


Concept Testing of Modular Graduate Certificate Programs Leading to the Master in Business Management Degree

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Abstract

This study was conducted to test the acceptability of the concept of modular graduate certificate programs leading to the Master in Business Management (MBM) degree in the cities of Iligan, Marawi, Cagayan de Oro, and Ozamiz, as well as in key municipalities in Lanao del Norte. Acceptability has been measured through the respondents' intentions: whether to enroll or not in these certificate programs if already available; whether to enroll in only some of these certificate programs or in all of them; and among those who chose the latter option, whether to have the certificate programs credited for the MBM degree or not. The respondents' intentions have been correlated with their demographic profile as well as with their geographic locations making use of logit analysis. The respondents' educational attainment and occupation were found to affect the intention to enroll or not to enroll. Their field of specialization, number of years of employment, age, educational attain-

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ment and place of residence, meanwhile, explain their intention to enroll in only some or in all of the certificate programs. Their number of years of employment and employer category affect their decision to have the certificate programs credited for the MBM degree.

A price sensitivity test was also conducted to determine the respondents' price expectations on the certificate courses.

Introduction

Conditions are changing in just about every industry, including higher education, and if educational institutions or educational programs are to continue to survive and thrive, they must focus on noticing, adapting to, and managing change. With this view, the Master in Business Management (MBM) Program of the MSU-IIT's College of Business Administration and School of Graduate Studies realizes the need to deliver the MBM degree in an innovative mode to meet changing realities.

For a long time, the MBM was the only graduate offering in the IIT campus, and one of the few in Iligan City. It catered to as many as a hundred-fifty enrollees per trimester when it was yet in the trimestral schedule. Its enrollees were of different academic backgrounds and were from the city's various business establishments and industries, from higher education institutions, and from government agencies. Several of these enrollees were already in the supervisory level upon admission into the program and after graduation, they moved on to occupy managerial positions in their respective offices. Other graduates who were previously occupying rank-and-file positions were similarly promoted to become supervisors.

The MBM boasts of 180 graduates. A tracer study being conducted by its research staff has already accounted for the whereabouts of 76 percent of its alumni.

The MBM enrollment, however, has declined through the years. This is traceable to the offering of other graduate programs in MSU-IIT and in other schools in the city, as well as the downswing in the Iligan economy which caused massive retrenchments in the industries. The retrenched workers/employees included a sizable number of MBM enrollees, many of whom have left Iligan to work elsewhere.

The leaner workforce in industries and other establishments that continue to operate are now saddled with more responsibilities such that their

busy work schedule does not anymore fit the traditional classroom-based coursework.

Yet, these target clients must “stay in school” to remain competitive in their field. They need to have graduate degrees to qualify for promotion. The demand for graduate education as one of the major means to upgrade knowledge and skills will therefore remain, and even expand, as long as graduate degrees remain requisites for promotion. Fortunately, having an MBA or MBM degree has been viewed by business, industry, and government as an edge.

The offering of modular graduate certificate programs leading to the MBM degree is an adaptive response to changing realities. It has been designed with the intention of providing continuing education to professionals with hectic work schedules, thereby reaching out to a bigger number of clientele. It is necessary, however, to “feel” the market and have some solid information that can guide the MBM program management in introducing the certificate programs.

A concept testing shall therefore be done. In addition, the price expectations of consumers on these new offerings shall also be determined to aid in the designing of the tuition scheme.

Concept Testing. Concept testing tries to find out if the target clientele will be able to make sense out of a product or service concept – in this case the concept of the modular certificate programs leading to the MBM degree.

A concept test involves creating a statement or description of a product or service that summarizes the primary benefits or ideas the provider wishes to convey. This conceptual statement serves as the foundation for either quantitative or qualitative evaluations, in which potential clients provide feedback on a number of issues. Typical issues for exploration include acceptance of the concept and opinions regarding its uniqueness and believability. It will also assess the motivating value of the product or service as contained in the concept, and will uncover features in the concept which the target clients view negatively (Roberto, 1987).

Price Sensitivity Tests. The essence of a price sensitivity test is to understand which prices best match the clients’ ability to pay.

Using pricing research, price expectation can be identified. In this study, the objective is to know the fair range of the upper and lower threshold limits of pricing for each modular MBM certificate course. Within the fair range, there is likely to be more number of enrollees. Above the upper threshold

limit, respondents will feel the modular certificate course is too expensive that it goes beyond their paying capacity. Below the lower threshold limit, respondents will doubt the quality of the modular MBM certificate courses and therefore will not enroll in them.

Objectives of the Study

The study sought to find out the appeal of the concept of the modular certificate graduate courses leading to the MBM degree to the respondents after presenting them with the concept board. It also sought to find out what the motivating features of the concept are, as well as its dissatisfiers. It also wanted to know how respondents would rank the features of the certificate courses according to their importance to them. The study also wanted to know if the respondents intend to enroll in the certificate courses or not, enroll in all or only in some, and if they intend to have the certificates credited for the MBM degree. Finally, the study wanted to find out if the respondents' intentions are influenced by their socio-economic profile, such as age, gender, educational attainment, field of specialization, occupation, years of employment, employer category, gross monthly household income, and location of residence.

Theoretical Framework and Hypotheses Testing

The study is premised on the marketing notion that to succeed in developing and selling a new product, the new product must first have a clear motivating product concept. Concept testing therefore needs to be done to verify if the formulated product represents consumer needs and is motivating to consumers. The results of the concept test serve as critical inputs to the development of the new product prototype or to fine tune one already in the development process.

The study, moreover, views the socio-economic profile and location of residence of the respondents as affecting their intention to avail of the modular certificate courses leading to the MBM degree.

The hypotheses of the study are presented below in null form. They were statistically tested at the five percent level of significance.

H₀₁: No significant relationship exists between the socio-demographic and geographic profiles of the respondents and their intention to

- enroll or not to enroll in the modular certificate courses.
- H₀₂:** No significant relationship exists between the socio-demographic and geographic profiles of the respondents and their intention to enroll in some or in all modular certificate courses.
- H₀₃:** No significant relationship exists between the socio-demographic and geographic profiles of the respondents and their intention to have the modular certificates credited or not for the MBM degree.

