Development of Guidelines on How to Practice Innovative Organization Model for Secondary School Administrators

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Abstract

This study was designed to develop guidelines on how to practice innovative organization model for secondary school administrators in Thailand. A total of 11 experts participated in structured observations for a period of two weeks. The observation results revealed that secondary school administrators have been successfully implemented the innovative organization model by integrating the three factors and their indicators to develop their schools to be innovative organizations.

Keywords: Human Resource Management, Innovative Organization Model, Innovative Leadership, Innovative Organizational Culture, Secondary School Administrators.

INTRODUCTION

An innovative secondary school organization emphasized personalized learning pathways for students, tailored to their interests, abilities, and learning styles, through differentiated instruction, adaptive learning technologies, and individualized support (Nguyen et al., 2021). The social and emotional learning is another key indicator for innovative organization whereby by integrating social and emotional learning programs and practices to support students' emotional well-being, social skills, resilience, empathy, and creating a positive school climate conducive to learning and growth (Nguyen et al., 2021). Therefore, Ariratana et al. (2019) highlighted several essential practices can be done to direct secondary school administration to be innovative organization. Through their observation results revealed that an innovative organizational model could provide valuable insights into best practices and strategies that could be adopted by school administrators to foster creativity and efficiency (Ariratana et al., 2019).

Theerasan et al.'s (2024) study highlighted that an innovation organization model for secondary school in Thailand was comprised of their factors, namely innovative leadership, innovative organizational culture, and human resource management. Pietsch et al. (2023) emphasized that an innovative organization for secondary schools could involve several key indicators, namely having a shared vision, a flexible organizational structure, innovator team, and open communication. As a result, school administrators have to align with teachers and stakeholders in setting goals and driving meaningful change in order to promote a shared vision for an innovative organization (Cheng 2021). Moreover, school administrators should reduce rigid hierarchies and promote a more decentralized decision-making process such as empower teachers, administrators, and staff to contribute ideas, make decisions, and take ownership for initiatives (Bigliardi et al., 2020). This is because flexibility in roles and responsibilities foster to allow teachers to contribute their strengths, skills, and interests across various functions or projects. This promotes versatility, professional growth, and collaboration (Bigliardi et al., 2020).

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Preliminary Study Report

The overall study involved three stages, but the researchers intended to report only the last stage of the study in this paper. In the first stage of this study, Theerasan et al.'s (2024) conducted a thorough document analysis to analyze relevant literature, reports, policies, and other documents to identify existing theories, frameworks, and essential factors and their indicators related to innovative organization model. This document analysis would help the researchers develop a hypothetical basis for the innovative organization model (Morgan, 2022). Theerasan et al.'s (2024) inspected and preferred relevant documents to determine their relevance to innovative organization as the first stage's research question, namely the identification of innovative organizational factors and indicators. Next, Theerasan et al.'s (2024) obtained the full text of potentially relevant documents for a more thorough evaluation, as mentioned by Morgan (2022).

The findings from first stage using document analysis approach and later cross examined with 10 experts' validation revealed that there are three vital factors of innovative organization: (i) Innovative organizational culture; (ii) human resource management, and (iii) innovative leadership. Moreover, the 10 experts recommended nine indicators, and 28 behavioral elements which derived from the essential factors with regards to fit the Thai context (Theerasan et al., 2024).

In the second stage, a quantitative survey research design was employed to 450 respondents from 117 secondary schools using an online questionnaire as a research instrument (Theerasan et al., 2024). This questionnaire consisted of 49 closed items that were developed based on the pre-determined sets of factors and indicators from the first stage's results to collect quantitative data. Following this line of reasoning, an innovative organization model was developed following a series of analyzing processes (Theerasan et al., 2024). Firstly, Theerasan et al., (2024) arranged the three factors and their nine indicators in a logical manner to reflect their interrelationships. Then, they used the structural equation modelling to analyze the structural relationship between measured variables and latent constructs because it syndicates factor loading examination and path analysis as well as multiple regression examination (Gay et al., 2011). Moreover, structural equation modelling was used by Theerasan et al. (2024) to estimate the multiple and interrelated dependence in a single analysis, namely endogenous and exogenous variables.

