MESR
منار الشرق للدراسات والأبحاث
Manar Elsharq for Studies & Research

Manar Elsharq Journal
For Management and Commerce Studies
ISSN: 2959-0655 (Print)
http://meijournals.com/ara/index.php/mejcms/index

Measuring University Brand Strategy Alignment in the Social Media Era: Developing and Validating a Social Media–Brand Strategy Fit Scale

Ahmed Al-Adaini [1]*, Ilham Rustamov [2]
ORCID (Al-Adaini): 0009-0000-7721-2085
[1] PhD Candidate in Business Administration, Department of Management, Azerbaijan State Oil and Industry University (ASOIU)
[2] Professor, Doctor of Economics, Department of Management, Azerbaijan State Oil and Industry University (ASOIU)
*** Corresponding Author: activities.edu@gmail.com**

ARTICLE INFO

Received: 03 Jan
Accepted: 16 Feb
Volume: 4
Issue: 1

Abstract

Objective: To develop and validate a Social Media Practices (SMP) scale for measuring Social Media–Brand Strategy Fit in higher education institutions (HEIs), which provides a psychometrically validated instrument needed to assess strategic alignment between the brand goals of the institution and its digital execution.
Approach/Methodology/Design: A mixed-methods scale development procedure that integrated deductive item generation, expert review and pilot testing. Quantitative validation used a survey of 300 key informants from 10 public universities in Azerbaijan. Subsequently, data were analyzed with Partial Least Squares Structural Equation Modelling (PLS-SEM).
Findings: SMP is validated as a formative second order construct, with five reflective dimensions. The sequential mediation pathway (SMP → Engagement Quality → Brand Credibility → Brand Trust→CBBE) was significant. The relationship between SMP and engagement was moderated by ICT infrastructure, the Trust–CBBE link was moderated by geographic location.
Conclusions: The validated SMP scale serves as a diagnostic tool for university brand audits and underscores the salient role of infrastructure in emerging-market branding. The implications for the Azerbaijan 2030 strategy are considered.

Keywords: Social media–brand strategy fit; social media practices (SMP); customer–based brand equity (CBBE); scale development; higher education marketing; PLS–SEM.

Introduction

And so, the global higher education sector has been massively digitalized, reshaping mechanisms of institutional branding. University brand is now constantly negotiated and evaluated in the real-time environment of social media (Dwivedi et al., 2021). To higher education institutions (HEIs), social media platforms have evolved from supplementary communication channels to be central interfaces of the institution in which stakeholders—prospective students, parents, alumni and policy-makers—infer quality, legitimacy and relevance (Perera, Nair & Asaari, 2023). In this ecosystem, the idea of strategic fit — the relationship between an organization's internal strategy and external execution — comes to play.

Both the scholarly literature and managerial practice by a major disconnect. While there's professional consensus that social media is critical for branding, the tools needed to measure

how closely a university's social media activities align with its brand strategy continue to be conspicuously lacking. Current approaches are set around volume-based metrics—follower counts, likes, shares—which measure activity volume rather than its strategic quality (Voorveld et al., 2018). For example, a university might create high engagement on a viral post and fail to communicate its core academic value proposition (Morgan et al., 2019), resulting in a gap between brand identity and image. Understanding digital branding effectiveness, however, starts with measuring social media–Brand Strategy Fit: the extent to which digital practices consistently reflect strategic imperatives of informativeness, interactivity, responsiveness, consistency and transparency.

The theory of the concept of strategic fit is deep-rooted within the practice and developed as a coherence among firms resources with its market surrounding (Venkatraman, 1989). On the marketing strategy implementation, fit refers to alignment between intended and realized strategy (Morgan et al., 2019). When applied to university branding, strategic fit means that institutional online behaviors need to align with the type of service characteristics that higher education is known for – high credibility and high involvement. Signaling Theory (Spence, 1973) explains the necessity of this fit: education is an experience good marked by high levels of information asymmetry between stakeholders who depend on signals to evaluate quality prior to their enrolment (Erdem & Swait, 2004). Social media behaviors are real-time streams of signals. Unpredictable, murky or unaccountable signals create noise and stakeholder doubt, while consistent, clear and accountable signaling alleviates uncertainty and lays the psychological foundations of brand equity.

Despite its theoretical significance, no validated scale exists to measure strategic fit across the HEI context. After extensive review, we note that most current instruments reflect user gratifications rather than institutional strategic performance (Shahbazi & Bunker, 2024). This paper, therefore, addresses this gap by creating Social Media Practices (SMP) scale to measure strategic fit operationally through five theoretically underpinned dimensions.

The importance in theory of measuring strategic fit, as opposed to simply digital presence or activity volume, has gained momentum through the marketing strategy literature where increasing acknowledgment is paid to the fact that deficiencies are a key source of competitive disadvantage stemming from poor implementation (Malshe et al., 2021). It is when, in the context of higher education, an implementation gap occurs when universities are spending time and money on social media presence but still do not align their digital activity with brand position they articulate. A university that claims to be research-intensive and floods its social-media channels with entertainment content for students creates a strategy–execution mismatch that undermines brand clarity and diminishes stakeholder trust. The SMP scale — operating on intrinsic user needs rather than engagement-related outcomes — is purposefully tuned to flag this kind of misalignment, offering a diagnostic capability above the noise level associated with impact-based measures.

1.1 Contextual Imperative: A Digital Transformation in Azerbaijan

There is strong need for a near unambiguous measure of digital strategic fit, especially in case of emergent economies w here digital transformation emerges as top-down state governance focus area but can hit structural road block. This investigation lies within the environment of

Azerbaijan's public higher education ecosystem, providing a one of a kind natural laboratory for understanding digital branding across heterogeneous contexts (World Bank, 2024). Implemented, a competitive human capital and modernization of the innovations are clearly targeting in Azerbaijan 2030 strategic roadmap (President of the Republic of Azerbaijan, 2021). Public universities are the principal engines of that development; thus their capacity to project a trustworthy brand image in digital media becomes an instrument of national strategic coherence.

Azerbaijan's digital divide is about ability, not access—it is high relatively but thin in terms of quality, speed, and affordability of infrastructure (World Bank 2024); Such connectivity challenges are not found in urban centers like Baku. This structural difference makes the Azerbaijani context a prime opportunity to explore scale robustness across resource-rich and resource-constrained institutions.

In addition, the national branding ecosystem includes a peculiar category of public universities in Azerbaijan. As publicly funded institutions accountable to both the Ministry of Science and Education and broader social stakeholders (e.g. taxpayers, policy-makers), they are under a dual communication imperative; projecting international competitiveness in order to attract foreign students and partnerships while also demonstrating domestic relevance and public accountability. This twin imperative renders strategic alignment of social media communication particularly consequential — and particularly challenging — in the Azerbaijani context. The SMP framework's multidimensional architecture is intended to allow researchers to ascertain whether institutions traverse this complexity strategically, providing a disaggregated diagnostic that reflects the vastly heterogeneous demands for institutional digital communication in emerging-market context.

