Effective Market Segmentation for Open Distance Learning Institutions' Marketing Strategy

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Abstract

This study aims to examine prospective learners' perceptions toward effective market segmentation strategies for Open Distance Learning (ODL) advertisements. A descriptive study was conducted to assess preferences based on the generational cohort. Self-administered questionnaires were used to obtain meaningful data from 282 potential learners in Malaysia. The potential learners were working adults based on generational cohorts, namely, Gen Z, Gen Y, Gen X and Baby Boomers. The study was conducted from October to December 2020. Based on the analysis, Substantiality and Accessibility between ODL institutions and the market were viewed by the majority of the respondents as more effective than Responsiveness and Identifiability. However, the standardised path coefficient shows that all variables are significant predictors of the effective market segmentation. Therefore, it is noteworthy to develop creative marketing strategies to attract the attention of a wider audience. The insights obtained can potentially assist ODL institutions to better understand the characteristics of effective market segmentation. The study adds to the existing marketing literature and has strong implications in both academic and ODL institutions, particularly regarding the aspect of prospective learners' opinions pertaining to effective market segmentation.

Keywords: Accessibility, Generational Cohort, Identifiability, Market Segmentation, Responsiveness, Substantiality, Open Distance Learning

1. Introduction

In a competitive business environment, effective market segmentation is crucial (Ziff et al., 2013). Market segmentation divides a consumer market into well-defined parts. A market segment consists of a group of consumers who share a similar set of needs and wants (Kotler & Armstrong, 2018). Identifying relevant consumer segments and deciding which to serve is a primary business challenge. Regardless of the type of market segmentation used by an

organisation, the end objective is to create a marketing advertising initiative that works within the context of a specific segment.

Numerous statistical methods have been employed to develop market segments (Ciribeli & Miquelito, 2015). Typically, after a company has defined its market-segment opportunities, it must decide which one to pursue and how broad it should be. In order to recognise clearer, better-defined target audiences, companies often combine multiple variables. However, not all segmentation schemes are useful (Kotler & Armstrong, 2018). An Open Distance Learning (ODL) institution, for example, could divide prospective students by gender, but the colour of their hair has no effect on their decision to pursue studies. As a result, the market is currently only minimally-segmentable from a marketing perspective.

Hence, a company must pay close attention to at least four main market segmentation criteria in order to be successful, namely, substantial, identifiable, accessible, and responsive (Donovan & Henley, 2012; Kotler & Armstrong, 2018). A marketing programme must be developed based on the suggested key performance indicators to ensure that the targeted segment has advantages that help the company to stay afloat in the marketplace.

ODL has become a new learning trend since the outbreak of COVID-19 (Bao, 2020; Favale et al., 2020). The learning process is currently moving beyond the existing physical classroom setting. On the positive side, ODL offers at least four benefits: personalised lifelong learning programmes, valuable social networks, as well as time and cost savings for both institutions and learners. In fact, many conventional face-to-face universities have advised their students to enrol for online courses to kick start a smooth transition into the new learning culture (QS Rankings, 2020). The number of online programmes also shows an increasing trend. However, it is also important to understand that effective market segmentation is crucial to effectively market ODL programmes.

Currently, only a few studies have looked into market segmentation criteria. Is an effective segmentation criterion solely based on factors such as substantial, identifiable, accessible, and responsive? Or are there other elements that are also important when segmenting customers? The fact is that higher learning institutions are competing with each other to obtain more students. Creativity in advertisements and effective market segmentation are vital, especially for ODL institutions. However, not many studies look into the marketing aspect of ODL programmes (Faridi & Ouseph, 2014). Hence, this study is significant in terms of evaluating prospective learners' views toward a more efficient way to group and choose the appropriate target market, which in the end will increase the intake into ODL institutions in Malaysia such as Open University Malaysia (OUM). Every year, OUM allocates a significant budget for marketing activities. Since its first inception, the OUM management perceived marketing as an effective technique to create awareness for its 40 academic programmes. The existing marketing strategy brought in 26,000 active learners, but the numbers fluctuate every year. The management believes that there must be a strong mechanism related to market segmentation and promotional activities to ensure a consistent figure. The university is serious in putting in strategic effort to create and maintain sustainability through competitive advantage by harnessing the impactful usage of important ODL marketing resources. Therefore, the findings of this study may help ODL institutions to gain a better and more useful understanding on their marketing strategies in the future.

