Sustainability in Open Distance Learning (ODL): Adoption of Market Segmentation and Advertising Strategy

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ABSTRACT

The purpose of this paper is to examine the prospective learner's perception of effective market segmentation and advertising messages for open distance learning (ODL) advertisements. A descriptive study was conducted to assess the perceptions of prospective ODL learners in Malaysia. Self-administered questionnaires were used to obtain meaningful data from 314 respondents. The study was conducted from January to March, 2021. Based on the analysis, accessibility between the ODL institution and its market segments was viewed by the majority of the respondents as more important than substantiality. Furthermore, the respondents agreed that reminders and persuasive messages are significant in attracting audience attention to an ODL institution. The standardised path coefficients have shown that accessibility, reminders and persuasive messages are significant predictors of the sustainability of ODL institutions, whereas substantiality was perceived by the respondents as being insignificant. The results from this study will help ODL institutions be more focused when designing their

advertising messages, and will deepen their understanding of market needs. These findings have strong implications for academic ODL institutions, particularly in the aspect of institutional sustainability based on effective market segmentation and the right strategy of advertising messages.

INTRODUCTION

The recent development of tertiary education businesses indicates that an effective marketing strategy is very important (Bao, 2020). Open distance learning (ODL) has gained momentum in the past two decades due to the remarkable global growth and expansion experienced by the higher education sector (Faridi & Ouseph, 2014; Kalman, 2017; Latchem, 2018). Higher education providers (HEPs) that provide ODL education have aggressively sought to increase their competitiveness through the development of their capabilities and resources, especially with the increasing competition from traditional and other ODL institutions who are also aiming for business sustainability (Blaschke, 2012; Park, 2011). ODL institutions are searching for more practical methods of creating and maintaining sustainability by leveraging the resources available in the existing ODL environment, such as institutional reputation, technological advances, e-learning modules and service management (Latchem, 2018; Munira & Fadzil, 2008; Richter & McPherson, 2012).

ODL has become a new learning trend since the Covid-19 outbreak (Bao, 2020; Favale et al., 2020). The learning process is now moving beyond the existing physical classroom environment. ODL offers numerous benefits, such as a personalised lifelong learning programme; valuable social networking, and increased time and cost-saving for the institution and students. Many conventional HEPs have advised their students to attend online courses to initiate a new learning culture (QS Rankings, 2020). The number of online programmes is also increasing steadily. The choice of programmes depends on the interests of the prospective student and ranges from basic certification to PhD level. There is also an increasing number of

regulatory bodies. Therefore, creativity is very important for universities to promote and deliver their programmes and services to the public.

The promotion of ODL programmes and their excellent services must be well thought out by the university. This is because the budget spent on advertising must bring in satisfactory returns. Therefore, the choice of the type of advertisement used must consider the strengths of the media channel, the messages conveyed and the market segment. This is to ensure a satisfactory response from the target market. The choice of media and type of messages must also take into account their exclusivity (Oh, 2013). This is to portray a good image of the ODL institution and its programmes. Creative messages will add value to the advertisement and change the users' perspective on the ODL programmes and services offered by educational institutions. However, as the business environment is becoming more competitive, more companies can to harmonise their advertisements with what the consumer wants to know.

To date, there are limited studies linking the different types of advertising messages and market segmentations to the intention of working adults to continue their studies as ODL students (Bao, 2020; Favale et al., 2020). In the meantime, ODL institutions are continuously searching for the best marketing strategy and model to attract prospective learners' attention that can be adopted for educational business sustainability (Ali & Fadzil, 2013). Generally, any type of business organisation will identify the appropriate market segments and decide which one to serve. Regardless of the type of market segmentation used by the organisation, the primary goal of the process is to create a marketing programme that fits the wants of a particular segment (Kotler & Armstrong, 2018).

Several methods that can be adopted to develop market segments (Grover et al., 2011). A business organisation will determine which segment to serve and how substantial its size is. Usually, an organisation will combine more than one variable to obtain a clearer and better-defined target group. However, not all segmentation schemes are useful (Kotler & Armstrong, 2018). To make it useful, a business must focus on the criteria of effective market segmentation, such as substantiality and accessibility (Donovan & Henley, 2012; Lamb et al., 2011). This process will boost student intakes, thus contributing towards business sustainability.