Research Methods

The respondents of the study were college graduates employed in higher educational institutions (HEIs), industries, small and medium enterprises (SMEs), and government agencies/local government units (LGUs) in Iligan City, Cagayan De Oro City, Ozamiz City, Marawi City and Lanao Del Norte. These areas have been considered in the study because of their proximity to MSU-IIT. Some of the respondents were previously or currently enrolled in master's degree programs in business and management. The majority, or 58 percent, however, were not enrolled but have the intention to enroll within the next two school years.

This study utilized the descriptive and prospective method of research. The prospective method is evident in the fact that all intentions or decisions of respondents to avail or not of the service considered were those that were captured during the time of the interview and had to be statistically processed to get the probability of predicting their correctness.

Sampling Design

Cluster sampling of various higher education institutions or HEIs, large scale industries (over P60M capitalization), small and medium enterprises or SMEs (business enterprises with a capitalization of P1.5 million to P15million and above P15million to P60 million, respectively), and government agencies or local government units were done in the study sites. These establishments were those with a reputation for having a program for faculty, employee and/or staff development . This was determined by the researchers through interviews or inquiries with acquaintances or with key informants (i.e., the human resource officer of the organization) during the field survey.

Given time and financial constraints, as well as the various geographical location of respondents, the researchers decided to limit the number of respondents to about 100. Proportional allocation was done: the larger the number of the type of establishment in a particular study site, the larger was the number of samples drawn from there. Sub-clustering was resorted to if a cluster was composed of different classifications of establishments.

Respective key informants referred respondents from each chosen establishment. These were those who were either interested to pursue graduate studies, have pursued graduate studies but for one reason or another have stopped, or were pursuing graduate studies at the time of the conduct of the study. The actual number of respondents interviewed is 103. Table 1 below shows the distribution of respondents.

Table 1. Distribution of Respondents of the Study

| SECTORS | AREAS | | | | | TOTAL | |
|------------|-------------|---------------------|-------------|-----------------|-------------|-------|--------|
| | Iligan City | Cagayan de Oro City | Ozamiz City | Lanao del Norte | Marawi City | F | % |
| HEIS | 6 | 5 | 4 | 6 | 4 | 25 | 24.27 |
| Industrial | 9 | 4 | 1 | 2 | - | 16 | 15.53 |
| SMES | 7 | 8 | 6 | 8 | 1 | 30 | 29.13 |
| GAS/LGUs | 4 | 7 | 5 | 10 | 6 | 32 | 31.07 |
| Total F | 26 | 24 | 16 | 26 | 11 | 103 | - |
| Total % | 25.24 | 23.30 | 15.53 | 25.24 | 10.68 | - | 100.00 |

Gathering of Data

Data were gathered through interviews which were guided by a questionnaire. Stimulus cards, also known as showcards, were used during the interviews. Data gathering was done during the months of August and September 2001.

The data on the number of firms in the five study areas were gathered from the Department of Trade and Industry (DTI), Securities and Exchange Commission (SEC), Commission on Higher Education (CHED) and the Philippine Information Agency. A windshield survey was done to locate establishments in Lanao del Norte as no current listing was available.

In the *concept testing* the respondents were shown the concept board containing the description of the modular certificate MBM program (Exhibit A). Ample time was given to each respondent to read and understand the features of the concept presented. Afterwards, the respondents were asked to rate the concept of the modular certificate MBM program in terms of its appeal using the following scale: "4" for *very appealing*; "3" for *somewhat appealing*; "2" for *somewhat unappealing*; and "1" for *not appealing at all*.

Those who rated the modular certificate concept a "4" or *very appealing* were asked the reasons for such a rating. The responses were interpreted as the motivating features or satisfiers that would attract respondents to enroll in the modular MBM when offered. Those who rated the concept with "3", "2" and "1" with interpretations ranging from *somewhat appealing* to *not appealing at all*, were also asked the reasons for the ratings made. The answers were then interpreted as clues to the "adverse negatives" or dissatisfiers of the concept.

The *price sensitivity tests* determined the respondents' price expectations for each of the modular certificate courses; that is, what range of tuition rates did the respondents expect, and within the range, what is the perceived fair price. The price range is bounded by an upper acceptability threshold and a lower acceptability threshold. Below the lower threshold the respondents would start to doubt the offerings to be too good to be true and would be thereby prompted to suspect that something must have been sacrificed in its quality. Above the upper limit the modular certificate courses would be seen to be just too expensive that it then would go beyond the respondents' paying capacity.

The research design for price expectations of the respondents was copied from that of the Dutch economist Peter H. Van Westendorp (Plog, 1982).

The researchers made use of a pricing scale based on existing MBA/MBM fees in the five study sites. The respondents were then made to react to the pricing scale. The responses were analyzed in cumulative distribution terms whose results yielded the following pricing points: the indifference

pricing point, optimum pricing point, and the range of acceptable prices.

Statistical Tools

Descriptions and analyses of responses were facilitated by the use of frequency counts, percentages, means, and weighted mean of ranks.

Logit regression was used to determine if significant relationships exist between the respondents' socio-demographic and geographic profiles and their (1) intention to enroll or not in the modular certificate programs leading to MBM; (2) intention to enroll in some or in all certificate programs; and with their (3) decision to have the certificate programs credited for the MBM degree or not.

Logit analysis makes use of a non-metric dichotomous dependent variables such as those mentioned above, which, specifically, are the "with intention to enroll or not", "will take some or all certificate programs" and "have the certificate courses credited for the MBM degree or not" variable in this study. The independent variables are the socio-demographic and geographic profile of respondents.

Wald Statistic

The Wald statistic, the test statistic in logistic regression for the significance of estimated coefficients, was used. Its interpretation is similar to the F or t values, used for significance testing of linear regression coefficients.

All computations were done using the Microsoft Excel and SPSS package.

