

# Faith Management in Thai Society: Case Study on Factor Analysis and Clustering to Worship the Vishnu of Siam Technology College's Students

**Prakart Pawa Thongsawang<sup>1</sup>**

Faculty of Business Administration,  
Siam Technology College, Thailand  
<sup>1</sup>octoberap@gmail.com

**and Prasopchai Pasunon<sup>2</sup>**

Faculty of Management Science,  
Silpakorn University Phetchaburi IT Campus, Thailand  
<sup>2</sup>arthur8kim@gmail.com

**Abstract** - The objectives of this research were to investigate the behaviour of Siam Technology College's students to worship the Vishnu and to analyze the worship factors to the Vishnu and lastly to categorize the students who worship the Vishnu by sacred factors. The sample consists of 393 students from Siam Technology College. Data collection was completely gathered through questionnaire distributed by stratified random sampling during 1-20 October 2017, which was developed based on the concept of service marketing mix (7P's). For extracting method, we applied the Principal Component Analysis (PCA) with Orthogonal Rotation by Varimax Method and clustered adorers by K-means technique Analysis. We found that the behaviour of adorers who worship the Vishnu is mainly based on their belief to Vishnu. Moreover, these students unusually worship to Vishnu. 76.1% of sacrifices are mostly flowers or garlands. 84.0% of adorers never take an oath to Vishnu. Most adorers knew the Vishnu from their teachers amounted 46.3%. Mostly adorers believe the Vishnu is the god of success accounted 65.1%. Considering the worship factors, there are five common factors which are the holiness (Eigenvalues = 17.303, Variance = 55.815%), the belief

(Eigenvalues = 3.012, Variance = 9.717%), the popularity (Eigenvalues = 1.683, Variance = 5.43%), the ritual (Eigenvalues = 1.134, Variance = 3.659%) and the environment (Eigenvalues = 1.099, Variance = 3.546%) respectively. To categorize the adorers, we could classified into 2 groups which were the adorers who worship based on the ritual accounted 38.93% and adores who worship based on receptiveness to Vishnu accounted 61.06%.

**Keywords** - Faith Management, Vishnu, Factor Analysis, Clustering

## I. INTRODUCTION

Vishnu is another holy god that the entire mechanics utmost pay respect and belief. The Vishnu is also considered as the king of mechanic gods. He is a teacher of all technicians who has rich of mercy and excellent of acumen. He also has the most power to create things and bring about the miraculous success of the three worlds which are the heaven, the human world, and the hell [1].

"Siam Technology College" is one of the famous technological institutions in the field of mechanics which students highly believed

that worshipping the Vishnu will help them succeed in learning all of their craft including career success related to the mechanic. The Siam Technology College always arranges the annual Vishnu ceremony in order to unite the spirit of their students and staffs. For this reason, we are interested in studying the behavior and factors affecting the worship of Vishnu in Siam Technology College.

## II. LITERATURE REVIEWS

Thai traditions and cultures have been diversely influenced from many Asian countries especially India, which they believe that the Vishnu is the god of the mechanic who is the greatest inventor or the skilful creator of all creations in the world. Therefore, Thais call his name as “Vishvakam” which means that the science that the Vishnu will come to teach by himself (the god of the mechanic).

The Vishnu is the sacred god that all engineers highly pay respect and faith. He is also a mental anchor of all the teachers and students who work in a field of mechanics. They always call him as “father” that is known for all mechanics [2].

All vocational institutions which mainly teach in a field of mechanic and engineering must have the outstanding statue of Vishnu within the institution. More importantly, they will always arrange the ceremony to sacrifice the Vishnu every year especially on their founding day of the institution [3].

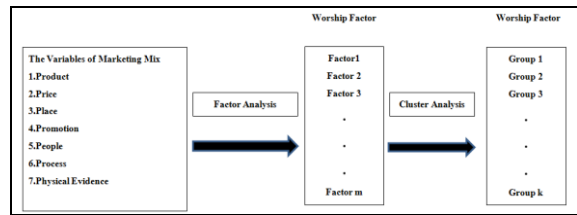
## III. RESEARCH OBJECTIVES

The objectives of this study are to examine the behaviour of the Siam Technology College's students to warship the Vishnu and to analyze the factors regarding worshipping the Vishnu. Lastly, we also classify the common factors respecting the Vishnu's worshipping.

## IV. CONCEPTUAL FRAMEWORK

A survey research is applied in this study. The factor analysis techniques using principal component analysis (PCA) with orthogonal rotation by varimax method also uses to

extract common factors by focusing on exploring the group of adorer to the Vishnu. In addition, the K-means technique analysis is employed to cluster the adorers.



