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Aims and scope

International Journal of Multidisciplinary in Management and Tourism is an interdisciplinary journal seeking an engagement between scholars working across a range of disciplinary fields, including Management, Tourism, critical theory and Interdisciplinary of humanities and social sciences.

Frequency of Issue:

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All submitted manuscripts must be Reviewed by at least two experts via the double-blinded review system

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Preface

We are pleased to present the 4th volume, first issue of the 2020 edition of the International Journal of Multidisciplinary in Management and Tourism. This volume consists of six articles. These articles are of multi-disciplinary nature in the fields of management and tourism. Management discipline is broad-based, and everything tangible or intangible, such as mental problems, medical diagnosis, industry, organization and business, projects, automation, community, social issues, and national politics require knowledge and applications of management sciences. This understanding forms the tenets and bases for promoting the participations and contributions of papers from both the researchers and practitioners in of the International Journal of Multidisciplinary in Management and Tourism.

The first article presents an emerging concept that is very much in alignment with the recent trend in information-based and knowledge-driven societies. The author skillfully introduces the concept of performance indicators monitoring and utilization in the effective design and implementation of local budgeting, for positive and sustainable impacts to local communities. It is not only the technical tool that the author emphasizes, the key lies also in the spirit and the fundamental usefulness of fact-based management.

Globalization has brought both opportunities and challenges for everyone, and a nation plays an ultimate policy role to ensure national developments are planned and executed appropriately in the context of globalization. The authors employ the hypothetical concept of the Environmental Kutznets Curve (EK), which provides important policy implications to Lao PDR that plays the role of global and good national citizenships to preserve the sustainability potential of the world.

The third article skillfully studies the manufacturers and traders of the pineapple industry in Chiang Rai, by looking into the competitive states of the industry from both the internal performance states of competitive advantage and financial stability, and the external conditions of the industry and the macro-economics environment. The SPACE, standing for Strategic Position and Action Evaluation, matrix concept is linked to how the manufacturers and traders making use of their human resources, which the author exploits theories of job resources-demand (JR-D) and socio-cognitive mechanisms for explanatory supports.

As empirically evidenced in the fourth article, a holistic approach to enterprise risk management (ERM) will benefit hotels positively. This article stands up in integrating the concept of balanced scorecard (BSC), corporate governance systems commitment and external environmental analysis, in enterprise risk management. This logical route provides a more convincing rationale support for motivating managerial, operating and supporting staffs to make use of ERM for strategy success.

The fifth article is documentary and descriptive in nature, which presents the current state of play of the Senate and political administration situations in Thailand. The author utilizes the historical evolution as the platform of argument to support the article development, which is aimed to contribute to install an effective Senate system in Thailand.

The last article articulates the significant gaps, of social atmospheric and interactions themes, and brand-service interactions, and skillfully exploits stimulus-organism-response (S-O-R) framework and theory to guide the conceptual development, for the hostel guest behaviors study. Relying upon the guest-responses data set from the city-bound hostels in Chiang Rai and Chiang Mai, the author demonstrates not only the theoretical utility of the S-O-R derived hypotheses, but also the insightful uses of some demographics and general information, through ANOVA and T-tests, for hostel management applications.

Once again, we are proud to present the six quality articles in the 4(1) issue of the International Journal of Multidisciplinary in Management and Tourism. As a closure here, we would like to invite all research scholars and practitioners to contribute your research works

with our Journal. All papers must be original, had not been published elsewhere, have not been submitted to other publication venues while submitting to us, and should be subjected to plagiarism assessment. Your manuscripts will pass through the editorial review and are sent for double-blind reviews by anonymous independent referees. Apart from research articles, we also accept quality book reviews. All accepted articles, upon appropriately revisions to the required quality and expectations, would be published online in our Journal website, and are downloadable free of charge. We recommend that potential authors review our publishing policies, manuscript requirements and formats, before submitting your manuscripts to our Journal.

Dr. Chai Ching Tan
Editor in Chief

Table of Contents

Research Articles

Conception of Local Budgeting Performance Indicators Storage*

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Abstract

The paper is devoted to the collecting, analyzing and publishing of performance information in public budgeting with new information technologies applying importance. Its implementation is proposed through the concept of using an interactive data warehouse on a countrywide scale with the local budgeting in Ukraine as an example case. The model of data storage and using concept has relied on implementation of the local budget programs performance indicators formulated. The scientific and technical conditions of data utilizing is described. The proposed model shows that the scheme of performance information flows on an example of particular types of the performance indicators, the conditions for their directly beneficial uses are determined; and the levels of qualitative and quantitative data composition for the information system were specified. In support of the data storage model conception implementation author systematizes the benefits of budget entity's performance information publicity and exploits for the further enhancement of performance information analysis in the multicriteria-based decision-making.

Keywords: local budgeting; local finance; performance budgeting; performance indicators; data warehouse; DID method; MCDM methods.

Introduction

Performance information is a cornerstone of the modern local budgeting worldwide. Citizen-oriented public service budgeting approach is gaining popularity, therefore local authorities should be interested in good image. In addition, public performance information allows the entity to compare own achievements and performance of the neighbors to see the best ways in efforts organizing. The performance indicators transparency and usefulness could be ensured by their accumulating, storage, interactive processing and further public reporting by a specialized data storage system.

This paper is devoted to the conception of creating such a system and its capabilities. We chose the performance indicators of the local budget programs in Ukraine to describe such a system with a data warehouse utilizing. Performance indicators are set from the standard list of samples in all regions and local budgets for the delegated by the state common functions (services) such as education, healthcare etc., so input data should be easily imposed into an

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interactive system, be compared and transposed to perform the other types of analysis. Therefore, following these unified indicators, one can monitor the applying of the budget programs by local authorities, the similar functions at the different local communities providing, compare the homogeneous indicators of the costs in communities and assure the local authorities with actual information about the performance indicators benchmarks over the whole country.

The author hopes that such a system will be advantageous for the motivation to engage in efficient public spending and involvement of all the budget process participants in it. The territorial communities will get the new opportunities for making decisions at a new level through the estimation methods for multi-criteria systems analysis in local finances for the local budgeting applying as well.

The Performance Information Estimation Necessity

Along the line of reasons to provide the performance indicators collection, Ukraine in particular, has gathered below based on the different topics research papers but with the lead question about performance. The first reason is that the budget process participants could increase their consciousness and discipline in general. Performance indicators that can be compared through disclosure by the regions, separate local communities and body executors' types liaise with the mitigation of the problem formulated by Throsby and Withers (1986) about "nonexcludable nature of a pure public good" and each taxpayer liability weakening in person. Development of e-governance and updated financial infrastructure require an information exchange between citizen and government in order to implement a certain chosen model of the citizens' involving into the budget process, as noted by Chadwick and May (2003).

The second reason is the budget body's activity consequences information needs the objectivity and transparency adding. Requirement of the unprejudiced data about the local budgets performance detract the "managerial games" effects with performance indicators had mentioned by Bevan and Hood (2006), when the indicators have been formulated more for third-party auditors, but not for the helpful assessment of the reaching objectives results. Lee at al. (2012) emphasized the exchange of performance information in the public sector necessity to avoid subjective electoral information and its one-sided distortions by the politicians toward citizens. Using benchmarking in the public sector, one can predict the future effectiveness of budget programs or identify effective or inefficient performers from similar institutions in such services as education, health care, social security or governance.

The third reason is a positive pattern and self-motivation for the local authorities. Moynihan and Pandey (2010) have determined that the authorities, in particular the local communities had been more successful applying of the completed and gathered performance indicators at the budgeting decisions afterwards, because managers had been looking for an efficient action examples around. This method has been used for target budgeting trough the executive contracts for the public goods serving in Denmark, when performance indicators utilized as a marker for identifying the most successful performers and drawing on their experience. Ammons and Rivenbark (2008) highlighted that managers with broad capabilities and deeper understanding of processes are more willing to use information about performance: their own internal indicators and indicators from another budget bodies as well. Publishing information at the public network increase the "transparency and accountability of the Public Administration", and the trust of people. Corruption and (or) lacking of professionalism among the government and civil servants could be minimized by increasing the transparency of providing decision's causes and consequences on the public funds spending, which it's an additional important consequence of the performance indicators publication on public.

The features of performance information applying have been identified as "a form of organizational behavior" of the public employees as discussed in Moynihan and Pandey (2010)'s model of the performance information use on local authority's example. The authors of the model found that the properties of the information depend on its provision information source. Information sharing in the public sector and the performance information exploitation directly depends on the "leadership and political support for performance management issues, and goal-oriented cultures matter, and that citizen support for and involvement in performance management processes matters". Therefore, published performance information has an affirmative impact on the moral grade of the participants, and hence behavior in the public sector in general.

The fourth reason is the New Public Management (NPM) or results-based management, which brings a huge advantage – it sets objectives, despite the disadvantages of technology. The objectives and targets are defined and, accordingly, their achievement indicators are appeared in the multiplied policy papers of many countries. NPM has such essential components as "performance-based budgets, benchmarking, activity-based costing, balanced scorecard", as well as policy objectives—quantitative ones, such as raising the literacy rate by a certain amount, or qualitative ones, such as correcting market imperfections. Performance indicators and specific objectives are primarily set by the executors in examined countries, but external centralized control is carried out in different ways: both the responsible executor and the Ministry of Finance, or by special committees, as well as by the US President or Prime Minister Offices. Performance-based budgeting and performance indicators separated out on the features in researches show that the combination of objectives, their achievement indicators and current performance indicators allows more efficient the public funds usage by getting rid of inefficient performers and unnecessary expenditures. The legal requirement for public finance transparency and public funds using assessment provided in Chapter 3 of Section 5 of the Association Agreement between Ukraine and the EU.

Example of the Performance Indicators Estimating Method

In the consideration of Ukraine's local budgeting experience, the implementation of the local budget expenditures execution in form of the budget programs in Ukraine cause the executives transition to enlarge responsibility. Local communities with their own authorities and budgets have been established within the decentralization process. Local authorities obtain the delegated obligation too. So, in Ukraine local authorities mostly lack of experience in devising of the budget programs besides the standard summary of templates provided by central authorities on the delegated functions in addition. The performance indicators data storage supposes the methods of current and final evaluation applying. The maximum global budget transparency is very important.

Today, the local budgets revenues of the territorial communities in Ukraine depend on their fiscal capacity calculation and inter-government transfers (subventions) from the central budget for the infrastructure development during the delegated functions provision, such as education, health care, social protection, environmental protection etc. Amount of this central budget support will construct a financial equalization system that has been depended on the fiscal capacity of the territorial communities in the future. The public services cost will depend on the estimation results of the received and own funds using. So, the factor of unskilled management should be eliminated as much as possible to prevent backward tendencies and equalize the fiscal capacities of the local communities.

Performance results of the budget programs are grouped according to typical examples, and each of the form has four groups of the performance indicators. The two last groups of the performance indicators are the indicators of effectiveness and the indicators of quality during

the year activities within the program boundary. We could observe, for example, the performance indicators that refer to expenditures for energy and water services (utilities). Assembled in the budget programs, indicators of efficiency and quality can be collected in a data warehouse, which also help to assess the energy saving policy of the local authorities to compare utility costs by regions. An example of the performance indicators is Table 1.

Table 1. An Example of the Performance Indicators

Performance indicators of effectiveness – The utility consumption level	**The norm indicator (N) in the whole country or in a particular region**	**Indicator accomplished in the budget program for period 1**	**Indicator accomplished in the budget program for period 2**
Heat supply (H_3) Gcal per 1 m3 of heated space.	N_h	H_1	H_2
Electricity (E), kWh/m^2	N_o	E_2	E_2
Water supply (W), cubic meters per square meter.	N_g	W_1	W_2
Quality performance indicators – the level of savings.	Based on cost savings for a specific region or the country	Indicator accomplished in the budget program for period 1	Indicator accomplished in the budget program for period 2
The level of heat supply saving (H), %	NE	EH_1	EH_2
The level of electricity saving (E), %.	NE	EE_1	EE_2
The level of water supply saving (W), %	NE	EW_1	EW_2

Simultaneously, there are the performance indicators of norm for this type of budget entities activities in comparing the results of local government energy efficiency policies with declared energy saving measures and without them by regions.

When collecting and accumulating the performance indicators of budget programs in the data warehouse, we can use different methods of estimating the outcomes of authorities implementing these budget programs. As an example, we use Difference-in-Difference (DID) estimation described in Wooldridge (2009)'s publication to evaluate performance data laid in the data warehouse. The DID method allows the data customer to compare homogeneous indicators in a service group over the years and to change the results of using services in the required group due to active energy efficiency policies of the local authorities. The method of comparing the difference in differences shows the changes in energy efficiency occur in each separate region in time. It distinguishes regions with different experiences in order to take into account its impact on the typical change of indicators in the period. The programmed estimation by the groups of typical budget programs indicators by this method focuses attention on the exceptions in the performance indicators of consumption or economy of consumption utilities between the regions. The outcomes of consumption assessing by region could become the presence or absence indicator of the changes to the energy efficiency in dynamics. Interpreting the results will depend on the tasks and conditions for receiving utilities. "Norm" in using this method can be considered a country-specific norm or performance indicators in any region in relation to which the estimation of the efficiency and quality of consumption utilities complete.

Consequently, we compare the change in the indicators in dynamics between 1 and 2 periods by regions A and B with region C, which in this case appears as "normative". For

example, regions A and B proclaim that they are pursuing an energy efficiency policy, while Region C uses energy in the usual way. Alternatively, on the contrary, region C shows the best energy savings projections from the planned ones - does it really overstate the planned performance indicators to get the best savings (quality) in their budget programs?

An adapted sequence of formulas for calculating the difference between the performance indicators of spending public funds in the community, summarizing the impact not only energy efficiency measures, will look like this:

$$\Delta uA = (I_1 - I_2) - (N_1 - N_2)$$
$$\Delta uB = (I_1 - I_2) - (N_1 - N_2)$$
$$P(AB) = [\Delta uA] - [\Delta uB]$$

Where 1 and 2 are the periods when the performance indicators were completed, A and B – the comparable regions, I – the performance indicator within a certain group, N – the indicator of a comparable certain group from the standard (neutral) region C.

The local budget program's performance indicators data storage model conception offered model proposed the continuously updated information system for providing data store with the planned and actual indicators of the local budget programs. Its concept stipulates accumulating the performance information from all local budgets and regions by exploiting any budget program's executing bodies as the first source with the putting performance indicator's attribution together in the dynamics at first. Incoming information will be supplied with the following features: by groups of the local budget programs performance indicators (under current regulations these groups are costs, product, effectiveness and quality indicators), by budget program executors, by functions that these budget programs serve, and by types (titles) of budgets and by territories. The information will be stored in a data warehouse where it should be updated in a timely manner and have basis general interactive processing of the input and current data. Output information will be displayed on a special publics accessible webpage and will be divided into the outcome of the automatic monitoring and assessment in graphic form as well as data and its analysis according to a specific user's request.

Corrado lo Storto (2014) had rated the websites by “the user cognitive system”, which enables us to adapt his inference to the baseline of using performance indicator's website. The form of information submission will vary for different user groups. For example, the representatives of the authorities need information that will immediately form overall view of the state and local authority’s policy implementation. This is, primarily, the rate of planned indicators compliance, strategies benchmarks implementing, a sample of indicators by type in the dynamics with grouping by administrative-territorial units or budgets etc. For analysts and scholars, information can be submitted in detail, unprocessed, and grouped according to the general criteria if needed: period, level of budget, budget programs objectives, planned and actual performance indicators by groups. For the citizen, information should be generalized in graphical form with low level of details and maximum visibility. These data will serve as an objective source for informing citizens about meeting their individual, special, local needs in comparison to other regions and the whole country in general. Therefore, the completed version of data warehouses' website will require the output information sorting into different levels depending on the type of user in the future.

Technical support for the data entry in the proposed model includes: (i) body’s of the State Treasury Service of Ukraine software modernization for collection of periodic reports of the spending unit's actual performance indicators; (ii) information processing, performance indicators data storage, links between the servers with information throughout the country and

common software system will furnish by local financial authorities at pattern like of the existing unified e-data portal. The State Treasury Service local bodies will provide actual information on the indicators of budget programs, and program's executors will introduce planned indicators during the development and approval of budget program passports directly in local financial authorities, as shown in Fig. 1.

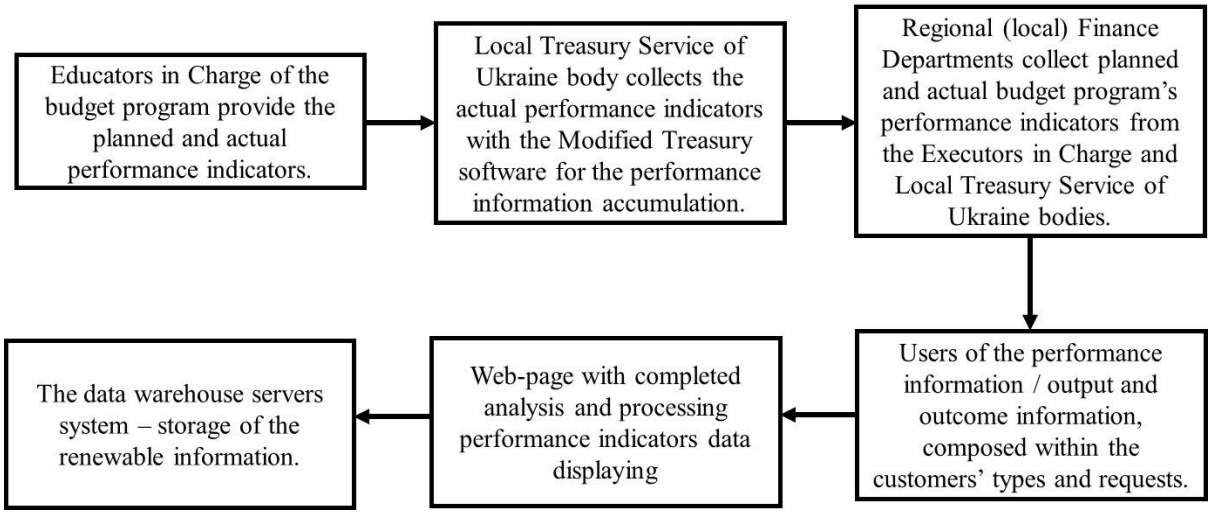

Fig. 1. Flow of information in the model

The software application and the information medium creation for data sequential input by various entities with further processing and obtaining the necessary information on the output was described by Ludwig at al. (2004). Software modules should provide a connection between territorial units, but with the possibility of layout, or switching on only selected functions such as: input, sampling, outputting information on a specified feature without processing, outputting information with the analysis results. The unified webpage needs the separately support providing.

The complications of Local Budgeting Performance Indicators Data Storage Model in Ukraine:

1. Should begin with an analysis of simple and unambiguous indicators of budget programs - performance indicators of the costs and product, which could be display in dynamics by type and territory, with the benchmarks given. Only over time, after a weighed revision, one can recommend to take into account the analysis of qualitative indicators.

2. According to the information dimensions in the accumulation of results, it is reasonable to consider the future system as Big Data in public sector under characteristics. Fig. 2 is the local performance indicators Big Data system architecture.

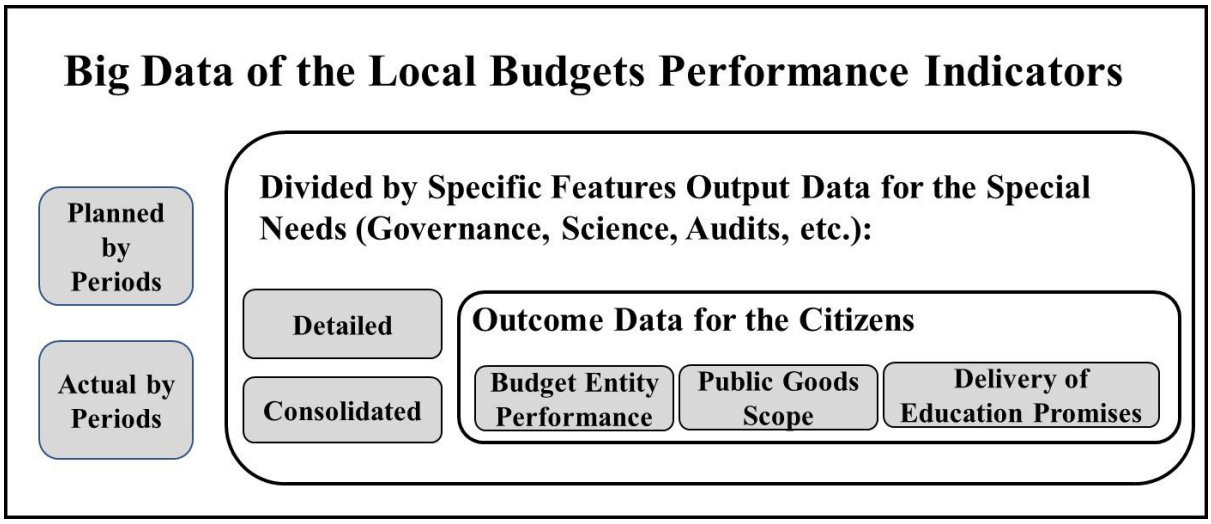

Fig. 2. Local performance indicators big data system

Further Analysis and Applying of the Performance Information

The performance indicators are divided (according to the legislation of Ukraine) into quantitative and qualitative ones. The quantitative performance indicators could be evaluated by comparing them with the averaged indicators or benchmarks for the country as a whole. DID analysis was applied to local budget programs performance indicators of utility supply among 9 regions in Ukraine. Eight of them had been compared with the 9th capital region indicators of utilities consumption after performance budget programs in 2016-2017. The results of the comparison calculations are shown in Table 2.

Table 2

Group of regions and types of the utilities	DID estimation result for the performance indicators of effectiveness	DID estimation result for the quality performance indicators
1. Heat	0,2	6,6
2. Heat	2,4	3,6
3. Heat	1,1	8,1
4. Heat	0,95	4,6
1. Electricity	6,3	11,3
2. Electricity	1,8	12,5
3. Electricity	6,3	15,8
4. Electricity	9,7	16,1
1. Water	0,07	3,0
2. Water	0,03	9,2
3. Water	0,01	7,4
4. Water	0,01	4,3

A universal user of monitoring data and estimating the contents of the data warehouse will see that the results of the electricity consumption estimate show the greatest really

significant deviations aside both the increase in consumption and the economy. Thus, it is the consumption of electricity that local authorities should give the priority in verifying.

Not only the acquisition of information about performance indicators is important, but also properly interpreting it and applying in the future. For example, the number of employees in the authority or the social assistance payment sum per the beneficiary in the community could be compared with the typical indicators for the all communities. Thus, in the list of typical budget programs and performance indicators for the service "Education", the line ministry had approved the quality indicator of secondary and primary education as the number of days the child was in the institution per year, and the product indicator - the number of children. The number of days the child was in the school, at our opinion, measures the product. Moreover, the number of students, lessons (hours) and teachers are auxiliary indicators for calculating costs. The grade of children success, the teacher qualifications and work experience, the number of students enrolled at University after school could be the qualitative indicators. Therefore, genuine quality measures need the proper development first, but the actual quality indicators should be included in data warehouse and used for monitoring until then.

The qualitative indicators assessment can be reconciled with the welfare indicators of the territory. The local authorities need such assessment to implement the most informed and cost-effective decisions. Municipal managers are forced to simultaneously evaluating various options on purpose of making such decisions for many parameters, some of them contradictory, sometimes interference factors on the final decision increase or disappeared at all. Therefore, the decision correctness and efficiency strongly depend on the formed indicators usefulness and the estimating method.

The multi-criteria decision making (MCDM) methods will provide the best further estimation under these conditions in our opinion. They allow evaluating and analyzing multi-purpose tasks with utilizing variety criteria combinations. The solution-making process constitutes a system with many inputs and outputs, so method invents criteria in the decision-making. This classical now approach serves a tool for comparing the alternatives in multi-criteria circumstances.

A number of MCDM methods usually assess and rank alternatives in the decision-making process today, and they mostly focused on the future. In this case, the alternatives integral estimation is obtained by aggregating evaluations according to the separate criteria. These methods include MOORA, ARAS, SAW, ELECTRE, TOPSIS, COPRAS, PROMETEE I, II, TOPSIS, CORPAS, VIKOR and others. Each of these methods has its own distinctions, advantages and peculiarities of application that we will consider in our further researches of this topic.

Conclusion

The proposed information system with the data warehouse creates a number of advantages in the performance information utilizing. First, the independence of local government is not violated, but its accountability is ensured. Second, performance indicators collecting and analyzing for a specific period makes possible their quantitative and qualitative composition estimating and adjust it if necessary. Thirdly, the use of modern MCDM methods for analyzing performance indicators, in combination with other economic indicators and benchmarks, will create new opportunities for researchers in order territorial and public policies formulation. The proposed system is based on only implemented in the regions local budget programs performance indicators because of the unified data. In the future, with the Big Data applying in the public sector, these storage data systems could be extended with the performance indicators of budget institutions, indicators of staff assessment, indicators of

economic progress etc. This will enhance the information evidence and its analysis possibilities.

The local budget program's performance indicators storage in form of the interactive data with open access from the moment of its setting in the plan about citizen-oriented services should become an indispensable according to the current rhetoric of the government in the near future. This data store should become the basis for monitoring and benchmarking of the particular executor's results in dynamics and the homogeneous activity of the communities too in relation to, for example, financial provision of health care or state-guaranteed education by the regions.

At the same time, it is not necessary to multiply the numbers of indicators. Perhaps such information system will be an incentive for further rational determination of the most necessary information of the budget programs indicators. Performance information should not be overburdened, and thus, the subjective internal and external influences must be eliminated. Performance indicators can be efficiently utilized only in case of clearly defined targets of activity.

In the absence of informational system, the main risk for the local budgets budget programs in Ukraine is their further formalization, which will not provide adequate information, either the efficiency of budget funds using, or effective management.

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Environmental Kuznets Curve (EKC) Hypothesis in Lao PDR: The Role of Globalization and Financial Development*

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Abstract

This paper examines the cointegration and causal relationship between economic growth, carbon dioxide emission, population density, and globalization in Lao PDR for the period from 1993-2013. The empirical analysis uses an autoregressive distributed lag (ARDL). The results confirm cointegration between the variables. Our results also confirm the presence of an environmental Kuznets curve (EKC). The findings show that income, energy consumption, and financial development have become important driving factors for the increase in the emission of carbon dioxide while globalization has no significant effect on environmental degradation. The empirical findings enable policy-makers to draw some conclusions about sustainable development in Lao PDR.

