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An innovation model of alumni relationship management: Alumni segmentation analysis

Natthawat Rattanamethawong ^a, Sukree Sinthupinyo ^{b, *}, Achara Chandrachai ^c

^a *Technopreneurship and Innovation Management Program, Chulalongkorn University, Bangkok, Thailand*

^b *Faculty of Computer Engineering, Chulalongkorn University, Bangkok, Thailand*

^c *Faculty of Commerce and Accountancy, Chulalongkorn University, Bangkok, Thailand*

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ABSTRACT

The purpose of this study was to cluster alumni into segments to better understand the alumni's characteristics, lifestyles, types of behavior, and interests. A sample of 300 university alumni records was used to obtain their respective attribute values consisting of demographics, preferred communication channels, lifestyle, activities/interests, and expectation from university, needed information, donation willingness, and frequency of contact. The researcher used logistic regression and the k-mean clustering technique to analyze the data from the survey. Five segments could be derived from the analysis. Segment 3, the so-called "Mid Age Religious" contained the highest portion while segment 5, the so-called "Elaborate Cohort" had the least portion. Most of the population under these two segments was female. Differences were identified in age, marital status, education, occupation, position, income, experience, and field of work. The Elaborate Cohort segment represented young females having a bachelor degree, with low experience and low income, working for their first employer, and still enjoying being single. Another segment with similar values of attributes as the Elaborate Cohort was segment 1, the so-called "Activist Mainstreamer" whose field of work was computer technology. The segment called "Senior League" consisted of members older than 41 years like the Mid Age Religious segment, however all members were male. The last segment, the so-called "Passionate Learner" had members aged between 31 and 40 years. In conclusion, the results of this study can assist in formulating strategic marketing by alumni associations to satisfy and engage their alumni.

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Introduction

Alumni Relationship Management (ARM) is an essential agenda item for every alumni association or university. Education institutions are understanding the importance of services with the right information and communication

(Ahmadi, Nilashi, Ibrahim, Rad, & Pourhashemi, 2013). Facebook and other social media are being used to solicit and thank alumni in order to reach out and have a greater impact (Masterson, 2012).

The distribution of universities varies throughout Thailand. Han, Kamber, and Pei (2012) stated that data mining detection is useful in this alumni communication because there are very likely natural groupings that may represent segments of the alumni who have much in common, and for which customized marketing is justified (Le Blanc & Rucks, 2009).

* Corresponding author.

E-mail addresses: vrattana@gmail.com (N. Rattanamethawong), sukree@gmail.com (S. Sinthupinyo), achandrachai@gmail.com (A. Chandrachai).

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Since Thailand's first modern institution, namely Chulalongkorn University opened by King Chulalongkorn back in 1902, alumni associations have been established; however, involvement and collaboration are still rare mainly because: 1) the alumni do not feel that universities have provided them with useful information and benefits, 2) the alumni are tracked only to seek funding contributions to universities, 3) the universities tend to treat successful and older alumni members better than new and less successful ones, and 4) the relationship among professors, existing students, and the alumni is very weak as there is no attachment to the university after graduation. There are additional reasons blocking the relationship between a university and its alumni. The main objective of this research was to overcome the above situation and strengthen the relationship between the university and its alumni. The author believes that the social network capability is able to support collaboration among universities and alumni members. The social network is a new channel for alumni members to use to communicate and to collaborate. However the author needed to study and analyze which attributes offer value to the alumni and will attract them to join and to be connected. The questions which the author aimed to answer in this research were:

- 1) How many different segments are alumni in Thailand clustered into?
- 2) Which attributes influence the correlations among the alumni members?
- 3) What are the characteristics and behavior of each segment?

Literature Review

Currently, some universities focus on alumni relationship management. Researchers have studied the relationship between a university and its alumni in order to improve and engagement the alumni. [Hanson \(2000\)](#) studied the relationship of selected student demographics, student academic involvement, student social involvement, alumni demographics, alumni social involvement, and alumni attitudinal measures with alumni supportive behavior. The researcher developed a conceptual model from his previous research to predict the alumni's support. The university uses the model to predict student and alumni supportive behavior from when students entered the university.

Other engagement research examined the relationship between alumni engagement and two categories of variables, alumni characteristics and alumni giving behavior ([Radcliffe](#)). The researcher gathered information such as alumni demographics, experiences, and attitudes. Data from the survey were analyzed to improve the ability to identify alumni donors and promoters. The results illustrated that there was no difference in the engagement scores based on alumni characteristics and that the engagement score had a positive correlation to a variety of types of giving behavior, donor status, recent donor status, annual giving behavior, and adjusted lifetime giving.

There are several models used for data clustering. One study provided a framework for market segmentation to determine the right target customers ([Larsen, 2010](#)). The author investigated two models: 1) the Minerva model which divided customers into five different lifestyle segments based on their values. These segments was designated a color; blue, green, rose, violet, and gray; and 2) the Mosaic model combined variables from the geographic segmentation and the demographic segmentation. These two models were then used to analyze and determine the right target customers.

Data mining using a neural network clustering technique has been used to identify high profit, high value, and low risk customers ([Rajagopal, 2011](#)). The results identified four clusters based on value. Cluster 3 had high revenue, high cost customers and was classified as the high value cluster. Cluster 1 had high revenue and high cost and was classified as medium value. Cluster 2 had low revenue and low cost and was classified as low value. The clustering results suggested strategies to retain or move the customers from the lower band to the upper band. [Prasanna and Peddyreddy \(2015\)](#) identified high profit, high value, and low risk customers using a data mining technique called clustering. The research delivered information by extracting data from transactions classified by the customer's revenue cluster. The result was very useful in increasing sales. [Durango-Cohen and Balasubramanian \(2014\)](#) presented a finite mixture model framework to classify the alumni population of a university in the Mid-western United States based on the monetary value of annual contributions. The results were supportive of the design of segment tailored solicitations and supported the allocation of resources for fundraising. [Rattanamethawong, Sinthupinyo, and Chandrachai \(2015\)](#) studied the factors which impacted the relationship between the university and students/alumni and proposed the conceptual framework illustrated in [Figure 1](#).

The model in [Figure 2](#) agrees with this model especially regarding the component "Identify your alumni members as individuals and let them feel you know them" and the component "Information to alumni, about your ability to cope with their requirement". These two components are similar to this study's ARM framework. However, the ARM framework is different from the new CRM strategy in "Identify your alumni members as individuals and make them feel you know them" and "Information to alumni, about your ability to satisfy their requirement".

Materials and Methods

Sample

Sampling in this study engaged 300 alumni in Thailand from all around Thailand with 222 (74%) from the Bangkok Metropolitan area, 25 (8.33%) from central, 19 (6.33%) from northeastern, 15 (5%) from northern, 15 (5%) from eastern, and 4 (1.33%) from southern Thailand. All respondents successfully completed the survey which was launched via an online Google form survey.

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