**Fig. 1** Conceptual Framework

The content of this research is mainly discussed on the behaviour and common factors affecting the worshipping of the Vishnu. The prospective results are to search for the important factors to worship the Vishnu and to categorize the groups of adorer who worship the Vishnu based on common factors. The research instrument was a questionnaire applied from [4].

## V. DATA

The population used in this study is the students who are studying on bachelor degree included freshman, sophomore, junior and senior at Siam Technology College. These students are come from different faculties such as technology, business administration, liberal art, political science and accounting. The data has been collected from 1-20 October 2017.

## VI. RESEARCH METHODOLOGY

We applied the principal component analysis technique with orthogonal rotation by varimax with Kaizer normalization. The criteria to determine the common factors are the eigenvalue and its factor loading which these values must be greater than 1 and 0.64 respectively. In the factor analysis, the questionnaire was formulated using the concept of service marketing mix including the modification of questionnaire worked by [4]. We then classified the common factors by K-means which determine the maximum number of cycles as 25. Moreover, we also determined the convergence criterion as zero. To determine the optimal number of clusters, we recursively

tested with the several K-means group analysis methods with  $K = 2, 3, \dots, 8$  which we comparably consider from the value of final cluster centers. However, before testing by the K-means, we transformed the factors score to be a standardized value.

## VII. DISCUSSION AND CONCLUSION

Based on the distribution of 400 questionnaires, there are only 393 completes. We found that the 73.5% of respondents were female with aged between 22-24 years accounted for 40.2%. Most of them are currently studying at the faculty of business administration amounted 54.2%. 84.5% of monthly income is more than 7,001 Baht and 35.4% of their average grade is 3.01 - 3.50.

For the behavior of adorers who worship the Vishnu, 64.4% had the purpose of worshipping as faith. 42.7% worship the Vishnu in an occasion time. 76.1% usually scarify by flowers and/or garland. 84% have not vowed to the Vishnu. 46.3% know the Vishnu from the teacher. 34.9% will remember the sacred of the Vishnu. 34.1% worship in other places. 41% will collect the souvenir of the Vishnu for their anchor. 60.3% worship for their prosperity of life. 65.1% believe that the Vishnu is the god of success. 31% worship during the exam period. 48.9% usually scarify by 9 incenses.

Analyzing the worship factors of Siam University students, we found 5 main common factors whose factor loadings are all greater than 0.720. With these value, they can be described the variance of worshipping the Vishnu in a percentage term.

**Common Factor 1: Sacred Factor** (Eigenvalue = 17.303). It can describe the variance of worshipping by 55.815%. This factor comprises of 6 topics which are: 1) feeling comfortable when worship Vishnu, 2) the sacredness of Vishnu, 3) Vishnu help to protect from disaster, 4) the miraculous power of Vishnu, 5) Vishnu helps to succeed, and 6) help to concentrate more on learning.

**Common Factor 2: Beliefs Factor** (Eigenvalue = 3.012). It can describe the variance of worshipping by 9.717%. This factor comprises of 8 topics which are: 1) faith in Vishnu, 2) faith in college, 3) faith in worshipping, 4) reputation of the Vishnu, 5) Inheritance of the college tradition, 6) college values, 7) the beauty of Vishnu's statue, and 8) sacredness of the talisman.

**Common Factor 3: Popularity Factor** (Eigenvalue = 1.683). It can describe the variance of worshipping by 5.430%. This factor comprises of 4 topics which are: 1) free from personal activities, 2) the number of people who go to worship, 3) the number of people who come to redeem a vow, and 4) the number of outsiders who come to worship.

**Common Factor 4: Worship Factor** (Eigenvalue = 1.134). It can describe the variance of worshipping by 3.659%. This factor comprises of 4 topics which are: 1) attending Vishnu's sacrificial ceremony, 2) Inheriting the traditions of the college, 3) The legend of Vishnu, and 4) the veneration of Vishnu as a collection.

**Common Factor 5: Environmental Factor** (Eigenvalue = 1.099). It can describe the variance of worshipping by 3.546%. This factor comprises of 4 topics which are: 1) the weather such as rainy or sunshine, 2) the worship facilities, 3) the cleanliness in the area, and 4) the shade of the location.

