19. The Implementation of Competency Certification Expertise-65-72

by Miftahul Huda

THE IMPLEMENTATION OF COMPETENCY CERTIFICATION EXPERTISE AND SKILLS OF CONSTRUCTION LABORS IN SURABAYA CITY

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ABSTRACT

Labors carrying out construction work must have skill certificates and job skills. However, these requirements cannot be fulfilled maximally by certifying stakeholders. This study aims to examine in depth the performance of the stakeholders involved in the implementation and benefits of certification expertise and skills of construction labors in the city of Surabaya. Data collection using questionnaires distributed to 60 contractors and professional associations. Analysis of data using qualitative and quantitative methods. The results concluded that the information, requirements and implementation of certification in Surabaya is good enough. Some things that must be considered are: or major qualification skills and the timing of verification and validation process at professional association level is too long. The cost of certification is too expensive and there is no uniformity of cost from the professional association of the organizers. The owner of certification expertise and skills of construction labors is guaranteed to be easy enough to get a job and gain career levy according to skill, easy enough to earn higher salary and gain skills but not guaranteed regular salary increase. The existence of certification expertise and skills of construction labors for contractors has not been fully utilized for the following requirements: establishing new companies, participating in tenders and implementing government or private projects. Professional associations already have and use the guidelines and standard operating procedures in accordance with applicable government regulations and have been certifying with service is quite satisfactory.

Keywords: certification, skill, expertise, contractor, Surabaya city.

1. INTRODUCTION

1.1 Background Issues

The number of construction service companies in Indonesia currently has reached about 141,000 companies, with a total construction workforce of about 6.5 million. The quantity of construction labor has not been matched by a sufficient number of qualities of professional competence [2]. Various efforts have been made both by the government through the Ministry of Public Works, the National Construction Services Development Board (NCSDB) and Professional Associations through training and various coaching. One of the efforts to improve the quality of the skill and skill of the construction laborers is by the quality assurance system in the form of construction labors certification (Regulation of Minister of Public Works of Republic of Indonesia No. 07 / PRT / M / 2010) [3]. But these efforts have not produced significant results until now.

Under the Law of the Republic of Indonesia Number 2 of 2017 on Construction Services [1] and Government Regulation of Republic Indonesia Number 70 of 2012, every construction labors is required to have a certification expertise and skills of construction labors [4]. Based on the previous study, the data shows that the distribution of construction work group consists of experts about 8%, skilled group of about 30% and the rest is a group of manual laborers. If the current construction workforce amounts to about 6.5 million, then about 3 million people must have a certificate. In fact, performance of the certification of experts and skilled personnel is still apprehensive. To date there are only 107,562 certified construction labors (about 6.46%). The number consists of 29,417 people who have a expertise certification of construction labors, and 78,145 people who have a skills certification of construction labors (NCSBDN, 2014) [5].

Based on the description, the resources and the ability of construction services business, especially in the case of human resources is still very low both in terms of quality and quantity. Therefore it is necessary synergistic programs for the stakeholders involved to accelerate the implementation of certification expertise and skills of

construction labors. This research seeks to reveal the performance of the stakeholders involved in the certification expertise and skills of construction labors in Surabaya City.

1.2 Previous Research

Table 1 describes some previous studies, among others, by Pratiwi and Wibowo (2010) [6]; Widiasanti (2013) [7] and Jelanatik et al. (2014) [8]. The table describes the research approach, population and research respondents, measured variables and analytical tools used.

Table 1. Previous Research

Title	Performance Evaluation of Stakeholders in Construction labors Skills Development With Performance Prism Method	Review of the Effectiveness of Certification Mechanism of Construction Experts Through NCSDB Labors Certification Unit	Analysis of Factors Affecting Construction Labors to Have Certification Expertise and Skills of Construction Labors at Contractor in Bandung
Researchers	Pratiwi dan Wibowo [6]	Widiasanti [7]	Jelantik, Alit, Salain & Nadiasa [8]
Year	2010	2013	2014
Research Approach	Strategies, Processes and Capabilities	Research Descriptive	Qualitative Research (case study)
Population	Ministry of Public Works, Manpower & Transmigration and NCSDB	Authorities in the implementation of certification expertise and skills of construction labors at Contractor	Some small, medium & large qualification contractors
Variable measured	Stakeholders Performance	Certification Mechanism of Construction Experts	Factors to have certification expertise and skills of construction labors at Contractor
Analyzation	Performance Prism Analysis	Description Analysis	Factor Analysis

Source: Various references

1.3 Problem Formulation

Based on the background description of the problems described above, then the formulation of the problem in this study are:
1) How far the results of the certification expertise and skills of construction labors at Contractor for construction in Surabaya City?
2) To what extent is the added value gained for certification expertise and skills of construction labors at Contractor in Surabaya?

