

# A STRUCTURAL EQUATION MODELING OF PERFORMANCE QUALITY OF LOCAL GOVERNMENT ORGANIZATION ACCOUNTANTS

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## ABSTRACT

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Accountants are crucial personnel for organizational operations. They ensure their organization's financial system is stable and secure and can provide information executives used to determine financial policies and manage operations to achieve the vision and goals. Accountants with suitable qualifications and performance quality will affect better organizational performance. This study sought to find evidence to confirm certain factors that affect the accountants' performance quality, investigating the effects of organizational culture, job satisfaction, and organizational engagement. A quantitative methodology was used to study a sample of 344 accountants who worked under local government organizations in the Northern Region of Thailand. Data were collected by a questionnaire and analyzed using descriptive statistics, correlation analysis, and structural equation modeling analysis to test hypotheses. The results showed that the proposed model and the empirical data were coherent and appropriate according to the model-fit indices:  $\chi^2 = 4.067$ ,  $df = 3$ ,  $p = .254$ ,  $\chi^2/df = 1.356$ ,  $GFI = .997$ ,  $RMSEA = .032$ . The effect of variables in the model was as follows: Organizational culture had a direct, positive effect on job satisfaction and organizational engagement and an indirect, positive effect on performance quality through job satisfaction and organizational engagement; organizational engagement had a direct, positive effect on job satisfaction and performance quality; job satisfaction had a direct, positive effect on performance quality; organizational engagement had an indirect, positive effect on performance quality through job satisfaction. Organizational culture, job satisfaction, and organizational engagement could predict 73% of the performance quality. The findings can be used as guidelines for improving the performance quality of local government organization accountants to increase their financial and budgetary management efficiency and effectiveness.

**Keywords:** Accountants; organizational culture; job satisfaction; organizational engagement

## 1. INTRODUCTION

Accountants are crucial to the operations of public, private, and non-profit organizations. They are responsible for accounting, providing accurate financial reports as information for planning and decision-making of executives in determining organizational direction and operations (Homkaew et al., 2017).

Therefore, organizations need accountants with suitable qualifications and performance quality. They ensure their organization's financial system is stable and secure and can support information executives used to determine financial policies and manage organizational operations to achieve the vision and goals (Department of Business Development, 2016).

Local government organizations (LGOs) are established by the federal government under decentralization and are assigned authority to provide certain public services by their budgets and officials (Lertpaitoon et al., 2013). They need qualified accountants to be responsible for their operations in budgetary and financial management. These operations include overseeing financial operations, establishing accounting systems and practices, preparing financial statements, analyzing financial data for the benefit of work administration, tracking operation risk, and complying with the other requirements and laws related to administration (Thorncharoenkul, 2018). Hence, the performance of accountants is vital to their operations. If accountants are determined to perform their duties qualitatively and continuously improve their performance quality, this will help them have sound management and performance to achieve their goals and maximize benefits to their organizations (Jaiyen et al., 2017; Sukcharoen, 2014).

Performance quality refers to an individual's productivity to achieve the individual and organizational goals, in conjunction with work behaviors, work attitudes, and work happiness without the stress. The personnel's performance quality affects organizational performance (Griffin and Moorhead, 2011; Schermerhorn et al., 2000). Therefore, organizations seeking good performance and achieving their goals must develop and support factors that affect the personnel's performance quality in all dimensions. Accountants' performance quality is not only based on accountancy qualifications, such as accounting knowledge and skill, accounting ethics, or excellent attitudes in work practices according to the accounting standards and framework but may involve other factors too (Chamchoi, 2014; Duangchang and Penwutikun, 2018; Kimsang, 2017). These may include personal factors, such as work motivation, job satisfaction, organizational engagement (Homkaew et al., 2017; Jhantasena, 2015), and organizational factors, such as executive support, organizational culture, organizational environment, and organizational competency (Suksantivong et al., 2017).

For the reasons mentioned above, this research aimed to find evidence to confirm the factors that affect the performance quality of accountants in local government organizations in terms of the effect of organizational culture, job satisfaction, and organizational engagement. The findings may be used as guidelines for improving the performance of accountants and increasing the efficiency and effectiveness of their financial and budgetary management.

## 2. LITERATURE REVIEWS

### 2.1 Local Government Organization (LGO)

A local government organization (LGO) is a government agency organized according to the government decentralization principle. The government authorizes it to provide certain public services instead of the central government using a local budget and officials, with the central government only supervising but not directing command (Lertpaitoon, 2004). Thailand's LGOs are divided into two types: 1) General LGOs, which include provincial administrative organizations (PAOs), municipalities, and subdistrict administrative organizations (SAOs); and 2) Particular LGOs, including the Bangkok Metropolitan Administration (BMA) and that of Pattaya City.

