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Motivation and Risky Decision on Quality Achievement of the Technical Contractors in West Sulawesi Province

Herman Callo
Lecturer in STIE Muhammadiyah Mamaju
E-mail: herman_callo@yahoo.co.id

Abstract

This paper attempts to review the literature on the risky decision and working motivation in technical contractor field work, then presents the importance of its delineated dimensions. The research design is based on descriptive and associative method because the worker in contractor field work frequently facing risky job. This research adopted questionnaire method as a mean for data collecting to examine the main factors affecting risky decision. This survey consists of the factors that previous studies stated which might affected on quality achievement, and also the measures that those studies considered as quality achievement measures. This survey was distributed over a random sample of contractor worker and staff who have experience construction in West Sulawesi Province. Sample data collected about 160 personal, as well as respondents from more than 300 population of contractor staff and technician. The technical research based on OLS with operated by Smart PLS with correlated to theories of motivation, risky decision, and, motivation or worker. The result in,that motivation has negatively affect and not associated with risky. Motivation positively affect and associated with with quality achievement, moreover risky decision has positively affect and associated with quality achievement.

Keywords: Motivation, Risky Decision, Quality Achievement, Technical Contractor
JEL Classification: G32, L14, L15

1. Introduction

Construction projects are always unique and risks raise from a number of the different sources (Oyegoke AS,2006 and Pheng,2006). The construction industry is often considered as a risky business due to its complexity and strategic nature. It incurs a numerous project stakeholders, internal and external factors which will lead to enormous risks. Unfortunately, the construction industry has a poor reputation in risk analysis when compared to other industries (Laryea, 2008). Construction projects are inherently complex and dynamic, and involving multiple feedback processes (Sterman,1992 and Uher,2004). A lot of participants – individuals and organisations are actively involved in the construction project, and they interests may be positively or negatively affected as a result of the project execution or project completion. Different participants with different experience and skills usually have different expectations and interests (Dey,2004). This naturally creates problems and confusion for even the most experienced project managers and contractors.

Cost of risk is a concept many construction companies have never thought about despite the fact that it is one of the largest expense items. If a contractor is aware of the forces that drive his desire to do business in the field of construction, he or she will be wiser in influencing his followers, in this case everyone who enters the project completion team to work together in completing the task and fostering relationships with his followers to achieve the goals of trying / Doing business and making it more consistent with the achievement of organizational goals.Risk management helps the key project participants – client, contractor or developer, consultant, and supplier – to meet their commitments and minimize negative impacts on construction project performance in relation to cost, time and quality objectives. Traditionally, practitioners have tended to associate construction project success with these three aspects of time, cost and quality outcomes.

The worker of contractor business continue well motivated by the manager, can improve his or her potential, it is certain that the results achieved are high the quality standard, moreover with they are equipped with full technical specifications and standards that explain the procedures for implementing the work to achieve the quality standard. Bartol and Martin (1998) consider motivation a powerful tool that reinforces behavior and triggers the tendency to continue. In other words, motivation is an internal drive to satisfy an unsatisfied need and to achieve a certain goal. It is also a procedure that begins through a physiological or psychological need that stimulates a performance set by an objective. As people work together they develop sentiments, therefore it is essential to create the premises for developing positive sentiments. Moreover, if the sentiments are becoming more positive, people will enhance the interactions between them. If this process continues, people will develop similar sentiments and behaviors. Once the cohesion of the group increases, the group will also develop expectations and norms that highlight the accepted behavior of the people in specific circumstances

This is often the case in the world of contractors in the province of West Sulawesi which also often neglects aspects of the importance of quality in accepting a contract or completing a job. So that the contractor is always motivated to improve the ability in carrying out tasks assigned to him such as: work experience, finance, technical capabilities covering the ability of equipment, personnel and quality management. Application of risk management tools depends on the nature of the project, organization's policy, project management strategy, risk attitude of the project team members, and availability of the resources (Uher,2004). A risk assessor model (RAM) presented by Jannadi and Almishari (2003) was developed to determine risk scores for various construction activities. The model provides an acceptability level for the risks and determines a quantitative justification for the proposed remedy. Risks and uncertainties, involved in construction projects, cause cost overrun, schedule delay and lack of quality during the progression of the projects and at their end (Wang and Chou,2003;Wysocki ,2009; Simu, 2006). As stated by Baloi and Price (2001), poor cost performance of construction projects seems to be the norm rather than the exception, and both clients and contractors suffer significant financial losses due to cost overruns.

