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The Impact of Social Media Marketing on Digital Service Adoption in Educational Institutions: Exploring the Mediating Role of Brand Equity, Trust, and Word-Of-Mouth Advertising

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Abstract: Recently, educational institutions have turned to investing in new technologies to provide digital services to customers as a means of cost control, attracting new customers, and meeting customer expectations. The adoption of these new technologies has become crucial for these institutions as part of their strategy. Therefore, this research focuses on investigating the influence of social media marketing (SMM) on the intention to use digital services in educational institutions. The study also considers brand equity, trust, and word-of-mouth promotion as potential factors mediating this relationship. The method employed was descriptive correlational research, utilizing structural equation modeling for data analysis, with 368 students participating. The results indicate that SMM has a significant influence on brand equity, trust, word-of-mouth advertising, and the intention to utilize digital services in educational institutions. Furthermore, brand equity, trust, and word-of-mouth advertising exert a positive and significant impact on the intention to use digital services within educational institutions. Additionally, brand equity, trust, and word-of-mouth advertising act as vital mediators in the relationship between SMM and the adoption of digital services in educational institutions. Consequently, we can conclude that SMM contributes to an increased intention to use digital services in educational institutions by leveraging brand equity, trust, and word-of-mouth advertising.

Keywords: brand equity; educational institutions; intention to use digital services; social media marketing; trust; word of mouth advertising

1 INTRODUCTION

The rapid advancement and widespread adoption of communication technology have sparked a remarkable transformation across multiple aspects of human lives and organizational performance [1]. This technological revolution has revolutionized the behaviors and outlooks of individuals, organizations, and governments, while simultaneously giving rise to new industries, employment opportunities, and innovative ventures [2, 3]. The advent of digital educational services stands as a significant outcome stemming from the pervasive reach and growth of information technology within the educational realm. In light of this matter, educational institutions, much like many other service providers, have begun allocating resources towards incorporating new technologies into their operations in order to offer digital services to their clientele. This approach serves multiple purposes: cost management, customer acquisition, and meeting customer expectations. Consequently, the integration of these innovative technologies has emerged as a strategic imperative in the agenda of educational institutions. In today's competitive landscape, there is a growing emphasis on researching the features offered by educational institutions that affect individuals' intentions to use digital services. As the number of institutions increases, it is crucial to identify effective strategies that can attract more customers and increase sales [4]. To achieve this, it is essential to understand the internal and external factors that shape users' behavior towards digital services. Given the dynamic and constantly evolving nature of the digital environment, educational institutions must have a comprehensive understanding of their users to keep up with the changing trends. However, there is still a lack of acceptance among Iranian consumers towards purchasing digital educational products and services from institutions and companies. Therefore, the purpose of the present study is to investigate how social media marketing (SMM) affects individuals' intentions to use digital services offered by educational institutions, with a focus on the role of brand equity, trust, and word-of-mouth advertising in mediating actions.

2 LITERATURE REVIEW

2.1 Social Media Marketing and Usage Intention

The use of social media has revolutionized the way organizations interact with their customers on a global scale, thanks to technological advancements and increased internet usage [5]. Businesses are now leveraging social media as a means of communication with customers and develop successful branding strategies by integrating different channels. Social media has also become a platform for public discourse on various topics, from politics to entertainment [6]. As a result, marketers are increasingly relying on SMM to reach their target audiences, with studies showing its effectiveness in influencing customer intention to use services [7, 8]. It is therefore our belief that the following hypothesis should be tested:

H_1: SMM has a positive impact on individuals' intentions to use digital services offered by educational institutions.

2.2 Brand Equity, Social Media Marketing and Usage Intention

This term refers to the inherent and exceptional value of a brand, the desire for customers to pay more for the similar amount of quality through their strong attachment to the brand as well as the fact that they are highly attracted to the brand [5, 9-12]. For customers, brand equity is the essence of successful organizational activities, as it helps organizations understand and satisfy their needs and demands. The basis of brand equity is the brand power that is rooted in the minds of customers. In addition to assets, brands can have liabilities as well, including brand recognition, perceived quality, brand

associations, and other brand assets that can develop or diminish the value of goods and services. According to Aaker [13], a brand equity is an asset or liability that can grow or decline the value of goods and services.

