

# Enhancing Supply Chain Performance of SMEs in Thailand Using the Integrated Personnel Development Model

Bundit Phrapratanporn<sup>1</sup>, Preecha Wararatchai<sup>2</sup>, Wissawa Aunyawong<sup>3</sup>, Nik Ramli Nik Abdul Rashid<sup>\*4</sup>

<sup>1, 2, 3</sup> College of Logistic and Supply Chain Management, Suan Sunandha Rajabhat University, Thailand.

<sup>\*</sup> Faculty of Business and Management, Universiti Teknologi Mara, Malaysia

<sup>1</sup>bundit.ph@ssru.ac.th

<sup>2</sup>preecha.wa@ssru.ac.th

<sup>3</sup>wissawa.au@ssru.ac.th

<sup>\*4</sup>nikramli@uitm.edu.my

**Abstract** — Personnel development is a salient component of the human resource supply chain of a business organization. This is especially true for small and medium sized enterprises (SMEs) which has limited resources and could potentially affect their supply chain performance. In an era where modern businesses are driven by innovation, a fresh approach to entrepreneur personnel development should be considered crucial and indispensable. Thus, the objective of this study has been to find a comprehensive and multi-dimensional approach in developing outstanding SME entrepreneurs that could bring about enhanced business performance, including in the vital supply chain functions. Through content analysis of relevant literatures in human resources, three pertinent constructs with strong empirical foundations have been identified, namely *happy workplace*, *transformational leadership*, *learning organization*, were selected and later hypothesized to affect organizational commitment and eventually contribute to enhance performance. Questionnaires were used as a quantitative research tool to collect the data from 500 employees in SMEs in the Nakhon Pathom Province, Thailand. Structural Equation Modelling (SEM) was used for analysing the statistics. The results found that the learning organisation is most appropriate, which has direct and indirect effects on supply chain performance. The mediating effect of organisational commitment on the relationship between learning organisation and supply chain performance was also found. The results of this study will be beneficial to entrepreneurs, the government, and educational agencies to be used as a guideline to form the policies and conduct further research.

**Keywords**— *Happy Workplace, Transformational Leadership, Organisational Learning, Organisational Commitment, Supply Chain Performance*

## 1. Introduction

Nowadays, the SMEs' supply chain performance has been widely studied worldwide as it is an interesting issue in enhancing their efficiency [1; 2]. An alternative dimension or indicator for SMEs supply chain performance is related to their ability to mobilize and enhance the maximum potential of their personnel and human resources. However, official data and on-going reports are showing that Thai SME entrepreneurs are now encountering difficulties [3; 4; 5]. The development of small and medium business enterprises (SMEs) to be intelligent entrepreneurs, also known as smart enterprises, means that entrepreneurs must be free from low income generation by aiming to be an entrepreneur who creates high added value based on the economy driven by innovative products and services [6]. This economic reform approach has been changed from the original concept, "So much to do, so little gained" to the new concept, "So little to do, so much gained". It has also been altered from producing commodities to innovative products by focusing on driving the country with technology, creativity, and innovation to develop Thailand's economy that is expected to have higher growth in the future, called Thailand 4.0 [7].

At present, it has been found the supply chain functions of most SME entrepreneurs in Thailand still lack the readiness in many areas, such as capital, technology, and quality labour, especially the problems of substandard workers who need skills in serious work, as shown in Table 1. Moreover, the business owners focus solely on their own interests [8].

**Table 1.** Background problems on employees reported by SME entrepreneurs

Problematic skills	Percentage of SMEs facing the problem	Number of SMEs facing the problem
Life and Career Skills	44%	1,063
Learning and	32%	773

innovation skills		
Information	25%	604
Technology Skills		
Total Sample		2,416

Source: Bank of Thailand (2018)

Consequently, it causes the workers to be unhappy with the workplace, feel unconfident in the profession, often leave work, and have no commitment to the establishment. These problems will cause the SME entrepreneurs to be unable to create the added value for their businesses and have high production costs. Therefore, SME entrepreneurs must have high investment at all times [6].

The guidelines for making SME entrepreneurs to achieve success are to create the value for the operational staff by building happiness at the workplace along with developing specific knowledge of each employee by changing the establishment to be a learning organisation. In addition, the organisation leader or the business owner must change the management approach to see the benefits that should be given to the employees in the organisation according to the concept of transformational leadership. This will generate the employees' love and commitment to the organisation resulting in the successful organisational performance. It is consistent with the past research, which found that creating a happy workplace environment, such as supporting an expressive society and providing the chance to brainstorm, caused the business organisation to be successful [9]. Furthermore, it conforms to another past research, which stated that human resource management was the heart of the management and if any organisation has an effective management system, it will result in the goal achievement [10].

The research model in this study attempt to provide guidelines to SMEs human resource supply chain functions which is in-line with the 20-year long-term national strategic plan (2017-2036) which aims to build the improved abilities of the people for the enhancement of the Thai society to be a strong foundation for the country (Policy and Planning Bureau of the Ministry of Interior, 2016). Moreover, it is also consistent with the 12<sup>th</sup> National Economic Development Plan in Strategy 1, building for Human Ability (Office of the National Economic and Social Development Board, Office of the Prime Minister, 2017, page 65) and Strategy 3, strengthening sustainably economic competitiveness (Office of the National Economic and Social Development Board, The Prime Minister's Office, 2017, page 82) [11]. The researchers, therefore, became interested in studying the model of "the supply chain performance of SMEs for the development to an excellent entrepreneur" as a guideline for SME

entrepreneurs to improve their organisations based on economic change and technological competition because resources play an important role in generating wealth economically and technologically.