Findings

Demographic Profile. The respondents have a mean age of 31 years. Majority (66 percent) are female and single (57 percent). Sixty-seven percent are college degree holders who have not earned master's degree units yet, and hence are potential clients for the modular graduate certificate courses leading to the MBM degree especially that 59 percent of them have business administration and management degrees.

About 31 percent are employed in government agencies and local government units, 29 percent in SMEs; 24 percent are teachers in HEIs, and

only 16 percent work in industries. The respondents' mean years of employment is six years. Many, or 45 percent, have gross monthly household incomes below P20,000; 20 percent earn monthly household incomes of P20,001 – P30,000; less than 20 percent of them have monthly household incomes of P50,000 and above. About 25 percent are from Iligan City and a similar proportion are from Lanao del Norte. About 23 percent are from Cagayan de Oro City, 16 percent from Ozamiz City, and 11 percent from Marawi City.

Concept Testing. To test the acceptability of the concept of modular certificate programs leading to the MBM degree, the concept board was presented to the respondents (again, please see Exhibit A). The test also assessed the motivating features of the modular MBM certificate courses as contained in the concept board. Moreover, the test tried to detect any concept features which the respondents may perceive to be negative.

When the respondents were asked how they find the concept of the modular certificate courses leading to the MBM degree majority, or about 76 percent, gave a rating of *very appealing*. The rating implies the acceptability of the concept. It also hints on the willingness of respondents to avail of the new offering. A rating of *somewhat appealing*, meanwhile, was given by approximately 23 percent of the respondents. Only one respondent gave a rating of *somewhat unappealing*.

The respondents were then asked to explain the appeal ratings they gave to the concept. Multiple responses were allowed; 188 responses were generated from those who judged the concept as *very appealing*, and 46 responses from those who did *not* find the concept as very appealing.

Table 2 presents the satisfiers or motivating features in the concept of the modular MBM as perceived by respondents who found it to be *very appealing*. The primary motivating feature is its convenient schedule, as cited by about 71 percent of the responses. This reveals the preference of respondents for week-end classes that are conducted twice-a-month, especially that all of them are employed.

Finishing a certificate course in a semester is good motivator for 43.6 percent of the respondents. This implies that some respondents value receiving only a post-baccalaureate certificate in their field of specialization or in their current work assignments. These are those who are not yet ready to get a master's degree but would want to have additional credentials for promotion, though not necessarily to a supervisory position.

Proposed Modular Certificate Courses Leading to MBM Degree

- ❖ The modular certificate courses are:
 - Certificate in Finance
 - Certificate in Human Resource Management
 - Certificate in Marketing
 - Certificate in Production Management
- ❖ Each certificate course consists of 9 units and aided by several self-contained learning modules
- ❖ A bridging program enables non-business graduates to cope with course requirements
- ❖ Some course work/instruction shall be done on-line
- ❖ Each certificate course takes only 1 semester to finish
- ❖ Classes will be held twice a month during the semester, 8 hrs/meeting, on a Saturday or Sunday
- ❖ The student may enroll in only 1 or a few certificate courses
- ❖ Completion of the 4 certificate courses qualifies the student to apply for the MBM degree, subject to enrolling in additional subjects, writing a thesis, or taking the comprehensive exams and writing a management case
- ❖ Certificate courses offered may be done within the campus or on satellite location of sponsors

Table 2. *Perceived Satisfiers in the Concept of the Modular MBM Program (N=78)**

| Satisfiers | Frequency | Percentage |
|---|-----------|------------|
| Convenient schedule | 55 | 70.51 |
| Allows the earning of certificates only | 34 | 43.59 |
| Some on-line instruction | 11 | 14.10 |
| Certificates earned can be used for promotion | 11 | 14.10 |
| Allows continuing education in a flexible manner | 11 | 14.10 |
| Bridging program allows non-business graduates to cope | 10 | 12.82 |
| Modular form facilitates self-study | 10 | 12.82 |
| Modular form allows choice of area of study | 9 | 11.54 |
| Possibility of holding classes in satellite location | 6 | 7.69 |
| Others (comprehensive and well-organized curriculum, encourages entrepreneurship, practical and innovative) | 31 | 39.74 |

Another satisfier is the online delivery of some instructional materials because of its innovativeness and technological appeal. This response received the same frequency distribution as such satisfiers as “certificates can be used for promotion purposes” and “allows continuing education in a flexible manner.” Flexibility is made possible by the self-contained modules and the online delivery of some instructional materials, which, to some ex-

tent, will enable enrollees to study on their own at a time and place convenient to them. These modules already cover important concepts and theories to be learned; they also have self-assessment questions and exercises for students to work on. The bridging program in itself is also seen as a satisfier by about 13 percent of the respondents. This is actually an existing feature in the regular MBM program as many of its enrollees are not graduates of courses in business and management.

Other reasons that prompted respondents to rate the concept as "very appealing" are: it portrays a comprehensive and well-organized curriculum, it encourages entrepreneurship, it is practical, and it is innovative.

Meanwhile, the dissatisfiers in the concept of the modular MBM program as perceived by 25 respondents (those who did not see the concept of modular MBM programs as *very appealing*) are shown in Table 3. Thirty-two percent of the respondents thought that one semester is too short for a certificate program. Twenty percent consider the 8-hour weekend class to be too long and therefore boring. A similar proportion of respondents said that enrolling in modular MBM programs requires self-discipline.

