Article

Assessing Digital Transformation Acceptance in Public Organizations' Marketing

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Abstract: Digital transformation has a substantial impact on the activities of public organizations. The way public organizations conduct marketing has also changed due to digital transformation. This paper evaluates how digital transformation influences public organizations' marketing activities in their employees' perception and examines the changes triggered by digital technology in public marketing. The research results are based on the literature review empirical studies based on a survey conducted among 425 employees of public organizations in Romania in the marketing field. Using the technology acceptance model and structural equation modeling to analyze and interpret the data, the paper demonstrates that digital technologies have a substantial impact on marketing, in the perception of technology users, in helping to build relationships with the public, and in increasing citizens' trust in public organizations. Digital technologies, by their significant characteristics (innovativeness, social influence, accessibility, and rapidity), have a significant impact on all public marketing activities. However, they are substantially transforming quantitative marketing research activities due to the digitization of financial accounting and managerial information systems, as well as interactive and transparent communication and public relations activities. Public organization managers must explain the benefits of digital marketing to employees from the internal branding perspective as well as the effectiveness of public marketing activities.

Keywords: marketing; digital transformation; public marketing; digital technologies; public sector organizations

1. Introduction

Digital transformation manifests through integrating digital technologies in all of the activities of a public organization, ensuring its sustainability. Public organizations must face the challenge of digital transformation and use various advanced marketing tools [1]. Digital marketing represents a way in which marketing goals are pursued and achieved through digital technologies and media [2,3]. Through digital transformation, not only is the activity carried out through traditional tools up to now made more efficient, but the existing processes are redefined. For example, technological progress modifies the organizational environment, changing how marketing is done [4]. In addition, digital transformation has generated changes in consumer behavior, generating new ways to attract and retain customers [5].

Digital marketing is the process, supported by technological innovations, through which a public organization collaborates with the users of public services to create, communicate and provide added value [6] for all stakeholders involved in the public service provision. Digital marketing uses information technologies such as Big Data (BD) and artificial intelligence (AI) to collect and process data related to public services, users of public services, and uses communication technologies such as mobile communications (MC) and social media (SM) to communicate with customers and respond to their needs [7–9].

Digital transformation in public organizations is incipient in Romania [10]. Social media and mobile communications stand out among the digital transformation tools used

in marketing in Romania. Public communication has adapted more quickly to the digital age than marketing research, which involves more significant investment in IT solutions, including Big Data and artificial intelligence. Nevertheless, public organization managers in Romania are aware of the need to implement digital marketing. Public digital marketing drives an increase in the level of involvement of citizens in the activities of the public organization by participating in community decisions [11].

Digital marketing offers new tools to determine the users' needs for public services and to develop and improve the public communication of public sector organizations. Digital technologies are a vector of change that helps minimize the adverse effects of bureaucracy, increase transparency, and have much greater interactivity with citizens. The main objective of this paper is to evaluate the impact of digital technologies on public marketing in the perception of marketing professionals. A wealth of papers address digital transformation and its impact on the organization's ecosystem, specifically marketing [1–3,6,7,12]. However, research on the acceptance of digital technologies in public marketing is relatively poor, which constitutes a gap in the digital public marketing literature. This paper addresses this research gap concerning the acceptance of digital technologies by the marketing professionals of public sector organizations. The research question arising from this gap is the following: what is the degree of acceptance of digital technologies in the marketing of public organizations by marketing professionals? The investigation proposes two objectives to answer the research question: to identify the characteristics of digital technologies that influence their usefulness, and to easily use and evaluate the influences on current and future behavioral intention.

The paper evaluates the perception of employees of public organizations in Romania concerning the acceptance of digital public marketing tools. The perception of employees of public organizations in Romania who work in the field of marketing, are assessed using the technology acceptance model (TAM) developed by Davis [13] and modified and adapted later in several other studies [14–17]. The paper presents a structure in six sections. The first section introduces the research topic, while the second section provides a literature review on the characteristics of public sector marketing and the digital transformation of public marketing. The third section outlines the research methodology, and the following sections present the study's results, discussion, and conclusions.