Value to clients is recognized that quality of construction is a key component of perceived value to clients. The lack of quality in construction is manifested in poor or non-sustainable workmanship, and unsafe structures; and in delays, cost overruns and disputes in construction contracts. Value and quality of construction is of concern to both public and private sector clients. This study on the quality of construction in West Sulawesi. This investigation is undertaken largely from a public sector client perspective, and concludes by highlighting those actions that clients can implement to derive higher quality on their construction projects. The report investigates the factors impacting on construction quality through the value chain in creating new capital works, namely design, procurement and construction.

Regulation of Construction Service Development Agency (LPJK) Number: 11 Year 2008 regarding Business Registration of Construction Service for contractor for the determination of grade and competence of construction service executing business that is assessed is 1. Finance that is net worth and financial ability when all package is done; 2. Personnel Ability that is responsible for business entity, Responsible field and technical responsible; 3. Based on the problems that have been described that the project completed by the contractor is not in accordance with that already agreed in the contract, and set forth in the Presidential Regulation of the Republic of Indonesia Number 54 Year 2010, among others that the project work must be in accordance with quality standards, , And appropriate quality. While Lehtinen and Gronsoos in Tjiptono (2011: 201), more emphasis on evaluating the quality of services from aspects of output, process, and image (result and process-oriented).

2. Literature Review

2.1 Motivation

Bartol and Martin (1998) consider motivation a powerful tool that reinforces behavior and triggers the tendency to continue. In other words, motivation is an internal drive to satisfy an unsatisfied need and to achieve a certain goal. It is also a procedure that begins through a physiological or psychological need that stimulates a performance set by an objective. As compared to financial resources, human resources have the capability to create competitive advantage for their organizations. Generally speaking, employee performance depends on a large number of factors, such as motivation, appraisals, job satisfaction, training and development and so on, but this paper focuses only on employee motivation, as it has been shown to influence to a significant degree the organizational performance. As Kalimullah (2010) suggested, a motivated employee has his/her goals aligned with those of the organization and directs his/her efforts in that direction. In addition, these organizations are more successful, as their employees continuously look for ways to improve their work. Getting the employees to reach their full potential at work under stressful conditions is a tough challenge, but this can be achieved by motivating them. Managers should be aware of the differences between motivation and satisfaction. On the one hand, motivation is influenced by forward looking perceptions about the relationship between performance and rewards, while on the other hand, satisfaction is the result of past events and refers to people's feelings about rewards they have received. Therefore, this distinction is important when trying to improve the organizational performance, as they need to focus on all the possible means to enhance motivation.

2.1 Risky Decision

Mitigating the risk in project is refer to risk management. Risk management is probably the most difficult aspect of project management. A project manager must be able to recognise and identify the root causes of risks and to trace these causes through the project to their consequences. Furthermore, risk management in the construction project management context is a comprehensive and systematic way of identifying, analyzing and responding to risks to achieve the project objectives (Ward,2008). The use of risk management from the early stages of a project, where major decisions such as choice of alignment and selection of construction methods can be influenced, is essential (Eskesen et.al.2004). The benefits of the risk management process include identifying and analyzing risks, and improvement of construction project management processes and effective use of resources.

The construction industry is heterogeneous and enormously complex. There are several major classifications of construction that differ markedly from one another: housing, nonresidential building, heavy, highway, utility, and industrial (Keoki, Sears and Clough.2008). Construction projects include new construction, renovation, and demolition for both residential and nonresidential projects, as well as public works projects, such as streets, roads, highways, utility plants, bridges, tunnels, and overpasses. The success parameters for any project are in time completion, within specific budget and requisite performance (technical requirement). The main barriers for their achievement are the change in the project environment. The problem multiplies with the size of the project as uncertainties in project outcome increase with size (Dey,2004). Large construction projects are exposed to uncertain environment because of such factors as planning, design and construction complexity, presence of various interest groups (owner, consultants, contractors, suppliers, etc.), resources (manpower, materials, equipment, and funds) availability, environmental factors, the economic and political environment and statutory regulations.

Risks in construction have been classified in different ways. Tah et al. (1993) categorized project risks into external and internal risks and developed a fuzzy model for contractor's risk assessment at the tender stage. External risks are those that are prevalent in the external environment of projects, such as those due to inflation, currency exchange rate fluctuations, technology change, major client induced changes, politics, Climate, Weather Condition and major accidents or natural disasters. They are relatively non-controllable and so there is the need to continually scan and forecast these risks and in the context of a company's strategy. Similarly, internal risks are relatively more controllable and vary between projects. These internal risks cover uncertainties due to labour, plant, material and subcontractor, resources and the site conditions. Consequently many researchers identified several risk factors and they are classified into different types depends on the nature of risk such as Physical, Environmental, design, Financial, Contractual / legal, Construction, Political, Management, Natural hazards, Safety and Delay risk (Mustafa, 1991; Dey, 2004; Ghosh, 2004; Enshasi and mosa, 2008; wang et al., 2010).