Keywords: Environmental Kuznets Curve; Financial Development; Globalization.

Introduction

Global warming and climate change are the most debatable environmental issues of our times. Industrial development is the main cause of the massive damage to the environment and economic losses from natural disasters like droughts, flooding, and heatwaves. The global impacts of climate change also have extensive effects on the well-being of humans, the existence of wildlife, and the state of the ecosystem. In Lao PDR, the economy and population are dependent on natural resources and agriculture. Hence, this dependence indicates that Laos is highly vulnerable to climate change.

Laos is one of the fastest growing economies in Southeast Asia with, on average, a rate of 7.85% per year between 2009 and 2015; and CO_2 emissions per capita increased by 208%

* The 6th Greater Mekong Sub region International Conference (GMSIC) 2019

between 2004 and 2014. As outlined in Lao PDR's eighth 5-year plan (2016-2020), the government of Lao has set a rate of 9.3% for industrial growth. This growth will increase the demand for energy that will stimulate pollution in the country. Moreover, sustainable development and environment protection are also goals (Somlith, 2016). Thus, Lao PDR faces a great challenge in accomplishing both goals of high economic growth and less environment degradation at the same time.

Since the 1980s, Lao PDR has experienced structural economic reforms because of globalization. The Lao economy has gradually become more global and has developed financially. The financial sector in Lao PDR has grown remarkably over the last decade, in particular, due to the institutions that offer services for both liabilities and assets such as microfinance institutions, saving groups, commercial banks, and insurance companies. Recent studies in Ozturk and Acaravi (2013) and Boutabba (2014) argue that financial development is an alternative source of CO_2 emission. On the other hand, Jalil and Feridun (2011) find that financial development reduces environmental pollution.

The fourth industrial revolution has increased globalization. Globalization leads to the greater integration of economies and societies (Agenor, 2002). Hence, countries around the world are more closely integrated with each other politically, economically, and culturally. Globalization enhances productivity and boosts economic activity via the transfer of technology from developed nations to developing ones. Globalization is also a significant variable that affects CO_2 emissions and the environment. Its effect on the environment is threefold: technological, scale, and compositional (Antweiler, Copeland, & Taylor, 2001). Many scholars have applied various measures to globalization to investigate its effect on environmental pollution. For instance, Shahbaz, Lean, and Shabbir (2012), Shahbaz, Kumar Tiwari, and Nasir (2013), and Boutabba (2014) show that trade openness decreases CO_2 emission due to the investment in energy-efficient technologies for production.

The remainder of this paper is organized as follows: Section 2 is a review of the literature. Section 3 presents the data and method. The empirical results are provided in Section 4 that is followed by the conclusion and policy implications in Section 5.

Lao Context

Over the last three decades, Lao PDR has experienced rapid economic growth. Before the Asian financial crisis, economic growth increased at an annual rate of 5.59% from 1986 to 1997. The average growth was about 7.82% during 2006-2016; and sectoral growth was 20.9% in agriculture, 33.2% in industry, and 45.9 % in services in 2012. Lao's economy is considered one of the fastest growing in Southeast Asia. Nonetheless, Lao PDR still has an underdeveloped infrastructure, especially in rural areas. Lao's economy has the enormous advantage of the inflows from foreign direct investment in mining and hydroelectricity (Kyophilavong, Shahbaz, Kim, & Oh, 2017).

In line with being a fast-growing economy, energy consumption has increased from 589.19 ktoe in 2013 to 613.33 ktoe in 2014 (4%). According to the report from the Ministry of Energy and Mine, the residential sector had the biggest energy use (39.68%) in 2014, followed by transportation (22.68%), commercial (9.86%), and other sectors (10.35%). In addition, CO_2 emissions increased from 0.04 metric tons per capita in 1990 to 0.29 metric tons per capita in 2014. The growth of the financial sector over the last decade raised confidence in continued foreign direct investment. Domestic credit to private sectors has been an increasing trend

(20.84% of GDP in 2010 and increased to 26.69% of GDP in 2019). A greater level of globalization in an economy can affect the emission of greenhouse gases. The globalization (measured by the KOF globalization index) of Lao PDR increased from 26.83 in 2010 to 27.07 in 2014 (26%). The KOF globalization index measured Lao's economy in 2014 as social globalization 38%, economic globalization 66%, and political globalization 26% (Dreher, 2006).

Lao PDR became a member of the Kyoto Protocol in February 2003. In order to cooperate with the Kyoto Protocol, Lao PDR must reduce the emission of greenhouse gases. While Lao PDR is not a main contributor to climate change, around 70% of its total population depends on agriculture for their livelihood. Hence, global warming and climate change can have immense impacts on people around the country from unpredictable natural disasters (UNDP, 2010). The country has concerns about the consequences of climate change to environmental sustainability, poverty reduction, human development, and economic growth.

Literature review

The existence of the environmental Kuznets curve (EKC) hypothesis has greatly attracted the attention of various scholars over the years. Studies have mostly applied the EKC hypothesis to emerging and developed countries rather than to less developed countries. The studies on EKC of different countries are presented in Table 1. To investigate whether the inverted U-shaped curve exists or not, most of the studies use different environmental degradation variables such as carbon dioxide (CO_2) emission (Ang, 2007; Iwata, Okada, & Samreth, 2010; Ozturk & Acaravcı, 2010; Marrero, 2010; Pao, Yu, & Yang, 2011), Sulfur dioxide (SO_2) emission (Llorca & Meunie, 2009), Ecological footprint (Al-mulali, Choong, Sheau-Ting, & Mohammed, 2015), and Biological oxygen demand emissions (Lee, Chiu, & Sun, 2010). Moreover, a number of variables have been applied as major determinants of environmental degradation such as GDP and GDP square (Arouri, Ben Youssef, M'henni, & Rault, 2012; Guangyue & Deyong, 2013; Shahbaz, Solarin, Mahmood, & Arouri, 2013). Studies also use other various economic indicators such as energy consumption (Ozturk & Acaravcı, 2010; Saboori, Sulaiman, & Mohd, 2012), trade openness (Halicioglu, 2009; Tiwari & Shahbaz, 2012), urbanization (Al-mulali et al., 2015), financial development (Jalil & Feridun, 2011), population growth (Ahmed & Long, 2012), and so forth. Furthermore, the empirical studies examine various countries from various regions that include the Americas (Day & Grafton, 2002; Zilio & Recalde, 2011; Hamit-Haggar, 2012; Robalino-López, García-Ramos, Golpe, & Mena-Nieto, 2014), East Asia and Pacific (Jalil & Mahmud, 2009; Lean & Smyth, 2010; Saboori et al., 2012; Chandran & Tang, 2013), Europe and Central Asia (Atici, 2009; Halicioglu, 2009; Apergis & Payne, 2010; Ozturk & Acaravcı, 2010), the Middle East and Africa (Fodha & Zaghdoud, 2010; Ozcan, 2013; Kohler, 2013; Sbia, Shahbaz, Hamdi, & Ozturk, 2014), and South Asia (Nasir & Rehman, 2011; Ahmed & Long, 2012; Tiwari & Shahbaz, 2012; Shahbaz, Lean, & Shabbir, 2012).

The studies that support the existence of an inverted U-shaped curve are presented in Table 1. In addition, they show that the EKC hypothesis commonly exists in high income and developed countries such as Canada (Hamit-Haggar, 2012), France (Ang, 2007), and Spain (Esteve & Tamarit, 2012). The upper middle-income countries such as China (Jalil & Feridun, 2011; Wang, Zhou, Zhou, & Wang, 2011), Malaysia (Shahbaz, Solarin, et al., 2013; Lau, Choong, & Eng, 2014), Tunisia (Shahbaz, Khraief, Uddin, & Ozturk, 2014; Farhani, Chaibi, & Rault, 2014), Turkey (Halicioglu, 2009; Ozturk & Acaravcı, 2010; Ozturk & Acaravcı, 2013;

Yavuz, 2014), and emerging countries (Pao & Tsai, 2010; Jayanthakumaran, Verma, & Liu, 2012; Govindaraju & Tang, 2013). On the other hand, some researchers have found that the EKC hypothesis does not support their studies such as of Llorca and Meunie (2009), Ozturk and Acaravcı (2010), Pao et al. (2011), Du, Wei, and Cai (2012), and Babu & Datta (2013). In the case of Lao PDR, there are no studies that examine the EKC hypothesis despite the phenomenal boost in its economic development. Thus, this paper is an effort to fill that gap in the EKC literature.

Table 1: Some sample studies on EKC.

Authors	**Country, period, and methodology**	**Variables use**	**EKC result**
Day and Grafton (2002)	Central and Eastern Europe 1980-2002 Fixed and random effects	CO_2, GDP, energy consumption	Yes
Ang (2007)	France 1960-2000 ARDL and VECM	CO_2, GDP, energy consumption, trade openness	Yes
Atici (2009)	Central and Eastern Europe 1980-2002 Random and fixed effect	CO_2, GDP, energy consumption, and trade openness.	Yes
Halicioglu (2009)	Turkey 1960–2005 ARDL, VECM Granger causality.	CO_2, energy consumption, GDP, trade openness	Yes
Jalil and Mahmud (2009)	China 1953-2006 ARDL, VECM	CO_2, energy consumption, GDP, financial development, trade openness.	Yes
Llorca and Meunie (2009)	China 1985–2003 Fixed effects model	SO_2, GDP, FDI, industrial output,	No
Iwata et al. (2010)	France 1960–2003 ARDL, Pair wise Granger causality.	CO_2, energy consumption, urbanization, nuclear electricity production, GDP, trade openness.	Yes
Ozturk and Acaravcı (2010)	Turkey 1968–2005 ARDL, Pair wise Granger causality.	economic growth, CO_2, energy consumption and employment	No
Marrero (2010)	Europe 1990-2006 Panel OLS, GMM and FE	CO_2, GDP, energy consumption in aggregate and disaggregate level	Yes
Lee et al. (2010)	97 countries by region. 1980-2001 Generalized Method of Moments (GMM)	Biological oxygen demand emissions, GDP, trade openness and population density.	Various

Lean and Smyth (2010)	ASEAN 1980–2006 Fisher cointegration, OLS (DOLS), VECM	CO_2, energy consumption, GDP	Yes
Apergis and Payne (2010)	Commonwealth of independent states. 1992-2004 Pedroni cointegration, OLS, and VECM	CO_2, GDP, energy consumption.	Yes
Ozturk and Acaravcı (2010)	Turkey 1968–2005 ARDL	economic growth, CO_2, energy consumption and employment	No
Pao and Tsai (2010)	Brazil, Russia, India, and China 1971–2005 Pedroni, Kao, fisher cointegration, OLS, VECM	CO_2, GDP and energy consumption	Yes
Fodha and Zaghdoud (2010)	Tunisia 1961–2004 Johansen cointegration, VECM	CO_2, SO_2, GDP	Yes
Pao et al. (2011)	Russia 1990–2007 Johansen cointegration, OLS and VECM.	CO_2, energy consumption, GDP.	No
Zilio and Recalde (2011)	Latin America and the Caribbean. 1970–2007 Pedroni cointegration	CO_2, energy supply, GDP	No
Nasir and Rehman (2011)	Pakistan 1972–2008 Johansen cointegration, VECM	CO_2, GDP, energy consumption, trade openness.	Yes
Jalil and Feridun (2011)	China 1953-2006 ARDL, VECM	CO2, energy consumption, GDP, financial development, and trade openness	Yes
Wang et al. (2011)	China 1995–2007 Pedroni cointegration and VECM	CO_2, GDP and energy consumption	No
Pao et al. (2011)	Russia 1990–2007 Johansen cointegration, OLS, VECM	CO_2, energy consumption, GDP	No
Arouri et al. (2012)	MENA 1981-2005 CCE, bootstrap panel test cointegration, and VECM	CO_2, GDP, and energy consumption.	No
Hamit-Haggar (2012)	Canada 1990–2007 FMOLS, VECM	CO_2, GDP	Yes
Saboori et al. (2012)	Malaysia	CO_2, GDP	Yes

	1980–2009 ARDL and VECM		
Ahmed and Long (2012)	Pakistan 1971–2008 ARDL	CO_2, energy consumption, GDP, trade openness, and population growth.	Yes
Tiwari and Shahbaz (2012)	India 1966–2011 ARDL and VECM	CO_2, energy consumption, GDP, and trade openness.	Yes
Shahbaz et al. (2012)	Pakistan 1971-2009 ARDL and VECM	CO_2, GDP, energy consumption, and trade openness.	Yes
Esteve and Tamarit (2012)	Spain 1857–2007 VECM	CO_2 and GDP	Yes
Jayanthakumaran et al. (2012)	China and India 971–2007 ARDL	CO_2, energy consumption, GDP, trade openness.	Yes
Du et al. (2012)	China 1995-2009 FE and GMM	CO_2, GDP, urbanization, industrial composition, energy consumption, technology progress, trade openness.	No
Guangyue and Deyong (2013)	China 1990-2007 CEDW, DF, ADF and PLS.	CO_2 and GDP	Various
Sbia et al. (2014)	UAE 1975–2011 ARDL and VECM	Electricity consumption, Growth, CO_2, urbanization.	Yes
Shahbaz et al. (2013)	Malaysia 1970-2011 ARDL and VECM	CO_2, GDP, financial development, energy consumption, trade openness.	Yes
Chandran and Tang (2013)	ASEAN 1971-2008 Johansen cointegration, VECM	CO_2, energy consumption for road transportation, GDP.	No
Ozcan (2013)	Middle East 1990–2008 Pedroni cointegration, FMOLS and VECM	CO_2, energy consumption, GDP	No
Kohler (2013)	South Africa 1960-2009 ARDL and VECM	CO_2, GDP, energy consumption, trade openness.	Yes
Ozturk and Acaravcı (2013)	Turkey 1960–2007 ARDL	Financial development, trade, economic growth, energy consumption, CO_2	Yes
Govindaraju and Tang (2013)	China and India 1965–2006 Johansen, ECM and VECM	CO_2, GDP and Coal consumption	No
Babu and Datta (2013)	Development countries 1980-2008 Fixed effect	Environmental degradation index, GDP, and population.	No

Shahbaz et al. (2014)	Tunisia 1971–2010 ARDL and VECM	CO_2, energy consumption, GDP and trade openness.	Yes
Farhani et al. (2014)	Tunisia 1971–2008 ARDL and VECM	CO_2, energy consumption, GDP and trade openness.	Yes
Yavuz (2014)	Turkey 1960–2007 Johansen cointegration, Gregory–Hansen cointegration, OLS and FMOLS model.	CO_2, energy consumption, GDP	Yes
Al-mulali et al. (2015)	99 countries classified by income level. 1980-2008 GMM and Panel	Ecological footprint, GDP, energy consumption, urbanization, trade openness, and financial development.	Yes

Model and methodology

To establish the relationship between the selected variables for Lao PDR, the following model is introduced:

$$C_t = f(E_t, Y_t, Y_t^2, F_t\ G_t) \quad (1)$$

Where C_t is CO_2 emission per capita, E_t is per capita energy consumption, Y_t is GDP per capita, Y_t^2 is GDP squared per capita, F_t defines financial development, and G_t refers to the KOF globalization index. All data are transformed into natural logarithms following Shahbaz et al. (2012) and Ozturk and Acaravci (2013). Hence, the form of our model is rewritten as follows:

$$Ln\ C_t = \beta_0 + \beta_1\ LnE_t + \beta_2\ LnY_t\ +\ \beta_3\ Ln\ Y_t^2 +\ \beta_4\ Ln\ F_t + \beta_5\ Ln\ G_t +\ \varepsilon_t \quad (2)$$

Where ε_t is the standard error term assumed to be a normal distribution.

Since the increase in energy consumption leads to higher economic activity that triggers CO_2 emissions, the sign for $\beta_1$should be positive. The EKC hypothesis displays that β_2 should be positive whereas β_3 should be negative. The sign of β_4 may be positive or negative depending on the level of economic development in the country. The expected sign for globalization is positive or $\beta_5 > 0$ if energy-efficient technology via foreign investment and trade is encouraged for domestic products otherwise $\beta_5 < 0$.

The accessibility of proper data is the most significant part of any research. We have used data on CO_2 emissions (metric tons per capita), real GDP per capita (constant 2010 US$), and the financial development indicator (domestic credit provided by financial sector, % of GDP) from World Development Indicators. The data on globalization come from the economic, social, and political globalization sub-indices that were borrowed from Dreher (2006). Moreover, the data on energy consumption per capita (kg of oil equivalent) were collected from the Ministry of Energy and Mine, Lao PDR (unpublished). This study

concentrates on the period from 1990 - 2014 based on the availability of annual data. We analyze the cointegration and causal relationships between economic growth, carbon dioxide emission, energy consumption, globalization, and financial development in Lao PDR. Furthermore, we test the long-run relationships among the series by applying the ARDL bounds testing approach to cointegration.

ARDL bounds testing

The determination of the existence of cointegration among variables is considerable. The existence of cointegration among variables not only means a long-run equilibrium relationship but it also assures consistent results when the ordinary least square method is applied to the estimation of the coefficients.

The ARDL bounds testing approach of cointegration is a new method that was established by Pesaran, Shin, and Smith (2001). This approach has various advantages compared to other cointegration approaches. First, we do not have to have all variables in the system to be in the same order of integration. Second, Haug (2002) argues that this technique provides better results for small samples in comparison to other cointegration techniques such as the versions presented in Engle and Granger (1987), Johansen and Juselius (1990), and Phillips and Hansen (1990). Third, we can distinguish between the long-run as well as the short-run relationships between the independent variables and the dependent variables. In addition, it allows the variables to have various optimal lags. However, it does not allow the order of integration of any of the variables to be bigger than one such as the I(2) variable. Thus, it is essential to identify the unit root to ensure that all variables qualify the underlying assumption of the ARDL bounds testing to cointegration.

In order to apply the ARDL, we construct the Unrestricted Error-Correction Model (UECM). The UECM is used to examine long-run and short-run relationships among variables as follows in Equation (3):

$$\begin{aligned}\Delta lnC_t = \theta_0 &+ \sum_{i=1}^{n} \theta_{1i} \Delta lnC_{t-i} + \sum_{i=0}^{n} \theta_{2i} \Delta lnE_{t-i} + \sum_{i=0}^{n} \theta_{3i} \Delta lnY_{t-i} \\ &+ \sum_{i=0}^{n} \theta_{4i} \Delta \ln Y_{t-i}^2 + \sum_{i=0}^{n} \theta_{5i} \Delta lnF_{t-i} + \sum_{i=0}^{n} \theta_{6i} \Delta lnG_{t-i} + \delta_1 lnC_{t-1} \\ &+ \delta_2 lnE_{t-1} + \delta_3 lnY_{t-1} + \delta_4 \mathrm{n} Y_{t-1}^2 + \delta_5 lnF_{t-1} + \delta_6 lnG_{t-1} + \varepsilon_t \end{aligned} \quad (3)$$

Fundamentally, Equation (1) uses the OLS technique. Then the computed F-statistic needs to be calculated. Equation (3) shows two segments of results. The first part presents the short-run parameters for instance $\theta_1, \theta_2, \theta_3, \theta_4, \theta_5$, and θ_5; while $\delta_1, \delta_2, \delta_3, \delta_4, \delta_5$, and δ_6 show the long-run relations among the selected variables. The "*k*" represents the number of lags, and "*t*" represents the trend variables.

The null hypothesis of no long-run cointegration for the F test is $H_0 = \delta_1 = \delta_2 = \delta_3 = \delta_4 = \delta_5 = \delta_6 = 0$ $H_1 = \delta_1 \neq \delta_2 \neq \delta_3 \neq \delta_4 \neq \delta_5 \neq \delta_6 \neq 0$ that is examined against its alternative. The computed F-statistic is compared with the critical bounds in Pesaran, Shin, and Smith (2004), which are known as lower critical bounds (LCB) and upper critical bounds (UCB). The existence of cointegration among the variables can be determined if the estimated

F-statistic is greater than the UCB, which rejects the null hypothesis for no cointegration. If the estimated F-statistic is lower than the LCB, then the null hypothesis for no cointegration is accepted.

Another way to determine the presence of a long-run relationship is to replace the lagged level variables with an error-correction term (ECT) and estimates for its coefficient and statistical significance. In order to get these coefficients, the short-run error-correction model in equation (3) needs to be examined. Then the ECT can be computed as the sum of the lagged level term that applies the calculates of δ_1. After that, the lagged level term in each equation is substituted by the lagged value of formed ECT. The error-correction model (ECM) is examined one more time with the same optimal selected lags. The ECT presents the speed of adjustment and indicates how quickly the variables return to the long-run equilibrium. The AIC and SBC criteria are used to choose the optimal lag length. The expected sign of its coefficients should be negative and statistically significant. The ECM is generated in Equation (4).

$$\Delta lnC_t = \theta_0 + \sum_{i=1}^{n} \theta_{1i} \Delta lnC_{t-i} + \sum_{i=0}^{n} \theta_{2i} \Delta lnE_{t-i} + \sum_{i=0}^{n} \theta_{3i} \Delta lnY_{t-i} + \sum_{i=0}^{n} \theta_{4i} \Delta \ln Y_{t-i}^2 + \sum_{i=0}^{n} \theta_{5i} \Delta lnF_{t-i} + \sum_{i=0}^{n} \theta_{6i} \Delta lnG_{t-i} + + \psi ECT_{t-1} + \varepsilon_t \quad (4)$$

The goodness of fit for the ARDL model is also checked with the diagnostic tests such as serial correlation, normality, and heteroscedasticity. Furthermore, we also compute stability tests for the stability of long-run and short-run estimates through the cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ), which are introduced by Durbin, Brown, and Evans (1975).

Empirical results and discussion

This paper uses the augmented Dickey and Fuller (Phillips & Hansen, 1990) and Phillips and Perron test (Phillips & Perron, 1987). The null hypothesis in both tests states that the variables include a unit root against the alternative of stationary. Table 2 shows the results of the ADF, and Table 3 shows the results from the PP tests of the level and first difference of the variables. The results show that none of variables is I (2) or beyond.

Table 2: ADF Unit root test results.

	Variable	**ADF test statistics**		
		None	Intercept	Trend and Intercept
Level	LnC	-2.357053**	-1.686800	-1.393700
	LnY	2.705362	5.934857	-1.068972
	LnY^2	2.582590	7.532620	-0.507142
	LnG	2.899825	-1.884308	-0.824195

	LnE	4.059185	4.048041	1.552588
	LnF	0.909214	-2.076690	-2.365478
First difference	LnC	-3.984397***	-4.502597***	-4.504989***
	LnY	0.685786	-2.152744	-4.709473***
	LnY^2	0.948262	-1.710860	-4.596922***
	LnG	-1.789903*	-4.915700***	-5.170761***
	LnE	-0.314390	-4.360697***	-4.828106***
	LnF	-3.700686***	-3.951794***	-3.808721**

Note: The ***, **, and * denote the statistical significance at the 1%, 5%, and 10% levels respectively.

Table 3: PP Unit root test results.

	Variable	**PP test statistics**		
		None	None	None
Level	LnC	-2.373599**	-1.393404	-1.686800
	LnY	13.11075	5.874444	-1.080210
	LnY^2	13.53576	7.485001	-0.518968
	LnG	2.915271	-1.884308	-0.824195
	LnE	3.779445	2.458860	-1.133427
	LnF	1.013319	-1.100113	-1.688023
First difference	LnC	-3.978638***	-4.502654***	-4.491987***
	LnY	0.447053	-2.995608*	-4.709473***
	LnY^2	0.665271	-2.423309	-4.596922***
	LnG	-4.005778***	-4.911359***	-5.155170***
	LnE	-2.774942***	-4.355811***	-5.927244***
	LnF	-3.602911***	-3.602911**	-3.482568***

Note: The ***, **, and * denote the statistical significance at the 1%, 5%, and 10% levels respectively.

The ARDL bounds testing requires the lag length for the variable to ensure that the classical assumptions are not violated. Based on the minimum value of the Akaike Information

Criteria (AIC), the optimum lag order is (1, 1, 1, 0, 1, 1). The result in Table 4 shows that the F-statistic is greater than the UCB. Thus, cointegration exists among the variables.

Table 4 presents the long-run cointegration results with the diagnostic tests such as serial correlation, normality, and heteroscedasticity. The results establish the existence of the EKC with positive and negative coefficients for $\ln Y$ and lnY^2.

Table 4: The results of ARDL cointegration.

Maximum lag imposed	AIC optimal lags	F-statistic at AIC-selected optimal lags	Result
1	(1, 1, 1, 0, 1, 1)	10.26841***	Cointegrated
Critical Value for F-statistics		Lower Bounds I(0)	Upper Bounds I(1)
1%		3.74	5.06
5%		2.86	4.01
10%		2.45	3.52

Note: ***, ** and * denote the statistical significance at 1%, 5% and 10% level respectively.

Specifically, the turning point of real GDP per capita is $Y^* = -\beta_2/2\beta_3$. This paper proposed that CO_2 emission per capita triggers an increase in income but after a certain level of income, which is the turning point, it begins to fall. The turning point of real GDP per capita out is 6.237, and the result is computed as a logarithm. Hence, our converted turning point is 511.322 US$.

Table 5 shows a 1% increase in GDP leads to a 203.476 % increase in CO_2 emission in the long run. The coefficient for lnE indicates that a 1% increase in energy consumption leads to a 11.961% increase in CO_2 emission. In addition, a 1% increase in financial development leads to a 0.525% increase in CO_2 emission. All the mentioned coefficients are statistically significant. However, lnG is statistically insignificant.

The short-run estimation results are also provided in Table 5. The sign of the coefficients for $\ln Y$ and lnY^2 do not support the existence of the EKC hypothesis for Lao PDR over the sample period. The coefficient for lnY indicates that a 1% increase in GDP leads to a 429.425% decrease in CO_2 emission. In addition, the coefficient for lnE indicates that a 1% increase in energy consumption leads to a 1.969% decrease in CO2 emission.

The estimate of the lagged error-correction term (ECT_{t-1}) is negative and statistically significant (-0.539) at the 1% level. This significance validates our earlier formed long-run relationship between the variables. Hence, we conclude that the adjustment from the short-run to the long-run equilibrium path is 53.9%. Our model passes all the diagnostic tests easily, and we find no evidence of serial correlation or heteroscedasticity.

Table 5: Long- and short-run analysis.

