

Preferences for the Master of Business Administration (MBA) in Agribusiness Program: A Conjoint Analysis

¹ Ryan Lloyd A. Saycon, MBA, ²Karl P. Campos, PhD

¹ Faculty, College of Development Management, University of Southeastern Philippines

² Faculty, Graduate School of Business, University of Southeastern Philippines

Abstract : *The primary objective of this study was to determine the Preferences of Agribusiness Professionals for Master of Business Administration in Agribusiness in the selected agribusiness offices in Davao City. Conjoint analysis was applied to determine the relative importance of each of the five attributes. The additive model was used to measure the preference of agribusiness professionals' for an MBA in agribusiness. The result of the study presented that the five (5) attributes, namely: faculty qualification, schedule of classes, facilities, learning modalities, and cost per semester, are all important attributes that contributed to the total preference of Master of Business Administration in Agribusiness among respondents in agribusiness offices in Davao City with learning modality as the most important attribute.*

Keywords: agribusiness, conjoint analysis, master of business administration, Philippines

I. INTRODUCTION

Agribusiness management education is a synthesis of the concepts of economics, agriculture, business (commerce) and management. The area of agribusiness management is of very recent origin, gaining rapid popularity among learners as a carrier choice. Agribusiness education is designed to build leadership workers to appeal to the agricultural industry, which is a successful choice for students who are ready to succeed in the private and public sector (Baira, Kalia, Meena, Lakra, & Kushwaha, 2014). In the academic sector of India, agribusiness professionals have a promising future due to the country's latest emerging discipline and shortage of agribusiness faculty. With this, it is one of the successful qualifications that help to turn the employees into future managers with management skills (Singh, Baladhandapani & Niranjana 2019).

In the Philippines, higher education is influenced by philosophical orientations that emphasize the pursuit and growth of the knowledge, skills, values and attitudes required to make the Filipino a productive member of society. It is built for all Filipinos to aspire for a better quality of life. Philippine higher education also seeks to leverage the productive potential of the human resource base of the country towards international competitiveness and to generate knowledge relevant and sensitive to the rapidly evolving domestic and international climate in a wide range of disciplines of agribusiness education (Ricafort, 2017).

The role of graduate programs in agribusiness is often ignored compared to the manufacturing and services industry based on the overall economic income development strategy. This is why education and the growth of human capital in the industry must be boost to be able to cope up with the changing trends in the environment in the overall economic development strategy (Faylon, Sangalang, Aquino, Carlos, Daite, & Brown, 2013). The role of education and the growth of human capital in the education of agricultural enterprises itself is significant.

Given the unbridled growth of State Universities and Colleges (SUCs) on different locality in the past few decades, declining enrolment in graduate programs in agribusiness courses is also a cause for concern. As part of political legacy-building, congress had a tendency to turn rural high schools into agribusiness colleges and later into full-fledged SUCs. However, the changing dynamics of the higher education sector bring into question the viability, if not the very survival of these institutions themselves, of their agribusiness and related programs. Moreover, the downtrend in enrollment has dire implications for the agribusiness sector's potential human resource requirements (Briones & Carlos, 2013).

Moreover, since the statement above showed that there is downtrend and decline of enrollees for agribusiness education, this study could also be a marketing tool for the course being studied. It will be used as a basis for marketing strategy to achieve high enrollment rate. On hindsight, this study is formulated to identify the preferences of agribusiness professionals' on MBA in agribusiness program and the emphasis on a package of attributes with a number of level for each attributes.

II. METHODOLOGY

The study employed experimental research design as it utilized conjoint experiments. In conjoint analysis, the use of experimental design in the analysis of consumer’s preferences, and to establish a valid model of consumer’s judgement that is useful in predicting the consumer acceptance of any combinations of attributes (Hair, et. al, 1998). In this study the effects of the selected attributes of master’s degree namely: faculty qualifications, schedule of classes, facilities, cost per semester, and learning modalities on the preferences of agribusiness professionals’ for Master of Business Administration in agribusiness program were measured. Moreover, the Master of Business Administration in Agribusiness program attributes were the independent variables in study. The dependent variables is the preference ranking on the different stimuli consisting the different combinations of factors and their levels.

A conjoint analysis involves of creating and conducting experiments among respondents for the purpose of modeling their purchasing decision. Market experts refer to conjoint analysis as on the best method for analyzing and investigating customer’s needs. It is constructing and conducting specific experiments among respondents or customers in order to model their decision-making process. Potential customers are requested to make judgments about the attributes that affect their buying decisions conjointly rather than weigh each attribute individually. This analysis will find out which product attributes create most value to respondents and how respondents will react to different product or services configurations (Kotri, 2006). This technique will allow managers to analyze how respondents make trade-offs by presenting profile descriptions to survey respondents and will derive a set of partworths for each attribute level, with some type of additive rule, and will reflect the respondents’ total preferences. This uses a subset of all possible combinations of product or service attribute levels and decomposes the customers evaluations of the demographics into another and compatible utility scales by which the judgements and other involving new combination of attributes can be reconstituted (Solaimon Adewunmi, Olutayo, Adekunle, & Oluwatoyin, 2018).