2.2 Quality Achievement

To work effectively in institutions with these and other facts and complexities, achievement and quality must be pursued and assessed in specific terms. Using the term "quality" in the abstract is not useful. Different sets of terms associated with different perspectives on achievement and quality produce different results. It is important not to conflate different sets of terms and perspectives. Quality as word and meaning; achievement and quality are in terms of something.

The set of knowledge and skills gained through study and evaluation is not the work or the quality itself, but rather their enabler. Works of art are only partially composed of the knowledge and skills evident in them. This truth reflects another: institutions can nurture and evaluate the development of competencies in individuals, but they cannot produce, and thus are not responsible for, the quality manifested in works of art created by individual uses of the competencies developed

Several studies into the barriers to the quality achievement of construction (CIDB.2000), many commonalities have been observed – but barriers invented in construction quality have also begun to be observed in recent years. Various studies conducted among architectural practices and/or general contractors consistently identified construction and procurement related barriers as the dominant barriers to the achievement of quality, often together with design related factors as barriers, such as:

a) Design related factors: inadequate details and inadequate specifications, and poor design coordination;
b) Procurement related factors: including emphasis on time and budget, shortened project periods, lack of pre-qualification, competitive tendering and awarding of contracts primarily on price; and
c) Construction related factors: including skills shortages and insufficient workforce training, lack of management commitment, and lack of strict quality control.

However, more recently, in addition to these predominantly less quality in construction and and civil working caused of:

a) Poor site management (planning, organising, leading, controlling, and coordinating)
b) Lack of contractor quality expertise
c) Corruption
d) Inadequate resourcing by contractors
e) Lack of understanding of quality
f) Level of subcontracting
g) Inadequate information detail
h) Focus on cost by contractors
i) Poor constructability

Based on the frequent use of indirect measures of quality achievement in construction field, with control variables such as motivation and risky decision, and based on the nature of the studies these measures are employed in this study. The following qualitative performance indicators are addressed in this research, and each item will be defined individually in the remainder of this section (Gayatri and Saurabh,2013)

A. Safety

Safety is a major concern for every construction company, regardless of the type of work performed. Safety is measured quantitatively through incidence rates and Experience Modification Ratings i.e. EMR. The objective of a safety program is to eliminate losses due to poor working practices that could impact workforce well-being.

B. *Employee Turnover*

Turnover is a problem that plagues the construction industry and indirectly increases overall costs, which associated with workers leaving the company to seek work elsewhere, and the cost of training new employees to fill those positions, is a valuable tool for determining overall construction performance. High percentages of employee turnover results in lower average worker skills on the site, which can affect the quality of work being performed. Furthermore, funds spent training new employees increase the cost of construction operations. By monitoring the change in company turnover, impacts on performance may be measured (Chitkara 2007).

C. *Absenteeism*

Performance evaluation based on absenteeism offers more concrete units for measurement. Absenteeism can be measured by the change in the number of lost man-hours due to absences over the duration of the construction project. A decrease in the number of lost man-hours directly results in increased production or output on the job. Decreasing the number of absences helps maintain the budgeted manpower needed to complete the work according to schedule.

3. Research Methodology

The research design is based on descriptive and associative method because the worker in contractor field work frequently facing risky job and less motivated. This research adopted questionnaire method as a mean for data collecting to examine the main factors affecting quality achievement. This survey consists of the factors that previous studies stated which might affect quality achievement, and also the measures that those studies considered as quality achievement measures. This survey was distributed over a random sample of contractor worker and staff who have experience construction in West Sulawesi Province. In order to obtain needed data about their opinions about the most important factors affecting quality achievement, and the best measures of quality achievement. The data transformed into a quantified numbers to assist in examining the study objectives. Sample data collected about 171 personal, as well as respondents from more than 300 population of contractor staff and technician.

Sample size calculation based on the formula of Yamane (1973), are: $n = \dfrac{N}{1+Nd^2}$

Description:

n = Number of samples minimal

N = Population size (267)

d = Precision defined as sampling error (5%).

Based on the above formula, the number of respondents obtained used in this study are:

$$n = \frac{267}{1+(267)\cdot(0{,}05)^2} = 160 \text{ contractor}$$

Applied technical research by Smart Partial Least Square with Structural Eqation Models.

4. Research Hypotheses

After reviewing the literature that covered the topic of risky decision, the researchers developed the following hypotheses that were set out to achieve the study objectives:

H 1: The Motivation affects either directly to quality achievement or indirectly through risky decision.

H 2: The risky decision affects quality achievement.