1.2 Research Objectives

The study's objectives are to create a psychometrically valid measure for University Brand Strategy Alignment, the operationalization of which is taken through the SMP construct, and to theorize its relationship in creating Customer-Based Brand Equity (CBBE). The specific aims are: (a) to conceptualize Social Media–Brand Strategy Fit as a multi-dimensional formative construct; (b) develop and refine scale items through literature adaptation, expert review and pilot testing; (c) validate the SMP scale using PLS-SEM techniques; (d) establish nomological validity through a proposed sequential mediation model (SMP → Engagement Quality → Brand Credibility → Brand Trust → CBBE); and (e) explore moderating effects of ICT infrastructure quality and geographic location. Theoretical conceptual research framework seen in Figure 1 organizes these components into an integrated S-O-R model that serves as a basis for the empirical work.

There are three main contributions from the study to theory and practice. Theoretically, it contributes two-fold: It connects the strategic implementation literature (Malshe et al., 2021) to the higher education branding stems in a distinct approach depicting execution fidelity as a zero-sum construct that can be measured within digital branding. From a research standpoint, it adopts the multi-stage scale development paradigm for rigor (Churchill, 1979) and PLS-SEM validation to provide a replicable model of how to develop scales in emerging-market institutional settings. At a more pragmatic level, it offers university administrators a diagnostic

tool that goes beyond vanity metrics to successfully elicit the strategic quality of digital communication — and thus has the potential to guide evidence-informed planning for social media management across campus.

Literature Review

2.1 Organizational and Marketing Theory of Strategic fit

Theoretically, the reader can link strategic fit to the contingency perspective that originates in every organizations internal state aligned with its environment (Venkatraman, 1989). In the branding context, fit has been defined as the similarity between an extension to a prototypical category (Aaker & Keller, 1990). This research applies this concept to the implementation phase, conceptualizing Social Media–Brand Strategy Fit as the level of alignment between a university's stated brand strategy and its legitimate, public social media behaviors (Morgan et al., 2019; Malshe, Hughes, Good & Friend, 2021). This is not a metric-based measure of success, but of fidelity to execution.

The relevance of strategic fit is heightened in emerging-market contexts, where institutional environments are marked by dynamic policy changes, resources heterogeneity, and shifting stakeholder expectations. In such environments, the punishment for strategic misalignment is magnified as institutions are under increased scrutiny by both domestic constituents (who want modernization) and international audiences (who rate credibility Morgan et al., 2019). For higher education institutions (HEIs) in post-soviet economies such as Azerbaijan, Kazakhstan, and Georgia, the legacy of centralized governance has contributed to organizational cultures where marketing and branding functions are still embryonic, being subordinated to administrative compliance on communication grounded in marketability (Dwivedi et al., 2021). This institutional inertia means that even where social media platforms are adopted, deployment may be little more than performative compliance rather than a strategic integration of the technology—phenomenon that highlights the need for fit-based rather than adoption-based measurement.

Additionally, post-Soviet higher education systems are characterized by a specific tension: the desire to be internationally competitive while also fulfilling a domestic social mission. In such contexts, universities have to provide a signal of academic excellence for potential international students but must also be seen as accessible and publicly accountable to domestic stakeholders (Perera et al., 2023). The need to signal successfully both that the record in fact appears attractive, and then also the expectation of an ever-growing campaign effort ahead as trailing have placed huge demands on digital strategies for communication, with the very same social channels needed to serve inherently different audience segments with varying informational needs. The multidimensional structure of the SMP framework—covering informativeness, interactivity, responsiveness, consistency and transparency—is designed to reflect whether institutions have tried to navigate this complexity strategically or jumped at any policy response that could be construed as "doing something."

2.2 The SMP (Social Media Practices) Construct

In order to make strategic fit operational, it introduces the SMP construct: observable strategic communication activities that institutions purposefully deploy on social platforms. SMP is defined as a formative second-order construct comprising five dimensions together building the underlying variable of Strategic Fit (Dwivedi et al., 2021; Appel, Grewal, Hadi, & Stephen, 2020). Chapter 4 identifies five constitutive dimensions of digital higher education branding from the literature on digital marketing and higher education branding.

Informativeness means whether the university social media is providing accurate, timely and decision-useful information. According to Uses and Gratifications Theory, one of the main motivators behind usage of social media for high-involvement services is information seeking (Shahbazi & Bunker, 2024). Interactivity measures the extent to which platforms allow for dialogue, as an example. Service-Dominant Logic (Vargo & Lusch, 2004) ascribes interaction value creation to the co-creation through various features, like polls and live sessions, forms (Appel et al. 2020). Responsiveness indicates timeliness and quality of institutional responses, serving as one of the dimensions of core service quality in the SERVQUAL model (Parasuraman, Zeithaml, & Berry 1988) and operationalizing the benevolence component of trust in the digital realm (Ibrahim et al. 2023). Consistency refers to the regularity and tonal stability in institutional communications across time and platforms; Integrated Marketing Communications theory posits that equity is built through consistent messaging (Keller, 1993). Transparency concerns the clarity of institutional structures, information on fees and decision-making processes; Legitimacy Theory asserts that public organizations must act in a transparent way to sustain their license to operate (Perera et al., 2023), which will lower the costs associated with credence goods (Erdem & Swait, 2004).

Any such formulation specification of SMP is theoretically paramount. In contrast to reflective constructs—which are interchangeable, observable manifestations of a common underlying trait—formative constructs are characterized by their indicators in that each dimension contributes unique conceptual content to the composite (Hair et al., 2022). Eliminating any dimension would change the meaning of the construct. The pattern of strategic fit that emerges from a university rated highly in informativeness but lowly in responsiveness is qualitatively different from the pattern that emerges for one rated highly on both. The formative specification thus retains the diagnostic granularity that renders the SMP scale practically useful: administrators not only can identify specific dimensions of misalignment but also target correct intervention accordingly.

2.3 HEI Branding in Contexts of Post-Soviet Emergence

Adopting brand management principles to higher education has seen global growth, but by far the most empirical examinations have come from western English-dominant or East Asian countries with favorable structures for building leading brands (that is, competitive market forces, institutional independence and mature digital environments) (Pinar et al. 2020). These findings should not be assumed to be transferable to post-Soviet and emerging-market HEIs. The research also illustrates how across the Caucasus and Central Asian region, typically state-run public academic institutions generally work under centralized ministerial control with minimal branding budgets, limited digital human capital, and legacy communication processes

that favor unidirectional announcements rather than interactive engagement (Perera et al., 2022). These structural properties imply that the processes by which social media practices convert into brand equity may be fundamentally different than those observed in resource-abundant settings.

