The impact of different styles of ‘learning’ and categorisations of ‘organisational strategies’ on ‘organisational performance’: a case of university industry in Thailand

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Abstract: - In anticipation of the ASEAN Economic Community (AEC) in 2015, individual members must prepare for the changing environment through economic development, at the same time reducing the differences amongst them. In particular, universities play a vital role in transferring and distributing knowledge to organisational members. Thailand is one of the AEC members, and this study scrutinises the relationship between top management’s learning styles, organisational strategies and organisational performance. Universities in Thailand are taken as a case study.

A quantitative research method was applied. Pilot studies tested reliability and validity. Questionnaires were used to collect data, and different statistical methods were used for analysis. Survey questionnaires were sent to all 198 universities in the country, and a total of 135 completed questionnaires received, amounting to the impressive response rate of 68.18 per cent. The questionnaires, distributed to the top management of the universities. The findings indicate that learning styles and organisational strategies are associated with organisational performance. In addition, results show that the association between learning styles and organisational performance is mediated by the organisational strategies.

Key-Words: - Learning Styles, Organisational Development, Organisational Performance, Organisational Strategies, Personal Development, and Strategic Management

1 Introduction

If it is to achieve outstanding levels of performance, an organisation may need to consider strengthening and creating a network or community of similar endeavours. With the approaching launch of the ASEAN Economic Community (AEC) in 2015, AEC members need to be well prepared. To accomplish this, individual members are required to develop economically, at the same time as reducing the differences between them. Hew[1] indicated that deeper economic integration can lead to significant social costs caused by structural adjustments and the risk of falling into areas of low-cost labour, trapping applicable resources. Hence, it is necessary for the members of the AEC communities insuperior economic positions to distribute their resources to the developing countries to ensure full participation of all members in the assimilation process. This includes financial and technical assistance, transfer of technology, education, training facilities and other capacity-building activities. Economic growth may be dependent on the development of the nation and its citizens, with human resources and education acting as key factors. Thailand’s position is ambiguous. At present, there are 198 universities in Thailand[2], but more importantly the issue is not quantity but quality. Hence, any quality-focused higher educational institutions must ensure superiority in education for its registrants.

Higher educational institutions are perceived as essential factors in rapid economic growth, and formal education, controlled by the state, is indispensable for improving the production capacities of a population. In addition, organisational strategies must be proficient in enabling organisations to achieve and maintain competitive advantages and superior performance in the dynamic and competitive business environment[3]. This means that organisations must be able to respond and adapt to environmental changes[4, 5].

Top management may have diverse backgrounds and different approaches to learning, so it is essential that they understand individual preferences for particular ways of learning[6]. Once they understand their own learning preferences, they will be able to apply their experience in their routine duties, and to learn and transfer their knowledge more efficiently and effectively. In turn, this encourages learning throughout the
organisation and enhance organisational performance overall.

Academic research into learning styles and organisational strategies, has recognised learning styles as one of the most expedient ways of achieving competitive advantage[7]. However, learning style extends far beyond a single area and is relevant to different disciplines, including contingency theory, organisational development, industrial economy, information theory and system dynamics, system theory, management science, production and operation management, social anthropology, sociology, psychology and organisational theory. It is founded on various theoretical assumptions that are complementary to each other in the understanding of learning styles [8-10].

For example, the Mutual Funds Marketing Group strives to develop a more collaborative culture and base their learning on the work of cross-functional work groups and improved communication[11]. Organisations need to challenge their own homogeneity of thinking by pursuing board members with positive sources of differences [12]. Two companies emphasised learning styles in different functions within the organisation: Motorola encouraged learning by providing rewards, looking at both the quality of products and processes, whilst the Mutual Funds Marketing Group focused on sharing knowledge among organisational members. These two companies are only an example of organisations encouraging learning; however, for other organisations, especially SMEs with different levels of resources (employees and investment), the results of applying learning in the organisation may be diverse.