According to the Department of Local Administration (2020), there are 7852 LGOs in Thailand: 1) 76 PAOs; 2) 2,454 municipalities comprising 30 city municipalities, 187 town municipalities, and 2,237 subdistrict municipalities; 3) 5,320 SAOs; 4) 2 particular LGOs comprising the BMA and Pattaya City.

### 2.2 Performance quality

Performance quality refers to an individual's productivity to achieve the individual and organizational goals, in conjunction with work behaviors, work attitudes, and work happiness without stress (Griffin and Moorhead, 2011; Schermerhorn et al., 2000).

1. 'Productivity' refers to the ability to produce an individual's work, measured from achieving the outputs and outcomes assigned by the organization.
2. 'Behaviors' refer to behaviors that represent the willing performance of tasks assigned by the organization in relation with others, measured from work behaviors relating to cooperation and relationships with others at work.
3. 'Attitudes' refer to opinions about a person, place, thing, or event that affect job satisfaction or dissatisfaction in the job and organizational engagement, which affect an individual's performance quality. It is measured from opinions relating to a person's mental state of self, others, and work and organization situations.

4. 'Stress' refers to behaviors or feelings in which a person reacts physically and mentally under crisis. It is measured from opinions about how each person deals with crises in order to work with happiness. The increased stress causes changes in individual and organizational behaviors and performance.

All four features were assigned as accountants' performance quality indicators in this study.

### 2.3 Organizational culture

Organizational culture refers to the values, concepts, guidelines, and work practices that employees abide by until it becomes a formality for determining the organizational strategies and methods that everyone in the organization practices to achieve its goals (Sa-nguanwongwan, 2004; Wongwaisayawan, 1997). So, creating an organizational culture is very necessary for organizational success. It will have a profound effect on organizational effectiveness when it creates: 1) organization engagement and involvement; 2) appropriate adaptability to changes of the organizational internal and external environment; 3) regular behaviors and practices that lead to harmonious work and predictable behaviors; and 4) appropriate organizational vision and mission, giving the organization a clear framework and direction of operations. These four factors will enable the organization to achieve the desired effectiveness. Therefore, the organizational culture factor is essential to appropriately support the organization in achieving its specified vision and mission (Denison, 1990). Hence, organizational executives should pay more attention to their organizational culture by evaluating whether its existing corporate culture's condition is suitable or valuable to the organization or not. This is so as to create an organizational culture in the appropriate way in order to benefit the organization. Organizational culture, therefore, is represented by the organization's personnel behaviors and their need to change (Wongwaisayawan, 1997). With support from the reasons above, we determined three hypotheses in this study that organizational culture affects job satisfaction, organizational engagement, and performance quality:

H1: Organizational culture affects job satisfaction.

H2: Organizational culture affects organizational engagement.

H3: Organizational culture affects accountants' performance quality.

### 2.4 Job satisfaction

Job satisfaction refers to good feelings, a positive attitude towards work, and happiness resulting from working people who have had their needs met as they expected (Locke, 1976). Those needs are divided into two parts: 1) internal needs, e.g., acceptance requirements, pride in success, independence and stability senses; 2) external needs, e.g., supervision, interpersonal relationships, compensation, benefits and welfare, working conditions, advancement opportunities (Herzberg et al., 2010). Job satisfaction will lead to improved performance quality because employees who have had their needs met with satisfaction will be motivated and willing to perform better. Executives who aim to increase productivity must improve employee performance by providing a work environment and factors such as salary, welfare, and job progress that satisfy employee satisfaction to motivate them to perform better, resulting in organizational benefits and achievement of goals (Davis, 1981). With support from the reasons above, we determined hypothesis 4 in this study, indicating that job satisfaction affects performance quality:

H4: Job satisfaction affects performance quality.

### 2.5 Organizational engagement

Organizational engagement refers to creating a sense of being within the organization and the positive feelings and expressions that make employees willing to sacrifice part of their happiness for organizational success and progress (Bentein et al., 2005). Organizational engagement consists of three dimensions: 1) affective dimension – employees' feeling that they are an organizational part expressed by giving cooperation to improve work in order to increase organizational effectiveness; 2) normative dimension – employees' gratitude that they had the opportunity to work in the organization; 3) continuance dimension – employees' awareness that they must have continued to work in the organization without resigning because of their needs (McGee and Ford, 1987; O'Reilly and Chatman, 1986). Organizational engagement results in employees willing to work for the organization's advancement and benefit and desire to remain continued organization's members. Organizational engagement has a meaning close to job satisfaction but is a broader indicator of organizational effectiveness than job satisfaction which reflects only the general effect an individual has on an organization in terms of their job. Although it evolves slowly, it is more stable than job satisfaction. With support from these reasons, we determined two further hypotheses in this study, indicating that organizational engagement affects job satisfaction and performance quality:

H5: Organizational engagement affects job satisfaction.