Because of brand equity, customers perceive the brand favourably and make more purchases as a result. To enhance engagement opportunities and manage brand assets in a positive manner, it is essential that firms develop strategies that enhance and grow their brand equity in order to make sure this is achieved [14]. The effect of brand equity on the behavior of customers has also been demonstrated in studies [15]. Additionally, there is evidence that SMM is a crucial part of building brand equity, as has been demonstrated in research studies [14, 16, 17]. Therefore, the following hypotheses are therefore put forward as a result of this study:

H_2: SMM influences positively brand equity.

H_5: Brand equity influences positively individuals' intentions to use digital services offered by educational institutions.

H_8: The effect of SMM on individuals' intentions to use educational institutions' digital services is mediated by brand equity.

2.3 Trust, Social Media Marketing and Usage Intention

Throughout the history of business, trust has been a fundamental concept for transactions and exchanges. The trust that a customer has in a brand refers to their level of confidence in a brand's ability to perform the tasks that have been assigned to them [18]. Morgan and Hunt [19] argue that trust is achieved when one party is confident in the correctness of the other party. Berry [20] asserts that relational marketing relies on the principle of trust. Trust is also a crucial factor in creating and improving the quality of relationships as a result of the process of making and keeping commitments and promises. When trust is established, other parties will feel that they can be trusted and are reliable, and this will result in solid, honest, fair, and productive cooperation between them. A brand that is trustworthy is more likely to secure the loyalty of customers after the product has encountered unexpected problems, making it more likely that the product or service will be developed, sold, and promoted in the future [21, 22]. As well as trust, research has also shown that customer behavior intentions are influenced by trust [8, 23, 24]. Additionally, research has demonstrated the role of SMM in building brand trust [8]. The following hypotheses are therefore proposed as a result:

H_3: Trust in a brand is positively affected by SMM.

H_6: Trust has a positive impact on individuals' intentions to use digital services offered by educational institutions.

H_9: Brand trust mediates the effect of SMM on individuals' intentions to use digital services offered by educational institutions.

2.4 Word-of-Mouth Adverting, Social Media Marketing and Usage Intention

Word-of-mouth marketing refers to creating conditions that encourage people to talk about a product or service and facilitating these conversations [25]. Word-of-mouth marketing involves satisfying customers so that they become the best advertisers for the firm. It is about real consumers and why they want to talk about the firm and its products. Word-of-mouth marketing takes advantage of people's natural tendency to talk. Word-of-mouth advertising is the most powerful source of marketing. Despite the large amount of information presented by competitors through various marketing tools, advertisements, and salespeople, customers and potential customers will engage in word-of-mouth advertising by talking to each other and helping each other make decisions. Word-of-mouth advertising is beyond the control of marketers, but it is cheaper than other methods, making it important to understand how it works. Word-of-mouth advertising is widely used in the field of internet and social media [26-28]. Studies have shown that word-of-mouth advertising is effective in influencing customer behavioral intentions [29, 30]. Additionally, research has demonstrated the important role of SMM in word-of-mouth advertising [26-28]. The following hypotheses are therefore proposed as a result:

H_4: SMM has a positive impact on word-of-mouth advertising.

H_7: Word-of-mouth advertising has a positive impact on individuals' intentions to use digital services offered by educational institutions.

H_{10}: Word-of-mouth advertising mediates the effect of SMM on individuals' intentions to use digital services offered by educational institutions.

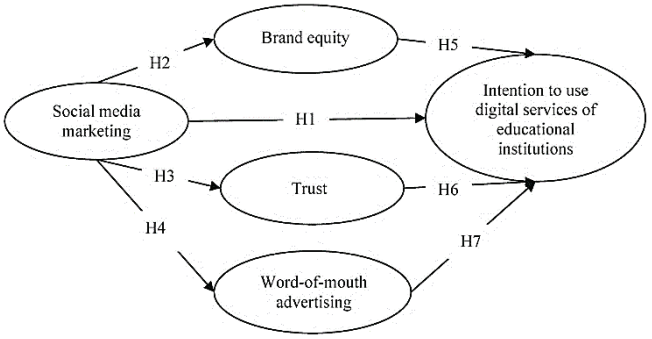

Figure 1 The conceptual model

There is a growing body of evidence in the theoretical literature that emphasizes the importance of SMM in the areas of brand equity, trust, word-of-mouth advertising, and intention to use services. Yet, few studies have developed a model for the effect of SMM on individuals' intentions to use digital services offered by educational institutions that stresses the role of brand equity, trust, and word-of-mouth advertising in mediating the effect of SMM on individuals' intentions to use digital services. Therefore, the main objective of this study is to show how SMM contributes to individuals' intentions to use digital services. This study uses brand equity, trust, and word-of-mouth advertising in educational institutions as a means of meditating the impact of SMM on individuals' intentions to use digital services. An overview of the conceptual model for the study can be found in Fig. 1 that has been developed based on the theoretical

literature and framework that have been derived from the literature.