The primary data were obtained from agribusiness professionals’ working in agribusiness sector such as managers, supervisors, and/or equivalent located in different offices in Davao City through the distribution of structured questionnaires that was developed by the researcher through the use of SPSS which the study aims to analyze. Moreover, during in the conducting of the survey, the respondents were guided by the researcher for questions or clarifications within the questionnaires. Conjoint analysis was applied to determine the relative importance of each of the five attributes. The additive model was used to measure the preference of agribusiness professionals’ on MBA in agribusiness given as; Total utility of MBA in Agribusiness = $f_{q,sc,f,cs,lm}$ = utility level fq for faculty qualification + utility level sc for schedule of classes + utility level f for facilities + utility level cs for cost per semester + utility level lm for learning modalities.

III. RESULTS

The relative importance ratings for the overall sample and selected agribusiness professionals are presented in Table 1. The sum of all importance ratings is 100%. A relative importance rating greater than zero means that the attribute has a significant contribution to the total worth of Master of Business Administration in Agribusiness program. At the aggregate level, which is presented in Table 2, the relative importance ratings for the attribute of Master of Business Administration in Agribusiness program considered by the respondents are faculty qualification (20.021%), Schedule (18.122%), Facilities (14.431%), learning modalities (31.462%) and cost per semester (15.962%). Varying results illustrate the value of conjoint analysis, capturing the preferences of individual respondent rather than focusing on the aggregate result.

Table 1. Overall Relative Importance

Attributes	Percentage
Learning Modalities	31.462
Faculty Qualification	20.021
Schedule of Classes	18.122
Cost per semester	15.962
Facilities	14.431
Total	100

Overall Utilities

Table 2 shows the utility values for each level of the five attributes for the overall sample.

Table 2. Overall Utilities

Attributes		Utility Estimate	Std. Error
Faculty Qualification	Master's Degree	-0.508	0.155
	Doctorate Degree	0.508	0.155
Schedule of Classes	Weekdays only	-0.028	0.155
	Weekends only	0.028	0.155
Facilities	Built Environment	-0.39	0.155
	Outcome Based	0.39	0.155
Learning Modalities	Face-to-face	-0.088	0.207
	Online or Homebased	-0.267	0.243
	Hybrid Instruction	0.355	0.243
Cost per semester	Below 10,000	-0.087	0.31
	Above 10,000	-0.173	0.621
Constant		4.652	0.493

The Pearson’s R and Kendall’s tau displayed at the bottom for each respondent and the overall sample were all significant at 5% which indicate how well the model fits the data. They were correlation values between the observed and the estimated preferences.

Table 3. Correlations between Observed and Estimated Preferences

	Value	Significance
Pearson's R	.975	.000
Kendall's tau	1.000	.000

Most Preferred attributes for Master of Business Administration in Agribusiness Program

The estimation of the over-all attributes that were preferred the most by the respondents in Master of Business Administration in Agribusiness program was undertaken using the additive Predictive Model as shown below:

The additive predictive model for overall sample is:

$$\text{Total Utility} = \text{UFQ} + \text{US} + \text{UF} + \text{ULM} + \text{UC} + \text{Constant}$$

Where,

UFQ	= -.508 (Master's Degree)
	= .508 (Doctorate Degree)
US	= -.028 (Weekdays Only)
	= .028 (Weekends Only)
UF	= -.390 (Built Environment)
	= .390 (Outcome Based)
ULM	= -.088 (Face-to-face)
	= -.267 (Online or homebased)
	= .355 (Hybrid instruction)
UC	= -.087 (Below 10,000)
	= -.173 (Above 10,000)
Constant	= 4.652

The most preferred attribute is one of which a faculty is a doctor's degree holder, schedule is weekends, outcome-based facilities, using a hybrid instruction and having a cost per semester of below 10,000. This preferred attribute has a total utility of 9.5, computed as follows:

$$\text{Total Utility} = .508^{DD} + .028^{WE} + .390^{OB} + .355^{HI} - .087^B + 4.652^C = 5.846$$

The respondents' choice of faculty qualifications with doctorate and masters is following the Commission on Higher Education (2019) requirements to make sure that students have access to faculty members who are knowledgeable in the subject matter they teach and who can deliver updated knowledge in that subject to their students. Those without advanced degrees do not have the opportunity to develop deep-level subject matter expertise or to be exposed to new developments in their fields (Asian Development Bank, 2011). As to the choice of the schedule of classes that is weekend only, this can be attributed to the fact that weekends are the best time for the MBA in Agribusiness students to attend classes to avoid conflict with work schedules on weekdays. It conforms to the study of Gelmar, et. al (2016), which revealed that weekends are the preferred days for classes by students.