Theerasan et al. (2024) found that the intercorrelation results of the 13 indicators of innovative organization model showed that there were positive and significant correlations for all relationships between the pairs. This implies that as one indicator increases, the other tends to increase too. The magnitude of the correlation coefficients ranged from 0.604 to 0.791 revealing the strengths of relationships were from moderate to strong at significant level of 0.01. Specifically, the relationship between recruitment (HRM1) and innovative behaviour result (IOC1) (r = .791; r < .01) was the highest magnitude of the correlation coefficient. However, the lowest magnitude of the correlation coefficient was creative thinking (IL3) and having a shared vision (IO1) (r = .604; p < 0.01) (Theerasan et al., 2024).

This was followed by testing the sufficiency of sampling size using Kaiser-Meyer-Olkin measure (Kaiser 1974). The Kaiser-Meyer-Olkin values of factors and indicators were found above 0.9 indicated that the sample size was excellent and sufficient according to Hutcheson and Sofroniou (1999) and Pallant (2013). On the other hand, the strength of the relationship between factors or indicators was measured using Bartlett's Test of Sphericity (Barlett, 1954). Theerasan et al.'s (2024) result of Barlett Test of Sphericity (9161.800), with df = 78 and p = 0.000 showed that the obtained data were nearly multivariate normal, hence the obtained data could proceed for further structural equation modelling examination. This could be explained as a Bartlett Test of Sphericity is an evaluation of multivariate normality according to data distribution. This means that it is used to verify whether the unique correlation matrix is an identity matrix or not in conformity with the null hypothesis. Since the significant values were more than 0.05 for both factors and indicators implied that an identity matrix was produced by the obtained data. It was worth remarking that the factors or indicators have to evaluate at the interval level (Theerasan et al., 2024).

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Theerasan et al. (2024) continued to attain estimates of the parameters for the innovative organization model by validating the identified factors. The factor loading values were found ranging from 0.089 to 0.555 at 0.01 significant level. The factor with the highest factor loading value was human resource management. This was followed by innovative organizational culture. The factor that had the lowest factor loading value was the innovative leadership. In conclusion, all the essential factors were found to be essential constructs of innovative organization for school administrators in secondary schools. In addition, the co-variance with the innovative organization indicators was in the range of 67.90 to 96.70 percent.

On the other hand, Theerasan et al. (2024) found that the factor loading of all the indicators were ranged from 0.824 to 0.983 and was statistically significant at 0.01. In this line of reasoning, all the identified indicators were considered important constructs for the innovative organization model. The indicator with the highest factor loading value was innovative participation. This was followed by personnel training and development, organizational commitment, having an innovative vision, performance evaluation, creative thinking, innovative atmosphere, and innovative behaviour. The factor that has the least capacity factor loading value was recruitment. Consequently, the researchers concluded that all the identified indicators were found to be important constructs of innovative organization for secondary school administrators in Thailand. The main contribution of the second stage of this study was the goodness-of-fit result. The goodness-of-fit result exposed that the innovative organization model as follow, $\chi^2 = 149.708$, df = 47, $\chi^2/df = 3.19$, CFI = 0.989, TLI = 0.981, RMSEA = 0.05, and SRMR = 0.017. These tests were employed to determine how associated real values were fitting to the expected values in the innovative organization model.

MATERIALS AND METHODS

Research Design

The researchers employed an observation research design involving systematically watching and recording behaviours, events, or other observable phenomena. The researchers found that this research design was suitable to use in education to gather data in a naturalistic setting without interference from the researchers. A structured observation was conducted using a predefined set of criteria and often within a controlled environment (Cleslelska et al., 2018). Firstly, the researchers defined the research problem and objectives clearly to the subjects who were being observed what the researchers intended to observe was the implementation of innovative organization model. This was followed by selecting the appropriate setting and participants for the study.

The advantages of using structured observation as this research design could provide rich, detailed data about real-world behaviours. Moreover, it could uncover behaviours and patterns that other research methods might miss. Since the researchers would like to explore the effectiveness of implementing the innovative organization model where the variables were not well-defined, this structured observation would be very useful (Cleslelska et al., 2018). Cleslelska et al. (2018) explained that structured observation could help the researchers observed how this innovative organization model was being applied in the secondary school settings.