Table 3. *Perceived Weaknesses in the Modular MBM Programs by Some Respondents (N=25)**

| Weaknesses | Frequency | Percentage |
|--|-----------|------------|
| A semester is too short for certificate program | 8 | 32.00 |
| Eight-hour weekend class too long | 5 | 20.00 |
| Requires self-discipline | 5 | 20.00 |
| Conflicts with the Saturday work schedule | 4 | 16.00 |
| Takes same time to finish as regular MBM | 3 | 12.00 |
| Other schools also offer weekend classes | 3 | 12.00 |
| Others (MBM image degraded by wanting to earn only certificates, needs extensive advertising efforts, try first the modular MBM) | 17 | 68.00 |

*Multiple Responses

Sixteen percent of the respondents said they work even on Saturdays and are therefore not pleased with the concept of weekend classes. They argued further that other schools already offer this kind of feature. Moreover, 12 percent did find the concept to be very appealing as it presented the modular MBM to require the same time to finish as the regular MBM. Other dissatisfiers include the impression of some respondents that the image of the MBM degree would be degraded by those who only wanted to earn a certificate. Some also said that extensive efforts to advertise the new concept still need to be done, while others would want the modular MBM to be tried first.

Ranking of the Features of the Modular Certificate Programs Leading to the MBM Degree. Respondents were asked to rank the features in terms of their value to them, using the rating 1 for most valuable feature, 2 for second most valuable feature and so on. In doing this, MSU-IIT, as the Institution introducing a new mode of offering MBM, will get insights on how to be able to respond to the needs of prospective clients.

Table 4 displays the ranking done by respondents.

As shown in Table 4, the feature "self-contained learning modules" emerged as the most valuable feature with a mean rating of 2.63. Respondents said that the modules would allow students the benefit of reading the lessons in advance, which will result in better interaction between professors and students during class sessions. Discussions can then focus on aspects of the lesson that require further explanation from the professor.

Table 4. Ranking of Modular MBM Features

| Features | Weighted Mean | Rank |
|--|---------------|-----------------|
| Self-contained learning modules | 2.63 | 1 ST |
| Completion of a Certificate Course in a semester | 2.92 | 2 ND |
| Can be credited for MBM degree | 3.49 | 3 RD |
| Weekend classes | 4.39 | 4 TH |
| Supplemental on-line learning | 4.44 | 5 TH |
| Bridging program | 4.61 | 6 TH |
| Possibility of off-campus delivery | 5.52 | 7 TH |

Second most valuable feature to respondents, with a mean rating of 2.92, was the feature "completion of a certificate course in a semester". This feature was also a perceived satisfier in the concept testing of the modular MBM program. Respondents appreciate the earning of a certificate after the semester because for them, it would mean obtaining something which — when compared to simply earning 6 to 9 units — can be better used for promotion purposes. They liked the idea of receiving a certificate after a semester of course work as it was possible that circumstances might later force them to stop from schooling.

Getting the third rank in terms of value was the feature "can be credited for MBM degree", garnering a mean rating of 3.49. The respondents felt that this feature does not rush them toward getting the MBM degree; while they may not be prepared to pursue the degree upon enrollment, the fact that the maximum requirement to finish a master's degree is five years gives them hope to be able to finish it since the certificate courses carry units for the MBM degree.

The "weekend classes" feature, which gained a mean rating of 4.39, only rank as the fourth valuable feature since, as mentioned earlier by respondents, there are already schools offering weekend classes.

On the other hand, the modular MBM also gives the respondents a chance to be updated with technology because of the "supplemental on-line learning" feature which ranked as the fifth with a mean rating of 4.44.

As majority of the respondents are in the field of business administration or management, the offering of a "bridging program" ranked only as the sixth valuable feature, with a mean rating of 4.61. The bridging program is required for non-business graduates in order for them to cope with the MBM courses.

The feature considered as the least valuable by respondents is the "possibility of off-campus delivery" with the lowest mean of 5.52. This may imply that respondents outside of Iligan City are willing to travel to the MSU-IIT campus to attend classes in the modular MBM program. Traveling, it seems, is no big deal especially that this is done only twice a month and MSU-IIT is generally accessible to respondents coming from most of the areas covered by this study.

The Intention to Enroll or Not in the Certificate Programs. After presenting the modular MBM program concept board and soliciting the feedback of the 103 respondents in terms of the appeal of the modular MBM, the

researchers asked the respondents about their intention to enroll in the program if available. Eighty-seven respondents, or about 84 percent, signify their intention to enroll.

Only a small minority, or about 15 percent of the respondents, do not intend to enroll because they prefer the regular MBM program. Delving deeper, this is because these respondents were either enrolled already in the regular MBM during the conduct of study or would like the regular class sessions which are held from 6 to 9 p.m. on weekdays.

One respondent was not sure whether to enroll or not at the time of the study.

When Respondents Intend to Enroll. About thirty-two percent of the respondents wanted to enroll within the next school year if it were already offered. Respondents who wanted to enroll immediately during the second semester of SY2001-2002 if the certificate programs were already available comprised about 28 percent while those who intended to enroll within the next two years account for about 18 percent. In short, those enrolling within two years would be about 78 percent. This would leave those who need further convincing to enroll to be less than 20 percent.

The results, when projected into the target market, imply the capability of the modular MBM to attract a good number of enrollees within the next two years. The number of early adopters or those enrolling "immediately", "as soon as it is available", and "within the second semester" (the study was conducted during the first semester SY 2001-2002) is already sufficient to start the offering.

Respondents Who are Willing to Shift to the Certificate Programs. Five or about 25 percent of the twenty respondents enrolled in the regular master's degree programs in business, management/administration and MPA at the time of the conduct of the study were willing to shift to the certificate courses. Thirteen of the 20 respondents, or around 65 percent, did not signify their intention to shift because they have taken almost all the academic requirements and would soon graduate.

Two respondents, which consist of about 10 percent of those enrolled in other master's degree programs in business, were not sure whether to shift or not because they were still not sure of the phasing out of the extramural offering of their program in Iligan City.

Respondents' Intention of Enrolling in Some or in All Certificate Courses. Fifty-six percent of the 87 respondents who intend to enroll in the

certificate courses intend to enroll in all certificate offerings. Thirty-eight of those intending to enroll, representing about 44 percent, will initially enroll only in some of the certificate courses (within the two year period) and if time and financial considerations would be favorable, they may proceed to enroll in all.

Respondents' Intention to Have Certificate Courses Credited for the MBM Degree. Seventy or 80 percent of the respondents answered that they would have the certificate courses credited for the MBM degree, though some of them would do so within a two-year time frame from the start of enrollment date. The respondents have been made aware that the maximum residency requirement to finish the MBM degree is five years.

