# QUANTITY SURVEYING PROFESSION IN INDONESIAN CONSTRUCTION INDUSTRY

# **MUHAMMAD FAKHRI**

## BACHELOR OF SCIENCE (HONS) IN QUANTITY SURVEYING

FACULTY OF ENGINEERING AND QUANTITY SURVEYING INTI INTERNATIONAL UNIVERSITY (2020)

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BY

# **MUHAMMAD FAKHRI**

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### **DECLARATION BY THE CANDIDATE**

I, Muhammad Fakhri, I17012347 confirm that the work in this research is my own work and the appropriate credit has been given where references have been made to the work of other researches.

Student Name	: Muhammad Fakhri
Student ID	: I17012347
Date	: 13 November 2020

### ABSTRACT

Quantity surveying profession is one of the professions engaged in the construction industry. This profession first appeared in one area of the United Kingdom since the 18th century. This research was carried out to discuss and provide insight on the history of the Quantity Surveying profession and the Quantity Surveying profession in the construction industry in Indonesia. Quantity Surveyors play an important role in a construction project. The Quantity Surveying profession first entered Indonesia in the early 1970s, but due to several factors made this profession less developed in Indonesia. Therefore, this research was carried out to investigate the current scenario of Quantity Surveying practice in Indonesia. The objectives of this research is to identify Quantity Surveying practice in Indonesian construction industry and to identify the perception of being a Quantity Surveyor in Indonesia. In this study, the method used is the Quantitative method by using an online questionnaire to obtain the data. The questionnaire has been conducted and has been distributed to Quantity Surveyors who have registered with the Indonesian Association of Quantity Surveyors (IQSI). The data obtained from the questionnaire has been analyzed using Relative Importance Index (RII). The outcome of this research are most of the members that registered with IQSI are not from Quantity Surveying background, most of the members have working experience is more than 5 and 10 years, majority of the members working as Quantity Surveyor in their company, the main factor that affecting less development of Quantity Surveying in Indonesia is lack of institution that provide Quantity Surveying program, the members chose event/seminar is the best way to delivering the information to the public regarding Quantity Surveying, and majority of the members felt it is really important to open Quantity Surveying program at Universities in Indonesia.

## TABLE OF CONTENT

ACKNO	DWLEDGEMENT	i
DECLA	RATION BY THE CANDIDATE	ii
ABSTR	ACT	iii
TABLE	OF CONTENT	iv
LIST O	F TABLES	vi
LIST O	F FIGURES	vii
LIST O	F APPENDICES	viii
ABBRE	EVIATIONS	ix
СНАРТ	ER 1	1
1.1	Introduction	1
1.2	Problem Statement	2
1.3	Aim	3
1.4	Objectives	3
1.5	Key Questions	3
1.6	Importance of Study	4
1.7	Chapter Outline	4
СНАРТ	'ER 2	6
2.1	Introduction	6
2.2	Quantity Surveying	6
2.2.1	History of Quantity Surveying Profession	6
2.2.2	The roles of Quantity Surveyor	7
2.2.3	Advantages of hiring Quantity Surveyor in the construction project	9
2.3	Quantity Surveying in Indonesia	10
2.3.1	History	10
2.3.2	Professional body regulate Quantity Surveying profession	11
2.4	How to become a Quantity Surveying in Indonesia	12
2.4.1	QS Formal education	
2.4.2	Non-QS formal education	14
2.5	Consultant Quantity Survey in Indonesia	15
2.6	The barrier of implementing the program of Quantity Surveying in Un	iversity in
	Indonesia	17
2.7	Conclusion	
СНАРТ	'ER 3	19
3.1	Introduction	19
3.2	Research Framework	19
3.3	Research Method	20
3.3.1	Quantitative Research	
3.4	Data Collection	22
3.4.1	Questionnaire	
3.4.2	Questionnaire Design	