As a result, this study aimed to study the levels of happy workplace (HW), learning organisation (LO), transformational leadership (TL), and organisational commitment (OC), and the SMEs' supply chain performance (SCP), and to study the mediating effect of OC on the SMEs' SCP. This study, moreover, purposes to fill the existing gap in the literature that an integrated model examining the complex relationship amongst SCP, OC, HW, LO, and TL which is still missing, especially in the context of SMEs in Thailand. As a result, this study is intended to create the model to be the guideline for SME entrepreneurs in Thailand and similar countries in conducting their businesses excellently and successfully.

## 2. Literature Review

**Supply Chain Performance of SMEs.** Taking into consideration the purpose of this study which is in the area of personnel development and human resource supply chain function, we found the ideas from Sirichotirat is most interesting [12]. His definition of performance or business success takes into consideration the collaboration of the people in the organisation to create balance within the organisation, which must occur simultaneously in 4 areas. First is, the balance of the organisational performance that generates an income for the organisation and develops the organisation, continuously; second is, the balance of customer satisfaction because customer satisfaction arises from using the satisfying products of the organisation. It will result in the sustainable growth for the organisation. The third is, the balance of effective organisational management which requires all employees in the organisation to cooperate in creating an effective production and service process; and the fourth is, the balance of the employees' satisfaction focuses on the quality of life of happy working. It reflects the good quality products resulting in customer satisfaction [12]. In addition, another study has identified that business performance, which include its supply chain functions, can also be measured in two dimensions: first, organisational potential in quality, cost, and time, and second, organisational effectiveness in manufacturing capabilities [13]. Sanson and Pathomsirikul moreover, have indicated that the performance of modern businesses pays attention to innovation since it can generate the marketing strategy with competitive advantages for the businesses in Thailand [14]. Taking into consideration the opinion of these

scholars, this study decided to focus on five dimensions of human resource SMEs' supply chain performance: business growth, potential of management, customer satisfaction, employee satisfaction, and innovation development.

**Organisational Commitment.** Meyer and Allen defined organisational commitment as, the commitment to the organisation is the relationship between the person in the organisation and the needs of the group of people that will remain or be abandoned in the organisation [15]. There are 3 principles of commitment that will lead to development in order to find effectiveness in the satisfaction of individuals in the organisation. First, affective commitment means the commitment in terms of the employees' emotions towards the organisation, corporate values, or company's goals [16; 17]. Employees have strong intentions and persistently continue to work for the organisation [18]. Second, continuance commitment means the recognition of various costs caused by neglect and lacking the sufficient attention of the employees in the organisation. It will be expressed in the form of continuous behaviour in the work, in that, either the employees will continue to work with that organisation or will change to another workplace [19]. Although, it is sometimes overlapped with affective commitment [20]. Third, normative commitment means the relationship with the role and function of the organisation towards the employees, including the rules that the organisation will be responsible for [21], the employees will show this in the form of loyalty to the organisation or lifetime commitment [22]. As a result, this study has emphasised three dimensions of organisational commitment: affective commitment, continuance commitment, and normative commitment.

Research has found that the organisational commitment affects the work satisfaction and operational performance of the employees [23]. Organisational commitment also influences the good membership behaviour of the organisation. In Thailand's context, a study found that organisational commitment positively influenced the work dedication in Thai employees working for Japanese companies located in the industrial estate [24]. While another study found that organisational commitment positively impacted on the good behaviour of the staff working in hotels in Thailand [25]. Therefore, the study hypothesised that:

H1: Organisational commitment positively affects SMEs' human resource supply chain performance.

**Happy Workplace.** Happy workplace means that the people develop processes in the organisations with goals and strategies in accordance with the vision of the organisation to create the readiness for change and sustainable

growth of the organisation. There are 3 elements in the happy workplace as follows: first, Happy People means employees are happy to work which will lead them to being the key personnel of the organisation; second, Happy Home means the workplace which makes the employees feel that the workplace is their second home. It is an organisation that has creative coexistence and mutual development; and third, Happy Teamwork means that there is cooperation between the community and the workplace to build the happy community [26]. Workplace happiness includes career satisfaction regarding the people and society in the organisation together with training and skill development opportunities [27]. The happiness in the workplace depends on the provision of social support, access to learning opportunities, and how people in the organisation perform. As a result, this study has emphasised three common dimensions of happy workplace: happy people, happy home, and happy teamwork.

Studies found that employee satisfaction had a positive effect on employee performance, and employee well-being also positively moderated the effect of employee satisfaction on employee performance. In Thailand's context, it is found that the success of a business organisation was caused in the happy workplace environment by encouraging employees to express their ideas [9]. Besides that, executives who focus on personnel encouragement, happiness in working, and organisational loyalty will be more successful in their businesses [10]. Therefore, the study hypothesised that:

H2: Happy workplace positively affects SMEs' human resource supply chain performance.

**Transformational Leadership.** Transformational leadership refers to the behaviour of leaders who try to motivate and encourage their subordinates to have the desire or inspiration to work. The leaders have charisma to stimulate the emotional feelings of the employees to comply with them. The transformational leaders have 4 important behaviours [28]. First, idealised influence is an indicator of behaviour that shows that the leaders have influence on the thoughts and minds of the followers. Second, Inspiration motivation is a motivating behaviour showing the expectations of the leaders towards the followers by motivating them to understand the organisation's vision. Third, Intellectual stimulation is a behaviour by which the leaders stimulate followers to use creativity and find new ways with conditions created by the leaders; and fourth, individualised consideration is a behaviour aimed at building good relationships between leaders and followers. The leaders must satisfy the needs of the followers in order to create relationships [29]. As a result, this study has

emphasised four dimensions of transformational leadership: idealised influence, inspiration motivation, intellectual stimulation, and individualised consideration.