Consequently, research in learning styles sustaining organisational strategies has examined the influence through organisational performance. It is obvious that understanding different learning styles in the organisation is supportive to constructing appropriate organisational strategies. For these reasons, applying learning styles can lead to developing and sustaining competitive advantage, and in the long term improving organisational performance.

1.1 Research Conceptual Framework

![Fig.1 The Links between the Demographics of Respondents, Learning Styles and Organisational Strategies through Organisational Performance](image)

**Independent variables:** The demographics of respondents, number of employees and the learning styles. At the same time, the levels of organisational strategies in each organisation were investigated.

**Dependent variable:** Organisational performance; the top management of each higher educational institution was asked to evaluate their organisational performance, focusing on their financial performance compared with others in their sector.

Figure 1 illustrates the connection between learning styles, organisational strategies and organisational performance of the unit of study, higher educational institutions in Thailand. More specifically, in view of the forthcoming launch of the AEC in 2015, consideration is focused on the continually growing amount of knowledge sharing among the members of this association.

2 Related Literature

2.1 The Evolution of Education in Thailand

Thai education was first reformed by King Chulalongkorn, the fifth king of the Chakri Dynasty, who ruled Siam from 1868 to 1910. The King’s decree indicated his King’s visionary and progressive views on education. He recognised that human resource development is critical to a nation’s economic success and prosperity. Hence, education needs an important moral dimension; and finally, creativity and aesthetics are considered as important elements in education [13, 14]. Thailand is a newly industrialising country, whose higher education system is in need of extra resources to develop academically and to compete with developed countries at a time when public spending has to be limited [15].

2.2 Learning Styles

Patterson et al. [16] suggested that, whether or not top management desires to influence the performance of their companies, the most important area to underline is the management of people [17]. Although to some extent organisational learning is distinct from individual learning, they are closely interconnected [18]. Organisations can learn separately from particular individuals, but individual members need to share formal and informal processes and structures through which learning can be undertaken and then diffused and transferred between the individual and groups [19]. Kolb [20] identified learning which occurs in the organisation in terms of the cognitive viewpoint, that ‘individual learning is dependent on the learning arrangements that exist within the organisation, either accelerating or slowing the learning process’ [21, p. 187][21-23]. Michie and Oughton [24] recommended that if organisational members have a stake in the organisation in which they work, they will be more motivated and
committed, with positive outcomes for organisational performance.

In addition, Duff [25] and Given [26] highlighted the fact that learning styles are a combination of characteristics: cognitive, affective and psychological aspects that act as indicators of how an individual interacts with and responds to the learning environment. Hence, learning styles can be defined as the way people process information effectively in their own manner. Honey and Mumford [27-30] suggested that learning styles can be classified into four different styles: Activist, Pragmatist, Reflector and Theorist. In addition, Dunn and Griggs [31] suggested that different managers may have different ways of perceiving and transferring knowledge, resulting in different levels of acquired or actionable knowledge, especially tacit knowledge or individual experience. Warr and Downing [32] also proposed that the differences in acquired knowledge resulting from different learning styles may lead to different ways in which individuals adopt the actionable knowledge in their roles as top management. Logically speaking, individuals may apply their different acquired or actionable knowledge in different manners which lead to varied consequences.

Finally, learning styles can be defined as the approaches people take in processing information effectively in their own way. They also play an important role in facilitating people to understand their own learning styles and adapt them to suit their organisational surroundings; in turn, they can transfer and encourage knowledge to others more effectively.

2.3 Organisational Strategies

David [33] believed that the term organisational strategy is used synonymously with strategic management. He defines organisational strategy as the art and science of articulating, employing, and appraising cross-functional decisions that enable an organisation to achieve its objectives. Pearce and Robinson [34] proposed that organisational strategy describes a set of decisions and actions contributing to the formulation and implementation of plans designed to achieve a company’s objectives. More importantly, Warr and Downing [32] and Mumford [35] stressed that there is an interconnection between learning styles and organisational strategies, while different ways of perceiving and transferring knowledge may lead to different levels of acquired knowledge and different methods adopted.

