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THE IMPACT OF E-LEARNING COMMUNICATION STRATEGY AND LEARNER GOALS ACHIEVEMENT IN THE KENYAN UNIVERSITIES

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ABSTRACT

Universities have come up with various e-strategies to deal with great market forces emanating from the need to adapt to the new normal in the academic environment, dynamic technological advancement, increasingly diverse student bodies, their changing needs and expectations as well as heightened demand for new and different programs and services. Despite the many initiatives to support e-learning, most e-learning strategies are not fully realized for successful learner goals achievement due to inadequate technology strategy. The purpose of the paper was to establish the influence of e-learning communication strategy on learner goals achievement in Kenyan universities. The target population was 16 universities offering e-learning with a total of 29608 participants, comprising of 26761 e-learners and 2847 e-lecturers. The sample consisted of 351 e-lecturers and 394 e-learners because they both interact more with the e-learning system that uses currently implemented e-strategies. Stratified random sampling was used to identify sample size in each of the 16 universities. Primary data was collected using questionnaires with a Likert scale types of questions. Questionnaires were distributed through emails and received back through the same medium due to Covid-19 pandemic situation. Descriptive statistics was used. Binary logistic regression analysis was used to regress relationship between learner goals achievement with e-communication strategy and was accompanied by relevant explanations. Results revealed that e-learning communication strategy has a statistically significant relationship with learner goals achievement. An empirical model linking e-learning technology strategy and learner goals achievement was developed to help e-learning managers with insight on successful identification and implementation of e-learning technology strategy to achieve learner goals.

KEY WORDS: *E-Learning, E-Learning Communication Strategy, Learner Goals Achievement, Proposed E-Learning Communication Strategy Implementation Model*

BACKGROUND OF THE STUDY

The focus on the use of e-learning strategies has greatly increased as universities continue to operate in a very dynamic and competitive world. Higher education institutions must deal with greater market forces because of the increasingly diverse student bodies, their changing needs and expectations as well as heightened demand for new and different programs and services. Owing to this, universities have been hard pressed to come up with various strategies to keep up to the pace. Communication strategy in the study focused on strategic student-instructor communication and strategic marketing communication. For e-learning to be useful, tutors should use the online environment to offer feedback on online work, and to assist with students' queries or problems, career guidance, e-learning technology use guidance and course guidance hence ability to achieve their goals (Vries, 2005).

Marketing communication to the potential e-learners helps to create awareness of the courses available and how they would be of benefit to them hence the probability of increasing students' enrollment. The intangible nature of the higher education product has led to the need for universities to have targeted marketing and promotions for markets that are easily identified with actionable strategies to reach them. Direct mail, telemarketing, and on-campus visit programs have been the most often used marketing strategies by colleges in trying to attract new students (Herren, Cartmell, & Robertson, 2011).

Recently, university web site has become the centerpiece of all recruiting. Having an attractive web site that has been easy to navigate has been paramount for successful university recruiting. One study showed that 88% of college-bound prospective students eliminated a university from consideration if the institution's web site provided a negative browsing experience (Lindbeck & Fodrey, 2010). Institutions that invested in web technology to communicate with prospective students from the millennial generation experienced enrollment growth. Colleges that targeted key audiences with customized messages enjoyed recruiting success.

The millennial generation has not paid attention to information if it has not been customized specifically for each individual

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(Lindbeck & Fodrey, 2010). Prospective students rated individual college web sites as the primary source of information gathered about a university and pointed out that contact that these students made with a college was to submit an application for admission (Dupaul & Harris, 2012). Therefore, it is the role of universities to scan the environment to identify unique communication strategies that increase students' enrolment and learner goal achievement.

Vershitskaya, Mikhaylova, Gilmanshina, Dorozhkin, and Epaneshnikov, (2020) emphasizes that despite the potential of a learning management system to support e-learning, most e-learning strategies are not fully realized, they completely or partially fail. (Vershitskaya, 2020) cites communication marketing strategies as one of the most likely causes of failure.