Participants of the Study

A total of 11 experts were purposively selected to participate as assessors to evaluate how the innovative organization model was practiced in the selected three secondary schools. The intention of choosing purposive sampling technique at this final stage of the study was to choose those experts who possess the specific characteristics, experience, and knowledge required for the structured observation assessments (Creswell & Creswell, 2022). First of all, the researchers compiled a list of individuals who met the defined criteria as potential experts. These 11 experts consisted of three academicians, two researchers, three practitioners, and three consultants who are well known for their work at innovative organization in Thailand. The three academic experts possess their highest academic qualification as doctoral degree, have their academic rank not lower than Associate Professor, and have experience in innovative organizational management and leadership for not less than five years. Besides, the two researchers were selected because they are the research experts who are currently working at the department of policy planning at Ministry of Education with outstanding research

achievements in innovative organizations. Another three practitioners/principals who were purposively selected from the 117 research schools of the second stage based on the results of the second stage. Finally, the three consultants were selected because they are actively involved in the innovative organization programs at national level.

Purposive sampling technique was justified in this context based on the following criteria such as academic qualifications, professional experience, published work, recognition, and practical experience (Creswell & Creswell, 2022). For example, experts with advanced degrees in organizational development education, management, and related field. Experts with significant experience in implementing or researching innovative in organizational models were given priority to be chosen. Experts who have published articles, papers, or books on topics related to innovation in organizations also became the researchers' main concern. Experts recognized by professional organizations, awards, or honours in the field of innovation and organizational development would be taken into consideration. Practitioners include principals and teachers who have successfully implemented innovative practices within organizations also had been taken into account. The five criteria allowed the researchers for the selection of experts who have specific expertise needed to provide a credible and insightful evaluation of the innovative organization model. Hence, this method of assessors' selection was to ensure that the observation assessment was informed by knowledgeable and experienced voices, which was crucial for accurately evaluating the effectiveness and potential of the model.

Research Instrument

A checklist for experts was created by researchers using the identified factors and indicators from the first and second stages of this research. This checklist was used by experts to assess the implementation of an innovative organization model in order to make sure a comprehensive and structured evaluation was conducted (Cleslelska et al., 2018). The contents of the checklist comprised of innovative leadership, innovative organizational culture, and human resource management. For instance, innovative leadership factor consisted of clear vision and goals, leadership support, and strategic planning. The experts need to assess if the secondary school has a clearly defined vision and goals for innovation, evaluate the extent of leadership commitment to fostering innovation and check if strategic plans are in place to support innovative practices while the secondary school administrators were practicing the innovative organization model in terms of innovative leadership (Pietsch et al., 2023).

In addition, the researchers used a rating scale, for example 1 to 5 for each item in the checklist to quantify the observation assessment. Moreover, they also provide space in the checklist for the experts to give some qualitative comments and recommendations. Over the 12 weeks of observation, the researchers conducted periodic reviews to update the checklist based on feedback and changing organizational needs. As a result, the experts could systematically evaluate various aspects of the innovative organization model and provide insightful feedback to guide further improvements.

RESULTS AND DISCUSSION

A total of 11 experts who participated in structured observations, and they were labelled as E1 to E11, respectively. The researchers organized the evaluation process, which only included the 11 experts feedback and insights systematically over the three factors and nine indicators for a period of 12 weeks toward three research schools. The researchers interpreted the mean score for understanding the central tendency of a dataset for each factor of innovative organization practice was assessed according to Boomchom's (2014) identification as shown in Table 1. Then, the researchers collected the experts' feedback and insights systematically and reported in Table 2 to Table 5.

Interval of Mean Value	Interpretation
4.51 to 5.00	Highest
3.51 to 4.50	High
2.51 to 3.50	Moderate
1.51 to 2.50	Low
1.00 to 1.50	Lowest

Table 1: Interpretation of Practical Level of Each Factor and Its Indicators of Innovative Organization