Integral to organisational strategy is the determination of long-term goals and objectives of an organisation, serving as a framework within which choices are prepared concerning the nature and direction of the organisation [33, 36, 37]. This framework helps in distributing resources to develop financial and strategic performance [38]. Furthermore, there is the consideration of the continually growing numbers of educational institutions. Increasing requirements for study may affect the competitiveness of educational organisations. To be effective, universities need to employ strategies through a wide variety of activities to offer superior value. The organisational strategies can help to determine those activities[39]. Kotler [40] proposed three key organisational strategies: cost leadership, product differentiation, and niche market, to meet customers’ needs and achieve competitive advantage in their sector.

First, cost leadership typically focuses on ways to lower cost. For example, in higher education, it may be useful to introduce e-learning programmes to lower costs as a cost leadership strategy. (See, for example, [41, 42]).

Second, product or service differentiation distinguishes a firm from its competitors. For example, universities may offer new or different courses or programmes of study to meet the needs of the market. (See, for example, [43]). This is especially important with the growth of the international market for academic, curricular internationalisation, and the commercialisation of international higher education can increase profit in the higher education sector [44]. For instance, Thailand has incorporated the internationalisation of higher education into its plans since 1990, and ‘international programmes’ are offered in both public and private universities [45]. Product differentiation may be more effective when students are not price sensitive, since knowledge can be considered as a first investment. Hence, universities applying this strategy may be able to acquire even more exceptional registration figures. More explicitly, any organisation equipped to provide a unique programme of studies may then be more attractive to students, who recognise that this university possesses specialised knowledge that is rare in other institutions.

Third, in niche marketing strategy, organisations concentrate on serving a specific group of students with similar demographics and a similar need or want. For example, the higher institutions may focus solely on students living in the countryside far from the capital, by offering a new branch close to their communities [46]. The education sector has emerged through the new technology as a viral tool to satisfy new scenarios for both learning and teaching [47]. Thus, technology can be used for remote study and particularly for home school study.

Lastly, organisational strategies may be applied differently in diverse organisations, according to their organisational goals.
2.4 Organisational Performance

The subjective and objective measures were identified during the process of data collection to identify the different levels of organisational performance of each higher educational institution in Thailand[48]. More importantly, although there may be bias in evaluating the organisational performance, based on the perception of the respondents, the subjective measures are commonly applied in existing research [49]. As different universities provide a variety of disciplines, it may not be straightforward to evaluate the overall performance of each university. To represent disciplinary differences, the data may need to be measured against the average industry income for each particular discipline (see, for example,[50-54]). To do this, top management were asked to evaluate their level of performance by focusing on the financial perspective compared with their competitors.

2.5 Research Question

The research is designed to answer the question: ‘To what extent are the learning styles of top management supportive to the institution through organisational strategies?’ The research question has been formulated to investigate the relationship between learning styles, organisational strategies, and organisational performance.

3 Sample and Data Collection

There are 198 universities in Thailand[55]. Samples were classified by the Stratified Random Sampling method, ensuring that they were equitably selected with different locations. Prior to conducting the questionnaire, postal letters, e-mails and telephone calls were made to arrange times and to ascertain that these top management were willing to participate in this survey. Respondents were assured of the confidentiality of their answers.