Moreover, the geographic distribution of university campuses in both urban and peripheral areas presents a spatial dimension to digital branding which has rarely been explored in the literature. Nor is this an urban panacea–as non-urban institutions compound disadvantages born of weaker ICT infrastructure (e.g., there's less bandwidth available to deliver content at higher quality) along with access to smaller local media markets, and limited stakeholder networks that facilitate trust-to-equity conversion. These concerns motivate us to incorporate ICT infrastructures and geographic location as boundary conditions in the model of the present study, progressing towards a context-sensitive approach to digital branding theory that can accommodate the heterogeneous realities in emerging market higher education.

Another aspect of the building process, pertaining to the context of the Caucasus and Central Asia region, relates to competitive behavior among universities. In mature markets, institutional brands spend decades of sound reputation in the market to differentiate themselves, while post-Soviet universities build brand identity in a very compressed timeframe within under-invested physical infrastructure competing for limited local students and looking overseas partnerships that require credible online presence. This compressed competitive time frame renders the strategic caliber of social media discourse especially impactful: institutions that manage to achieve authentic strategic alignment between brand positioning and digital efforts might obtain outsized first-mover advantages in brand equity development, while those who utilize social media without careful consideration may inadvertently harden negative or undifferentiated brand perceptions whose correction over time becomes extremely costly (Morgan et al., 2019). A measurement tool, the SMP scale in a way provides institutions with more pointers to diagnose and mitigate strategic misalignment before it solidifies into an enduring brand disadvantage in this competitive landscape.

2.4 The Sequential S-O-R Mechanism

One method for representing a nomological network to validate the SMP scale is through the S-O-R framework (Mehrabian & Russell, 1974). SMP serves as the stimulus. The organism consists of a series of linked processes: Engagement Quality (cognitive and affective processing), Brand Credibility (perceived expertise and integrity) to give rise to Brand Trust (the willingness to become vulnerable). The answer is Customer-Based Brand Equity (CBBE)—the differential response to stakeholders of brand knowledge (Keller, 1993; Pinar et al., 2020). This applied work is consistent with key linkages: Ibrahim et al. (2025) revealed that communication quality on social media is a predictor of engagement in emerging-market higher education institutions (HEIs); Erdem and Swait (2004) channeled the signaling pathway from credibility to trust; Pinar et al. (2020), confirmed the CBBE dimensions in higher education. This study consolidates these pathways into a single serial mediation model.

The mediation sequence of engagement → credibility → trust is not arbitrary but follows a theoretically grounded psychological path. The second category captures the human side of social media and represents the initial cognitive and affective processing that occurs during

engagement by stakeholders with institutional social media content. The engagement quality measures how deep, rich or meaningful an interaction is rather that whether it occurred (Barker et al., 2013). The perceptions of credibility arise from repeated experiences through which stakeholders build a portfolio of evidence about institutional expertise and integrity over time (Erdem & Swait, 2004). As the most psychologically demanding construct of the chain, trust requires both consistently positive experiences in engagement and perceptions of credibility (Keller) before stakeholders will develop willingness to put themselves at risk with institutional actions. This progressive deepening of psycho- logical commitment parallels the attitude-formation hierarchy as described in the consumer behavior literature and justifies in theory testing for serial rather than parallel mediation.

2.5 ICT infrastructure and location as moderators

Whereas the Resource Based View (RBV) states that outcomes are a function of resource complementarity availability (Barney, 1991). The quality of ICT infrastructure—the speed, stability and availability of connectivity—represents a vital complementary asset that enhances the scope and fidelity with which social media signals are transmitted (World Bank, 2024). Urban vs. Non-urban Enhanced market density and institutional visibility as structural difference influencing the conversion of trust to brand equity Perera et al., 2022

The moderating role of ICT infrastructure is particularly significant since the effectiveness of social media is inherently bandwidth dependent: interactive features, video content, and real-time responsiveness all rely on reliable connectivity. Where infrastructure is poor, even well-executed strategic communication faces delivery friction that undermines its effect on stakeholder engagement. Beyond its association with the quality of infrastructure, geographic location also informs a host of structural properties—such as market density and media ecosystem complexity, including number and density of potential informational substitutes—that mediate the efficiency by which trust-based signals convert to brand equity gains.

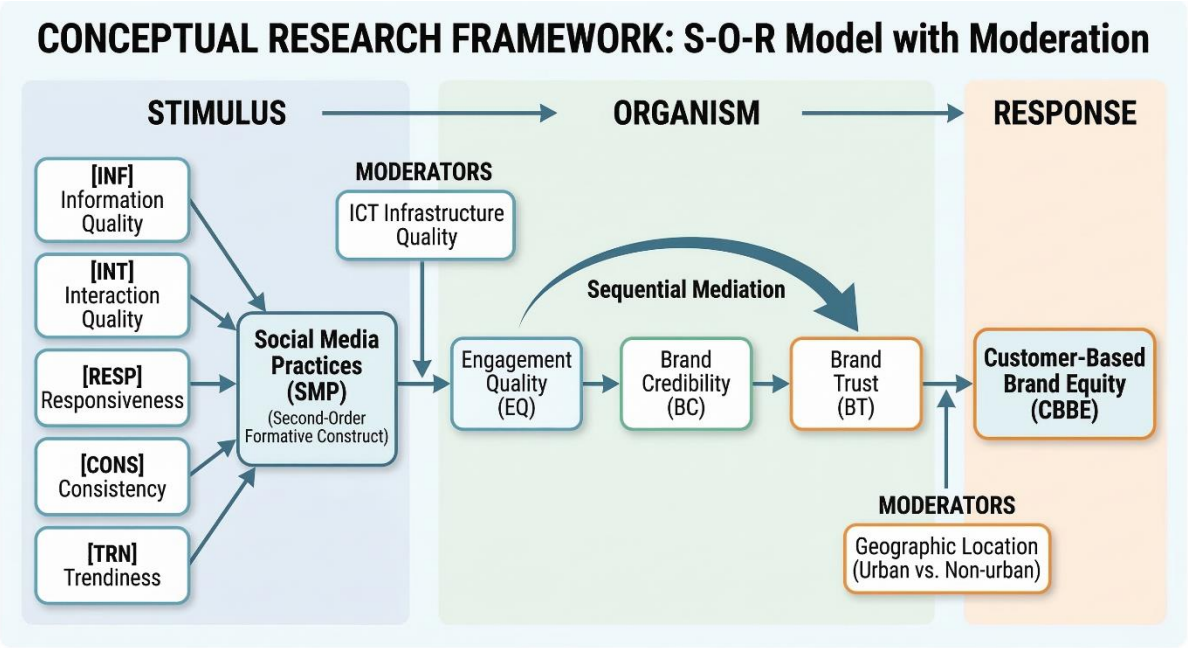

Figure 1. *S-O-R Model: Conceptual Research Framework with Sequential Mediation and Moderation Paths. SMP = Social Media Practices; INF = Informativeness; INT = Interactivity; RESP = Responsiveness; CONS = Consistency; TRN = Transparency; EQ = Engagement Quality, BC= Brand Credibility, BT=Brand Trust, CBBE- Customer-Based Brand Equity.*

Methodology and Procedures

3.1 Research Design

This study used a post-positivist quantitative research design with explanatory cross-sectional survey. The deductive approach allowed for empirical testing of the S-O-R mechanism and scale-validation.