2. Literature Review

2.1. Marketing in the Public Sector

Globalization, increasing competition, the digitization of activities, and interest in business ethics and social responsibility shifted focus from profit maximization to sustainability and social well-being. In this way, the marketing concept has expanded beyond traditional marketing related to commercial activities [18], acquiring social values, and is also used by the public sector to address needs and social requirements [19,20].

Public sector marketing does not only refer to the adaptation of traditional commercial marketing strategies to build a positive image and reputation of the public organization, but requires a series of tools specific to the public sector. Unfortunately, despite much research in public marketing [21–34], there are many gaps in public marketing research. One of these gaps is the effect of implementing digital technologies in financial accounting and managerial information systems that fundamentally transformed public marketing processes.

Public marketing contains a set of processes to build public services, communicate about them, and deliver the services to the users [35]. Finally, the objective of public marketing is the interest and well-being of society, which distinguishes it from traditional marketing in the private sector, where the ultimate objective is profit maximization through satisfying customer needs and obtaining their loyalty [24,26]. The vital element, however, remains the consumer or user of public services, consumerism being the vector that caused changes in public services, causing the transition from public administration to the new public management [36]. Therefore, public marketing developments have extended

far beyond social welfare, legal regulations, public health assurance, political communication, and equality and opportunities in education [37–50], and have penetrated the area of public organization marketing, given trends towards the digitization of public marketing [24,26,34,35,51–55].

2.2. Digital Transformation of Marketing in the Public Sector

Digital transformation involves using digital technologies by public organizations to radically improve the quality of public services and to create value for citizens [56], while ensuring organizational sustainability. For digital transformation in the public sector to be successful, in addition to IT infrastructure and process adaptation, a change in organizational culture is also necessary. The digital marketing of organizations is a scientific tool used for planning, organizing, coordinating, managing, and controlling the activities involved in developing services that satisfy the public interest [10]. Through the digitization of public marketing, the ability to adapt to the needs of users of public services via innovation, transparency, and flexibility is increased, ensuring a unified vision of the public organization's activities.

Starting with the technology diffusion model of Cooper and Zmud [57] as a theoretical foundation, Kim et al. [58] showed that digital technology implementation within organizational processes requires not only the integration of digital resources in the primary activities but also the obtaining of the trust and commitment of workers for the adoption of digital technologies.

Digital technologies are transforming all activities of individuals and organizations, leading to the emergence of digital transformation. Digital technologies affect essential processes within organizations, such as generation, collection, exchange, combination, integration, analysis, interpretation, and access to data, which is essential for developing public services [59]. As individuals and private companies increasingly use digital technologies, there is an increasingly substantial demand for public organizations to adapt to the digital environment, implementing emerging technologies and aiming to innovate public governance [58,60,61]. Digital transformation will enhance public organizations' activities through the innovativeness of the technologies used to communicate with the public. Furthermore, digital transformation allows the adaptation to the needs of public service users, allowing public organizations to exercise their social influence while ensuring organizational sustainability [62,63].

Based on the previous research results, the following hypothesis was formulated:

Hypothesis H1: *Innovativeness and social influence significantly influence the perceived usefulness of digital technologies by marketers of public sector organizations.*

The digital transformation of processes within public organizations does not only involve the implementation and use of digital technologies to improve organizational efficiency and communication. New institutional frameworks are needed, as well as an acceptance by the employees of public organizations of the changing nature of work and interaction patterns. In addition, digital transformation involves using digital technologies strategically in order to create public value [57,59,60].

The increased accessibility of data and the speed of its collection and processing have had substantial effects on marketing. Kannan [6] defines digital marketing as a marketing process that uses digital tools (such as AI, BD, MC, and SM) to meet consumer needs expressed within a marketplace, including areas such as social media marketing, mobile commerce, e-commerce, and the collection and management of customer databases [7].

