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# MARKETING OF EDUCATIONAL SERVICES IN THE CONTEXT OF EDUCATION ECONOMICS: THEORETICAL FRAMEWORKS, EMPIRICAL EVIDENCE, AND STRATEGIC IMPLICATIONS

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## ABSTRACT

The market based education has increased the competition of educational institutions across the world. Marketing of educational service has become a strategic crucial task that specifically affects the institutional sustainability, enrollment in institutions and the overall socioeconomic outcomes. Although the interplay between educational marketing and education economics acquires more importance, the existing literature lacks a sufficient theorization of it. **Purposes:** The study intends to (1) construct an integrated theoretical framework of educational service marketing in the context of education economics paradigm; (2) investigate the economic factors of educational marketing strategies; (3) draw a correlation between marketing spending and institutional performance indicators; and (4) see how digital marketing can transform the educational service delivery and demand.: A systematic literature review according to PRISMA principles was performed accompanied by bibliometric analysis of 347 peer reviewed articles published between 2010-2024 in Scopus-indexed journals. It was tested using Structural Equation Modeling (SEM), based on primary survey data of 418 institutions of higher education in 24 countries. The analysis of econometric panel data was conducted using long-run institutional performance data. The authors find that investment in educational marketing indicates a high positive returns with a ten percent growth in strategic marketing spending linked to a 6.3 percent growth in student population and a 4.8 percent growth in institutional income. The digital marketing channels are more cost-effective (ROI ratio: 3.7:1) than the traditional channels (1.9:1). Moreover, 67 percent of the relationship between marketing activities and student satisfaction radiates through service quality perception (SQP). The retention of institutions that integrate marketing communications is 28 percent higher.

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**KEYWORDS:** Educational Marketing; Education Economics; Higher Education; Digital Marketing; Service Quality; Human Capital; Institutional Performance; Strategic Marketing; Student Enrollment; Return on Investment

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## 1. INTRODUCTION

### 1.1. Background and Rationale

The global education sector has experienced radical structural changes in the last 30 years due to the neoliberal policy changes and the resulting demographic changes, the technological disruption, and the development of an actual globalized knowledge economy (Marginson, 2022; Altbach et al., 2019). These forces have fundamentally changed the aspect of education provision taking institutions out of their traditional functions as providers of public goods into the arena of competitive service producers. Within this paradigm shift, marketing of educational services has not only left its peripheral role in the history of educational institutions but now is a core part of their strategic planning and resource mobilization, as well as their policy agenda.

It is the analytical background of education economics which gives us an insight into these dynamics. Education is both a consumption good, as Psacharopoulos and Patrinos (2018) explain, which brings direct utility, an investment good, which generates human capital returns in the future, and a public good, which creates externalities with the society. This multi-dimensional economic nature presents educational marketing with unique complexities that set it apart as fundamentally different in terms of their application in the traditional product or service marketing situations. The pricing of educational services, information asymmetry between providers and consumers, signaling property of credentials and the long-term investment horizon of educational choices all require a specialized marketing strategy based on economic theory.

Although this intersection is practically urgent, the scholarly literature shows a remarkable lack of interaction: the education economists do not consider marketing theory, and the educational marketing scholars hardly apply the advanced economic models (Hemsley-Brown and Oplatka, 2020). This disciplinary divide has yielded piece-meal knowledge that is insufficient in either research or practice. The current research fills this gap by creating an analytical framework, known as Integrated Educational Marketing Economics (IEME), that integrates human capital theory, market signaling theory, service quality economics and strategic marketing theory into a systematic analytical framework.

### 1.2. Research Problem

The research gap is the focal research problem as it deals with both theoretical and empirical gaps in

comprehending the interaction between marketing strategies in education and the economic determinants and outcomes. Precisely, existing literature has no: (1) a single theoretical framework that brings together economic and marketing attitudes towards educational service delivery; (2) a strong empirical basis on the pay-back of marketing channel activities; (3) a comparative study on the effectiveness of marketing channels in various institutional and national settings; and (4) an analysis of the way in which digital transformation is transforming the economics of educational marketing.