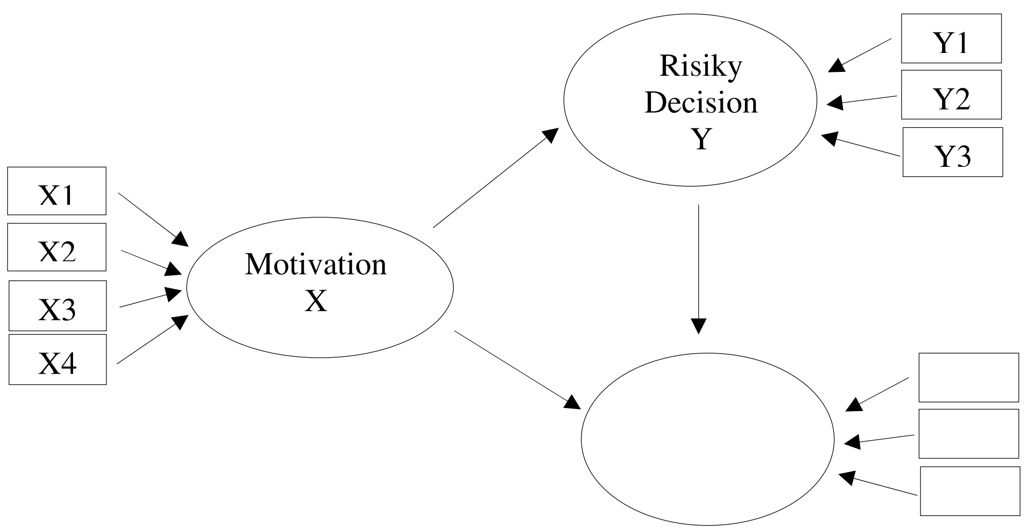
5. Data Analysis Procedures

This research implements a number of statistical techniques and procedures that help to examine research hypotheses. These techniques include reliability and validity test, frequency analysis, independent sample t-test, descriptive statistics, correlation matrix, linear regression, and simple regression. All statistical procedures were estimated using path analysis with Smart PLS implemented properly.

6. Models

The categorical nature of the dependent variable leads to inefficient OLS parameter estimates due to the heteroscedasticity of the OLS residuals (Maddala 1983). Therefore, we examine the association between financial statement restatements and indirect measures of quality achievement using multivariate logistic regressions. The models based on figure 1 are estimated using the restatements sample and all other firm year observations with available. This methodology is consistent with that employed in Richardson et al (2002), and avoids the problem of non-random matched samples for infrequent events described in Palepu (1986) and Zmijewski (1984). Figure 1 Conceptual Framework Research Based Model Equations Structural

Figure 1 Model Research



With indicator variable as follows:

Latent Variables	Symbol	Indicator variable
Quality Achievement (Z)	Z_1	Safety
	Z_2	Employee turnover
	Z_3	Absenteeism
Motivation (X)	X_1	Advantages
	X_2	Recognition
	X_3	Experience
	X_4	Openness
Risky Decision (Y)	Y_1	Readiness of reserve fund
	Y_2	Preparedness for weather changes
	Y_3	Contract changes

The research model is estimated is direct to risky decision measure in statistical model $\eta_1 = \Phi_1\xi_1 + \Phi_2\xi_2 + \zeta_1$ or noted as QUACHIEV= Φ_1 RISKDEC + Φ_2MOTIV + ζ_1

Partial Least Square (PLS) Estimation Parameters Estimation parameters of structural equation modeling with partial least square approach was obtained through a three-stage process of iteration and at every stage of producing estimates. The first phase resulted in estimated weight w_{jh} Weight estimation of w_{jh} weights obtained through two ways, namely mode A and mode B. Mode A is designed to obtain the estimated weight of the types of indicators reflexive, whereas the B mode is designed to obtain the estimated weight of the types of indicators formative.

In mode A weights wjh is the regression coefficient of Zj in simple regression models Xjh on inner estimation Zj, $X_{jh} = w_{jh} Z_j + e_{jh}$. Estimates for the model 1 is obtained through OLS in a way to minimize the sum of squared ejh, as follows:$e_{jh} = X_{jh} - w_{jh} Z_j$, $\sum_{h=1}^{J} e_{jh}^2 = \sum_{h=1}^{J}(X_{jh} - w_{jh} Z_j)^2$. Then the sum of the squares ejh lowered to the face wjh in order to obtain weights for mode A: $\widehat{w}_{jh} = \frac{Cov(X_{jh}, Z_j)}{Var(X_j^2)}$. Mode 2 of the weighting vectors wj of wjh is the regression coefficient vector of Zj at the center of the manifest variables ($X_{jh} - \overline{X}jh$) are connected to each other latent variables ξj:, $Z_j = w_jX_j + \varepsilon_j$ and $\varepsilon_j = Z_j - w_jX_j$. Generating of $\varepsilon_j^T\varepsilon_j$: $\varepsilon_j^T\varepsilon_j = (Z_j - w_jX_j)^T(Z_j - w_jX_j) = Z_j^TZ_j - 2w_jX_j^T Z_j + w_j^T w_jX_j^TX_j$. Then $\varepsilon_j^T\varepsilon_j$ lowered to w_{jh} in order to obtain weights for mode B: $\widehat{w}_j = (X_j^TX_j)^{-1} X_j^T Z_j$, Where X_j is a matrix with columns defined by the manifest variables ($X_{jh} - \overline{X}jh$) linking ξ_j latent variable j. Inner weight vector model is a $w_{jh} = (Var\ (X_j))^{-1} Cov(X_{jh}, Z_j)$ with $Var\ (X_j)$ is covariance matrix Of X_j and $Cov(X_{jh}, Z_j)$ Is the column vector between variabels of X_{jh} and Z_j . The second stage produces estimates obtained path through the model inner and outer estimation models.