3.2 Scale Development Procedure

Following the multi-stage paradigm by Churchill (1979), which establishes the most stringent framework in marketing for developing measures of constructs, we developed the SMP scale. The procedure involved four main stages, which included: domain specification, item generation, scale purification and psychometric validation.

In domain specification phase a broad review of digital marketing, higher education branding, and strategic fit literatures was undertaken to delineate what the SMP construct is about conceptually and its constitutive dimensions. Specifically, Item generation was deductive; Informativeness items were adapted from Voorveld et al. (2018) and Dwivedi et al. (2021), contextualized for HEI content. Interactivity items adapted from Appel et al. (2020) and Dwivedi et al. (2021). Items measuring Responsiveness were adopted from Parasuraman et al. (1988) and Dwivedi et al. (2021). Consistency items were adopted from Dwivedi et al. (2021) and Appel et al. (2020). Transparency items were modified from Shahbaz and Bunker (2024) to a public-sector context. This resulted in a form of 25 items, five for each dimension.

Expert review was performed by eight academic marketing researchers and four HEI administrators to establish content validity; they assessed the relevance, clarity, and representativeness of all items. Following expert feedback, 10 items were removed due to redundancy, ambiguity, or poor fit contextually, resulting in a refined pool of 15 items (three per dimension). Measures were translated into Azerbaijani using back-translation (Brislin, 1970), and reconciled by a bilingual committee consisting of one native speaker of Azerbaijani was one bilingual researcher. This pilot study in 30 university staff confirmed item clarity and identified no floor or ceiling effects, with estimated completion time of 8–12 minutes. The final SMP scale consists of 15 items measured on a 7-point Likert scale (1 = Strongly Disagree; 7 = Strongly Agree) and is designated as a formative second-order construct built upon five reflective first-order dimensions.

3.3 Sampling and Participants

The target population included institutional stakeholders (eg, staff oriented to communication, marketing, public relations, or administration) from Azerbaijani public universities. The informant-key method is suitable in organizational level studies (Kumar, Stern, & Anderson, 1993). Sample quota sampling was conducted across 10 universities, yielding 300 usable

responses from a total of 412 distributed questionnaires (response rate: 72.8%). The sample was comprised of urban (62.0%, n = 186) and non-urban (38.0%, n = 114) respondents.

3.4 Data Collection

Data were collected from October to December 2025 via mixed-mode administration (i.e., online and paper-based) to the extent feasible given connectivity constraints. To mitigate CMV, we blindsided respondents with anonymity, counterbalanced items and employed a theoretically irrelevant marker variable (Podsakoff et al., 2003).

3.5 Measures

Apart from the SMP scale (15 items, formative), the established reflective measures were used: Engagement Quality (4 items), Brand Credibility (4 items), Brand Trust (4 items) and CBBE 10 item (adapted from Pinar et al., 2020, Keller, 1993). Moderators were ICT infrastructure quality (4 items) and location (urban vs non-urban). Seven-point Likert scales were used for all reflective items.

3.6 Analytical Strategy

Data were analyzed by PLS-SEM using SmartPLS 4, chosen for its ability to handle formative constructs and complex mediation–moderation models, and its predictive nature (Hair, Hult, Ringle & Sarstedt, 2022). Data were analyzed following the standard two-stage approach: first measurement model assessment and then structural model assessment. There are three specific reasons that PLS-SEM as compared to CB-SEM was preferred: (1) the SMP construct operates in formative specification where variance-based estimation is required; (2) the predictive nature of this study matches well with the explanatory orientation of PLS-SEM; and (3) a sample size of 300 provides better statistical power under PLS-SEM given models of this complexity. Mediation was examined with bootstrapped specific indirect effects (5,000 resamples), moderation with product-indicator approach, and multi-group analysis (MGA) and preceding MICOM invariance testing.

Results and Discussion

4.1 Descriptive Analysis and CMV Test

Screening of data for missing values (mean replacement if method variance) to collectively confirm that CMV was not a concern.

4.2 Measurement Model Evaluation

4.2.1 Reflective constructs: reliability and validity

All reflective constructs showed excellent psychometric properties that significantly exceed the suggested guidelines proposed by Hair et al. (2022). Standardized loadings varied from 0.72–0.92, all above the threshold of 0.70 for indicator reliability. Discussion Construct reliability was assessed using Composite Reliability (ρc) [14], which ranged from 0.881 to 0.934, well above the minimum of 0.70 (ave; construct; AVE ≥ 0.5), suggesting that all constructs have a strong level of internal consistency in this population. AVE values were between 0.584 and 0.662, surpassing the 0.50 threshold for convergent validity by confirming that each construct accounts for more than half of the variance in its indicators. The overall

measurement model results are shown in Table 1, indicating that the measurement model presents a reliable and valid basis for structural model testing.

Yet, of those reflective constructs with an excellent model fit and strong psychometric properties (as reported in Sections 3.5 and 4), CBBE had the broadest set of indicators (10 items) that adapts well to its reliable measure in the field corresponding to other studies for research in the Azerbaijani higher education context on a multi-dimensional brand equity measure served by adapted literature between these factors (Pinar et al., 2020; Keller, 1993). Given trust's conceptualization as a unitary psychological disposition (Erdem & Swait, 2004), Brand Trust exhibited the highest loading (0.81–0.92) and AVE (0.662) average across items also in accordance with theoretical expectations that trust items should cluster closely together.

Table 1

Reliability and Convergent Validity of Reflective Constructs

Construct	Items	Loading Range	CR (ρc)	AVE
Engagement Quality (EQ)	4	0.72–0.85	0.881	0.584
Brand Credibility (BC)	4	0.78–0.89	0.902	0.635
Brand Trust (BT)	4	0.81–0.92	0.918	0.662
CBBE	10	0.74–0.90	0.934	0.605

4.2.2 Discriminant validity.

As Table 2 shows, the HTMT criterion further validated discriminant validity: all values were below a conservative threshold of 0.85 (range: 0.49–0.78).

Table 2

Heterotrait–Monotrait Ratio (HTMT) Results

Construct	SMP	EQ	BC	BT
EQ	0.64	—		
BC	0.52	0.71	—	
BT	0.49	0.65	0.78	—
CBBE	0.59	0.62	0.68	0.74

Note. All HTMT values < 0.85.

4.2.3 Formative SMP construct validation.

No multicollinearity was confirmed as all formative indicator VIF values were <3.3. From bootstrapping (5,000 resamples), all outer weights were significant (p <. 05). Convergent validity was established (redundancy analysis r =. 81). The outer weights are reported in Table3.