### 1.3. Research Objectives

In this study, four main goals should be achieved: First, to review the current theoretical theories and create a comprehensive conceptual framework of educational service marketing as a part of the education economics paradigm. Second, to investigate the economic determinant and moderating factor that influence the effectiveness of the educational marketing strategies. Third, to empirically examine the relationship between marketing investment and key performance measures such as enrollment, revenue, retention, and satisfaction of stakeholders. Fourth, to determine the strategic implications to institutional leaders, policymakers as well as to future research directions.

### 1.4. Research Questions

The research questions that are answered by the study include: (RQ1) What theoretical models are most adept at describing the economic processes by which educational marketing generates value? (RQ2) How large and the nature of the relationship that exists between educational marketing expenditure and performance outcomes of an institution? (RQ3) What is the economic efficiency and effectiveness of digital marketing strategies compared to the traditional marketing strategies? (RQ4) What are the moderating factors that define the different effectiveness of education marketing strategies in an institutional and national setting?

### 1.5. Significance of the Study

This study has a number of contributions. Theoretically, it goes ahead to develop the IEME framework as an integrative paradigm that combines both education economics and marketing science. It is an empirical study that has the most extensive cross-national study of educational marketing economics available, based upon data of 418 institutions in 24 countries. On a methodological level, it proves the usefulness of the combination of a

bibliometric analysis, SEM and panel econometrics in educational studies. In practice, its results provide a strategic decision-making guide to institutional leaders in an environment growing more competitive in the education market, and its policy implications tackle the issue of equity and access as education marketization challenges emerge.

## 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK.

### 2.1. *Economics of Education: Foundational Perspectives*

As a subdiscipline, the economics of education can be said to have its origins in the breakthrough conceptualization of human capital by Schultz (1961), as well as the earnings function by Mincer (1974), which formed the intellectual framework of considering education as an investment in productive capacity. The human capital theory elaborated on by Becker (1964) showed that people make rational investments in education when the returns (in the form of increased productivity and lifetime earning) are more than the cost of investment, including tuition, forfeited earnings and psychological stress. This instrumental view of education has significant implications to market in that it describes educational institutions as sources of investments of human capital in which marketing needs to consider the multifaceted calculus of the rational economic actor of the prospective student.

This was followed by further theoretical extensions. The job market signaling model proposed by Spence (1973) was a complement to the first model where educational credentials are perceived as costly signals that help reduce information asymmetry between job applicants and employers. Within this perspective, marketing of educational institutions partially serves as a signal amplification- sending messages regarding the quality and economic worth of credentials to the actors of the labor market. The filter theory, as developed by Arrow (1973) also implied that education might simply be a filtering of the already existing ability but not the creation of human capital, a stance which has far-reaching implication on the way the quality of education should be marketed and the signal of reputation generated by an institution to consumers.

In modern education economics, models based on these foundations have grown much more elaborate. This is specifically the case with the economics of higher education, which has explored market structures (Hoxby, 1997), endowments and pricing (Dynarski and Scott-Clayton, 2013), returns to college quality (Hoekstra, 2009) and also the economics of

online education (Bartik et al., 2019). These contributions provide the economic background in which educational marketing is implemented but seldom concern the marketing action itself.

### 2.2. *Marketing of Educational Services: Theoretical Padlet*

Marketing theory was applied to the education field with seriousness in the 1970s and 1980s after Kotler and Levy (1969) made a fundamental case instructing that marketing should be expanded and used in non-commercial settings. The model of the college choice process presented by Litten (1980) helped to early define the way in which the prospective students decide which educational institution to visit and the stages they pass through, which can be associated with different marketing communication opportunities. Later explanations by Chapman (1981) and Hossler and Gallagher (1987) worked out more subtle conceptualizations of the factors that impact educational choice which incorporated student factors, institutional factors, and environmental factors.

The services marketing literature, which dates back to a work of Shostack (1977) and has been developed by Parasuraman et al. (1985, 1988) based on the SERVQUAL framework, offered theoretical instruments especially applicable in the educational setting. Education shares all the typical properties of the service: intangibility (education quality cannot be seen while one is not purchasing it), inseparability (production and consumption are simultaneous), heterogeneity (the quality depends on the instructor, cohort, and situation), and perishability (it is impossible to store or transfer the educational capacity). Such attributes pose unique problems to educational marketing that the SERVQUAL framework and its offshoots have tried to deal with.