Twenty percent of those enrolling would like only to earn certificates and do not have the plan to work for a master's degree.

Preferred Certificate Courses. For those who wanted to take only certificate courses, the most popular choice is the Certificate in HRM. This is followed by Certificate in Marketing, Certificate in Finance, and finally, Certificate in Production Management. Note that most of the respondents were graduates of business and management baccalaureate degrees, so it is understandable why the Certificate in Production Management emerged as the last choice. In the regular MBM program, this field is generally chosen by engineers or engineering graduates.

Preferred Class Schedule. Most of the respondents, or 68 percent, prefer classes to be held on Saturdays. They said they consider Sunday as "family day" and do not want to go to school on this day. About 27 percent among the respondents prefer Sundays. These are those who have work even on Saturdays but want continuing education even if this falls on a Sunday. Five percent find it alright to have classes either on Saturdays or Sundays. These are mainly employed in the government sector.

Price Sensitivity Test

The tuition rates used in the price sensitivity tests were based on existing tuition rates of schools offering distance education programs. Distance education programs usually make use of modules and supplemental on-line instruction. The University of the Philippines – Open University (UPOU) charges around P3,100.00 for tuition and miscellaneous fees for a six-unit load. The Philippine Women University (PWU) charges around P3,500.00

for the same load. Tuition and miscellaneous rates of other universities, such as Xavier University (XU) were also considered. XU charges more than P5,000.00 for a 9-unit load. Exclusive business schools in Masters in Management, such as the Ateneo de Manila University (ADMU) and De La Salle University (DLSU) charge about P7,000.00 for a load of 9 units. Considering that a certificate course carries the equivalent of a 9-unit load, this study made use of "below P4,000.00" as the lower price threshold. It then made use of a price scale interval of P500.00 up to the "more than P7,000.00" level as the ending price or the upper-threshold price. The "price" that was presented was explained to respondents as covering tuition, registration and miscellaneous fees, including the cost of the modules.

The price scale is shown in Table 5. Shown likewise in the table are the cumulative percentages of those who thought that at certain points in the price scale, the certificate course was already "expensive". It also shows the cumulative percentage of respondents who thought that at certain points in the price scale the certificate course was "too expensive" such that the respondents were not willing anymore to enroll.

The lower portion of Table 5 highlights the pricing points where respondents considered the certificate course as "cheap" or "too cheap" that its quality starts to be doubtful.

Shown further in Table 5 are the two additional derived cumulative distributions: the "not cheap" and "not expensive" cumulative distributions. These represent the "reverse" of the "cheap" and the "expensive" cumulative distributions. Their derivations are shown also in the Table.

These cumulative distributions are needed to determine the indifference pricing point, the optimum pricing point, and the range of acceptable prices.

The Indifference Pricing Point (IPP). This is the intersection of the "cheap" and the "expensive" cumulative distributions. It represents the price where the respondents who regarded the certificate course as "cheap" equals those who looked at it as "expensive". The rest of the respondents saw the program as neither "cheap" nor "expensive" and therefore, this is the price where the maximum numbers of respondents would be indifferent. As shown in Figure 1, the indifference pricing point is approximately P 4,400.00.

The Optimum Pricing Point (OPP). This is the intersection of the cumulative distribution of the "too cheap" responses with that of the "too expensive" responses. At this price the respondents who considered the certifi-

Table 5. Price Expectations for the Modular Certificate Courses Leading to MBM Degree (N=103)

| Price | Expensive | | | | Too Expensive | | |
|--------------------|-----------|--------|--------------------|-------------------------|---------------|--------|------------------------|
| | F | % | Cum % Expensive | Cum % Not Expensive* | F | % | Cum % Too Expensive |
| P 4,000.00 | 4 | 3.88 | 3.88 | 96.12 | - | - | - |
| 4,500.00 | 30 | 29.13 | 33.01 | 66.99 | 1 | 0.97 | 0.97 |
| 5,000.00 | 21 | 20.39 | 53.40 | 46.60 | 7 | 6.80 | 7.77 |
| 5,500.00 | 7 | 6.80 | 60.20 | 39.80 | 4 | 3.88 | 11.65 |
| 6,000.00 | 15 | 14.56 | 74.76 | 25.24 | 11 | 10.68 | 22.33 |
| 6,500.00 | 5 | 4.85 | 79.61 | 20.39 | 3 | 2.91 | 25.24 |
| 7,000.00 | 21 | 20.39 | 100.00 | - | 14 | 13.59 | 38.83 |
| More than 7,000.00 | - | - | - | - | 63 | 61.17 | 100.00 |
| Total | 103 | 100.00 | - | - | 103 | 100.00 | - |

| Price | Cheap | | | | Too Cheap | | |
|--------------------|-------|--------|----------------|----------------------|-----------|--------|--------------------|
| | F | % | Cum % Cheap | Cum % Not Cheap** | F | % | Cum % Too Cheap |
| P 7,000.00 | - | - | - | - | - | - | - |
| 6,500.00 | - | - | - | - | - | - | - |
| 6,000.00 | - | - | - | - | - | - | - |
| 5,500.00 | 1 | 0.97 | 0.97 | 99.03 | - | - | - |
| 5,000.00 | 12 | 11.65 | 12.62 | 87.38 | - | - | - |
| 4,500.00 | 8 | 7.77 | 20.39 | 79.61 | - | - | - |
| 4,000.00 | 82 | 79.61 | 100.00 | - | 7 | 6.80 | 6.80 |
| Less than 4,000.00 | - | - | - | - | 96 | 93.20 | 100.00 |
| Total | 103 | 100.00 | - | - | 103 | 100.00 | - |

* Cum% "not expensive" = 100% - Cum% "expensive"