H6: Organizational engagement affects performance quality.

### 3. RESEARCH METHODS

#### 3.1 Sample and procedure

The research used a quantitative methodology. The population was 2,235 accountants from 823 local government organizations (LGOs) in Thailand's upper northern region (Department of Local Administration, 2020). The sample was determined based on Krejcie and Morgans' criteria (1970), which suggests the sample suitable for estimating the population with 95% confidence and 5% error, and Stevens' criteria (1996), which suggest that the sample for structural equation modeling analysis should be at least twenty units per one observed variable. Seven observed variables were involved in this study. The 344 samples chosen exceeded the minimum criteria recommended (>331). The samples were selected from 823 LGOs using stratified random sampling, with samples in each place determined by population proportion and selected at random.

#### 3.2 Instrumentation

The instrument used in the research was a research-developed questionnaire divided into two parts, as follows:

Part 1: General information of respondents using multiple-choice and word-filling questions, including gender, age, education level, job position, and work experience.

Part 2: Related variables divided into four parts: Section 1– Organizational culture (six questions); Section 2– Job satisfaction (seven questions); Section 3– Organizational engagement (eight questions); and Section 4– Performance quality (ten questions). Five experts examined the content validity of the questionnaire. The item-objective congruence (IOC) for all questionnaire questions was higher than .60 (Hambleton, 1984). The questionnaire was then tested with thirty non-sample accountants to determine its reliability using Cronbach's alpha coefficient method (Cronbach, 1951). The questionnaire's reliability was .95, and the questionnaire's reliability used to measure the variables of organizational culture, job satisfaction, organizational engagement, and performance quality was .95, .96, .93, and .95, respectively.

#### 3.3 Data collection

Four hundred questionnaires were sent to the sample for collecting data, and 344 respondents returned the questionnaires with complete information. The response rate was 86%, which was enough to assume the sample was qualified to represent the entire population. According to Aaker et al. (2001), an acceptable survey response rate for follow-up processes should be greater than 20%.

#### 3.4 Data analysis

The data were analyzed using frequency, percentage, Pearson's product-moment correlation, and structural equation modeling analysis (SEM) to investigate the proposed model's consistency with the empirical data. The consistency of the model to the data was assessed using  $\chi^2$  statistics and fit indices. Kline (2005) suggested that the chi-square probability level (p-value) should be more than 0.05. The value of the relative chi-square ( $\chi^2/df$ ) is considered satisfactory when < 3 in large samples ( $N > 200$ ), < 2.5 in medium-sized samples ( $100 < N < 200$ ), and < 2 in small samples ( $N < 100$ ). The value of the goodness of fit index (GFI), like multiple r-squared, theoretically ranges from 0 (poor fit) to 1 (perfect fit), is considered satisfactory when > .90 (Browne and Cudeck, 1993; Byrne, 2001). A value for the root mean square error of approximation (RMSEA) of less than 0.05 would indicate a "close fit," and a value of 0.08 or less would indicate a "reasonable fit" (Kline, 2005; Schumacker and Lomax, 2004).

### 4. RESEARCH RESULTS

The general data analysis of respondents showed that most of them were females (94.2%), aged between 41-50 years (52.9%), graduated with a bachelor's degree (62.2%), their job positions were Finance Division Director/Chief Financial and Accounting Department (69.8%), and their work experience was more than ten years (88.4%).

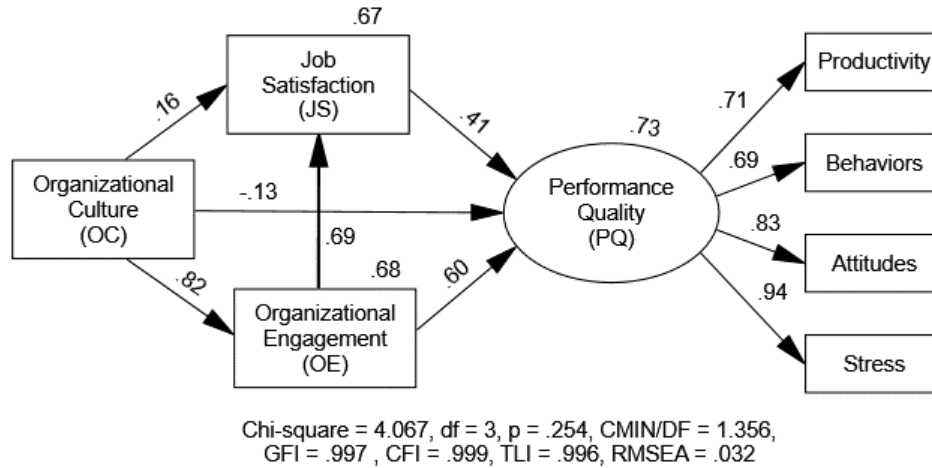
**Table 1:** Correlation among Variables in Proposed Model