Looking at the outer weights, we can see that Informativeness provides us the largest relative contribution to the SMP composite (w = 0.284), followed by Responsiveness w — 0.261 and then Interactivity (w = 0.237). This hierarchy indicates that in the specific context of Azerbaijani HEIs, decision-relevant and accurate content provision is positioned as the most important constituent of strategic digital alignment (with an underlying emphasis on delivering value) — alongside evidence supporting generally high levels of information asymmetry found in education as an experience good (Erdem & Swait, 2004). Responsiveness's second-place ranking highlights that because institutional trust deficits are more pronounced in emerging markets, a perceived willingness to engage and respond grounds a powerful signal of benevolence." Consistency (w = 0.218) and Transparency (w = 0.195) while significant in their contribution, when compared to the other factors, seem relatively low weighted, possibly showing a sign of digital maturity stage: early adoption is mostly around content quality and responsiveness whereas consistency and transparency feel as factor gaining weight with evolving digital ecosystem.

Table 3

Patterns of Outer Weights for the Five SMP Dimensions

Dimension	Outer Weight	t-value	p-value	VIF
Informativeness (INF)	0.284	4.12	< .001	1.89
Interactivity (INT)	0.237	3.58	< .001	2.14
Responsiveness (RESP)	0.261	3.87	< .001	2.31
Consistency (CONS)	0.218	3.24	.001	1.76
Transparency (TRN)	0.195	2.91	.004	1.92

Note. Bootstrapping: 5,000 resamples. Redundancy analysis r = .81.

4.3 Structural model and hypothesis testing

The structural model accounted for 61.2% of the variance in CBBE ($R^2 = 0.612$), indicating a considerable level of explanatory power (Hair et al., 2022). The direct effect of SMP on CBBE was significant (β = 0.192, p =. 002). In the final model, the full sequential pathway was supported: SMP → Engagement Quality (β = 0.584, p <. 001), Engagement Quality → Brand Credibility (β = 0.491, p <. 001), Brand Credibility→Brand Trust(β=0.612,p<. 001), Brand Trust → CBBE (β = 0.445, p <. 001). The specific indirect effect of the full path (SMP → EQ → BC → BT → CBBE) was significant (β = 0.218, 95% CI (0.14, 0.29)), confirming the study's main argument that strategic fit developed equity through a psychological process in phases simultaneously. The final structural model results verify the theoretical S-O-R chain as seen in Figure 2.

To further clarify the mediation mechanism, effect size (f^2) values and total Variance Accounted For (VAF) were calculated based on each mediation relationship. For the SMP → EQ path, f^2=0.52 was obtained indicating a large effect. For EQ → BC, an f^2 of 0.31 (medium-to-large); for BC → BT, an f^2 of 0.48 (large); and for BT → CBBE, an f^2 of 0.27 (medium).

The VAF, defined as the ratio of the total indirect effect (β = 0.218) to the total effect (β = 0.410), amounts to 53.2%, suggesting complementary partial mediation: The sequential engagement–credibility–trust chain explains more than half of SMT's impact on CBBE, but a significant direct path remains. This pattern of partial mediation implies that strategic social media practices build brand equity both via the theorized chain of psychological processing and also via a shorter piecewise heuristic route—perhaps in line with direct brand awareness effects—that skips the entire credibility–trust process.

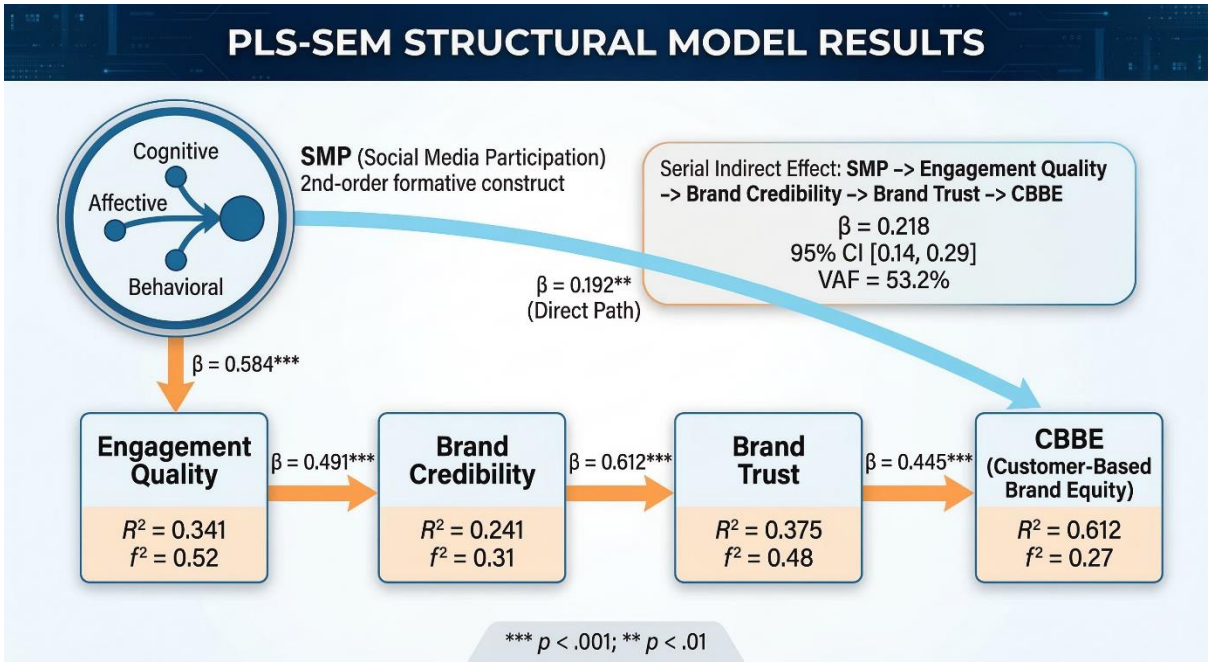

Figure 2. *PLS-SEM Structural Model Results. Path coefficients (β), significance levels, R^2 values, and f^2 effect sizes for each endogenous construct. The dashed line represents the direct effect of SMP on CBBE.*

4.4 Moderation and Multi-Group Analysis

4.4.1 Moderation by ICT infrastructure.

The interaction effect of SMP × ICT Infrastructure was a significant predictor of Engagement Quality (β = 0.21, p <. 01). Simple slope analysis showed that the SMP–Engagement relationship is stronger at high ICT quality (simple slope β = 0.72, p <. 001), and low ICT quality (β = 0.39, p <. 01), suggesting that infrastructure acts as an enabler ramping up the dividends on strategic digital spend. Fat tails become apparent with increasing SMP, as shown in Figure 3 (Panel A), validating the proposition that digital infrastructure is not simply a necessary but ultimately passive condition for social media-based strategies to succeed; rather it is an active multiplier of effectiveness.