- Inner Model Estimation
  By following the PLS algorithm of Wold (1985) and which has been improved by Lohmoller's (1989), the estimated inner Z_j models of standarized latent variables $(\xi_j - m_j)$ is defined by $Z_j \propto \sum_{i;\xi_i \text{ connected to } \xi_j} e_{ji} Y_i$. Wherein the weight inner e_{ji} models can be selected via three schemes, namely:
- Path scheme
  Latent variables connected to ξ_j are divided into two groups, namely: the latent variables that explain ξ_jj and is followed by the variables described by ξ_j. If ξ_i described by ξ_j then e_{ji} is

multiple regression coefficient between Y_i and of Y_j. Latent variables connected to ξ_j are divided into two groups items, namely: the latent variables that explain ξ_jj and is Followed by the variables Described by ξ_j.

$$e_{ji} = \begin{cases} \text{multiple regression coefficient of } Y_i \text{ from } Y_j \text{ ,if } \xi_j \text{ described by } \xi_i \\ Cor(Y_i Y_j) \text{ , } \xi_j \text{ described by } \xi_i \end{cases}$$

- Centroid schema

  Inner model weight of e_{ji} as the sign correlation between Y_i and Y_j , can be written as follows:$e_{ji} = sign[Cor(Y_i Y_j)]$

  Factor schema Inner mode weight of l e_{ji} as the sign correlation between Y_i and Y_j, can be written as follows: $e_{ji} = Cor(Y_i Y_j)$
- Outer Model Estimation

  Estimates outer models Y_j of standardization latent variables $(\xi_j - m_j)$ with mean = 0 and standard deviation = 1, obtained by a linear combination of the variables center manifest by the following equation $Y_j \propto \pm [\sum_{h=1}^{J} w_{jh}(X_{jh} - \bar{X}_{jh})]$. Where the symbol α means that the variable left represents the right of the standardized variables. Standardisation latent variables can be written by the following equation: $Y_j = X_{jh} + e_j$ with $X_{jh} = w_{jh} Z_j + e_j$ dan $Z_j = X_{jh} - \bar{X}_{jh}$ So that $\hat{Y}_j = \sum_{h=1}^{J} \widetilde{w}_{jh}(X_{jh} - \bar{X}_{jh})$. Coefisient of w_{jh} and $\widetilde{w}_{jh}$ both of regarded as outer mode weighted. The third stage produces mean estimates obtained and constant parameter. In This stage, estimation precedure based on main matrix and weight estimation and second stage coeficient, in order to count ean and constant parameter.
- Mean estimation of m_j

  Mean obtained as qutaions as $\xi_j = Y_j + m_j + e_j$ and $\xi_j - m_j = Y_j + e_j$ with $Y_j = \sum_{h=1}^{J} \widetilde{w}_{jh}(X_{jh} - \bar{X}_{jh})$ then $\xi_j - m_j = \sum_{h=1}^{J} \widetilde{w}_{jh}(X_{jh} - \bar{X}_{jh})$. Equations analog as : $\hat{\xi}_j = \sum_{h=1}^{J} \widetilde{w}_{jh} X_{jh} = Y_j + \widehat{m}_j$ So that: $\widehat{m}_j = \sum_{h=1}^{J} \widetilde{w}_{jh} \bar{X}_{jh}$. Where $\widetilde{w}_{jh}$ is defined as the weight of the outer models, with all the manifest variables that observations on the same scale of measurement. According to Fornell (1982), says that if the estimation of latent variables on the original scale $\xi_j^* = \frac{\sum_{h=1}^{J} \widetilde{w}_{jh} X_{jh}}{\sum_{h=1}^{J} \widetilde{w}_{jh}}$. The above equation is possible when all the weighting of outer positive model. Often in real applications, the estimation of latent variables require scale 0-100 scale in order to have a benchmark to compare with an individual score. So in the case of the I series observation, the easily obtained through the transformation as follows: $\xi_j^{0-100} = 100\, x\, \frac{\xi_j^* - x_{min}}{x_{max} - x_{min}}$. Where x_{min} and x_{max} are the minimum and maximum values of common measurement scale for all variables manifest.
- Parameter Constant