Observation Results of Innovative Leadership (IL) Factor

The 11 experts evaluated the innovative leadership (IL) practice levels in terms of having an innovative vision (IL1) indicator showed at a high level ($\bar{x} = 4.49$, SD = 0.59). When the researchers analyzed each item specifically, it was found that item with the highest mean score was administrators exhibit leadership behaviour in planning together with teachers to create an innovative vision ($\bar{x} = 4.52$, SD = 0.64). The second indicator of innovative leadership was innovative participation (IL2) which was found at a high practice level as well ($\bar{x} = 4.47$, SD = 0.62). The highest practice level of the innovative participation indicator was administrators demonstrate leadership behaviours in providing opportunities for teachers to exchange knowledge in creating innovations ($\bar{x} = 4.51$, SD = 0.61). The third indicator of innovative leadership was creative thinking (IL3) that was practiced by secondary school administrators at high level too ($\bar{x} = 4.47$, SD = 0.61). The observation results indicated that administrators demonstrate their agility in thinking. For example, being able to think alternatively, find solutions, and find ways to deal with new events, and new situations that can occur successfully, efficiently, and timely manner was mostly practiced by secondary school administrators defined by secondary school administrators defined by secondary school administrator results of innovative leadership practices while secondary school administrators defined by secondary school administrators ($\bar{x} = 4.51$, SD = 0.67). Table 2 presents the observation results of innovative leadership practices while secondary school administrators implemented the innovative organization model.

Table 2: The Observation Results of Innovative Leadership (IL) Factor Practice Levels While Using Multicultural
Leadership Model

No	Having an innovative vision (IL1) indicator	\overline{x}	SD	Inter- pret
1.	Administrators exhibit leadership behaviour in planning together with teachers to create an innovative vision.	4.52	0.64	High-est
2.	Administrators exhibit leadership behaviour in defining the school innovative vision.	4.52	0.65	High-est
3.	Administrators demonstrate leadership behaviour in understanding school's goals and vision for innovation.	4.50	0.65	High-est
4.	Administrators exhibit leadership behaviour in announcing the innovative vision clearly to drive the schools.	4.47	0.65	High
5.	Administrators demonstrate leadership behaviour to create awareness of the innovative vision among teachers.	4.48	0.66	High
6.	Administrators demonstrate leadership behaviour in implementing school's innovative vision.	4.48	0.64	High
	Total	4.49	0.59	High
	Innovative participation (IL2) indicator			
7.	Administrators show leadership behaviours in setting the school innovative goals.	4.45	0.65	High
8.	Administrators exhibit leadership behaviours in defining roles and assigning tasks clearly to teachers to create innovation in school.	4.46	0.73	High
9.	Administrators demonstrate leadership behaviours in stimulating the teachers' cooperation to create innovations in school.	4.44	0.70	High
10.	Administrators demonstrate leadership behaviours in providing opportunities for teachers to exchange knowledge in creating innovations.	4.51	0.61	High-est
	Total	4.47	0.62	High
	Creative thinking (IL3) indicator			8
11.	Administrators show their innovative thinking. For example, having the initiative to bring new methods in operational planning and management to achieve efficiency.	4.43	0.68	High
12.	Administrators demonstrate their agility in thinking. For example, being able to think alternatively, find solutions, and find ways to deal with new events, and new situations that can occur successfully, efficiently, and timely manner.	4.51	0.67	High-est
13.	Administrators show their cognitive flexibility such as the ability to change one's thinking style that is to respond and handle unfamiliar situations effectively.	4.47	0.67	High
14.	Administrators show their thorough thought. For example, the ability to think and plan operations systematically, step-by-step manner in order to complete the work according to the goals efficiently.	4.47	0.68	High
	Total	4.47	0.61	High

Observation Results of Innovative Organizational Culture (IOC) Factor

When the researchers analyzed the 11 experts' evaluation results of innovative organizational culture (IOC) practice levels in terms of innovative behaviour (IOC1) indicator showed at a high practice level ($\bar{x} = 4.46$, SD = 0.56). Generally, all experts agreed that administrators and teachers possess characteristics in supporting for the use of educational innovations and was highly practiced while they were practicing innovative behaviour ($\bar{x} = 4.57$, SD = 0.54). The second indicator of innovative organizational culture was innovative atmosphere

(IOC2) and was found at high level too ($\bar{x} = 4.49$, SD = 0.61). The observation result showed that there were two practices such as administrators encourage and support teachers to have the freedom to learn new things ($\bar{x} = 4.49$, SD = 0.63) and administrators promote and support teamwork among teachers at the same practice levels ($\bar{x} = 4.49$, SD = 0.68). The third indicator of innovative organizational culture was organizational commitment (IOC3) ($\bar{x} = 4.49$, SD = 0.60) with the highest practice level in item of administrators and teachers demonstrate compliance with the school's rules ($\bar{x} = 4.53$, SD = 0.68). Table 3 demonstrates the details of innovative organizational culture practices.