Long-run relationship			
Variable	**Coefficient**	**t-Statistic**	**Probability**
Dependent variable = C			
Constant	-699.3734	-2.693659	0.0246
LnY	203.4766	2.692730	0.0247
LnY^2	-16.31176	-2.686908	0.0249
LnG	-1.617506	-0.790379	0.4496
LnE	11.96164	2.081949	0.0671
LnF	0.525695	2.249239	0.0511
R-squared	0.987940	F-statistic	73.72595
Adjusted R-squared	0.974540	Prob(F-statistic)	0.000000
Short-run relationship			
ΔLnY	-429.4053	-10.59549	0.0000
ΔLnY^2	33.78499	10.67727	0.0000
ΔLnE	-1.969331	-2.317728	0.0457
ΔLnF	0.081306	1.627712	0.1380
ECT_{t-1}	-0.539293	-10.94523	0.0000
R-squared	0.900363	F-statistic	
Adjusted R-squared	0.873794	Prob(F-statistic)	
Diagnostic Checks			
Serial correlation LM		0.478472 (0.3004)	
ARCH test		1.477498 (0.2177)	
Normality test		0.606374 (0.738461)	
Heteroscedasticity test		1.139947 (0.3440)	
Ramsey reset test		0.003928 (0.9516)	

Moreover, due to structural changes in the Lao economy, it is likely that the macroeconomic variables may be subject to one or more structural breaks. For this reason, the stability of the short-run and the long-run coefficients are checked through the cumulative sum (CUSUM) and cumulative sum of squares (CUCUMSQ) test suggested by Durbin et al. (1975). The results of the stability test (CUSUM & CUSUMSQ) are provided in Figs. 1 and 2. We discover that our graphs are both inside the critical bounds (red lines) at the 5% level. These levels ensure that our model is reliable and consistent.

Fig.1. Plot of cumulative sum of recursive.

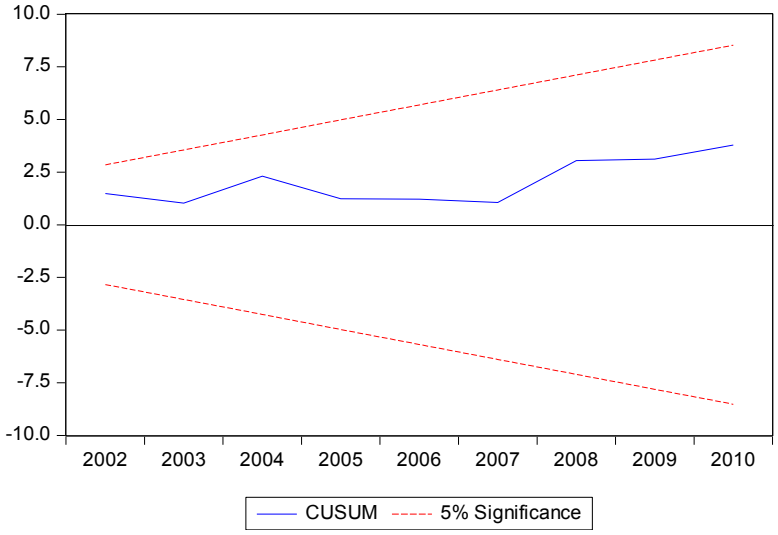
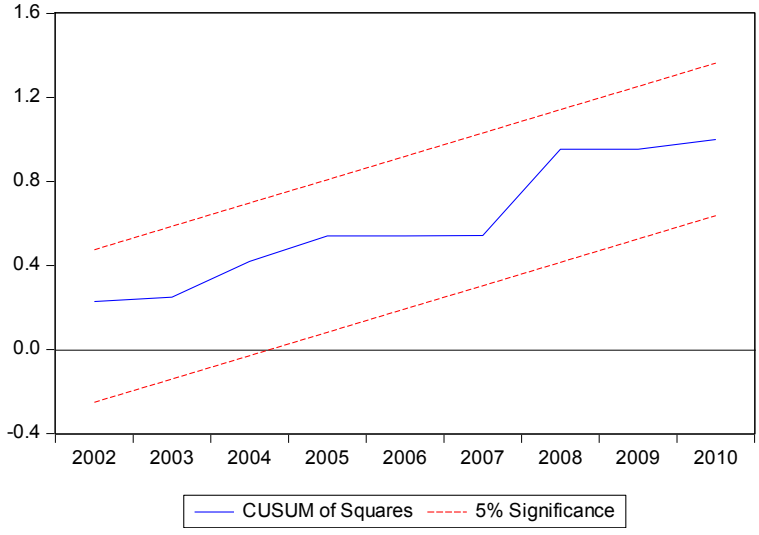


Fig.2. Plot of cumulative sum squares of recursive.



Conclusion

This paper examines the cointegration between CO2 emission, energy consumption, financial development, and globalization in Lao PDR for the period from 1990-2014. To realize the aim of this research, we use the ARDL technique introduced by Pesaran et al. (2001). The bound F-test for cointegration gives evidence of a long-term relationship among the respective variables.

The positive signs of the linear and nonlinear confirm that the existence of the EKC hypothesis supports this country only for the long run. This finding means that CO2 emission increases with income but after a certain level of income, it starts to fall as more efficient technology and energy conservation are utilized during the nation's development progress. We find that globalization has no significant impact on CO2 emission. Furthermore, the results also indicate that income, energy consumption, and financial development are important

contributors to the increase in CO2 emission. These results are in line with the findings obtained for Pakistan (Javid & Sharif, 2016). This study suggests that the government of Lao PDR should plan new environmental policies to reduce environmental pollution and conserve the well-being of the Lao people.

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The SPACE (Strategic Position and Action Evaluation)-Driven Strategic Insight for the Pineapple Manufacturers and Traders

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Abstract

SPACE (Strategic Position and Action Evaluation) matrix is a useful strategic management tool, and is used in this study to provide strategic insights for the pineapple manufacturers and traders in Chiang Rai. In the SPACE framework, competitive advantage and financial stability are the two important determinants for firms to position and formulate competitive strategies, and are shown to be positively related to operations resources determined by job resources, job demand, and motivational incentives. These factors provide the base to influence the perceived behavioral control of the employees, leading to the buildup of psychological thrust to commit to execute jobs to expectation. Numerous aspects of theoretical contributions, in the aspect of RBV (Resource-based View of competition), and linking employee-level contributions to competitive advantages and strategic postures, are thus made possible.

Keywords: Competitive advantage; JD-R, organizational performance; RBV; SPACE matrix

Introduction

Without proper and clear strategic position, or long-term measures, the pineapple industry in Chiang Rai will continue to face periodic uncertainty in dealing with oversupply, which often cause prices to drop and farmers suffer. Until now, most measures are short-term basis, i.e., government setups emergency funds (Fruit Crop Online, 2019), and makes use of its institutional structure in the province to purchase pineapples for sales at various department stores and shops (The Thaiger, 2018).

There are many reasons, but mainly due to unorganized or systematic strategic management effort of the industry. Reasons often cited are that there are no local sales or collective points to help distribute the over-supplied pineapples, and further argued that the farmers are required to travel long distances to reach pineapple manufacturers, such as those in the eastern province of Rayong or the province of Prachuap Khiri Khan in the upper southern region. Associated with the far-distance on logistics and lacking of the financial ability of the farmers to hire workers for harvesting, many farmers are forced to leave their pineapples to ripen and rot in the fields. Albeit the inherent weaknesses unresolved, Thailand is still one of

the largest producers and exporters of agricultural products that are acceptable to international markets, and pineapple industry is among the leading potentiality (Eapsirimetee, Suthikarnnarunai & Harnhiran, 2013). Fig. 1-2 show that pineapples lead other agricultural product exports from Thailand.

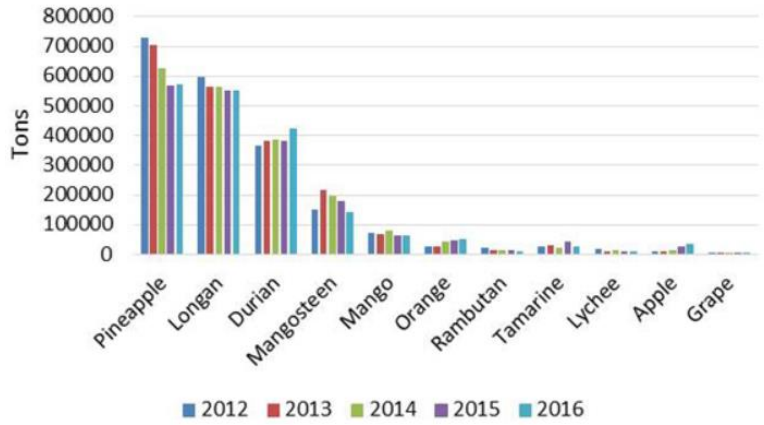


Fig. 1: Export Volume of Fruits in Thailand
Source: Win (2017)

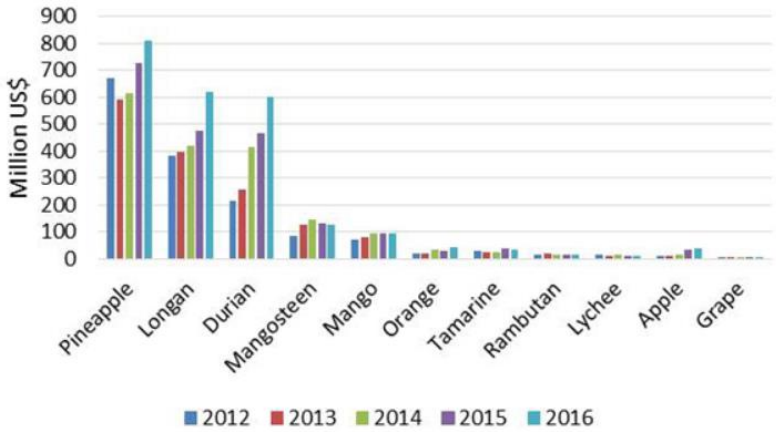


Fig. 2: Export Value of Fruits in Thailand
Source: Win (2017)

Thailand occupies about fifty per cents of the global market share in the production and export of pineapples (Thai Pineapple Industry Association, 2017), mainly contributed by the Southern part of the country (Kodanmal Group Limited Company, 2017). Ranked among the pineapple by-products exported are canned pineapples, at USD 615 million in 2016 (Department of Agricultural Extension, 2017), followed by juice, frozen and dried pineapples.

The objective of this study is to provide a snapshot of some representative manufacturers and traders of pineapples in A. Mueang of Chiang Rai in terms of their perceived competitiveness states in the industry, and suggest strategy position posture that could help them improve their business performances. Along with this objective, a comparison of their perceptions, in between manufacturers and traders, and their managers and workers, is presented. In addition, a relationship of organizational factors in support of workforce-

contributed organizational performance, is examined, which is further linked to the resulting perceived competitiveness states, both internally and externally.

Literature Review

Evidences in both academic publications and the practicing worlds recognize that competition is at the core of the success or failure of any organization (Tan, 2018). That is, organization develops business strategy in order to compete effectively (Jermias, 2008). Based on the "strategy as positioning" concept (Tan, 2018), to compete to one's advantage, organization must find a suitable position in the industry.

The SPACE – which is a more objective approach of SWOT analysis – is a valuable method guiding organization to formulate a suitable strategic position in the industry to realistically and effectively make use of both internal and external competitiveness and performance conditions. The internal states are determined by: (1) Competitive advantage, (2) Financial stability, and the external states are determined by (1) Industry strength, and (2) Environmental stability, as shown schematically in Fig. 3.

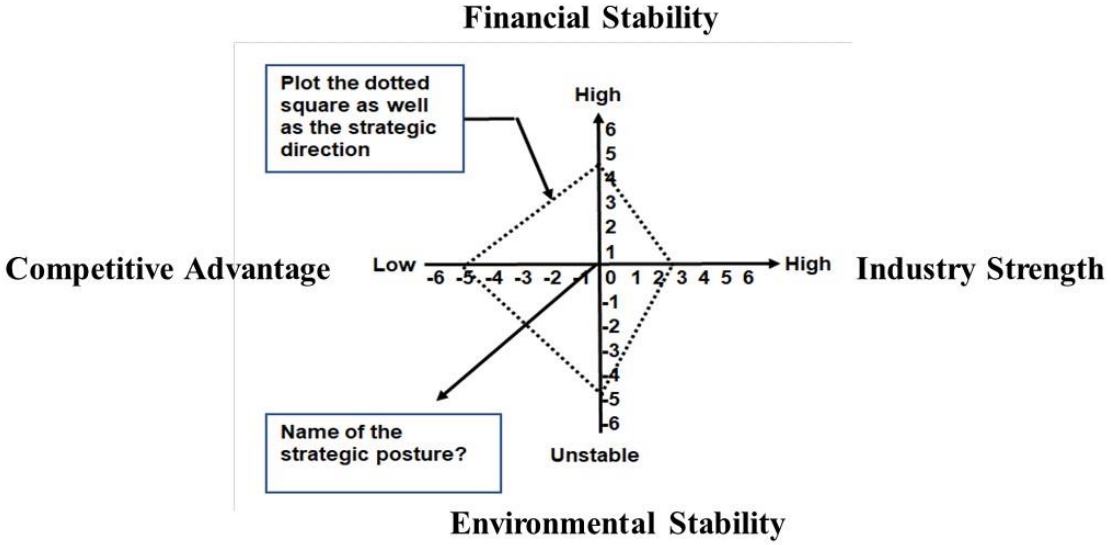


Fig. 3: The SPACE Analysis Framework

Two notable strategic positions for competitive advantage are widely acknowledged, namely price leadership and product differentiation. For product differentiation, company must attempt to identify unique value which the customers are willing to pay. Companies with unique competitive advantage, in that the companies choose product features strategically in response to existing or anticipated actions of competitors, can allow them to position competitively or advantageously in brand space uniquely. Companies with cost leadership positioning should demonstrate the ability to realize advantages of cost efficiency and acquire the ability to make use of economic profits (Spulber, 2009). The sources of competitive advantage, according to Porter (1985), have to be linked to the activities that pervade the value chain.

In reality, the nature of competitive advantage is beyond cost leadership and differentiation, and could involve product quality, delivery reliability, process flexibility

(Rosenzweig, Aleda & James, 2003) or a host of other factors. In short, competitive advantage demonstrates as anything separating the organization from the others and keeps it alive and growing (Švárová & Jaroslav, 2014). Companies need to recognize that competitive advantage can only be developed over long periods of time (i.e., path dependence) (Barney, 2001), such as in how organization trains its employees, and puts to efficient and effective contributions.

Though SPACE matrix concept has been examined and studied in many places, such as in Radder and Lynette (1998), the usage is isolated and independent of other context or variables. If that is so, SPACE usefulness would be very limited, and serves only as SWOT analysis. Thus, this research proposes that employees should be an important basis to contribute to the internal factors of SPACE states of the organization, namely 1) competitive advantage, and 2) financial stability to contribute to the strategy position posture of the organization.

In particular, the following theoretical direction, illustrated in Fig. 4, is assumed and to be empirically assessed:

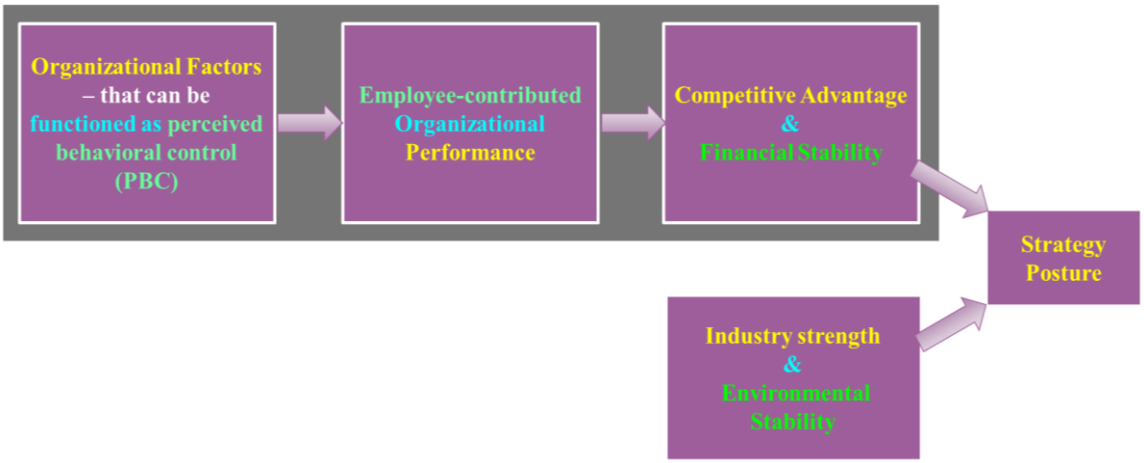


Fig. 4: Theoretical Framework

Note that this framework, if validated with significant differences, statistically, can be another empirical test and example supporting the validity of the resource-based theory of competitive advantage. The performance measures employees-related and contributed organizational performance, and can be used to serve to track the implementation of the business strategies, and to indicate the effectiveness of the strategic position in the industry (Simons et al., 2000).

Method

Qualitative

This study conducts interviews to identify the factors to enrich the understanding according to the theoretical framework that aims to point out the competitiveness states of the business, suggest strategic postures, and to point out how the managerial perceptions of employee work contributions are supportive of the perceived competitiveness states as determined by the SPACE matrix.

Quantitative

This study further conducts quantitative approach in order to design and get the managers and employees to fill up the questionnaires for comparative study purpose. The data is analyzed by use of correlations and simple regression analysis, and perceptual gap analysis.

SPACE Analysis

SPACE method exploits case study method, by taking the form of qualitative interviews with the managers. SPACE stands for Strategic Position and Action Evaluation, which is one of the strategic management tools that have gained "high reliability for considering macroeconomic, microeconomic and financial factors in the process of determining the position of the organization" (Tafti, Esmaeil & Leila, 2013).

The SPACE matrix is formed of both internal and external dimensions of strategic importance to organization. The internal dimension is described by competitive advantage and financial stability. The external dimension is described by environmental stability and industry strength.

The collective assessments of both internal and external dimensions of strategic conditions lead to four possible strategic postures an organization can position itself in its industry: (1) Aggressive, (2) Competitive, (3) Conservative, and (4) Defensive. Aggressive position posture – is typical in an attractive industry (high industry strength) with stable economic conditions. A competitive position posture – is characteristic of an attractive industry (high industry strength) in a relatively unstable environment. Conservative position posture – is distinctive of a low growth but stable market. The focus is on financial stability, while product competitiveness is the critical factor (Radder & Lynette, 1998). Defensive position posture – is an unattractive industry where competitiveness is the critical factor. In short, SPACE matrix is used to assess and propose coherency of business strategy in matching both the internal and external environment (Sabherwal & Yolande, 2001).

Data Analysis and Result

The surveyed demographics are shown in Fig. 5-7, which highlights that 58% are manufacturers, and 42% are traders. There are 5 manufacturers (M) participated, and seven traders (T) participated. Twenty-six per cents are located in Thasud, Chiang Rai, 30.1% located in Nang Lae, Chiang Rai, and 43.9% located in Ban Du, Chiang Rai.

Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manufacturer	181	58.0	58.0	58.0
	Trader	131	42.0	42.0	100.0
	Total	312	100.0	100.0	

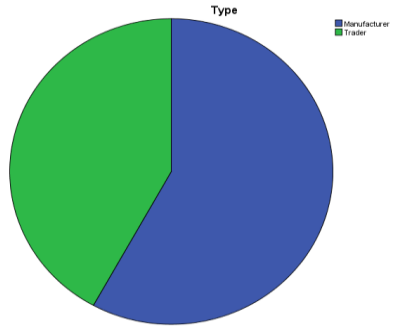


Fig. 5: Demographics – Business Type

Company Code

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	M1	47	15.1	15.1	15.1
	M2	38	12.2	12.2	27.2
	M3	35	11.2	11.2	38.5
	M4	30	9.6	9.6	48.1
	M5	31	9.9	9.9	58.0
	T1	21	6.7	6.7	64.7
	T2	18	5.8	5.8	70.5
	T3	10	3.2	3.2	73.7
	T4	15	4.8	4.8	78.5
	T5	20	6.4	6.4	84.9
	T6	22	7.1	7.1	92.0
	T7	25	8.0	8.0	100.0
	Total	312	100.0	100.0	

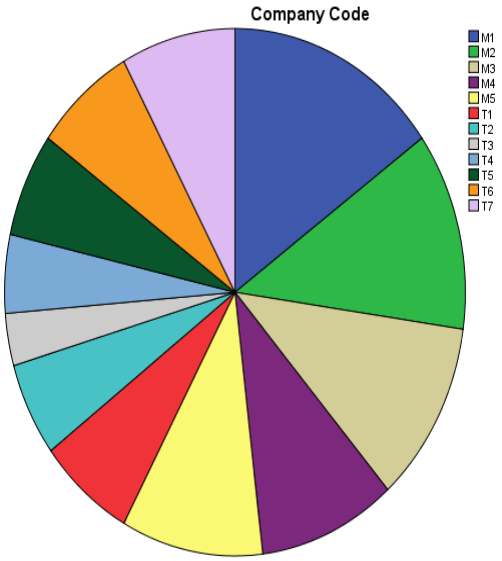


Fig. 6: Demographics – Company Code

Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Thasud	81	26.0	26.0	26.0
	Nang Lae	94	30.1	30.1	56.1
	Ban Du	137	43.9	43.9	100.0
	Total	312	100.0	100.0	

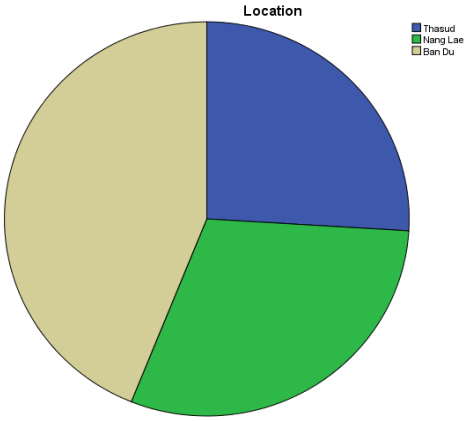


Fig. 7: Demographics Data – Company Location

The interviews lead to the identification of themes "job resources-job demand", and motivation-related organizational factors that the managers perceived important to drive workforce contribution to support organizational performances:

> "Job resources i.e., guideline for production, work condition, supervisory support, and team spirit", "job demand i.e., operations requirement for time to completion," and "motivation i.e., salary." From the theory of planned behavior, the employees would perceive these factors as perceived behavioral control (PBC).

In the aspect of workforce-contributed organizational performance, the managers point out three important aspects, namely:

> Cognitive – in terms of ideas and problem-solving contribution, which is a sort of extra-role and in-role behavioral contribution to the organization.
> Organizational – i.e., process improvement, product quality, on-time delivery.
> Affective – i.e., feeling and job commitment, which is the affective necessity for organizational performance.

The positive relationship between PBCs and the perceived organizational performance is evidenced in Fig. 8.

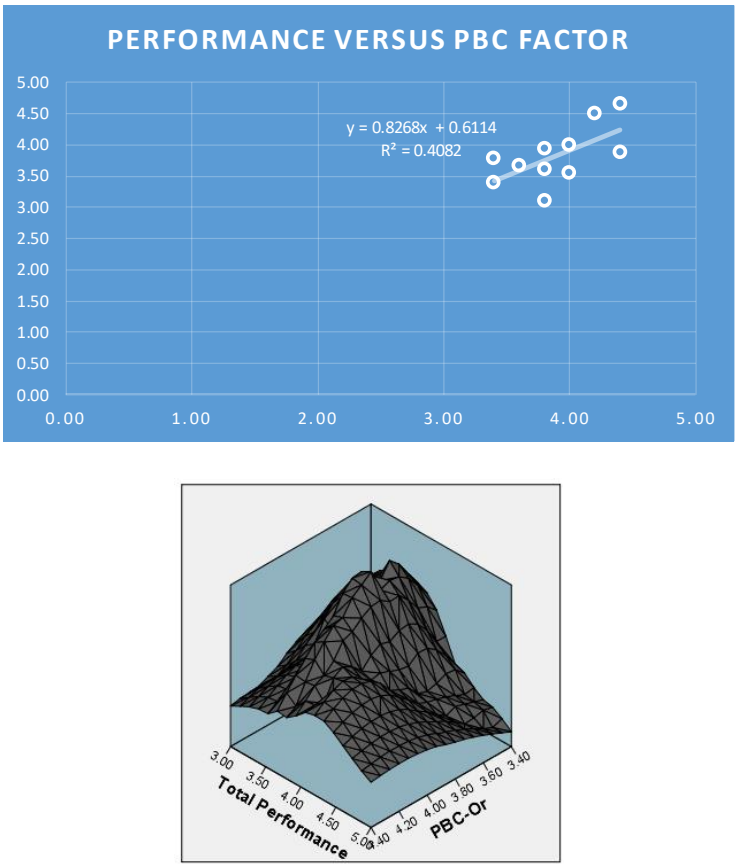


Fig 8: Performance versus Perceived Behaviors Control Factor

The employee-induced performance can directly contribute to improve the competitive advantage and financial stability of the organization, as shown in Fig. 9. Nevertheless, Fig. 9 indicate two obvious clusters, namely the manufacturers and the traders, with the lower level of values corresponding to the traders shown in the front portions of the 3D density plots. The companies with higher perceived competitive advantages also show better financial stability.

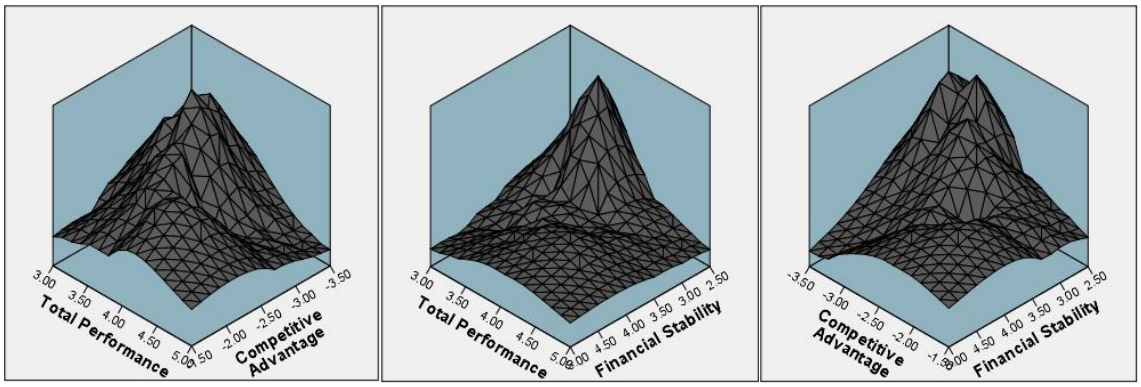


Fig. 9: Linking between Organizational Factors and Performance

Apart from the 3D density plots, the perceptual gaps between the manufacturers (5 of them) and the traders (7 of them), and between the managers (12) and the employees (312) participated in the surveys can also be shown in Fig. 10.