4.4.2 Multi-group analysis: location.

Measurement invariance was tested using MICOM (configural and compositional invariance supported). The MGA also showed a substantial difference in the Brand Trust → CBBE path (Δβ = 0.15, p <. 05), with the coefficient larger for urban universities. In city controls—identified by improved market density and face visibility, trust transforms high more competently into brand equity (simple slope β = 0.52, p <. 001), while structural constraints in non-urban areas attenuate this mechanism (β = 0.37, p <. 001). As can be seen in Figure 3

(Panel B), urban institutions have a trust–equity slope that is significantly greater than the corresponding slope for non-urban institutions.

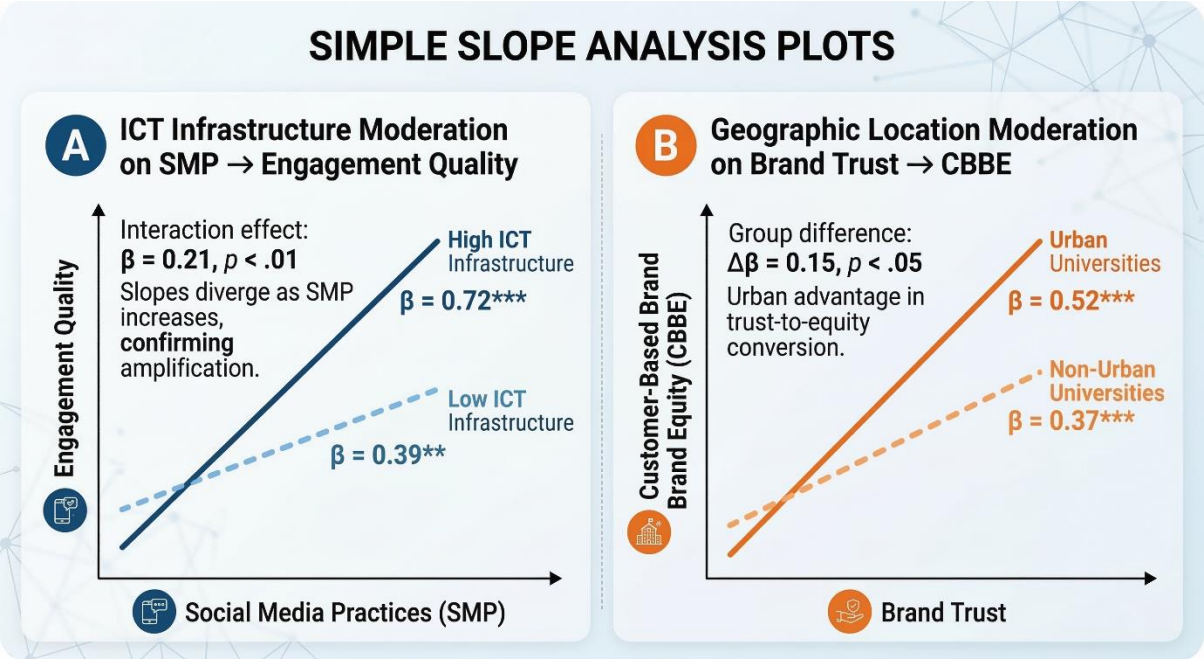

Figure 3. *Simple Slope Analysis Plots. Panel A illustrates the interaction between SMP and ICT Infrastructure Quality on Engagement Quality. Panel B shows the multi-group comparison of the Brand Trust → CBBE path across university locations situated in urban and non-urban areas.*

Table 4

Stratification of Structural Model and Hypothesis Test Results

Hypothesis	Path	β	95% CI / Δβ	Decision
Direct	SMP → EQ	0.584***	[0.49, 0.67]	Supported
Direct	EQ → BC	0.491***	[0.38, 0.59]	Supported
Direct	BC → BT	0.612***	[0.52, 0.70]	Supported
Direct	BT → CBBE	0.445***	[0.34, 0.55]	Supported
Direct	SMP → CBBE	0.192**	[0.07, 0.31]	Supported
Indirect	SMP→EQ→BC→BT→CBBE	0.218***	[0.14, 0.29]	Supported
Moderation	SMP × ICT → EQ	0.210**		Supported
MGA	Δ(BT → CBBE)	0.150*		Supported

*Note. * p <. 001; ** p <. 01; * p <. 05. CI = 95% bootstrap confidence interval (5,000 resamples). MGA difference urban minus non-urban*

4.5 Discussion

The results offer three main contributions. The validated SMP scale first operationalizes strategic fit in the digital age, offering a more granular perspective of digital brand alignment

beyond traditional binary adoption studies. Second, the proven SMP → EQ → BC → BT → CBBE path expands on the S-O-R paradigm in aspects concerning institutional branding by showing that credibility and trust serve as its gate for long-term value—an insight that confirms and builds upon Ibrahim et al. (2025) and Erdem and Swait' signaling pathway (2004). Third, the moderation findings add to digital divide literature by illustrating that ICT infrastructure conditions branding effectiveness and simply are a framework for analyzing these relationships, both contextually and spatially, with trust–equity conversion operating at an urban advantage on the city level— insight neglected in homogeneous Western contexts.

These results deserve comparison with contemporary findings within the fast-emerging HEI digital branding literature. Ibrahim et al. Reported a path coefficient of 0.41 for the relationship between social media communication quality and engagement in a multi-country African sample (2025). The significantly larger SMP → EQ coefficient (β = 0.584) obtained in the present study likely marks an advantage of our formative specification, as it captures the breadth of strategic activity rather than a single communication quality dimension. This stronger effect highlights the importance of measuring strategic fit in a holistic manner. Likewise, the Brand Credibility → Brand Trust coefficient (β = 0.612) is much greater than the 0.38–0.45 range usually obtained from Western consumer brands (Erdem & Swait, 2004), indicating that in emerging-market educational settings—characterized by a lower level of institutional credibility and alternative information carriers—credibility cues have significantly greater importance to trust construction. The effect has important strategic implications for HEIs located in transitional economies and expectations surrounding communication investment.

This has practical implications, as the findings cannot have either statistical correlations or associations. Finally, the f^2 effect size beyond.52 for the SMP → EQ path suggests a very large practical effect where strategic social media alignment explains much of the variance in engagement quality. The VAF of 53.2% provides evidence for the fact that the sequential mediation chain is indeed the dominant route from strategic fit to brand equity, while its lingering direct effect (β = 0.192) also indicates an alternate heuristic route—most likely via a brand awareness or familiarity effect—that calls for further research attention. This dual-pathway finding carries key implications for university communication strategy: whilst the engagement–credibility–trust chain being at the center of strategic intervention, it is important that managers also acknowledge direct visibility and awareness effects of strategic social media presence.

