

# An Analysis of Confirmatory Factors of High-performance Organization in External Education Quality Assurance

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## ABSTRACT

This research aimed to analyze the confirmatory factors of a high-performance organization in external education quality assurance. The sample used for the research consisted of 1,452 participants, including educational administrators from all levels and types of education, external evaluators, and evaluation regulatory units, selected through simple random sampling. The research tool was a measurement of the characteristics of a high-performance organization in external education quality assurance. Data were analyzed using exploratory factor analysis and confirmatory factor analysis. The research findings revealed that the results of the exploratory and confirmatory factor analyses of the high-performance organization in external education quality assurance comprised three components: Strategy (Strategy of External Assurance in Education), System (System of External Assurance in Education), and Performance (Performance of External Assurance in Education Organization). The model fit indices were as follows: Chi-square ( $X^2$ ) = 210.174,  $df = 114$ ,  $X^2/df$  (CMIN/DF) = 1.844,  $p$ -value = 0.000, RMR = 0.011, SRMR = 0.018, RMSEA = 0.024, and CFI = 0.995, indicating that the confirmatory factor analysis of the high-performance organization in external education quality assurance aligns with empirical data. This model is named PSSHPO: High Performance Organization System and Strategy of External Assurance in Education Model.

**Keywords:** High-performance Organization in External Education Quality Assurance, high-performance organization, external quality assurance

## INTRODUCTION

Education is a powerful tool for developing a nation's human capital or resources. Countries with well-educated populations tend to experience higher levels of development. Therefore, education is essential for national progress. Many countries worldwide have adopted education as a cornerstone of their national development. Considering the master plan under Thailand's National Strategy: 12<sup>th</sup> Issue on Learning Development aims to enhance learners' learning skills and foster a lifelong desire for knowledge. This includes redesigning the learning system, changing the role of teachers, improving the efficiency of the education management system, and developing a lifelong learning system. It also involves establishing a foundation for a learning support system using digital platforms and creating an education system that excels academically at the international level. Furthermore, it emphasizes promoting the development of Thai people according to multiple intelligences to reach their full potential, enhancing the capabilities of those with special talents to secure stable careers, and integrating leading researchers and technologists to advance research and create innovations that address national development needs, thereby strengthening the country's potential and resilience. The specific goals include: (1) increasing the number of Thais with quality education that meets international standards, possessing the necessary skills for the 21st century, being able to solve problems, adapt, communicate, and collaborate effectively with others, and having a continuous lifelong learning habit; and (2) improving the development of Thais to reach their full potential according to their aptitudes and multiple intelligences (Office of the National Economic and Social Development Council, Prime Minister's Office, 2017, p. 12). It is evident that education is the foundation and a crucial element in the development of the country in all dimensions.

It is evident that education is the foundation and a crucial element in the development of the country in all dimensions. Therefore, managing education to ensure quality requires the application of management principles, similar to the administration or operation of various enterprises, which must be conducted in

a comprehensive and systematic manner. One important step in this process is evaluation, which provides feedback to reflect whether the operations have achieved the set goals, and to identify any weaknesses or issues that need improvement to ensure that future operational planning effectively meets its goals. It is necessary to prioritize evaluation, particularly from neutral external agencies. This will create a mechanism for serious oversight and encourage educational management entities, from the national level down to the smallest units, such as educational institutions and classrooms, to engage in self-assessment. This self-evaluation is crucial for the continuous development of quality education management (Office for National Education Standards and Quality Assessment (Public Organization), 2024). This led to the establishment of the Office for National Education Standards and Quality Assessment (Public Organization) or ONESQA, which is responsible for developing criteria, methods for external quality assurance, and evaluating the educational management to ensure the quality of educational institutions, taking into account the goals, principles, and educational management guidelines at each level and type of education. The main responsibilities include: 1) Developing an external quality assessment system and ensuring high-quality evaluation methods, 2) Developing standards and criteria for external quality assessment, 3) Certifying external assessors, 4) Overseeing the standards of external quality assessments conducted by external assessors, 5) Developing and training external assessors by creating training programs, and encouraging private organizations and professional academic bodies to participate in training external assessors effectively, 6) Submitting external quality assessment reports to the Cabinet, the Minister of Education, and the Bureau of the Budget for use in forming educational policies and allocating budgets, as well as publicly disseminating the results of external quality assessments.