Among the important strategies used is the institution's identification of the motives of the target market. The way the prospective learners perceive ODL institutions' advertisements is different from the way they perceive consumer product and service advertisements. Some prefer reminder advertising messages, while others consider persuasive messages to be the better choice. Prospective learners are the ones who decide which types of messages influence them to enrol on a particular programme.

Since its inception, Open University Malaysia's (OUM) management has seen marketing as an effective technique to generate awareness for its 40 academic programmes. Their existing marketing strategy has brought in 26,000 active learners so far, but the number of students enrolling fluctuates every year. As such, management believes that there must be a factor related to market segmentation and promotion that will ensure a more consistent and satisfactory learners' enrolment rate.

This research aims to question whether, based on existing literature, it can be said that substantiality and accessibility are effective forms of market segmentation. Is it right to claim that reminders and persuasive messaging techniques are preferred by prospective ODL learners? It is time to identify prospective learners' preferred types of advertisements and a more effective way of segmenting the market, which, in the end, will bring more students to the business. Information obtained from this study may provide a greater and more useful understanding of the future marketing strategies that should be employed by ODL institutions.

Based on the background of the study, the researchers have identified three objectives to be achieved. The objectives are as follows:

1. To assess the effects of substantiality, accessibility, reminders and persuasive messages in marketing communication programmes for the sustainability of ODL institutions.
2. To examine the most effective market segmentation criteria to be focused on by ODL institutions in their marketing programmes to ensure the sustainability of ODL institutions.
3. To examine the preferred type of messages to be adopted by ODL institutions in their marketing programmes to ensure the sustainability of ODL institutions.

LITERATURE REVIEW

Sustainability of ODL Educational Institutions

The increasing need for individuals to have access to higher education is of profound importance to the sustainability of ODL institutions. Higher education has its responsibility to promote knowledge, as an educated population will increase socio-economic mobility, hence uplifting society. The number of higher education institutions engaged in sustainable development elements, such as technology-enabled teaching and learning, technology-based research, engagement with the market segment, development of ODL programmes and rendering of high-quality services, is increasing every year (Husaini & Jusoh, 2017). Therefore, several indicators have been developed to provide a clear view of the current overall progress of ODL institutes towards sustainability (Lozano et al., 2013).

Providing opportunities for continuous education to as many people as possible is among the ultimate focuses of higher education providers to remain sustainable. Open Distance Learning (ODL) is a viable platform for education and lifelong learning opportunities that are relevant to individuals at the workplace and mass society for nation building. Through ODL, more people have greater opportunities to improve their employability and income. Therefore, higher education institutions need to take into account at least three aspects of ODL institutional sustainability: the quality of the programme and services provided; understanding of the market segment; and creative marketing communication (Parsons & Shelton, 2019; Salvioni et al., 2017).

The number of learners enrolled in the system indicates the efforts undertaken by ODL programmes to be made easily available and reachable to all. As mentioned earlier, the accessibility of these programmes and their marketing communications are also important aspects that should integrate sustainability into all actions taken by ODL institutions. Existing literature has found that the ability to sustain a business has become an important factor in increasing the market share of private educational institutions (Goni et al., 2017; Roos & Guenther, 2020; Shrivastava, 2020).

Understanding Effective Market Segmentation for ODL Institutions

Market segmentation is about knowing your customers, giving them exactly what they want or may want, building strong affiliations with channel affiliates and co-marketing partners and communicating with them via highly targeted promotional media, such as event sponsorships, interactive websites, personalised emails and trade magazines (Lamb et al., 2011). In other words, it is a technical way of truly understanding the customer.

ODL institutions require a different approach when segmenting their prospective learners. The university market has been characterised as being comprised of three main segments, those being matured students, high school leavers and, recently, international students. Each segment will consider different factors when choosing a university (Constantinides & Stagno, 2011). Nevertheless, the feasibility of market segmentation should be considered and advertisements must indicate the relevance of the programmes and services being offered to their target market (Angulo et al., 2010). Several authors have suggested good market segmentation strategies, such as through substantiality and accessibility (Lamb et al., 2011). These parameters will be explained further in the following sections.