The moderation findings are particularly noteworthy for their theoretical and policy implications. The ICT infrastructure interaction effect (β = 0.21) shows that strategic social media investment from a return on investment standpoint is nearly halved in low-infrastructure environments (simple slope β = 0.39 vs. 0.72). This finding expands the digital divide literature beyond access-measures to show that infrastructure quality alters the effectiveness of strategic communication practices—something that has not previously been documented in higher education branding research. The geographic moderation of trust–CBBE path (Δβ = 0.15) elucidates the reality that urban branding advantage originates at the conversion stage, when institutional trust becomes brand equity, rather than telling earlier points in the mediation chain;

strong market density and stakeholder network effects thus underpin tactile returns on institutional trust-building than competitive advantage bringing more established sex-sponsored designs to bear in non-metro jurisdictions.

Together, these findings establish the SMP scale as a research instrument and practical management tool. The scale's formative architecture allows for dimension-level diagnostics that can inform targeted interventions, and the nomological network shows that such interventions translate into observable brand equity change through a clearly articulated psychological mechanism. For the larger field of higher education marketing, the study illustrates both utility in measuring strategic fit rather than volume of communication and the importance of examining boundary conditions that capture structural heterogeneity emblematic of emerging-market institutional environments.

Conclusion and Suggestion

5.1 Conclusion

We present a validated scale for the Social Media–Brand Strategy Fit construct, conceptualized through five dimensions of strategic alignment. We establish that this alignment is empirically validated and distinguishes which of the engagement, credibility, and trust drives brand equity in a sequential chain conditioned on physical reality of infrastructure. Digital strategies in emerging markets, and their relationship to brand identity and the infrastructural realities of stakeholder engagement, must also be actionable for universities.

This study contributes to theory in three key ways. It begins by presenting the SMP construct as a psychometrically sound formative measure that translates the previously vague idea of digital strategic fit in higher education into operational terms. Second, we ensure nomological validity by situating the SMP scale within a general S-O-R mediation model to show that strategic fit-based effects in terms of brand equity form thus via an incremental psychological process rather than direct effects alone. Third, it contributes to the context-sensitive branding theory by diagnosing ICT infrastructure quality and geographic location as key boundary conditions that moderate the fit–equity mechanism, providing empirical evidence of qualitatively different structural constraints in the operation of branding processes in emerging markets than those characterized based on Western contexts.

5.2 Managerial Implications

SMP Scale: The Brand Strategy Audit tool Switching from vanity metrics to assessing managers based on social media performance (SMP), establishing service-level agreements for responsiveness, proactively sharing information about policies to improve transparency in markets and developing guidebooks for the brand voice will all assist manager effectiveness throughout this persistent epidemic (Dwivedi et al., 2021). Content that builds trust credibility should take precedence over posts intended for entertainment. The outer weight analysis is also useful in that it provides a clear indication of how-to priorities: given информативность (w = 0.284) and отзывчивость (w = 0.261) are the strongest contributors, communication offices should focus on content quality and managing stakeholder response rather than aesthetic дизайн or viral content production.

Importantly, the moderation findings have actionable implications for resource-constrained institutions. For the few universities with weak ICT infrastructure, the attenuated SMP–engagement relationship (simple slope β = 0.39 vs. 0.72 under high ICT) shows that strategic communication efforts will bring low engagement returns until connectivity is improved. In the meantime, these institutions should focus on high-impact, low-bandwidth practices in order to keep connected — such as regular text-based informational content and timely text responses — rather than bandwidth-heavy interactive features like live-streamed events or high-resolution video content. In urban institutions, where the trust–equity conversion is more forest efficient (β = 0.52 vs for at ZO), the strategic imperative is to maximize through credibility-building via sustained strategic alignment since each unit of trust gained provides a better benefit to brand equity.

The periodic auditing is also beneficial for making this simple but effective five-diagonal approach be in sync with the universities dynamic strategies like branding, etc. This dashboard would be coupled to live social media metrics that are mapped to each of the SMP dimensions: informativeness scores that are generated based on content relevance classification, interactivity indices computed from comment-reply ratios and participation in live sessions, responsiveness metrics measuring average response time and quality of resolution, consistency measures based on variance in frequency of posting and tone analysis, as well as transparency indicators derived from visibility around policy-related content. By plotting these five dimension scores against institutional best practices, the dashboard would provide administrators with real-time detection of strategic misalignment and enhanced digital communication resource allocation, as well as a longitudinal metric to measure subsequent interventions. This tool would make the SMP scale a management technology instead of just a research instrument.

5.3 Policy Implications

Moderation analysis also shows policymakers developing for Azerbaijan 2030 regional stakeholders to lack ICT infrastructure that limits branding return, while rural broadband investments in place act as complementary assets. In this way, universities outside of cities suffer from a trust-conversion penalty that calls for a new Regional Digital Equity Package (RDEP). The dimensions outlined in the SMP could therefore be a Minimum Digital Service Standard of sorts for public universities.

5.4 Digital Transformation Policy Recommendations for Azerbaijan 2030

The findings of this study provide a practical contribution to policy by directly assisting the Azerbaijan 2030 national priority of competitive human capital development via digitalization and modernization. First of all, the sizeable ICT moderation effect (β = 0.21) underpins the empirical validation to priorities broadband infrastructure investment in university regions outside metropolitan areas diaspora on the national agenda for a digital transformation across its landscapes. The simple slope analysis shows that the return on investment in strategic social media practices almost halves under poor connectivity conditions, typical of most developing countries. Therefore, the Ministry of Science and Education should cooperate with the Ministry of Digital Development and Transport to determine minimum bandwidth standards for

university campuses as soon as possible in Ganja, Lankaran, Shaki, and other non-capital educational institutions.

Second, the insights from this study strengthen our recommendations for a National University Digital Branding Index based on these five SMP dimensions. Where this is there such an index, it would merely act as a benchmarking tool for schools within an existing higher education quality assurance framework and it would encourage schools to invest not just in the uptake of social media platforms but also on how they plan them. The Index could be a composite score derived from the five SMP dimension scores and published as a score However, to serve individual institutions effectively, the dimensions would need to be separately published so they can be examined for targeted institutional improvement. Public disclosure and ranking of the index would encourage competition to invest in strategic digital communication, providing the Ministry with a harmonized metric by which to assess institutions' performance in digitally governing.

Third, there should be greater expansion-standardization of digital literacy training programs for university communication staff. The outer weight analysis demonstrating the preeminence of informativeness and responsiveness as content characteristics indicates that investments in training should be placed on developing content factory strategy and stakeholder response management, instead of aesthetic design or viral production. Training curricula must include workshops focused on applying data to content-producing procedures and developing response protocols that reflect brand voice consistently across every touchpoint. Lastly, an independent funding source—perhaps relative to competitive grants relative to demonstrated SMP improvement—is necessary in order to reconcile institutional effector with the national broader agenda of branding Azerbaijan's higher education sector as a credible and fresh brand in the Caucasus and Central Asia regional marketplace.