The previous research by Suwanchareon, *et al.* found that transformational leadership had an indirect effect on organisational performance by mediating marketing, products, and process innovation [30]. The leadership of the organisations' executives in the SMEs had also shown an impact on business performance, such as increased sales and profits [31]. Transformational leadership was shown to positively influence the accomplishment of the organisation [32]. The leaders of the organisations played a huge role in leading the organisations to achieve their goals. Therefore, the study hypothesised that:

H3: Transformational Leadership positively affects SMEs' human resource supply chain performance.

**Learning Organisation.** A learning organisation is a place where everyone can continually expand their potential and create works according to the goals set by forming many new ideas [33]. In order to successfully implement the learning organisation, the organisation must comply with 5 disciplines [34; 35]. The first is Personal Mastery. Learning organisations are organisations that learn through a group of people who learn. The learning of the organisation can occur only when the person has learned and practices learning regularly. The second are the Mental Models. They include basic terms, basic beliefs, and conclusions or images that crystallise in people's thoughts, which influence the knowledge and understanding of the things in the world. These affect the behaviour towards individual values and attitudes. The third is Shared Vision. The vision will be the power to drive the various missions of the organisation to reach its goals. It is a common point and learning power of the organisation's members in which the leaders need to develop a unique vision. The fourth is Team Learning. The team's capability development requires an excellent relationship through discussions of the organisation's members in order to be able to adjust the direction to suit the organisation. Finally, the fifth is Systems Thinking. The system is the subsets that relate to each other. The operation of a part will affect other parts in the system. The system will affect the prosperity, collapse, profit, and image of the organisation. There is a framework for looking at the overall picture in order to see the relationships that are linked to each other rather than the modular look [36]. As a result, this study focused on five dimensions of learning organisation: personal mastery, mental models, shared vision, team leading, and systems thinking.

Learning organisation, knowledge management, and Innovation organisation impacted on the success of the organisation [32]. The learning organisation needs proper knowledge management to enable the employees to work effectively. In Thailand's context, it is found that learning organisation helped SMEs to achieve organisational performance, and increased the financial efficiency and productivity of the organisation, as well as the satisfaction of the customers [37]. Concordantly, it is also found that the effectiveness of knowledge management had a positive relationship with the success of the organisation, resulting in successful performance and better work efficiency [38]. Therefore, the study hypothesised that:

H4: Learning organisation positively affects SMEs' human resource supply chain performance.

**Factors affecting organisational commitment.**

Phochanasombat found that happiness in the organisation affected the organisational commitment of the personnel in the Office of Disease Prevention and Control, Nakornsawan Province, Thailand [39]. Leaders allowing personnel to express their ideas, besides that, was the driving factor of the organisational commitment. Moreover, Sanglimsuwan, *et al.* found that the suitability of the job, mindfulness, and psychological environment had a positive direct influence on the employees' organisational commitment, by which, the organisational commitment had a positive direct influence on dedication as well [24]. In addition, another study found that the quality of the work life has an influence on job satisfaction and organisational commitment [25]. Therefore, the study hypothesised that:

H5: Happy workplace positively affects organisational commitment.

Gyensare, *et al.* found that transformational leaders had positive direct influence on organisations and had effects on reducing the resignation of employees in the organisations [40]. Besides that, another study depicted the positive effect of intellectual stimulation and vision on affective commitment, the positive relationship of personal recognition and continuance commitment coming from perceived sacrifice of investments on the organisation, and the positive impact of supportive leadership on normative commitment [41]. A study by Jain and Duggal also found that transformational leadership positively affected the organisational commitment of employees of information technology industries [42]. Therefore, the study hypothesised that:

H6: Transformational leadership positively affects organisational commitment.

It has been revealed that the effect of learning organisation on work commitment in Information technology firms and the implication that human resource managers need to develop prioritised composite-level involvements at individual, team, and organisational levels of the learning organisation for constructing vastly organised commitment [43]. Furthermore, the role of learning opportunities has been effective in generating work engagement [44]. Moreover, it has been found that the inquisitive approach of learning every day and moving concurrently towards innovation also leads to work engagement [45]. Constant learning chances act as the serious requirement for the existence of firms. Therefore, the study hypothesised that:

H7: Learning organisation positively affects organisational commitment.

**The mediating role of organisational commitment.** Based on previous studies, organisational commitment is caused by happiness in the workplace regarding people and society in the organisation together with learning opportunities [24; 25; 39], transformational leadership which can inspire and encourage the employees to have the need or motivation to work [40; 41; 42], and learning organisation that allows staff to continually expand their potential and create works according to the goals set by forming many new ideas. Meanwhile, organisational

commitment positively affects business performance [43; 44; 45]. As the linkage of the two sub-hypotheses allows us to account for the mediation effect [46], the study therefore hypothesised that:

H8: Organisational commitment mediates the effect of happy workplace on SMEs' human resource supply chain performance.

H9: Organisational commitment mediates the effect of transformational leadership on SMEs' human resource supply chain performance.

H10: Organisational commitment mediates the effect of learning organisation on SMEs' business performance.

**Conceptual Framework.** This conceptual framework was generated from the combination of the concepts, theories, and related researches, including the concept of human resource supply chain performance [12; 13; 14]; transformational behaviour [28; 29]; 5 disciplinary concepts of the creation of learning organisation [33; 34; 35; 36]; the concept of bringing happiness into the organisation [26; 27]; and the composition of the organisational commitment [15; 16; 17; 18; 19; 20; 21; 22], as shown in Figure 1.