However, despite the 23 years of external quality assessment conducted by the Office for National Education Standards and Quality Assessment (Public Organization) or ONESQA, several issues have arisen in relation to the process of external quality evaluation: 1) The level of acceptance of ONESQA is still not as high as it should be, particularly when considering the forms and methods of external quality assessment. 2) The results of the external quality assessment have not led to significant development, meaning educational institutions do not immediately and continuously apply the assessment results. This is due to the attitudes of administrators and their positive disposition toward external quality assessment (Thanawin Na Nan, 2011). 3) External assessors lack understanding of the educational context, and some assessors have expertise that does not align with the fields they are evaluating. 4) Society's expectations of ONESQA's impact on the educational system are high, particularly in raising public awareness about educational quality assurance and external quality evaluation. Additionally, societal, political, and educational conditions, both domestically and internationally, have changed and become more volatile. Therefore, for the benefit of formulating educational policies, it is necessary to urgently improve and develop the assessment system using modern theoretical frameworks and international benchmarks (Kittiya Effans et al., 2023). A key issue is that Thailand has ONESQA as the sole national organization for educational quality assessment, established under the National Education Act. Over the 23 years since its inception, more than 5.4 billion baht has been spent (The Committee on Driving Education Reform, National Reform Steering Assembly, 2016). However, there has been no study on the development of the characteristics of external education evaluation agencies, resulting in insufficient information to develop the organization into a highly capable and agile external education quality assessment body. Moreover, the issue of quality assurance is a global challenge, transcending the cultural contexts of various higher education systems (Tadesse, 2014). The researcher believes that conducting research to develop the characteristics of high-performance agencies in external education quality assessment would provide new knowledge, serving as a guideline for managing such agencies to be modern and high-performing. This would lead to the development of an assessment system that functions as a mechanism for improving the quality of education in Thailand, gaining international recognition and enabling the country to compare and compete with other developed nations.

### **Objective**

To analyze the confirmatory factors of a high-performance organization in external education quality assurance

### **Conceptual Framework**

The conceptual framework for this research aims to investigate, develop, and propose a model and guidelines for enhancing the capabilities of external quality assessment agencies in education. The researcher has reviewed related literature on the concepts of New Public Management, High Performance Organizations (HPO), and the Public Sector Management Quality Award (PMQA). These variables will be utilized as a basis to construct a semi-structured interview format. Initially, the researcher has selected

these variables to be integrated into a model of high-performance organization components, which can be summarized in the following research framework:

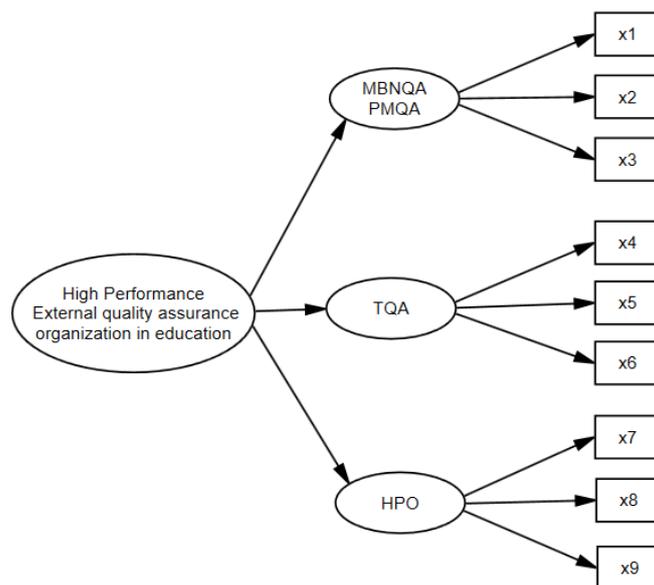


Figure 1. Conceptual Framework

### 1. Population and Samples

The key informants included administrators or representatives from affiliated agencies of educational institutions in early childhood education, basic education, vocational education, and higher education across all educational affiliations, as well as external assessors at all educational levels and representatives from the assessment regulatory body, totaling 36 individuals.

The sample used for the research to analyze exploratory and confirmatory factors consisted of 400 participants, selected through simple random sampling. The sample size was calculated using the A-priori criteria for structural equation modeling (Danielsooper, 2024). However, the researcher opted to use Krejcie and Morgan's sample size calculation method (Krejcie & Morgan, 1970), comparing a population of no more than 64,650 individuals, which resulted in a sample size of 382 people. Krejcie and Morgan's method yielded the maximum sample size, which was selected for the study, and the sample was proportionally calculated to include 400 participants. In considering the appropriate sample size for data analysis using Factor Analysis techniques, Comrey and Lee (1922) suggested that a sample size of 300 is considered good, while 500 is deemed very good. However, in this study, the researcher was able to collect a total of 1,452 completed questionnaires from educational administrators at the early childhood, basic education, vocational, and higher education levels across.