AI uses comparative methods, parametric models, or analytical models to estimate costs and interpret customer behaviors in marketing. In addition, AI can use structural equation modeling, neural network analysis, or the fuzzy analytic hierarchy process to determine behavioral intentions, resulting in better decisions and increasing efficiency [64–69]. BD represents the material for AI technologies, enhancing accounting information systems,

generating higher quality data, and savings costs. Organizations can use these technologies separately, but the synergistic effects are solid, leading to better marketing analytics [3]. Social media marketing is a tool for public organizations to reach public service users using platforms such as Facebook, Instagram, and LinkedIn [1,3]. Mobile communications allow public institutions to approach public service users through mobile devices [6,7]. The increased volume of data (BD) obtained through the digitization of financial accounting and managerial information systems allows for the customization of marketing strategies. AI solutions facilitate a better prediction of the response of customers to the promotion and communication policies [64,67–70]. Furthermore, the data collected through digital technologies contribute to evaluating the organization's potential performance. The large volume of digital data allows for obtaining information on the customers' needs that can be satisfied by the organization, obtaining information on the effects of various marketing, promotion and communication activities, and facilitating the analysis of the costs of marketing and retention operations [6]. A successful marketing campaign must be holistically developed, analyzing all the data provided by the financial accounting and managerial information systems to succeed in building strategies that complement each other [71].

To adapt the strategies to the objectives of the public organization, two main strategies of marketing can be used: inbound marketing and outbound marketing, which differ in terms of approach, types of costs, time to obtain results, and duration of the marketing process [72]. Outbound marketing represents a strategy by which a public organization advertises its public services offered [73]. On the other hand, inbound marketing is a strategy that focuses on attracting and satisfying the needs of public service users. The more organic the public communication of a public organization is, the higher will be the responsiveness of public service users and their degree of satisfaction [5,74].

Marketing analysis and more effective communication of public organizations with users of public services can be improved by implementing digital technologies such as BD, AI, MC, and SM [75,76]. These technologies have thus become essential for public marketing professionals due to the opportunities new technologies offer in collecting and processing data and obtaining strategic information for public organizations. Therefore, new technologies facilitate improving the experience of public service users through an optimal marketing mix and the preferences of public service users [9,77].

Marketing research using digital technologies such as BD and AI improves the organization's financial accounting and managerial information systems, facilitating the collection of essential data and their transformation into information that ultimately leads to increased customer satisfaction [78]. In addition to increasing users' satisfaction with public services, digital technologies also bring enjoyment to public marketers, making their work easier.

Based on the results of previous research, the following hypothesis was formulated:

Hypothesis H2: *Accessibility and speed significantly influence the perceived easy-to-use of digital technologies by marketers of public sector organizations.*

Digital technologies such as AI, BD, MC, and SM offer revolutionary opportunities to manage customer relations, promote and advertise policy, and build a more effective communication strategy with target customers while ensuring organizational sustainability [9,75–77]. Digital technologies represent an opportunity for marketing professionals to obtain and manage strategic information for their organizations. Better management of information within the financial accounting and managerial information system allows marketing professionals to improve the consumer experience through a more efficient development of the marketing proposal and the management of customer preferences [78].

3. Research Methodology

Digital transformation represents a holistic process requiring a new organizational culture centered on transparency, interactivity, and sharing.

Digital transformation relies on innovation in designing public marketing strategies to engage with new generations of customers, especially millennials and those generations that will follow. This study aims to evaluate the impact of implementing digital technologies (AI, BD, MC, and SM) on public sector organizations' perception of marketing professionals to understand how their use influences public marketing. Figure 1 shows the phases of the research.
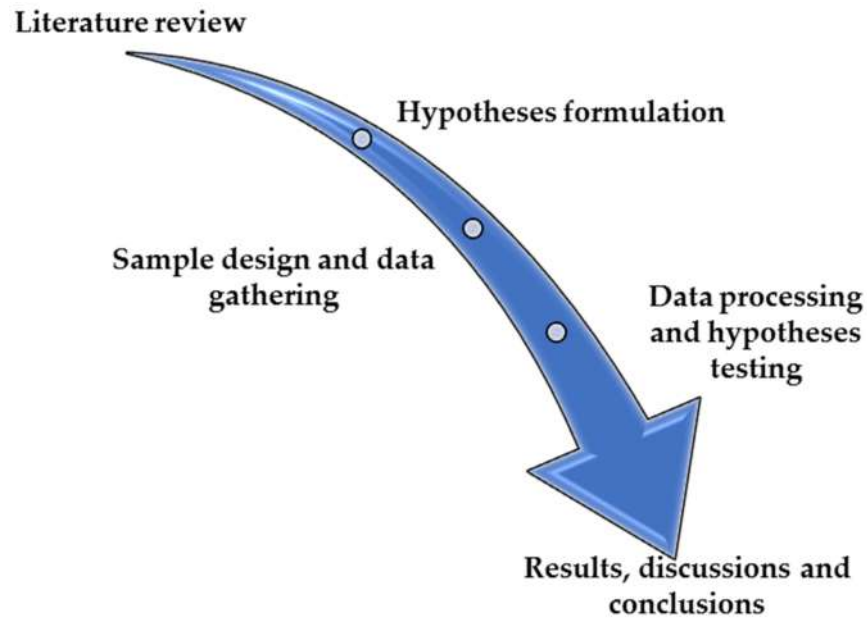
Figure 1. Research process phases. Source: author's design.