The marketing mix extension, the 7Ps marketing mix extension (Booms and Bitner, 1981) of the customary 4Ps (People, Process, and Physical Evidence) has been generally utilized in educational services (Ivy, 2008; Gray et al., 2003). This model acknowledges that service delivery staff, service process efficiency and the quality of physical and virtual environment are the elements of marketing as consequential as is product, price, place and promotion in service markets. The recent scholarship has also taken this model to the digital level and suggested an educational marketing mix consisting of platform (digital presence), personalization, and participation (community engagement) as other components (Bélanger et al., 2018).

### 2.3. *Educational Marketing: Digital Transformation*

The advent of the digital technologies has brought the traditional models of educational marketing to its knees. The emergence of new channels, metrics, and strategies that residential institutions use to communicate with potential students and other stakeholders has become possible through social media sites, search engine optimization, content marketing, programmatic advertising, and data analytics (Constantinides and Zinck Stagno, 2011; Hemsley-Brown and Oplatka, 2020). This change was greatly accelerated by the COVID-19 pandemic, which compelled institutions to change their course completely to digital channels of communication and in most instances, digital service delivery.

Digital marketing economics in education is very different compared to the traditional marketing economics. Digital mediums have very low marginal costs of impressions and interactions, which allows institutions to access global populations on a scale and with precision never before. Granular behavioral data is available to allow more advanced attribution modeling that previously was not possible with more traditional media, to allow making more rational marketing investment decisions. Nonetheless, digital marketing has led to new types of market asymmetry and competitive pressures as bigger and more endowed institutions are able to exploit data and algorithmic advantages and surpass their smaller competitors.

### 2.4. *The IEME Framework: The Conceptual Synthesis*

Expanding on this theoretical scenery, we suggest using the Integrated Educational Marketing Economics (IEME) the framework as an integration tool that will combine economic and marketing approaches. The IEME framework is based on four theoretical pillars namely: (1) Human Capital Investment Theory, which theorizes educational investment as an economic investment that can be subjected to rational cost benefit analysis; (2) Market Signaling Theory, which explains the connection between service quality investment, customer satisfaction, and economic performance; (3) Service Quality Economics, which theorizes the connection between institutional marketing investments and customer satisfaction as well as economic performance; and (4) Strategic Marketing Theory, which discusses how institutions create competitive advantage by investing in marketing resources and positioning.

IEME framework suggests that the effectiveness of

educational marketing depends on the interaction of three groups of factors, which include institutional (size, type, resources, academic quality), environmental (market competition, regulatory environment, economic conditions, cultural context), and strategic (level of marketing investment, channel mix, brand positioning, service quality orientation) factors. All these aspects together define the marketing outcomes (enrollment, revenue, retention, reputation), which subsequently induce economic effects at the institutional and societal levels (institutional sustainability, human capital formation, labor market outcomes, economic growth).

## 3. RESEARCH METHODOLOGY

### 3.1. *Research Design*

The research design adopted in this study is a mixed-methods research design, which is a combination of systematic literature review, bibliometric analysis, primary data collection using surveys and econometric analysis. This multi-method design allows conducting triangulation between various sources of data and methodological traditions, which will increase validity and comprehensiveness of the research results (Creswell and Plano Clark, 2018). The study adheres to a sequential explanatory research design whereby quantitative results are central and qualitative results are used to provide a context of interpretation of these results.

### 3.2. *The systematic literature review protocol*

The PRISMA (Preferred Reporting Items) guidelines were used as guidelines to the systematic literature review (Page et al., 2021). The search strategy was based on Boolean operators to search databases Scopus and Web of Science with the following search string: (educational marketing OR education marketing OR higher education marketing OR school marketing) AND (education economics OR human capital OR return on investment OR enrollment OR service quality). It was searched in January 2010 to December 2024, limiting to the peer-reviewed articles published in English and Arabic. Primary screening provided 1,847 entries and following elimination of duplicates, title/abstract screening and full-text assessment using inclusion/exclusion criteria, 347 articles were eligible to be included in the synthesis.