3.5	Data Sampling	23
3.5.1	Sample Frame	23
3.5.2	Sample Size	23
3.6	Data Analysis	24
3.6.1	Relative Importance Index (RII)	24
3.7	Conclusion	24
CHAPTI	ER 4	26
4.1	Introduction	26
4.2	Respondents General Information (Part 1)	26
4.2.1	Respondents Education Background	27
4.2.2	Working Experience	28
4.2.3	The Current Position of the Respondents in Their Company	29
4.3	Quantity Surveying Profession in Indonesia (Part 2)	30
4.3.1	Perception about the level of knowledge about Quantity Surveying profession	in
	Indonesia	30
4.3.2	Level Involvement of a Quantity Surveyor in the Indonesian Construction	
	Industry	31
4.3.3	Respondents Perception About the Importance of Hiring a Quantity Surveyor	in
	the Indonesian Construction Industry	32
4.3.4	Replacing the Roles of Quantity Surveyor in Indonesian Construction Industry	/
	with Other Construction Player	
4.3.5	Impact of the Roles Quantity Surveyor	35
4.3.6	Factors Affecting Less Development of Quantity Surveying in Indonesia	36
4.3.7	How the Respondents Know About Quantity Surveying Profession	39
4.3.8	Delivering Information to the People about Quantity Surveying	40
4.3.9	Open Quantity Surveying program at University in Indonesia	41
4.4	Conclusion	42
CHAPTI	ER 5	43
5.1	Introduction	43
5.2	Limitation of Study	43
5.3	Conclusion	43
		+5
5.4	Recommendation	
		44
REFERE APPENI	Recommendation ENCES DICES	44 46 49
REFERE APPENI APPENI	Recommendation	44 46 49 50

### LIST OF TABLES

Table 2.1 Listed of Quantity Surveyor consultant in Indonesia	.15
Table 4.1 Percentage of respondents	.26
Table 4.2 Respondents current position in the company	.29
Table 4.3 Number and percentages of respondents on the importance of hiring a Quantity Surveyor	in
the Indonesian construction industry	.32
Table 4.4 Ranking of importance hiring a Quantity Surveyor in the Indonesian construction industry	У
	.33
Table 4.5 Number and percentages of respondents on the factors affecting less development of	
Quantity Surveying in Indonesia	.36
Table 4.6 Ranking of the factors affecting less development of Quantity Surveying in Indonesia	.38
Table 4.7 Ranking of how the respondents know about Quantity Surveying profession	. 39
Table 4.8 Ranking of the best way on delivering information about Quantity Surveying to the publi	с
in Indonesia	.40

## LIST OF FIGURES

Figure 2.1 The roles of Quantity Surveyor in all phase of construction	8
Figure 2.2 Quantity Surveyor in every stages of construction	9
Figure 2.3 Quantity Surveying curriculum at University Bung Hatta	13
Figure 2.4 Quantity Surveying curriculum at University Bung Hatta	14
Figure 3.1 Research Framework/Flow	20
Figure 3.2 Target Respondents	23
Figure 4.1 Respondents Education Background	27
Figure 4.2 Respondents Working Experience	28
Figure 4.3 Respondent position in their company	29
Figure 4.4 Level of knowledge regarding the Quantity Surveying	30
Figure 4.5 Level of involvement of Quantity Surveyor in the Indonesian construction industry	31
Figure 4.6 Importance of hiring a Quantity Surveyor	32
Figure 4.7 Replacing the roles of Quantity Surveyor in Indonesian construction industry	35
Figure 4.8 Impact of Quantity Surveyor	35
Figure 4.9 Factor affecting less development of Quantity Surveying in Indonesia	36
Figure 4.10 How the respondents know about Quantity Surveying profession	39
Figure 4.11 Respondents opinion on the best way to delivering information to the public about	
Quantity Surveying	40
Figure 4.12 The need to open a Quantity Surveying program at University in Indonesia	41

### LIST OF APPENDICES

APPENDIX A QUESTIONNAIRE	
APPENDIX B SAFEASSIGN	

### **ABBREVIATIONS**

QS	Quantity Surveyor
RICS	Royal Institution of Chartered Surveyor
IQSI	Ikatan Quantity Surveyor Indonesia (Indonesian Association of Quantity Surveyors)
AIQS	Australian Institution of Quantity Surveyors
RISM	The Royal Institution of Surveyors Malaysia
HKIS	Hong Kong Institute of Surveyors
PAQS	The Pacific Association of Quantity Surveyors
UK	United Kingdom
Bachelor	Degree
MSc	Master (Master of Science)
PhD	Doctor (Doctor of Philosophy)
UBH	University of Bung Hatta
FTSP	Fakultas Teknik Sipil dan Perencanaan (Faculty of Engineering and Planning)
M&E	Mechanical and Electrical

## CHAPTER 1 INTRODUCTION

#### **1.1 Introduction**

The Quantity Surveying profession comes from mainland England which then develops throughout the other countries in the world (IQSI Official Website, 2019). This profession emerged around the 19<sup>th</sup> century after a large fire incident that occurred in the city of London (IQSI Official Website, 2019). At that time, this profession arises due to the need of skills in calculating the approximate value of the buildings that affected by the fire (IQSI Official Website, 2019).

