Abstract

This research aims to study the human resource management model influencing the operational efficiency of the automotive parts manufacturing industry in Thailand. It is quantitative research and the research tool used was a questionnaire. The sample groups were executives of 500 establishments. The results showed that the knowledge management was average at a high level followed by human resource management, operational efficiency, and organizational innovation. The correlation analysis found that human resource management had a close relationship with organizational innovation. Knowledge management and operational efficiency were high as per the results of the concordance analysis of the model. It was found that the factors directly influencing operational efficiency were human resource management, organizational innovation, and knowledge management. These factors are important tools that help increase operational efficiency and create sustainable competitive advantages for the automotive parts manufacturing industry in Thailand.

Keywords: Human resource management, Knowledge management, Organizational innovation, Operational efficiency
Introduction

The automotive industry is the cornerstone of Thailand's economic development. It is currently worth 5.8% of the gross domestic product (Economic base, 2018). The automotive industry has received a lot of attention from automotive operators around the world. For that reason, the automotive industry is the target industry that will drive the Thai economy in the future. It will be developed as a production base for electric vehicles, expanding business in the value chain of the automotive industry especially the design and prototyping whilst promoting the use of efficient and high-precision production technology. (Eastern Special Development Zone Policy Office, 2019) As for the Thai automotive industry in 2018, there is a rising trend, when looking into both internal and external factors. From this direction, in the automotive industry, there was a 16.2% increase in car sales in 2018. The main factor is the recovery of the domestic economy, improved consumer confidence, and more tourists traveling into Thailand. Including the fact that customers use their first car for 5 years and by then consider a car change. In addition, government assistance to low-income earners also positively affects the growth of the automotive industry. (Economic base, 2018)

Therefore, in order to increase the competitiveness of the automotive parts manufacturing industry in Thailand to have global competitiveness, the organization must focus on human resource management. To help plan the recruitment of personnel with knowledge, abilities, and good attitudes to be the new personnel of the organization. As a result, the organization will and should have sufficient personnel to perform various duties as necessary continuously and appropriately to help strengthen and develop the organization to be successful (Farouk et al., 2016). At the same time, the organization should develop personnel with a training system by providing internal training by recruiting people with expertise and expertise to teach in the organization. Even consider sending the necessary staff to a training and development center or establishment to take part in a program sponsored by the organization itself that was deemed relevant and feasible. As a result, personnel develops themselves in terms of acceptance, learning, understanding, and application. (Boonpetch, 2018) In addition, human resource management also helps to define guidelines for managing personnel within the organization throughout the process and helps develop personnel in the context of an appropriate organizational environment. This leads to the formulation of strategies that are consistent with the vision and main missions of the organization, ultimately resulting in the achievement of the organization's visionary goals. (Phurich and Amornsiripong, 2018) Whereas knowledge management motivates personnel to be creative. Appropriate innovations are used in operations, therefore, organizations must promote and support learning in order to increase the ability to manage knowledge leading to development. In addition, knowledge management is also a tool for determining the sustainable success of an organization. (Jantarajaturapath et al., 2016)
With great emphasis and interest, the researcher was interested in studying the human resource management model that influences the operational efficiency of the automotive parts manufacturing industry in Thailand.

**Objective**

To study marketing mix affecting consumers in purchasing at refill shops in Mueang Chiang Mai District.

**Research objectives**

1. To study the components of human resource management, knowledge management, organizational innovation, automotive parts manufacturing industry and operational efficiency
2. To develop a structural equation model of the human resource management model that influences the operational efficiency of the automotive parts manufacturing industry in Thailand.

**Literature review**

**Human resource management**

Organizations require a large number of human resources for performing various functions in order to obtain quality human resources which the organization must develop and maintain human resources to be able to work for the organization effectively. The ‘effectiveness’ to predict the future human resource must be related to the direction and plans of the organization. It consists of planning, recruiting, selection, development, compensation, health and safety, and labor relations in order for the organization to have increased operational potential and profitability. From the point of view of the management, the focus of human resources in an organization is to develop employees to have a better potential thereby empowering organizations to compete effectively Hanifah et al. (2019) Like Hamza's research (2016). It was found that human resource management policies are related to organizational performance because human resource management is a part that helps develop personnel in the organization to have the ability to act. Further to strengthen the organization and the working capacity (Nilawan, 2018) which found that organizations should focus on internal resources that are considered valuable assets to increase organizational efficiency, while a study by Stucki, (2016) found that human resource management helps to develop organizations to be highly effective. Developing and improving the skills of employees that are committed to enhancing competitive efficiency.