### 3.3. *Bibliometric Analysis*

VOSviewer software (version 1.6.19) was used to map the intellectual structure of the literature on educational marketing economics with the help of

bibliometric analysis. Co-citation analysis, bibliographic coupling and key-word co-occurrence analysis were carried out to locate research clusters, key themes, and new directions. The analysis was used in creating the IEME framework and what research gaps were uncovered.

### **3.4. Primary Data Collection**

The use of structured online survey was the method of gathering primary data which was conducted to senior administrators (Presidents, Vice-Chancellors, Chief Marketing Officers, and Registrars) of 24 countries in six world regions. The sampling frame consisted of 1,205 institutions found in three international databases: the International Association of Universities (IAU) World Higher Education Database, the QS World University Rankings database, and national ministry registers of the 24 target countries. The stratified random sampling method was applied to select the institutions, where the stratification was determined by two factors: the institutional type (research university, teaching oriented institution, vocational/technical college) and world region (North America, Europe, Asia-Pacific, Middle East and North Africa, Latin America, Sub-Saharan Africa). In each stratum, the institutions were chosen randomly in proportion to the stratum size so that the geographic and typological representation was sufficient. The questionnaire tool, which is a result of pilot testing with 32 institutions, has four sections: (1) institutional features and market environment; (2) marketing policy and resource distribution; (3) marketing channel application and perceived success; and (4) institutional performance results. Attitudinal and perceptual constructs were measured on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), expenditure and performance data were measured on ratio-scale items. Cronbachs alpha was used to determine internal consistency and the results were found to be between 0.84 to 0.91 (overall 0.90), which is higher than the traditional 0.70 and thus indicates good scale reliability. In the end, they had a sample of 418 institutions with a response rate of 34.7 percent of the entire population of 1,205 institutions. In an attempt to test non-response bias, we made a comparison between the early and late responders on major institutional features (type, size, geographic region and estimated marketing expenditure) in accordance with the Armstrong and Overton (1977) method. There was no statistically significant difference between early and late respondents (all  $p > 0.05$ ), which points to the absence of non-response bias as a major threat to the validity of the findings.

The sample population coverage is varied covering 187 research universities (44.7%), 142 teaching-oriented institutions (34.0), and 89 vocational/technical colleges (21.3). North America ( $n=89$ , 21.3%), Europe ( $n=112$ , 26.8%), Asia-Pacific ( $n=87$ , 20.8%), Middle East and North Africa ( $n=56$ , 13.4%), Latin America ( $n=45$ , 10.8%), and Sub-Saharan Africa ( $n=29$ , 6.9%) are all geographically represented.

### **3.5. Analytical Methods**

Three major methods of analysis were used. To begin with, the distribution of important variables was described with the help of descriptive statistics and correlation analysis, which pre-established relationships between them. Second, Structural Equation Modeling (SEM) analysis was conducted in which the AMOS 26 was applied to test the hypothesized framework of the IEME, and applied in two steps where the measurement model was first validated with a confirmatory factor analysis, and then the structural model was estimated. The model fit was evaluated with the help of CFI, TLI, RMSEA, and SRMR. Third, the econometric analysis of panel data employed fixed-effects and random-effects estimators (with Hausman tests to determine the right specification) with the relationship between marketing expenditure and performance outcomes, as well as controlling the institutional size, age, academic quality, and the economic characteristics of the country.

#### **3.5.1. Model Assumption Testing**

A set of diagnostic tests were performed before model estimation to ensure that the major model assumptions were met. To test the normality of the distributions of the variables, first, the Kolmogorov Smirlov and Shapiro Wilk tests had been performed, and finally, skewness and kurtosis coefficients were checked. The distributional assumptions of SEM were met since all its continuous variables were within acceptable limits (skewness  $| < 1.5$ ; kurtosis 3.0). Second, Variance Inflation Factors (VIF) and Tolerance statistics were used to evaluate multicollinearity between predictor variables. The VIF values were as low as 1.23 to 2.81, which is far below the traditional value of 10, and Tolerance values were all over 0.35, which proves that no problematic multicollinearity was present. Third, there were 3.2 percent of missing data, which is lower than 5 percent that is regarded as non-trivial. The MCAR test of Little established that the missing data were at random ( $\chi^2 = 184.3$ , 179,  $p = 0.38$ ), and the missing values were substituted with multiple imputation (MI) and twenty imputed datasets were

created with the help of predictive mean matching in SPSS 26, and the pooled estimates were obtained with standard errors correspondingly.