The Quantity Surveying profession arises based on the existence of a need to specialize in managing a plan or also the design of planners into a format that can show a parameter so that it can be more easily evaluated, compared, and processed which in turn can form a point meeting that can connect the desires of the assignor (client) and planning the planners (IQSI Official Website, 2019). Basically a Quantity Surveyor has a role in a project that must be responsible for estimate the cost that will be used for the project so it will ensure the construction and production costs can be managed properly and correctly (The role of a quantity surveyor, n.d.).

Quantity surveyor can be said to be a new profession in Indonesian construction industry. Quantity surveyor is a profession that has a lot of contribution in the construction world from the date of commencement until completion date. However, in Indonesia many people do not know about this profession due to lack of information and there are only a few Quantity Surveyor practitioners in Indonesia (IQSI Official Website, 2019). Because of the lack of information regarding the Quantity Surveyor profession, employers prefer civil engineering to carry out tasks that should be done by the Quantity Surveyor (IQSI Official Website, 2019). Therefore, there are many construction projects have experienced delays in completion and there have even been abandoned construction projects (Fathir, 2018).

Information regarding the development of Quantity Surveyor in Indonesia is limited. As a result, this profession has not received enough attention from the people and resulting in a lack of people intention to become a Quantity Surveyor (Harususilo, 2018). Some people who already know about this profession prefer to study outside Indonesia, such as United Kingdom, Australia, Singapore or Malaysia which have the quality and qualification standard to become a Quantity Surveyor.

Regarding to (Yusid Toyib, 2015) in order to build a better construction industry, the Quantity Surveyor profession will begin to be more used in construction projects. According to (Yusid Toyib, 2015) Quantity Surveyor plays an important role in the efficiency of the infrastructure development process in Indonesia and also the concern about workplace accidents is indicated as an example of the lack of calculation of funds for work safety before the project is implemented. The real challenge faced in Indonesia's construction is the lack of understanding of the different contracts between parties who are bound by contracts, lack of information, lack information provider, and lack of practitioners that have QS background (Yusid Toyib, 2015).

### **1.2 Problem Statement**

In the construction industry, there are three phase of construction which is pre-construction stage (before construction), Construction and post-construction (after construction) (Sims and Sims, 2014). Pre-construction is a phase when the parties figuring out the scale of work and prepare the work programme that will determine the cost of the project which will provide information to give a beginning estimate (Sims and Sims, 2014). After the pre-construction, the parties will start the construction based on the data that has been prepared in the previous phase (Sims and Sims, 2014). The final phase is a post-construction, the parties will maintain and examine all aspects of the project whether it is appropriate to use or not (Sims and Sims, 2014). After all aspects are assessed to have achieved all aspects planned then the project will be given to the client but the project must be maintained by the parties concerned for the next few years. Quantity Surveyor is one of the parties involved in all three construction phases. The Quantity Surveyor must manage and carry out his duties so that the project can run smoothly and prevent any issues.

Construction in Indonesia really needs the role of the Quantity Surveyor to assist government or private projects so that it can run smoothly from the pre-construction to postconstruction process (Media, 2018). The lack of the Quantity Survey profession in Indonesia results from lack of information and also a lack of practitioners who teach about this profession. There is only one university that have Quantity Survey course which is Universitas Bung Hatta located in West Sumatera, Indonesia (Harususilo, 2018). This course was opened in 2002. Therefore, many construction projects use the services of Quantity Surveyors from other countries such as Malaysia to help the construction industry in Indonesia.

According to (Khalid and Peli, 2006) most of the Quantity surveyor work in Indonesia is carried out by parties who are not graduated from Quantity Surveying program. Most of them are those who have ties to the world of construction such as architects and engineers. They gained knowledge and abilities through their experience, in-house courses, and attended special training about Quantity Surveyors. However, Architects and Engineers cannot really master Quantity Surveyor's knowledge entirely because basically they are trained in designing and doing fieldwork while Quantity Surveyor refers more to learning financial budgets and contracts.

The need for the Quantity Surveying profession in the Indonesian construction industry is very high and also information about Quantity Surveying in Indonesia is still lacking which results in a lack of interest in people to become a Quantity Surveyor (Harususilo, 2018). The development of the Quantity Surveying profession is still quite lacking. This problem must be resolved as soon as possible by making available more courses, training and basic knowledge about Quantity Surveying, and by promoting Quantity Surveying services to the construction industry in Indonesia (Husaini, 2015).

### 1.3 Aim

The aim of this study is to investigate the current scenario of Quantity Surveying practice in Indonesia

### 1.4 Objectives

- 1. To identify Quantity Surveying practice in Indonesian construction industry
- 2. To identify the perception of being a Quantity Surveyor in Indonesia

### 1.5 Key Questions

1. How many number of Quantity Surveyor practicing are from a Quantity Survey background that involve in the construction industry in Indonesia?