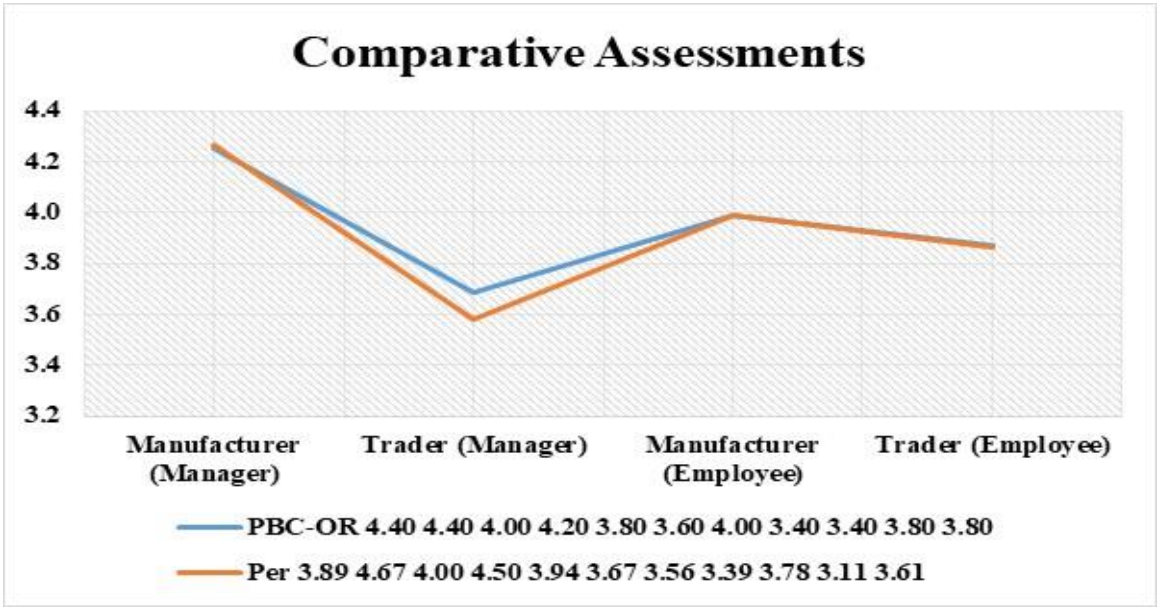
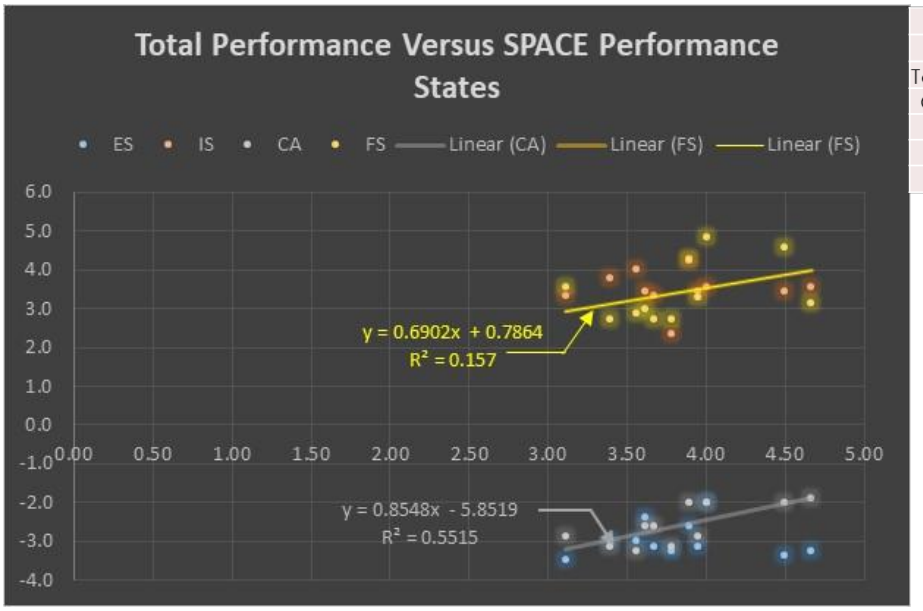


Fig. 10: Perceptual Gaps between Manufacturers and Traders, and between Managers and Employees

We also found that the workforce-contributed organizational performance is shown more able to predict the internal competitive advantage of the company than financial stability. No significant pattern is obvious on the external conditions – both environmental stability and industrial strength, as shown in Fig. 11.



Bivariate Correlations

	Total	CA	FS	ES	IS
Total	1				
CA	0.74	1			
FS	0.40	0.73	1		
ES	-0.01	0.30	0.37	1	
IS	0.01	0.27	0.29	0.32	1

Fig. 11: Simple Regression Analysis and Correlations

In view of the external competitive conditions (industry strength and environmental stability) and the strengths and weaknesses of the pineapple factories (characterized by competitive advantage and financial stability), the SPACE analysis, as shown in Table 1, suggests it is more appropriate to formulate competitive strategies using "aggressive posture" for the manufacturers, and "competitive posture" for the traders.

Table 1: The SPACE Outcome

	ES	IS	CA	FS	CA+FS		IS+CA	FS+ES	Strategic Position
	Average	Average	Average	Average	CA+FS	ES+IS			
	ES	IS	CA	FS					
	-2.6	4.2	-2.0	4.3	5.9	5.4	2.2	1.7	Aggressive Posture
	-3.3	3.6	-1.9	3.1	5.2	4.5	1.7	-0.1	Competitive Posture
	-2.0	3.6	-2.0	4.9	6.3	5.4	1.6	2.9	Aggressive Posture
	-3.4	3.4	-2.0	4.6	6.1	4.3	1.4	1.2	Aggressive Posture
	-3.1	3.4	-2.9	3.3	4.5	4.5	0.6	0.2	Agressive Posture
	-3.1	3.3	-2.6	2.7	4.3	4.4	0.7	-0.4	Competitive Posture
	-3.0	4.0	-3.3	2.9	4.0	5.0	0.8	-0.1	Competitive Posture
	-3.0	3.8	-3.1	2.7	4.0	4.8	0.7	-0.3	Competitive Posture
	-3.3	2.3	-3.1	2.7	4.0	3.6	-0.8	-0.5	Defenisve Posture
	-3.5	3.3	-2.9	3.6	4.7	4.2	0.5	0.1	Aggressive Posture
	-2.4	3.4	-2.6	3.0	4.5	5.0	0.8	0.6	Agressive Posture
Manufacturer	-2.8	3.7	-2.0	4.2			1.7	1.4	Aggressive Posture
Trader	-3.1	3.4	-2.9	3.0			0.5	-0.1	Competitive Posture

Regarding aggressive posture, we discussed with the managers and recognized their strategies of how they are being aggressive, as follows:

> *"We are expanding our targeted markets, not only to China, but also to Myanmar. Furthermore, we are expanding our product lines such as export not only fresh-cut mini-pineapples but also other tropical fruits like mangosteen and durian, making use of the resources we already have or can acquire further." (Manufacturer with aggressive posture)*

> *"We always get in touch with our employees by listening to their suggestions, ideas and problems. And when we see there is something wrong, we correct it immediately, or when their ideas help on, we invest on them to improve our competitiveness i.e., productivity of our process, and quality." (Trader with aggressive posture)*

> *"It is true that we are doing business for profit. But what we do more is that we treat our final customers like we treat ourselves and the person we love or care. What we do should meet the requirement and expectation of our final customers. Thus, we continue to invest on ways to improve our businesses and our products to meet not only our immediate customers but the consumers. Success depends on us investing on our market" (Manufacturer with aggressive posture)*

However, there are two traders that are in aggressive posture, and both are trying to become a manufacturer by collaborating with each other (that is: collaborative strategy, in order to implement the competitive strategy, such as to improve financial conditions and competitive advantages). Their opinions on competitive strategies are reflected in the following:

> *"We know our traders have certain weaknesses, probably lacking of financial resources. Thus, we share our knowledge with them to help them improve their competitive edge."*
> *"When compare we with the manufacturers, we think they are in better advantage, both financially and in certain resources. This motivates us to become a manufacturer, but our financial situation is not strong enough."*
> *(Trader with competitive posture)*

Thus, we observe that traders are not in aggressive posture in which most of them are having financial instability. The manufacturer positions exhibit the appropriateness for an aggressive strategic posture, and the government policy should support the manufacturers as the factories of fresh-cut mini-pineapples to become more aggressive to have more competitive advantage in Chiang Rai.

Conclusion

The SPACE analysis suggests aggressive posture for the manufacturers, and competitive posture for the traders, based on the systematic planning and implementation of organizational factor support i.e., job resources and job demand, as they contribute to workforce's ability to support organizational performance, and also the competitive advantage of the firm.

The organizational factor support provides the bases for employee perceived behavioral control to drive contribution, which aligns with and connotes the workability of the theory of planned behavior (TPB).

The aggressive strategic posture of the manufacturers is underpinned on the SPACE logics that the manufacturers are still in stable economic condition, and the organization should examine to exploit its economic strength to protect and improve its competitive advantage. In addition, the aggressive strategic position should also carefully study its industry and broad environment conditions, and take full advantages of their opportunities.

On the other hand, as manifested with a competitive strategic posture, the traders recognize a relatively unstable environment as compared to its upstream value-chain player, namely the manufacturer, including weaknesses financially. Traders with the competitive strategy posture can aim to selectively improve and sharpen its competitive strength, and then invest appropriately to find a slot in the industry and environment for stability.

This research contributes to support the validity and usefulness of resource-based theory of competitive advantage, that is applicable to the pineapple industry, which, in this research, the resource is relating to, in particular, the human resource strategy. Due to the

positive correlation shown between financial stability and competitive advantage (bivariate coefficient at 0.73** sig. to 0.01 level, 2 tails), financial resource is equally important.

The three organizational performance domains should simultaneously be targeted, as it shows significant contribution to creating competitive advantage, and also certain level of financial stability: namely (1) Cognitive – which is aligned with the concept of in-role and extra-role behaviors, (2) Affective – which manifests job commitment and loyalty, and (3) Organizational – which defines job performance i.e. ability to deliver jobs on-time and up to the standard quality requirement.

Two aspects of theoretical contributions are noted: 1) Theory of job resource-demand can be used to implement perceived behavioral control advocated in the theory of planned behavior, which provides a motivational trust for employee contribution to organizational performance, and 2) Workforce contribution and organizational factor supports should be systematically targeted and invested for contributing to the competitive advantage of the organization.

In the aspect of practical implications, the perceptual and competency gaps between the manufacturers and traders, and between the managers and employees reveal that they should be consciously resolved and considered in strategic management, as this could lead to strategic synergy and sustainable performance.

Limitation

The industry, without the views and actual performance states of the farmers, and the customers, would not be sufficient to provide a realistic and holistic picture of the industry. Thus, further research should incorporate these perspectives to yield a more accurate and valid picture, through informant-based triangulation. This is particularly important especially the most suffered in price-slumped situation is the farmer, which is due to a lack of financial capability to invest on hiring workers for harvesting, and far-distance from manufacturers.

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Skillful Use of Enterprise Risk Management in Hotels

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Abstract

Due to the complexity and abstract nature of enterprise risk management (ERM), its concept and implementation procedures are not easily comprehended by both the management and the operations teams. As a result, the rate of adoption in the industry remains relatively low. The continuing escalation of unpredictable natural and manmade disasters, such as the Covid-19, has made ERM ever more important. This study obtained 215 valid samples from the hotels located in Uttaradit and Phitsanulok, Thailand, to demonstrate how one can easily comprehend ERM by linking to more familiar concepts such as balanced scorecard (BSC) and business strategy. In this regard this study aims to lay a groundwork for the ERM application as a necessary part of strategic and operations management. Besides the theoretical contributions, this research makes use of statistical comparative analyses of many demographic variables (i.e., position, type of job, number of hotel rooms, service types, HR and hotel operations) to offer a rich spectrum of practical implications.

Keywords: Balanced Scorecard; Enterprise risk management; Hotel Performance; Strategy

Introduction

Business in the 21st century is more complicated, unstable and uncertain than in the past. Risk and uncertainty are inseparable business conditions and attributes today (Protiviti, 2006) alongside with strategies, which must be deliberated as a part of the strategic and performance management systems of the organizations (Peattie, Philip & Peattie, 2005). In particular, a concept involving enterprise risk management (ERM) evolves to be essential, as it is holistic and embraces company-wide participation, and when coordinated well, ERM has proven to effectively support the implementation of strategies and improve the chance of success (Gordon, Martin & Tseng, 2009). Enterprise risk management (ERM) has been reported to evolve from low-level or process-driven risk management to higher-level, that is at the enterprise-level. ERM provides numerous important functions, for example to help the firm to establish, evaluate and report on their internal controls (Lawson, Muriel, Sanders, 2017), and thus, helps organization manages risk in effective way.

There is a high competition among tourism and hospitality sector. Hotel sector is significantly important to the overall economy in Thailand. In 2016, the total number of hotel rooms has increased to 25.7% which causes higher-level market of room supply, and thus

intensifies the competition and raises urgent need to reduce uncertainty and risk in strategy formulation and implementation. Moreover, expansion of investment in hotel business is affected by the increasing of tourists' number and spending as well (GSB Research, 2017). "Thailand's international visitors were up by 7.54% over 2017, and the estimated 2.007 trillion Baht in tourism revenue was up by 9.63%. Tourists to Thailand are expected to increase from 38.27 million to 41 million" (Bangkok Post, 2019). Along with the increase of foreign tourists, the accommodation occupancy rate (AOR) would also get the benefits, but is subjected to the ability of Thai hotels to differentiate their strategies and manage risk – a thematic focus of this research. AOR, according to Bank of Thailand, and reported by (CEIC, 2019), fluctuates above 60%.

Phitsanulok and Utttaradit are attractive areas to explore. Phisanulok is located in the lower northern part of Thailand. Neighboring provinces is Uttaradit, which is located in the upper north of Thailand. These two provinces have many interesting tourist attractions, especially they have rich natural, historical and cultural resources that the tourism and hotel sectors can make use of. Fig. 1 presents the locations of the two provinces targeted in this research.

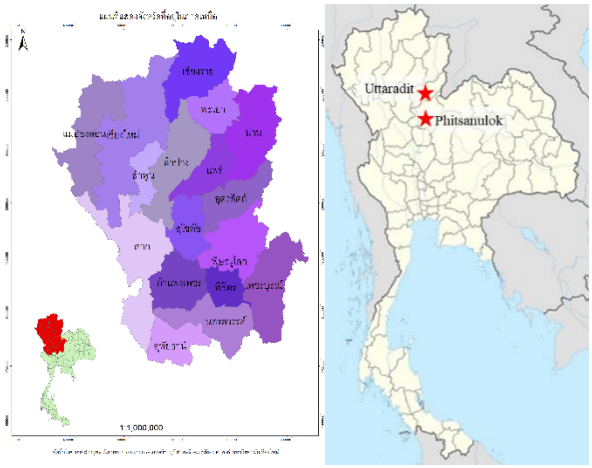

Fig. 1: Northern part and Uttaradit, Phitsanulok Map. (Source: Wikimedia)

Phitsanulok and Uttaradit are among the routes to northern Thailand and, in fact, can be reckoned as a main transportation hub linking the central provinces to the north of the country. Many travelers pass through these two provinces. The Ministry of Tourism and Sport (2018) reported that Phitsanulok and Uttaradit currently have more than 4 million tourists, consisting of domestic tourists, international tourists and excursionist, who also use the services of hotels, guesthouses and other type of accommodations; meanwhile, hotel number is on the rise.

There are many reasons that influence the competition in hotel market. Present economic changes, preferences of customers, prices and industrial situations, and externally caused risk factors can collectively impact on hotel's demands and performances. The steadily increasing oversupply of accommodation to the market, especially in the most important tourist areas, and the spread of online booking systems, may increase competition on price (Lunkam, 2017). Customers have many choices to select, such as traditional hotel establishment, a more contemporary version like Airbnb, hostels, or guesthouses. Due to wide variation of players in the accommodation sector, the traditional hotel establishments

are under the pressure to improve their offers. Oliver (2016) noted that "the fierce competition, the bargaining power of clients, the dependence on suppliers, the constant demand for innovation, changes in the regulatory environment, the new expectations of society" (p. 66) have made the operating environment of organizations, such as hotels, to be more complex. Nevertheless, how these environmental conditions influence on the mission clarity and a need for stronger corporate governance is not obvious, particular in the context of enterprise risk management. Complexities involve, for instance, the risks and the nature of relationships with the agents of businesses (Oliver, 2016), and if they are dealt with systematically, such as by means of ERM, they could deter the efforts of the organizations towards success (Soltanizadeh, Abdul Rasid, Mottaghi, & Wan Ismail, 2016).

To help organizations chart towards the right course in more robust manner, enterprise risk management (ERM) comes to assistance, albeit at a significant investment effort by firms. Nevertheless, as it was stated above, and "regardless of the increased number of studies on risk management in various firms, limited studies have strived to reveal the components driving and obstructing ERM" (Callahan & Jared, 2017). In particular, a systems-thinking framework is lacked in ERM context (O'Donnell, 2005), in simple implementable manner. The current COSO framework of ERM is rather detailed as it follows a step-wise process (Committee of Sponsoring Organizations of the Treadway Commission and World Business Council for Sustainable Development, 2019).

To be precise, through enterprise risk management measures, hotels can mitigate risk and plan to deal with impacts that cause from uncertain events, which is the essential motive for this research. The latest version of COSO ERM framework is adopted, and is integrated with the Balanced Scorecard (BSC) concept, as way for structuralizing the perspectives of hotel performances. Towards this end, the following research objective is aimed:

> *The purpose of this study is to conceptualize a model that establishes a strategic linkage between the environments of hotels and efforts in enterprise risk management (ERM), and further studies how these environmental considerations and EMR will impact on strategy success and organizational performances. Specifically, the external environment would consider the number of competitors, technological changes, pricing competition and government regulation, as manifestations of the forces exerted on the hotel organizations. On the internal environmental domain, corporate governance and culture, and mission clarity are incorporated. The performance of organization will take a more holistic view by means of Balanced Scorecard (BSC) concept.*

Literature Review

Characteristics of Enterprise Risk Management

Enterprise risk management (ERM) is defined by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) as "a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives" (Fraser & Simkins, 2010). From the definition just stated, ERM demonstrates numerous important characteristics, which can be categorized in terms of:

Why – ERM is primarily motivated by the potential possibility of the executed and formulated strategies to deviate from the expectation or corporate objective How – ERM is a process, and is a holistic approach, targeted at the enterprise-level to risk management. Reference (Dickinson, 2001) recognizes EMR as a formal part of the decision-making process. From ethical viewpoints (Tan, 2016), ERM can be reckoned as a rule-based or principle-based framework (Lawson, Leah & Sanders, 2017).

What – Risks are broad-based, i.e. insurable risk, financial risks, operational risks. Insurable risk stresses the nature of risks transferred to insurance companies, and such risks are generally related to "natural catastrophes, human error, or fraud, but as the scope of insurance markets expanded, some types of commercial risks could also be transferred such as credit risks" (Dickinson, 2001). Risk is also an inherent property of an organization, particularly associated with strategy formulation and execution. In other words, ERM is an integral part of a company's strategy, whether at corporate level, business level, global level, or operational level (Tan, 2018).

Factors Potentially Affecting ERM

A range of internal and external factors can cause the outcomes of a company's strategies to depart from the deliberated version (Dickinson, 2001). Putting in another words, risks could emanate from the market, or from firm-specific or non-markets ((Lawson, Leah & Sanders, 2017), such as due to insufficient strategy-focused culture (Kaplan, Davenport, Norton, 2001) and clarity and commitment in company mission. When the external risk-pressures are higher, such as due to the number of competitors, changes in technologies, and government regulations, the more pressing is the need for organizations to establish good corporate governance system and commitment (Krenn, 2016), culture and make clarity of company mission. In other words, organizations view the firm's external context as a source of isomorphism (DiMaggio & Powell, 1983). These arguments support the following hypothesis:

H1: There is a positive relevancy in between the external environment and internal environment consisting of 1) corporate governance and culture, and 2) mission clarity.

Rationales to the Approaches of ERM

As argued in Calndro and Lane (2006: 32), "getting the right assumptions" to approach ERM is very important, but is not straightforward, and to reduce this impact, they introduce the Balanced Scorecard (BSC) concept as a way to help organizations proving of their assumptions in terms of cause-and-effect linkages of the factors or risk-reduction measures. BSC is first introduced by Kaplan and Norton (1996), and is extended using the concept of strategy mapping (Kaplan & Norton, 2004), strategic alignment (Kaplan & Norton, 2006) and strategy-focused corporate culture (Kaplan, Davenport & Norton, 2001).

Defined by risk as the possibility of loss caused by unsuccessful strategy implementation, whether for either intentional (due to ethical misconduct) (Tan, 2016), or unintentional reasons (due to error made unknowingly) (Calandro & Lane, 2006), ERM should be deliberated to improve strategy success, by appropriately considering external

environment, and by making clear of mission and establishing culture and rule- and principle-based corporate governance.

Organizational culture has the ability to influence at enterprise-wide level, due to its inherent nature as mental programming, and thus can influence the leadership, execution, rituals, and values of the organizations, and fundamentally, has the stability function – that is, to stabilize the organization. Along similar argument in Hofstede, Hoftstede and Minkov (2010), Liker and Hoseus (2008) define culture as "the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems".

In short, the following hypotheses are therefore raised, which establish the causal impact of both internal and external factors on ERM and strategy success:

H2: External environment has significant influence on ERM.

H3: External environment has significant influence on strategy success.

H4: Internal environment, which consists of corporate governance and culture, and mission clarity, can significantly explain the variance of ERM.

H5: Internal environment, which consists of corporate governance and culture, and mission clarity, can significantly explain the variance of strategy success.

"Facing complexity and being able to focus in the face of it rather than retreat from it and pretend that it does not exist," as argued in (Wells, 1998), is the heart of good strategic thinking, which is reflected in the hypothetical relationship linking both internal and external environments to strategy success. Furthermore, judging from the previously stated definition of risk, referred as the possibility of the strategy execution will not be successful (Calandro & Lane, 2006), we can establish, therefore, that ERM can directly contribute to improve strategy success, leading to the next hypothesis connoting a characteristic of strategy, as both emergent and complex, and deliberating (Tuomela, 2005), in which ERM can serve as a management control system (Tsamenyi, Sahadev & Qiao, 2011):

H6: ERM can positively and significantly influence strategy success.

A logical extension of H1-H6, in the aforementioned, is the linkage of both strategy success and ERM to contribute to organizational performances, which are operationalized, in more integrative and holistic manner, via the four BSC perspectives. In other words, the purpose of ERM is aimed to minimize or reduce the possibility of loss, or increase the possibility of success, which in turn, lead to organizational performances as represented by the four performance perspectives, namely learning and growth, internal business processes, customer and financial performances (Sainaghi, Phillips & Valentina, 2013). ERM practices are not only necessary for improving the performance of an organization, but also contribute to reduce different types of risk exposure (Florio & Giulia, 2017). Successful ERM strategies enable businesses to maximize their profitability and efficiently manage risk (Lechner & Gatzert, 2018). Specifically, by constantly monitoring the total performance of the enterprise,

steadily watching "the efficiency, profitability, cash flow and exposure of each of the enterprise's important clients," and putting in place "a system of warning signals for all activities and act decisively if an out-of-control condition is detected," as manifested and regulated in ERM, the four BSC performances can potentially be realized. Thus, the following hypothesis is raised:

H7: Both ERM and strategy success lead to the four BSC performances.

Besides, as shown in Kaplan and Norton's (2004) strategy mapping concept, the four BSC performances are interrelated, and in particular, of the logic that learning and growth drives internal business processes, which in turn, drives performance manifested by customers accepting the value proposition and its services, leading to financial achievement (Tan & Sitikarn, 2019). In other words, there is a causal relationship of the four BSC performance perspective, as articulated in the following hypothesis:

H8: There is a causal relationship of the four BSC performance perspective.

As a conclusion of the literature review, the following theoretical framework is derived and the next section would discuss the methodological design to provide the empirical evidences to the framework shown in **Fig. 2**.

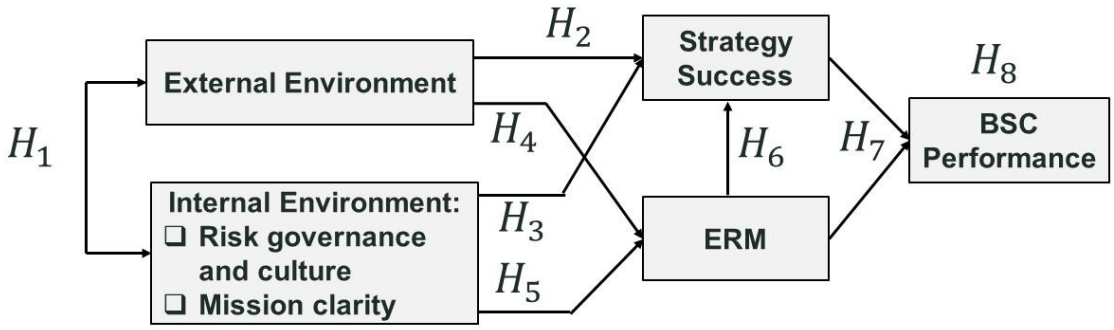

Fig. 2: The Conceptual Framework of the Research

Method

Sampling and Data Collection

The population of this study is hotel owners and employees (manager and non-manager positions) working in the hotels located in Muang district, Uttaradit and Muang district, Phitsanulok, Thailand. Based on the information from the Department of Provincial Administration of Thailand, there are 155 hotels registered in these areas. According to the Ministerial Regulation B.E. 2551 (2008), hotels are classified into 4 types, based room number and the provided services, as shown in Table 1.

Cochran (1977) states that in case of unknown population, a sample size of 385 is suggested with 95% confidence level. Researcher contacted the HR department of each hotel and required minimum respondent's criteria of each position, which is one owner, one manager and three non-managers. After agreement was obtained, a total of 450 questionnaires

sets were distributed to 32 hotels in these two provinces from August 2019 to September 2019, as shown in Table 1. Data were collected directly by paper-based questionnaires. Eventually, there are 215 valid questionnaires returned and have been used for result analysis, which is around 48% response rate and matches the typical response rate in business and management research: between 30% and 80% (Goudy, 1976).