To analyze the perception of employees of public organizations in Romania concerning adapting public marketing tools and methods to the paradigm of digital transformation, we used a structured questionnaire to which the surveyed respondents provided answers voluntarily and anonymously, contributing to the process of combatting common biases. The questionnaire includes general questions regarding perceptions of the new technologies and does not include data that requires an institutional review board and informed consent. For the questionnaire items, we used the Likert scale with five levels (Table 1). The 5-point Likert scale offers a wide range of response options to fine-tune the evaluation. This scale was also used by other authors [20].

Table 1. Questionnaire structure.

Variables	Items	Scales
Demographic variables	Gender	Male (1), Female (2)
	Age	18–30 years (1), 31–45 years (2), 46–65 years (3)
PU	Innovativeness Social influence Trust Informativeness	1 to 5 (1—non-important, 5—most important)
PEU	Customization Accessibility Speed Enjoyment	
Behavioral intention	Attitude toward using Intention to use	1 to 5 (1—not at all excited, 5—very excited) 1 to 5 (1—the smallest, 5—the biggest)

Table 1. *Cont.*

Variables	Items	Scales
Actual use	Extent of use	1 to 5 (1—minimal, 5—maximal extent)
Users' satisfaction	Meeting expectation	1 to 5 (1—very little, 5—very much)
	Positive experience	1 to 5 (1—unsatisfactory, 5—excellent)

Source: author's construction based on [10–14,75–79].

The Technology Acceptance Model (TAM) is a frequently used model for assessing users' intentions to accept the new technologies' implementation and the actual use of technologies in their activities [17]. Davis's TAM model [13] is based on rational action theory [79] and planned behavior theory [80]. The TAM model designed by Davis [13] and subsequently modified and adapted in various other research [14–17] involves the assessment of perception on two primary variables: perceived usefulness and ease of use (PU and PEU). These two variables have as antecedents in our study characteristics of digital technologies, as perceived by the marketers of public organizations in Romania. PU includes, as its antecedent variables, innovativeness, social influence, trust, and informativeness, while PEU has customization, accessibility, speed, and enjoyment as its antecedent variables, selected based on other research [13–17]. According to the TAM model [13–17], the two primary variables (PU and PEU) exert a positive influence on behavioral intention (BI), which influences actual use (AU). BI has intention to use and attitude toward use as its antecedent variables, while AU has the extent of use as an antecedent variable. Based on the previous research results, the following hypothesis was formulated:

Hypothesis H3: *PU and PEU significantly positively influence BI directly and AU indirectly in the perception of public sector organization marketers.*

In the framework of the TAM model applied in the digitization of public marketing, we introduced the satisfaction of digital technology users (marketing professionals of public sector organizations) as a primary variable to ensure the understanding of future behavioral intentions, similar to other research in the field of electronic commerce [81–85]. User satisfaction (US) influences both the current and future use of digital technologies by marketers in public sector organizations. Based on the results of previous research, the following hypothesis was formulated:

Hypothesis H4: *US significantly positively influences BI and AU in the perception of public sector organization marketers.*

Figure 2 shows the research model.