Questionnaires were distributed to top management of the universities in Thailand, usingKrejcie and Morgan’s formula to determine sample size [56]. Their table recommends that a population of 198 requires a sample size of no less than 121. Meanwhile, Ames [57] suggests that mail surveys can be expected to have response rates of 11 to 15 per cent. In this study, however, questionnaires were sent out to all 198 universities. A total of 135 completed questionnaires were received, which amounted to the impressive response rate of 68.18 per cent and would improve the validity of the research and generalisability of the findings. More precisely, Hair et al [58] suggest that a ratio of 5:1 is the standard to achieve to ensure that the data collected adequately reflects the phenomenon being studied; that is, taking into account all the independent variables, a sample that is at least one-fifth of the target population size is required. Thus, the high response rate could further contribute to the representativeness of the data collected. In this study, ten independent variables were analysed: gender, age, income, experience, number of employees, activist, pragmatist, reflector, theorist, and organisational strategies. To ensure reliability and validity, a pilot study was carried out before conducting the actual questionnaire.

The questionnaire was composed of four sections: demographics, learning styles, organisational strategies and organisational performance. The first section comprised demographic questions relating to gender, age, income and experience, while the number of employees is a controlled variable. The second and third sections used a 1-6 Likert scale [59] where 1 was the least and 6 the most agreed. In the last section, top management were asked to evaluate their organisational performance by focusing on financial performance, by providing a percentage score against other organisations in their sector (See, for example,[60-64]).

3.1 Validity

Balnaves and Caputi [65] proposed three main kinds of validity: construct, internal and external. Construct validity determines whether the construct of the research is successfully operationalised and represents the phenomena relating to the research objective. In this study, the unit of analysis is the top management of the universities in Thailand, qualified to provide accurate data grounded on their understanding. Internal validity refers to the extent to which the research design allows researchers to draw conclusions around the relationships among variables. In this research, using the quantitative approach, different statistical techniques were applied to test these relationships. Burns [66] suggested that the standardised test is helpful in forming an important part of the body of necessary information. Hair et al. [58] recommended that the most common test for normality is the Kolmogorov-Smirnov test which determines the level of significance of the differences from a normal distribution. The most commonly used significant level is 0.05. Hence, the organisational performance was verified for the normality by using the Kolmogorov-Smirnov test. The results indicated that the significance level of the sample was greater than 0.05 (See, Table 1). Hence, it can be concluded that the sample had a normal distribution, and conforms to acceptable formats.

| Table 1: Test of Normality |
|---------------------------|------------------------|
|                           | Kolmogorov-Smirnov     |
|                           | Df                     | Sig.                  |
| Organisational Performance| 134                    | 0.179                 |

H₀: the sample is normal distribution.  
H₁: the sample is not normal distribution.
In contrast to the other types, external validity reflects the degree to which the samples are actually representative of the population from which they were drawn. In this research, the respondents were stratified according to their location to ensure that each sample from the different locations had an equal chance of being selected. A probability or random sample technique was then applied to select the samples. This means that the samples were randomly selected, contributing further to the generalisability of the data gathered.

In addition, the questionnaire was sent to professional proof readers based in the UK and Thailand in order to check the translation from English to Thai and from Thai to English. This was necessary to ensure that the respondents shared the same understanding of the phrases applied in every single question. All respondents were also assured of the highest level of confidentiality of data, which were used for academic purposes only. Respondents were also notified that a copy of the results would be provided, although no individual names would be identifiable from the published information.

3.2 Reliability

Reliability refers to the stability, accuracy and dependability of data [66]. Also, a valid question will enable accurate data to be collected, and one that is reliable will mean that the data is collected consistently [67]. Foddy[68] suggested that “the question must be understood by the respondent in the way intended by the researcher and the answer given by the respondent must be understood by the researcher in the way intended by the respondent”. Saunders et al.[67] suggested that “internal consistency” involves correlating the responses to each question with answers to other questions in the questionnaire. It therefore measures the consistency of responses across either all the questions or a sub-group from the questionnaire.