### Research methods

The researcher divided the research process into four stages as follows:

1. Document Review and Theoretical Study: The researcher reviewed relevant documents and studies on high-performance organizations, focusing on theories related to new public management and the characteristics of high-performance organizations. These were analyzed and synthesized to form a draft of the components of a high-performance organization, which was used to define the research framework.
2. Interviews and Opinions Study: The researcher conducted interviews with administrators or representatives of educational institutions at the early childhood, basic education, vocational, and higher education levels, external assessors at all educational levels, and representatives from evaluation regulatory units. The data from in-depth interviews and focus group discussions were analyzed and summarized to identify the components of a high-performance organization in external education quality assessment. This information was then used to create a tool for measuring the characteristics or components of such an organization.
3. Questionnaire Development: Using the information gathered in step 2, the researcher developed a questionnaire to survey the opinions of educational administrators and service users about the characteristics of a high-performance organization in external education quality assessment.
4. Factor Analysis: The data collected in step 3 were compiled and analyzed using Factor Analysis techniques, including Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA).

### 1. Population and Samples

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The sample for analyzing exploratory and confirmatory factors consisted of 400 participants, selected through simple random sampling. The sample size was calculated using the A-priori criteria for structural equation modeling (danielsooper, 2024). However, the researcher applied Krejcie and Morgan's (1970) sample size calculation method, allowing for a 5% margin of error at a 95% confidence level. Given a population of no more than 64,650 individuals, a sample size of 382 was determined. Krejcie and Morgan's method yielded the maximum sample size, so this criterion was selected, resulting in 400 participants after proportional sampling. According to Comrey and Lee (1922), a sample size of 500 is considered very good, and a minimum of 300 is required for Factor Analysis. In this study, the researcher was able to collect questionnaires from 1,452 participants, including educational administrators at all levels and types of education, external assessors, and representatives from evaluation regulatory units.

### 2. Developing a research instrument for data collection

The researchers created a draft of the components of a high-performance organization based on a review of literature, synthesizing principles, theories, and models of high-performance organizations from various sources: 1) (Carl G. Thor, 1994) 2) (De Waal, 2007) 3) Pellitier (2013, cited in Wasan Chawalitvorakul, 2017), 4) Gartner Group (2008), 5) Linder & Brooks (2004), 6) Vivienne Jupp & Mark (2004), 7) Carew & others (2000), 8) Linda Holbeche (2004), 9) Frank Buytendijk (2006), 10) Miller (2001), 11) NissadaVechanont (2008), 12) The Higher Learning Commission (2009, cited in AkkapongSukmat, 2023) and the PMQA framework (Office of the Public Sector Development Commission, 2022). The result was nine components, including: 1) Strategic Management 2) Focus on Personnel 3) Stakeholder Focus 4) Operations Focus 5) Continuous Improvement 6) Leadership 7) Knowledge Management 8) Flexible and Agile Organizational Structure 9) Collaboration with Relevant Agencies. These components were used to create the focus group guidelines and were submitted to the research advisor for review regarding content structure and language use, with revisions made based on suggestions.

2. Development of Measurement Tool: The researcher developed a tool to measure the characteristics of a high-performance organization in external education quality assessment by synthesizing data from expert interviews, literature reviews, and relevant research documents. The tool included 18 characteristics with a total of 68 items.

#### 2.1 Determining instrument quality

2.1.1 The measurement tool was submitted to the thesis advisor to verify the accuracy of the content structure and language use, with revisions made based on suggestions.

2.1.2 The revised measurement tool was then submitted to three experts in measurement and evaluation to assess its validity and calculate the Index of Item-Objective Congruence (IOC), resulting in scores between 0.60 and 1.00 for all 68 items.

2.1.3 The measurement tool was further tested with a sample of 30 individuals to determine its reliability using Cronbach's alpha coefficient ( $\alpha$ -Coefficient) (Kalaya Wanichbuncha, 2002). A reliability score of greater than 0.7 was required (Nunnally, 1978), and the questionnaire regarding opinions on the development of a high-performance organization in external education quality assessment achieved a total reliability score of 0.992, which is rated as "excellent."

2.1.4 The final version of the 68-item measurement tool was then used with the actual research sample.

### 3. Data Collection

To analyze the components of a high-performance organization in external education quality assessment, the researcher collected data from the population and sample, which included educational administrators from all sectors and types of education, external assessors from all educational levels and types, and managers from evaluation regulatory units. Data were collected through an online questionnaire using Google Forms. The researcher sent a formal request for data collection to Mahidol University, and copies were distributed to the respective organizations of the target educational institutions at each level and type. Data collection yielded a total of 1,452 completed questionnaires, which were subsequently analyzed using statistical methods.