1.4 Purpose and Objectives

Based on the description of the problem background and the problem formulation described above, the purpose and objectives of this study are:
1) To examine and analyze in depth of the certification expertise and skills of construction labors at Contractor for construction in Surabaya City.
2) To examine and analyze the added value obtained of the certification expertise and skills of construction laborers at Contractor for in Surabaya City.

1.5 Research Benefits

Based on the description of the background of the problem, the formulation of the problem and the purpose and objectives described above, then the expected benefits of the results of this study are:
1) For the Surabaya City Government: is to provide informative contribution related to problems and barriers to the implementation of the certification expertise and skills of construction labors at Contractor in Surabaya City.

2) For the parties directly involved in the implementation of the certification expertise and skills of construction labors at Contractor as input and evaluation for further implementation.

1.6 Scope and Limitations of Research

This research was conducted in Surabaya City by involving the parties involved directly or indirectly in the implementation of the certification expertise and skills of construction labors in the city of Surabaya. The parties involved are among others; Contractors of minor, medium and large qualifications (subcualication : K1, K2, K3, K4, M1, M2, B1 and B2) [9], professional association of contractors, located and operating in Surabaya City and other parties involved [10] .

2. RESEARCH METHOD

2.1 Research approach

This research uses a research approach with a qualitative paradigm, because it observe social phenomena that occur in the environment of construction services. Qualitative research is a research that emphasizes the understanding of the problems in social life based on factual conditions or natural settings are holistic, complex and detailed. This research also has a category of action research because it will produce a policy that will be submitted to decision makers [11].

2.2 Population, sample and respondent

The population in this research is construction service company (contractor), professional association and construction service construction team in Surabaya City. Sampling is done because the population is unlimited, so sampling technique is required. In this research use purposive sampling and random sampling. Purposive sampling to determine the sample of existing professional associations in Surabaya, while random sampling is used for sampling of construction service companies who have taken care of the certification expertise and skills of construction labors. Respondents of the study were determined by purposive as many as 100 companies, consisting of 65 contractor companies and 35 professional association companies

2.3. Instruments and research data

The research instrument is questionnaire. The research variables and indicators are set out in accordance with relevant government laws and regulations as well as the provisions of procedures for certification from the National Construction Service Development Board (NCSDB). Questionnaires were distributed through three stages: first stage was distributed 100 questionnaires and 38 answers back. The second stage was reprinted as many as 50 questionnaires and returned 17 answers. The third stage was reprinted as many as 25 questionnaires and returned 10 answers. The number of answers to the questionnaires returned by the contracting company is 65 answers, while the worth to be analyzed from the collected amount is 60 company answers.

2.4 Research variables and indicators

The research variables consist of 5 variables and 35 indicators. The research variables include; (A). The performance of the certification expertise and skills of construction labors (consisting of 16 indicators, (B) The owners of the certification expertise and skills of construction labors (consisting of 5 indicators), (C) The benefits of of the certification expertise and skills of construction labors for construction companies (consisting of 5 indicators) and (D) Benefits of the certification expertise and skills of construction labors for professional associations of construction companies (consisting of 9 indicators)

2.5 Data Analysis

Data analysis was performed using mean and mean deviation standard calculated from data of each group of respondents' answers, using formula [12]:

$$\overline{X} = \frac{\sum fi.Xi}{\sum fi} \dots \dots (1) \text{ and } \overline{Y} = \frac{\sum fi.Yi}{\sum fi} \dots (2), \quad \overline{\overline{X}} = \frac{\sum fj.\overline{X}j}{\sum fj} \dots (3), \text{ dan } \overline{\overline{Y}} = \frac{\sum fj.\overline{Y}j}{\sum fj} \dots \dots (4) ,$$

Where :

$\overline{X}$ = mean of respondent's answer

$\overline{Y}$ = mean of standard deviation of respondents' answers

fi = number of respondents

$\overline{\overline{X}}$ = the mean of the respondent's mean

$\overline{\overline{Y}}$ = the mean of the mean standard deviation of the answer Respondents

fj = number of respondents' questions

The average result of the respondent's answer is then maped into 4 criteria in the form of four quadrant of Cartesius Diagram based on the mean value data and the mean standard deviation of answers of each responder group as follows :

1. Quadrant I   : $\overline{X} \geqq \overline{\overline{X}}$ and $\overline{Y} \leq \overline{\overline{Y}}$: (very good)
2. Quadrant II : $\overline{X} \geqq \overline{\overline{X}}$ and $\overline{Y} > \overline{\overline{Y}}$: (good)
3. Quadrant III : $\overline{X} < \overline{\overline{X}}$ and $\overline{Y} \leq \overline{\overline{Y}}$: (bad)
4. Quadrant IV : $\overline{X} < \overline{\overline{X}}$ and $\overline{Y} > \overline{\overline{Y}}$: (very bad)

Each of the four quadrants in the Cartesian Diagram is a representation of the results of the study that need to be discussed further.