PROBLEM STATEMENT

Vershitskaya, Mikhaylova, Gilmanshina, Dorozhkin, and Epaneshnikov (2020) emphasizes that despite the potential of a learning management system to support e-learning, most e-learning strategies are not fully realized, they completely or partially fail. E-Learning strategies if well implemented help in the achievement of learning outcomes such as enhancing students critical thinking, provide flexible learning, timely course completion, reduce costs, perceived learner satisfaction and increase efficiency of institutions. Without e-learning communication strategy, Kenyan universities may be faced with decreasing market share and unsuccessful learner goals achievement. Therefore, the paper focused on the impact of e-learning communication strategy on learner goals achievement.

An empirical model was proposed and developed linking e-learning communication strategy and learner goals achievement in the Kenyan universities that will help university e-learning managers to identify and develop a successful e-learning communication strategy implementation. Other levels of learning institution such as primary schools, secondary schools and tertiary colleges can tap into the findings and recommendations to successfully implement e-learning strategies in their institutions. The study also recommended areas of further future research which forms basis for researching more on the topic.

PAST STUDIES

Various scholars have previously done studies related to e-learning communication strategies and learner goals achievement. One study showed that 88% of college-bound prospective students eliminated a university from consideration if the institution's web site provided a negative browsing experience (Lindbeck & Fodrey, 2010). A study by Herren, Cartmell, & Robertson, (2011) indicated that direct mail, telemarketing, and on-campus visit programs have been the most often used marketing strategies by colleges in trying to attract new students. Vries, (2005) emphasized that for e-learning to be useful, tutors should use the online environment to offer feedback on online work, and to assist with students' queries or problems, career guidance, e-learning technology use guidance and course guidance hence ability to achieve their goals.

Grudzewski, Awdziej, Mazurek and Piotrowska, (2018) conducted a research to examine the possible impact of virtual reality on message perception and attitude towards particular offers. Furthermore, the authors wanted to find out whether there was a relationship between the use of virtual reality and the acceptance of new technologies in marketing communication. The results obtained reveal that VR technology positively and significantly impacts the reception of the offer, the technology involved and the presentation itself. Mtebe and Raphael(2018) did a similar study to identify key factors that have an influence on learners' satisfaction with the e-learning system at the University of Dar es Salaam, Tanzania. The study revealed that service quality is the strongest predictor of learners' satisfaction. Chang and Tung, (2008) acknowledges that information exchange among students and teachers about educational content and daily life learning activities are important for learning.

Hughes, (2007) points out that where students have been able to communicate with tutors online, they have found it useful. Higher education institutions must deal with greater market forces, because of the decline in public funding, together with other challenges such as rising expenses, increasingly diverse student bodies and their changing needs and expectations as well as heightened demand for new and different programs (Douglas, 2005). Furthermore, Eckel, (2005) asserts that in this quest most higher education institutions are seeking to apply new communication technologies in the delivery of education to reach new student markets and by doing so expand enrolment.

KNOWLEDGE GAP

In the quest to understand more about e-learning communication strategy in the universities, scholars have studied on various topics as evidenced in the reviewed articles. However, there is inadequate coverage of factors in various existing models for successful implementation of e-learning communication strategy in developing countries (Bourlova and Bullen, 2018). Therefore, there are still concerns regarding the way e-learning communication strategies have been identified and implemented as evident in universities, precisely in Kenya (Van der Klink &Jochems, 2004; Munguatosha et al., 2011). Furthermore, no scholar has done a study combining e-learning communication strategy and learner goals achievement in the Kenyan Universities. Therefore, the paper seeks to determine the influence of e-learning technology strategy on learner goals achievement in the Kenyan Universities.

THEORY CONCEPTUALIZATION

Dynamic capability theory and integrated marketing communications (IMC) theory**.**

Dynamic Capability Theory

Teece, Pisano and Shuen, (1997) developed the Dynamic Capabilities theory whose concept provides helpful additional

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insights in answering the question regarding the sources of a competitive advantage. The theory was developed from the concept of resource-based view (RBV), which emphasized that competitive advantage is determined by the possession of bundle of resources with valuable, rare, inimitable, and non-substitutable (VRIN) characteristics, but under dynamic and competitive environment, looking at the relationship of resources and performance alone to achieve sustainable competitive advantage proved to be insufficient. This is because when the environment is not stable, the resources are not strongly favoring the competitive advantage of the firms (Wu, 2006).