3 METHODOLOGY AND RESEARCH METHODS

In this research, structural equation modeling (SEM) with partial least squares (PLS) is chosen to investigate the relationships between variables through structural equations.

3.1 Population and Sample

The methodology employed in this study involved selecting a population of Iranian students as the target group. A simple random sampling technique was utilized to choose participants who were available and willing to take part in the research. In order to ensure a representative sample, 450 questionnaires were distributed among students in various educational institutions, out of which 368 questionnaires were returned. Using Cochran's formula for determining sample size, we were able to determine the sample size in the present study based on previous research studies, which indicated that a sample size of 450 would be adequate to represent students who were utilizing digital services from educational institutions.

3.2 Instruments

It was determined that SMM measures could be measured by using a questionnaire that was developed by Seo and Park [31]. As part of the questionnaire, 11 items were included, which assessed entertainment, interaction, trendiness, customization, and perceived risk. The entertainment items were divided into two categories, and interaction was broken down into three categories. In order to determine the brand equity of a brand, Seo and Park [31] developed a questionnaire which consisted of 6 items, of which three items assessed the brand's awareness of the brand and three items assessed the brand's image. In order to measure trust, Shankar et al. [25] developed a questionnaire containing six items that was administered to all participants in the study. Besides this, a questionnaire developed by Kim and Ko [32] was used to measure word-of-mouth advertising, which included three items in the survey. There was a five-point Likert scale used to rate all of the items on a scale of 1 to 5, with 1 being completely disagreed and 5 being completely agreed with.

4 RESULTS

4.1 Testing of Measurement Model

Cronbach's alpha coefficient and composite reliability were used in order to assess the reliability of the measurement model, while factor loadings, average variance extracted and the Fornell-Larker test were used in order to assess the validity of the measurement model. The composite reliability index, proposed by AmirKhani and Borhani [33], was found to be more effective than Cronbach's alpha, as it does not assume that the observable variables of each measurement model have the same weights. Instead, composite reliability uses the factor loadings of the items when calculating, resulting in more accurate and better Cronbach's alpha ratios. The composite reliability index for the internal consistency of the measurement model was evaluated according to a criterion of 0.7 or higher. The confirmation factor analysis shows that the construct is well-defined when the factor loading of each item is 0.6 or higher in the confirmatory factor analysis [34, 35]. The factor loadings for the items of the variables in Table 1 were all above 0.6, confirming the coefficients of the factor loadings. If the factor loadings between the construct and its indicators are less than 0.6, those indicators should be modified or removed from the model. According to [36], whether or not the construct explains about 50% or more of the variance in its markers was tested by analyzing the average variance extracted (AVE). With an AVE value of 0.5 or higher, the construct is considered to be convergent, as it can explain about half or more of the variance [37]. A more detailed analysis of the design and reliability of the constructs can be found in Tab. 1, which demonstrates that the factor loadings, composite reliability, and AVE of the variables are adequate and appropriate.

Table 1 Factor loadings, composite reliability and AVE of variables

Variable	Item	Factor loading	Alpha	CR	AVE
Entertainment	1	0.852	0.69	0.832	0.711
	2	0.833			
Interaction	1	0.860	0.809	0.887	0.723
	2	0.843			
	3	0.847			
Trendiness	1	0.922	0.840	0.926	0.862
	2	0.935			
Customization	1	0.841	0.704	0.834	0.715
	2	0.817			
Perceived risk	1	0.875	0.698	0.869	0.768
	2	0.877			
Brand awareness	1	0.842	0.750	0.857	0.667
	2	0.820			
	3	0.787			
Brand image	1	0.726	0.681	0.825	0.612
	2	0.811			
	3	0.807			
Brand trust	1	0.862	0.908	0.929	0.688
	2	0.812			
	3	0.901			
	4	0.791			
	5	0.733			
	6	0.865			
Word of mouth	1	0.867	0.780	0.870	0.691
	2	0.797			
	3	0.829			
Intention to use digital services of educational institutions	1	0.728	0.869	0.90	0.601
	2	0.735			
	3	0.763			
	4	0.805			
	5	0.800			
	6	0.815			

We used the Fornell-Larker index as an indicator of discriminant validity in order to assess the constructs used in this study. The AVE of a construct must have a square root greater than the correlation between that construct and other constructs in order to meet the requirements for this index.