#### 4. Data Analysis

The researcher analyzed the characteristics of a high-performance organization in external education quality assessment using statistical software. The analysis was conducted through factor analysis, specifically utilizing Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA).

#### RESULTS

The results of the analysis of the components of high-performing organizations in external education quality assurance are as follows:

##### 1. Results of Exploratory Factor Analysis (EFA):

In the exploratory factor analysis, the researcher used the 68 items from the questionnaire to calculate the average for each of the 18 components. These components were then subjected to exploratory factor analysis. The results are as follows:

**Table 1.** Results of KMO and Bartlett's Test Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.788
Bartlett's Test of Sphericity	Approx. Chi-Square	18864.436
	Df.	153
	Sig.	.000

From Table 1, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was found to be 0.788, indicating that the data were sufficiently appropriate for factor analysis. Bartlett's Test of Sphericity showed a Chi-Square value of 18,864.436 with a significance level (Sig) of 0.000, which is less than the 0.05 threshold. Additionally, the Measures of Sampling Adequacy (MSA) for each variable exceeded 0.5, indicating that the 18 variables were interrelated and suitable for further factor analysis.

For the exploratory factor analysis of the characteristics of high-performance organization in external education quality assessments, Principal Component Analysis was employed, considering Eigenvalues equal to 1.00. The Varimax rotation method was used, and the factor loading for each variable was set at 0.50 or higher (Hair, 2019, p. 152).

**Table 2.** Analysis of components, eigenvalues, percentage of variance, and cumulative percentage of variance

Component	Number of indicators	Initial Eigen values		
		Total	% of Variance	Cumulative %
1	9	7.340	40.778	40.778
2	6	3.206	17.810	58.588
3	3	1.599	8.885	67.472

From Table 2, it can be seen that the components of high performance organizations in external education quality assessment consisted of 3 components derived from 18 observed variables. The Eigenvalue values were greater than 1.00, ranging from 1.599 to 7.340, and can explain 64.472% of the variance of the components.

Component 1 comprised 9 observed variables, namely Voutput (Organizational Performance Result), Vorg (Organizational Structure), Vpromote (Encourage the use of evaluation results), Vimprove (Continuous improvement), Vcommunication (Communication and Public Relations), Vcollaborate (Collaboration), Vevaluation (Format and methods of external quality assessment), Vdvlassessor (Development of external assessors) and Vvassessorunit (Assessment Supervision Unit). This component is named Performance of External Assurance in Education Organization (Performance).

Component 2 consisted of 6 observed variables: Vkm (Knowledge Management), Voperating (Operations), Vhrm (Workforce Faculty and Staff Focus), Vvassessor (External Assessor), Vaccept (Acceptance), and Vindependent (Independent organization). This component is named System of External Assurance in Education (System).

Component 3 (Strategy) consisted of 3 observed variables: Vstake (Customers and Stakeholders), Vstrategic (Strategic Management), and Vleader (Leadership). This component is named Strategy of External Assessment in Education (Strategy).

The researcher analyzed the data using statistical software to ensure the alignment of the theoretical model with empirical data by performing Pearson's Correlation to assess the relationships between variables. The correlation coefficients ranged from 0.508 to 0.802, with all variables showing statistical significance at the 0.01 level. Therefore, none of the variables exceeded a correlation of 0.85, avoiding multicollinearity (Rex B. Kline, 2010), making the data suitable for analysis.

## 2. Results of Confirmatory Factor Analysis (CFA)

The confirmatory factor analysis (CFA) of the model for a high-performance organization in external education quality assessment was conducted by examining the relationships between latent and observed variables. The results demonstrated that all models showed consistency and harmony. The Chi-square values ranged from 0.004 to 25.003, with a statistical significance (P-value) between 0.060 and 0.950. The Goodness of Fit Index (GFI) for all measurement models ranged from 0.996 to 1.00, and the Adjusted Goodness of Fit Index (AGFI) ranged from 0.990 to 1.00. The Root Mean Square Error of Approximation (RMSEA) values ranged from 0.018 to 0, indicating that all four models were consistent and harmonious. By considering individual aspects of confirmatory factor analysis of the high-performance organization in external education quality assessment, the relationships between latent and observed variables demonstrated consistency.

