4	0	0	4	0	0	12	0.60
9		Some information is not kept in writing.						4	0	3	0	1	0	14	0.70
10		No standard form used to record the data during construction.						4	0	2	1	1	0	13	0.65
11		The documentation system is lack of computerized technology applied.						4	0	2	2	0	0	14	0.70
												Average of Relative Index =		0.65	
12	Presentation	The full details of claim submitted by contractors are always logically built up.						4	0	0	3	1	0	11	0.55
13		The contractor's claim submissions are always well organized with evidence substantiating the entitlement.						4	0	0	4	0	0	12	0.60
14		The full detail reports of claim submitted by contractors are always well organized with standard form.						4	0	0	3	1	0	11	0.55
15		The contractors are always submitting clear and using simple word of claims, it is easy to understand.						4	0	0	3	1	0	11	0.55
16		The contractor always submit you a full detail of claims with a good faith.						4	0	0	0	4	0	8	0.40
17		The claims submitted by contractors are always reasonably referred to the legal and factually grounds for the entitlement.						4	0	0	3	1	0	11	0.55
18		The full details of claims are always submitted within time limit requirements.						4	0	2	2	0	0	14	0.70
												Average of Relative Index =		0.56	
												Average of Claim Evaluation's Relative Index =		0.61	

หมายเหตุ "a" Relative Index =  $\frac{\sum w}{A \times N}$

ตารางที่ ข-3.3 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Claim Negotiation

No.	Statements regarding to the process of contractor's Claims	No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
			5	4	3	2	1		
			Strong agree	Agree	Neutral	Disagree	Strong disagree		
1	The contractors are always submitting the logical built up of the full detail of claims.	4	0	0	2	2	0	10	0.50
2	The contractor's claims submissions are always well-documented with fully evidence substantiating the entitlement.	4	0	1	3	0	0	13	0.65
3	The contractors are always submitting the well-organized with a standard format of the full detail reports of claims.	4	0	0	3	1	0	11	0.55
4	The statements in a claim submission from the contractors are factually convincing and influential.	4	0	0	2	2	0	10	0.50
5	The contractors always submit you a full detail of claim with a good faith.	4	0	0	1	3	0	9	0.45
6	The contractors are always submitting clear and using simple words of claims, it is easy to understand.	4	0	0	4	0	0	12	0.60
7	The claims submitted by the contractors are always reasonably referred to the legal and factually ground for entitlement.	4	0	0	2	2	0	10	0.50
8	The full details of claims are always submitted within time limit requirements.	4	0	2	2	0	0	14	0.70
9	The contractor always put the most effort to mitigate the settlement by Litigation and Arbitration.	4	0	1	1	2	0	11	0.55
10	Claims are always resolved as soon as possible concerning their effects to the project's performance.	4	0	2	1	1	0	13	0.65
11	Most of the claims are settle concerning mutual satisfaction of both sides.	4	0	1	3	0	0	13	0.65
12	The negotiation of claims is always objective directed to the problems.	4	0	0	4	0	0	12	0.60
13	Claims negotiation for completion is conducted professionally and cooperatively.	4	0	0	4	0	0	12	0.60
Average of Claim Negotiation's Relative Index =								0.58	

หมายเหตุ : "a" Relative Index =  $\frac{\sum w}{A \times N}$

ตารางที่ ข-3.4 การคำนวณดัชนีสัมพัทธ์ (Relative Index) ของ Relevant documents

No.	List of relevant documents	No. of respondents	Frequency of occurrences					Sum w	Relative Index <sup>a</sup>
			5	4	3	2	1		
			Very often	Often	Sometimes	Rarely	Never		
1	Preliminary and baseline schedules.	4	0	0	2	1	1	9	0.45
2	Updated project schedules.	4	0	0	1	1	2	7	0.35
3	Relevant correspondences between parties.	4	0	0	3	1	0	11	0.55
4	Clarification memos.	4	0	0	2	2	0	10	0.50
5	Meeting minutes.	4	0	3	1	0	0	15	0.75
6	Photographs represent the problems.	4	0	0	1	1	2	7	0.35
7	Daily report and logs.	4	0	1	3	0	0	13	0.65
8	Change order logs.	4	0	0	2	2	0	10	0.50
9	Submittal logs.	4	0	0	2	2	0	10	0.50
10	Cost of report and records.	4	0	0	1	1	2	7	0.35
11	Oral instructions.	4	0	0	2	2	0	10	0.50
12	Reports of quality control.	4	0	1	3	0	0	13	0.65
13	Chart of labor power.	4	0	2	2	0	0	14	0.70
Average of Relative Index =								0.52	

หมายเหตุ "a" Relative Index =  $\frac{\sum w}{A \times N}$

## ประวัติผู้เขียนวิทยานิพนธ์

นางสาวมณฑาทิพย์ ทองธรรมชาติ เกิดเมื่อวันที่ 7 เมษายน พ.ศ.2524 ที่จังหวัดบุรีรัมย์ สำเร็จการศึกษาระดับปริญญาตรี สาขาวิชาวิศวกรรมโยธา สำนักวิชาวิศวกรรมศาสตร์ จากมหาวิทยาลัยเทคโนโลยีสุรนารี จังหวัดนครราชสีมา ในปีการศึกษา พ.ศ.2546 และได้ศึกษาต่อในหลักสูตรวิศวกรรมศาสตรมหาบัณฑิต สาขาวิชาวิศวกรรมโยธา คณะวิศวกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัยในปี พ.ศ.2547