This survey was carried out between May and July 2022 in Romania. The studied population is represented by public organization employees from the Southwest Oltenia region in Romania who have marketing and public communications responsibilities. The study used the stratified random sampling method. The layers' setting depended on two demographic criteria: gender and age. Among the total respondents, 53.4% were male and 46.6% were female. The structure according to age is as follows: 26.6% of respondents were in the 18–30 years-of-age category, 43.5% were in the 31–45 years-of-age category, and 39.9% of respondents were between 46 and 65 years.

The sample has a level of confidence of 95%, with the margin of error being 4.67%. Four hundred twenty-five responses were received out of four hundred thirty-eight returned questionnaires. Table 2 presents the descriptive statistics.
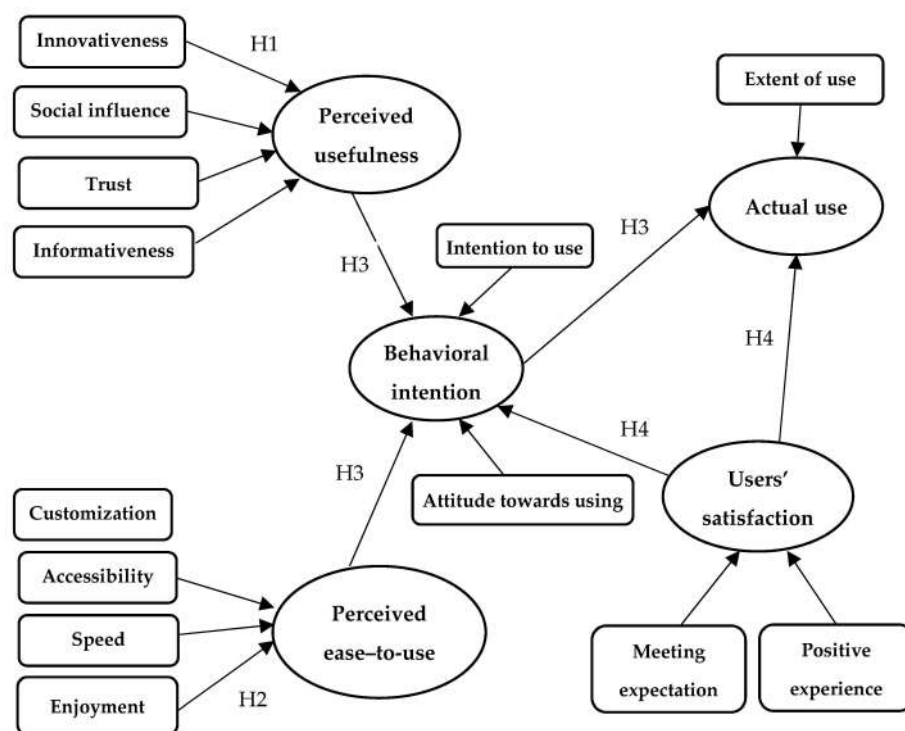
Figure 2. Conceptual model. Source: author's design based on [10–14,75–79].

Table 2. Descriptive statistics.

	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Gender	1	2	1.47	0.499	0.137	−1.991
Age	1	3	2.03	0.752	−0.054	−1.225
Innovativeness	2	5	3.83	0.999	−0.387	−0.933
Social influence	2	5	4.02	0.958	−0.609	−0.669
Trust	1	5	3.81	0.945	−0.525	−0.422
Informativeness	2	5	3.72	0.974	−0.126	−1.041
Customization	1	5	3.99	0.866	−0.595	−0.062
Accessibility	2	5	3.95	0.854	−0.458	−0.449
Speed	1	5	3.71	0.882	−0.099	−0.583
Enjoyment	2	5	3.87	0.836	−0.380	−0.404
Attitude towards using	1	5	3.54	0.968	−0.092	−0.827
Intention to use	1	5	3.82	0.879	−0.485	−0.183
Extent of use	1	5	3.27	1.327	−0.187	−1.120
Meeting expectation	1	5	3.86	0.950	−0.432	−0.604
Positive experience						

Source: author's design using SPSS v.20.

To test all hypotheses, we used structural equation modeling, which allows the evaluation of the relationships that are established among the latent (endogenous) variables of the model, and variables determined based on the exogenous variables (questionnaire items) of the model [86]. The TAM model can be optimally tested empirically using structural equation modeling [16,17].