  In general, the path coefficient $\boldsymbol{b_{ji}}$ is multiple regression coefficient of $\boldsymbol{Y_j}$endogenous latent variables were standardized in the explanatory latent variables (exogenous)$\boldsymbol{Y_i}$, $\boldsymbol{Y_j = \sum_{i=1}^{J} b_{ji} Y_i + e_j}$. At the time of converging latent variables (non-centered) $\boldsymbol{\hat{\xi}_j}$ is equal to $\boldsymbol{Y_j + \widehat{m}_j}$. the regression equation when the latent variable $\boldsymbol{\hat{\xi}_j}$ not converge is: $\boldsymbol{\hat{\xi}_j = b_{j0} + \sum_{i=1}^{J} b_{ji} \hat{\xi}_i + e_j . e_j^2 = (\hat{\xi}_j - (b_{j0} + \sum_{i=1}^{J} b_{ji} \hat{\xi}_i))^2 = \hat{\xi}_j^2 - 2\hat{\xi}_j b_{j0} - 2\hat{\xi}_j \sum_{i=1}^{J} b_{ji} \hat{\xi}_i + (b_{j0}{}^2 + 2 b_{j0} \sum_{i=1}^{J} b_{ji} \hat{\xi}_i + \sum_{i=1}^{J} b_{ji}^2 \hat{\xi}_j^2)}$. $\boldsymbol{\frac{\partial e_j^2}{\partial b_{j0}} = \widehat{b}_{j0} = \hat{\xi}_j - \sum_{i=1}^{J} b_{ji} \hat{\xi}_i}$ with $\boldsymbol{b_{j0} = \widehat{m}_j - \sum_i b_{ji} \widehat{m}_i}$, So the location parameter is a constant $\boldsymbol{b_{j0}}$ for endogenous latent variables and the average $\boldsymbol{\widehat{m}_j}$for exogenous latent variables.

7. Results

Descriptive Statistics

Based on the following table we can make the following observations:

- The number of observations (respondents) for each variable was 160, which reflect that the respondents have answered all questions concerning study variables.
- The average value for risky decision was 86.4%, indicating that the respondents believe that risky decision in the West Sulawesi is relatively high.
- The average value of the independent variables ranged from 72% to 82%, which means that the respondents assume that risky decision is highly affected by those variables.
- Standard deviation for all variables was relatively low, which indicate that the respondents" answers are consistent and close to each other.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Quachiev1	160	1,00	5,00	4,48	0,82	0,67
Quachiev2	160	2,00	5,00	4,60	0,76	0,58
Quachiev3	160	1,00	5,00	4,66	0,71	0,50
Motiv1	160	2,00	5,00	4,39	0,98	0,96
Motiv2	160	2,00	5,00	4,29	0,80	0,65
Motiv3	160	1,00	5,00	3,98	1,22	1,50
Motiv4	160	1,00	5,00	3,93	1,12	1,26
Riskdec1	160	1,00	5,00	4,15	0,87	0,76
Riskdec2	160	2,00	5,00	3,79	1,31	1,72
Riskdec3	160	1,00	5,00	2,61	1,38	1,91

Source: Output of Test of SPSS V.22

The following sections shed some lights on the concept of each statistical procedure used in the research. In this research will be testing the validity and reliability on each latent variable is the variable risky decision and motivation toward quality achievement by using statistical software SmartPLS. Size reflexive individual is said to be valid if it has a value of loading (λ) with latent variables to be measured ≥ 0.5, if one indicator has a value of loading (λ) <0.5, the indicator should be discarded (dropped) because it would indicate that the indicator is not good enough for measure latent variables appropriately. Here are the results of structural equation path diagram output in the PLS using SmartPLS software.

Pearson correlation coefficients are presented in Table 1. All significant correlations between variables in the model are more than 50% except for RISKDEC3. Based on table 1 and reflect to figure 1 showing that loading value of among variables within X1 and X2 with Y, each of loading factor must be $(\boldsymbol{\lambda}) \geq 0.5$, and has t-statistic > 1.64 on level of significancy $\boldsymbol{\alpha} = 0{,}05$. The composition model sequentially descripted RISKDEC3 with loading factor -0.5989 should be discarded and continue for proceed data running