Resource base is referred to the firm's resources or assets that consists of technological assets, complementary assets, financial assets, reputational assets, structural assets, institutional assets, and market assets (Teece, Pisano, & Shuen, 1997) which are divided into tangible and intangible assets (Hitt, Ireland, & Hoskisson, 2005) and controlled by firms (Grobler, 2007; Helfat & Peteraf, 2003). There are various tangible and intangible assets such as specialized know-how, management capability, alliance experience and financial capital (tangible asset) as suggested by Wu, (2010). According to (Helfat, et al., 2007), processes are also treated as resources.

Integrated Marketing Communications (IMC) Theory

Integrated Marketing Communications (IMC) was an idea that was conceived in 1989 in the United States of America at the American Association of Advertising Agencies (AAAA) when Keith Reinhart was the chairman. It focused on advertising efforts across several different promotional methods. According to Kliatchko, (2005) IMC is a marketing communication planning concept that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communication disciplines for instance, general advertising, direct response, sales promotion, and Public Relations and combines them to provide clarity, consistency and maximum communication impact through the seamless integration of discrete messages. IMC attempts to combine, integrate, and synergize elements of the communications mix, as the strengths of one are used to offset the weaknesses of others. Therefore, communicators with an IMC approach consider all forms of communication, all message delivery channels, customers and prospects, and all brand contact points while they plan and implement marketing and marketing communication strategies.

METHODS

The research study adopted a positivist research philosophy as recommended by Creswell (2009). Positivist epistemology assumes that only facts derived from the scientific method can make legitimate knowledge claims. This study used descriptive survey research design. Kothari (2010) describe a descriptive survey design as a design that seeks to portray accurately the characteristics of a particular individual, situation or a group hence the best for the study. The target population was the 16 universities offering e-learning and licensed to operate in Kenya according to the CUE 2018 data in Kenya, with a total of 29608 participants, comprising of 26761 e-learners and 2847 e-lecturers. Respondents were e-lecturers and e-learners because they both interact more with the e-learning technology system hence best suited to give feedback on its success. Sample from the total participants (29608) consisting of 351 e-lecturers and 394 e-learners was determined by Slovin's formula. Stratified random sampling also known as proportional sampling was used to identify sample size in each of the 16 universities. In statistics, stratified sampling is a method of sampling from a population which can be partitioned into subpopulations. When subpopulations within an overall population vary, it is advantageous to sample each subpopulation (stratum) independently hence suitable for this study as each university out of the 16 universities vary from each other.

Primary data was collected using questionnaires that have both structured and unstructured questions. Questionnaire contained a likert scale types of questions where the respondents were required to indicate their level of agreement with statements towards a concept being measured. Due to COVID-19 pandemic, Questionnaires were delivered to the respondents through emails and received back through the same medium. Data reliability was measured using Cronbach's alpha coefficient which ranges between 0 and 1 (Kipkebut, 2010). The results indicated that e-learning communication had an Alpha coefficient of 0.750 thus acceptable. Binary logistic regression model was used. The model is specified as follows:

$$L_i = \ell n(\frac{P}{1-P}) = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 X_1 + \boldsymbol{\beta}_2 X_2 + \boldsymbol{\beta}_3 X_3 + \boldsymbol{\beta}_4 X_4 + \boldsymbol{\mu}$$

RESULTS AND DISCUSIONS

745 questionnaires were issued to the respondents out of which only 619 were returned accounting for 82.1% return rate. This return rate was adequate as supported by Wimmer and Dominick (2012) who emphasizes that a response rate of 21% – 70% is acceptable for self-administered questionnaires and guarantees accuracy and minimizes bias. Cronbach's Alpha was used to ensure the reliability of instruments and the constructs. The results indicated that e-learning communication had an Alpha coefficient of 0.750. According to Kothari (2010), a scale of 0.70 or above is acceptable thus confirming the study as reliable.