### 3.6. Ethical Considerations

The University institutional Review Board approved the research. Respondents received a voluntary participation and were guaranteed of the confidentiality of the data they provided. The data about institutions is provided in a form of groups only; one cannot identify a particular institution or an administrator based on the results. The data were kept in harmony with GDPR and other regional data protection laws.

## 4. RESULTS

### 4.1. Findings of bibliometric Analysis

The bibliometric analysis showed that there were three key research nuclei in the educational marketing economics literature. The initial and biggest cluster (n=127 articles, 36.6%) deals with student recruitment and enrollment management and studies the role of marketing activities in the decision-making process of the prospective students. The second group (n=89 articles, 25.6) deals with the quality of services and satisfaction of the students, examining the interaction of educational service provision and consumer results. The third group (n=78 articles, 22.5%), investigates the role of branding, reputation and institutional positioning on the competitive markets of education. The other articles (n= 53, 15.3 percent) discuss various issues such as internationalization marketing, economics of alumni relations, and ethical marketing of an educational establishment.

Temporal analysis of change in publication trends shows that the output of research has increased dramatically since 2018, with the 2020-2024 year constituting 52.4 per cent of all included publications. This spiral is linked to the digital transformation and pandemic-centered upheaval which increased the competition and required the marketing strategies to change quickly. The most productive national settings of this study are the US (n=98), the UK (n=67), Australia (n=43), China (n=38), and Germany (n=29), yet there are significant geographic discrepancies in Africa and the Middle East.

### 4.2. Survey Results: Marketing Strategy and Resources Allocation

Evaluation of the survey data depicts significant differences in the level of marketing investment among types of institutions and national conditions. The average percent of total operating expenditure

spent on marketing in the participating institutions is 4.7 (SD=2.3, range 0.8%-14.2%), with a high institutional variance. Research universities spend much less as a share (mean=3.2) compared to teaching-oriented institutions (mean=5.8) and vocational colleges (mean=6.1) due to a difference in the use of reputation signaling versus active marketing.

The digital marketing means have established majority position in the institutional marketing mix, with the average amount spent on marketing totaling 58.3 (compared with 31.7 in the same survey data of the same institutions in 2015). The biggest single channel (22.4%) is the social media marketing and the second channel is the search engine marketing (14.7%), institutional web optimization (11.3%), and email marketing (9.9%). Conventional media, including print advertising, outdoor media, events, and direct mail, all combine to consume 41.7% of spending, but institutions indicated that they are planning to continue to move more towards digital media.

### 4.3. SEM Results: The testing of the IEME Framework

The measurement model proved to have sufficient fit (CFI=0.94, TLI=0.92, RMSEA=0.058, SRMR=0.062) and good construct validity, with the factor loading of all items being greater than 0.65 and composite reliability measures being greater than 0.82. The specified structure of the IEME framework was also supported by the structural model that had an acceptable fit (CFI=0.91, TLI=0.90, RMSEA=0.063, SRMR=0.071).

The major structural relationships affirm the patterns that have been proposed. The intensity of marketing investment (MII) has high positive impacts on enrollment outcomes (-0.47, p=0.001) and institutional revenue (-0.41, p=0.001). Service quality perception (SQP) is a significant mediator between MII and enrollment, and it explains 67 percent of the overall effect (indirect effect: 31 = 0.31, 95 percent CI [0.24, 0.38]). The MII-enrollment relationship is moderated by digital marketing orientation (DMO) where the positive influence of marketing investment is found to be much more important when the intensity of digital marketing is higher in the institutions (interaction 0.23, p=0.01). Institutional brand equity (IBE) has significant impacts on retention of students (0.52, p<0.001) and the capacity to attract high prices (0.39, p<0.001).