Moreover, human resource management is also related to organizational innovation as organizational innovation arises from the proper management of human resources through incentive methods to motivate employees to perform their tasks (Sherine and Moza, 2016). There are affected by the employees. Including stakeholders and other people involved in the
organization that aid to reinvent the working model to focus on maximum efficiency (Shipton et al., 2017). Further, human resource management is related to knowledge management, allowing employees to know their own abilities. In addition, the organization knows the ability of each employee to reduce the risk in the operation. Therefore, the employees participating in various activities of the organization encourage employees to gain knowledge both in the present and in the long run. Thus, organization leaders and employees must have a good relationship with each other to create an exchange of knowledge during work.

As a result, the organization is efficient in terms of sales growth and profit, therefore knowledge management is a fundamental factor. The need to empower employees to make good decisions under different circumstances (Barhate, 2016).

The research hypothesis can be written as follows:

H1: Human resource management has a direct influence on organizational innovation.
H2: Human resource management has a direct influence on operational efficiency.
H3: Human resource management has a direct influence on knowledge management.

Organizational Innovation

Organizational innovation is an important part that will play a role in the organization's competitiveness because innovation creates creativity to develop the production process as well as to organize the organization into a new form. Therefore, the organization should continuously develop innovation in order to compete effectively in the business sector to the international level. Organizational innovations used for competitive advantage consist of product innovations. Types of innovation such as: Marketing innovation, process innovation, behavioral Innovation, strategic innovation, and technological innovation. As for the relationship between organizational innovation and operational efficiency, it was found that organizational innovation will increase productivity and increase the value of products and services effectively depending on organizational structure factors. With regards to, systematic learning and knowledge management, it was found that knowledge management can encourage personnel to create ideas for innovation, enabling the organization to acquire new products or improve the quality of products to be up-to-date, leading to the creation and development of the organization. For the Sherine and Moza study, (2016). Found that organizational innovation also determines the direction of competition that is important for the organization's success, therefore, the role of organizational innovation has resulted in the success of small organizations in sales, thereby having competitive advantages resulting in increased profits for the organization through the process of using knowledge and ideas to develop new things; not as a result of plagiarism or reproduction. In addition, organizational innovation is a key element that creates a competitive advantage and affects market share performance (Horsthuis, 2016) and can be used effectively even if certain organizations have cultural differences (Cavanagh et al., 2017). The context of organizational innovation is the key to developing an organization
to progress and have economic growth, thereby being able to create quality people. Employees that have operational skills, have the ability to use technology, have problem-solving skills, have the ability to create a learning society, and produce works of creativity without imitation. In addition, organizational innovation helps to improve service quality for higher efficiency (Nazlina, 2016).

  can be written as a research hypothesis as follows:
  
  H4: Innovation capability directly influences operational efficiency.

**Knowledge management**

Knowledge management is the process of creating and collecting information. The information used to store may be obtained from books, textbooks, or experts as well as disseminating knowledge that is useful and necessary for the development and progress of the organization. This will result in the organization's ability to compete by the knowledge that is divided into 2 types: the knowledge that is a person arising from experience or ability to perform tasks or explicit knowledge: the knowledge that can be conveyed in the form of a manual or journal, or a combination of experience and previously collected information. In addition, knowledge management is a valuable asset to add value to the productivity of the organization. Therefore, knowledge management consists of developing knowledge to a higher level of knowledge gathering and knowledge transfer, in order to create and improve the infrastructure within the organization. By applying the knowledge gained from knowledge management to benefit (Malik and Garg, 2017). It was found that organizations with widespread knowledge dissemination had a positive impact on the success of financial organizations and an organization with a modern knowledge storage system will help the organization utilize the knowledge base efficiently and increase the competitiveness of the organization (Bhaskar and Mishra, 2017). Regarding the relationship between knowledge management and operational efficiency, it was found that important the relationship, allowed the organization to have good performance and create competitive advantages. Therefore, giving rise to a variety of resources and employees that have a high level of operational skills that contribute to the organization’s innovative capability (Zhang, 2016). Operational efficiency arises from knowledge management that is in the work process in every step of the process while working. Moreover, knowledge management is the pursuit of knowledge. Creating and transferring knowledge to groups of people to create added value for the organization as per the study of Jantarajaturapath et al. (2016) found that knowledge management is a component in determining organizational stability and that an organization with effective knowledge management will result in high operational potential.