Variables	<i>M</i>	<i>SD</i>	<i>JS</i>	<i>OE</i>	<i>PQ</i>
Organizational culture (OC)	3.77	0.75	.722**	.824**	.520**
Job satisfaction (JS)	4.03	0.59	-	.814**	.670**
Organizational engagement (OE)	3.39	0.60	-	-	.689**
Performance quality (PQ)	4.24	0.46	-	-	-

Notes: \*\* $p < .01$

The data in Table 1 shows the relationship of the variables. Organizational culture was correlated with job satisfaction, organizational engagement, and performance quality with correlation coefficients of .722, .824, and .520. Job satisfaction was correlated with organizational engagement and performance quality with correlation coefficients of .814 and .670. Organizational engagement was correlated with performance quality with a correlation coefficient of .689. All variables' relationships had a statistical significance of .01 ( $p < .01$ ).

Structural equation modeling was analyzed to examine the consistency of the proposed model against empirical data. It showed that the proposed model and the empirical data were appropriate and coherent after adjusting the model. The fit indices were chi-square ( $\chi^2$ ) = 4.067, degrees of freedom (df) = 3, probability value ( $p$ ) = .254, relative chi-square ( $\chi^2/df$ ) = 1.356, a goodness of fit index (GFI) = .997, and the root mean square error of approximation (RMSEA) = .032, as shown in Figure 1.



**Figure 1:** Significance Fit of the Proposed Model to the Empirical Data

Figure 1 shows the path coefficients, factor loadings, and predictive coefficients of variables in the proposed model. Details are shown in Table 2 and Table 3 as follows:

**Table 2:** Factor Loadings of Variables That Are Indicators of Performance Quality

Indicators	Std. Factor Loadings ( $\beta$ )	SE	t-value	R <sup>2</sup>
<b>Performance Quality (PQ)</b>				
(1) Productivity	.708**	scaling		.365
(2) Behaviors	.695**	0.098	9.974	.482
(3) Attitudes	.828**	0.165	7.907	.429
(4) Stress	.940**	0.176	9.564	.883

Notes: \*\* $p < .01$

Table 2 shows the standardized factor loadings of variables that are indicators of the performance quality, composed of four observed variables: Productivity, Behaviors, Attitudes, and Stress. They showed standardized factor loadings of .708 (with  $R^2=.365$ ), .695 (with  $R^2=.482$ ), .828 (with  $R^2=.429$ ), and .940 (with  $R^2=.883$ ).

**Table 3:** The Effect of Variables in the Proposed Model

Independent Variables	Dependent Variables								
	Job Satisfaction (JS)			Organizational Engagement (OE)			Performance Quality (PQ)		
	DE	IE	TE	DE	IE	TE	DE	IE	TE
Organizational Culture (OC)	.16**	.57**	.73**	.82**	-	.82**	-.13*	.79**	.66**
Job Satisfaction (JS)	-	-	-	-	-	-	.41**	-	.41**
Organizational Engagement (OE)	.69**	-	.69**	-	-	-	.60**	.28**	.88**
R <sup>2</sup>	.67			.68			.73		

Notes: DE = Direct effect, IE = Indirect effect, TE = Total effect ( $\beta$ , \* $p < .05$ , \*\* $p < .01$ )

Data in Figure 1 and Table 3 show that the effect of variables in the proposed model can be summarized as follows: 1) OC had a direct, positive effect on JS and OE, with path coefficients of .16 and .82, and an indirect, positive effect on JS and PQ, with path coefficients of .57 and .79. Thus, OC had a positive, total effect on JS, OE, and PQ, with path coefficients of .73, .82, and .66; 2) JS had a positive, direct, and total effect on PQ, with a path coefficient of .41; 3) OE had a positive, direct effect on JS and PQ, with path coefficients of .69 and .20, and an

indirect effect on PQ, with path coefficients of .28. Thus, OE had a positive, total effect on JS and PQ, with path coefficients of .69 and .88. Also, predictive coefficients ( $R^2$ ) of the variables indicates that 1) OC could predict 67% of OE ( $R^2 = .67$ ); 2) OC and OE could jointly predict 68% of JS ( $R^2 = .68$ ), 3) OC, OE, and JS could jointly predict 73% of PQ.