Figure 1. Reflective analysis

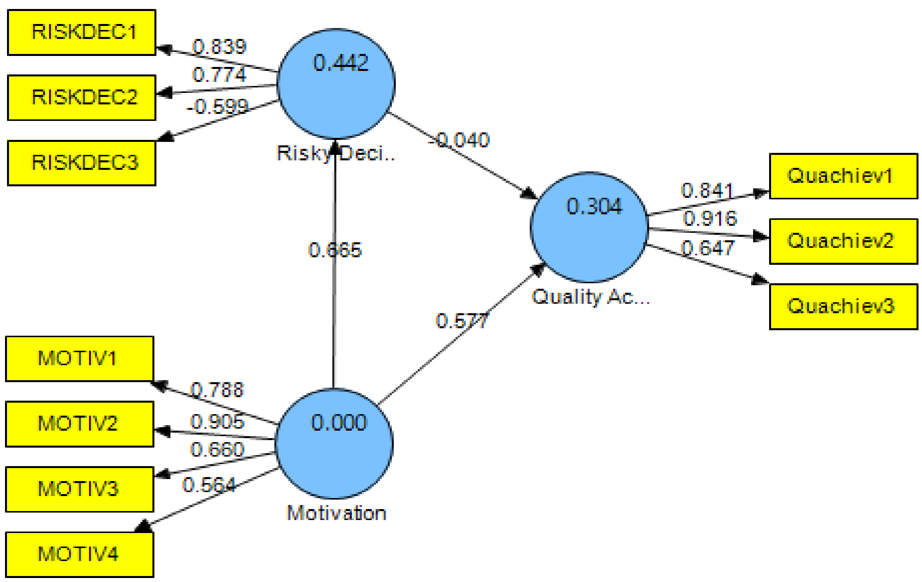


Table 1. Latent Variable Correlations

	Motivation	Quality Achievement	Risky Decision
Motiv1	0,7883		
Motiv2	0,9051		
Motiv3	0,6604		
Motiv4	0,5644		
Quachiev1		0,8408	
Quachiev2		0,9165	
Quachiev3		0,6470	
Riskdec1			0,8390
Riskdec2			0,7744
Riskdec3			-0,5989

Source: Output of Test of Bootstraping Smart PLS

Results of testing that the whole independent variables showing positively associated with the likelihood of risky decision. The value of loading (λ) to be valid if it has a latent variables to be measured ≥ 0.5, that way in Table 2, the whole indicators apparently valid to be continue as good indicator to support latent variable

Table.2 ValidityTest

Variable		Indicators	Loading (λ)	Sampel Mean	Standard error	T-Statistic	Validity
Quality Avhievement	>	Quachiev1	0,838	0,834	0,074	113.944	Valid
	>	Quachiev2	0,923	0,926	0,020	456.511	Valid
	>	Quachiev3	0,630	0,605	0,152	41.440	Valid
Motivation	>	Motiv1	0,784	0,792	0,059	133.857	Valid
	>	Motiv2	0,903	0,904	0,020	452.633	Valid
	>	Motiv3	0,666	0,669	0,098	67.700	Valid
	>	Motiv4	0,569	0,552	0,124	45.900	Valid
Risky Decision	>	Riskdec1	0,910	0,914	0,041	223.533	Valid
	>	Riskdec2	0,767	0,746	0,100	76.804	Valid

Source: Output of Test of Bootstraping Smart PLS

Reliabilitty Test and Structural Evaluation Model (Inner Model)

Research realiability if meet the construc reliability or Cronbachs Alpha more than 0,6. Which the output of SmartPLS descripted on the next table.

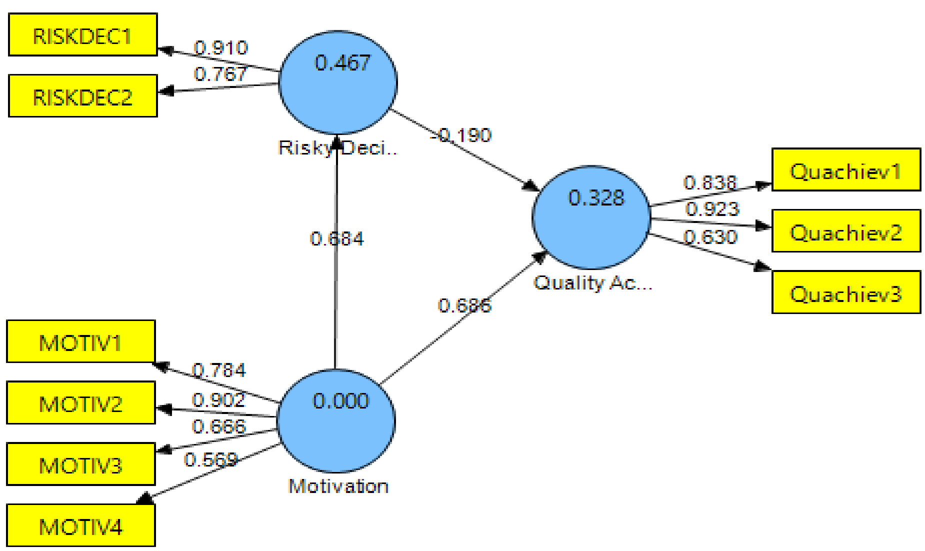
Table .3 Reliability Test

	AVE	Composite Reliability	R Square	Cronbachs Alpha	R Square
Motivation	0,5491	0,8255		0,7182	
Quality Achievement	0,6501	0,8448	0,3283	0,7596	0,3283
Risky Decision	0,7077	0,8278	0,4673	0,6023	0,4673