2.   Research Objectives

The researchers have established two goals to be accomplished based on the study's context. Following are the objectives:

RO1: To assess which market segmentation criteria that is effective as perceived by the prospective ODL learners.
RO2: To examine the most effective market segmentation criteria to be focused by the ODL institutions in their   marketing communication activities.

3.   Literature Review

3.1 Understanding Effective Market Segmentation for ODL Institutions

Some marketing segmentation examples are knowing the clients, offering them exactly what they want or will want, establishing a close relationship with channel affiliates and co-marketing partners, and engaging via extremely focused advertising channels such as event sponsorships, digital web pages, direct newsletters, and trade magazines (Kotler & Armstrong, 2018). To put it another way, it is a scientific approach to actually comprehend consumers.
       When it comes to segmenting prospective students, ODL institutions must take a distinct path. The market has been split into three segments: mature students, high school graduates, and recent foreign students, each of whom makes various considerations when selecting a university (Constantinides & Stagno, 2011). Nevertheless, the feasibility of marketing segmentation should mean something and must indicate the relevance of the programmes being marketed for these three main segments (Matz et al., 2017). A number of authors suggested four requirements for effective segmentation: substantiality, identifiability and measurability, as well as accessibility and responsiveness (Lamb et al., 2011). These four parameters are further explained in the following sections.

3.1.1 Substantiality and Effective Market Segmentation

Substantiality refers to the segment that must be sufficiently large and profitable to be economically viable for an organisation (Kotler & Armstrong, 2018). It typifies that a segment should be the largest possible homogenous group worth going after with a tailored programme. A segment should also be large enough to warrant developing and maintaining a special marketing mix (Lamb et al., 2011). Substantiality is a common way for directing the value of the segmenting opportunity, thus achieving the organization's goal. According to previous analyses, substantiality must explicitly address the organization's goals to reduce the possibility of designing unsuccessful and inefficient targeting via segmentation (Pires & Stanton, 2000). Additionally, the organisation's top management should be actively involved in the market segmentation process from its initiation. Previous studies have shown a positive and significant effect between substantiality and the effectiveness of market segmentation (Finne & Grönroos, 2017). Other studies have found a significant effect, but must be enhanced by other factors such as integrated marketing communication and technology advancement (Finne & Grönroos, 2017; Tancharoen, 2016). Hence, this study suggests the following hypothesis:

H1: There is a positive and significant relationship between substantiality and effective market segmentation for ODL institutions.

3.1.2 Identifiability and Effective Market Segmentation

Previous studies detailed that a higher household discretionary income would determine the preference for progressive goods and services, and spend a lower proportion of the household budgets on basic commodities such as food. There are also substantial differences between urban and rural segments, particularly in terms of household income. The reduction of participation by children dependants and women would also influence a market. Interestingly, literacy rate would suggest a raising notice for education level (Martins et al., 2017).

Previous studies profiled university segments such as suburban retirement, suburban empty nesters, low status families, urban retirement, suburban welfare and mid-status suburban (Ngubane-Mokiwa & Letseka, 2015). The application of segment profiling has proven to be a simple and a cost-effective technique. Existing studies have shown a positive relationship between identifiability and effective market segmentation. However, the range of the magnitude is from weak to moderate (Donovan & Henley, 2012; Grover et al., 2011). Thus, this study proposes the following hypothesis:

H2: There is a positive and significant relationship between identifiability and effective market segmentation for ODL institutions.

3.1.3 Accessibility and Effective Market Segmentation

Accessibility is the degree to which a segment can be effectively reached and served (Kotler & Armstrong, 2018). It greatly relies upon the ability of an organisation to direct its marketing efforts toward a particular segment. Media coverage, distribution and the influence of behavioural factors all require evaluation. It is also important to choose a media mix that will reach the target segment economically and efficiently. Similarly, the distribution network chosen must be effective in reaching a particular sub-segment. The firm must be able to reach members of targeted segments with customised marketing mixes (Lamb et al., 2011). The primary concern of accessibility relates to the optimisation of the budget at hand and reaching out to the differentiated and mass target audience. However, previous studies have shown a positive and significant relationship of accessibility and effective market segmentation (Lissitsa & Kol, 2016; Martin, 2011). Therefore, this study proposes the following hypothesis:

H3: There is a positive and significant relationship between accessibility and effective market segmentation for ODL institutions.