Table 1: Targeted Population and Sampling

Targeted population					
Targeted areas	**Hotel type**				**Total**
	Type 1	**Type 2**	**Type 3**	**Type 4**	
Phitsanulok (PHS)	55	21	12	12	100
Uttaradit (UTT)	43	9	0	3	55
					155
Sampling/ participated					
Hotel type	**Type 1**		**Type 2**		**Type 3**		**Type 4**		**Total**
Targeted areas	**PHS**	**UTT**	**PHS**	**UTT**	**PHS**	**UTT**	**PHS**	**UTT**	
Number of hotels participated	11	2	12	2	1	0	3	1	32
Distributed questionnaires	110	20	180	40	20	0	60	20	450
Valid questionnaires collected	54	11	82	26	12	0	20	10	**215**

Note:

PHS refers to Phitsanulok and UTT refers to Uttaradit.
Type 1: Hotels provide accommodation only and the number of rooms do not exceed 40 rooms.
Type 2: Hotels provide accommodation and catering or restaurant services, the number of rooms do not exceed 80 rooms.
Type 3: Hotels provide accommodation, catering or restaurant services and conference rooms or entertainment venues.
Type 4: Hotels provide accommodation, catering or restaurant services, conference rooms and entertainment venues.

Measurement Instrument

For the testing of model constructs and the validity of the interaction structure, the questionnaire design was selected as the quantitative method. Validity and reliability of the constructs are defined by aligning the constructs with the scope of the concepts, i.e., strategy, hotel performance, ERM and BSC, along with their definitions. In the pilot-testing process, we approach three subject experts: Two with sufficient knowledge of strategy and ERM, and another on research methodology. The reliability measures include the use of statements in language and in ways that can easily be understood instantly, reflecting easy recall or routine perceptions of the hostel employees.

The questionnaire instrument is arranged into two sections. Section one describes the respondent's and hotel's demographics. In section two, the constructs are measured by using five-rating scale items targeting on level of agreement (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). There are five parts in section two, namely internal environment, external environment, enterprise risk management (ERM), strategy success and hotel performance, with a total of thirty-five measurement items.

The statement details of the measurement items are given and discussed in the next section "Result and Discussion", along with the validity and reliability assessments of the constructs.

Data Analysis

In this study, the data were analyzed using AMOS-based structural equation modeling (SME) and IBM SPSS package, involving also T-test, ANOVA tests, factor analysis, correlations and multiple regression. SEM provides the stringent base for hypotheses testing as well as examining for additional insights such as the mediating role of ERM for leveraging the ability of both internal and external considerations to deliver strategy success. Both incremental and absolute fit are examined in SEM. Cronbach's alpha coefficient is used to evaluate the internal consistency of the measurement items describing the construct, evidenced with the coefficient exceeding 0.70. Exploratory factor analysis was undertaken as a part to contribute to the validity assessments of the instrument and the results obtained, describing the total variance explained (TVE) and factor loadings, and the unitary dimensional nature of the constructs shown in the next section.

Result and Discussion

Descriptive profile

A valid 215 responses set is used for the statistical analysis. The respondents hold position as owner, manager and non-manager, and among them, female at 70.7%. Back office accounted for 57.8%, and 42.3 % have less than 3 years of working experience and 79.3% of them also have less than 3 years working experience in hotel. The local residents occupy 75.8% and non-local residents at 24.2%. Among them, 50.7% have Bachelor degree. More than 70% are shown associated with 3-star hotels and majority of hotels have less than 40 rooms (44.7%), and less than 25 employees (43.7%). Additional to that, 47.4 % of hotels' year operation is between 6 -10 years. The responses are associated with: commercial hotel (75.8%), resort hotel (13%) and boutique hotel (11.2%). 76.3 of these hotels are independent type.

Result of Validity and Reliability Assessment

Tables 2 and 3 present the measurement statements of the constructs studied, evidencing that the reliability, convergent and divergent validity thresholds and requirements are met. With factor loading exceeding 0.70, TVE well above the 0.5 threshold, and reliability index exceeding 0.70 minimum threshold on Cronbach's Alpha, the convergent validity is well established.

Table 2: Measurement Instrument

Constructs	Items	Alpha	Factor Loading	Mean	Standard Deviation
Internal Environment					
Mission Clarity:					
Vision, mission and core value	Vision, mission and core value are clearly defined.	0.899	0.92	3.63	0.84
	Vision, mission and core value are communicated to us.		0.94	3.65	0.82
	We know our job contributed to vision, mission and core value.		0.87	3.92	0.85
Objectives	Objectives are set according to hotel strategy.	0.901	0.90	3.70	0.82
	Objectives are set for all job function.		0.92	3.84	0.92
	Objectives are set to get to our vision.		0.92	3.84	0.83
Risk Governance and Culture	We have to a work system (i.e., procedures, process, guidelines) to aim to minimize uncertainties that may lead us to fail.	0.903	0.88	3.69	0.85
	Overall, we work together to meet our objectives.		0.88	3.87	0.82
	Our organization monitors and controls to meet our objectives.		0.90	3.83	0.89
	Our organization provides constant review of our work performance.		0.87	3.84	0.89
External Environment	Number of competitors	0.786	0.75	2.74	0.50
	Technology change		0.84	2.62	0.52
	Hotel price competition in the market		0.82	2.70	0.49
	Government regulation		0.72	2.48	0.59
Enterprise Risk Management					
Strategy development risk management	We consider and take actions on anything that can make us not able to implement strategy.	0.828	0.83	3.64	0.76
	We invest necessarily (i.e. training, system) to enable us to implement strategy.		0.87	3.63	0.90
	We think through and discuss most factors that may influence the success of our strategy design and implementation.		0.89	3.74	0.78
Performance risk management	Anything that may cause us to deviate from target will be targeted and solved.	0.863	0.88	3.65	0.72
	We take necessary corrective actions if anything arises to prevent us to deliver our performance.		0.91	3.82	0.81
	We take necessary preventive action if anything arises to prevent us to deliver our performance.		0.88	3.77	0.80
Information, communication and reporting risk management	Our company shares information in right form to help us implement strategy and meet objectives.	0.866	0.87	3.72	0.75
	We report our progress and also areas of challenges to prevent us from winning.		0.90	3.76	0.77
	We communicate our progress and areas of challenges so, together, we can solve problems.		0.90	3.79	0.81
Strategy Success	Our strategy attracts more customers to stay at our hotel.	0.904	0.92	3.82	0.84
	Our strategy is capable to make us achieve our objectives.		0.92	3.80	0.86
	Our strategy is clearly able to give us clear direction for everyone to do perfect job.		0.91	3.80	0.91
Performance					

Constructs	Items	Alpha	Factor Loading	Mean	Standard Deviation
Financial	Our hotel has been able to meet our revenue target.	0.893	0.95	3.68	0.86
	Our hotel has been able to meet our cost and budget control.		0.95	3.71	0.90
Customer	Our hotel quite well-received by the market.	0.814	0.92	3.87	0.85
	We hardly have bad/severe customer complaint.		0.92	3.68	0.94
Internal business process	To my knowledge, our hotel is operated to desired quality standard.	0.908	0.96	3.81	0.90
	To my knowledge, our hotel's operation is managed to expectation.		0.96	3.80	0.92
Learning and growth	In general, our hotel's stuffs are well trained to execute hotel strategy.	0.893	0.89	3.64	0.94
	In general, our hotel has good working environment.		0.94	3.78	0.89
	In general, our hotel has up-to-date information to guild our continuous improvement.		0.89	3.77	0.93

Beside the aforementioned indicators i.e., reliability and TVE, Table 3 further supports the divergent validity, with the square-root of TVE exceeding the cross correlations coefficients.

Table 3: Mean, Convergent and Divergent Validity and Reliability.

					The Constructs											
	Mean	α	KMO	TVE	VMC	OBJ	RGC	EE	SDRM	PRM	ICRRM	SS	FIN	CUS	IBP	LG
V1	3.73	.90	.71	.83	.91											
V2	3.79	.90	.75	.84	.68**	.91										
V3	3.81	.90	.84	.78	.67**	.773**	.88									
V4	2.64	.79	.76	.62	.17*	.27**	.26**	.78								
V5	3.67	.83	.71	.75	.52**	.58**	.61**	.26**	.86							
V6	3.74	.86	.73	.79	.55**	.57**	.62**	.25**	.69**	.89						
V7	3.75	.87	.73	.79	.51**	.62**	.64**	.27**	.68**	.70**	.89					
V8	3.81	.90	.76	.84	.50**	.60**	.59**	.25**	.61**	.69**	.70**	.92				
V9	3.69	.89	.50	.90	.50**	.629**	.59**	.19**	.58**	.59**	.72**	.70**	.95			
V10	3.77	.81	.50	.84	.51**	.548**	.56**	.18**	.62**	.66**	.65**	.71**	.66**	.92		
V11	3.81	.91	.50	.92	.49**	.602**	.54**	.19**	.65**	.66**	.69**	.73**	.67**	.75*	0.96	
12	3.73	.89	.71	.83	.48**	.57**	.59**	.21**	.61**	.68**	.67**	.71**	.67**	.73*	0.76**	0.91
					Factor loading: all >0.70 Correlation Coefficients are significant at the 0.01 and 0.05 level (2 tailed** and 1 tailed*) The diagonal = Square root of TVE Criterion for divergent: The diagonal must be higher than the cross-correlations coefficients.											

Note: VMV (V1) stands for vision, mission and core value, OBJ (V2) objectives, RGC (V3) risk governance and culture, EE (V4) external environment, SDRM (V5) strategy development risk management, PRM (V6) performance risk management, ICRRM (V7) information, communication and reporting risk management, SS (V8)strategy success, FIN (V9) financial, CUS (V10) customer, IBP (V11) internal business process, and LG (V12) learning and growth.

Comparative Study

Table 4 provides a comprehensive detail of the construct profile and the cross-group comparisons, based on ANOVA or T-Tests.

Table 4: General Data Profile, Descriptive and Cross-Comparative analysis

				Internal Environment			External Environment	Enterprise Risk Management			Strategy Success	Performance			
				Mission Clarity											
		Frequency	Percentage	Vision, mission and core value	Objectives	Risk Governance and Culture		Strategy Development Risk Management	Performance Risk Management	Information Communication and Reporting Risk Management		Financial	Customer	Internal Business Process	Learning and Growth
Gender	Male	60	27.9	3.78	3.77	3.80	2.68	3.70	3.88	3.87	3.91	3.83	3.93	3.94	3.80
	Female	152	70.7	3.71	3.80	3.81	2.62	3.66	3.69	3.71	3.77	3.64	3.72	3.76	3.71
	Other	3	1.4	3.67	3.78	3.83	2.67	3.44	3.67	3.78	3.89	3.50	3.67	3.67	3.56
Position	Owner	6	2.8	3.61	3.67	3.50	2.63	3.72	3.67	3.67	4.00	3.75	3.92	4.17	3.72
	Manager	14	6.5	4.48	4.26	4.29	2.59	3.91	4.17	4.22	4.21	4.18	3.89	4.29	4.14
	Non-Manager	195	90.7	3.68	3.76	3.78	2.64	3.65	3.72	3.72	3.77	3.66	3.76	3.76	3.70
	Sig.			.001		.034				.034					
Type of Job	Front Office	75	35.8	3.72	3.76	3.77	2.61	3.57	3.71	3.68	3.72	3.55	3.74	3.68	3.67
	Back Office	120	57.2	3.66	3.77	3.79	2.66	3.70	3.72	3.75	3.81	3.72	3.78	3.82	3.72
	Both	20	7	4.22	4.08	4.05	2.60	3.85	4.02	4.05	4.15	4.05	3.90	4.25	4.02
	Sig.			0.01										.034	
Year of Work (Overall)	Less than 3 years	91	42.3	3.66	3.68	3.75	2.60	3.63	3.67	3.68	3.74	3.61	3.81	3.75	3.69
	3-5 years	54	25.1	3.91	3.94	3.99	2.65	3.71	3.89	3.91	3.92	3.88	3.78	3.86	3.83
	> 5 years	70	32.6	3.70	3.83	3.74	2.67	3.70	3.72	3.72	3.80	3.66	3.73	3.84	3.71
Year of Experience in Hotels	Less than 3 years	106	49.3	3.67	3.69	3.76	2.63	3.62	3.66	3.66	3.74	3.59	3.79	3.74	3.66
	3-5 years	58	27	3.85	3.93	3.95	2.67	3.74	3.88	3.93	3.92	3.90	3.79	3.90	3.86
	> 5 years	51	23.7	3.73	3.86	3.74	2.62	3.69	3.77	3.75	3.82	3.67	3.72	3.86	3.73
Resident	Local Resident	163	25.8	3.69	3.78	3.78	2.64	3.62	3.72	3.74	3.77	3.68	3.73	3.76	3.71
	Non-local Resident	52	24.2	3.87	3.83	3.89	2.61	3.84	3.81	3.81	3.91	3.74	3.91	3.95	3.81
	Sig. (2-tailed)							0.05							
Education	Below Bachelor	102	47.4	3.66	3.66	3.65	2.57	3.61	3.60	3.63	3.66		3.68	3.71	3.60
	Bachelor	109	50.7	3.81	3.93	3.95	2.69	3.73	3.88	3.87	3.95	3.76	3.88	3.92	3.85
	Master or above	4	1.9	3.42	3.58	4.00	2.69	3.42	3.67	3.67	3.75	4.00	3.50	3.38	3.84
	Sig.				0.04	0.02			0.02	0.03	0.03				
Star Category	2 Stars	9	4.2	3.78	3.70	3.72	2.42	3.81	3.78	3.70	3.67	3.33	3.83	3.50	3.70
	3 Stars	154	71.6	3.74	3.80	3.80	2.66	3.66	3.71	3.71	3.80	3.67	3.75	3.80	3.70

				Internal Environment			External Environment	Enterprise Risk Management			Strategy Success	Performance			
				Mission Clarity											
		Frequency	Percentage	Vision, mission and core value	Objectives	Risk Governance and Culture		Strategy Development Risk Management	Performance Risk Management	Information Communication and Reporting Risk Management		Financial	Customer	Internal Business Process	Learning and Growth
	4 Stars	39	18.1	3.77	3.88	3.90	2.60	3.71	3.86	3.93	3.89	3.87	3.86	3.97	3.91
	5 Stars	13	6	3.54	3.49	3.67	2.63	3.62	3.77	3.72	3.77	3.65	3.73	3.65	3.54
Number of Room	Less than 40 rooms	96	44.7	3.75	3.75	3.77	2.57	3.63	3.71	3.60	3.71	3.57	3.66	3.65	3.63
	41-79 rooms	77	35.8	3.71	3.72	3.77	2.66	3.55	3.68	3.76	3.81	3.68	3.74	3.81	3.67
	> 80 rooms	42	19.5	3.73	4.03	3.95	2.74	3.98	3.95	4.08	4.02	4.00	4.11	4.19	4.07
	Sig.							0.00		0.00		0.20	0.01	0.00	0.01
Hotel type	Commercial Hotel	163	75.8	3.69	3.76	3.77	2.65	3.65	3.72	3.72	3.78	3.71	3.75	3.79	3.73
	Resort Hotel	28	13	3.86	3.88	3.88	2.67	3.63	3.76	3.92	4.00	3.71	3.82	3.91	3.77
	Boutique Hotel	24	11.2	3.90	3.93	3.96	2.49	3.86	3.86	3.76	3.75	3.52	3.88	3.81	3.71
Management type	Independent Hotel	164	76.3	3.74	3.79	3.79	2.65	3.66	3.73	3.75	3.78	3.67	3.79	3.83	3.76
	Chain Hotel	51	23.7	3.70	3.79	3.88	2.60	3.71	3.79	3.78	3.89	3.76	3.73	3.75	3.64
Services type	Room only	65	30.2	3.69	3.66	3.68	2.58	3.54	3.55	3.54	3.62	3.47	3.53	3.48	3.58
	Room plus other services	150	69.8	3.75	3.85	3.86	2.66	3.73	3.83	3.85	3.89	3.79	3.88	3.95	3.80
	Sig. (2-tailed)								.008	.003	.02	.009	.04	0	
Number of employees	Less than 25 people	94	43.7	3.63	3.69	3.71	2.58	3.57	3.63	3.60	3.67	3.51	3.56	3.56	3.57
	26-50 people	82	38.1	3.79	3.78	3.85	2.62	3.69	3.85	3.81	3.81	3.76	3.87	3.91	3.76
	51-75 people	9	4.2	3.96	3.81	3.81	2.78	3.56	3.56	3.55	3.89	3.89	3.94	3.94	3.93
	76-100 people	18	8.4	3.76	4.15	4.10	2.90	4.35	4.11	4.31	4.32	4.36	4.44	4.50	4.35
	More than 100 people	12	5.6	3.97	4.11	3.83	2.71	3.36	3.47	3.86	4.00	3.54	3.63	3.92	3.72
	Sig.						0.03	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.01
Year of hotel operation	Less than 5 years	78	36.3	4.07	3.96	4.01	2.64	3.79	3.88	3.79	3.97	3.80	4.01	3.95	3.85
	6-10 years	102	47.4	3.64	3.81	3.79	2.60	3.68	3.73	3.82	3.83	3.74	3.79	3.86	3.79
	11-15 years	25	11.6	3.09	3.27	3.29	2.76	3.25	3.43	3.35	3.25	3.22	3.14	3.22	3.25
	More than 20 years	10	4.7	3.63	3.67	3.75	2.65	3.67	3.63	3.77	3.67	3.55	3.35	3.65	3.40
	Sig.			0	.002	.001		.011	.037	.019	.001	.018	0	.002	.008

Numerous important insights are revealed from the comparative studies and are stated in the following. The respondents who work in managerial position acknowledged that vision, mission and core values are made clear and communicated and that their jobs contributed to them, and objectives are well aligned with hotel strategy that they hold to the belief that job functions are designed to achieve objectives and will lead them to accomplish the vision. These managerial positions also are more involved than other positions, significantly, on risk governance and culture, involving tasks like monitoring and control to meet objectives, constant review of work performance, and a work system (i.e., procedures, processes, and guidelines) to aim to minimize uncertainties that may lead the hotel to fail, particularly by making use of the "information, communication and reporting risk management" aspect of enterprise risk management (ERM).

Respondents whose tasks involve both back-office and front-office have clearly understood internal environment in hotel more than respondents who work only either front-office or back-office. Even they are not statistically significant, these respondents project higher means value in internal environment, enterprise risk management and strategy success, which are contributed to better hotel performance, especially in their working processes. Having tasked both ways, back-office and front-office, they project higher level of clarity of vision, mission and core value and acknowledged that their jobs clearly contributed to them. Significantly, they are also shown to the perceptual fact that the hotel is operated to the desired quality standard, and the operation is managed to the expectation. In resident section, the non-residents consider the efforts on enterprise risk management, especially in strategy development of risk management, more than the residents, and is statistically significant. The reason behind the higher level of perceptual ERM could be owed to the fact that they are employed from outside the local residence for their job roles, and had gained the additional experiences and attitude in dealing simultaneously with strategy and enterprise risk management, causing them to have higher understanding in ERM and they acquire the ERM practices in their jobs in terms of discussion and taking actions on anything that can make them not able to implement strategy and success of their strategy more than the resident group.

Those with Bachelor degree significantly perceive higher on the constructs investigated in view of the ERM model. Group of employees who work in hotels which have more than 80 rooms, considered as a large size hotel, take actions more on ERM aspects. Group of employees who work in hotels providing room and other services have better cognition of what is the situation and anything that will consider as a risk in their jobs and is knowledgeable of how to solve the problems. Moreover, they have communicated the risk information that is important to their job with colleges. Effective ERM practices in hotel can contribute to hotel's higher strategy success, leading to positive effect in better performance that embraces financial, customer and internal business performances. Hotels with more rooms and more employees also consider ERM at a higher level than the lower-room counterparts, leading to better performances across the four BSC perspectives, which supports the findings of, for instance, partly attributable to the complexity increase with room and employee numbers.

Model Fit Test

The goal of structural equation modeling (SEM) analysis is to estimate the model parameters, θ, by using optimization algorithm to minimize a function of the discrepancy

between S and $\hat{\Sigma}$ (variance/covariance matrix implied by the population parameters for the hypothesized model) so that $[\Sigma - \Sigma(\theta)]$ is minimized, where $\Sigma(\theta)$ denotes the population covariance matrix of observed variables. The model is tested based on Maximum Likelihood (ML) function, $F_{ML}(\theta) = \ln |\hat{\Sigma}| + \text{tr}\,(S\hat{\Sigma}^{-1}) - \ln |S| - (p+q)$, where S and $\hat{\Sigma}$ are the sample and model estimated variance and covariance matrices, respectively, and (p+q) is the number of observed variables involved in the model yielding (p+q) (p+q+1)/2 unique variances and co-variances.

The SEM path structure is shown in Fig. 3, which confirms the eight hypotheses raised. First of all, the positive relationship structure of both internal management quality (manifested on mission clarity, and risk governance and culture) and the sensed external environmental conditions are supported (H1 is supported). The mission clarity is crucial to success in effective strategic management, and what the SEM path in Fig. 3 revealed is, which contributes also to the extant literature, is that as the competitive environment becomes more challenging, the roles of mission clarity and core value communicated to the organizational members, and establishing risk governance system and cultures, become very important and should be aligned. This reflects the first Hypothesis H1.

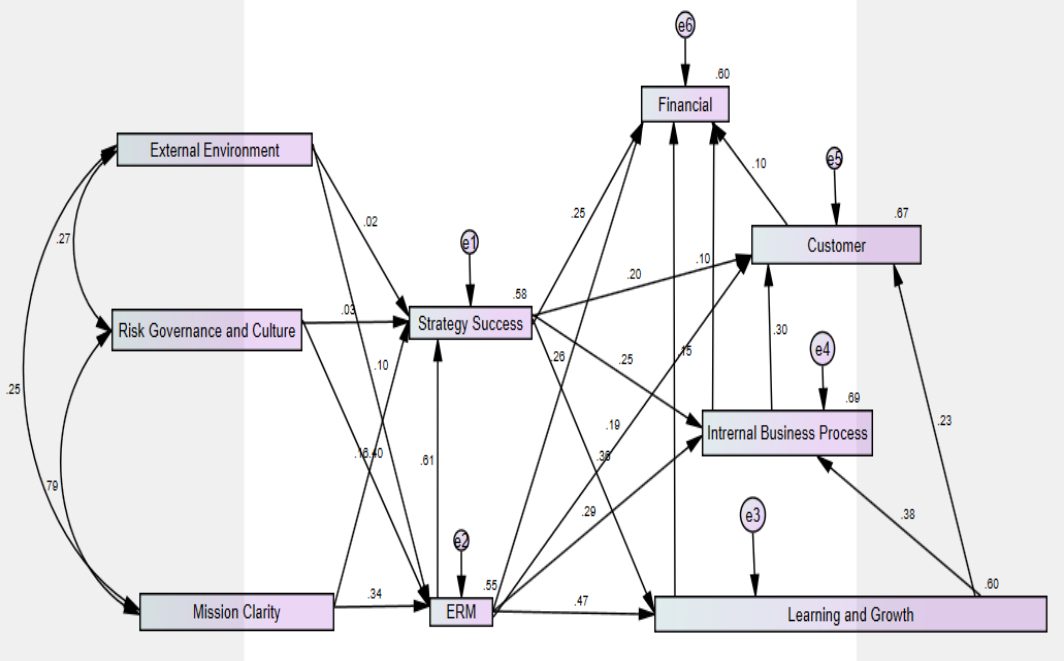

Fig. 3: The Structural Equation Model

The SEM model fit test results are presented in Table 5, with χ^2/s = 1.594, below the threshold of 5, and with p = 0.086 ≥ 0.05 (showing perfect absolute model fit) based on Maximum Livelihood (ML). Increment model fit indexes also conform to the requirements for increment model fit: Normative fit index (NFI) 0.987, RFI = 0.961, IFI = 0.995, TLI = 0.985, and CFI = 0.995, all closer to 1, together with the absolute fit RMSEA = 0.053. (Hair, William, Barry. & Anderson, 2014)

Table 5: Model Fit Statistics

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	42	19.127	12	.086	1.594
Saturated model	54	.000	0		
Independence model	18	1475.745	36	.000	40.993

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.987	.961	.995	.985	.995
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.053	.000	.095	.414
Independence model	.432	.414	.415	.000

Hypothesis Testing

The hypothetical structures stated in H2 to H8 are supported by the path analysis structure of SEM analysis in Fig. 3, with the statistically significant regression coefficients, Beta, presented in Table 6, as evidences to support the hypotheses H2 to H8.

Table 6: Hypothesis Supporting Details

Hypotheses	Independent Variable	Dependent Variable	Beta	t	Sig	Result
H2	External Environment	Enterprise risk management	0.10	2.18	0.03	Support
H3	External Environment	Strategy success	0.02	0.49	0.62	Support
H4	Mission clarity	Enterprise risk management	0.34	4.52	0.00	Support
	Risk Governance and Culture		0.40	5.33	0.00	
H5	Mission clarity	Strategy success	0.16	2.12	0.04	Support
	Risk Governance and Culture		0.03	0.38	0.70	
H6	Enterprise risk management	Strategy success	0.61	9.12	0.00	Support
H7	Strategy success	BSC performance	0.43	8.58	0.00	Support
	Enterprise risk management		0.50	10.07	0.00	
H8	Learning and growth	Internal business process	0.38	6.22	0.00	Support
	Internal business process	Customer	0.30	4.17	0.00	
	Customer	Financial	0.10	1.38	0.17	

The SEM confirms that hotel performance is influenced and significantly mediated by enterprise risk management and strategy success in making use of internal management and

external environmental conditions. Hypothesis H1 is evidenced in the significantly positive correlations outcome given in Table 3. SEM in Fig. 3 also confirms the BSC structure, stating the significant role of learning and growth as the fundamental driving forces to provide the knowledge and insights to guide the development of internal business process and improves the values offered to customers. In doing so, financial performance is shown achieved, attributable to learning and growth, internal business process, customer performances, and most importantly, strategy success and ERM.

Conclusion

Strategy success of hotel will have more effectiveness when the hotel implements ERM that rationalizes based upon acknowledging the external environmental pressures, which serves as an urgency motivator, and clarity in the mission and the regulatory and aspirations environment (Tan, 2018b). There are numerous important concluding insights drawn from this research, which manifest the domains of contributions, both theoretically and practically.