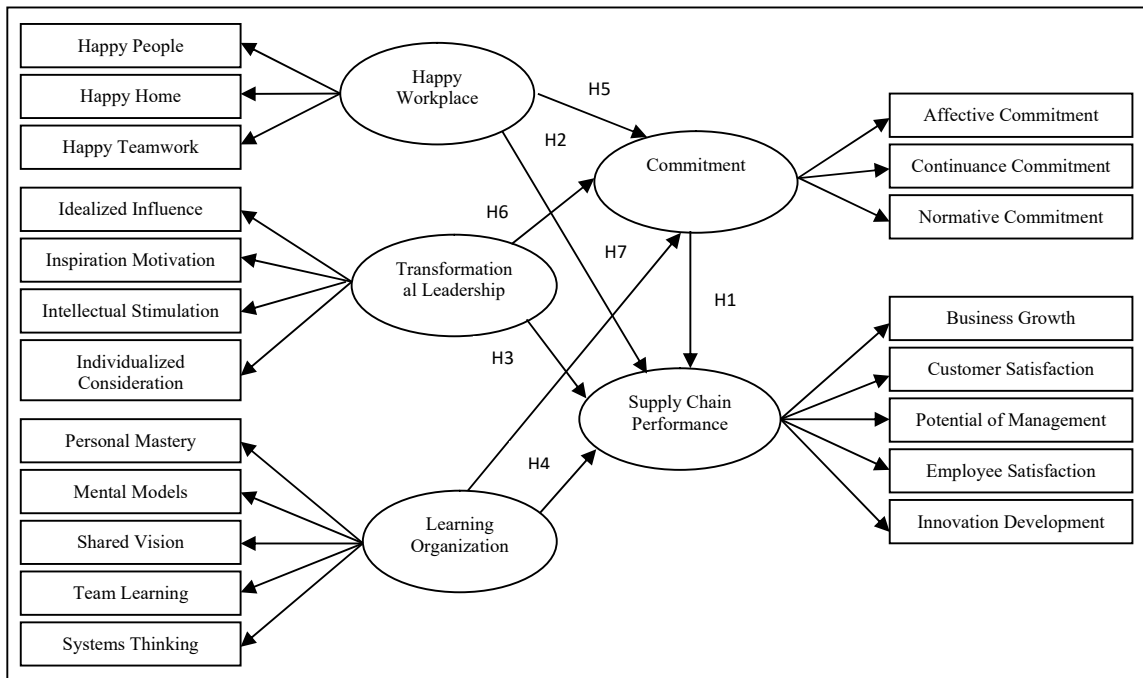


Figure 1. Conceptual framework of the Integrated Model for SMEs' Human Resource Supply Chain Performance

### 3. Research Methodology

The study was mixed between the quantitative and qualitative methods. This study was based on a sequential explanatory research design. First, the research problem was defined and then the concepts and related research, as mentioned in the literature review part, were studied. After that, the study was conducted consistent with the research design by collecting data through a questionnaire as a quantitative research instrument with 500 employees of industrial factories in the Nakhon Pathom province. Then, the data gathered were calculated as the appropriate size for the statistical analysis of structural equation modelling (SEM) using LISREL [47].

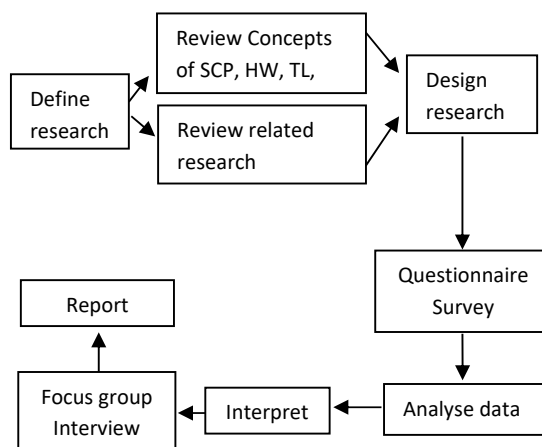


Figure 2. Research flow

For the reliability test, firstly, the questionnaire, examined by experts, represented the reliability with the Cronbach's Alpha Coefficient of greater than 0.7, indicating that this questionnaire had a high level of confidence [48; 49]. Moreover, composite reliability, convergent validity, and discriminant validity were tested using the threshold of reliability:  $CR > 0.70$ ; Convergent validity:  $AVE > 0.50$ ; and Discriminant validity:  $AVE > MSV$  [50]. Then, the second order confirmatory factor analysis: CFA<sup>2nd</sup> was tested, as shown in Table 4. After obtaining the results, six SMEs' executives were invited to attend a Focus group interview to discuss the results. The content analysis was used to investigate the interview results. Finally, the conclusion was reported. The research flow was shown in Figure 2.

### 4. Results

**Testing for Measurement Model.** Table 2 showed the descriptive statistics of the constructs, including the number of items in each construct, mean, standard deviation (S.D.), interpretation, first order factor loadings, and Cronbach's  $\alpha$  coefficient. All

factors were at high levels, except for individualised consideration and shared vision, which were at the highest levels, and reached the minimum recommended values of 0.70 for Cronbach's  $\alpha$  [48; 49].

Table 3 depicted the reliability, and convergent and discriminant validities, including composite reliability (CR), average variance extracted (AVE), maximum shared variance (MSV), and average shared variance (ASV). All factors met the criteria of reliability ( $CR > 0.7$ ), convergent reliability ( $AVE > 0.5$ ), and discriminant validity ( $MSV < AVE$  and  $ASV < AVE$ ) [50].

Table 4 presented the Goodness of fit by the second order confirmatory factor analysis (CFA). The results showed that every item of this questionnaire had a high level of weight with values ranging from 0.51-1.00. When considering the consistency by considering the Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root Mean Square Error of Approximation (RMSEA), and Standardised Root Mean Square Residual (SRMR), it was found that every model was appropriate. All constructs passed the criteria. This displayed that the data was well-empirically consistent [47].