 Table 3: The Observation Results of Innovative Organizational Culture (IOC) Factor Practice Levels While Using

 Multicultural Leadership Model

No	Innovative behaviour (IOC1) indicator	\overline{x}	SD	Inter- pret
1.	Administrators and teachers possess characteristics in pursuing their knowledge to create innovations.	4.42	0.67	High
2.	Administrators and teachers possess characteristics in applying of innovations in their work.	4.41	0.65	High
3.	Administrators and teachers possess characteristics in the exchange of knowledge to create innovations.	4.43	0.73	High
4.	Administrators and teachers possess characteristics in accepting of school innovations.	4.48	0.59	High
5.	Administrators and teachers possess characteristics in supporting for the use of educational innovations.	4.57	0.54	High-est
	Total	4.46	0.56	High
	Innovative atmosphere (IOC2) indicator			
6.	Administrators promote a positive atmosphere with freedom in terms of creativity and innovation in the school environment.	4.48	0.66	High
7.	Administrators encourage and support teachers to have the freedom to learn new things.	4.49	0.63	High
8.	Administrators promote and support teamwork among teachers.	4.49	0.68	High
	Total	4.49	0.61	High
	Organizational commitment (IOC3) indicator			
9.	Administrators and teachers show their dedication to work for the school to their fullest potential.	4.42	0.65	High
10.	Administrators and teachers show their acceptance and belief in the school's goals.	4.52	0.62	High-est
11.	Administrators and teachers demonstrate adherence to the values of the school.	4.49	0.65	High
12.	Administrators and teachers demonstrate compliance with the school's rules.	4.53	0.68	High-est
	Total	4.49	0.60	High-

Observation Results of Human Resource Management (HRM) Factor

The observation assessments from the experts showed that human resource management (HRM) practice levels in terms of recruitment (HRM1) indicator showed at a high level ($\bar{x} = 4.35$, SD = 0.69). When the researchers analyzed each item specifically, it was found that item with the highest mean score was administrators have their strategies to recruit knowledgeable teachers in terms of their ability in creating innovation ($\bar{x} = 4.36$, SD= 0.74). The second indicator of human resource management was personnel training and development and was found at a high practice level as well ($\bar{x} = 4.44$, SD = 0.59). The highest practice level of the personal training and development indicator was administrators organize activities to support and create creativity in their schools ($\bar{x} = 4.45$, SD = 0.71). The third indicator of human resource management was performance evaluation (HRM3) that was practiced by secondary school administrators at high level too ($\bar{x} = 4.37$, SD =0.70). The observation results indicated that administrators build morale for teachers who create innovations was mostly practiced by secondary school administrators ($\bar{x} = 4.42$, SD = 0.77). Table 4 illustrates the observation results of human resource management practices while secondary school administrators implemented the innovative organization model.

 Table 4: The Observation Results of Human Resource Management (HRM) Factor Practice Levels While Using Multicultural Leadership Model

No	Recruitment (HRM1) indicator	\overline{x}	SD	Inter-
				pret
1.	Administrators have their strategies to recruit knowledgeable teachers in terms of their ability	4.36	0.74	High
	in creating innovation.			
2.	Administrators allocate their teachers in appropriate job positions based on their knowledge	4.33	0.72	High
	and ability to create innovations.	4.55	0.72	riigii
	Total	4.35	0.69	High

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	Personnel training and development (HRM2) indicator			
3.	Administrators organize training to provide knowledge in understanding of innovation to the teachers.	4.42	0.61	High
4.	Administrators organize activities to support and create creativity in their schools.	4.45	0.71	High
	Total	4.44	0.59	High
	Performance evaluation (HRM3) indicator			
5.	Administrators evaluate the success of innovations systematically.	4.34	0.75	High
6.	Administrators build morale for teachers who create innovations.	4.42	0.77	High
7.	Administrators search / analyze the causes of unsuccessful work systematically.	4.35	0.75	High
8.	Administrators and teachers work together in finding solutions to solve problems and further develop innovations.	4.36	0.75	High
	Total	4.37	0.70	High