5.5 Limitations and Future Research

The cross-sectional nature of these data limits causal inference; longitudinal studies are needed to assess temporal precedence in the SMP–engagement–credibility–trust–equity chain. To ensure multi-source validation, the key-informant approach should be triangulated with student surveys and objective social media analytics (Kumar et al., 1993), given that it is only representative at an organizational level. The study is limited to the context of an Azerbaijani public university and as such, generalizability is bound. CMV testing was thorough, but the reliance on self-report measures may result in residual social desirability bias that cannot be completely addressed through statistical corrections.

Several avenues for future research should be followed to further these findings. First, we should investigate platform-specific fit: the SMP scale may also be modified to relate between visual-dominant platforms (e.g., Instagram, TikTok) and text-dominant platforms (e.g., X/Twitter, LinkedIn) to test variation in the relative importance of other five dimensions dependent on platform affordances. Second, the emergent potential of AI to automate responsiveness and robotize informativeness is an arena with a strategic balance that we could expect to shift fundamentally in the coming years. Third, mixed-methods validation that integrates objective social media analytics with more subjective SMP approaches would

provide compelling evidence of construct validity by demonstrating concordance between perceived and actual strategic alignment(27).

In line with current findings, three specific hypotheses are put forth for future testing in an empirical context:

H-Future 1: The positive relationship of SMP with CBBE is significantly stronger for those universities which have an officially issued a written digital branding policy than for others, thus serving the moderating role of institutional digital governance.

H-Future 2: The moderating effect of ICT infrastructure on the SMP→Engagement Quality relationship weakens over time as the level of national connectivity improves, indicating that this should be understood as a dynamic threshold phenomenon rather than a permanent structural barrier.

H-Future 3: Transparency has a stronger impact on Brand Trust for public universities than private institutions, because publicly funded organizations are held to higher expectations of accountability by their stakeholders. In order to significantly improve the generalizability and theoretical precision of the strategic fit framework, it would be beneficial to test these hypotheses across a number of post-Soviet or emerging-market countries.

References

Ref: Aaker, D. A., & Keller, K. L. (1990). Consumer evaluations of brand extensions. Journal of Marketing, 54(1), 27–41. https://doi.org/10.1177/002224299005400102

Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The next big thing for social media in marketing. Journal of the Academy of Marketing Science, 48(1), 79–95. https://doi.org/10.1007/s11747-019-00695-1

Barney, J. (1991). Resource-based view of firm and sustained competitive advantage Journal of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700108

Brislin, R. W. (1970). Back-translation for cross-cultural research. Journal of Cross-Cultural Psychology, 1(3), 185–216. https://doi.org/10.1177/135910457000100301

Churchill, G. A. (1979). A framework for the development of better measures in marketing research Journal of Marketing Research 16(1), 64–73. https://doi.org/10.1177/002224377901600110

Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefih,) M.M.)Krishen,) A.S.)Kumar,V.)Rahman,)M.)Raman,)R.Taskin) M.)Xing)value)Y.Wang)(2021). Shaping the future of digital and social media market research International Journal of Information Management, vol. 59, p. 102168. https://doi.org/10.1016/j.ijinfomgt.2020.102168

Erdem, T., & Swait, J. (2004). Brand credibility, brand consideration and choice Journal of Consumer Research, 31(1), 191–198. https://doi.org/10.1086/383434

This is a short summary of the document:Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). Partial least squares structural equation modeling (PLS-SEM) 3rd ed. Sage Publications.

Ibrahim, B.; Jibril, A. B.; Ozuem, W.; Olatunji, O. D.Date of Release: October 24 (2025). Social networks in higher education marketing: A systematic literature review and research agenda. Cogent Business & Management, 12(1), 2423059. https://doi.org/10.1080/23311975.2024.2423059

Keller, K. L. (1993). The international academia from dozens of the leading marketing schools around the world. Journal of Marketing, 57(1), 1–22. https://doi.org/10.1177/002224299305700101

Kumar, N., Stern, L. W., & Anderson, J.C. (1993). Using Key Informants to Conduct Interorganizational Research Academy of Management Journal, 36(6), 1633-1651. https://doi.org/10.2307/256824

Malshe, A., Hughes, D. E., Good, V. & Friend, S. B. (2021). If you can't do marketing strategy, then what are the impediments? And how to overcome them? International Journal of Research in Marketing, 38 (4), 928–950. https://doi.org/10.1016/j.ijresmar.2021.01.003

[5] Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. MIT Press.

Morgan, N. A., Whitler, K. A., Feng, H., & Chari, S. (2019). Research in marketing strategy. Journal of the Academy of Marketing Science, 47 (1), 4–29. https://doi.org/10.1007/s11747-018-0598-1

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(1), 12–40.

C.A.H Perera, R. Nair, M. H. A. H ASAARI (2022) University Brand Image and Purchase Intention Under the Influence of Social Media Marketing Journal of Marketing for Higher Education https://doi.org/10.1080/08841241.2022.2078101

Perera, C.H., Nair, R. and Asaari, M.H.A. H.(2023). The Impact of Communication on Social Media and Brand Image in International Student Enrolment Intentions Frontiers in Education, 8, 1618524. https://doi.org/10.3389/feduc.2023.1618524

M. Pinar, T. Girard, P. Trapp, Z. Eser (12 March 2020) A study of customer based brand equity in higher education: A Turkish university case. Journal of Marketing for Higher Education, 30(2), 289–316. https://doi.org/10.1080/08841241.2020.1741478

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Biased behavior and common method issues in behavioral research Journal of Applied Psychology (2003) 88(5):879–903. https://doi.org/10.1037/0021-9010.88.5.879

President of the Republic of Azerbaijan (2021). Order on the approval of “Azerbaijan 2030: National Priorities for Socio-Economic Development” Retrieved from https://president.az/en/articles/view/50474

Shahbazi, Z., & Bunker, D. (2024). Social Media User Intentions: Scale Development and Validation. Journal of Computer Information Systems, 64(3), 312–329. https://doi.org/10.1080/08874417.2023.2232039

Spence, M. (1973). Job market signaling. Quarterly Journal of Economics, 87(3), 355374. https://doi.org/10.2307/1882010

Vargo, S. L., & Lusch, R. F (2004). The metamorphosis into a new dominant logic for marketing. Journal of Marketing, 68(1), 1–17. https://doi.org/10.1509/jmkg.68.1.1.24036

Venkatraman, N. (1989). Fit, in strategy research. Academy of Management Review 14, no. 3 (1989): 423–444. https://doi.org/10.5465/amr.1989.4279078

(http://doi.org/10.1007/s11747-015-0426-y) Voorveld, H. A. M., van Noort, G., Muntinga, D. G., & Bronner, F. (2018). 1. Social media engagement and social media advertising. Journal of Advertising, 47(1), 38–54. https://doi.org/10.1080/00913367.2017.1405754

World Bank. (2024). Azerbaijan: Digital needs assessment for rural population (Report No. 099030225124017361). Washington, DC: World Bank Group. Retrieved from https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099030225124017361