Frequency analysis of e-learning communication Strategy's Constructs

e-learning Communication strategy in the study focused on strategic student-instructor communication and strategic marketing communication. For e-learning to be useful, tutors should use the online environment to offer feedback on online work, and to assist with students' queries or problems, career guidance, e-learning technology use guidance and course guidance hence ability to achieve learner goals. Marketing communication to the potential e-learners helps to create awareness of the courses available and how they would be of benefit to them hence the probability of increasing students'

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enrollment. The intangible nature of the higher education product has led to the need for universities to have targeted marketing and promotions for markets that are easily identified with actionable strategies to reach them. Direct mail, telemarketing, websites and on-campus visit programs have been the most often used marketing strategies by colleges in trying to attract new students (Herren, Cartmell, & Robertson, 2011).

Table 1: Summary of frequency analysis of e-learning communication Strategy's Constructs

E-learning Communication Strategy	Disagree	Neutral	Agree	Total
The university has put in place a marketing strategy by investing in e-learning TV, social media and brochures Recoded	293(47.3%)	127(20.5%)	199(32.1%)	619(100%)
There is a software for interactive online communication between e-instructor and e-learner Recoded	224(36.2%)	148(23.9%)	247(39.9%)	619(100%)
university organizes educational events by preparing a series of lectures and seminars Recoded	270(43.6%)	148(23.9)	201(32.5%)	619(100%)
There is a university's website where all the events and e-courses are advertised Recoded	217(35.1%)	150(24.2%)	252(40.7%)	619(100%)
The university has created a strategic relationship with the public through materials for prospective students Recoded	274(44.3%)	139(22.5%)	206(33.3%)	619(100%)

Source: Research Data, (2021)

e-learning Communication strategy in the study focused on strategic student-instructor communication and strategic marketing communication. The results showed that 47.3% disagreed that the university has put in place a marketing strategy by investing in e-learning TV, social media and colourful brochures promotions, road shows, university open days. On the other hand 32.1% agreed that the university has put in place a marketing strategy by investing in e-learning TV, social media and colourful brochures promotions, road shows, university open days. Likewise, Results indicated that 36.2% of the respondents disagreed that there is a software for interactive online communication between e-instructor and e-learner on career advice, e-learning technology usage and feedback. Majority, 39.9% were in agreement that there is a software for interactive online communication between e-instructor and e-learner on career advice, e-learning technology usage and feedback.

On investigating another construct, results showed that 43.6% disagreed that the University organizes educational events by preparing a series of lectures and seminars intended for prospective students while 32.4% were in agreement that the University organizes educational events by preparing a series of lectures and seminars intended for prospective students. On finding out if universities are using websites for advertising their services, results were evident that 35.1% disagreed that there is a university's website where all the events and e-courses are advertised. Majority (40.7%) of the respondents agreed that there is a university's website where all the events and e-courses are advertised.

Similarly, investigation results on whether the universities have created a strategic relationship with the public majority (44.3%) did not agree with the statement that the University has created a strategic relationship with the public through materials for prospective students, conference attended by public and experts appearing on the media. 33.3% were in agreement that the University has created a strategic relationship with the public through materials for prospective students, conference attended by public and experts appearing on the media.

Hypothesis Testing

$H_0$1 There is no significant relationship between e-learning communication strategy and learner goals achievement in the Kenyan universities.

Relationship Between e-learning Technology Strategy and Learner Goals Achievement

To find out the relationship between e-learning communication strategy and learner goals achievement, chi-square test analysis was done. P-value less or equal to 0.05 indicates a significant relationship between categorical variables while P-value greater than 0.05 shows no significant relationship between categorical variables.

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Chi-Square Tests between e-learning communication strategy and learner goals achievement

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	105.047[a]	1	.000	.000	.000
Likelihood Ratio	94.672	1	.000	.000	.000
N of Valid Cases	619				

Source: Research data (2021)

Chi-square test analysis from the table ,points out that p-values are less than 0.05 thus evidence that e-learning communication strategy and learner goals achievement have a strong significant relationship ($p<0.05$). The two categorical variables are statistically significant. Therefore, the null hypothesis that stated "***There is no significant relationship between e-learning communication strategy and learner goals achievement in the Kenyan universities."*** Was rejected and the alternative hypothesis upheld. If quality e- learning communication strategy is available and practiced in the Kenyan Universities then learner goals are likely to be achieved.