  Can be written as a research hypothesis as follows:
  
  H5: Knowledge management has a direct influence on operational efficiency.
Operating Efficiency

Operational efficiency is the process by which an organization determines the direction and method of work to reach a predetermined goal. By assessing the internal and external environment that affects the organization in order to forecast future events. Organizational performance measures can be measured in many dimensions. There is no proper method. Therefore, it depends on the purpose to be used. The tools used to measure the effectiveness of the organization are: customer focus, competitor focus, profitability, sales growth, and new product success for future profits and for the stability of the organization which will lead to competition, in order to create added value for target customers and to formulate strategies that have been widely used by both small and large organizations, including non-profit organizations (Boxall and Purcell, 2016). In addition, it was found that the criteria used to measure the effectiveness of the organization's performance should include: profitability, financial performance, and employee satisfaction within the organization (Choi et al., 2013). For Shipton et al., (2017), the way that organizational performance is effective is focused on performance. Emphasis has been put on learning to develop ideas and lead to organizational innovation and employees in the organization must learn together by being open-minded and thus the cooperation of people within the organization will result in the long-term growth of the organization which is considered better than giving orders and strict regimental policies for the employees to follow. Therefore, organizations must focus on enhancing learning efficiency, knowledge dissemination and thereby applying knowledge to encourage personnel to be involved in the continuous learning process even though they may differ in culture (Cavanagh et al., 2017).

Research conceptual framework

![Research conceptual framework](Image)
Methodology

Population and sample

The population is the top executives of the automotive parts manufacturing industry of 618 companies (Thai Auto Parts Manufacturers Association, 2018). The sample group was 500 establishments.

Sample group: The sample size was determined using structural equation modeling analysis criteria. The sample size was defined and considered highly sufficient: 500 samples (Comrey and Lee, 1992) with the method of drawing (Probability Sampling)

Research tools

It is a general information questionnaire. The questionnaire was a 5-item checklist, and the questionnaire was a Rating Scale, which had criteria for giving the weight of the assessment into 5 levels according to the Likert method.) 100 items, consisting of 4 areas: human resource management, knowledge management, organizational innovation and operational efficiency.

Creating research tools

Study the principles of questionnaire construction in accordance with the research conceptual framework and study data from books, documents, articles and related research results. as a guideline to create questions and tool quality inspection consisted of 1) Content validity by 3 experts to determine IOC (Index of item objective congruence) The values were between 0.60-1.00 passed the benchmark and were of high accuracy (Rovinelli & Hambleton, 1997) 2). Reliability: A pre-Test of 30 questionnaires were used to determine Cronbach's alpha coefficient, the value was between 0.695-0.839, passed the standard criteria and had high confidence (Nunnally, 1978)

Statistics used in data analysis

Data analysis by statistics, mean, standard deviation. Structural equation model analysis (SEM) was analyzed by evaluating the consistency of all latent variables to have a value. Consistent with empirical data, all criteria were met, the evaluation criteria contain CMIN–p values greater than .05, CMIN/DF greater than 2, GFI greater than .90, RMSEA less than .08 (Arbuckle, 2012).
Results

The results of the overall opinion analysis revealed that the value was at a high level. ($\bar{X} = 3.96, \text{S.D} = 0.55$) When considering each side, sorted by average from highest to lowest. It was found that knowledge management had a high average of opinions. ($\bar{X} = 4.06, \text{S.D} = 0.86$) followed by human resource management ($\bar{X} = 3.98, \text{S.D} = 0.71$) operational efficiency ($\bar{X} = 3.93, \text{S.D} = 0.81$) and organizational innovation ($\bar{X} = 3.91, \text{S.D} = 0.73$) Able to summarize each aspect as shown in Table 1.