Substantiality of the Market and its Effect on the Sustainability of an ODL Institution

Substantiality refers to the segment that is sufficiently large and profitable to be economically viable for an organisation to pursue (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 to direct the value of segmenting opportunities, and, thus, achieve the organisation's objectives. Previous studies have found that substantiality must address the organisation's objectives clearly, as this will eliminate the possibility of designing ineffective and inefficient targeting material to potential segments (Pires & Stanton, 2000). The organisation's top management should be actively involved in the market segmentation process from the beginning.

Previous studies have shown a positive and significant relation between substantiality and the sustainability of a business (Donovan & Henley, 2012; Pires & Stanton, 2011). Hence, this study suggests the following hypothesis:

H1: There is a positive and significant relationship between the substantiality of a market and the sustainability of ODL institutions.

Accessibility of the Market and its Effects on the Sustainability of an ODL Institution

Accessibility is the degree to which a segment can be effectively reached and served (Kotler & Armstrong, 2018). It largely rests upon the ability of an organisation to direct its marketing efforts to 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 targeted segment both economically and efficiently. Similarly, the distribution network chosen must be effective in reaching the chosen sub-segment. The organisation must be able to reach members of targeted segments with their customised marketing mix (Lamb et al., 2011). The main concerns of accessibility are related to the optimisation of the budget at hand and the ability to reach differentiated and mass targeted audiences. Previous studies have shown a positive and significant relationship between accessibility and the sustainability of a business (Angulo et al., 2010; Matz et al., 2017). Therefore, this study proposes the following hypothesis:

H2: There is a positive and significant relationship between the accessibility of the market and the sustainability of ODL institutions.

Understanding Effective Advertising Messages for ODL Institutions

Advertising messages can be classified according to their aim. The aim could be to persuade or remind the targeted audience about products or services. The right advertising message plays an important role in raising consumer awareness and building a favourable impression, thus establishing long-term relationships.

Persuasive Advertising Messages and their Effects on the Sustainability of an ODL Institution

Persuasion is the act of making a person do or believe something by giving them a good reason to do so. The objective of persuasive advertising is to build consumers' liking, conviction and preference towards a business (Tutaj & Van Reijmersdal, 2012). Persuasive advertising may convince consumers with a certain belief that leads to a particular behavioural action, such as purchasing a product or service. Persuasive advertising uses various techniques to appeal to the logical and emotional sides of the decision-making process. Not all consumers are strictly rational or purely emotional in their purchasing decisions. There are always rooms for both objective facts and creativity when it comes to influencing the consumers' beliefs and behaviour (Matz et al., 2017).

There are persuasive advertising messages that use comparative advertising as a strategy. The advertisement will make an explicit comparison to the attributes of close competitors (Shareef et al., 2019). A persuasive advertising message works best when it stimulates the consumers' cognitive and affective processes, especially when they try to understand the advertisement in a detailed and analytical way (Fleck et al., 2012; Lu et al., 2019). Some advertisers use authority figures and emotional tactics to attract the attention of their targeted market segment. Previous studies have shown a positive relationship between persuasive advertisements and consumers' perceptions of the sustainability of an organisation (Constantinides & Stagno, 2011; Fleck et al., 2012; Lu et al., 2019). Hence, in the context of this study, it can be hypothesised that:

>   H3: Persuasive advertising messages have a positive and significant relationship with the sustainability of ODL institutions.

Reminder Advertising Messages and their Effects on the Sustainability of an ODL Institution

Fundamentally, this type of advertising focuses on stimulating consumers' intent to re-purchase products or services (Kotler & Armstrong, 2018). Reminder advertising is used primarily by established brands or in a follow-up to a more extensive ad campaign to remind the consumer about the product or service; or to introduce new life or theme into existing campaigns (Lamb et al., 2011).

Reminder advertising also serves to enhance the top-of-the-mid awareness of the brand and reinforce key messages of brand values and the recent offers. The strategy applied in this type of advertising is to mention the name of the product and testimonials of existing customers. The messages will be repeated many times to keep the targeted consumers interested in, and aware of, a well-established product that is most likely at the mature or end-stage of its product life cycle (Verma, 2009). Previous studies have shown the significant effects of reminder advertisements on consumers' perception of the sustainability of a business (Constantinides & Stagno, 2011; Fleck et al., 2012). Therefore, it can be hypothesised that:
H4: Reminder advertising has a positive and significant relationship with the sustainability of ODL institutions.