Overall Observation Results of Innovative Organization (IO) Factor

When the researchers analyzed the experts' overall assessments of innovative organization (IO) practice levels in terms of having a shared vision (IO1) indicator showed at a high practice level ($\bar{x} = 4.41$, SD = 0.67). Generally, all experts agreed that administrators, teachers, and the school board have jointly set an innovative vision ($\bar{x} = 4.45$, SD = 0.71). The second indicator of innovative organization was having a flexible organizational structure (IO2) and was found at high level too ($\bar{x} = 4.41$, SD = 0.64). The observation result showed that the highest practices of having a flexible organizational structure was administrators have delegated the decision-making authority appropriately to teachers in the school. ($\bar{x} = 4.48$, SD = 0.69). The third indicator of innovative organization was innovator team (IO3) ($\bar{x} = 4.38$, SD = 0.61). The observation result showed that there were two highest practices such as teachers dare to think, do, and decide for creating innovations ($\bar{x} = 4.40$, SD = 0.62) and teachers are having a common goal to create and develop innovations in schools ($\bar{x} = 4.40$, SD = 0.70). Table 5 demonstrates the details of innovative organization practices.

 Table 5: The Observation Results of Innovative Organization (IO) Factor Practice Levels While Using Multicultural Leadership Model

No	Having a shared vision (IO1) indicator	\overline{x}	SD	Inter-
				pret
1.	Administrators, teachers, and the school board have jointly set an innovative vision.	4.45	0.71	High-est
2.	Administrators, teachers, and the school board have jointly set innovative goals.	4.40	0.72	High-est
3.	Administrators, teachers, and the school board determine innovative strategies together.	4.41	0.71	High-est
4.	Administrators, teachers, and school committees create and develop innovations together as a plan for school operations.	4.39	0.70	High-est
5.	Administrators, teachers, and school committees drive their school towards a clear goal as an innovative organization.	4.38	0.73	High-est
	Total	4.41	0.67	High-est
	Having a flexible organizational structure (IO2) indicator			0
6.	Administrators adjust the school structure to be consistent with the school's operational plan.	4.36	0.72	High-est
7.	Administrators define administrative work groups clearly to promote innovations.	4.45	0.74	High-est
8.	Administrators have assigned appropriate job roles, duties, and responsibilities to teachers in the schools.	4.42	0.71	High-est
9.	Administrators have delegated the decision-making authority appropriately to teachers in the school.	4.48	0.69	High-est
10.	Administrators and teachers work as innovator teams in creating and developing innovations.	4.34	0.67	High-est
11.	Administrators value the importance of teachers in their schools.	4.43	0.75	High-est
	Total	4.41	0.64	High-est
	Innovator team (IO3) indicator			
12.	Teachers have a common goal to create and develop innovations in schools.	4.40	0.70	High-est
13.	Teachers exchange ideas and listen to the team's opinions in their school.	4.38	0.75	High-est
14.	Teachers carry out assigned tasks with enthusiasm and to the best of their ability.	4.38	0.70	High-est
15.	Teachers are ready to continuously learn and develop themselves in creating innovations.	4.37	0.61	High-est
16.	Teachers dare to think, do, and decide for creating innovations.	4.40	0.62	High-est
	Total	4.38	0.61	High-est
	Open communication (IO4) indicator			
17.	Administrators are open to communication in various forms for creating innovations.	4.44	0.71	High-est
18.	Administrators and teachers can communicate in every direction within the school.	4.50	0.59	High-est
19.	Administrators provide opportunities for exchanging opinions and listening to teachers' opinions.	4.52	0.68	High
20.	Administrators create understanding to implement the school's plans in the same direction.	4.43	0.69	High-est
	Total	4.48	0.61	High-est

CONCLUSION

The ultimate contribution of this study was the three selected cases (secondary schools) were successfully practicing an innovative organization model together with guidelines to assist those practitioners at school level. By incorporating these three factors, namely human resource management, innovative leadership, and innovative organizational culture practices, secondary schools can create an environment that nurtures and sustains innovation, leading to long-term success and growth.

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