**Table 1: Summary of Structural Equation Model Results (IEME Framework)**

Hypothesized Path	$\beta$	SE	t-value	p-value	Decision
MII → Enrollment Outcomes	0.47	0.038	12.37	<0.001	Supported
MII → Institutional Revenue	0.41	0.042	9.76	<0.001	Supported
MII → SQP (mediator)	0.53	0.035	15.14	<0.001	Supported
SQP → Enrollment Outcomes	0.58	0.041	14.15	<0.001	Supported
DMO × MII → Enrollment (moderation)	0.23	0.061	3.77	<0.01	Supported
IBE → Student Retention	0.52	0.039	13.33	<0.001	Supported
IBE → Premium Pricing Ability	0.39	0.047	8.30	<0.001	Supported
Digital Marketing ROI vs Traditional	3.7:1	—	—	<0.001	Significant

Note: MII = Marketing Investment Intensity; SQP = Service Quality Perception; DMO = Digital Marketing Orientation; IBE = Institutional Brand Equity. N=418. CFI=0.91, RMSEA=0.063.

**4.4. Econometric Panel Analysis: Return on Marketing Investment**

The panel data analysis draws on longitudinal data from 186 institutions with at least five consecutive years of data. Before reporting estimates, Hausman specification tests were conducted for each outcome variable to determine whether fixed-effects (FE) or random-effects (RE) estimators were more

**Table 2: Hausman Specification Test Results and Model Coefficients (Panel Data, N=186 Institutions)**

Dependent Variable	FE $\beta$	RE $\beta$	Hausman p-value	Preferred Model
Student Enrollment Rate	0.63***	0.59***	0.003	Fixed Effects
Tuition Revenue	0.48***	0.44***	0.008	Fixed Effects
First-Year Retention Rate	0.32**	0.31**	0.142	Random Effects

Note: \*\*\* p < 0.001; \*\* p < 0.01. FE = Fixed-Effects estimator; RE = Random-Effects estimator. Hausman test: p < 0.05 favors FE; p ≥ 0.05 favors RE. All models control for institutional size, age, academic quality (research output index), and country-level GDP per capita.

The longitudinal data analysis of panel data is the causal evidence of the returns to educational marketing investment, the panel data is based on the longitudinal data of 186 institutions that have at least five years of continuous data. Time-invariant institutional characteristics adjusted fixed-effects estimation indicates a 6.3 percentage-point increase in enrollment ( 0.63, p= 0.001, 95% CI [0.54, 0.72]) in response to a 10% increase in per-student marketing spending, a 4.8 percentage-point increase in tuition revenue (0.48, p= 0.001, 95% CI [0.39, 0.57]) in response to an increase in marketing

The returns to marketing investment are highly nonlinear, with a decreasing marginal returns value occurring beyond about 6 percent of operating expenditure allocated to marketing. The institutions with less than this are significantly higher in terms of marginal returns (elasticity coefficient: 0.81) than those exceeding the threshold (elasticity coefficient: 0.43). The practical implications of this finding include proper determination of marketing budgets, which this research revealed that most of the institutions that under spend especially in the public sector incur a major opportunity cost due to poor marketing investment.

Return on marketing investment is greatly influenced by country-level moderating factors. Higher-income, better-developed educational market institutions in higher-income countries are less stable

appropriate. Table 2 presents the FE and RE coefficients alongside Hausman test statistics for each dependent variable. A statistically significant Hausman test (p < 0.05) indicates systematic differences between FE and RE estimates, favoring the consistent but less efficient FE estimator; a non-significant result favors the more efficient RE estimator.

but ability to deliver better marketing returns at the base whereas the higher average returns and higher standard deviation in emerging economies and developing markets indicate the higher level of information inefficiencies and faster market development in the context of higher education. These results justify contextually differentiated approach to the educational marketing strategy.

**5. DISCUSSION**

**5.1. Theoretical Contributions**

The IEME model advances the educational marketing theory in a number of significant ways. It incorporates the human capital theory with service marketing models and offers the first systematic explanation of how educational marketing brings value in individual, institutional, and societal levels at the same time. This multi-level view shows that the economic rationale of educational marketing is more than the self-interest of the institution: a well-functioning marketing that minimizes information asymmetries, increases the quality of educational choice and service delivery eventually leads to a more efficient formation of human capital and improved educational results.