There is a higher correlation between the construct and its indicators in this case, highlighting the fact that it is more highly correlated with the construct than with other constructs. It is for this reason that Tab. 2 presents the results that relate to correlation and square root of the AVE, which is the second validity criterion, as well as their correlation. The correlation matrix also includes values below the diagonal to assess the relationships between variables, revealing that all variables have a positive and significant correlation coefficient.

Table 2 Correlation and square root of AVE of variables

Variable	SMM	Brand equity	Trust	Word of mouth	Usage intention
SMM	0.76				
Brand equity	0.68**	0.88			
Trust	0.63***	0.57**	0.83		
Word of mouth	0.41**	0.34**	0.42**	0.83	
Usage intention	0.60**	0.59**	0.59**	0.46**	0.77

*$p < 0.05$; **$p < 0.01$

4.2 Structural Model Testing

To forecast the intention to use digital services offered by educational institutions, a SEM based PLS approach was used to evaluate the proposed conceptual model. With the bootstrap method, 500 sub-samples were used to calculate the t-values for the path coefficients in order to determine the significance of the coefficients. The relationship between the variables can be illustrated in Fig. 2 by the model that has been tested. In accordance with the figure below, SMM has a significant and positive impact on brand equity, trust, word-of-mouth advertising, as well as on intention for students to make use of a digital service that is provided by educational institutions. Additionally, a positive and significant association is also found between brand equity, trust, and word-of-mouth advertising and the intention of students to use the digital services of educational institutions in the future. It is worth noting that the numbers inside the circles represent the variance that has been explained by the variables.

Table 3 Path coefficients and explained variance

Variable	β	t-value	p-value	Explained variance
on intention to use digital services of educational institutions via:				
SMM	0.195**	3.712	0.001	0.541
Brand equity	0.264**	5.545	0.001	
Brand trust	0.252**	4.513	0.001	
Word of mouth advertising	0.204**	4.641	0.001	
On brand equity via:				
SMM	0.697**	21.634	0.001	0.486
On brand trust via:				
SMM	0.64**	18.380	0.001	0.410
On word-of-mouth advertising via:				
SMM	0.42**	8.061	0.001	0.177