RESEARCH METHODOLOGY

This research focuses on the analyses that are relevant to achieving the three objectives mentioned in the earlier part of this paper. Self-administered questionnaires were distributed to 350 prospective ODL learners in Malaysia. According to Sekaran & Bougie (2020), on average, there will be approximately 10 to 20 percent of the respondents that will not answer the questionnaire. The convenience sampling technique was adopted as the method of collecting data. Data were collected from January to March, 2021, among employees who work in the public and private sectors. The researchers also distributed the questionnaires to self-employed individuals. A total of 314 valid responses were obtained, and the percentage of valid responses is 89.71 percent.

The measured items were adapted and modified from past studies related to market segmentation, effective advertising messages and institutional sustainability. Table 1 shows the measured items for each construct examined in this study. The respondents' background information comprised of age, gender, education level and occupation. The measured items developed were based on variables such as substantiality, accessibility, persuasion and reminder advertising for ODL institutions. Data obtained from the questionnaire were analysed using SPSS Version 22.0 to examine the respondents' profiles and perceptions of the market segmentation process, effective advertising messages and institutional sustainability. SMARTPLS was used to examine the target's endogenous

variable variance, inner model path coefficient size, outer model loadings, indicator reliability, internal consistency, convergent validity, discriminant validity and structural path significance in bootstrapping.

Table 1
Adapted and Modified Measured Items
(Cooper-Thomas et al., 2012; Lu et al., 2019; Matz et al., 2017; Pires & Stanton, 2011; Shareef et al., 2019)

Measured Items
Substantiality
SUB1: ODL advertisement must be targeted to the mass market
SUB2: ODL advertisement must be targeted to the market that can generate more revenue
Accessibility
ACS1: ODL advertisement must be reachable by the target market
ACS2: ODL advertisement must use a media that is high in its coverage
ACS3: ODL advertisement must be targeted to a market that can be effectively served
ACS4: ODL advertisement must be efficiently reached the target market
Persuasive
PER1: ODL advertisement must make a person believe about the institution
PER2: ODL advertisement must convince a person about an institution
Reminder
REM1: ODL advertisement must remind a person about the existence of the institution
REM2: ODL advertisement must highlight the achievement of an institution
REM3: ODL advertisement must portray testimonials of existing students
Sustainability
SUS1: ODL institution will remain relevant with the right marketing strategy
SUS2: ODL institution will have more student's enrolment in the future
SUS3: ODL institution will be the choice of many prospective students

ANALYSIS & FINDINGS

A thorough analysis was conducted to understand the prospective ODL learners' view on effective market segmentation, advertising messages and sustainability. The results are as follows:

Table 2
*Demographical Characteristics of The Respondents*

Demographic Characteristics	Frequency	Percentage
Generational Cohort (n=314)		
Below 25 years old (Gen Z)	74	23.57
26 – 40 years old (Gen Y)	104	33.12
41 – 55 years old (Gen X)	90	28.66
56 – 76 years old (Baby Boomers)	46	14.65
Educational Level (n=314)		
LCE/SRP/PMR	18	5.73
MCE/SPM	38	12.10
HSC/STPM	23	7.32
Certificate	21	6.69
Diploma	38	12.10
Bachelor's Degree	104	33.12
Masters	61	19.43
PhD	11	3.50
Occupation (n=314)		
Private Sector	129	41.08
Public Sector	122	35.85
Self-Employed	63	20.06

As is shown in Table 2, the number of respondents who work in the public sector is as high as those who work in the private sector. With the increasing number of civil servants in Malaysia, this has become a common statistics. Meanwhile, easy access to education has allowed more people to have an equal opportunity to obtain a higher level of education. This research discovered a positive trend wherein a total of 68.15 percent of the respondents had tertiary education. The remaining 31.85 percent still have the opportunity to pursue tertiary education through ODL based on their accreditation of prior experiential learning (APEL) admissions.