Table 1  Mean and Standard Deviation of Priority

<table>
<thead>
<tr>
<th>Overall analysis results</th>
<th>$\bar{X}$</th>
<th>S.D.</th>
<th>Interpret</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Human resource</td>
<td>3.98</td>
<td>0.71</td>
<td>High</td>
</tr>
<tr>
<td>2  Corporate innovation</td>
<td>3.91</td>
<td>0.73</td>
<td>High</td>
</tr>
<tr>
<td>3  Knowledge management</td>
<td>4.06</td>
<td>0.86</td>
<td>High</td>
</tr>
<tr>
<td>4  Operational efficiency</td>
<td>3.93</td>
<td>0.81</td>
<td>High</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.96</strong></td>
<td><strong>0.55</strong></td>
<td><strong>High</strong></td>
</tr>
</tbody>
</table>

The results of the structural equation analysis consisted of knowledge management factors. The characteristics of entrepreneurs, innovation capability and the terms of competitive advantages, as shown in Figure 2.
Figure 2 Structural equation model Human resource management style that influences efficiency Operations of the automotive parts manufacturing industry in Thailand

From Figure 2, the results of the structural equation model analysis. The results showed that the probability of chi-square (Chi-Square) was 0.080, correlation chi-square (CMIN/DF) was 1.420, the level of conformance index (GFI) was 0.969, and the mean square root index of estimation error (RMSEA) was 0.060. It was concluded that the surveyed model of the empirical data with the sample was consistent with the review data and passed the designated criteria.

Moreover, it was found that human resource management had a direct influence on organizational innovation (DE = 0.97), operational efficiency (DE = 0.78) and knowledge management (DE = 0.92) were statistically significant at the 0.001 level. Further it was found that organizational innovation had a direct influence on operational efficiency (DE = 0.21) and knowledge management had a direct influence on operational efficiency (DE = 0.36) with statistical significance at the 0.001 level. The congruence of the model can be analyzed as shown in Table 2.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM &lt;--- HRM</td>
<td>1.232</td>
<td>0.143</td>
<td>8.615</td>
<td>***</td>
<td>.924</td>
</tr>
<tr>
<td>IN &lt;--- HRM</td>
<td>0.720</td>
<td>0.129</td>
<td>5.581</td>
<td>***</td>
<td>.970</td>
</tr>
<tr>
<td>PO &lt;--- IN</td>
<td>1.035</td>
<td>0.178</td>
<td>5.815</td>
<td>***</td>
<td>.211</td>
</tr>
<tr>
<td>PO &lt;--- KM</td>
<td>0.914</td>
<td>0.147</td>
<td>6.218</td>
<td>***</td>
<td>.364</td>
</tr>
<tr>
<td>PO &lt;--- HRM</td>
<td>0.920</td>
<td>0.166</td>
<td>5.542</td>
<td>***</td>
<td>.783</td>
</tr>
<tr>
<td>hrm_4 &lt;--- HRM</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>.541</td>
</tr>
<tr>
<td>hrm_3 &lt;--- HRM</td>
<td>0.978</td>
<td>0.139</td>
<td>7.036</td>
<td>***</td>
<td>.520</td>
</tr>
<tr>
<td>hrm_2 &lt;--- HRM</td>
<td>1.179</td>
<td>0.140</td>
<td>8.550</td>
<td>***</td>
<td>.553</td>
</tr>
<tr>
<td>in4 &lt;--- IN</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>.584</td>
</tr>
<tr>
<td>in3 &lt;--- IN</td>
<td>1.227</td>
<td>0.123</td>
<td>9.976</td>
<td>***</td>
<td>.652</td>
</tr>
<tr>
<td>in2 &lt;--- IN</td>
<td>1.141</td>
<td>0.125</td>
<td>9.128</td>
<td>***</td>
<td>.585</td>
</tr>
<tr>
<td>in1 &lt;--- IN</td>
<td>1.073</td>
<td>0.117</td>
<td>9.171</td>
<td>***</td>
<td>.530</td>
</tr>
<tr>
<td>po5 &lt;--- PO</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>.585</td>
</tr>
<tr>
<td>po4 &lt;--- PO</td>
<td>1.173</td>
<td>0.132</td>
<td>8.886</td>
<td>***</td>
<td>.671</td>
</tr>
<tr>
<td>po3 &lt;--- PO</td>
<td>1.222</td>
<td>0.126</td>
<td>9.698</td>
<td>***</td>
<td>.711</td>
</tr>
<tr>
<td>po2 &lt;--- PO</td>
<td>1.248</td>
<td>0.230</td>
<td>5.426</td>
<td>***</td>
<td>.660</td>
</tr>
<tr>
<td>po1 &lt;--- PO</td>
<td>1.055</td>
<td>0.189</td>
<td>5.582</td>
<td>***</td>
<td>.618</td>
</tr>
<tr>
<td>hrm_1 &lt;--- HRM</td>
<td>1.204</td>
<td>0.136</td>
<td>8.853</td>
<td>***</td>
<td>.579</td>
</tr>
<tr>
<td>km1 &lt;--- KM</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>.848</td>
</tr>
<tr>
<td>km2 &lt;--- KM</td>
<td>1.556</td>
<td>0.251</td>
<td>6.199</td>
<td>***</td>
<td>.594</td>
</tr>
<tr>
<td>km3 &lt;--- KM</td>
<td>1.183</td>
<td>0.123</td>
<td>9.618</td>
<td>***</td>
<td>.677</td>
</tr>
<tr>
<td>hrm_5 &lt;--- HRM</td>
<td>1.460</td>
<td>0.147</td>
<td>9.932</td>
<td>***</td>
<td>.344</td>
</tr>
<tr>
<td>in5 &lt;--- IN</td>
<td>0.787</td>
<td>0.146</td>
<td>5.390</td>
<td>***</td>
<td>.314</td>
</tr>
<tr>
<td>km4 &lt;--- KM</td>
<td>0.788</td>
<td>0.130</td>
<td>6.062</td>
<td>***</td>
<td>.354</td>
</tr>
<tr>
<td>km5 &lt;--- KM</td>
<td>0.803</td>
<td>0.114</td>
<td>7.044</td>
<td>***</td>
<td>.273</td>
</tr>
</tbody>
</table>