**Testing the result of the causal relationship model.** Structural equation modelling was used to test the 10 hypotheses comprising the proposed model of the impact of organisational commitment on the effects of happy workplace, transformational leadership, and learning organisation on the SMEs' human resource supply chain performance. As shown in Figure 3, the testing result of the causal relationship model of the factors affecting the business performance of SMEs found that the model was consistent with empirical data. It represented the important statistical indicators, including Chi-square = 139.88,  $df = 116$ ,  $P\text{-value} = 0.0649$ ,  $RMSEA = 0.020$ ,  $SRMR = 0.024$ ,  $CFI = 1.00$ ,  $GFI = 0.97$ ,  $AGFI = 0.95$ . Therefore, it could be assumed that the model-fit is acceptable.

Table 5 depicted the hypothesis testing results. The results found that Hypotheses 1, 4, 7, and 10 could be supported with a statistically significant level of  $p < 0.001$ . So, the learning organisation factors were the most important. They directly influenced the employees' organisational commitment ( $\beta = 0.48$ ) and the SMEs' business performance ( $\beta = 0.41$ ). The second most important factor was organisational commitment. It had a direct influence on the SMEs' business performance ( $\beta = 0.34$ ), with the weights of the Affective Commitment ( $\beta = 0.50$ ), Continuance Commitment ( $\beta = 0.46$ ), and the Normative Commitment ( $\beta = 0.31$ ), respectively. Whilst, the happy workplace factor directly affected organisational commitment ( $\beta = 0.08$ ) and

SMEs' human resource supply chain performance ( $\beta=0.22$ ) with no statistical significance. Whereas, the transformational leadership factor had a direct influence on organisational commitment ( $\beta=0.29$ ) and SMEs' human resource supply chain performance ( $\beta=0.41$ ) with no statistical significance.

For the mediating role of learning organisation, it had indirect influence on the human resource supply chain performance of SMEs with the mediating effect of organisational commitment ( $\beta=0.14$ ), with the weights of the Mental Models

( $\beta=0.52$ ), followed by Shared Vision ( $\beta=0.52$ ), System Thinking ( $\beta=0.45$ ), Team Learning ( $\beta=0.42$ ), and Personal Mastery ( $\beta=0.38$ ), respectively. However, the indirect influences of happy workplace and transformational leadership on the SMEs' human resource supply chain performance with the mediating effect of employees' organisational commitment had no statistical significance ( $p>0.05$ ), as shown in Table 5.

**Table 2.** Descriptive statistics of the constructs

	No. of items	Mean	SD	Interpret	1 <sup>st</sup> order loading	Cronbach $\alpha$
<b>SMEs Supply Chain Performance</b>						
Business growth	4	4.15	0.42	High	(0.71-0.89)	0.71
Customer satisfaction	4	4.13	0.54	High	(0.67-0.77)	0.71
Potential of Management	3	4.11	0.45	High	(0.85-1.00)	0.74
Employee satisfaction	3	4.12	0.49	High	(0.78-0.86)	0.77
Innovation development	3	4.15	0.57	High	(0.69-0.88)	0.75
<b>Happy Workplace</b>						
Happy people	5	4.05	0.43	High	(0.70-0.86)	0.80
Happy Home	5	4.11	0.37	High	(0.65-0.84)	0.73
Happy teamwork	3	4.07	0.47	High	(0.72-0.89)	0.76
<b>Transformational Leadership</b>						
Idealised influence	5	4.18	0.52	High	(0.64-0.74)	0.76
Inspiration motivation	4	4.12	0.41	High	(0.79-0.94)	0.78
Intellectual stimulation	3	4.17	0.58	High	(0.80-0.89)	0.75
Individualised consideration	4	4.20	0.45	Highest	(0.77-0.85)	0.81
<b>Learning Organisation</b>						
Personal Mastery	3	4.16	0.41	High	(0.72-0.81)	0.81
Mental Models	3	4.19	0.42	High	(0.83-0.90)	0.80
Shared Vision	3	4.22	0.56	Highest	(0.82-0.88)	0.83
Team Learning	3	4.13	0.48	High	(0.82-0.92)	0.79
System Thinking	3	4.16	0.39	High	(0.79-0.91)	0.85
<b>Organisational Commitment</b>						
Affective Commitment	3	4.14	0.53	High	(0.64-0.86)	0.79
Continuance Commitment	3	4.15	0.44	High	(0.74-0.89)	0.72
Normative Commitment	3	4.15	0.49	High	(0.62-0.82)	0.76

**Table 3.** Reliability, and convergent and discriminant validities

	CR	AVE	MSV	ASV
SMEs' supply chain performance (SCP)	0.891	0.624	0.593	0.469
Happy workplace (HW)	0.803	0.577	0.533	0.446
Transformational Leadership (TL)	0.869	0.625	0.593	0.524
Learning organisation (LO)	0.909	0.668	0.624	0.494
Organisational Commitment (CO)	0.827	0.620	0.578	0.447

Notes: Threshold of reliability: CR>.70; Convergent validity: AVE>.50; Discriminant validity: AVE>MSV. CR = composite reliability; AVE = average variance extracted; MSV = maximum shared variance; and ASV = average shared variance

**Table 4.** Goodness of fit by CFA<sup>2nd</sup>

Index	P value	$\chi^2/df$	CFI	GFI	AGFI	RMSEA	Critical N	SRMR	Goodness of Fit
	>0.05	<2	>0.95	>0.95	>0.95	<0.05	>300	<0.05	
HW	0.54	0.96	1.00	0.99	0.97	0.00	805	0.02	Pass
TL	0.18	1.14	1.00	0.98	0.96	0.01	610	0.03	Pass
LO	0.05	1.32	1.00	0.98	0.96	0.02	538	0.04	Pass
CO	0.61	0.87	1.00	0.99	0.98	0.00	1177	0.02	Pass
BP	0.08	1.25	1.00	0.98	0.96	0.23	576	0.03	Pass

Notes: HW: Happy Workplace; TL: Transformational Leadership; LO: Learning Organisation; CO: Commitment; and BP: Business Performance of SMEs