*$p < 0.05$; **$p < 0.01$

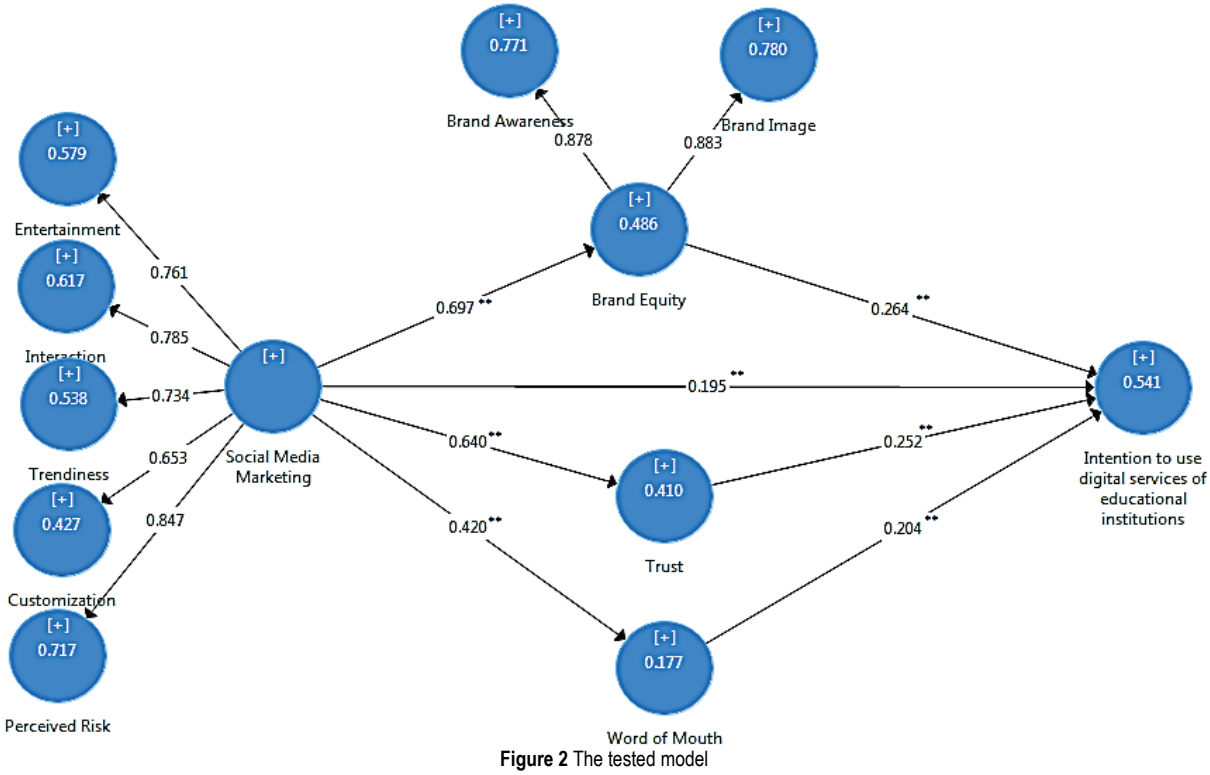

Figure 2 The tested model

The results of Tab. 3 suggest that SMM effectively improves brand equity, trust, word-of-mouth advertising, and the intention to use the digital services of educational institutions, as well as a positive and significant effect on the use of SMM. Moreover, the intention to use digital services of educational institutions being positively influenced by

brand, trust, and word-of-mouth advertising can also be observed to have a significant and positive impact on the intention to use digital services. There has been a substantial increase in the use of digital services by educational institutions, with 54% of the variance explained by models variables, 49% by those related to brand equity, 41% by those related to brand trust, and 18% by those related to word-of-mouth advertising. There are two types of indirect coefficients presented in Tab. 4.

Table 4 Indirect coefficients

Indirect paths	Indirect effects	*t*-value	*p*-value
SMM → Brand Equity → Intention to use digital services of educational institutions	0.184	5.260	0.000
SMM → Trust → Intention to use digital services of educational institutions	0.161	4.346	0.000
SMM → Word of Mouth → Intention to use digital services of educational institutions	0.086	3.937	0.000

As shown in the Tab. 4, the extent to which SMM has a positive effect on the intention of students in educational institutions to use digital services is mediated by brand equity, brand trust, and word-of-mouth marketing, all of which play an important role in mediating the positive effect. There are several factors that play a significant role in the decision to choose digital services in educational establishments, but brand equity, brand trust, and word-of-mouth advertising play a crucial role. In this study, the GOF index value of 0.60 suggests that the tested model has an adequate fit. Generally, values greater than 0.36 are considered acceptable and indicative of a good quality model.

5 DISCUSSION

In this study, it was examined what effect SMM had on the inclination to use digital services provided by educational institutions in terms of their inclination to use social media. Furthermore, it was investigated whether SEM could be used as a means of evaluating brand equity, trust, and word-of-mouth advertising in order to help to find the mediating effects of these factors. Based on the findings of the study, the proposed model was found to be a reasonably good fit to the data and could explain 54% of the variation in the intention of using digital services of educational institutions, 49% of the variation in brand equity, 41% of the variation in brand trust, and 18% of the variation in word-of-mouth advertising for educational institutions.

There was a significant and positive impact of SMM on the brand equity of the educational institution, trust, word-of-mouth advertising, and intention of using the digital services of the institution. This suggests that SMM can enhance brand equity, trust, word-of-mouth advertising, and the intention to use digital services of educational institutions. It is worth noting that this finding is in line with previous findings by Hanaysha [8], Garanti and Kissi [16], Zollo et al. [17], Darvishinia [27]. Therefore, the use of social media can increase brand equity, trust, word-of-mouth advertising, and the intention to use digital services of educational institutions if the social media usage is engaging for users, the content of social media is interesting, social media enables information sharing and exchange of opinions, users can easily express their opinions. The content of social media is frequently updated, social media allows users to customize their experience, social media allows users to share information about brands, products, and services with their friends, as well as they can share the content of institutional social media on their websites and blogs. As a result, the communication of people, groups, and products, as well as the sharing of information through social media and information sharing, has the potential to lead to brand equity, trust, word-of-mouth advertising, and an increase in the willingness to use educational institutions' digital offerings. The use of social media by educational institutions as a means of sharing information and knowledge transfer about their products and services, exchanging and transmitting information using social media, and enabling information searching through social media will therefore increase the likelihood that users of educational institutions' digital services will take advantage of their services in the future [39].