***P<0.001
Research hypothesis

Table 3 Summary of hypothesis testing results

<table>
<thead>
<tr>
<th>Research hypothesis</th>
<th>Hypothesis test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Human resource management has a direct influence on organizational innovation.</td>
<td>Influential</td>
</tr>
<tr>
<td>H2: Human resource management has a direct influence on operational efficiency.</td>
<td>Influential</td>
</tr>
<tr>
<td>H3: Human resource management has a direct influence on knowledge management.</td>
<td>Influential</td>
</tr>
<tr>
<td>H4: Organizational innovation has a direct influence on operational efficiency.</td>
<td>Influential</td>
</tr>
<tr>
<td>H5: Knowledge management has a direct influence on operational efficiency.</td>
<td>Influential</td>
</tr>
</tbody>
</table>

Discussions

1. Human resource management influences organizational innovation. Human resource management influences organizational innovation because the organization encourages employees to receive training from internal and external agencies to develop knowledge. Specialized skills in both aspects of theory and practices are developed through an appropriate course until the employees understand the work process well. This thereby enables the personnel to be creative in creating innovation and have the proper working methods between employers and employees or between employees and executives in order to create a good working atmosphere and to reduce conflicts that will affect the organization, the findings are consistent with a study by Farouk et al., (2016). It was found that human resource management can lead to innovation within the organization if it is applied appropriately, especially in terms of motivation, training, recruitment, and selection, as well as performance appraisal. As Kuo's Study (2011) The results of the research showed that human resource management resulted in organizational innovation because it caused personnel to learn. The ability to manage knowledge creates innovative ideas within the organization and leads to the development and optimization of the organization for the study Nazlina (2016) found that human resource management in communication and sharing information, compensation, evaluation, selection, training, and development are essential for organizational innovation. In
addition, innovation processes are widely used in organizations to be successful as well as build good relationships with personnel. This will result in the appropriate use of human resource potential in the organization to achieve its objectives (Trajkovski, 2018).