First, this research demonstrates the positive relationship between the perceived environmental threat level and the efforts level of enterprise risk management (ERM), which underpins a working of contingency based approach to ERM. While the current research projects that the ERM effort is contingent upon how the hotel management and teams perceive the environmental complexity and stresses, it is suggested the hotels should take a more proactive approach in ERM.

Second, there is a very significant positive relationship also shown in between the external environment and the internal organizational efforts in terms of putting the management efforts right, by means of mission clarity and risk governance and culture. Considering internal and external environment while ERM and strategy are implementing is very important, justifying an open system that rationalizes the mutual alignments and matching (both internal and external) in order to win, leading to both external and internal roles to influence both ERM and strategy success. Most importantly, as the competitive environment gets difficult or becomes more challenging, the roles of mission clarity and core value communicated to the organizational members, and establishing risk governance system and cultures, become very important and should be aligned.

Third, this study indicates that ERM is a perfect mediator in leveraging up the efforts in mission clarity, risk governance and culture, and handling with the external environment for strategy success. The result of this research shows that employees who perceive higher level of threat of the environment, has higher level of mission clarity and risk governance and culture, tend to have better ERM practices in their job which further directly impact to the higher success of strategy of their hotels. In view of this, the hotels should allocate budgetary resources to provide training to employees and the management relating to ERM, as well as strategic management in a more holistic and measurable manner.

Fourth, performance of the hotels, in holistic balanced scorecard sense, is shown to be explained by both strategy success and the efforts of ERM. This matches with the definition of ERM as a significant part of the efforts to reduce uncertainty and possibility of unsuccessful strategy implementation. In other words, the effect of ERM practices not only

impacts directly to hotel performance outcome but it also impacts to hotel performance indirectly by passing though the success of hotel strategy.

Fifth, this research provides a holistic view of performance in terms of four perspectives of BSC concept. In short, hotel performance is simultaneously demonstrated by the ability to fulfil the objectives in four respective perspectives (namely, learning and growth, internal business process, customer, and financial) and equally, each perspective is inter-supporting each other to yield expected financial performances. Organizational learning is important particularly when our aim is to survive at a rate not lowering than the rate of change of the environment (Tan, 2018a).

Sixth, the BSC logics which states how learning and growth objectives and initiatives support achievement level and effort of internal business process, which in turn, drives customer-domain performance, and thus, financial performance, is empirically supported. Their interrelationships provide a balanced approach to ERM, and presents the organizational performance in more sustainable manner (Denton & White, 2000).

Implication

This study suggests several practical implications for hotel owners and managers to give considerable attention to ERM implementation to improve the success of strategy and hotel performance, and both the external and internal environment factors should be strategically incorporated and be supportive. The practical implications stated below are inferred and drawn from the outcomes of this research.

As effective ERM implementation is hardly straightforward (da Silva Etges et al, 2018), this research shows that educational background is important – Those with Bachelor degree significantly perceives higher on the constructs investigated in view of the ERM model. No significant differences are found across the different star-categories of hotel sector, which provides a practical utility sharing across the entire hotel sector, to use the ERM model suggested to benefit and enhance operating and financial performances. Hotels with more rooms and more employees also consider ERM at a higher level than the lower-room counterparts, leading to better performances across the four BSC perspectives, which supports the findings of, for instance, Callahan & Soileau (2017) and Ma, Maozhu, Yifeng, and Xiaobo, 2019, partly attributable to the complexity increase with room and employee numbers.

Most importantly, there seems to be a lax when the hotel operations years increase – that is, the more years of hotel operations, the lower the efforts of the entire ERM model dynamics, spanning from both internal and external environment, to ERM and strategy success, and BSC performances, signifying a weakening of the so-called “dynamic capability” of the hotels to sense opportunities (the external environment), and seize them or formulate strategies to take advantages of them, while simultaneously shape threats. According to the perspective of dynamic capability, firms need to continuously build, integrate, and reconfigure their skills and abilities to adapt to their important environment and sustain competitive advantage.

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Senate and Politics of Thailand*

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Abstract

This research is a documentary analysis of the current senator's duties that affect the changes in government formation of politics in Thailand, by using the form of synthesis and analysis of documents and related research both in Thailand and abroad. The objective is to study the functions of the senate and the politics of Thailand.

The research found that the Senate in Thailand are both the elected and the appointed, which in the current state has seen changes in the Thai direction that are different from the past. With the additional authority to vote to support the Prime Minister, which may not be in alignment with the principle of duty in the way of practice in civilized world, the positive and negative impact for the Thai politics will still need the time to prove.

Keywords: Authority; Politics of Thailand; Senate.

Introduction

The democratic regime, which is considered the power of government, comes from the people. With an important parliamentary organization that is a representative to act, which must be elected to be a representative of the people for the administration of the country in controlling, monitoring and supervising the administration of the government in accordance with the policy announced to the Council Thailand. The Thai parliament is developed from the Council of State or the Government Advisory Council, which has been in existence since the reign of King Rama V (Rama 5).

After the change of government in 1932, the Constitution of the Kingdom of Thailand, BE 2475 (1932), required the Parliament to be a single council system, namely the House of Representatives. There are two types of members (each category has the same number), namely membership type 1 that comes from the election and the members of category 2 that are from the appointment. The members from the appointment (type 2 members) help to screen the work of the members of the House of Representatives. The rationales for the two-membership parliamentary system are stated by Pridi Banomyong in

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the declaration to the House of Representatives One episode (Thai Parliament, 2018) , as follows:

> … that we need to have half of the members of the second category in order to help the representatives as just starting to have a constitutional rule. We already know that There are still a large number of people who have not received enough education to manage their own interests. If disobeying, let the people choose their representatives alone at this time. The bad results will fall to the people. Because those who are applying to be representatives may be the person who has the power of property The People's council vows that if the people have sufficient education, it would be happy to allow the people to govern themselves without having to have members of the second category, therefore placing conditions. It is to understand that members of category 2 are like mentors who will help support the work in accordance with the objectives of the Constitution, and this is a true protectionist.

Since the beginning of the Senate year, when the new constitution was written, the role of the senator will be adjusted according to the intent of each constitution. Until the last election on 28 March 2019, the story of the Senate was criticized about the acquisition of the Prime Minister from the parliamentary vote. (Constitution of the Kingdom of Thailand BE 2560, 2017) Section 159 The House of Representatives shall consider and approve the person who is worthy to be appointed Prime Minister from the person who has the qualifications and has no prohibited characteristics under Section 160.

In addition, the Constitution also provided the transitional provisions. There is no House of Representatives and the Senate under this Constitution for the National Legislative Assembly established under the Constitution of the Kingdom of Thailand. (Temporary version), in the year 2014, still serves the parliament. House of representatives and the Senate …

> …Section 272 stipulates that during the first 5 years, the senator (sor.) has the power to consider choosing a person as prime minister. But the member of the House of Representatives (MPs) is eligible to nominate a person to be the prime minister only because members of the House of Representatives - representatives (MPs) are those who choose…

From the said constitutional law it causes the Senates to be watchful because the votes in the Prime Minister's testimonials are undeniable that the key points and points should be in Prime Minister's certification, which is placed at General Prayut Chan-ocha a vote from the Senate. According to the transitional provisions, there is a Senate of 250 members. The National Peacekeeping Council will select from the list of names that the Election Commission has set up to select 50 members from the list of nomination committee members. The Senate has recruited 194 people and 6 positions from the Ministry of Defense: Supreme Commander, Army Commander, Naval commander, Air commander, and the national police commander. According to the transitional provisions of the constitution, the Senate has the duties and powers such as to follow, recommend and accelerate the reform of the country. In consideration of the bill that the Senate or the House of Representatives supposes in some cases to be done by a joint meeting of the parliament. And the approval of the person who deserves to be appointed prime minister, which the Senate under this transitional provision should make the country reform more progressive.

For this reason, the senator or, in short, SW, is a group of people who will point out the future of the country by providing support to those who will become the next prime minister of the country. This makes it looks like if the acquisition of the Prime Minister is due to the support of the government, it should not be a political legitimacy in the form of democracy.

History of the Thai Senate

Thai senators are considered as representatives of the people as well as members of the House of Representatives. But there are differences in the origin, qualifications, number and jurisdiction of the political parties in which each constitution defines the details of the matter. The democratic government in most countries will use the Bicameral system, consisting of the House of Representatives and the Upper House. The High Council has many words. For example, in the United Kingdom, use the House of Lords in the United States over a Senate (Senate).

Thailand started with the first senator from the Constitution of the Kingdom of Thailand in 1946. The indirect election was that the people chose the representatives to elect the senators. Later, the Senate selection was changed from being appointed by the Prime Minister to the selection and offering to the King to appoint. The Senate functions as a mentor of the House of Representatives, and the later has the authority to examine, scrutinize the law, and the power to select the persons who are senators or not members of the Senate to be an extraordinary commission to carry out activities or to consider investigating activities in the parliamentary circle. Subsequently, there have been changes, and changes until the 20th edition of the Constitution of 2017.

If considering the change of government of the people, it will be found that the Thai government model has incorporated many forms from the administration of France, such as local government. The origin and authority of the Senate of France consists of 2 councils: the national assembly and the Senate, as provided in the French Constitution 1958 (1958) Section 24 (Jumpa et al., 2007):

> .... Parliament, the House of Representatives and the Senate. Members of the House of Representatives are directly elected and general. Senators are elected indirectly. The Senate is a representative of various local government organizations of the French People's Republic outside the country. There are representatives in the Senate…

The Senate under French rule comes from an indirect (universal suffrage) election, with a 9-year term (with the first set having a 9-year term, after 3 years, 1 in 3 out of the province list by the end of the constitutional law), with a new selection every 3 years later. In 2003, the amendment of the law stipulates that the term of office of the new Senate is 6 years, with leaves half of every 3 years.

The French Senate has significant powers. The legislative authority is considering the approval of the draft law on the matter specified by the Constitution in which the Constitution requires the Senate to consider the draft law as limited as the House of Representatives. The system of approval of the French draft law has established the principles of segregation of laws in the Constitution Part of the law is the power of Parliament. Another part is the

authority of the administration. The Senate has the power to propose a draft law. Both have the power to control the management with the power to ask questions, but do not have the power to vote to not trust the other power management departments of the Senate, such as in giving consent to declare war and in granting consent to the declaration of martial law, etc. The French Senate plays a lesser role when compared to the House of Representatives. The power under the Dharma state is the process of drafting law, and the draft law must be screened from both councils, which must have the same opinion so that the law can be put into operatives.

If coming to see the model from Asian countries, Japan is a country that is ruled by democracy and has a monarch as well as Thailand. When Japan was defeated in World War II, the Japanese regime changed. The enforcement of the 2nd constitution in 1947 caused the Japanese political situation to return to the democratic regime in the form of parliament as usual. There are progressive political developments, such as the election of senators from the former Japanese senators and the appointment of nobles, the support for the local government and the election of the governor which also includes the expansion of election rights covering most people of the country (Jalin, 2011).

The first constitution of Japan, BE 2489, states that all power belongs to the people. The form of government has a parliament called the Diet. It consists of the House of Representatives and the House of Councilors, as well as France and Thailand. Members of both councils are elected. The Japanese constitution does not specify the details of the number of members of both councils. For the election system or qualification of candidates for election in the election law by both council members will be elected through the demarcation system (single-member constituency) and proportional system (proportional representation).

The Japanese Senate has a total of 252 members, with a term of office of 6 years. Half of the senators will be elected every 3 years. 152 members are elected through a demarcation system in 47 provinces of Japan and another 100 people from the proportional system from the single constituency in the whole country. Senate Election Area uses the provincial area as a constituency. In each constituency, there is a Senate of 2 to 8 people in proportion to the population in the constituency. The basic qualifications of candidates for senators are at least 30 years of age.

The Japanese Senate has an important authority to act as a legal screening council approved by the House of Representatives, and has the power to investigate the Cabinet in the event of malpractice. The approvals of various cases are, for example, to approve the House of Representatives for approving the person to be the prime minister and to approve the treaty.

For Thailand, the Constitution of the Kingdom of Siam, BE 2475 requires the House of Representatives to have 2 types of members: one type is from the election, and another type comes from the appointment. Subsequently, the Constitution of the Kingdom of Thailand, BE 2489 (1946) stipulates that the first "council" occurs, consisting of the elected representatives from the people directly, who choose the members of the council of 80 people to screen the work of the House of Representatives. The people later came to the Constitution of the Kingdom of Thailand. (Temporary version), 1947, therefore changed the name from “Phutthisapra Council” to “Senate” by the King appointing senators. There are a number

equal to the MPs. From then on, the various constitutions have determined the number of sources and qualifications of the Senate, which are different in some issues until the 1997 the constitution has changed the authority of the Senate. Interestingly, the Senate is defined as a qualified person directly elected. Without campaigning and not affiliated with any political party, 200 persons, by increasing the duty to consider selecting persons to hold positions in independent organizations and having the authority to remove persons who have committed wrongdoings as prescribed by law, such as: Persons with unusual wealth implied in fraud; Person who commits an offense against official position; Committing an offense against the position of justice; Intentionally use the authority and duties in contradiction to the provisions of the Constitution or laws; or Violate, or do not comply with the ethical standards. By the person of the Senate having the power to vote to remove from the position such as the Prime Minister, the President of the Supreme Court and President of the Constitutional Court Chairman of the Supreme Administrative Court, the Attorney General, and the Directors in various independent organizations, etc.

The increase in "removal" power in this constitution, therefore, has established a screening mechanism so that NSO cannot be dominated or associated with political parties and civil servants. The SW must not be a member or officer or advisor of any political party, not a member of a local council or a local administrator who has been elected, including not accepting concessions from the state, government agencies, state enterprises or holding those concessions, or being a party to the state or government agency or state agency, or state enterprise that is a monopolistic nature, whether directly or indirectly.

When the constitution requires the Senate to be elected by the people instead of appointing in the past, the election of PS is seen as a political weakness because the political party can intervene. By sending the people of the party or those who trust to apply for election as Sor, the two councils are seen as kinship councils until unable to perform checks and balances to exercise the power as determined. Such issues led to the improvements in the Constitution in the year 2007, which requires the Senate to comprise 150 persons, divided into 1 person elected from each province, including 77 persons and 73 persons from the recruitment. The nomination committee consists of (1) Chairman of the Constitutional Court (2) Chairman of the Election Commission (Election Commission) (3) Chairman of the Ombudsman (4) Chairman of the National Counter Corruption Commission (NCC) (5) Chairman of the Audit Committee Money (6) Studied in the Supreme Court, which maintains not less than one of the Supreme Court judges appointed by the Supreme Court, and (7) the judiciary in the Supreme Administrative Court at the general meeting of the Supreme Administrative Court assigned a number of persons as members, along with the details of the nomination of senators, must come from the nominations of various organizations in the academic, government, private, professional and other sectors. The consideration criteria incorporate the knowledge expertise and experience that will be useful in the performance of the Senate, and the elements from individuals with different knowledge and capabilities in different areas, the opportunities and gender equality, the proportion of people in each of the similar sectors, including providing the opportunities to disadvantaged people in society.

The duty of the SV is still to scrutinize the draft law approved by the House of Representatives, and not less than 1 in 10 of the total number of members of both councils to propose to the Constitutional Court in diagnosing the laws that are enacted by the Constitution, including having the right to sign the name of the matter to the Constitutional

Court to consider and diagnose cases that have problems or have an impact on the country's economic or social security.

The key issue of change is the qualification of SW that is different from the past, which must not be a parent, spouse or child of a council member representatives or political positions. The consequences in practice are the difference between the origin of the SW system, both the SW system, the nomination and the election, and the political intervention problems with the Council of Kinship because the constitution has lifted the power of dismissal that had been with the Supreme Court for discretion (Thai Parliament, 2018).

By considering the authority of the Senate of France, Japan and then Thailand, it will see that they want the Senate to act to check and balance the work of the MPs. And considering various laws, therefore, each Thai constitution sets the framework of the property, source and authority of the Senate in order to be able to act in accordance with the intention of being virtuous, fair, without interference.

Phummoon's research on “The pattern of getting a senator in Thailand” (2016) summarizes the results of the senator's right for Thailand, which is divided into two issues: one party sees that the Senate should come from the election with the other party that the Senate should come from recruiting each party, which has the following reasons:

Issue 1 The source of the senator by election method. The parties that support the reason in order to get the senators who have direct links with the people and know the problems of the area as well, which will enable them to solve the various problems at the point. Therefore, having a Senate that consists of people from the election has no damage. In situations that there are many repeated elections, people will be able to learn by themselves. As for the Senate members who were appointed, even if a good person has knowledge, but it is difficult to explain why it must be appointed without any connection with the people. As for the opposition, it was seen that in the past, senators who were elected from political party funding and based on political parties. Finally, candidates must rely on the mechanism of representatives and political parties.

Issue 2 The source of the senator by means of recruitment. The parties that support the reason to recruit senators with a variety of professional backgrounds and being knowledgeable specialized expertise. Nevertheless, the oppositions reckons otherwise that recruitment is not democratic, because the people do not choose, and thus, the recruited senators may not be responsible or politically responsive to the people, and still further, they may not know and understand the problems of the people because they are not people in the areas. From the opinions of both parties, it is something that the constitutions have seen the problem, and be brought to the constitutional amendment, which can be seen from the evolution of the Constitution as illustrated in Fig. 1.

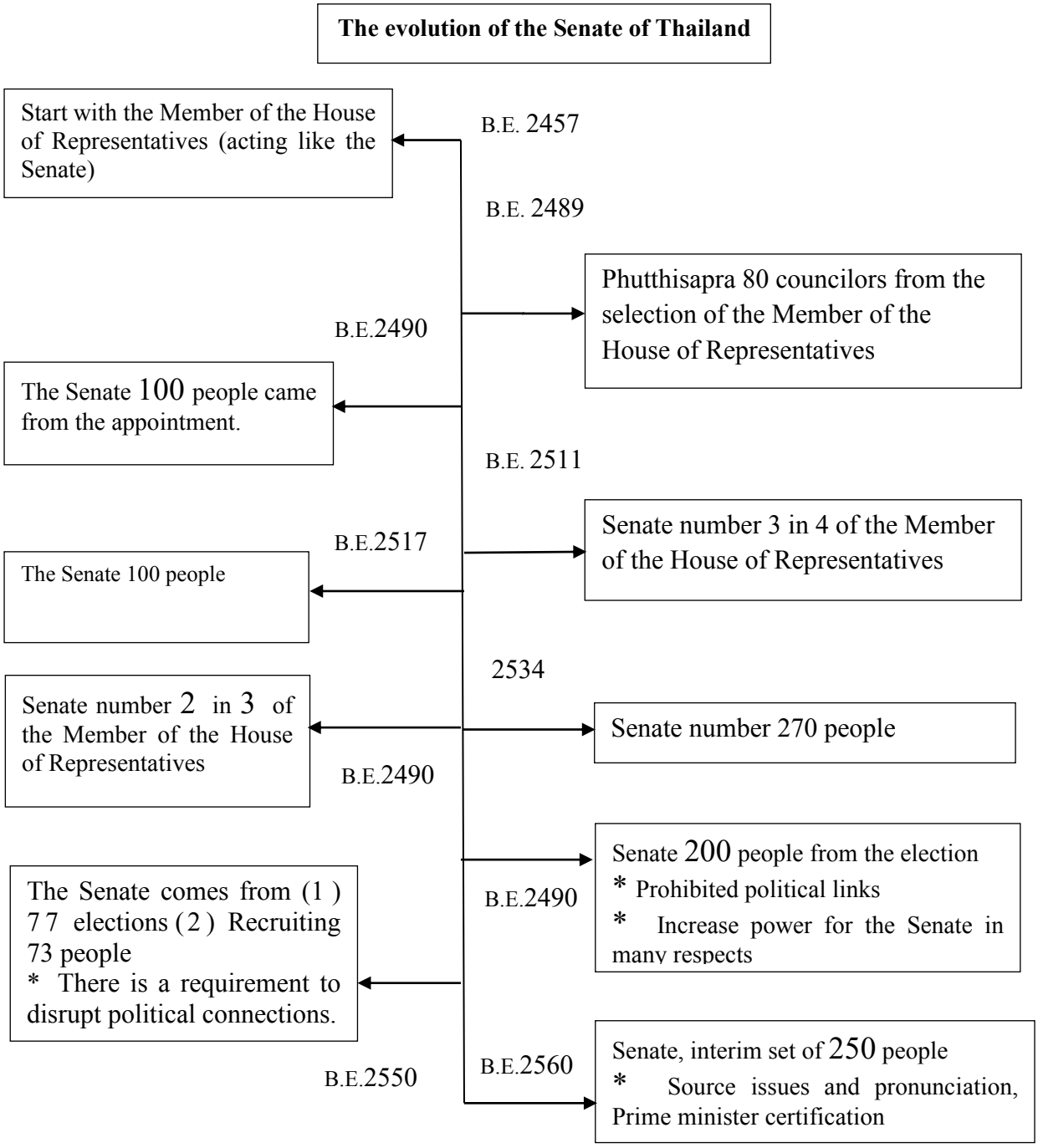

Fig. 1. The Evolution of the Senate of Thailand

Conclusion

According to the intention to perform the duties of the House of Representatives, which is an important counterbalance mechanism for the legislative branch, the performance of the Senate should therefore be free from all sectors. In doing so, it can allow the senators to be neutral and be able to their use knowledge and ability to promote the democratic regime and be fair to the people they represent. Regardless of how the senator has originated, if each person recognizes the importance of a prestigious role and the work for the nation truly and is

not a political tool of any party, then, the political governance of Thailand will be stable, and is the trust of the people as the owner of sovereignty.

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Enriching the Hostel Customer Behavioral Study

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Abstract

The extant literature review is abundantly rich with how customers perceive and respond attitudinally, behaviorally and emotionally to their hotel experiences. It is, nevertheless, not so fortunate in the hostel context. In closing this gap this study employs the theoretical concept of stimulus-organism-response (SOR). The 250 valid responses of the questionnaire survey were used to operate the structural equation modeling (SEM) analysis. The SOR concept was developed using a mix of literature review and interviews. The latter contributes, in particular, when there is a lack of information, and has prompted the study to focus on the stimulation variables involving service operations (both tangible and intangible aspects), the social engagement environment (which is a differentiating feature of hostels), and hostel brand to influence the value and hostel brand image perceptions of the customers, which in turn, influence how they would engage in social media and as loyal customers.

Keywords: Brand Image; Hostel; Social Media Engagement; Stimuli-Organism-Response

Introduction

Tourism is a significant sector contributing to over 17% of Thai national GDP, estimated to THB 2.5 trillion for the domestic economy, which benefits various stakeholders i.e., the tourism and hospitality value chains, and the manufacturing of products that cater to the needs of the tourists (Kungsri Research, 2017). Along with tourism is the increasing of accommodation demand. Thailand has been seeing the number of foreign tourists jumped from 15.9 million in 2010 to 38.3 million in 2018, and that also causes the hostel sector to experience skyrocketing growth of 32% in bed inventory, amounting to 63,632 beds in 1,766 properties across Southeast Asia, and with the most numbers of hostel beds in Thailand. Specifically, Thailand has a 42% share of the hostel industry in Southeast Asia (Hotelworks, 2018). Hostel sector is generally acknowledged to serve the low-cost segments whereby the travelers prefer to save traveling cost so that their trip journeys can be extended longer (Hostelworldgroup, 2019).

There are actually some unique features that hostels offer, and are significantly different from what the hotels generally offer, and these problems are negligibly addressed and reported in the extant literature. For instance, Timothy and Teye (2009) articulate and stress that "social atmosphere space" is something logically important for the hostel sector but it is lacking of empirical test; they further note that "associating with a wide array of global travelers is part of the assortment of products and experience of hosteling. Stories are shared, photographs exchanged, recommendations made for other voyage destinations, and in some cases, romances are kindled". With this friendship-making motivation, social engagement is reckoned as an important motivator and something the hostel sector should actively stimulate. Beside social atmosphere and spaces, there are other aspects such as customer experiences towards the services of the hostel staying, and in relation to the perceived images of hostel in the eyes of the customers, and the function of social-media blogs, are also not easily found in the extant literature associated with Sciencedirect.com and Emerald databases.

Meanwhile, a desktop-based SWOT analysis provides a sketch of both internal and external environmental landscape of the hostel sector: (1) Strength – The hostels offer numerous apparent benefits over other modes of accommodation, and the significant ones are inexpensiveness and social atmosphere of the hostels. Thus, hostels offer values for certain price-sensitive and social-preference types of customer segments. (2) Weakness – Thailand's skilled workforces are at low proportion when compared to other ASEAN countries, and this further puts the pressure for the hostel sector to recruit skillful employees. Though high skills are not needed in the hostel industry, the employees must be equipped with empathic and service-oriented attitude, mainly driven by the hostel sector in "heterogeneity" nature, in that "no two customers are precisely alike" (Zeithaml, and Bitner, 1996), which requires the employees to be able to react professionally to various customer needs. (3) Opportunity – Thailand as a tourism destination has offered the hostel industry abundant opportunistic and creative spaces for more hostel development in the nation to include more beds and services. (4) Threat – Threats of potential new entrants are high because hostel businesses are low investment in nature when compared to hotel alternatives, and regulation is not complex.

Judging by the significant weightage of hostels played in the accommodation industry and the lack of empirical and conceptual research, an urgent research is needed. A SWOT landscape sheds light towards the practical function of adapting a Stimulus-Organism-Response (S-O-R) paradigm, such as by considering the social factor, services, and value perceptions. Thus, the following research objective is targeted:

> *The purpose of the research is to conceptualize and statistically validate a proper model to be able to describe the customers' behavioral dynamics of their experiences staying in hostels in both Chiang Rai and Chiang Mai. Specifically, this research is designed to investigate the effects of stimuli (S), consisting of the factors that the hostel should emphasize, on the customers' internal or organismic states (O), which further contributes to customer loyalty and the disposition to engage and share their staying experiences on social media.*

Literature Review

As stated in the purpose statement, S-O-R (Stimulus-Organism-Response) model is adapted, which serves both theoretical and practical purposes. S-O-R is the seminal conceptualization of Mehrabian and Russell (1974). The model is simple, and by realizing what factors are important to please the actual and emotional needs of customers, i.e. novelty, or things critically important for hostel context, the hostel managements can suggest what they should emphasize in order to create favorable responses of the customers. Theoretically, the empirically validated research provides a valid mechanism to explain hostel customer behaviors with valid explanatory power. The design and implementation of the S-O-R mechanisms adapt the insights derived from the environmental psychology, which offers an exploratory perspective on customer behavior with regard to hostel environmental effect (Tiu, Newman & Dennis, 2000). Thus, S-O-R is a loyalty formation process. The response can be conative (intentional return to use the hostel service in the next visit), cognitive (thinking that hostel offers better services when compared to others), affectively (a deeper sense of affective response), and action loyalty (actual repurchase) (Han, Kim, & Kim) in nature. In short, the stimulating qualities and factors will cause customers to approach the offer or avoid the offer in the next occasion.