3. RESULT AND DISCUSSION

3.1 Respondent data

The study respondents consist of 25 contractor companies and 35 professional association companies. The contractor shall consist of small qualifications (sub-qualifications K1, K2, K3 and K4), intermediate qualifications (M1 and M2 sub-qualifications) and substantial qualifications (sub-qualifications B1 and B2) with the composition of the sub-qualification amounts as shown in Figure 1. Where the names of professional association data is shown in Figure 2.
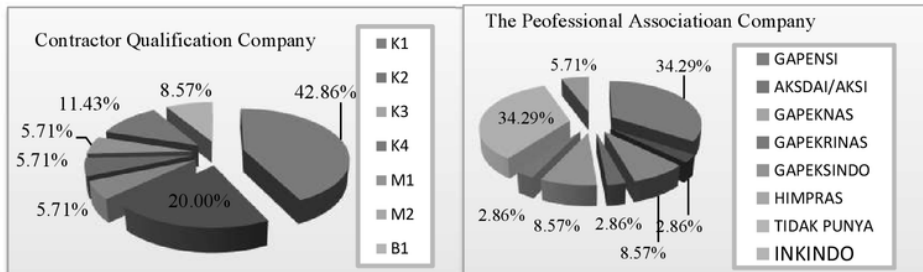

Figure 1 Contractor Company Qualification   Figure 2.Company of Professional Associations
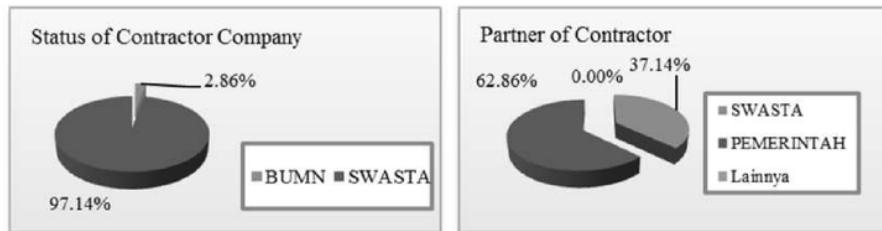

Figure 3. Status of Contractor Company   Figure 4. Partner of Contractor

Figure 3 shows company data consisting of BUMN contractor (2.86%) and private contractor (97.14%). Figure 4 shows the company's data on private projects and government projects.

3.2 Profile of respondents

Respondent profile data consist of: gender, age, last education and experience. Respondent profile data are shown in Figure 5 to Figure 8
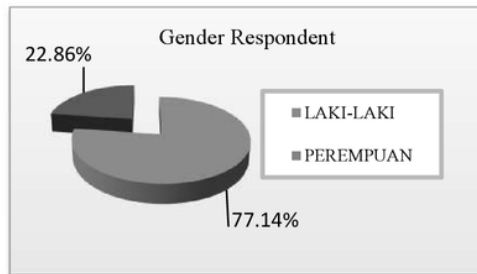
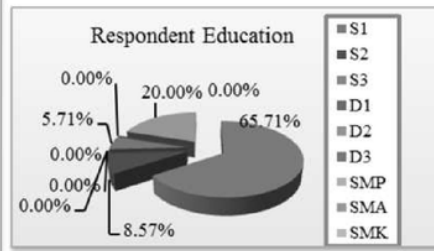Figure 5 Gender Respondents
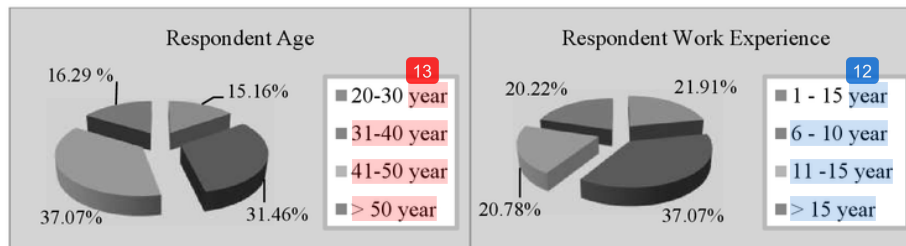