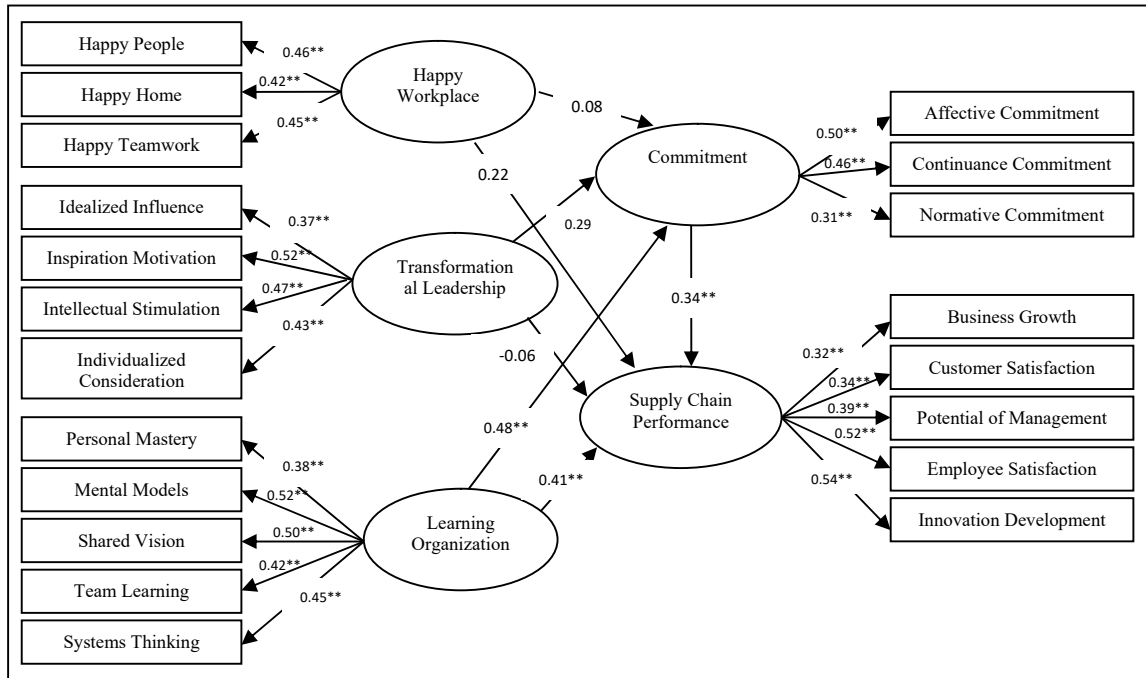


Figure 3. Results of the Data Analysis

Table 5. Hypothesis testing results

Hypothesis	Path	Standard Coefficient	Results
H1	Organisational Commitment → SMEs' supply chain performance	0.34**	Supported
H2	Happy workplace → SMEs' supply chain performance	0.22	Not Supported
H3	Transformational leadership → SMEs' supply chain performance	-0.06	Not Supported
H4	Learning organisation → SMEs' supply chain performance	0.41**	Supported
H6	Transformational leadership → Organisational commitment	0.29	Not Supported
H7	Learning organisation → Organisational commitment	0.48**	Supported
H8	Happy workplace → Organisational Commitment → SMEs' supply chain performance	0.03	Not Supported
H9	Transformational leadership → Organisational Commitment → SMEs' supply chain performance	-0.02	Not Supported
H10	Learning organisation → Organisational Commitment → SMEs' supply chain performance	0.14**	Supported

Note: \*p<0.05, \*\* p<0.001

### 5. Discussion

First, the results supported the important role of learning organisation for creating positive SMEs' human resource supply chain performance. The most significant aspect was mental models, shared vision, system thinking, team learning, and personal mastery, respectively. It depicts that SME organisations must teach employees to think, analyse, distinguish work from personal matters,

work with suitable reasons, and update work perpetually. They have to build employees' understanding of the organisation's vision and motivate the employees to work in line with the organisation's vision to move towards the success of the organisation. They always need to teach employees the priorities of the work they do, the adaptation to new situations, and the work database management which can be a good way to make future decisions. They require the development the



staff to know how to work as a team, listen to others reasonably, and work with everyone in the organisation, willingly. Finally, they must provide training programmes to create knowledge and understanding in the operation, give an opportunity to make creative work that adds value to the organisation, and develop knowledge in working for employees to have the ability in the field they like. This study validates previous findings related to the positive relationship between learning organisation and SMEs performance [32; 37; 28].

Second, the results support the important role of the learning organisation for organisational commitment. The employees tend to extensively work for companies continuously providing them with the budgets to attend training programmes or study in interesting programmes since they believe that if they have the knowledge and professional skills, they can be offered the higher wages and acceptance from the people in society. It reflects that employees need stability in their lives and social acceptance. This corresponds to Maslow's hierarchy of needs theory that states that people are motivated to achieve certain needs and that some needs take precedence over others [51]. Once that level is fulfilled, the next level up is what motivates them, and so on. Furthermore, this confirms the previous studies on the effect of learning organisation on organisational commitment [43; 44; 45].

Third, the findings, however, seem to not support the notion of happy workplace and transformational leadership affecting organisational commitment and SMEs' human resource supply chain performance. This is in accordance with the interview with several SME executives on January 18, 2019. Although the important indicator of business success is employee satisfaction of working in the organisation and the ways to create happiness of the organisation, the most significant issues today are the adjustability to rapid economic and technological changes along with high competition from both internal and external competitors caused by the free trade policy and regional economic integration. As a result, the happiness in the workplace is not enough today. The employees need to learn innovation in the context of manufacturing, marketing, logistics, supply chains, etc., which will lead the organisation to become an innovative development organisation and be able to produce innovative technological outputs in the future. The innovative knowledge can be adopted to improve work processes that are geared towards becoming an innovation-driven organisation. In addition, the people who come to work in the organisation would like to have the opportunity to learn jobs from the organisations that they work very well for in order to achieve

self-improvement and career advancement rather than happiness in the workplace or leadership style. Sometimes, they can endure the dissatisfying work environment, if they can, as employees, develop their own abilities and gain worthwhile experiences when they are working in the organisation.