** Cum% "not cheap" = 100% - Cum% "cheap"

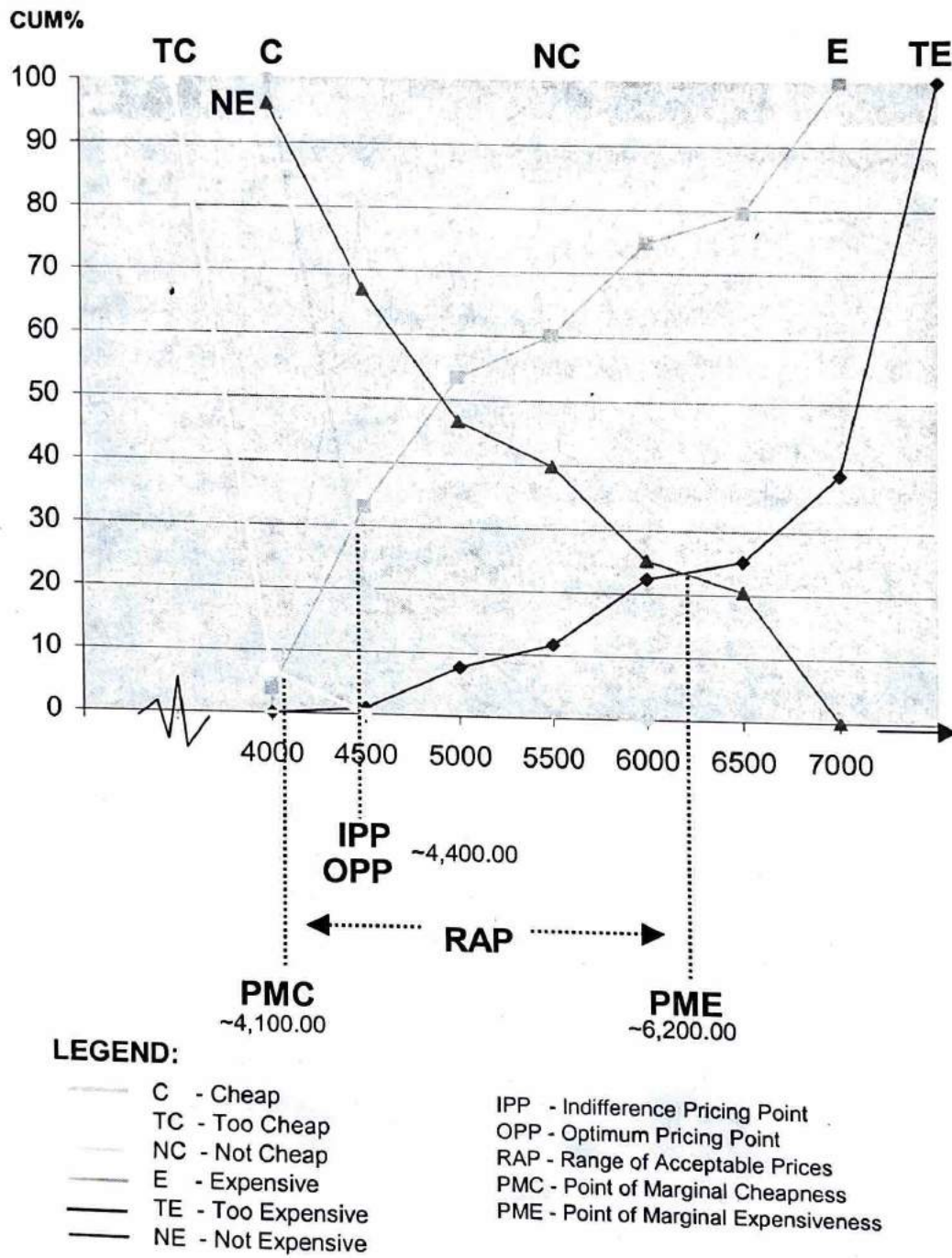


Figure 1. Results of Price Sensitivity Test for Modular Certificate Courses

cate course as “too cheap” and those who saw it as “too expensive” are equal to each other. The rest of the respondents regarded the certificate course at this price as neither “too cheap” nor “too expensive” and therefore just right or “optimal”. It can be seen from Figure 1 that the optimum pricing point is almost equal to the indifference pricing point, or also approximately P4,400.00.

The Range of Acceptable Prices (RAP). This range is defined by two intersection points. The first is the intersection between the “too cheap” and the “not cheap” cumulative distributions, which is referred to as the point of marginal cheapness (PMC). The second is the point of marginal expensiveness (PME) which refers to the intersection between the “too expensive” and the “not expensive” cumulative distributions. Figure 1 shows that the range of acceptable price is approximately P4,100.00 as the lower acceptability threshold and approximately P6,200.00 as the higher acceptability threshold.

The foregoing results imply that prospective clients expect that a modular certificate course will be priced in the vicinity of the OPP and IPP price which is P4,400.00; they expect, moreover, that the price will not fall below the PMC price of 4,100 nor go beyond the PME price of P6,200.00. The prospective clients’ price expectations serve as a guide in pricing the MBM certificate courses.

Logit Analysis

The Intention to Enroll or Not to Enroll in the Modular Certificate Courses vs. Socio-Demographic and Geographic Variables. As mentioned in the research methods, logit regression is done when the dependent variable is non-metric and binary. Such is the case for the dependent variables “with the intention to enroll” and “with no intention to enroll”. The independent variables are the socio-demographic variables and geographic variables.

In the logit regression that was done in this study, only 102 out of the 103 respondents from the five study areas were considered as the sample because one respondent was not sure whether to enroll or not.

The sample was divided into two groups, the first group consisted of those who have the intention to enroll in the modular MBM program, and the second group consisted of those who do not have the intention to enroll. The groups were coded as 1 and 0 respectively; “1” for those who intend to

enroll and "0" for those who do not intend to enroll.

Table 6 shows the significant variables. As only one independent variable significantly explains the dependent binary variables at $\alpha = 0.05$, the researchers included another independent variable which was significant at $\alpha = 0.10$ to come up with two explanatory variables for the respondents' "intention to enroll or not to enroll".