A majority of the respondents belong to Generation Y, aged between 26-40 years old (33.12 percent). For Open University Malaysia (OUM), it is notable that the high percentage of students from Generation X (41 – 55 years old) and Generation Z (Below 25 years old) offer a good opportunity for institutional sustainability.

Figure 1
SMARTPLS Reflective Model for Effective Market Segmentation, Preferred Advertising Messages and Sustainability of ODL Institution
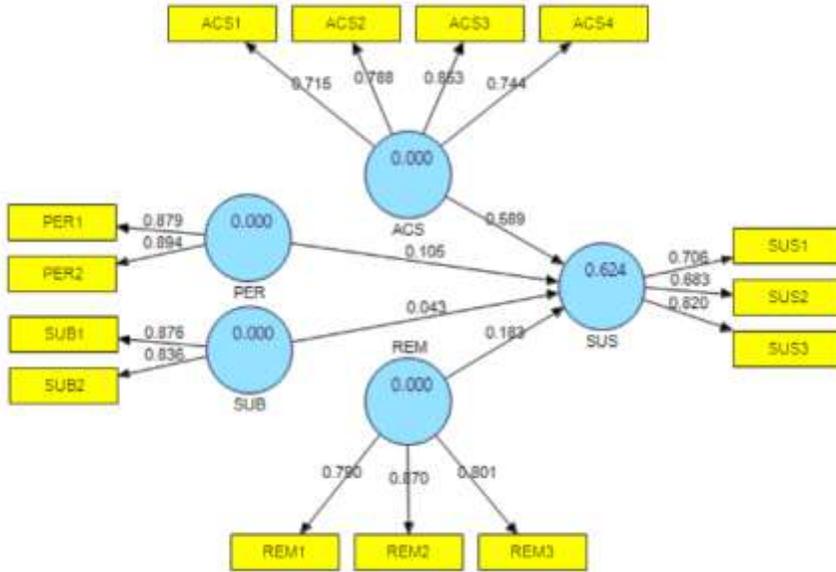
Note: ACS – Accessibility, PER – Persuasive, SUB – Substantiality, REM – Reminder, SUS – Sustainability

Figure 1 indicates that the coefficient of determination R^2 is 0.624 for the SUS endogenous latent variable. This means that the four latent variables (ACS, PER, SUB and REM) moderately explain the variance in SUS (62.4%). The inner model path coefficient suggests that SUB has the strongest effect on ACS (0.589), followed by REM (0.183) and PER (0.105). However, the hypothesised path relationship between SUB and SUS is below 0.1. The standardised path coefficients for ACS, PER and REM are above 0.1 and are statistically significant. However, the standardised path coefficient for SUB is not statistically significant (0.043 < 0.1). Hence, it can be concluded that ACS, PER and REM directly predict SUS.

Table 3 indicates that all composite reliabilities are greater than 0.70. This means that the measured items have internal reliability consistency. As for convergent reliability, all average variances extracted (AVE) are higher than 0.50 (Hair et al., 2014).

Table 3
Result Summary for The Reflective Outer Model

Latent Variable	Indicators	Outer Loadings	Indicator Loadings	Composite Reliability	AVE
ACS	ACS1	0.7155	0.5119	0.8583	0.6034
	ACS2	0.7880	0.6209		
	ACS3	0.8525	0.7268		
	ACS4	0.7442	0.5538		
PER	PER1	0.8785	0.7718	0.8798	0.7855
	PER2	0.8939	0.7991		
REM	REM1	0.7897	0.6236	0.8608	0.6738
	REM2	0.8698	0.7566		
	REM3	0.8007	0.6411		
SUB	SUB1	0.8763	0.7680	0.8462	0.7336
	SUB2	0.8361	0.7449		
SUS	SUS1	0.7065	0.4991	0.7819	0.5461
	SUS2	0.6828	0.4662		
	SUS3	0.8204	0.6731		

Table 4
Discriminant Validity

Indicators	AVE	Square Root
ACS	0.6034	0.7768
PER	0.7855	0.8863
REM	0.6738	0.8209
SUB	0.7336	0.8565
SUS	0.5461	0.7390

Table 5
Fornell-Larcker Criterion Analysis for Discriminant Validity

	ACS	PER	REM	SUB	SUS
ACS	**0.7768**				
PER	0.4642	**0.8863**			
REM	0.5698	0.5155	**0.8209**		
SUB	0.4273	0.4151	0.3215	**0.8565**	
SUS	0.7203	0.4906	0.5863	0.3967	**0.7390**

Tables 4 and 5 show that the square roots of AVE for each latent variable are greater than the correlations of the latent variables. This indicates that the measures of the construct are not highly related to each other (Hair et al., 2014).