<table>
<thead>
<tr>
<th>Table I: Reliability of the Instruments</th>
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<tbody>
<tr>
<td>Variables</td>
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<tr>
<td>Activist</td>
</tr>
<tr>
<td>Pragmatist</td>
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<tr>
<td>Reflector</td>
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<tr>
<td>Theorist</td>
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<tr>
<td>Cost Leadership</td>
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<tr>
<td>Product Differentiation</td>
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<td>Niche Market</td>
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The most frequently used method for calculating internal consistency is Cronbach’s alpha coefficient [67], applied to ensure the level of reliability (see Table II). The results for the levels of Cronbach’s alpha coefficient of the set of questions on learning styles and organisational strategies were greater than 0.70. Therefore, it was found that the levels of Cronbach’s alpha coefficient for both learning styles and organisational strategies were acceptable for an attitude scale.

4 Data Analysis and Discussion

A sequential or hierarchical analysis of a set of independent variables may often produce the coefficients necessary to answer the scientific questions at hand. In the hierarchical form, the set of independent variables is entered cumulatively in the R² and partial regression coefficient correlation coefficients are determined when each independent variable joins the others [69]. A full hierarchical procedure for a set of independent variables consists of a series of regression analyses, each with one more variable than its predecessor. The choice of a particular cumulative sequence of independent variables is made in advance, as indicated by the purpose of the research. Moreover, the researcher should be guided by the theoretical foundation that originally led to the research question [70]. The higher the correlation between the independent and dependent variable, the better prediction equation they will provide [71]. This research framework has three main groups of independent variables: demographics of respondents and number of employees; learning styles; and organisational strategies. Consequently, the relationship between independent and dependent variables was tested to attain the results precisely, and hierarchical regression analysis was applied.

4.1 Hypotheses

H1: The relationship between demographic of respondents and number of employees, learning styles, and organisational performance may be mediated by organisational strategies.

5 Findings

Rather than looking for a statistical solution, the researcher should be guided by the theoretical foundations that originally led to the research question [70]. This suggests that the researchers select the most appropriate independent variables to predict a dependent variable. Therefore, in this section, hierarchical regression analysis was performed to examine the direct effects of number of employees, demographics, learning styles and organisational strategies on the dependent variable, organisational performance.
5.1 Mediation Testing

Table III: Coefficient (Standardised Coefficients of 1st and 2nd Equations)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardised Coefficients (1st Equation)</th>
<th>Standardised Coefficients (2nd Equation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig.</td>
<td>R²</td>
</tr>
<tr>
<td>Gender</td>
<td>0.000</td>
<td>0.638</td>
</tr>
<tr>
<td>Age</td>
<td>-0.045</td>
<td>0.405</td>
</tr>
<tr>
<td>Income</td>
<td>0.052</td>
<td>0.956</td>
</tr>
<tr>
<td>Experience</td>
<td>0.059</td>
<td>0.415</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>0.135</td>
<td>0.525</td>
</tr>
<tr>
<td>Activist</td>
<td>-0.371</td>
<td>0.555</td>
</tr>
<tr>
<td>Pragmatist</td>
<td>0.167</td>
<td>0.795</td>
</tr>
<tr>
<td>Reflector</td>
<td>0.322</td>
<td>0.684</td>
</tr>
<tr>
<td>Theorist</td>
<td>0.076</td>
<td>0.679</td>
</tr>
<tr>
<td>Cost Leadership</td>
<td>-</td>
<td>-</td>
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<td>Product Differentiation</td>
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<td>Niche Market</td>
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Dependent Variable: Organisational Performance

1st Equation: organisational performance = α number of employees and demographics of respondents + α learning styles

2nd Equation: organisational performance = α number of employees and demographics of respondents + α learning styles + α organisational strategies

Hair et al. [58] strongly suggest using the adjusted R² in comparing models with different numbers of independent variables. The adjusted R² is also useful in comparing models with different data sets because it will compensate for the different sample size. Hence, in this research, the adjusted R² was considered for comparing between two equations. It was found the adjusted R² for the second equation was 0.699, which is greater than the adjusted R² of the first equation, 0.611. This indicates that the set of independent variables in the second equation explains the dependent variables more fully than the set of independent variables in the first equation. In addition, when adding the organisational strategies into the equations, the Beta Coefficient values of the learning style variables changed. This suggests that the effect of learning styles on organisational performance was mediated by organisational strategies. Hence, hypothesis I was accepted. It can be concluded that the relationship between demographics of respondents and number of employees, learning styles, and organisational performance are mediated by organisational strategies.