## 6. Conclusion

In conclusion, both learning organisation and organisational commitment affect the organisational development of management potential that will enable the organisation to grow sustainably and be a good role model for society. This will develop the country into a high-income country in the future along with creating products or services that make customers satisfied because the employees in the organisation will work hard to get products that meet the standards and keep up with delivery to customers. Importantly, the staff will be happy to deal with the customers like taking care of their own family members. Finally, it also help will the organisation to grow its business well since the staff will attempt to support the development of the strategies to achieve the sales target. They will support the production department to reduce losses in the manufacturing process and recognise the duties and commitment to accomplish the goals as well. This is consistent with the literature linking those phenomena in a complementary relationship [9].

**Implication to practice.** The study is expect to bring benefits to business entrepreneurs who want to develop their organisations to keep pace with the technological, economic, and social changes as well as government agencies and scholars. The recommendations for applying the results of this study to the related parties are as follows:

- 1 . SME entrepreneurs can use this model as a guideline to develop the organisations to be an innovative and successful organisation, sustainably.
- 2 . Government agencies that have direct supervision duties, such as the Ministry of Industry are able to develop SME entrepreneurs so that the government sector can benefit the most and support the development of the private sector, sustainably. The government agencies, moreover, may use the results of this study as an example to formulate policies for other industries to be involved in preparing to enter the era of Thailand 4.0.
3. Scholars and interested parties can apply the findings of this study as the guidelines and conduct further research in other industries.

## References

- [1] D. Kafetzopoulos, K. Gotzamani, & D. Skalkos, The relationship between EFQM enablers and business performance: The mediating role of innovation, *Journal of Manufacturing Technology Management*, 30(4), 684-706, 2019.
- [2] M.S. Bhatia & A. Awasthi, Assessing relationship between quality management systems and business performance and its mediators: SEM approach, *International Journal of Quality & Reliability Management*, 35(8), 1490-1507, 2018.
- [3] T. Kruasom, Creating a Competitive Advantage for Thai SMEs towards Thailand 4.0 Era. *Journal of Business Administration and Accountancy* 1 (1), 1-20, 2017.
- [4] S. Pattharabanjerd, Dividend policy for SMEs entrepreneurs in economic crisis situation. *Modern Management Journal*, 15(1), 23-34, 2017.
- [5] M. Chantanee, The Development of SMEs Entrepreneurship in Uthai District of Phranakhon Si Ayutthaya Province, *ARU Research Journal*, 3(3), 9-14, 2016.
- [6] S. Maysin, Coding "Thailand 4.0" to create a new economy over the middle income trap, 2016 (retrieved June 7, 2017 from <https://www.thairath.co.th/content/613903>).
- [7] P. Kumpirarusk, & K. Rohitratana, Industry 4.0: Future Industries of Thailand. *WMS Journal of Management Walailak University*, 7(3), 52-64.
- [8] Bank of Thailand. SMEs survey study, 2018. (retrieved August 14, 2018 from [https://www.bot.or.th/Thai/Segmentation/Business/Documents/SMEs\\_survey\\_study2018.pdf](https://www.bot.or.th/Thai/Segmentation/Business/Documents/SMEs_survey_study2018.pdf))
- [9] S. Sirikutta, Creative economy strategies that affect the success of business organizations: a case study of the upper central industrial entrepreneurs. *Journal of Agriculture (Society)*, 34, 428 – 439, 2013.
- [10] R. Chatreewisit, Cooperation power in human resource development is still standing. *Journal for Quality Management*, 17 (160), 102-107, 2011.
- [11] Office of the National Economic and Social Development Board, the Prime Minister's Office. (2017). 12<sup>th</sup> National Economic and Social Development Plan, 2017-2019.
- [12] N. Sirichotirat, Principles of human resource management in the 21st century. 2nd edition. Bangkok: Chulalongkorn University Printing Center., 2016.
- [13] Kaewkhun, W. (2013). Strategic Human Resource Management that Affects Organizational Success and Success in Human Resource Management Of companies in the automotive industry and parts In AmataNakorn Industrial Estate, Chonburi Province. *Sripatum Journal*, 10 (1), 132-140, 2013.
- [14] R. Sunson, & Y. Pathomsirikul, Competitive Advantage Marketing Strategy of Construction Material Retailer Business in Thailand for preparing to ASEAN Economic Community. *Journal of Management Sciences*, 32(1), 91-121, 2015.
- [15] J.P. Meyer, & N.J. Allen, *Commitment in the Workplace: Theory, research, and application*. Thousand Oaks, CA: Sage Publications.
- [16] R.M. Kanter, Commitment and Social Organization: A Study of Commitment Mechanisms in Utopian Communities, *American Sociological Review*, (33)4, 499-517, 1968.
- [17] R.T. Mowday, R.M Steers, & L.W. Porter, The measurement of organizational commitment, *Journal of Vocational Behavior*, 14(2), 224-247, 1979.
- [18] L.W. Porter, R.M. Steers, R.T. Mowday, & P.V. Boulian, Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603-609, 1974.
- [19] A.E. Reichers, A Review and Reconceptualization of Organizational Commitment. *Academy of Management Review*, 10(3), 54-65, 1985.
- [20] J.P. Meyer, & N.M. Parfyonova, Normative commitment in the workplace: a theoretical analysis and re-conceptualization, *Human Resource Management Review*, 20(4), 283-294, 2010.
- [21] D.S. Bolon, Organizational citizenship behavior among hospital employees: A multidimensional analysis involving job satisfaction and organizational commitment. *Hospital & Health Services Administration*, 42(2), 221-241, 1997.
- [22] R.M. Marsh, & H. Mannari, Organizational Commitment and Turnover: A Prediction Study. *Administrative Science Quarterly*, 22(1), 57-75, 1997.
- [23] A. Susanty, R. Miradipta, & F. Jie, Analysis of the effect of attitude toward works, organizational commitment, and job satisfaction, on employee's job performance. *European Journal of Business and Social Sciences*, 1(10), pp 15-24, 2013.
- [24] S. Sanglimsuwan, S. Naksawat, P. Suksawang, & K. Sanglimsuwan, Development of employee engagement model for employees In a Japanese company in Thailand. *Journal of Behavioral Science*, 19 (2), 77-93, 2013.
- [25] P. Limyothin, Good member behavior of the organization in the hotel business. *Hat Yai Academic Journal*, 13 (2), 155-165, 2015.
- [26] C. Wasanthanarat, & T. Wuttiwatchaikaw, Happiness Organization 4.0. Bangkok: At Four Print, 2017.
- [27] B.K. Joo, & I. Lee, Workplace happiness: work engagement, career satisfaction, and subjective well-being, Evidence-based HRM: a Global Forum for Empirical Scholarship, 5(2)206-221, 2017.
- [28] B.M. Bass, & B.J. Avolio, Does the transactional–transformational leadership paradigm transcend organizational and national boundaries? *American Psychologist*, 52(2), 130-139, 1997.
- [29] B.M Bass, & R.E. Riggio, *Transformational Leadership*. New York: Psychology Press.
- [30] V. Suwanchaen, R. Isichaikun, T. Bunpoem, & A. Somboonsawasdee, Development of transformational leader model and innovations that influence the business operations of the food industry for export of Thailand. *Modern Management Journal*. 14 (2), 129-144, 2016.
- [31] R.A. Aziz, R. Mahmood, & M.H. Abdullah, The Effects of Leadership Styles and Entrepreneurial Orientation on The Business Performance of SMEs in Malaysia." The 2013 IBEA, International