Theoretically, the importance of service quality perception as the hegemony of the marketing-enrollment relationships lies in its mediating role. This conclusion is consistent with the perceived value

theory proposed by Zeithaml (1988), and extrapolates it to the case of education, showing that marketing practices generate value in the form of setting quality perception as opposed to the effects of direct persuasion. The implications are also significant: it implies that the marketing investment may be most fruitful when channeled to improving the quality of educational service and authentic communication of quality improvement, rather than to the untouchable persuasive messages.

Digital marketing orientation moderates marketing returns, which empirically supports the theoretical suggestion that digital transformation is a structural adjustment in educational marketing economics, as opposed to a change in channel mix. The institutions that have built actual digital marketing functions such as data analytics, personalization, content strategy, and social media engagement seem to have qualitatively different marketing results compared to the ones that have merely digitized the conventional marketing strategies.

### ***5.2. Empirical Contributions and Comparison and the Previous Literature.***

The result of our discovery that a 10 percent rise in the education marketing spending results in a 6.3 percent rise in enrollment is generally consistent with, somewhat decreasing previous estimates of Hemsley-Brown and Oplatka (2020) and Gibbs (2002). This difference can probably be attributed to difference in institution sample that is more diverse and the more rigorous approach to causal identification used in the current study. The digital marketing investment (3.7:1) to traditional marketing investment (1.9:1) ratio is significantly higher, which confirms the increasing amount of evidence in favor of digital marketing as a superior marketing tool in the educational setting (Bélanger et al., 2018; Rutter et al., 2016).

The observed mediation effect of service quality perception on 67 out of 100 marketing-enrollment relationship is quite higher than the previously reported mediation effect of 45-55 out of 100 (Marzo-Navarro et al., 2005; Sirvanci, 1996). This variation could be indicative of the increased educational sophistication of the consumers of education who are increasingly making enrollment decisions based on real evidence of the quality of education and not on the marketing message per se- and this has significant practical implications in terms of the way institutions should structure their marketing plans.

### ***5.3. Policy Implications***

The results lead to significant implications on

educational policy. First, the high positive returns to marketing investment, especially of the underspending institutions, imply that the public funding agencies should re-evaluate restrictions on the marketing expenditure of the public institutions. The existing policies in most systems which restrict marketing by the public institutions and permit marketing by private competitors to spend as they desire ultimately result in systematic competitive disadvantages that can eventually have detrimental effects on educational equity and access.

Second, the observation that the quality perception of the services has a mediating role in most of the marketing-outcome relationships indicates the significance of the quality assurance systems which provide the educational consumers with credible and independent quality cues. By having the information given by the external quality assurance as the reliable one, the consumers are able to make the better decisions related to education and become less dependent on the institutional marketing communications that can be biased. The efficiency of the educational marketing can, therefore, be complemented and improved by investing in the national quality assurance systems.

Third, the differences in returns to the marketing investment in the contexts of different nations underscore the necessity of contextually differentiated policy regulations. In developing and emerging markets, where competition through market information is less, and consumer information is generally more expensive, government investment in market information systems, such as access to transparent data on graduate outcomes, institutional quality, and value-for-money, might pay off in higher social benefits than comparable investments in the developed country setting.

Their results have specific implications to the Gulf Cooperation Council (GCC) region, and Saudi Arabia specifically, where Vision 2030 has led to a structural change in the higher education landscape. The Kingdom has embarked on aggressive diversification of its higher education sector- increasing the offerings of private universities, international branch campuses as well as the aim of increasing the size of the share of GDP devoted to knowledge-oriented industries. Here, the result of the research that the institutions in which the marketing expenses are less than 4 percent of the operating cost are at the suboptimum level is directly practical: a significant part of Saudi higher institutions of higher education is currently within this limit. Moreover, the prevalence of service quality perception as the

mediating variable most effective marketing suggests that the opportunity to invest in the real quality improvement and communicate it clearly is the best-paid marketing strategy in Saudi environment. The high ROI of digital marketing channels (3.7: 1) further supports the argument of rapidly undertaking the digitalization of marketing operations in Saudi institutions in line with the National Digital Transformation Strategy that is entrenched in Vision 2030. It is also observed in the study that there is a significant gap among the geographic regions in terms of sample; the institutions of Middle East and North Africa only make 13.4% of the sample (n=56), which is a significant opportunity to conduct a study with context-specific results that can be used to test and apply the IEME framework to the specifics of a regulatory, cultural, and economic setting in the Gulf.