4. Results

The conceptual model was tested using SmartPLS v3.0 software (SmartPLS GmbH, Oststeinbek, Germany), which allows for the use of structural equation modeling (partial least squares variant). Figure 3 shows the relationships established between the variables and the dependencies among them.
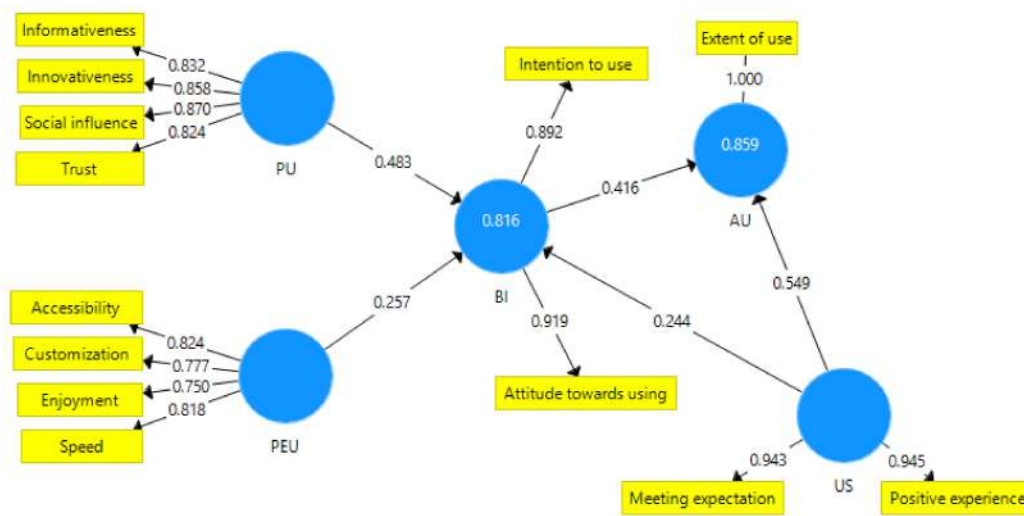
Figure 3. Applied model. Source: author's design using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

Hypotheses H1 and H2 concern the antecedents of PU and PEU. Analyzing the outer loading and outer weights of PU and PEU, hypotheses H1 and H2 are confirmed as valid. Among the PU antecedents, the most important are social influence and innovativeness; among the PEU antecedents, the most important are accessibility and speed (Table 3).

Table 3. Outer loading and weights of exogenous variables.

PEU	Outer Loading	Outer Weights	PU	Outer Loading	Outer Weights
Accessibility	0.824	0.331	Informativeness	0.832	0.272
Customization	0.777	0.289	Innovativeness	0.858	0.295
Enjoyment	0.750	0.309	Social influence	0.870	0.327
Speed	0.818	0.334	Trust	0.824	0.290

Source: author's design using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

The validity and reliability of the TAM model applied to the digitization of public marketing are excellent (Table 4), with all indicators having relevant values for the model: Cronbach's Alpha (above 0.7), Composite Reliability (above 0.8), Average Variance Extracted (above 0.6), according to [86].

Table 4. Model reliability and validity.

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
BI	0.781	0.901	0.820
PEU	0.803	0.871	0.629
PU	0.868	0.910	0.716
US	0.878	0.942	0.891

Source: author's design using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

The indicators of the model fit are significant [86]. SRMR was recorded as 0.073 and NFI was recorded as 0.903. The path coefficients obtained following the bootstrapping procedure (with 500 subsamples and a significance level of 0.05), along with T statistics and P values, show significant positive influences of PEU and PU on BI (Table 5). As King and He [16] have shown, perceived usefulness is the most important predictor of behavioral intention.

Table 5. Paths coefficients.

	Coefficients Paths	T Statistics	*p* Values
BI → AU (H3)	0.416	7.592	0.000
PEU → BI (H3)	0.257	7.437	0.000
PU → BI (H3)	0.483	11.452	0.000
US → AU (H4)	0.549	9.924	0.000
US → BE (H4)	0.244	5.041	0.000

Source: author's design using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

The relationships illustrated in Table 5 confirm the validity of hypothesis H3 concerning the direct influence of PU and PEU on BI in implementing digital technologies in public marketing.