The S-O-R, which puts the internal or organistic states of the customers as the mediator, illuminates an example of instrumental or operant conditioning creatively, in that customers respond positively through being rewarded for their behaviors; that is, the customers are satisfied with their choice selecting the hostel in the first place. In short, satisfied customers reinforce their choice behavior (loyalty) and unsatisfied customers lead to turning away. The following hypothesis reflects the instrumental or the operant conditioning aspect of the S-O-R, namely:

H: Customer satisfaction positively influences customer loyalty.

For in-depth discussion on instrumental or operant conditioning, one is suggested to review Skinner (1638). In general, we define satisfaction as the customer's total assessment of their experiences with the hostel, adapting Crosby, Evans & Cowles (1990). For loyalty, it is referred as a "deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future" (Oliver, 1999), so the hostel can earn a share of the customer's wallet.

S-O-R model can also be understood by adapting computer analogy or metaphor (Eysenck & Keane, 2000), which acknowledges processing the information or messages received from how the hostels intend or attempt to stimulate the emotional and behavioral responses of the customers. In this way, "O" should depict the information-processing output, and of relevancy is how customers perceive of the values received (CVP, Customer Value Proposition), the overall assessment of how satisfied they are with the services, and the images formed. CVP reflects the perceptions of the hostel customers with respect to the values the hostel proposed, which according to some preferential theory and the nature of active wants, the nature of CVP could of economic reasons, functional reasons, emotional reasons, or/and social reasons (Holbrook, Lehmann & O'Shaughnessy, 1986). Functional value is one of the topics in the early work of consumer behavioral study, and explains the property of a good or service that is capable to satisfy customer needs (Salvatore, 1980). By focusing on the cognitive organism, apart from the satisfactory state of the customers, it reinforces that the stimuli are processed both cognitively and affectively for the changed response to occur. Nevertheless,

based on Zajonc (1984), there is the possibility that the affective evaluation of stimuli, which results in customer satisfaction, can occur independently of cognitive processes which intercept and process the information in terms of CVP and brand image formation. Thus, two additional hypotheses take the shape in the S-O-R context:

H: In a hostel context, the stimuli, which describes the service operations, the social engagement environment, and the external brand image perceived from the social media, do positively influence both CVP and hostel brand perception.

H: Both CVP and the hostel brand perception (the internally formed through customer experiences) positively influence customer satisfaction.

The conceptual factor, exemplified by the external brand image explicitly formed from social media, extends the inactiveness of customers to activeness (Moital, 2007), which treats the customers as "information processor" (Ribeaux & Poppleton, 1978), taking into consideration of the environmental and social stimuli as information inputs aiding internal decision making of the customers (Stewart, 1994). The theoretical support for inclusion of external brand image of hostel is also indicated in Table 1.

The inclusion of hostel brand perception signifies the role played by customer experiences and the creation of memory of the unique experiences of the hostel accommodation stay. Image formed is important as it directly contributes to enhancing brand recognition, leading to brand loyalty (Dirsehan & Kurtuluş, 2018; Huang & Liu, 2018). In addition, the externally sourced brand image from the social media has the ability to reduce risk perception of the customers (Kim & Lennon, 2010), particularly the purchase provides no avenue for product and service testing.

Table 1: The Early S-O-R and Modern Theory of S-O-R

Early S-O-R	Modern Theory of S-O-R
Suggests a linear relationship of S-O-R, taking an inactive organism state (Eysenck & Keane, 2000).	Acknowledges active organism, incorporating the past experiences of the customers to influence information-processing of stimuli; thus, in a way, information processing is both stimulus-driven and concept driven (Moital, 2007), hierarchical in nature (Tan, 2018; Tan, Phakeephirot & Sereewichayaswat, 2019), and should be more inclusive of other theories i.e., theory of planned behavior (Tan, 2019a,b).

In the above stated hypotheses, apart from the hostel operations quality and pricing, which is within the control and commitment of the hostel, the social engagement environment is equally important, particularly in the hostel context.

Two ultimate responses are considered in this research, namely customer loyalty and in terms of social media engagement. Customer loyalty is an important target of the hostel management as it indicates the success of the hostel operations. Thus, researchers have attempted to elucidate the factors that influence loyalty (Jani & Heesup, 2015), and this research exploits the S-O-R paradigm to provide a conceptualization platform to help

researchers explain and present evidence pertaining to locating the effective stimulating effects on hostel customers' internal states (Vieira, 2013).

Within the Social Exchange Theory (SET), customer behaviors are related to, inter-dependent on, and contingent upon the actions of another person (Cropanzano & Mitchell, 2005), through social engagement at the social compound and facility provided by the hostel. In today's social media-era (Tan & Isariyah, 2018), achieving customer engagement with social media has become a concept of increased relevance in recent marketing literature and as a novel approach to translate and implement customer value proposition (Gligor, Bozkurt & Russo, 2019). Kalan and Haenlein (2010) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content".

It was demonstrated and empirically tested in Tan and Isariyah (2018) that when customers are more loyal, they are more attuned to participate actively in social media, such as telling the stories, which serves empathetic and agentic role to tell what they experience to others so that others would not fail to anticipate the unexpected. Thus, without considering social media engagement, in today's social media-era, it would make the study of consumer behaviors incomplete (Gomez, Lopez & Molina, 2019).

The S-O-R model that has been articulated so far can provide important insights to the hostel management and the researchers to help them understand the mental structures and processes that mediate between stimulus and response (Kihlstrom, 1987).

The theoretical S-O-R model, which summarizes and integrates the hypotheses stated previously, is concluded in Fig, 1, and the hypotheses are presented now sequentially as follows:

H1: There is a positive interrelationship between the various aspects of the stimuli, namely service operations objectives reflected by the service quality and cost perception, the social engagement environment, and the external brand perception.

H2: Stimuli positively influences the organism. The organism is consisted of CVP, hostel brand perception (named as the internal brand image, formed through customer experiences, and not extracted from the external media), and customer satisfaction.

H3: CVP positively influences hostel brand (the internal).

H4: Both CVP and the hostel brand (the internal) positively influence customer satisfaction.

H5: Both customer satisfaction and CVP can significantly explain the variance of customer loyalty.

H6: CVP positively influences social media engagement.

H7: Customer loyalty positively influences social media engagement.

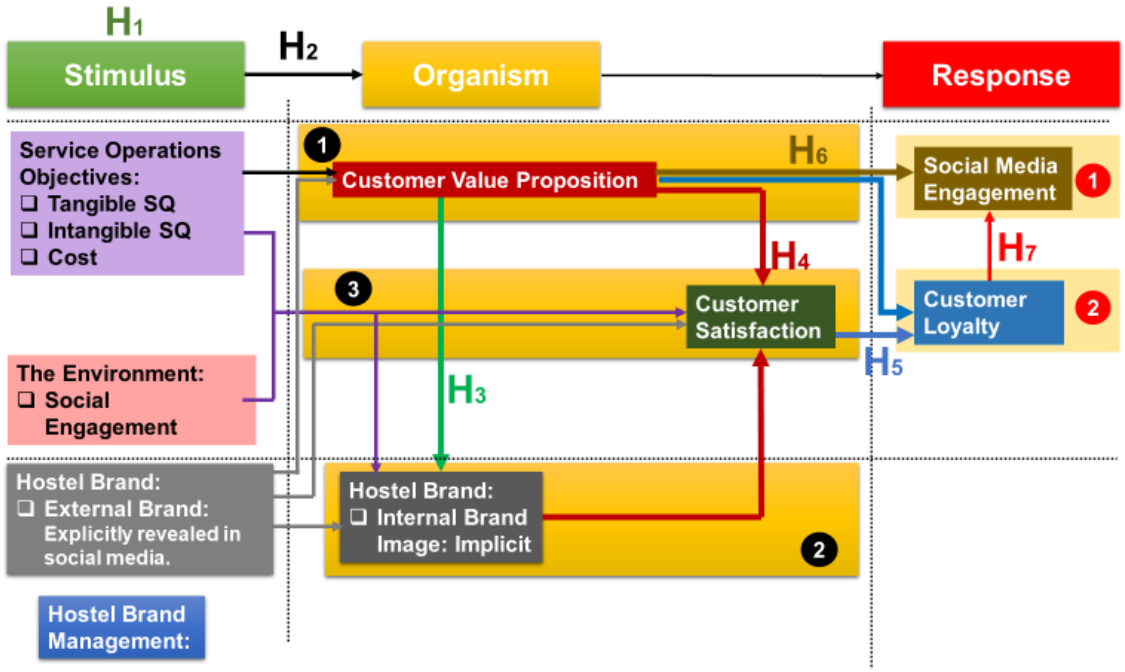

Fig. 1: The Theoretical S-O-R Model Proposed to Study Hostel

Research Method

Samples and Data Collection

This research targeted the city-bound hostels, located in Chiang Mai and Chiang Rai, with the name lists sourced from Hostelworld.com. The sample and population profiles are given in Table 2. Given the qualified 33 hostels in Chiang Rai and 93 hostels in Chiang Mai, 12 in Chiang Rai and 22 in Chiang Mai agreed to participate in the survey. The low rate of response was partly attributed to low season at the time of data collection – September to October 2019. 770 questionnaires were distributed. To attract the customers to participate, we provided them with a small token of cultural gift which costed about 12,320 Baht, and the gifts together with the questionnaires were managed by the hostel managers. Due to low season, the data collection took about two months, and collected 260 surveys, and ten of them were exempted from statistical analysis due to various missing questions. The response rate is 30%, which according to Baruch and Holtom (2008), a non- self-administered survey will typically have as low as 30% of response rate.

Table 2: Targeted Population and Sampling

Targeted population			
Targeted area	Chiang Rai		Chiang Mai
Existing hostel	43		113
Closed Hostel during low season	10		20
Available Hostel	33		93
Sampling/Participated			
Hostels willing to participate	12		22
Distributed questionnaires	270		500
Collected questionnaires	70		190
	Total	=	260
	Valid questionnaires	=	250
	Invalid questionnaires	=	10

Measurement Instrument

The measurement instrument is designed in consideration to meet stringent validity and reliability assurance criteria, which reviewed the construct definitions and ensured phrases and statements of questionnaire items reflecting the hostel environment. The pilot-tested phase involved seeking the opinions of two subject experts: one with rich publication experiences, and another with knowledge in service marketing and hospitality. The questionnaires have two parts.

The first part requested the hostel customers to provide their demographic profiles and some general inform, which offers a spectrum of practical insights that can be used to imply improvement strategies for hostel management. The variables include gender, nationality, age, occupation, marital, booking in advance, duration of stay, room type, daily rate, frequency of stay, character or trait of the customers, unique theme, low-cost and independent travel, alternative attitude of staying in hotel instead, social media reliance, purpose of trip, accompaniment, and travel plan.

Part 2 surveys the theoretical constructs: a total of 48 items. The questionnaire items are discussed, along with evidences to support validity and reliability requirements, in the "Result and Discussion" section.

Statistical Testing

Hypotheses testing and the detailed spectrum of statistical analysis were completed using both AMOS-based SEM (Structural Equation Modeling) analysis and SPSS-based statistical analysis. Methods used to assist the assessment of validity and reliability involve using factor reduction, correlations, and reliability checks. Minimum reliability threshold is targeted at 0.70 (Nunnally, 1978). The SEM fitness test criteria are comprehensively discussed in Hair, Black, Babin and Anderson (2014).

Result and Discussion

The statistics analyses were based on the 250 guests staying in the city bounded hostels in Chiang Mai and Chiang Rai. Males and female customers are quite equally distributed: The female guests at 59.6%. Among them, European at 46.8%, Thai at 16.8% and North American at 12.8%. Age wise, 25-34 years old at 44%, and 26.4% of the respondents are students. Furthermore, 84.8 % are single, and among them, 66.4% booked 1-2 weeks before checked into the hostel, 36.8% stays for three nights to a week, chose mixed dorm at 41.6%, and 61.6% spent 100 to 400 Baht per bed per night, and 72.4% checked into the hostel for the first time.

Interestingly, 72.8% of the respondents are extrovert in personality trait, connoting a skewed preference towards social interactions.

Among the respondents, 54% purported the trip for travelling, accompanied by friends at 62 %, and their travel plans are flexible, at 80.8%. Another important demographic variable is that 89.6% consider themselves as low-cost and independent travelers, relying on social media for decision making at 86%, and 63.6% responded that they would also choose hotel instead of hostel if price is comparable.

Result of Validity, Reliability Assessments and Measurement Instrument

Prior to SEM model fitness tests, the measurement instrument must be properly assessed. Factor loading, as shown in Table 3, proves of exceeding the 0.7 threshold, with reliability index determined by Cronbach Alpha, also more than the threshold requirement, 0.7.

Table 3: Measurement Instrument

Construct	Items	Alpha	Factor loading	Mean	Std. Dev.
Cost	The hostel provides special offers.		0.73	3.78	0.93
	The hostel price is cheap, which can save cost of travelling.	0.70	0.81	4.03	0.93
	The hostel has well-informed price prior to the purchasing with no additional charges.		0.82	4.29	0.89
Reliability	The hostel service is considered very reliable.		0.92	4.24	0.90
	The hostel reservation system is reliable.	0.91	0.92	4.30	0.88
	Staffs are able to accurately answer the customer questions.		0.92	4.40	0.90
Responsive	Hostel's check-in and check-out procedures are fast and efficient.		0.88	4.34	0.94
	Staffs of the hostel are never too busy to respond to my requests.	0.82	0.87	4.25	0.96
	Hostel quickly responses to customers upon request, such as through email or social media.		0.83	4.16	0.99
Assurance	Staffs understand my requests and able to respond appropriately.		0.94	4.26	0.94
	Staffs are able to provide city information and recommend attractive places.	0.90	0.91	4.32	0.87
	Staffs are knowledgeable of the services offered by the hostel		0.90	4.35	0.91
Empathy	Staffs always provide the service with smile and kindness.		0.90	4.48	0.84
	Staffs look after customer like a family.	0.89	0.92	4.22	0.95
	Hostel is willing to offer additional services or assistance.		0.90	4.26	0.89
Tangible	The hostel has a variety of facilities i.e. laundries, Wi-Fi to cater for our daily needs.		0.91	4.21	0.96
	Rooms and bathrooms are clean.	0.89	0.92	4.23	0.97
	The hostel has high security which has security personnel, fire alarm-system and CCTV.		0.89	3.92	1.06
Social engagement	Hostel provides social spaces, whereby customers can socialize among each other and do some activities together such as pools, game machine or board game.		0.84	3.80	1.15
	Hostel provides social activities, such as cooking class, yoga etc.	0.81	0.81	3.16	1.23
	Hostel allows you to meet up a new friend, which support you to better understand cross-cultural differences and similarities.		0.91	3.73	1.13
Functional value	The hostel makes we relaxed from the quality of service.		0.86	4.19	0.91
	The hostel room is very quiet and gives comfortable sleep.	0.70	0.79	3.98	0.97
	The hostel location is convenient which is close to the city.		0.80	4.34	0.77
Emotional value	The time spent at the hostel is truly enjoyable		0.94	4.12	0.96
	The atmosphere of the hostel makes my staying with a sense of joy.	0.93	0.96	4.09	0.99
	I feel like being at home while staying at the hostel		0.91	3.83	1.08
Economic value	The hostel provides good accommodation that is worth its price.		0.85	4.26	0.87
	The food and beverages served at the hostel are worth of its price.	0.84	0.85	3.96	1.09
	The customers can use all facilities and access the hostel services which are worth.		0.92	4.17	0.94
	Understand different multi-cultures better.	0.93	0.94	3.76	1.02

Construct	Items	Alpha	Factor loading	Mean	Std. Dev.
Social value	Enhance empathy towards other culture.		0.95	3.80	1.00
	Improve my interpersonal relations (with others).		0.93	3.80	1.01
External brand image	This hostel has media advertising on online social media such as reviews from Trip Advisor, Travel Bloggers, Pan tip etc.	0.89	0.90	4.10	0.94
	From the external sources, this hostel is attractive.		0.90	4.15	0.98
	From the external sources, this hostel is responsive to consumers.		0.92	4.28	0.87
Internal brand image	From my experience, this hostel is well managed.		0.92	4.22	0.96
	From my experience, this hostel has good employees.	0.93	0.95	4.36	0.90
	From my experience, this hostel is customer focused.		0.95	4.30	0.94
Customer satisfaction	Overall, this hostel fulfils many important needs e.g. Beds, Wi-Fi.		0.92	4.32	0.86
	Staying at this hostel is the right choice for me.	0.93	0.96	4.27	0.95
	Overall, I am really satisfied with this hostel.		0.93	4.31	0.94
Customer loyalty	I am likely to return to this hostel in the future if there is opportunity arises in the future.		0.92	4.04	1.15
	I feel emotionally attached to this hostel.	0.90	0.89	3.47	1.26
	I will recommend this hostel to my relatives and friends.		0.93	4.07	1.14
Social media engagement	I would share the positive things that I experience at this hostel in my social media.		0.91	3.45	1.38
	I would post pictures that I experience at this hostel in my social media.	0.83	0.92	3.24	1.40
	I would provide good rating to available platforms, such as TripAdvisor, Agoda, etc. about this hostel.		0.75	4.00	1.14

The factor reduction shows the unitary nature of the constructs, with the total variance explained (TVE) in exceeding the 0.60 minimum threshold, as reported in Table 4.

Table 4: Mean, Convergent and Divergent Validity, and Reliability

	Mean	Std. Dev.	Alpha	KMO	TVE	$\sqrt{TVE}$
Cost	4.03	0.73	0.70	0.65	0.62	0.79
Reliability	4.32	0.82	0.91	0.76	0.84	0.92
Responsive	4.25	0.83	0.82	0.71	0.74	0.86
Assurance	4.31	0.83	0.90	0.74	0.84	0.92
Empathy	4.32	0.81	0.89	0.74	0.82	0.91
Tangible	4.12	0.90	0.89	0.74	0.82	0.90
Social Engagement	3.56	1.00	0.81	0.67	0.73	0.85
Functional Value	4.17	0.72	0.70	0.67	0.66	0.81
Emotional Value	4.01	0.94	0.93	0.74	0.88	0.94
Economic Value	4.13	0.85	0.84	0.68	0.76	0.87
Social Value	3.79	0.95	0.93	0.76	0.88	0.94
External Image	4.29	0.88	0.89	0.75	0.82	0.91
Internal Image	4.23	0.78	0.93	0.76	0.88	0.94
Satisfaction	4.30	0.86	0.93	0.72	0.87	0.93
Loyalty	3.86	1.08	0.90	0.74	0.84	0.91
Social Media Engagement	3.56	1.13	0.83	0.65	0.74	0.86

Correlations Coefficients are significant at the 0.01 level (2-tailed) **

Also, as shown in Table 5, discriminant validities of the different constructs are robustly secured, as evidenced by the square root of TVE (Total Variance Explained), in the diagonal, more than the cross-correlations coefficients.

Table 5: Mean, Convergent and Divergent Validity, and Reliability

	Construct															
	Cost	Reliability	Responsive	Assurance	Empathy	Tangible	Social Engagement	Functional Value	Emotional Value	Economic Value	Social Value	External Image	Internal Image	Satisfaction	Loyalty	Social Media Engagement
V1	**0.79**															
V2	0.68	**0.92**														
V3	0.62	0.8	**0.86**													
V4	0.55	0.73	0.73	**0.92**												
V5	0.55	0.7	0.68	0.72	**0.91**											
V6	0.46	0.7	0.67	0.62	0.65	**0.90**										
V7	0.31	0.4	0.36	0.35	0.39	0.58	**0.85**									
V8	0.49	0.72	0.67	0.66	0.59	0.68	0.54	**0.81**								
V9	0.47	0.63	0.61	0.54	0.55	0.74	0.58	0.75	**0.94**							
V10	0.57	0.71	0.63	0.59	0.63	0.69	0.47	0.68	0.66	**0.87**						
V11	0.38	0.4	0.42	0.34	0.44	0.55	0.66	0.56	0.64	0.56	**0.94**					
V12	0.5	0.6	0.65	0.63	0.55	0.66	0.49	0.67	0.69	0.63	0.5	**0.91**				
V13	0.58	0.77	0.72	0.67	0.71	0.7	0.43	0.69	0.67	0.69	0.47	0.65	**0.94**			
V14	0.51	0.69	0.69	0.6	0.61	0.77	0.56	0.74	0.77	0.68	0.55	0.74	0.78	**0.93**		
V15	0.43	0.52	0.52	0.46	0.53	0.65	0.55	0.67	0.8	0.56	0.59	0.62	0.66	0.78	**0.91**	
V16	0.32	0.34	0.33	0.33	0.36	0.47	0.46	0.5	0.62	0.45	0.48	0.5	0.48	0.58	0.73	**0.86**

V1 = Cost, V2= Reliability, V3= Responsive, V4= Assurance, V5= Empathy, V6=Tangible, V7= Social Engagement, V8= Functional Value, V9= Economic Value, V10= Emotional Value, V11= Social Value, V12= External Image, V13= Internal Image, V14= Customer Satisfaction, V15= Customer Loyalty, V16= Social Media Engagement.

Comparative Study

The color-coded cells of Table 6 highlight the areas of significant differences, revealed by means of either analysis of variance (ANOVA) or t-test. The following illuminates the areas of significant differences:

- Male in general has means value more than the female, but are not to the level of statistical significance.
- Nationality wise, the Asian groups show significantly lower perceptual level on hostel service qualities, in aspects of reliability, responsiveness and tangible, as well as social engagement, leading to lower CVP, especially significant on the economic value. The external image projected to the Asian group is also relatively lower than the other nationalities.
- On the occupational aspect, social engagement of the student groups is the lowest among the other, while the business owner has the highest level. The similar trend is also shown in the "response" side indicated in social media engagement, which explains the dispositional tendency to post pictures experienced at the hostel to social media platform.

- The single-group perceives significantly higher that the hostel price is cheap, and that the hostel has well-informed price, which signifies a higher level of price-sensitivity, and also shows higher perceptions on other aspects of service qualities, particularly with respect to "responsiveness". The single-group perceives favorable hostel image, of both received from the social media and their own experiences.
- Those booked the hostel in the shortest advance, within 1-2 weeks, show higher level of perceptual agreements with all the constructs studied, and thus, the model dynamics should be strategically maintained and promoted for this group of customers. The similar trend is exhibited also for those staying one-night as compared to longer-duration stays, partly attributable to the exhaustion of the experiences with the services provided by the hostel. The hostels would need to be more innovative and service conscious in order to service the groups of longer-duration stays.
- The same-sex group has shown favorable perceptions on all constructs studied, and the private-room customers think the other ways. Thus, it is important the hostel owners start to identify them for further investment in order to stimulate their experiences in more active way.
- Price wise, 100-400 Baht per-bed day shows high level perceptual responses on all the constructs studied, but gradually wear off when daily rates increase. Thus, it is important the hostels pay a close attention to how their customers perceive pricing and the relevancies of other factors in order to yield at an optimal level.
- First-timers are shown to reflect higher level of emotional value received, leading to also higher loyalty value. The hostels should actively target them and exploit their emotional characteristics.
- Hotels of unique themes should also be stressed actively as they can significantly induce higher level of perceptual experiences in the stimulation, organism and response aspects, which is important in driving up the performance of the hostel.
- On average, the non "low-cost and independent travel" group shows higher level of perceptions of the constructs studied, particularly with responsiveness and assurance, implying higher level of emphases the service providers to respond quickly in professional manner, which reflects the higher level of price they are willing to pay.
- Reading the signal from the "Alternative attitude (Hotel instead of Hostel)", it indicates the existence of stickiness – that is, there is a group of customers preferring hostels to hotels.
- Although on average, the customers who rely on social media show higher level of perceptions on the constructs studied, but the only significant one is that of "reliability", partly they have glanced across the social media, and their choices signify a better choice. This is an important message which has been not easily revealed in the extant publications.
- No significant differences are found on the different purposive groups, i.e. for travel, holiday, business, visiting friends, and MICE, which eases up the budgetary burdens for this segmentation need.
- Those who travel alone have higher level of perceptions of the constructs studied, when compared to staying with friends. The hostels should actively aim to promote more active experiences for shared partnership situations.
- Those with relatively fixed travel plan are significantly more loyal and tend to engage socially in sharing the experiences of the hostel with others on social media, and the hostel should actively promote this group and embark them as brand ambassadorship.