Figure 6. Respondent Education
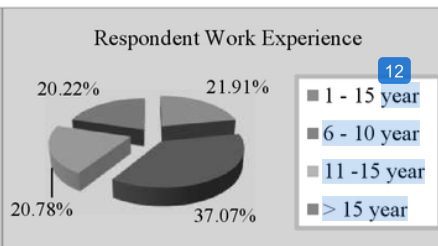

Figure 7. Respondents Age

Figure 8. Respondent Work Experience

3.3 Research Results

Table 2 shows the result of mean analysis and standard deviation analysis of each variable and its indicator from the respondent of the contractor company. Each mean and standard deviation of the indicator are then calculated average of mean = 3,475 and average of standard deviation mean = 0,958. Each quadrant has the following criteria:

1) Quadrant I: Mean ≥ 3,475, and Standard Deviation ≤ 0.958. Indicators that enter quadrant I have the category that the implementation of the certification expertise and skills of construction labors has been running well and must be maintained.
2) Quadrant II: Mean ≥ 3,475, and Standard Deviation > 0.958. Indicators that enter the first cadrant have the category that the implementation of the certification expertise and skills of construction labors has been running well enough, but still biased to be improved for better.
3) Quadrant III: Mean < 3,475, and Standard Deviation ≤ 0.958. Indicators that enter the third cadrant have the category that the implementation of the certification expertise and skills of construction labors less well, so it is necessary to get attention and improvement.
4) Quadrant IV: Mean < 3,475, and Standard Deviation> 0.958. Indicators entering IV cadrant have the category that the implementation of the certification expertise and skills of construction labors is not going well and should get serious attention to be better. Research result

Table 2. Average Mean and Standard Deviation

Code	Variable and Indicators	Result		N	QW
		Mean	SD		
A	**Organizing Performance**				
A1	Information on certification	3.686	0.900	60	1
A2	The socialization of certification	3.600	0.946	60	1
A3	Implementation of certification	3.686	0.796	60	1
A4	The cost of certification	3.743	0.950	60	1
A5	Fees for the cost of certification	3.743	0.886	60	1
A6	Compliance of certification fee rate	3.229	1.239	60	3
A7	Certification management requirements	3.486	0.887	60	1

Table 2. Average Mean and Standard Deviation

Code	Variable and Indicators	Result		N	QW
		Mean	SD		
A8	Certification procedures	3.286	0.860	60	4
A9	Certification implementation schedule	3.314	0.867	60	4
A10	Processing time at Association level	3.086	1.121	60	3
A11	Processing time at NCSBDN	3.029	1.150	60	3
A12	Validity period	3.571	0.948	60	4
A13	Requirements for government project tender	3.029	1.014	60	3
A14	Requirements for private project tenders	3.200	0.994	60	3
A15	Requirements for implementation of government projects	3.657	0.802	60	1
A16	Requirements for the implementation of private projects	3.343	1.027	60	3
B	**Benefits of certificates for labor**				
B1	Job guarantees according to expertise and skill	3.571	0.948	60	1
B2	Higher salary guarantees	3.629	1.031	60	2
B3	Guaranteed salary will rise	3.400	1.117	60	3
B4	Guarantee of increased expertise and skill	3.486	1.040	60	2
B5	Guaranteed career enhancement	3.829	0.857	60	1
C	**Benefits of certificates for the company**				
C1	Terms of establishment of new company	3.343	0.968	60	3
C2	Company registration requirements	3.629	0.942	60	1
C3	Rented for tender	3.143	1.004	60	3
C4	Be sold out to participate in the tender	2.629	1.190	60	3
C5	Purchased to other companies	2.543	1.094	60	3
D	**Performance of the Association of Organizational**				
D1	Has written guidelines	3.657	0.958	60	1
D2	Has a written SOP	4.086	0.853	60	1
D3	Working as per the guidelines	3.800	0.868	60	1
D4	Working according to SOP	3.857	0.810	60	1
D5	Has a cost of certification fee written	3.543	0.950	60	1
D6	The cost of certification is in accordance with the written rates	3.686	0.993	60	2
D7	Performance Service implementation	3.714	0.825	60	1
D8	Performance certification according to regulations	3.657	0.765	60	1
D9	Implementation of certification and renewal is done at any time	3.743	0.919	60	1
	Average	3.475	0.958		

Source: Primary Data Analysis Result

After that, then each indicator variable can be mapped into four quadrants namely: quadrant I up to the awareness IV as shown in Figure 9.and described as follows:

1) Quadrant Group I is an excellent research group and needs to be maintained
2) Quadrant Group II is a group of research results are good and need to be improved in order to become better,
3) Quadrant Group III is a group of unfavorable research results and needs to get attention to be improved in order to become better,
4) Quadrant Group IV is a group of unfavorable research results and desperately need to get to be improved in order to become better
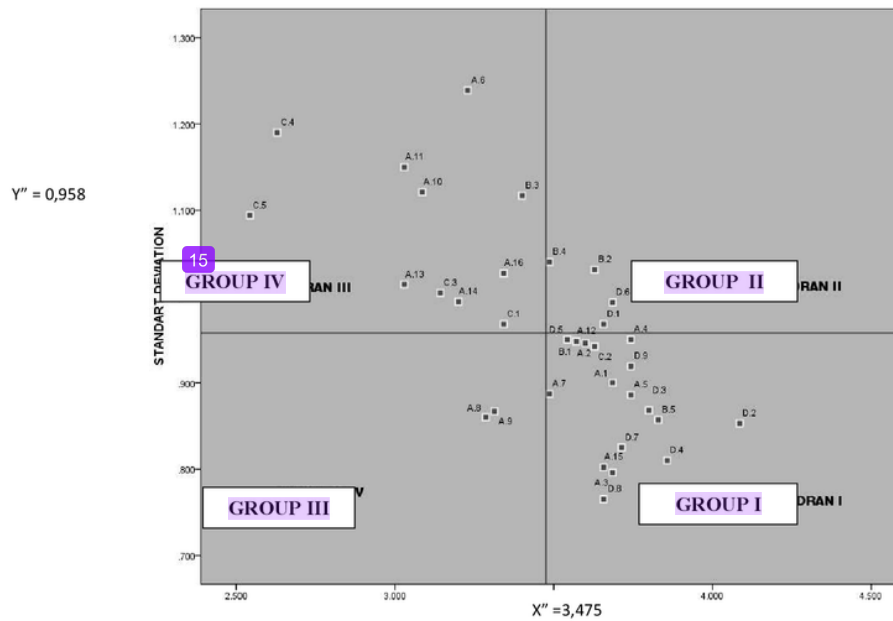
Figure 9. Mapping of Research Results

4. CONCLUSIONS AND SUGGESTIONS

4.1 Conclusions

Based on the analysis of data, results and research findings that have been discussed in the previous chapter, this study concludes the following matters:

1) The results of the implementation of the certification expertise and skills of construction labors conducted in Surabaya City generally has been running quite well especially in terms of: information, requirements and implementation of the implementation of the certification expertise and skills of construction labors. But there are still some things that are not working with: the requirements of management and certification is difficult enough especially for the certification of madya or major qualification skills and the timing of verification and validation process at professional association level and registration process at NCSDB level too long

2) The value added or benefits gained for construction laborers who have obtained the certification expertise and skills of construction labors in Surabaya City are; guaranteed to be easy enough to get a job and gain career levers according to expertise or skill, easy enough to earn higher salaries and gain expertise or skill, but not guaranteed regular salary increases

3) The added value or benefit of the certification expertise and skills of construction labors for the contractor company in Surabaya City is that the certification expertise and skills of construction labors has not been fully used for the requirements of: establishing a new company, participating in tenders and implementing government or private projects. Similarly, the certification expertise and skills of construction labors may be borrowed or traded between contractor companies for the following requirements: establishing a new company, participating in tenders and implementing government or private projects.

4) Professional associations of contractors already have written manual and standard operating procedures (SOP) in accordance with prevailing laws and regulations and have been conducting certification of the certification expertise and skills of construction labors in accordance with the guidelines or SOP owned and service satisfactory. The implementation of the certification expertise and skills of construction labors shall be conducted at any time at a non-compliance cost, very expensive and there is no uniform tariff of fees among certification providers (professional associations).

4.2 Suggestions

Based on the results of the conclusions outlined above, it is recommended that the following things:

1) To contractor company and construction professional company in Surabaya City, it is suggested to: utilize the certification expertise and skills of construction labors as a means to improve the quality of company's competence by involving all expertise and skills personnel to perform the certification expertise and skills of construction labors.

2) To the Surabaya City Government and the East Java provincial government it is advisable to intervene through NCSBD and the Regional Construction Service Provider so that the certification expertise and skills of construction labors can be carried out at a uniform cost, relatively cheaper, no illegal fees and with faster processing, especially for small and medium qualified contractors with limited funds

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