The data in Table 6 confirm the validity of the second part of hypothesis H3 concerning the indirect influence of PU and PEU on AU through BI. Analyzing Table 6, significant indirect relationships can be observed between PU and PEU, on the one hand, and AU on the other. The perceived usefulness and ease of use of digital technologies mean that marketing professionals of public sector organizations are likely to have a favorable attitude towards new technologies and to use them in their work.

Table 6. Specific indirect effects.

	Coefficients	T Statistics	*p* Values
PEU → BI → AU (H3)	0.107	4.491	0.000
PU → BI → AU (H3)	0.201	5.601	0.000
US → BI → AU (H4)	0.102	5.804	0.000

Source: author's design using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

The research with regard to hypothesis H4 led to its confirmation as valid. Furthermore, the satisfaction generated by using digital technologies in public marketing leads marketers to use these technologies (Table 5) and influences future behavioral intentions regarding using new technologies (Table 6), ensuring a vicious circle of digital technology use.

5. Discussion

Emerging technologies, such as BD and AI, can be used in data collection, sharing, processing and interpretation, repetitive decision-making, and public communication of public sector organizations, minimizing the negative phenomenon of bureaucracy [87]. Implementing digital technologies in organizations within a community of users to increase organizational efficiency has been an important research topic since the emergence of digital technologies [57]. In the field of public governance, digital technologies are considered a potential driver for the efficiency of managerial processes by transforming the internal process of the activities to improve organizational effectiveness and communication with other entities (through e-government) [88].

Digital technologies are reshaping management and marketing strategies, representing a new challenge for ensuring organizational competitiveness [89]. Knowing customer needs, satisfying customer needs, and even inducing new needs requires a large volume of data, accessible communication systems, extensive data processing capabilities, and AI-based decision-making solutions [90]. Therefore, digital transformation allows companies to be more customer-centric and to satisfy their needs [91].

This paper addresses the main characteristics of the usefulness and ease of use of digital technologies in public marketing, showing that innovativeness, social influence, accessibility, and speed are the most significant characteristics (hypotheses H1 and H2), which lead public marketing professionals to adopt these technologies, which is in line with the findings of other studies [6,7,62,63]. In turn, the usefulness and ease of use of digital technologies in public marketing influence behavioral intention and, ultimately, the actual

use of technologies (hypothesis H3), as has been demonstrated in other fields by various authors [14–17,81–85]. Public marketing professionals' satisfaction recorded after using digital technologies in their activities influences current and future use, with behavioral intention as a moderator (hypothesis H4).

As organizations increasingly implement digital technologies, satisfying customer needs to greater degrees in the process, customers become accustomed to this high degree of satisfaction and redefine their expectations of the services offered [92]. As a result, organizations must collect as much data as possible to meet customers' growing needs, process and interpret it, and transform it into marketing strategies [9]. The shift from manual data collection and management to digitized processes has significantly reduced assessment and analysis time, increasing rapid decision-making capabilities that ultimately lead to maximizing revenue, minimizing costs, and optimizing the organization's growth [80]. In addition, the large amount of data collected and processed using BD and AI technologies allows organizations to optimize marketing strategies and better predict the response of public service users' preferences to marketing strategies [70].

Marketing uses the data and information offered by the organization's financial accounting and managerial information system. In addition, information systems and public marketing are evolving towards digital transformation, becoming an essential vector of the operational activities in the relationship with the users of public services while ensuring organizational sustainability.

IT solutions based on BD and AI make it possible to collect and analyze large amounts of data, resulting in better information for optimal decisions [93]. Digital technologies such as BD, AI, MC, and SM represent valuable tools for implementing targeted and creative marketing strategies [6].

Sharing marketing information through MC or SM platforms has substantial benefits, even if the shared content does not lead to prompt user action. Sharing attractive and interactive information with the organization's customers can significantly build brand awareness, creating a connection between the brand and the consumer [74].

However, adopting digital technologies must be based on a strategic plan to create a synergistic effect and increase the organization's added value. To this end, organizations must equip themselves with the best technology available on the market and develop strategies and practices that favor facilitating competitive advantages. Organizations must also mitigate potential data security and privacy issues while balancing their desire for innovation and advantage with consumer expectations and ethical norms [94].