Table 6: The Comparative Analyses

	Description	Frequency	Percentage	Cost	Reliability	Responsive	Assurance	Empathy	Tangible	Intangible	Service Quality	Social Engagement	Functional Value	Emotional Value	Economic Value	Social Value	CVP	External Image	Internal Image	Image	Satisfaction	Loyalty	Social Media Engagement
Gender	Female	149	59.6	4.05	4.26	4.21	4.23	4.29	4.06	4.25	4.21	3.48	4.13	3.92	4.06	3.66	3.94	4.11	4.27	4.19	4.29	3.79	3.57
	Male	98	39.2	4.01	4.40	4.30	4.45	4.36	4.19	4.38	4.34	3.71	4.25	4.13	4.23	3.98	4.15	4.28	4.34	4.31	4.34	3.98	3.58
	Other	3	1.2	3.78	4.45	4.56	4.00	4.33	4.56	4.33	4.38	2.89	3.55	4.44	4.56	4.11	4.17	4.00	4.11	4.06	3.78	3.55	2.78
	Sig.															0.03							
Nationality	Thai	42	16.8	3.91	4.08	4.06	4.20	4.41	4.17	4.19	4.18	3.71	4.25	4.13	4.18	3.89	4.11	4.18	4.25	4.21	4.40	4.06	3.91
	European	117	46.8	4.11	4.40	4.29	4.38	4.38	4.07	4.36	4.30	3.49	4.10	3.94	4.13	3.77	3.99	4.23	4.35	4.29	4.25	3.79	3.37
	Asian	35	14.0	3.96	4.08	4.11	4.06	3.93	3.80	4.05	4.00	3.21	4.01	3.90	3.76	3.47	3.78	3.78	3.98	3.88	4.09	3.88	3.74
	North American	32	12.8	3.89	4.31	4.27	4.37	4.26	4.27	4.30	4.30	3.79	4.28	4.15	4.19	4.03	4.16	4.33	4.35	4.34	4.34	3.84	3.66
	Other	24	9.6	4.18	4.69	4.54	4.49	4.50	4.51	4.56	4.55	3.87	4.47	4.17	4.53	3.82	4.25	4.26	4.46	4.36	4.64	3.84	3.47
	Sig.				0.01	0.03			0.03			0.04			0.02			0.05					
Age: year Old	Under 18	1	0.4	4.33	4.67	5.00	4.67	5.00	5.00	4.83	4.87	4.67	4.00	4.67	5.00	4.33	4.50	4.33	4.67	4.50	4.33	4.33	2.33
	18-24	98	39.2	4.08	4.23	4.20	4.18	4.27	3.96	4.22	4.17	3.50	4.04	3.96	4.10	3.77	3.97	4.07	4.20	4.13	4.18	3.75	3.31
	25-34	110	44.0	4.02	4.36	4.35	4.41	4.35	4.17	4.37	4.33	3.63	4.27	4.04	4.22	3.84	4.09	4.29	4.39	4.34	4.36	3.88	3.66
	35-54	38	15.2	3.87	4.36	4.04	4.30	4.32	4.32	4.25	4.27	3.48	4.25	4.10	3.96	3.77	4.02	4.11	4.22	4.16	4.41	4.12	3.96
	Over 55	3	1.2	4.89	4.89	4.67	5.00	4.67	4.56	4.81	4.75	3.78	3.67	3.44	4.00	2.78	3.47	4.22	4.56	4.39	4.44	3.22	3.55
	Sig.																						0.02
Occupation	Student	66	26.4	4.13	4.32	4.30	4.26	4.32	4.06	4.30	4.25	3.33	3.96	3.93	4.15	3.69	3.93	4.07	4.20	4.14	4.16	3.75	3.19
	Corporate	56	22.4	4.02	4.32	4.30	4.40	4.27	4.00	4.32	4.26	3.51	4.27	4.00	3.95	3.58	3.95	4.18	4.44	4.31	4.36	3.94	3.71
	Government	15	6.0	3.71	3.75	3.62	3.82	4.15	4.02	3.84	3.87	3.73	3.89	3.87	3.98	3.71	3.86	4.11	4.00	4.05	4.02	3.87	3.87
	Business owner	25	10.0	3.97	4.27	4.17	4.48	4.48	4.49	4.35	4.38	4.16	4.29	4.28	4.36	4.17	4.28	4.35	4.21	4.28	4.47	4.24	4.09
	Freelance / Self-employed	46	18.4	4.01	4.35	4.38	4.25	4.26	4.01	4.31	4.25	3.41	4.20	4.04	4.02	3.76	4.01	4.09	4.28	4.18	4.33	3.79	3.56
	Unemployed	26	10.4	4.17	4.44	4.24	4.68	4.50	4.21	4.47	4.41	3.60	4.26	3.79	4.37	3.92	4.09	4.36	4.35	4.35	4.37	3.63	3.33
	Other	16	6.4	3.94	4.58	4.19	4.02	4.27	4.46	4.27	4.30	4.02	4.50	4.38	4.44	4.23	4.39	4.36	4.50	4.43	4.50	4.06	3.83
	Sig.						0.02					0.01	0.04										0.01
Marital	Single	21 2	84.8	4.09	4.35	4.30	4.35	4.34	4.10	4.34	4.29	3.59	4.20	4.04	4.15	3.79	4.04	4.24	4.33	4.28	4.34	3.90	3.56
	Married	33	13.2	3.74	4.13	3.88	4.07	4.21	4.22	4.07	4.10	3.50	4.00	3.83	4.03	3.82	3.92	3.80	4.02	3.91	4.12	3.72	3.58
	Divorced	5	2.0	3.60	4.13	4.47	4.40	4.07	4.33	4.27	4.28	3.07	4.07	4.07	4.00	3.60	3.93	4.13	4.40	4.27	4.00	3.27	3.67
	Sig. (2-tailed)			0.01		0.02												0.02		0.04			
Booking in Advance	within 1 -2 w.	16 6	66.4	4.14	4.44	4.30	4.36	4.42	4.19	4.38	4.34	3.70	4.27	4.11	4.25	3.96	4.15	4.23	4.31	4.27	4.38	3.96	3.59
	2 w. – 1 m.	49	19.6	3.76	4.02	4.05	4.10	4.01	3.99	4.04	4.03	3.29	3.84	3.71	3.92	3.53	3.75	4.00	4.21	4.11	4.07	3.52	3.41
	Months ahead	35	14.0	3.92	4.12	4.29	4.40	4.29	3.97	4.28	4.21	3.30	4.18	3.96	3.89	3.35	3.85	4.15	4.31	4.23	4.25	3.87	3.64
	Sig. (2-tailed)			0.00	0.00			0.01		0.02	0.03	0.01	0.00	0.03	0.01	0.00	0.00					0.04	
Duration of Staying	1 night	38	15.2	4.34	4.59	4.55	4.61	4.55	4.48	4.58	4.56	3.81	4.42	4.21	4.36	3.60	4.15	4.47	4.54	4.50	4.58	4.14	3.83
	2 nights	63	25.2	3.90	4.05	4.03	4.06	4.24	4.01	4.10	4.08	3.66	4.05	3.96	4.03	3.88	3.98	4.21	4.15	4.18	4.22	3.83	3.66
	3 nights	29	11.6	4.16	4.23	4.15	4.33	4.40	4.15	4.28	4.25	3.88	4.00	4.00	4.22	4.02	4.06	3.97	4.31	4.14	4.24	3.98	3.65
	3 nights – 1 w.	92	36.8	4.05	4.46	4.27	4.31	4.26	3.99	4.33	4.26	3.38	4.20	3.95	4.12	3.79	4.02	4.11	4.28	4.20	4.26	3.73	3.31
	1-4 w.	22	8.8	3.73	4.20	4.29	4.46	4.21	4.17	4.29	4.26	3.36	4.27	4.00	4.01	3.42	3.93	4.03	4.26	4.14	4.33	3.95	3.62
	More than 1 m.	6	2.4	3.67	4.00	4.67	4.45	4.50	4.61	4.40	4.44	2.95	3.83	4.33	4.00	4.17	4.08	4.50	4.39	4.45	4.28	3.61	3.94
	Sig. (2-tailed)			0.01	0.01	0.04	0.04		0.05			0.03											
Room Type	Same sex	22	8.8	4.35	4.46	4.44	4.43	4.62	4.47	4.48	4.48	3.79	4.41	4.35	4.44	3.99	4.30	4.39	4.70	4.55	4.71	4.41	4.05
	Mixed dorm	10 4	41.6	4.04	4.40	4.30	4.36	4.38	4.22	4.36	4.33	3.94	4.33	4.26	4.27	4.09	4.24	4.36	4.39	4.37	4.47	4.03	3.62
	Private room (Share Bath.)	50	20.0	4.17	4.42	4.24	4.35	4.33	4.08	4.33	4.28	3.32	4.11	3.93	4.31	3.63	3.99	4.18	4.31	4.24	4.13	3.73	3.53
	Private room (Private Bath.)	74	29.6	3.85	4.08	4.12	4.19	4.13	3.90	4.13	4.09	3.13	3.92	3.62	3.73	3.41	3.67	3.86	4.02	3.94	4.05	3.55	3.36
	Sig. (2-tailed)			0.01	0.03				0.03			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Daily rate: bed/day (Baht)	Lower than100	11	4.4	3.97	4.36	4.42	4.33	4.39	4.09	4.38	4.32	3.64	4.30	4.15	3.91	3.85	4.05	4.33	4.55	4.44	4.42	4.00	3.64
	100 - 400	15 4	61.6	4.18	4.50	4.39	4.45	4.47	4.18	4.45	4.40	3.61	4.24	4.06	4.29	3.90	4.12	4.25	4.43	4.34	4.40	3.92	3.50
	401 - 800	44	17.6	3.80	4.01	3.96	4.02	4.22	4.07	4.05	4.06	3.38	4.05	3.97	3.95	3.64	3.90	4.01	4.06	4.03	4.14	3.82	3.84
	801 – 1,200	32	12.8	3.66	3.93	3.93	4.14	3.86	3.96	3.96	3.96	3.50	3.97	3.79	3.80	3.51	3.77	4.02	3.85	3.94	4.02	3.47	3.30
	1,201 – 1,600	9	3.6	4.08	4.04	4.15	4.00	3.85	3.92	4.01	3.99	3.70	4.11	3.93	3.78	3.56	3.84	4.07	4.30	4.19	4.33	4.26	4.04
	Sig. (2-tailed)			0.00	0.00	0.00	0.01	0.00		0.00	0.00				0.01				0.00	0.02			

Frequency of staying	first time	181	72.4	4.05	4.34	4.26	4.32	4.25	4.13	4.29	4.26	3.51	4.15	3.93	4.16	3.72	3.99	4.14	4.29	4.22	4.29	3.77	3.51
	once or more	69	27.6	3.99	4.27	4.23	4.29	4.49	4.10	4.32	4.27	3.70	4.22	4.23	4.07	3.98	4.12	4.28	4.29	4.28	4.32	4.11	3.70
	Sig. (2-tailed)			0.04										0.03								0.02	
Character/ trait	Extrovert:	182	72.8	4.07	4.38	4.25	4.34	4.32	4.16	4.32	4.29	3.59	4.20	4.07	4.18	3.83	4.07	4.23	4.29	4.26	4.33	3.91	3.63
	Introvert:	68	27.2	3.93	4.14	4.24	4.24	4.31	4.00	4.23	4.18	3.50	4.09	3.84	4.01	3.69	3.91	4.03	4.29	4.16	4.22	3.73	3.38
Unique theme	Yes	158	63.2	4.07	4.39	4.33	4.36	4.35	4.24	4.36	4.33	3.74	4.31	4.22	4.23	3.99	4.19	4.30	4.40	4.35	4.46	4.14	3.92
	No	92	36.8	3.97	4.18	4.11	4.23	4.27	3.91	4.20	4.14	3.26	3.92	3.66	3.96	3.43	3.74	3.97	4.11	4.04	4.02	3.38	2.95
	Sig. (2-tailed)				0.05	0.04			0.01		0.04	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
low-cost and independ	Yes	224	89.6	4.02	4.30	4.20	4.28	4.31	4.10	4.27	4.24	3.58	4.15	4.01	4.13	3.82	4.03	4.15	4.27	4.21	4.29	3.87	3.54
	No	26	10.4	4.12	4.44	4.63	4.63	4.42	4.27	4.53	4.48	3.37	4.31	4.00	4.14	3.47	3.98	4.39	4.45	4.42	4.36	3.75	3.77
	Sig. (2-tailed)					0.01	0.04																
Hotel instead Hostel	Yes	159	63.6	4.01	4.21	4.12	4.20	4.23	4.01	4.19	4.15	3.46	4.10	3.88	4.10	3.70	3.94	4.07	4.15	4.11	4.19	3.74	3.54
	No	91	36.4	4.07	4.51	4.47	4.51	4.47	4.30	4.49	4.45	3.74	4.30	4.24	4.19	3.95	4.17	4.37	4.54	4.45	4.49	4.08	3.59
	Sig. (2-tailed)				0.01	0.00	0.00	0.02	0.02		0.00	0.04	0.04	0.00			0.02	0.01	0.00	0.00	0.01	0.02	
Rely on social media	Yes	215	86.0	4.04	4.27	4.24	4.27	4.30	4.11	4.27	4.24	3.54	4.13	3.97	4.14	3.75	4.00	4.19	4.25	4.22	4.29	3.85	3.58
	No	35	14.0	3.97	4.58	4.30	4.54	4.44	4.18	4.46	4.41	3.71	4.42	4.27	4.10	4.05	4.21	4.07	4.55	4.31	4.35	3.95	3.46
	Sig. (2-tailed)				0.00																		
Purpose	for travel	135	54.0	4.01	4.27	4.19	4.25	4.28	4.04	4.25	4.21	3.55	4.14	3.95	4.07	3.73	3.97	4.14	4.21	4.18	4.25	3.74	3.41
	for holiday	22	8.8	4.23	4.45	4.23	4.49	4.27	4.21	4.36	4.33	3.83	4.30	4.18	4.12	3.83	4.11	4.30	4.29	4.29	4.50	4.19	3.88
	for business	5	2.0	3.47	3.80	4.33	4.47	4.13	4.20	4.19	4.18	1.93	3.60	3.73	3.20	3.00	3.38	4.07	4.00	4.03	3.67	3.20	2.93
	visiting friends	3	1.2	4.45	4.44	4.56	4.22	4.22	4.11	4.36	4.31	3.33	4.45	4.33	4.67	3.78	4.30	4.34	4.67	4.50	4.56	4.00	3.78
	for MICE	6	2.4	3.67	3.45	4.22	4.06	3.78	3.33	3.88	3.77	2.56	4.05	3.39	3.28	3.22	3.49	3.45	3.61	3.53	3.78	3.50	3.28
	Other	79	31.6	4.07	4.46	4.34	4.38	4.46	4.27	4.41	4.38	3.69	4.22	4.12	4.34	3.97	4.16	4.27	4.48	4.37	4.41	4.04	3.78
	Sig. (2-tailed)				0.03							0.00			0.00		0.05						
Accompany	Alone	95	38.0	4.12	4.51	4.43	4.46	4.46	4.36	4.47	4.44	3.83	4.36	4.30	4.26	4.03	4.24	4.37	4.52	4.45	4.55	4.17	3.80
	with Friends	155	62.0	3.98	4.20	4.14	4.22	4.24	3.97	4.20	4.15	3.40	4.06	3.83	4.05	3.64	3.90	4.06	4.15	4.10	4.15	3.67	3.42
	Sig. (2-tailed)				0.00	0.01	0.02	0.04	0.00	0.01	0.00	0.00	0.00	0.00		0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01
Travel Plan	flexible	202	80.8	4.04	4.31	4.28	4.35	4.34	4.08	4.32	4.27	3.51	4.16	3.98	4.12	3.79	4.01	4.14	4.26	4.20	4.27	3.79	3.46
	Relatively fixed	48	19.2	3.99	4.33	4.10	4.16	4.22	4.29	4.20	4.22	3.79	4.21	4.12	4.18	3.79	4.08	4.33	4.42	4.37	4.44	4.17	4.01
	Sig. (2-tailed)																					0.03	0.00

Model Fit Test

The SEM path analysis result is given in Fig. 2, which shows the path coefficient, and the R-square predicted for the respective dependent variable, and the correlations of the exogenous indicators on the stimuli layer.

The SEM focuses on latent variables S, O, and R variables rather than the observed variables, and the basic objectives of SEM are to provide a means of estimating the structural relations among the unobserved latent variables of a hypothesized model free of the effects of measured errors.

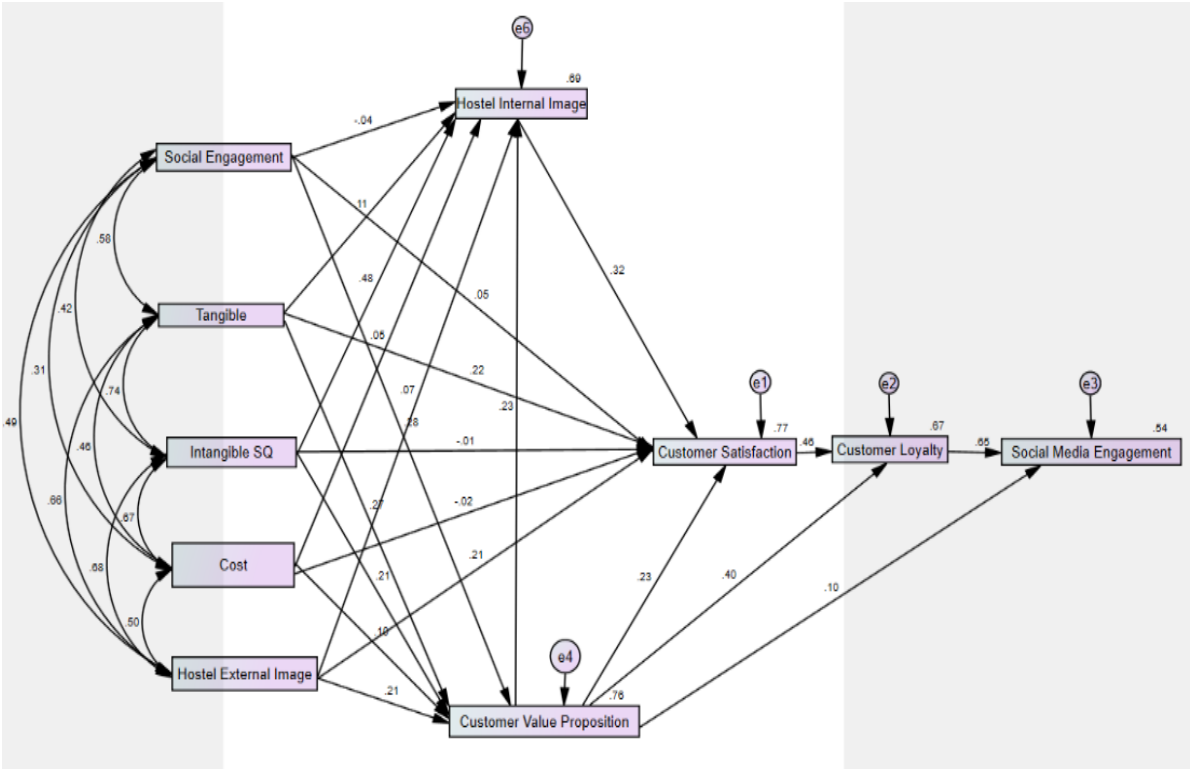

Fig. 2: The Validated Structure Equation Model

To be specific, the purpose of SEM model estimation or model fit is to find a set of model parameter θ to produce $\sum(\theta)$ so that $[\sum - \sum(\theta)]$ can be minimized, where $\sum(\theta)$ denotes the population covariance matrix of observed variables.

The model is tested based on Maximum Likelihood (ML) function stated in equation (1):

$$F_{ML}(\theta) = \ln |\widehat{\Sigma}| + \text{tr}\,(S\widehat{\Sigma}^{-1}) - \ln |S| - (p+q) \quad (1)$$

Where S and $\widehat{\Sigma}$ are the sample and model estimated variance and covariance matrices, respectively, and (p+q) is the number of observed variables involved in the model yielding (p+q) (p+q+1)/2 unique variances and co-variances.

The fit indices for the structural model are given in Table 7. The χ^2 of the structural model is 21.78 with 13 degrees of freedom, and p-value ≥ 05 (indicating perfect absolute model fit) and χ^2/df below the upper threshold of 5 (at 1.629). With p ≥ 0.05, there is an absolute model fit based on the Maximum Livelihood (ML). The absolute fit assesses how well the model specified reproduces the observed data, and is also evidenced in the root mean squared error of approximation (RMSEA) at 0.050. The incremental fit indices, which assesses how well a specified model fits relative to some alternative baseline model, with indexes NFI = 0.99, RFI = 0.966, IFI = 0.996, TLI = 0.987, and CFI = 0.996, all closer to 1.

Table 7: Model Fit Statistics

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	52	21.178	13	.069	1.629
Saturated model	65	.000	0		
Independence model	20	2143.070	45	.000	47.624

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default Model	.990	.966	.996	.987	.996
Saturated Model	1.000		1.000		1.000
Independence Model	.000	.000	.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default Model	.050	.000	.088	.451
Independence Model	.433	.417	.448	.000

Hypothesis Testing

First of all, the correlations shown in Table 5 provides the support for the first hypothesis H1. The other hypotheses, H2 to H7, are supported based on the structural path model given in Fig. 2 and the supporting details are given in Table 8.

Table 8: Hypothesis Supporting Details

Dependent Variable	Independent Variable	Beta	t-value	Sig.	Hypothesis	Result
Organism 1: Internal Image $R^2 = 0.69$	Tangible SQ	0.11	1.71	0.09	H2	Supported
	Intangible SQ	0.48	7.12	0.00		
	External brand Image	0.07	1.33	0.19		
	Social Engagement	-0.04	-0.82	0.42		
	Cost	0.05	1.09	0.28		
	CVP	0.23	3.20	0.00	H3	Supported
Organism 2: CVP $R^2 = 0.76$	Tangible SQ	0.27	5.11	0.00	H2	Supported
	Intangible SQ	0.21	3.57	0.00		
	External brand Image	0.21	4.54	0.00		
	Social Engagement	0.28	7.12	0.00		
	Cost	0.10	2.26	0.03		
Organism 3: CS $R^2 = 0.77$	Tangible SQ	0.22	3.99	0.00	H2	Supported
	Intangible SQ	-0.01	-0.22	0.83		
	External brand Image	0.21	4.38	0.00		
	Social Engagement	0.05	1.06	0.29		
	Cost	-0.02	-0.50	0.62		
	CVP	0.23	3.52	0.00	H4	Supported
	Internal brand image	0.32	5.73	0.00		
CL $R^2 = 0.67$	CVP	0.40	6.57	0.00	H5	Supported
	CS	0.46	7.56	0.00		
SME	CVP	0.10	1.51	0.13	H6	Supported
$R^2 = 0.54$	CL	0.65	9.69	0.00	H7	Supported

Note: SQ = Service Quality, CVP = Customer Value Proposition, CL = Customer Value, SME = Social Media Engagement

Specifically, the SEM shows that both hostel internal image and customer value propositions play significant mediator roles, which leverages the stimulation drivers further to impact on customer satisfaction. Customer loyalty is an important mediator, which delivers a role to stimulate and motivate the hostel customers to share their experiences in social media.

Conclusion

Prior literature highlights very little of empirical and conceptual research involved in explaining and characterizing how the customers perceive of their experiences staying in hostels. Thus, very limited insight can be gained. As such, this research adapts a widely acknowledged S-O-R paradigm (cf. Tan, 2019a,b; Tan et al. 2019) to guide the conceptualization in explaining and presenting evidence pertaining to how the customers perceive and react to their experiences staying in hostels. Due to a lack of published information and knowledge structure characterizing customer behaviors in hostel context, the research effort is useful. The comparative statistical analyses provide a rich spectrum of insights of practical implications.

Four groups of variables are shown significantly important enacting the roles of stimuli. One group is controllable by the hostels – namely the tangible and intangible service quality. The second group is the living facility and compound provided by the hostels to facilitate the social engagement of the guests among themselves. The third involves cost perception of the hostel guests. The fourth is the hostel external image which the guests formed prior to purchase. Customers process these sets of information and sort out their mental stages in terms of perceived value (the perceived customer value proposition, CVP) and hostel internal image formed. Thus, there is a clear information-processing taking place, and hostels should acknowledge it (Bettman, 1970), in the view that customers form memory consisting of an array of cues formed of social engagement, service qualities (tangible and intangible), cost and hostel external image, which influences the states of their satisfaction, mediated through the influences of hostel internal image and customer value proposition (Newell, Calman & Simon, 1958).

Two layers of organistic states are demonstrated, namely (1) the first layer, consisting of hostel internal image and customer value proposition, and (2) customer satisfaction – the second layer.

While the second layer is affection oriented, the first layer is cognitive in nature, driven by "an interactive relativistic preference experiences" (Holbrook, Lehmann, & O'Shaughnessy, 1986) of the customers and the judgments formed of the customer's assessment of what has happened (benefits and sacrifices or costs incurred) (Nasution & Mavondo, 2008).

Due to the service-nature and the social emphasis of hostel atmosphere, customer value proposition involves four value domains, namely functional value, emotional value, economic value, and social value, and they are shown to significantly impact on satisfaction, loyalty, and social media engagement. The latter describes the behavioral tendency of the hostel customers to share, post pictures of what they experience at the hostels in social media platform. Customer social media engagement has received increasing attention (Gomez, Lopez & Molina, 2019). Loyalty is a significant mediator in leveraging the perceived values to arrive at customers sharing in social media, which can serve as ambassador promoting the hostel brand.

Numerous important practical implications can be suggested to the existing hostels or as messages to the hostel sectors on areas to be emphasized.

The following states the significant ones.

Hostels should realize that a much higher level of efforts is needed to stimulate the Asian groups so it drives more favorable organistic perceptions and thus responses. Though the students should be more active in social media, these groups are shown to exert lower level of efforts in sharing what they experience at the hostel, and promotional incentives should be derived to stimulate their sharing.

The single-group perceives significantly higher that the hostel price is cheap, and that the hostel has well-informed price, which signifies a higher level of price-sensitivity, and also shows higher perceptions on other aspects of service qualities, particularly with respect to "responsiveness". The single-group has favorable image formation of the hostel, of both they received from the social media and their own experiences. The single-group should be segmented for a particular attention, as the hostel can leverage their favorable attitudes.

Those booked the hostel in shortest advance, within 1-2 weeks, show higher level of perceptual agreements with all the constructs studied, and thus, the model dynamics should be strategically maintained and promoted for this group of customers. The similar trend is exhibited also for those staying one-night as compared to longer-duration stays, partly attributable to the exhaustion of the experiences with the services provided by the hostel. The hostels would need to be more innovative and service conscious in order to service the groups of longer-duration stays.

The same-sex group has shown favorable perceptions on all constructs studied, and the private-room customers think the other ways. Thus, it is important the hostel owners start to identify them for further investment in order to stimulate their experiences in more active way.

Price wise, 100-400 Baht per-bed day shows high level perceptual responses on all the constructs studied, but gradually wear off when daily rates increase. Thus, it is important the hostels pay a close attention to how their customers perceive pricing and the relevancies of other factors in order to yield at an optimal level. First-timers are shown to reflect higher level of emotional value received, leading to also higher loyalty value. The hostels should actively target them and exploit their emotional characteristics. Hotels of unique themes should also be stressed actively as they significantly induce higher level of perceptual experiences in the stimulation, organism and response aspects, which is important driving up the performance of the hostel.

Reading the signal from the "Alternative attitude (Hotel instead of Hostel)", it indicates the existence of stickiness – that is, there is a group of customers who prefer hostels to hotels. Those who travel alone have higher level of perceptions of the constructs studied, when compared to staying with friends. The hostels should actively aim to promote more active experiences for shared partnership situations. Those with relatively fixed travel plan are significantly more loyal and tend to engage socially in sharing the experiences of the hostel with others on social media, and the hostel should actively promote this group and embark them as brand ambassadorship.

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