Concerning the respondents' choice of hybrid mode of delivery, students preferred classes that combine the best characteristics of both face-to-face and online modality into a course delivery that is both flexible and accessible while providing an interpersonal experience with instructors and a physical connection to campus. This study confirms the findings of Alnajdi (2014), wherein, it pointed out that hybrid learning environment offers students the privilege, enabled in an online learning environment, to understand and discuss real-world problems through immersive learning experiences. It also offers learners the ability to meet face-to-face with course teachers and their peers to debate, discuss, challenge and acquire guidance. As to the cost per semester, respondents choice prefer an MBA in Agribusiness program offering that can only cost of Php10,000 at the maximum per semester. This finding supports the study of Patayon (2018) which revealed that cost of below Php10,000 are preferred by graduate students. Mbawuni & Nimako (2015) also pointed out that financial cost continues to be an essential factor in a student's choice of institution for a master's program.

IV. CONCLUSION

Based on the findings of the study, the following conclusions were drawn: The five attributes namely: faculty qualification, schedule of classes, facilities, cost per semester, and learning modalities are all important in the preference of agribusiness professionals' for Master of Business Administration in Agribusiness program. Learning modality was the most important course attribute of MBA in Agribusiness followed by faculty qualification, schedule of classes, cost per semester, and the least important was facilities.

Having identified the preferred MBA in agribusiness attributes by agribusiness professionals' in selected agribusiness offices in Davao City, institutions should align the course/program to the preferences of the respondents. Institution

should take into considerations on the learning modalities of the course/program as this is the most important attribute to agribusiness professionals. In addition, they should also consider their faculty members as having a doctor's degree, weekends as schedule of classes, outcomes-based facilities, hybrid instruction in learning modalities, and a cost per semester of Php10,000 below. Similar study must be conducted in the other location with additional attributes in order to capture fully the preference of agribusiness professionals.

REFERENCES

- [1] Alnajdi, S. (2014). Hybrid Learning In Higher Education.
- [2] Asian Development Bank, (2011). Improving Instructional Quality: Focus on Faculty Development. *Higher Education in Dynamic Asia*
- [3] Baira, S.L, Kalia, A., Meena, L.K., Lakra, K., & Kushwaha, S., (2014). Agribusiness Management Education: A Review on Employment Opportunities, *International Journal of Scientific and Research Publication*
- [4] Briones, R. and Carlos M. (2013). Higher Education in Agriculture: Trends, Prospects, and Policy Directions
- [5] Commission on Higher Education, (2019). Policies, Standards, and Guidelines for Graduate Programs.
- [6] Faylon, P., Sangalang, R., Aquino, A., Carlos, M., Daite, R., and Brown, E. (2013) Higher Education in Agriculture: Trends, Prospects, Policy Direction. Introduction: The state and future supply of and demand for Agriculture, Forestry and Natural Resources (AFNR) graduates in the Philippines
- [7] Gelmar, GV., Reyner, PC., Rodobaldo, MV., Alexander, SR., (2016). Conjoint Analysis tool for Determining Attributes on Designing a Graduate Degree Program
- [8] Hair, JF., Anderson, RE., Tatham, RL., and Black, WC. (1998). Multivariate Data Analysis. 5th Ed. Upper Saddle River, New Jersey. *Prentice-Hall International*
- [9] Kotri, A. (2006). Analyzing customer value using conjoint analysis: the example of packaging company. University of Tartu
- [10] Mbawuni, J., & Nimako, S.G. (2015). Critical factors underlying student's choice of institution for graduate programs: Empirical Evidence from Ghana
- [11] Patayon, C. (2018). Unpublished Book: Students' Preferences on the Attributes of the Master of Business Administration Program Offered by Higher Education Institutions in Davao Region, Philippines
- [12] Ricafort N. (2017). The Philippine Higher Education System: Current Trends and Developments. *Commission on Higher Education*.
- [13] Singh S., Baladhandapani K., and S. Niranjan (2019). Importance of Management Education in Agriculture
- [14] Solaimon, M., Adewunmi, O., Olutayo, O., Adekunle, A., and Oluwatoyin, A. (2018). Application of Conjoint Analysis to Customers' Preference of Soap.