Table 4.17 elearning communication strategy and learner goals achievement Crosstabulation

			learner goals achievement		
			Learner goals not well achieved	Learner goals well achieved	Total
elearning communication strategy	Inadequate eLearning communication strategy used	Count	411	38	449
		% within elearning communication strategy	91.5%	8.5%	100.0%
	There is adequate elearning communication strategy	Count	95	75	170
		% within elearning communication strategy	55.9%	44.1%	100.0%
Total		Count	506	113	619
		% within elearning communication strategy	81.7%	18.3%	100.0%

Source: Research data (2021)

Chi-square test analysis from table 4.16,points out that p-values are less than 0.05 thus evidence that e-learning communication strategy and learner goals achievement have a strong significant relationship ($p<0.05$). The two categorical variables are statistically significant. If quality e- learning communication strategy is available and practiced in the Kenyan Universities then learner goals are likely to be achieved.

Crosstabulations analysis results from the table shows that respondents who felt there is inadequate e-learning communication strategy use in the Kenyan Universities and learner goals were not well achieved were an overwhelming 91.5%.Those who felt there was inadequate e-learning communication strategy support and learner goals were well achieved were 8.5% thus in agreement with chi-square test analysis.

The chi-square analysis was reinforced by Lindbeck and Fodrey, (2010) noted that 88% of college-bound prospective students eliminated a university from consideration if the institution's web site provided a negative browsing experience. Institutions that invested in web technology to communicate with prospective students from the millennial generation experienced primary source of information gathered about a university and pointed out that contact that these students made with a college was to submit an application for admission (Dupaul & Harris, 2012). Consequently, it is evident that there is need for Kenyan universities to do a SWOT analysis to identify the best communication strategies such as a good communication web technology for the achievement of learner goals.

CONCLUSION

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The findings indicated that e-learning communication strategy is significantly associated with learner goals achievement. From crosstabulations analysis results show that respondents who felt there is inadequate e-learning communication strategy use in the Kenyan Universities and learner goals were not well achieved were an overwhelming 91.5%.Those who felt there was inadequate e-learning communication strategy support and learner goals were well achieved were 8.5% thus in agreement with chi-square test analysis. Therefore, e-learning managers should endeavor to do a SWORT analysis to identify and implement e-learning communication strategies that will help the students to achieve their goals.

Contribution

Guided by the study findings and theoretical review, a possible empirical strategy implementation model linking e-learning technology and learner goals achievement. The model context has borrowed greatly from marketing mix theory, IMC theory and dynamic capability theory.