The two explanatory variables are "educational attainment" (significant at $\alpha = 0.05$) and "occupation" (significant at $\alpha = 0.10$). The values in the second column are estimates of the coefficients of the logit model.

The regression results imply that the lower one's "educational attainment" (measured as years of schooling) the higher the probability to enroll in the certificate programs.

Table 6. *Explanatory Variables of Respondents' Intention to Enroll or Not to Enroll in Modular Certificate Courses*

| | B | S.E. | Wald | df | Sig. | Exp(B) |
|-------------------------------|--------|-------|-------|----|--------------------|--------|
| <i>Educational Attainment</i> | -0.544 | 0.270 | 4.055 | 1 | 0.044 ¹ | 0.581 |
| <i>Occupation</i> | -0.576 | 0.310 | 3.447 | 1 | 0.063 ² | 0.562 |
| Constant | 2.733 | 2.255 | 1.469 | 1 | 0.226 | 15.381 |

¹ Significant at $\alpha = 0.05$

² Significant at $\alpha = 0.10$

In inputting the data in the logit regression, the "occupation" variable was broken down into five categories. The category "executives, managers, owners" was assigned the dummy variable "1" and so on, such that the lowest position was assigned the dummy variable "5". Regression results show that there is a higher probability among executives and professionals to enroll than clerks or service workers.

To sum up, regression analysis point to a higher probability for one who does not have master's degree yet occupying higher level positions to enroll in the modular MBM program.

Table 7 gives the classification table that tells how well the model fits

the data by comparing the predicted and observed outcomes. The table shows that two respondents were already definite in saying "NO" (will not enroll) while 13 would still have the predicted result of "YES" (with intention to enroll). The two respondents, representing 13.30 percent of the 15 who did not have the intention to enroll were correctly classified for the dependent variable "NO". With respect to the 87 respondents who answered "YES" (with intention to enroll), two of them would still have the probability of saying "NO" while 85 were already certain in enrolling in the modular MBM program. This means that 85 of the 87 respondents, or 97.7 percent were correctly classified for the dependent variable "YES". The overall probability that the model can predict correctly those with intention to enroll or those with no intention to enroll is 85.3 percent.

Table 7. Classification Table for the Intention to Enroll in Modular Certificate Courses

| Observed | | | Predicted | | |
|----------|--------------------|-----|-----------|-----|--------------------|
| | | | Results | | Percentage Correct |
| | | | No | Yes | |
| Step 1 | Results | NO | 2 | 13 | 13.30 |
| | | YES | 2 | 85 | 97.7 |
| | Overall Percentage | | | | 85.3 |

The Intention to Enroll in Some or All of the Certificate Courses vs. Socio-Demographic and Geographic Variables. Among the 10 independent variables entered in the analysis, only "field of specialization" and "years of employment", were found to have a significant effect on the dependent variable "to enroll in some or all modular certificate programs within the next two years" at the 5 percent level. Meanwhile, "age", "educational attainment" and "geographic" variables were found to have a 10 percent level of significance. Table 8 displays the logistic regression results.

Table 8. *Explanatory Variables of Respondents Who Will Enroll in All/Some Certificate Courses Within the Next Two Years*

| | B | S.E. | Wald | df | Sig | Exp(B) |
|--------------------------------|--------|-------|-------|----|--------------------|--------|
| <i>Field of Specialization</i> | -0.534 | 0.216 | 6.103 | 1 | 0.013 ¹ | 0.586 |
| <i>Years of Employment</i> | -0.166 | 0.072 | 5.377 | 1 | 0.020 ¹ | 0.847 |
| <i>Geographic</i> | 0.393 | 0.211 | 3.463 | 1 | 0.063 ² | 1.482 |
| <i>Age</i> | 0.099 | 0.058 | 2.912 | 1 | 0.088 ² | 1.104 |
| <i>Educational Attainment</i> | 0.447 | 0.264 | 2.866 | 1 | 0.090 ² | 1.563 |
| Constant | 0.254 | 2.059 | 0.015 | 1 | 0.902 | 1.289 |

¹ Significant at $\alpha = 0.05$

² Significant at $\alpha = 0.10$

In inputting the data in the logit regression, the “*field of specialization*” variable was broken down into eight categories. The category “Education” was assigned the dummy variable “1”, “Arts and Humanities” – “2”, “Social and Behavioral Science” – “3”, “Business Administration and Management” – “4”, “Computer Science and Information Technology” - “5”, “Medical and Allied” – “6”, “Engineering” – 7 and “Math and Science” was assigned the dummy variable “8”.

Regression results show that there is higher probability among graduates in Education, Arts and Humanities, Social and Behavioral Sciences and also graduates in Business Administration and Management to enroll in all certificate programs compared with graduates in Math and Science.

Regression results also show that there is a higher probability for one who have lesser number of years of employment to enroll in all certificate programs. This may be due to the tendency of those who are new in their jobs to be more aggressive in advancing their careers as they are younger and more idealistic.

The five areas in the “*geographic variable*” were encoded as “1” for respondents coming from “Iligan City”, “2” – “Cagayan de Oro City”, “3” – “Ozamiz City”, “4” - “Lanao del Norte” and “5” – “Marawi City”.

Regression results point to a higher probability for those who are from Marawi City, Lanao del Norte, and Ozamiz City to enroll in all certificate programs compared to those who hail from Iligan City and Cagayan de Oro City. This may be due to the lesser number of schools offering graduate courses in the former set of areas. Meanwhile, it can also be seen from the regression results that older respondents have a higher probability of enrolling in all certificate programs. Moreover, those who already earned some MA units are more inclined to enroll in all the certificate courses than those without MA units yet.

Only the 87 respondents who signified to enroll in the modular MBM were considered in the regression analysis regarding the intention to enroll in some or in all the certificate courses. Table 9 shows that among respondents who said "NO" (take only some of the certificate programs), 25 were predicted not to change their decision while 13 were predicted to possibly enroll in all certificate programs. The 25 of the 38 respondents who will enroll in some of the certificate programs were correctly classified for the dependent variable "NO" with a 65.8 percent probability.