3.1.4 Responsiveness and Effective Market Segmentation

Market responsiveness could be raised when the management emphasizes gaining customers' responses. In developing market responsiveness, the firm should address customers' needs and take action to meet those needs. A formalised, disciplined process is required and would enable a firm to identify what is most important for the customers, and create the opportunity to distinguish the firm against competitors. Besides the management's internal effort to increase market responsiveness, consumers in the market segment ought to be responsive to the products and services that are intended for them. Apparently, corporate credibility and endorser credibility have a significant influence on consumers' attitudes towards advertisements and brands, including their purchase intentions, which may thus be able to develop effective marketing communication strategies (Grover et al., 2011). Previous studies have shown a positive and significant relationship between responsiveness and effective market segmentation, but must be

enhanced by other factors such as technology efficacy and media channels (Lissitsa & Kol, 2016; Parment, 2013). Thus, this study suggests the following hypothesis:

H4: There is a positive and significant relationship between responsiveness and effective market segmentation for ODL institutions.

3.2 Generational Cohorts

Each generation is commonly influenced by the time and environment in which they grew up. Existing studies have found that different generational cohorts will have different attitudes. They also behave differently due to age gap and social interactions. However, they will share the same outlooks and values (Kotler & Armstrong, 2018). Marketers will develop an effective market segment to reach their target audience. The inclusion of generational cohorts in this study is important as a source of reference in terms of the prospective learners' perceptions on effective market segmentation and the preferred types of marketing communication for ODL institutions, based on age group. Any similarities or differences in opinion were highlighted in this study. Table 1 indicates the common generational cohorts, as proposed by Lissitsa & Kol (2016).

Table 1: Groups of consumers based on generation (Source: (Lissitsa & Kol, 2016))

Generation	Year of Birth
Gen Z	1995 – 2015
Gen Y (Millennial)	1980 – 1994
Gen X	1965 – 1979
Baby Boomers	1944 – 1964

4. Research Methodology

This research focuses on the analyses that are relevant to achieve the two objectives previously mentioned. As of August 2020, the total workforce in Malaysia was recorded at 15.9 million, and represent potential learners of ODL institutions. A self-administered questionnaire was distributed to 350 participants. The convenience sampling technique was adopted for collecting the data, because it is convenient, accessible to the researchers, and requires a relatively small budget. Data were collected from October to December 2020. A total of 282 valid responses were obtained for this study, amounting to an 80.57% response rate.

The measured items were adopted and modified from past studies related to market segmentation. The respondent background comprises age, gender, education level, and occupation. The measured items are based on the variables such as substantiality, identifiability, accessibility, responsiveness, and effective market segmentation for ODL institutions. Data obtained from the questionnaire were analysed using SPSS version 22.0 to examine the respondents' profiles and their perceptions toward market segmentation. SMARTPLS was used to examine the target endogenous variable variance, inner model path coefficient sizes, outer model loadings, indicator reliability, internal consistency, convergent validity, discriminant validity, and the structural path significance in bootstrapping.

5. Analysis and Findings

A thorough analysis was conducted to investigate the prospective ODL learners' views on effective market segmentation.

Table 2: Demographical characteristics of the respondents

Demographic Characteristics	Frequency	Percentage
Generational Cohort (n=282)		
Below 25 years old (Gen Z)	64	22.70
26 – 40 years old (Gen Y)	92	32.63
41 – 55 years old (Gen X)	85	30.14
56 – 76 years old (Baby Boomers)	41	14.54
Educational Level (n=282)		
LCE/SRP/PMR	15	5.32
MCE/SPM	35	12.41
HSC/STPM	20	7.09
Certificate	18	6.38
Diploma	35	12.41
Bachelor Degree	101	35.82
Masters	58	20.57
Occupation (n=282)		
Private Sector	103	36.52
Public Sector	101	35.82
Self-Employed	41	14.54
Unemployed	37	13.12

As can be seen in Table 2, the number of respondents who work in the public sector is as high as that of private sector employees. With the increasing number of civil servants in Malaysia, this statistic is common. However, it can be seen that the percentage of respondents who are unemployed is considerably high. This could likely be based on the reason that many of them are still searching for suitable jobs or considering to pursue their studies. Meanwhile, easy access to education has made many people have an equal opportunity to obtain a higher degree. This research discovered a good trend where a total of 68.8% of the respondents have tertiary education. The remaining 31.2% still have an opportunity to pursue their tertiary education through ODL based on the Accreditation of Prior Experiential Learning (APEL) admission.