1) The confirmatory factor analysis results of the latent variable of Performance of External Assurance in Education Organization (Performance) showed a good fit with empirical data ( $X^2 = 25.003$   $df=17$   $P\text{-value} = 0.095$   $GFI=0.996$   $AGFI=0.990$   $CFI=0.999$   $RMSEA=0.018$  )

2) The confirmatory factor analysis results of the latent variable System of External Assurance in Education (System) indicated a good fit with empirical data ( $X^2 = 10.603$   $df=5$   $P\text{-value}=0.060$   $GFI=0.998$   $AGFI=0.990$   $CFI=0.999$   $RMSEA=0.028$ ).

3) The confirmatory factor analysis results of the latent variable of Strategy of External Assessment in Education (Strategy) indicated a good fit with empirical data ( $X^2 = 0.004$   $df=1$   $P\text{-value}=0.950$   $GFI=1.000$   $AGFI=1.000$   $CFI=1.000$   $RMSEA=0$ ).

4) 3) The confirmatory factor analysis results of the latent variable of High Performance Organization System and Strategy of External Assurance in Education (PSSHPO) indicated a good fit with empirical data ( $X^2 = 289.436$   $df=115$   $P\text{-value} = 0.000$   $GFI=0.979$   $AGFI=0.968$   $CFI=0.991$   $RMSEA=0.032$ ).

**Table 3:** Results of the confirmatory factor analysis for the high-performance organization in external education quality assessment based on the relationship between latent and observed variables.

Assessment method	Confirmatory factor						
	$X^2$	df	P-value	GFI	AGFI	CFI	RMSEA
Performance	25.003	17	0.095	0.996	0.990	0.999	0.018
System	10.603	5	0.060	0.998	0.990	0.999	0.028
Strategy	0.004	1	0.950	1.000	1.000	1.000	0
PSSHPO	289.436	115	0.000	0.976	0.968	0.991	0.032

The results of the second-order Confirmatory Factor Analysis (CFA) of the mode of high-performance organization in external education quality assessment indicated that the model was consistent with empirical data, as evidenced by a Chi-square value of 210.174;  $P\text{-value} = 0.000$  at degrees of freedom ( $df$ ) = 114. The Goodness of Fit (GFI) was 0.985, the Comparative Fit Index (CFI) was 0.995, and the Root Mean Square Error of Approximation (RMSEA) was 0.024. This demonstrated that the Performance of External Assessment in Education Organization (PSSHPO Model) was consistent with the empirical data. When ranking the components by loading value from highest to lowest, a component with the highest value was Strategy of External Assessment in Education (Strategy), followed by System of External Assurance in Education (System), and Performance of External Assurance in Education Organization (Performance). Additionally, the average variance extracted (AVE) values ranged from 0.552 to 0.656, which exceeded the threshold of 0.50 (acceptable criteria). The composite reliability (CR) values ranged from 0.794 to 0.919, which also exceeded the minimum requirement of 0.70 (acceptable criteria) (Fornell & Larcker, 1981). This model was named the Performance of External Assessment in Education Organization (PSSHPO Model) as detailed in Table 4.

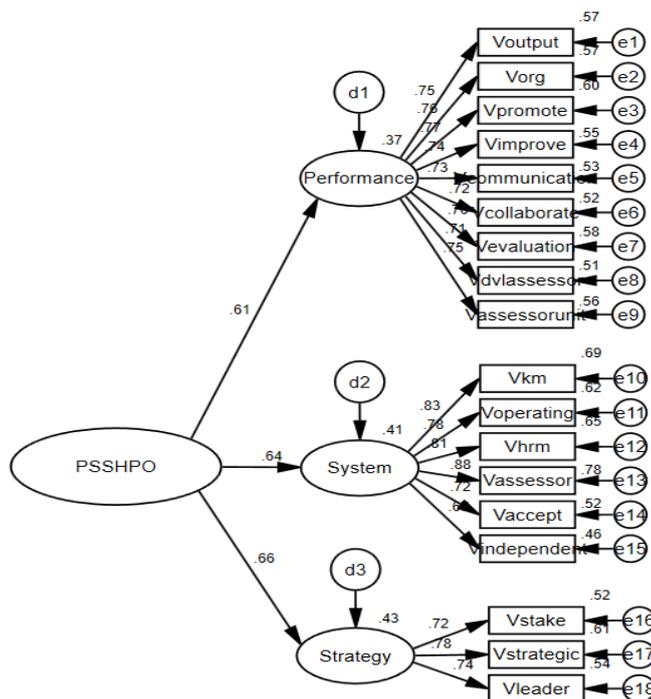
**Table 4:** Results of the statistical fit indices for the second-order CFA of the high-performance organization in external education quality assessment.