According to this model, the brand equity of educational institutions also influences positively the intention of students to take advantage of digital services provided by them. This implies that an increase in brand equity can lead to a higher intention to use digital services of educational institutions. This finding is consistent with previous studies conducted by Majeed et al. [38]. Therefore, if users of digital services of educational institutions are constantly aware of the institution, associate its characteristics quickly in their minds, remember its symbols or logo, perceive it as an experienced and customer-oriented institution, their behavior can be influenced, leading to a higher tendency to use digital services of educational institutions.

In addition, the model showed that brand trust has a significant influence on the likelihood that students will use the digital services offered by educational institutions in the future. This suggests that an increase in brand trust can lead to a higher intention to use digital services of educational institutions. There is significant agreement between the findings of this study and those of previous studies conducted by Kim et al. [23], Hanaysha [8], Ha and Nguyen [24]. Therefore, if the educational institution fulfills its obligations towards users of digital services, meets their expectations, considers their interests, and is perceived as fair and honest, users of digital services of the institution will trust its credibility, leading to a higher intention to use its digital services.

Because of the analysis, it has been found that word-of-mouth advertising significantly affects the intention of students to use digital services of educational institutions in a positive and significant manner. Consequently, it seems that an increase in word-of-mouth advertising may be associated with an increase in the intention to use digital

services offered by educational institutions. Therefore, if most users of digital services of the educational institution report positive recommendations for using its services, customers have mostly positive experiences, and users express and share their views about the institution on websites and social networks, the intention to use digital services of the educational institution will increase.

6 MANAGERIAL REMARKS

As an educational institution, it is recommended to take advantage of social media platforms as a potent tool for utilizing the power of SMM. This can be done by sharing information about your services and products, facilitating information exchange and transmission, keeping customers informed with up-to-date information about your services and products, introducing your services and products through social media, and enabling customers to search for information about your services and products on social media.

To capitalize on the role of brand equity, educational institutions are recommended to view brand equity as a crucial tool when it comes to reach out to new customers and retain existing ones. Brand equity fosters a positive attitude and a general positive effect, leading to an increase in the intention to use digital services of educational institutions. As brand equity is the foundation of product differentiation and brand recognition, it offers a convincing incentive to buy and generates favorable emotions towards the brand, thereby aiding in the process of intending to use the service.

To leverage the role of trust, educational institutions are advised to build customer trust by providing high-quality services that meet customer expectations, demonstrating commitment and humility in their interactions with customers, paying close attention to customer needs, responding promptly to customer inquiries and concerns, and guaranteeing their services.

To capitalize on the power of word-of-mouth advertising, educational institutions are recommended to provide high-quality services and encourage customers to share positive online recommendations for using their digital services. They should strive to generate mostly positive experiences, enabling customers to provide positive online recommendations for purchasing digital services from the institution.

7 CONCLUSION

The study concluded that the use of SMM, brand equity, word-of-mouth advertising, and brand trust are factors that are significantly associated with the intention of an educational institution to use digital services. The relationship between SMM and the intention to use digital services in educational institutions can also be enhanced by brand equity and brand trust, as well as word-of-mouth advertising, which may play a positive and significant mediating role. This suggests that SMM can increase the intention to use digital services in educational institutions through the enhancement of brand equity, word-of-mouth advertising, and brand trust. As a result, social media interactions between users of educational digital services and educational institutions facilitate the exchange of information and values, which can influence the intention to use digital services in educational institutions. Additionally, factors such as awareness of digital services and products, interesting content, information sharing, exchanging opinions, trendiness of information, and customized information search can also impact the intention to use digital services in educational institutions. Therefore, effective communication and information sharing between users of educational digital services and educational institutions through social media can foster confidence, attachment, and enthusiasm towards the institution, ultimately leading to a greater willingness to use digital services in educational institutions. The study's generalizability is limited as it only involved a sample of Iranian students. Additionally, the findings rely on self-reported data. To further explore the effects of SMM in educational institutions, future studies could consider using mixed research methods that incorporate qualitative data such as Ghorashi et al. [40] or Fusion Models [41]. It is important to note that the current study is correlational in nature, and therefore, causal inferences cannot be made.

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