Academic qualification is important in this research, as it may indicate how the potential learners look at effective market segmentation. The majority of the respondents are Gen Y, between 26-40 years old (32.63%). For Open University Malaysia (OUM), it is notable that the high percentage of Gen X (41-55 years old) and Gen Z (under 25 years old) offers a good opportunity for institutional sustainability.

Figure 1 indicates that the coefficient of determination, R^2, is 0.460 for EFF endogenous latent variable. This means that the four latent variables (SUB, IDN, RES, and ACS) moderately explain the variance in EFF (46.0%). The inner model path coefficient suggests that SUB has the strongest effect on EFF (0.357), followed by ACS (0.220), RES (0.157), and IDN (0.110). The hypothesised path between SUB, IDN, RES, and ACS are statistically significant. All

standardised path coefficients are over 0.1. Hence, it can be concluded that SUB, IDN, RES, and ACS directly predict the EFF.
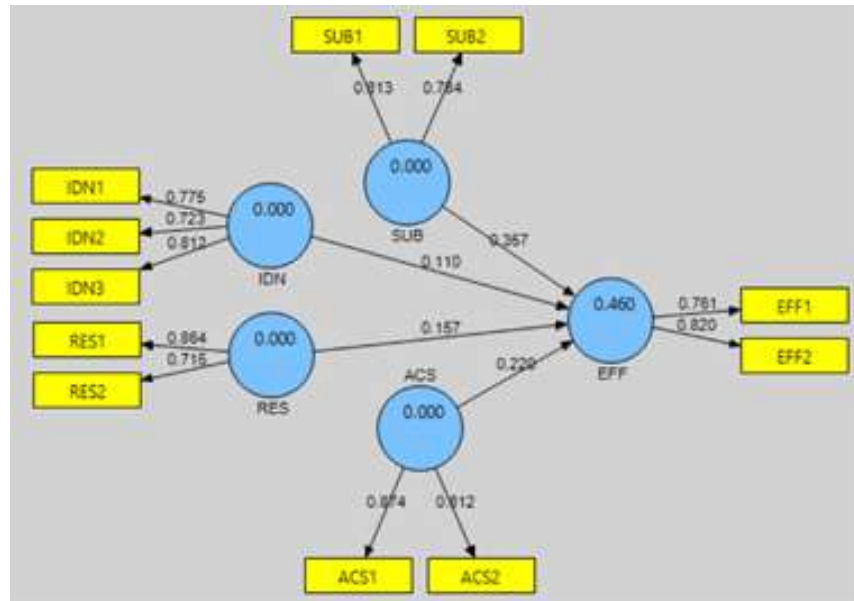
Note: SUB: Substantiality, IDN: Identifiability, RES: Responsiveness, ACS: Accessibility, EFF: Effectiveness

Fig. 1 SMARTPLS reflective model for effective market segmentation as perceived by prospective OUM learners

Table 3: Results summary for the reflective outer model

Latent Variable	Indicators	Outer Loadings	Indicator Loadings	Composite Reliability	AVE
ACS	ACS1	0.8744	0.7646	0.8317	0.7121
	ACS2	0.8122	0.6597		
EFF	EFF1	0.7608	0.5788	0.7695	0.6257
	EFF2	0.8202	0.6727		
IDN	IDN1	0.7753	0.6011	0.8141	0.5940
	IDN2	0.7229	0.5226		
	IDN3	0.8115	0.6585		
RES	RES1	0.8635	0.7456	0.7703	0.6284
	RES2	0.7150	0.5112		
SUB	SUB1	0.8131	0.6611	0.7787	0.5377
	SUB2	0.7838	0.6143		

Table 3 indicates that all Composite Reliability values are greater than 0.70. This means that the measured items have Internal Reliability consistency. As for the Convergent Reliability, all Average Variance Extracted (AVE) values are higher than 0.50 (Hair et al., 2014).