Source: Output of Test of Bootstraping Smart PLS

Based on Table 3, latest variable has AVE > 0.5 and $\rho_c \geq 0.7$ as well as risky decision has a AVE > 0.5 and $\rho_c \geq 0.7$. Based on bootstrapping test in Table. 3, that no need to abolish the indicator variables. Then proceed to the next second step in figure 2 as follows:

Figure 2. Estimation Model of Equations Structural



Hypotheses Tests

Based on Table 3 and Table 4. Results of testing Hypothesis 1, that motivation has negatively affect and not associated with risky decision with estimated path coefficient -0,1897. Hypothesis 2: Motivation positively affect and associated with with quality achievement estimated path coefficient 0,6836, moreover risky decision has positively affect and associated with quality achievement with estimated path coefficient 0,5660.

Table .4 Path Coefficients

Determinant Model		r^2	ʎ	Ś	σ	T Statistics
Risky Decision	->	Quality Achievement	0.5560	0.5746	0.0519	107.066
	->	32,83%	0.6836	0.6974	0.0630	108.424
Motivation	->	Risky Decision 47%	-0.1897	-0.2160	0.0964	19.680

Source: Output of Test of Bootstraping Smart PLS

Determinants Model (R Square)

The estimated coefficients for risky decision is 47,00 percent, while risky decision definitely attribute only 32,83 percent. We attribute the prominent of significance in Model 1 and Model 2 are less significant.

Limitations and Conclusions

Findings

Our finding is that the wider the scope of the motivation will be an effort to control risky decision in develop the morale of worker in construction field, while in risky decision will caused of the limited information processing capacity of a decision-maker can be strained when considering the consequences of only one course of action. Yet, choice requires that the implications of various courses of action be visualized and compared. In addition, unknown factors always intrude upon the problem situation and seldom are outcomes known with certainty. This progressive model building is often referred to as the bootstrapping approach and is the most important factor in determining successful implementation of a decision model. Decision makers often face a severe lack of information. Probability assessment quantifies the information gap between what is known, and what needs to be known for an optimal decision. The probabilistic models are used for protection against adverse uncertainty, and exploitation of propitious uncertainty. That way the risky decision need lot of information to achieve the quality of building in cinstruction.

Discussion

Which is under discussion is the extent of the object to be verified that quality achievement is guiding the ethic of worker, more honestly in composing the budget which suitable with the quality of the construction working based on scheduled and procedures. In the event of time and budgets constraints that will affect the quality of building. Moreover the worker get enhance in morale of Islamic spirit.

Conclusions

We are unable to support the hypotheses that risky decision and motivation is most important to evaluate the working plan. Relevant information and knowledge used to solve a decision problem sharpens our flat probability to achieve the goal. Useful information moves the location of a problem from the pure uncertain “pole” towards the deterministic “pole.” Probability assessment is nothing more than the quantification of uncertainty. In other words, quantification of uncertainty allows for the communication of uncertainty between persons. There can be uncertainties regarding events, states of the world, beliefs and so on. Probability is the tool for both communicating uncertainty and managing it. There are different types of decision models that help to analyze the different scenarios. Depending on the amount and degree of knowledge we have, the three most widely used types are:

a. Decision making under pure uncertainty
b. Decision making under risk
c. Decision making by buying information

In decision making under pure uncertainty is more risky, the decision maker has absolutely no knowledge, not even about the likelihood of occurrence for any state of nature. In such situations, the construction worker and supervision working require the decision maker's behavior is purely based on his/her attitude toward the unknown. Some of these behaviors are optimistic, pessimistic and least regret, among others.

Managers need to motivate the staff and worker in construction field. Employee recognition goes a long way toward increasing and maintaining achievement. Employees who are valued for their contributions desire to continue contributing and striving for success. Managers do not need to purchase extravagant gifts as a way to motivate employees. A simple thank you for a job well done makes an employee feel like a valuable part of the team. Other ways to recognize employees include a paid day off, a card expressing gratitude and flexibility in work schedules. Employee recognition is most effective when employees are earning fair wages and when the recognition is sincere.

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