Latent Variables	PSSHPO			SMC	AVE	CR
	b	$\beta$	t			
Strategy	0.952	0.656	10.806**	.430	0.562	0.794
System	1.00	0.644	-	.415	0.656	0.919
Performance	0.848	0.607	11.059**	.368	0.552	0.917
$X^2 = 210.174$ $df=114$ $P\text{-value} = 0.000$ $GFI= 0.985$ $CFI = 0.995$ $RMSEA = 0.024$ $RMR = 0.011$						

Notes: \*\*represent the 0.01 level of significant

By analyzing the observed variables for each component, the findings are as follows:

- 1) For the Strategy Component (Strategy of External Assurance in Education), it was measured by three observed variables. The most significant variable was Vstrategic (Strategic Management), followed by Vleader (Leadership), and once again Vstake (Customers and Stakeholders), in that order of importance.
- 2) For the System Component (System of External Assurance in Education), six observed variables were identified. The most significant variable was Vassessor (External Assessor), followed by Vkm (Knowledge Management), Vhrm (Focus on Personnel), Vaccept (Acceptance), Voperating (Focus on Operations), and Vindependent (Independence).
- 3) For the Performance Component (Performance of External Assurance in Education Organization), nine observed variables were analyzed. The most significant was Vpromote (Promotion of Using Evaluation Results), followed by Vevaluation (Evaluation Methods and Approaches), Vorg (Agile and Flexible Organizational Structure), Voutput (Operational Outcomes), Vassessorunit (Evaluation Regulatory Unit), Vimprove (Continuous Improvement), Vcommunication (Communication and Public Relations), Vcollaborate (Collaboration with Different Sectors), and Vdvlasseur (Development of External Assessors), in that order of importance. This hierarchy is represented in Figure 2.



Chi-Square =210.174 ;df=114 ; Relative Chi-Square =1.844; P-value= .000  
 GFI= .985 ; NFI = .989 ; TLI= .993 ; CFI = .995 ; RMSEA=.024 ; RMR= .011

**Figure 2.** Results of the second-order confirmatory factor analysis

**DISCUSSION**

The results of the confirmatory factor analysis for the high-performance organization in external education quality assessment model from the 2<sup>nd</sup> Confirmatory Factor Analysis (CFA), were based on the chi-square value of 210.174; P-value= 0.000 with a degree of freedom (df) = 114; the Goodness of Fit (GFI) = 0.985 ; Comparative Fit Index (CFI) = 0.995; and Root Mean Square Error of Approximation (RMSEA) = 0.024. This indicated that the Performance of External Assessment in Education Organization

(PSSHPO Model) was consistent with empirical data. This suggested that the developed instrument had significant factor loading necessary as a high-performance organization in external education quality assessment, ranked from highest to lowest as follows: 1) Strategy (Strategy of External Assurance in Education), 2) System (System of External Assurance in Education), and 3) Performance (Performance of External Assurance in Education Organization), which can be further explained as follows:

1. The Strategy Component (Strategy of External Assurance in Education) was measured by three observed variables, with Strategic Management being the most important, followed by Leadership and Stakeholder Focus, respectively. Therefore, the management of external education quality assurance organizations should drive the organization's operations using strategic management, with effective strategic planning. There should be a strategic plan to enhance the organization's capacity to become a digital organization, setting both short-term and long-term strategic goals that align with the organization's mission and connect with the national strategy. The impacts on the economy, society, politics, and education, both direct and indirect, should be analyzed. The vision, mission, and values of the organization should be clearly defined (Office of the Public Sector Development Commission, 2023). A strategic outline of the organization and its competitive environment, such as the organization's growth in the same industry, should be drawn up. The focus should be on the strategy and ensuring that the entire organization moves in the same direction, with a strong shared mission, values, and culture, promoting employee dedication and teamwork. This aligns with the concept of high-performance organizations by (André A. de Waal, 2008) and (Gartner Group, 2008). The organization should be led by leaders with a strategic vision, who understand the philosophy and context of external quality assessment, and who have knowledge, skills in measurement and evaluation, broad vision, commitment, governance, transparency, and the ability to listen to feedback. They should inspire confidence and motivation among staff to achieve good performance and drive the organization towards its goals, aligning with the research on developing quality management towards a high-performance hospital organization: a case study of Siriraj Hospital by (DusaneeYosthong, 2018, p. 181). Emphasizing stakeholders, listening to the opinions of educational institutions, affiliated agencies, internal staff, and other stakeholders, and using their suggestions for improvement or action will allow the organization to use the information to improve services. There should be appropriate satisfaction and engagement assessments, enabling service users to tailor services to their needs. Additionally, there should be easy access to complaint channels through technology, consistent with the research of (SangwonNgadkratoke, 2019).