Table 4: Discriminant validity

Indicators	AVE	Square Root
ACS	0.7121	0.8439
EFF	0.6257	0.7910
IDN	0.5940	0.7707
RES	0.6284	0.7927
SUB	0.5377	0.7333

Table 5: Fornell-Larcker criterion analysis for discriminant validity

	ACS	EFF	IDN	RES	SUB
ACS	0.8439				
EFF	0.5126	0.7910			
IDN	0.3877	0.4923	0.7707		
RES	0.3622	0.4885	0.7372	0.7927	
SUB	0.5414	0.6070	0.5081	0.4779	0.7333

Tables 4 and 5 show that the "square root" of AVE of each latent variable is greater than the correlations among the latent variables. This also indicates that the measure of constructs are not highly related each other (Hair et al., 2014).

Table 6: Checking the significance level of the inner model using bootstrapping

Path	T-Statistics
ACS → EFF	3.7118
IDN → EFF	1.9708
RES → EFF	2.7675
SUB → EFF	6.8387

Table 6 indicates that the ACS → ENT, IDN → EFF, RES → EFF, and SUB → EFF T-Statistics are greater than 1.96. Therefore, all variables have shown evidence of a significant relationship. This is consistent with the earlier assessment of the reflective PLS-SEM model.

Table 7: A summary of the hypothesis testing

Hypothesis	*Statement*	*Results*
H1	There is a positive and significant relationship between substantiality and effective market segmentation for ODL institutions.	Supported
H2	There is a positive and significant relationship between identifiability and effective market segmentation for ODL institutions.	Supported
H3	There is a positive and significant relationship between accessibility and effective market segmentation for ODL institutions.	Supported
H4	There is a positive and significant relationship between responsiveness and effective market segmentation for ODL institutions.	Supported

Table 7 portrays a summary of the hypothesis testing. It was found that all hypotheses were supported. This is perhaps due to the reason that the prospective learners perceived that in order to be effective, the marketing communication must substantially reach the segment. Therefore, Integrated Marketing Communication must be properly planned to standardise the message across the media channels. The ODL institutions must ensure that the segment must be effectively reached and served. In the meantime, effective programmes must be formulated to attract and serve the target market segment. Hence, Research Objective 1 was achieved.

Table 8: Generational cohort and perception on effective market segmentation

	SUB	IDN	RES	ACS
Gen Z	9.54%	3.05%	4.20%	5.34%
Gen Y	16.79%	3.44%	4.96%	7.63%
Gen X	18.70%	4.20%	3.44%	5.34%
BB	5.73%	3.05%	2.29%	2.29%
Total	50.76%	13.74%	14.89%	20.61%

Table 8 portrays that substantiality of the market is highly perceived by all generations as an effective strategy in market segmentation. Meanwhile, accessibility between the ODL institution and the prospective learners is also important to capture a significant amount of attention.

Another interesting finding is that Gen Z and Y viewed that the ability of the ODL institutions to reach them and respond to their questions is very important. This means that ODL institutions must be creative in their marketing communication strategy, especially in approaching prospective learners via social media channels such as YouTube, Facebook, Instagram, and Twitter. This is also applicable to traditional media channels such as TV, Radio, Newspaper, and Outdoor advertising, in order to capture the prospective learners' attention. Thus, Research Objective 2 was achieved.

6. Conclusion

The growing concern on marketing strategies has prompted ODL institutions to consider effective market segmentation to promote the university and its programmes to the right market. The results of this study indicate a unique perspective on the perception of Malaysian prospective learners towards effective market segmentation. An empirical investigation confirmed that the majority of the generational cohorts perceived that the Substantiality, Accessibility, Responsiveness, and Identifiability are important elements to develop an effective market segmentation. This is consistent with the research findings by Angulo et al. (2010), Donovan and Henley (2012) and Foedermayr and Diamantopoulos (2008). Hence, ODL marketing strategies must incorporate all variables tested in this study to attract a larger targeted audience in the future. However, priority should be given to the substantiality and accessibility of the market segment upon designing marketing communication activities. This is in tandem with the research findings which also discovered that the majority of Malaysian consumers desire to attach themselves to marketing activities that are consistent with the opinions and beliefs of their social circles.

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