6. Conclusions

Digital technology has changed public organizations, removing barriers between public organizations and beneficiaries of public services [12]. The public must receive quality services and interactive public relations in a constantly changing environment. Digital transformation as a result of the implementation of a multitude of tools that allow the collection, processing, transmission, analysis, and interpretation of data, as well as sophisticated ways of public communication and public relations, offer opportunities to optimize marketing activities that could not be undertaken with traditional tools. In addition to empathic characteristics, marketing acquires an analytical character through digitizing financial accounting and managerial information systems that collect and process large volumes of data. Digital marketing is an under-researched topic in public marketing, although more and more public organizations are implementing digital transformation tools [1–3,6,7,9,90,95]. Unlike other research, the paper aims to evaluate the perception of employees from public organizations with experience in the field of public marketing on the digital technologies used and their acceptance in marketing activities.

6.1. Theoretical Implications

Public marketing aims to satisfy the requirements of public service users; therefore, public communication and public relations are essential. Although an increase in the

relevance of digital marketing can be seen, it has not entirely replaced traditional marketing. Within public organizations, both types of marketing must coexist to ensure that user needs and requirements are met. The efficiency of public governance and marketing resides in the ability to combine digital and traditional tools [95–97].

The most used digital technologies in public marketing are BD, AI for marketing analysis, research, and processing collected data, and MC and SM to increase sharing, accessibility, and trust in the information provided. All of these technologies are used to create content marketing [4] adapted to the needs and requirements of public service users. Content marketing and the tools used to create and communicate content marketing to the public are essential for digitizing public organizations. Marketers from public organizations can use these technologies to improve their activity.

In the era of advances in information and communication technology, the promotion of the circular economy, and the need to ensure sustainability, including the relations of public organizations with the beneficiaries of public services, are evolving, with digital technologies affecting marketing, allowing for closer relations with the users of public services.

6.2. Practical Implications

Digital transformation has changed communication patterns with citizens providing information about public service to its users. Digital public marketing offers new opportunities for public governance, digital technologies influencing marketing and communication with citizens, and thereby producing paradigmatic changes in the relationship between the public organization and the citizens, who are the users of public services.

Research shows that digital technologies significantly impact all public marketing activities through their significant characteristics (innovation, social influence, accessibility, and speed). However, they are substantially transforming quantitative marketing research activities due to digitalized financial accounting and managerial information systems and communication and public relations activities. Recognizing the importance of digitizing financial accounting and managerial information systems is the key to achieving an open, transparent, and interactive relationship between the public organization and its beneficiaries. Public marketing professionals should accept the implementation of digital technologies to achieve a complete digital transformation. Studying behavioral intention and its influence and satisfaction on the effective use of digital technologies can provide essential data to public organizations which can be the basis of digitalization strategies for public marketing. A marketing system based on digital technologies has the public at its center, the relationship with it being significant to adapt public services to its needs and demands. For a close relationship between public sector organizations and the users of public services, an organizational culture oriented toward openness, transparency, and the full adoption of digital technologies in marketing research and public communication activities is also required.

Public marketing requires a social media strategy for internal and external branding, in addition to increasing the degree of engagement of public service users. Public organizations must first pay attention to SM because the most valued characteristics of digital technologies by public marketing professionals are social influence and accessibility. In addition, MC can be a valuable channel for digital public marketing ads that allow for interactivity. BD and AI contribute to the creation of effective content marketing, which allows customers of public organizations to learn about public services without the active intervention of the public organization. Linking content marketing with social media generates a behavioral intention to use and motivates the customer to interact with the content offered, meaning that they are more likely to share it, attracting new customers.

6.3. Limitations and Further Research

The research undertaken has the following limitations. First, the study presents a limitation concerning the limited generalization of the research results. Also, the cross-

sectional approach, although it provides complex data, does not provide a picture of the evolution of perceptions over time. However, this limitation can be overcome by future research that follows the evolution of perceptions of digital technology users in public marketing. In addition, future research may consider other antecedents of digital technologies' usefulness and ease of use in public marketing, extending the current research.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares that they have no conflict of interest.

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