2. **Human resource management influences knowledge management.** Human resource management influences knowledge management. Because knowledge management is the process of collecting information and distributing knowledge within the organization for personnel to use widely and widely. As with the automotive industry, knowledge management processes and design work practices are correct and appropriate to find ways to improve operations to keep up-to-date. The knowledge is applied in solving work-related problems. This is consistent with the study by Sohrabi and Naghavi (2015). It was found that human resource management plays an important role in knowledge transfer because knowledge is a valuable asset that organizations use as a strategy to create competitive advantages. In addition, the knowledge contained in the personnel will be fully utilized only when the organization has effective internal human resource management, flexible, modern, and systematic management. In the study of Sanchez, Marin, and Morales (2015) it was found that operation effectiveness resulted from the selection of personnel to undergo intensive training until they were familiar with the operating procedures. Furthermore, the organization has an evaluation of the performance of sending personnel to comprehensive training supported by the organization this thereby will help improve the organization's personnel to have knowledge and efficiency to perform better. To allow the employees to have the ability to use a variety of technologies and be innovative in decision-making and assist in production planning. Finally, to create added value for the organization. (Sawangrat, 2020)

3. **Human resource management influences operational efficiency.** Human resource management influences operational efficiency because human resource management encourages personnel to gain knowledge in order to achieve an appropriate operational style. From the study, it was found that the human resource management of different organizations resulted in the employees in the organization being learned about the different operations as well. This is consistent with research by Wang et al., (2012). It was found that human resource management starting from recruitment, selection, development, training, performance appraisal, salary, and compensation motivates personnel to perform at their full potential, leading to higher organizational performance. It also helps develop operational skills to be effective and widely applicable to both small and large organizations (Stanton et al., 2014) and non-profit organizations (Boxall and Purcell, 2016). Hamza (2016) found that the policy of human resource management is related to the performance of the organization because human resource management is part of helping to develop personnel in the organization to be able to work as well as At same time, motivation is a process that supports all the activities of personnel that are critical to operational efficiency and that a well-motivated organization increases the likelihood of an organization's success up (Girniene and Atkociuniene, 2015).
4. **Organizational innovation influences operational efficiency.** Organizational innovation influences operational efficiency as people exchange experience gained from their operations in order to come up with new ways of working, this is appropriate as the personnel accepts the transformation of old ideas into new ideas that can be applied to work for maximum efficiency and better the communication skills of the organization itself. Developing communication skills will have a positive impact on effective feedback. In addition, the organization has promoted and encouraged the learning of new things in order to create creativity and innovation suitable for work operations. An organization will focus on operations such as learning to develop ideas that may ultimately lead to organizational innovation (Shipton et al., 2017). Organizational innovation has a direct influence on operational efficiency because organizational innovation demands the employees to learn from the acquisition of internal and external market data and innovation also determines the key competitive direction. Therefore, it is essential to enable innovation to influence the operational efficiency of the organization. Sherine Farouk et al., (2016) In addition, organizational innovation improves the quality of service (Nazlina, 2016), as well as Kumar's (2010) study, looked at the similarities and differences in strategizing models of innovation while the results showed that the implementation of innovations made the organization more efficient and effective which is similar to the findings from the research of Mohamm and Hinson (2012), which states that innovation is very important for the survival of the organization because it helps the organization to harvest new methods in order to manage and differentiate products and services (Gonzalez and Andrade, 2011).

5. **Knowledge management affects operational efficiency.** Knowledge management influences operational efficiency because an organization has a knowledge management process and a clear operational plan. To make the organization’s management run smoothly and efficiently it is important to clearly specify the duties and responsibilities of the personnel as appropriate according to their knowledge, competence, and operational skills. Furthermore, to verify the accuracy of the information that may be recycled and reused. In addition, personnel should be involved in the knowledge management processes and aid in the design of work practices that are appropriate to the organization. To further ensure that there is a technique for controlling and coordinating work within the organization that is systematic. The personnel have to find ways to improve operations to be always up-to-date, this is consistent with a study by Wang et al., (2012) found that the wages of employees in organizations largely depend on their learning ability this is because important knowledge gained by the employees is efficiently used within the organization, therefore the organization further motivates and encourages knowledge acquisition and knowledge sharing among employees within the organization. Thus, knowledge management is a process of working in different stages. In addition, Jantarajaturapath et al., (2016) found that knowledge management is a component in determining the stability of organizations, and organizations that have effective knowledge management will result in higher operational potential. Therefore, organizations with
intelligent, idealistic leaders avoid the use of power and have the ability to inspire make an organization that yields employee morale and work efficiency (Sawangrat, 2020).