Table 6 indicates that the ACS → SUS, PER → SUS and REM → SUS T-statistics are greater than 1.96. However, the SUB → SUS T-statistic is less than 1.96. Therefore, aside from SUB, all variables have shown evidence of significant relationships. This is consistent with the earlier assessment of the reflective PLS-SEM model.

Table 6
Checking The Significance Level of The Inner Model Using Bootstrapping

Path	T-Statistics
ACS → SUS	8.0745
PER → SUS	2.6695
REM → SUS	3.9853
SUB → SUS	1.1116

Table 7 summarises the hypotheses testing. It was found that H2, H3 and H4 are supported while there is insufficient evidence to support H1. This is perhaps due to the prospective learners' perception that, in order to be effective, the marketing communication must be able to reach their intended segment. Markets that are too substantial will create problems, such as the issue of the reachability of the segment. Therefore, integrated marketing communication must be properly planned to standardise the message across media channels. The ODL institutions must ensure that the market segments are effectively reached and served. In the meantime, effective advertising must be formulated to remind the targeted segment of the institute, followed by persuading them to pursue their studies at the ODL institution. The findings are consistent with previous studies conducted by Angulo et al. (2010), Constantinides and Stagno (2011) and Fleck et al. (2012). Hence, all research objectives in this study were successfully achieved.

Table 7
A Summary of The Hypotheses Testing

Hypothesis	Statement	Results
H1	There is a positive and significant relationship between the substantiality of the market and the sustainability of ODL institutions.	Not Supported
H2	There is a positive and significant relationship between the accessibility of the market and the sustainability of ODL institutions.	Supported
H3	Persuasive advertising has a positive and significant relationship with the sustainability of ODL institutions.	Supported
H4	Reminder advertising has a positive and significant relationship with the sustainability of ODL institutions.	Supported

CONCLUSION

The growing concern of marketing communication strategies has necessitated ODL institutions to consider effective market segmentation and the right type of advertising that is used to promote their universities, programmes and services to the right market. This is to ensure the sustainability of the educational institutions. The results of this study portray the unique perspectives prospective Malaysian learners have towards market segmentation strategies and advertising messages in the media. An empirical investigation has confirmed that the majority of prospective learners perceive that accessibility between the ODL institution and the market segment is very important. In the meantime, ODL advertisements must incorporate the elements of reminders and emotional connections to persuade prospective learners to pursue their tertiary education. This is in tandem with the research findings, which also discovered that the majority of Malaysians appreciate advertising messages and market segmentation strategies on products and services that are consistent with their current lifestyles and perceptions towards education. Thus, such beliefs and opinions will also contribute to the sustainability of an educational institution.

This study had several limitations. Since the study adopted the convenience sampling method, the outcomes are only applicable in the context of Malaysia. The timing of this study is also another factor that limits the generalisability of the findings. The COVID-19 pandemic had limited the chances of involving more respondents for the study.

For future ODL studies, it is recommended that the researchers examine the effect of identifiability and responsiveness on the sustainability of the ODL institution, due to those two factors that were found to be relevant in the context of conventional market segmentation (Lamb et al., 2011).

The implications of this study can be seen from both theoretical and practical aspects. Accessibility, persuasive and reminder add to the new body of knowledge in the context of economics and social dimensions in the sustainability theory (Faridi & Ouseph, 2014). On the other hand, from the practical aspect, the marketing departments of ODL institutions may adopt the three variables in their marketing strategy. This will ensure consistency in students' intake for the benefit of the ODL institutions in the future.

CONTRIBUTIONS OF AUTHORS

The authors would like to confirm an equal contribution in each part of this work. All authors have reviewed and approved the final version of this work.

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CONFLICT OF INTERESTS

All authors would like to declare that there are no conflicts of interest.

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