2. The System Component (System of External Assurance in Education) was measured by six observed variables, with External Assessor being the most important, followed by Knowledge Management, Personnel Focus, Acceptance, Operations Focus, and Independence, respectively. Therefore, organizational leaders should prioritize external assessors, as they are the ones who must work on behalf of the organization. External assessors must understand the context of educational institutions and have in-depth data collection skills to obtain facts. Key competencies for external assessors include measurement and evaluation skills (Somchai Rattanathongkam, 2013), knowledge and understanding of standards and indicators, the ability to analyze SAR, the ability to write external quality assessment reports, and providing clear recommendations for improvement. In other words, external quality assurance organizations must have highly competent external assessors. Knowledge management will lead to improvements in assessment quality by accumulating and analyzing data from previous assessments, helping to refine assessment tools and processes for greater efficiency. Additionally, knowledge management ensures that all external assessors have a consistent understanding of external quality assessment standards and methods (ThanapornYamsuda, 2018). Focusing on personnel or human capital is also important, in terms of recruiting capable staff, promoting staff development, retention, fostering engagement, creating career growth paths, and keeping talented individuals in the organization for the long term (NissadanVechanont, 2008). Building confidence with stakeholders through modern work processes (Office of the Public Sector Development Commission, 2022) will enhance the organization's capacity, transparency, and accountability. Publishing evaluation results to the public will give service users confidence in the quality of services, which will lead to acceptance, consistent with the research of (Wichian Kongthap, 2010) and (PasarinyaPhongphao, 2020). Finally, being an independent organization, not affiliated with educational agencies, will prevent any external influence, making management more efficient in fulfilling its mission than hierarchical government systems (Osborne & Gaebler, 1992), which may distort assessment results. This will ensure that the outcomes are neutral and accurately reflect reality. However, a high-performance evaluation organization must be able to adapt to the country's economic, social, political, and educational contexts in order to be considered a high-performance external education quality assurance organization.

3. The Performance Component (Performance of External Assessment in Education Organization) was measured by nine observed variables. The most important variable in this component was the promotion of using evaluation results, followed by evaluation methods and approaches, organizational structure flexibility and agility, operational outcomes, the evaluation regulatory unit, continuous improvement, communication and public relations, collaboration with various sectors, and the development of external assessors. Each of these reflects the capability of a high-performance organization in external education quality assessment. Starting with creating value for the organization, promoting the use of evaluation results is crucial to encourage affiliated agencies and educational institutions to use the results to improve the quality of their schools. Although promoting the use of evaluation results is not the primary mission of external quality assessment organizations, it is an important process that raises awareness among schools and their affiliated agencies about quality assurance and encourages them to use the evaluation results for improvement based on the P-D-C-A quality cycle. This is consistent with the research of Boonchom Srisaard et al. (2016) and Manit Boonprasert (2021). Developing evaluation methods and approaches that align with the context of educational institutions at different levels and types, both for developmental purposes and accreditation, ensures parity with international standards. It helps identify strengths and areas for improvement in educational institutions, aligning with research on international quality assurance systems (PraornSuthontharawipat, 2001). Improving organizational structure to enhance agility and flexibility, focusing on Business Agility (Gartner Group, 2008), emphasizes teamwork and effective communication (Vivienne Jupp & Mark, 2004) to achieve outcomes that meet the expectations of service users and society, improving the organization's ability to respond to service users. This builds trust among schools, their affiliated agencies, parents, and other entities involved in education management, both nationally and internationally. Moreover, the organization plays a role in addressing the country's educational challenges sustainably (Thailand Quality Award, National Productivity Institute, 2021). The development of the evaluation regulatory unit into a highly capable entity that operates as a partner or colleague is also crucial. For an external quality assessment organization to be high-performing, the evaluation regulatory unit must also demonstrate high capability in assessing educational quality, aligning with the research on the development of components and indicators for the quality of evaluation regulatory units by AkkapongSukmat (2023). Effective communication and public relations, both internally and externally, are essential. Clear communication prevents and resolves misunderstandings, and public opinion surveys help improve communication (Brien, 2006). Providing timely, easily understood information (Gartner Group, 2008) enhances the organization's effectiveness. Collaboration with various sectors is also important, as external quality assessment operates within an educational policy framework involving multiple stakeholders. Collaborative efforts reduce redundancy and conflict in operations, increasing the efficiency of public services (Collaborative Public Management: CPM) (Agranoff & McGuire, 2003). Building networks of cooperation with both internal and external organizations ensures the success of collaboration efforts (The Higher Learning Commission, 2009, cited in AkkapongSukmat, 2023). And the final key factor of this component is the development of external assessors. The development of external assessors is a crucial process in external quality assessment, with the primary objective of enhancing the competency and ability of external assessors at various levels. This aims to ensure that external assessors have a thorough understanding of the external quality assessment system, enabling them to evaluate educational institutions effectively, thereby ensuring that the external quality assessment is standardized and accurate. The development of external assessors must focus on building the following essential competencies: 1) Core competencies which fundamental knowledge, such as expertise in specific types of education management, analyzing SAR (Self-Assessment Reports), evaluating the situation and context of educational institutions, and gathering and verifying information. 2) Necessary skills and abilities which include the ability to analyze situations and the skills required for measurement and evaluation (Somchai Rattanathongkam, 2013). 3) Specialized competencies in educational quality assessment which refers to the specific competencies required for assessing what is being evaluated, a deep understanding of the management of each educational level and type, in alignment with national educational systems, guidelines, and methods. Furthermore, assessors must adhere to ethical principles, showing respect, honesty, a commitment to evaluation for improvement, and a collegial spirit. This aligns with the research of ThanakornNgamchompoo et al. (2020) and SiridechSucheeva et al. (2018).