6 Recommendations

The results suggest that the set of predictors was statistically associated with the dependent variable. Moreover, findings indicate that top managements’ demographics, learning styles and organisational performance were mediated by organisational strategies. This suggests that it may be necessary to provide learning style programmes to encourage top management to practise the predominant components of those learning styles (i.e. pragmatist and reflector). In particular, therefore, it would be helpful for top management to encourage learning in the organisation by applying the effective learning styles, pragmatist and reflector, to transfer knowledge and skills to the employees.

In addition, top management may need to encourage employees to distribute ideas and then try them out in practice. At the same time, top management may need to take some time to consider and gather the information. It is also important that top management should undertake problems by analysing and observing them from different perspectives and then refining the alternative ways of approaching them.

Therefore, any organisation desiring to improve its organisational performance may need to encourage management to maintain the organisational strategies: cost leadership, product differentiation, and niche market. For example, González [72] suggested that a split mode of studies is an alternative education system considered to be one of the most cost effective [73, 74]. In addition, McDermott and Walston [75] found offering new disciplines of study and strengthening the unique
characteristics for students as an executive programme for top management in a business school was considered useful for working people considering pursuing higher education. Also, specific groups of students, such as organisational members from business and academic areas, remain the groups to be considered since they are seeking to attain tacit and explicit knowledge to improve productivity in their workplaces [72, 76].

7 Implications and Future Research

There are several implications suggested by these findings. First, the impact of learning styles on organisational performance may need to be observed over a long period of time in a longitudinal study. Thus, time limitation is one of the difficulties in conducting research.

It is also recommended that future studies consider other groups relevant to the organisation, apart from top management. In this research, top management was specifically approached to complete the questionnaires. However, their perceptions and accounts may not be sufficiently comprehensive in understanding the contribution of learning styles and organisational strategies to organisational performance. It is thus strongly recommended that the views of other potentially useful respondents from different positions be taken into consideration for cross-checking purposes. More specifically, it may prove useful for future studies on organisational performance to include the views of a wider range of respondents other than top management themselves, such as other organisational members, subordinates or students.

Furthermore, the importance of tacit knowledge should not be underestimated, since the findings of this research showed that the association between the demographics of respondents, the number of employees, the learning styles, and organisational performance was mediated by organisational strategies. Hence, their different backgrounds, and the experience acquired from their varied learning styles, may lead individuals to adopt different levels of knowledge to develop different organisational strategies in managing their organisation. Therefore, future research may need to extend the study to investigate individuals’ tacit and explicit knowledge, and to study whether there is an association between these types of knowledge and the other variables, and the extent to which this would bring about different styles of learning, different organisational strategies, and different levels of organisational performance.

In addition, as this study mainly relies on the quantitative approach, it may not offer a complete understanding of the complex relationships in organisations. Hence, to improve the validity of future research, it may be necessary to combine qualitative and quantitative methods to triangulate the findings.

8 Conclusion

This research explains the relationship between the demographics of respondents, learning styles, organisational strategies, and organisational performance. The findings suggest that pragmatist and reflector learning styles are supportive to the organisation. In addition, organisational strategies act as a mediator between the demographics of respondents, learning styles and organisational performance. Hence, the empirical findings suggest that the set of predictors in this research can be used as guidelines for top management to improve organisational performance overall.

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References:


[38] D. Rigby, "Management tools survey 2003: usage up as companies strive to make headway in tough