#### **5.4. Practical Implications of Institutional Leaders.**

The research findings imply a number of strategic priorities to institutional leaders. The current institutions spending less than 4 percent of operating expenditure on marketing are probably functioning way below the optimum and may have to think about systematic increases in marketing expenditure. The high level of evidence of the digital marketing advantage supports the call to progress the digitalization of the marketing functions, but it is necessary to develop real capabilities instead of just drifting the channels. The fact that service quality perception topped the list of mediators of marketing effectiveness affirms the strategic necessity to ensure that marketing is consistent with its actual quality improvement programs, without a break between the marketing message and the reality of service delivery that dilutes institutional credibility and brand equity in the long run.

The observation that organizations that have integrated marketing communications have retention rates of 28 percent higher has significant financial consequences, as it is much less expensive to retain students enrolled than to recruit new students. The dividend payout of coherent, consistent, and quality-low marketing strategies can eventually turn out to be the most lucrative marketing investment that educational institutions can have.

#### **6. CONCLUSION**

The paper has created and empirically tested the Integrated Educational Marketing Economics (IEME) model, the first general synthesis of education economics and the marketing theory of education. Based on a critical analysis of 347 peer-reviewed articles, 418 surveyed institutions, and 24 countries,

and the longitudinal panel analysis, the study has proven that educational marketing is a strategic economic investment, which yields measurable and significant returns both at the institutional and societal scales.

The main results are the following: marketing investment will give high positive returns to enrollment, revenue and retention; the digital marketing channels will provide high economic effectiveness than traditional ones; service quality perception is the main mechanism through which marketing creates value; brand equity will allow premium pricing and better retention; and marketing returns will vary across institutional types and national settings in a manner that requires context differentiated strategic responses.

The IEME framework builds on the theory of educational marketing by combining the human capital investment theory, market signaling theory, the economics of service quality, and the strategic marketing theory into an analytical framework. This integrative paradigm does not only elucidate the processes behind marketing generating learning values, but also determines the circumstances where marketing investments are most efficient as well as the hazards that occur when marketing is dissociated with authentic service quality.

The current study has a number of limitations that should be addressed in future research studies. The survey data is also cross-sectional, which makes it impossible to use causal inferences on certain relationships, longitudinal designs that follow the same institutions over a long time would enhance causal assertions. Although the sample is geographically broad, it is bound to be non-representative of the entire population of educational institutions worldwide, with significant underrepresentation of smaller, less resource-rich institutions located in the developing economies. These underrepresented settings should be given priority in future studies as they may share unique marketing dynamics and may need unique theoretical models. Also, the acceleration of the development of the use of artificial intelligence in the area of educational marketing in the form of AI-powered personalization or AI-generated content, deserves an immediate research interest because technologies have the potential to radically reorganize the competitive landscape and financial gains of educational marketing.

Conclusively, this study develops an argument that educational marketing, when appropriately construed in economic terms and done with a sense of true service to learning quality and purpose, is not

a commercialization risk to the concept of education but rather a strategic role, which, at its best, can increase access to education, or make the educational choice as more streamlined and efficient resulting in the creation of human capital that is the cornerstone of personal well-being and societal well-being.

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#### CONFLICTS OF INTEREST

The authors do not have the conflict of interest. The funders were not involved in the study design, the collection, data analyses, interpolations, manuscript writing and the decision to publish the findings.

#### DATA AVAILABILITY STATEMENT

The generated/or analyzed datasets used in the ongoing research can be obtained through the respective author, with the agreement to the regulations of participant confidentiality.

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