### **Suggestions**

#### **1. Policy Suggestions**

1) Organizations that assess external quality in education with high competency should use strategic management to drive and lead the organization. The strategies for driving the organization can define strategies for developing personnel, which includes external evaluators and units overseeing external

assessments. This should align with the organization's strategies to create a shared understanding of goals and directions for organizational development, and to drive the organization through research and innovation via effective knowledge management and regular knowledge exchange within the organization.

2) To enhance credibility, organizations assessing external quality should create innovative external quality assessment methods that are modern and responsive to changes in the economy, society, politics, education, and future educational development directions. They should develop assessment models and methods that focus on output, outcome, and impact rather than input factors and processes, with an emphasis on learners. The assessment format should be improved to a joint accreditation model at the higher education level to build credibility and acceptance.

3) Create innovative external quality assessment methods that are modern and responsive to changes in the economy, society, politics, education, and future educational development directions.

4) Develop the competencies of external evaluators and units overseeing external assessments to ensure high quality and competency, equipping them with the desired skills for external quality assessment that can accurately measure and evaluate what is being assessed, gaining acceptance from educational institutions, parent organizations, and service recipients. The development of external evaluators and oversight units should be conducted in collaboration with internationally recognized agencies.

5) Publicly disseminate the results of external quality assessments to the public, ministers, and the cabinet, using the recommendations from external quality assessments to inform decision-making in policy formulation or directions for addressing educational issues in the country, as well as providing quick and modern communication channels for complaints.

6) Encourage educational institutions and parent organizations to use assessment results to immediately and continuously improve the quality of educational institutions.

7) Promote continuous personnel development to enhance competencies in achieving excellence in external quality assessment.

## 2. Suggestions for Implementation

1) High performance organizations in external education quality assessment should develop strategic plans for personnel development that align with the necessary performance and promote continuous professional development in conjunction with the organization's strategic planning and operational plans, including clear and effective plans for developing the external quality assessment system to ensure that all personnel possess excellent knowledge and skills in external quality assessment.

2) The standards and criteria for external quality assessment should be reviewed and refined and innovative external quality assessment process should be continuously created to remain modern and advanced, utilizing the participation of stakeholders and all relevant parties.

3) Clear standards for the performance of external assessors and external evaluation regulatory units should be established along with continuous evaluation of their performance.

4) A plan should be developed to create transparency in the organization's operations through the participation of personnel at all levels.

The concrete application of these policy and implementation suggestions will result in higher performance for external educational quality assessment organizations, enabling them to perform their missions effectively and efficiently, fulfilling the objectives of the establishment of assessment organizations, and responding to societal expectations for external quality assessment organizations to reflect or provide suggestions for the improvement of the country's educational quality and future educational development directions, allowing stakeholders to be prepared to cope with ongoing fluctuations.

## 3) Suggestions for Future Research

This research has contributed to the development of a model for high performance organizations in external education quality assessment, with the expectation that organizations tasked with external educational quality assessment will adopt this model to formulate their policies or operational practices. However, it is essential to conduct tryout of the model and evaluate its quality, as well as to conduct further studies on the establishment of assessment criteria for high-performance organizations in external quality assessment. This is to foster competition in operational efficiency among organizations, ultimately benefiting educational institutions and all service recipients involved. Additionally, research should be conducted to analyze factors that hinder the implementation of external quality assessments, aiming to eliminate obstacles or find solutions to enhance the operational performance of external quality assessment organizations. This will not only meet societal expectations but also serve as a mechanism to elevate the overall quality of education in the country.

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