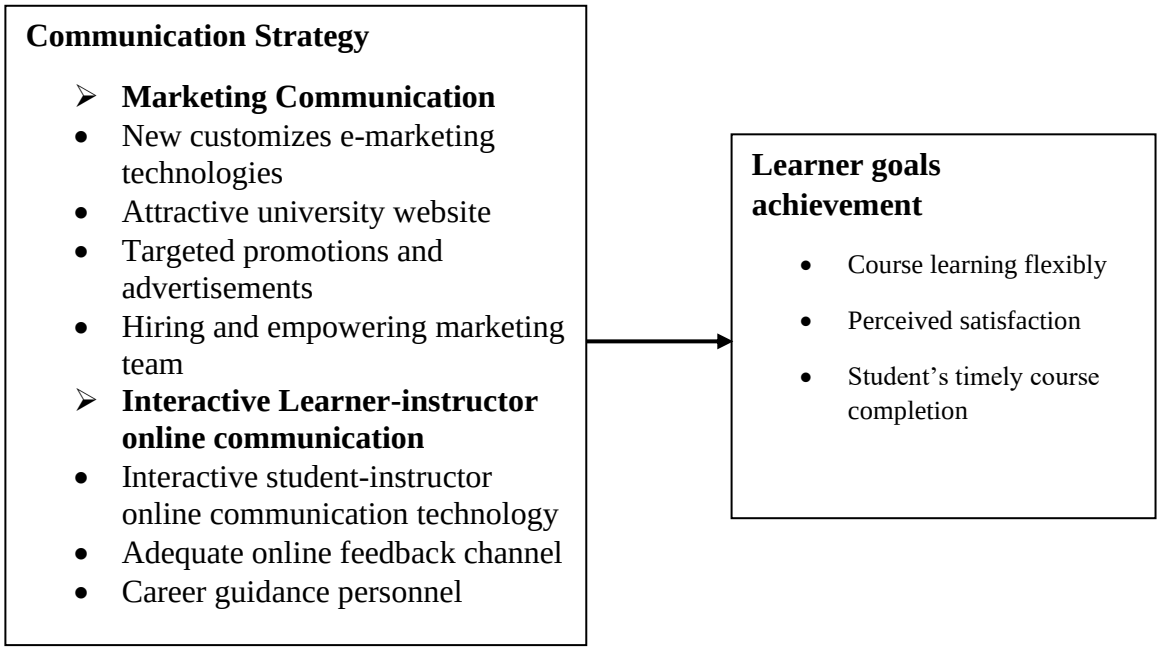


Figure 1: Proposed e-learning communication model

Communication strategy in the proposed e-communication strategy focused on strategic student-instructor communication and strategic marketing communication. Guided by the dynamic capability theory, universities ought to do SWOT analysis both internally and externally to identify their strengths and weaknesses in terms of their capabilities and resources in the area of e-communication. Crosstabulations analysis results show that respondents who felt there is inadequate e-learning communication strategy use in the Kenyan Universities and learner goals were not well achieved were an overwhelming 91.5%.Those who felt there was inadequate e-learning communication strategy support and learner goals were well achieved were 8.5%. Thus there is need for e-learning communication implementation in the Kenyan universities.

Marketing communication to the potential e-learners helps to create awareness of the courses available and how they would be of benefit to them hence the probability of increasing students' enrollment due to targeted promotions and advertisements, learner satisfaction as students are guided on choosing the right courses from a variety of those listed on institution's websites, flexible learning as instructors interactively offer assistance on how to use e-technologies in the course of their learning. A satisfied e-learner who studies effectively and efficiently at their own pace, time and in any location is likely to complete his course within the stipulated time. For e-learning to be useful, tutors should use the online environment to offer feedback on online work, and to assist with students' queries or problems, career guidance, e-learning technology use guidance and course guidance hence ability to achieve their goals

Therefore, marketing communication, universities need to identify and adopt new and customized communication technology, hiring and empowering a marketing team to work round the clock, investing in an attractive e-learning university website having a targeted marketing and promotions for markets that are easily identified with actionable strategies to reach potential e-learners. Herren, Cartmell, & Robertson, (2011) emphasized that direct mail, telemarketing, and on-campus visit programs have been the most often used marketing strategies by colleges in trying to attract new students in addition to an attractive university web site that has become the centerpiece of all recruiting.

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As pertains interactive student-instructor communication, identification and implementation of an interactive communication technology between students and instructors that should use the online environment to offer feedback on online work, and to assist with students' queries or problems, career guidance, e-learning technology use guidance and course guidance hence ability to achieve their goals is very vital. Chang and Tung, (2008) acknowledges that information exchange among students and teachers about educational content and daily life learning activities are important for learning. Hughes, (2007) points out that where students have been able to communicate with tutors online, they have found it useful.

Thus, universities ought to do SWORT analysis to identify and implement adequate e-learning communication strategies to achieve learner goals. e-learning managers involved in the implementation of e-communication strategy process in developing countries ought to identify , implement and prepare corrective measures and strategies based on these factors to avoid future system failures in order to achieve learner goals. The model will help university e-learning managers to identify, develop a successful e-learning technology strategy in their learning institutions. Other levels of education such as primary schools and tertiary colleges can adapt the model to assist them in the implementation of e-learning communication strategy in their institutions.

Areas of further research

The findings indicated that e-learning communication strategy is significantly associated with learner goals achievement. Further study in a different set up and educational level could be done to find out whether the results remain the same.

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