Table 9. *Classification Table for the Respondents Who Will Enroll in All / Some Certificate Courses Within the Next Two Years*

| Observed | | | Predicted | | |
|----------|--------------------|-----|-----------|-----|--------------------|
| | | | Results | | Percentage Correct |
| | | | No | Yes | |
| Step 1 | Results | NO | 25 | 13 | 65.8 |
| | | YES | 11 | 38 | 77.6 |
| | Overall Percentage | | | | 72.4 |

On the other hand, among the 49 respondents who decided to enroll in all certificate programs, 11 respondents were predicted to change their decision and enroll only in some of the certificate courses. However, the 38 respondents who signified to enroll in all certificate programs were predicted to pursue the intention. They have been correctly classified for the dependent variable "YES" with a 77.6 percent probability.

The overall probability that the model can predict correctly for those

with intention to enroll in some or all of the modular certificate programs is 72.4 percent.

The Intention to Have the Modular Certificate Courses Credited for MBM or Not vs. Socio-Demographic and Geographic Variables. The researchers further wanted to find out the likelihood that the respondents would have the modular certificate courses programs credited for the MBM degree or not vis-à-vis their socio-demographic and geographic profile.

The output of the logistic regression analysis is shown in Table 10.

Table 10. *Explanatory Variables of Respondents' Decision to Have Modular MBM Courses Credited for MBM or Not*

| | B | S.E. | Wald | df | Sig. | Exp(B) |
|---------------------|--------|-------|-------|----|--------------------|--------|
| Years of Employment | -0.249 | 0.096 | 6.753 | 1 | 0.009 ¹ | 0.780 |
| Employer | 0.830 | 0.383 | 4.689 | 1 | 0.030 ² | 2.293 |
| Constant | 0.047 | 2.595 | 0.000 | 1 | 0.985 | 1.049 |

¹ Significant at $\alpha = 0.01$

² Significant at $\alpha = 0.05$

The results show that one with a shorter employment history is more likely to have the certificate courses credited for the MBM degree.

The "employer" variable, meanwhile, has four categories. The "higher educational institutions (HEIs)" category was assigned the dummy variable "1", "industries" – "2", "small/medium enterprises (SMEs)" – "3" and "government agencies/local government units (LGUs)" – "4". "4". Regression results reveal a higher probability among respondents coming from LGUs and SMEs to enroll compared to those respondents employed at HEIs and industries.

The goodness of fit of the model is tested by comparing the predicted and observed outcomes; results are presented in Table 11.

In the classification table, five of the 17 respondents who said "NO" are more likely not to have the certificate courses credited for the MBM degree; whereas the remaining 12 respondents with "NO" intention of having these

credited for MBM degree would probably say "YES" in the future. The correctly classified responses for the dependent variable "NO" is 29.4 percent.

Of the 70 with intention to enroll and have the certificate programs credited for the MBM degree, three respondents would possibly not continue with the intention while 67 respondents would likely push through with it. With "YES" as the dependent variable, 95.7 percent of the responses were correctly classified. Generally, the model's predictive ability is 82.80 percent correct.

Table 11. Classification Table for the Respondents' Decision to Have Modular Certificate Courses Credited for MBM

| Observed | | | Predicted | | |
|----------|--------------------|-----|-----------|-----|--------------------|
| | | | Results | | Percentage Correct |
| | | | No | Yes | |
| Step 1 | Results | NO | 5 | 12 | 29.4 |
| | | YES | 3 | 67 | 95.7 |
| | Overall Percentage | | | | 82.8 |

Conclusions

The respondents generally find the concept of the modular certificate courses leading to the MBM degree as very appealing. They consider the self-contained learning modules, the earning of certificates after a semester of course work, the courses that can be credited for the MBM degree, week-end classes and the delivery of some instructions on-line as the leading features of the concept.

Majority of the respondents signified their intention to enroll in the certificate courses within the two-year period that it shall be made available. Also, a majority of those who intend to enroll in the certificate programs wanted to enroll in all certificate offerings. They would want to have the certificate programs credited for the MBM degree.

In terms of preference of certificate courses by those not enrolling in all courses the Certificate in Human Resources Management emerged as the

first preference, followed by Certificate in Marketing, Certificate in Finance, and finally, by the Certificate in Production Management. Most preferred to have the classes conducted on Saturdays.

The socio-demographic variables that bear a significant relationship with respect to the respondents' intention to enroll or not in the modular certificate courses are *educational attainment* (at $\alpha = 0.05$) and *occupation* (at $\alpha = 0.10$).

There exists also a significant relationship between the socio-demographic variables as *field of specialization* (at $\alpha = 0.05$), *years of employment* (at $\alpha = 0.05$), *age* (at $\alpha = 0.10$), *educational attainment* (at $\alpha = 0.10$) and their intention to enroll in some or all certificate courses.

The geographic variable also significantly influence the intention to enroll in some or all certificate courses (at $\alpha = 0.10$).

The respondents' decision to have the modular certificate courses credited for the MBM degree or not bears significant relationship with their years of employment (at $\alpha = 0.01$) and their type of employer (at $\alpha = 0.05$).

Recommendations

On the basis of the findings of the study, the researchers present the following recommendations:

1. The offering of modular MBM certificate courses is a novel thing; as such the MBM program should launch an information education campaign (IEC) on its features and benefits using fliers, brochures or billboards in order for the potential clients to be motivated to enroll. The MBM Committee may visit offices, schools, establishments and other organizations so that inquiries and points of clarifications can be answered immediately and appropriately.
2. Consistent with the price sensitivity test results, each modular certificate course should be offered at a package price of P4,400.00 which emerges as the optimum pricing point (OPP) and the indifference pricing point (IPP). Any lowering or raising of the package fee (which includes tuition fees, registration fees, miscellaneous fees, and cost of modules) should not fall below the price of P4,100.00 which is the point of marginal cheapness (PMC) nor go beyond the price of P6,200.00, the point of marginal expensiveness (PME).

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