Conclusion and suggestions

1. Recommendations from research

1.1 Human resource management From the results of the study, it was found that human resource management influences operational efficiency, the organization must focus on the selection of personnel using moral and ethical criteria. Integrity and responsibility are the criteria for selecting personnel into the organization because personnel who have such characteristics will have a high ability to work. Further, have the ability to effectively take responsibility for important matters In addition, the organization must consider the personality of themselves and the personnel, in order to create a good image for the organization. Therefore, in order to increase operational efficiency, organizations should consider Human resource management added 3 aspects, namely 1) morality, 2) responsibility, and 3) personality, to strengthen the internal organization.

1.2 Organizational innovation From the study, it was found that operational efficiency arises from the organization's focus on organizational innovation, which is the key to organizational advancement and economic growth to create quality people. An organization with operational skills-, has the ability to use technology, have problem-solving skills and the ability to create a learning society, and has creative ideas consisting of originality. Innovation in the organization arises from the organization's management process in order to change the behavior within the organization to be ready for global competition. Therefore, organizations should consider factors of organizational innovation in 3 additional areas: 1) change the thinking process 2) change the working process, and 3) change the production process. to increase operational efficiency for the organization

1.3 Knowledge Management From the results of the study, it was found that effective knowledge management can result in good organizational performance, the organization must combine the knowledge that is scattered within the organization to be stored within a centralized system. To provide everyone in the organization with access to specific, principled, rational, and credible sources of knowledge to support operational decision-making and in addition to being used for personnel development and organizational development. Encourage personnel with the knowledge and the ability to apply their knowledge to add value and income to the organization. As a result, the organization has the ability to compete, enhance the ability to make decisions, and plan operations, including working efficiently. Therefore, in order to increase operational efficiency, the organization should consider 4 additional knowledge management factors, namely 1) knowledge-gathering 2) knowledge development 3) new
knowledge creation, and 4.) applying knowledge wisely. Therefore, this will result in the organization having the highest competitiveness.

1.4 Operational efficiency From the results of the study, it was found that the criteria used to measure the success of the organization's operational efficiency. In addition to human resource management, organizational innovation, and knowledge management. Organizations must focus on operational efficiency in four additional areas: 1) setting the quality standards of the completed work 2) measuring the error of employees in the performance 3) measuring the efficiency of the work performed. Use appropriate and cost-effective resources, and 4) measure the efficiency of the speed in completing the tasks in time. Such components will result in the organization meeting its operational goals. The organization will be able to achieve its human resource development goals and achieve organizational development goals to move towards a learning organization and in turn the application in the operations to achieve efficiency.

2. Suggestions for next research

2.1 Following the points mentioned in this research to further study the factors affecting the efficiency of operations. To support operations in accordance with the vision and organizational development towards sustainability and should apply the conceptual framework from this research to study with other industry groups to obtain guidelines for organizational development and personnel development to test the potential and the efficiency of these highlighted factors. Study the readiness to adapt and the evolution towards the future that will lead to operational efficiency.

2.2 The Ministry of Industry and educational institutions should play a role in promoting knowledge for the automotive industry operators by focusing on 4 main areas, namely human resource management, knowledge management, organizational innovation, and operational efficiency for the production process to be accurate, effective, well-paced and consistent with the needs of current and future target markets and develop the organization to be a highly efficient organization. Thereby the involvement of governmental entities--, may play a role in a standardized production process that is profitable and capable of sustainability.

New knowledge and the effects on society and communities

It was found that the factors directly influencing operational efficiency were human resource management, organizational innovation, and knowledge management. These factors are important tools that help increase operational efficiency and create sustainable competitive advantages for the automotive parts manufacturing industry in Thailand.
References