## 5. DISCUSSION AND CONCLUSION

From the study results of the effects of organizational culture, job satisfaction, and organizational engagement on performance quality of local administration organizations' accountants, it can be concluded that:

1. The organizational culture (OC) had a direct, positive effect on job satisfaction and organizational engagement (H1:  $OC \rightarrow JS$  and H2:  $OC \rightarrow OE$  supported) and had an indirect, positive effect on job satisfaction through organizational engagement ( $OC \rightarrow OE \rightarrow JS$ ) and performance quality through job satisfaction and organizational engagement ( $OC \rightarrow JS \rightarrow PQ$  and  $OC \rightarrow OE \rightarrow PQ$ ). However, it was found that the direct effect of organizational culture on job satisfaction was not statistically significant (H3:  $OC \rightarrow PQ$  not supported). This may result from organizational culture affecting personal characteristics (e.g., values, beliefs, ideas, job satisfaction, organizational engagement) rather than directly affecting performance quality (Gordon, 1999; Griffin and Moorhead, 2011; Sa-nguanwongwan, 2004; Suksantivong et al., 2017). It will affect the performance quality and the organizational efficiency and effectiveness when it creates: 1) organizational engagement; 2) adaptability that is appropriate to changes of environment, both of internal and external organization; 3) normal behaviors and practices that lead to collaborative work and predictable behaviors; 4) an appropriate corporate vision and mission, giving the organization a clear framework and direction for its operations. These four factors will enable the organization to achieve its desired effect. Therefore, organizational culture is essential to foster job satisfaction and organizational engagement, which builds organizations' performance and success according to a well-defined vision and mission (Denison, 1990; Lee and Allen, 2002; Robbins, 2005).

2. Job satisfaction (JS) had a direct, positive effect on performance quality (H4:  $JS \rightarrow PQ$  supported). This is because job satisfaction is the employee's good feeling and attitude towards work due to their expectations of work being met, such as work security, working conditions, wages or compensation, work progress, independence to work, honoring and status, colleagues, and work administration (Herzberg et al., 2010; Rodnut, 2016). Therefore, job satisfaction is most related to performance because individual satisfaction will make the working person more willing to perform the task to achieve the organizational goals. If a person has full job satisfaction, he has a positive sense of work (Homkaew et al., 2017; Lau and Chong, 2002; Limsukon and Phadoongsithi, 2011). It could be said that: "Responding to the needs of the operator until satisfied will induce a higher incentive for productivity and quality of work than unresponsive individuals" (Davis, 1981).

3. Organizational engagement (OE) had a direct, positive effect on job satisfaction (H5:  $OE \rightarrow JS$  supported) and performance quality (H6:  $OE \rightarrow PQ$  supported), and also had an indirect, positive effect on performance quality through job satisfaction ( $OE \rightarrow JS \rightarrow PQ$ ). This is because organizational engagement is a positive belief and feeling towards the organization, a sense of unity with the organization, resulting in a person's willingness to sacrifice some of their happiness for success and progress of the organization, and a desire to be an organization member forever (Bentein et al., 2005; Duangchang and Penwutikun, 2018; O'Reilly and Chatman, 1986). The study results also found that organizational engagement can better predict performance quality than job satisfaction. This represents a more comprehensive organizational development concept than job satisfaction which only reflects the person's response to the organization in one aspect of the job. Organizational engagement can develop gradually and at a slower rate than the development of job satisfaction but is more stable. Therefore, organizational engagement is a crucial indicator of personnel performance quality and organizational efficiency and effectiveness (Chomsiri, 2017; Jhantasena, 2015; Yingyong et al., 2017).

## 6. RECOMMENDATION

This study identified that organizational culture, job satisfaction, and organizational engagement, directly and indirectly, affected the performance quality of accountants of local administrative organizations. Hence, the administrators of local government organizations and related departments for developing local government organization accountants must recognize and emphasize the building and development of organizational culture, job satisfaction, and organizational engagement appropriate and conducive to the accountants' performance. This will enable accountants to perform the organizations' essential operational



responsibilities relating to budget, finance, and accounting with a better performance efficiency and quality, so contributing to the efficiency and effectiveness of local government organization's operations on a sustainable basis.

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