Base on the values of final cluster center of Vishnu worshipers by their factor scores, we can classify adorers into 2 groups ( $K=2$ ) which are: 1) people who are ritualism and 2) people who are faith in Vishnu (Table I). Among the worshipers, there are 153 (38.93%) people who are ritualism and there are 240 (61.06%) people who are faith in Vishnu, environmental and beliefs.

**TABLE I  
CLASSIFICATION OF SIAM TECHNOLOGY  
COLLEGE STUDENTS REGARDING  
WORSHIPING THE VISHNU BASED ON  
FINAL CLUSTER CENTERS**

Common Factor	Group	
	Ritualism	Faith
1. Rite	0.640	-0.415
2. Popularity	0.573	-0.331
3. Holiness	-0.415	0.605
4. Scenery	-0.123	0.569
5. Beliefs	-0.541	0.468
#Count (Percentage)	<b>153 (38.93)</b>	<b>240 (61.06)</b>

The results can be concluded that the common factors extracted from all of the questions in the distributed questionnaire that likely impact the worshipers to the Vishnu are sacredness, beliefs, popularity, worship and environment. These factors complied with the results of [5]. Obviously, the faith is the most influential factor to the worshipers. This result is also related with [4, 6].

We found that the faith is a factor largely affecting the worshiping of Vishnu and also affect the tourists' attraction to worship the other holy things, not only the Vishnu. According to these results, it can also help to promote the popularity of several gods. Therefore, providing knowledge about the sacred and the belief in the Vishnu will probably make the tourists decide to worship more on the Vishnu and other gods.

The next important factors in worshiping the Vishnu are sacred and ritual factors. These factors mainly affect the belief of the worshipers in that Vishnu is the holy god of success. It shows that the successfulness in their life is mostly resulted from the worshiping of the Vishnu. However, the educational institutions should cultivate the intention and let them try to succeed on their own effort in order to protect the misunderstanding about the sacredness. In addition, there are also scenic factors and popularity factors of adorers that affect the worshiping of Vishnu. As results, we should improve the environment around the statue of Vishnu to be more attractive and beautiful.

More importantly, we should properly prepare some equipment used to worship Vishnu for all people.

Based on the classification results from final cluster centers, we can categorize the worshippers into 2 groups which are people who favors rite and people who favors faith. For the ritualism, there are 2 general factors which are ritual factors and popularity factors of worshipers. Therefore, there should have some publicity or ads about the Vishnu for students and public in order to have a continuous and accurate awareness of the ritual. For the faith, there are 3 general factors which are sacred, environmental and belief factors. Therefore, there should have some inspiration and push forward to let the worshipers widely know about this in order not to be reluctant to worship the Vishnu.

From the various factors as mentioned above, all of them contribute to the worshiping of the Vishnu because Thai societies extremely believe in the faith and the sacred. Therefore, there should be a favorable place for worshiping and continuously public the news for those who have faith in the Vishnu. As results, they will contribute benefit to all people especially the tourists who come through to worship the Vishnu the Siam Technology College.

## REFERENCES

**(Arranged in the order of citation in the same fashion as the case of Footnotes.)**

- [1] Jaruwatho, P.R. (2007). "Analytical Study of the Concept of Religion Worship in Buddhism". Master Thesis of Buddhism (Buddhism): Mahachulalongkomrajavidyalaya University.
- [2] Meesang, P. (2013). "The concept of God in Brahman - Hindu and Theravada Buddhist: a Case Study of the Theravada Buddhist". Master Thesis of Buddhism (Comparative Religion): Mahachulalongkomrajavidyalaya University.
- [3] Srisawad, P. (2007). "Building Identification of Vocational Students in a

- Field of Machanic”. Master Thesis of Communication Art (Speech Communication) Chulalongkorn University.
- [4] Pasunon, P., Nichapong, S., and Praphat, S. (2011). “Factors and Behavior of Silpakorn University Sanamchan Campus’s Students to Worship to Ganesha in Nakormprathom Province”. Term Project for Bachelor of Business Administration, Faculty of Management Science, Silpakorn University.
- [5] Pasunon, P., Siri, J., and Benjawan, P. (2012). “Factor Analysis and Clustering of Worshipping Kuan Yu in Muang District, Nakornsawan Province”. Proceeding on the 5<sup>th</sup> National Conference in Business and Economic, Faculty of Management Science, Khonkaen University.
- [6] Pasunon, P. and Kantima, V. (2010). “Factors and Behavior of Silpakorn University Phetchburi IT Campus’s Students to Worship to Ganesha”. Srinakharinwirot Research and Development (Journal of Humanities and Social Sciences), 6(3), pp. 27-38.