- Conference on Business, Economics, and Accounting March 2013, Thailand: Bangkok.
- [32] A. Noruzy, V.M. Dalfard, B. Azhdari, S.N. Shirkouhi & A. Rezazadeh, Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *International Journal Advanced Manufacturing Technology*, 64, 1073–1085, 2013.
- [33] P.M. Senge & R.M. Fulmer, Simulations, Systems Thinking and Anticipatory Learning, *Journal of Management Development*, 12(6), 21-33, 1993.
- [34] M. Pedler, J. Burgoyne, & T. Boydell, *The Learning Company*, McGraw-Hill, London, 1991.
- [35] R. Stata, Organizational Learning - The Key to Management Innovation, *Management Review*, 30(3), 63-74, 1989.
- [36] P.M. Senge, *The Fifth Discipline: The art & practice of the learning organization*, London: Century Business, 1990.
- [37] N. Preechawet, Performance of small and medium enterprises from the perspective of learning organization concept. *Journal of Academic Affairs*, 14 (27), 85-98, 2010.
- [38] P. Kittikunchotiwiut, Knowledge management effectiveness and organizational success: an empirical study of hotel business in Thailand. *Research Science and Intelligence*, 12 (1), 28-42, 2010.
- [39] S. Phochanasombat, Factors affecting organization commitment of personnel in Office of Disease Prevention and Control 8, Nakornsawan Province, 2016. (retrieved June 8, 2017 from <http://ryssurvey.com/vichakarn>)
- [40] M.A. Gyensare, O. Anku-Tsede, M.A.Sanda, & C.A. Okpoti, Transformational leadership and employee turnover intention: The mediating role of affective commitment. *World Journal of Entrepreneurship*, 12(3), 243-266, 2016.
- [41] I. Keskes, J.M. Sallan, P. Simo, & V. Fernandez, Transformational leadership and organizational commitment: Mediating role of leader-member exchange, *Journal of Management Development*, 37(3), 271-284, 2018.
- [42] P. Jain & T. Duggal, Transformational leadership, organizational commitment, emotional intelligence and job autonomy: Empirical analysis on the moderating and mediating variables, *Management Research Review*, 41(9), 1033-1046, 2018.
- [43] P. Malik & P. Garg, Learning organization and work engagement: exploring the nexus in Indian IT sector, *Asia-Pacific Journal of Business Administration*, 9(3), 166-189, 2017.
- [44] B.L. Rich, J.A. Lepine, & E.R. Crawford. Job engagement: antecedents and effects on job performance, *Academy of Management Journal*, 53(3), 617-635, 2010.
- [45] A. Purushothaman, Organizational learning: a road map to evaluate learning outcomes in knowledge intensive firms. *Development and Learning in Organizations: An International Journal*, 29(3), 11-14, 2015.
- [46] A. Hayes, Introduction to Mediation, Moderation, and Conditional Process Analysis (2 nd Edition): A Regression-Based Approach. Guilford Press, New York, 2017.
- [47] S. Angsuchoti, S. Wjitwanua, & R. Pinyopanuwat, *Statistical analysis for research in the social science and behavioral science: using technique LISREL (3<sup>rd</sup> Edition)*. Bangkok: Chareondee Mankong Printing 2011.
- [48] K. Vanichbuncha, *Statistics for research* (5<sup>th</sup>ed). Bangkok: Thammasan, 2010.
- [49] J.C, Nunnally, & I.H. Bernstein, *Psychometric Theory*, 3rd ed., McGraw-Hill, New York, 1994.
- [50] C. Fornell & D.F. Larcker, Evaluating structural equation models with unobservable variables and measurement error”, *Journal of Marketing Research*, 8(1), 39-50, 1981.
- [51] A. Maslow, *Motivation and personality*. Harper and Row New York, 1954.