The Role of Behavioral Capabilities in Enhancing Digital Maturity: A Survey Study in Educational Institutions

P-ISSN: 1680-9300
E-ISSN: 2790-2129
Vol. (26), No. (2)
pp. 83-98

[1] Omar T. Abdulruhamman, [2] Ali A. Alshaher
[1,2] Department of Management Information Systems, College of Administration and Economics, University of Mosul, Mosul, Iraq.

Abstract:

This study aims to analyze the role of behavioral capabilities in enhancing the orientations of educational institutions toward digital maturity. Digital transformation has become an inevitable necessity within a dynamic business environment characterized by complexity and competitiveness, which requires attention to human and behavioral dimensions alongside technology. The study adopted a descriptive-analytical approach based on relevant theoretical literature and applied studies, and conducted a field survey on a sample of leaders in educational institutions in the region undergoing digital transformation. A total of 250 questionnaires were distributed, and 201 were returned. AMOS.V.24 was used for statistical analysis. The findings showed that behavioral capabilities—such as flexibility and innovation—contribute directly to formulating and implementing effective digital strategies and increase the institution's ability to adapt to changes. The results also indicated that flexibility affects the digital strategy and digital infrastructure, and that innovation also contributes to strengthening the digital maturity strategy and the digital infrastructure required by educational institutions to enhance their digital maturity. This, in turn, increases responsiveness to modern technologies and reduces resistance to change. The study recommends developing training and developmental programs that focus on strengthening the behavioral capabilities of leaders and staff alike, as these capabilities represent a pivotal element for achieving digital maturity and ensuring the sustainability of the institution's competitive advantage.

Keywords: Behavioral Capabilities, Strategic Orientation, Digital Maturity, Educational Institutions, Digital Transformation.

1. Introduction

Education constitutes one of the main pillars of societal development and one of the most important foundations for building strategic partnerships between universities, governments, and the industrial sector, as such partnerships contribute to supporting institutional transformation and sustainable growth (Aldhi, etal, 2025, 2). Over the past few years, universities' orientation has not been limited to developing and updating information technology infrastructure; it has also been accompanied by enhancing the behavioral capabilities of faculty members and students, including adopting a culture of continuous learning, openness to innovation, and the ability to adapt to modern technologies, as core pillars of educational activities and scientific research (Hooghe, etal., 2025, 794).

In light of accelerating digital transformations and the dynamic business environment characterized by complexity and competitiveness, focusing solely on the technical aspect is no

Journal of Prospective Researches
Vol. (26), No. (2)
The paper was received on January 14, 2026; accepted on April 21, 2026; and published on April 29, 2026.
Corresponding author's e-mail: omar.abdulrahman@uoninevah.edu.iq

10.61704/pr.695

longer sufficient to ensure the success of digital transformation in educational institutions. Rather, attention to human and behavioral dimensions has become a strategic requirement to enhance institutional digital maturity (Wahdaniyah, etal., 2025, 631). Consequently, universities today face increasing pressures that push them to adopt clear orientations to enhance digital maturity, ensuring higher efficiency and effectiveness of the educational process and achieving its sustainability amid rapid technological changes (Aliy, etal., 2025, 111).

The literature indicates that successful digital transformation is associated with individuals' ability to adapt to new technologies and their possession of leadership behaviors that support change and innovation, such as flexibility, active participation, and risk acceptance (Chang, etal., 2025, 2). These capabilities acquire special importance in developing countries, given financial constraints and high technology costs, which requires aligning available resources with behavioral and leadership capabilities to enhance institutional digital maturity stages (Singun, 2025, 2).

The adoption of modern technologies by universities and educational organizations—such as cloud computing—reflects a rapidly growing orientation toward enhancing digital maturity, due to the tangible economic and developmental returns of these technologies in Arab and Western countries (Touijer & Elabjani, 2025, 2). Recent studies also indicate that Western countries integrate behavioral research findings into their implementation plans to ensure the alignment of technology with individuals' behaviors and interaction patterns, which is increasingly important given rising technology costs and disparities in allocated budgets among countries (Mughal, etal., 2025, 165). Researchers further emphasize that behavioral capabilities—such as embracing innovation, the ability for continuous learning, and flexibility in using technology—represent fundamental requirements for supporting digital transformation and achieving the objectives of educational institutions in contemporary society (Hu, X., & Suo, 2025, 71). Within the Iraqi context, applied artificial intelligence and natural language processing initiatives have demonstrated the practical value of digital analytics for institutional decision-making and capability development (Hussein, 2023; Kobrossy et al., 2024).

Accordingly, this study seeks to bridge the research gap due to the limited number of studies in the Middle East, and to explore the impact of individuals' behavioral capabilities—alongside digital maturity in educational institutions—on the level of their readiness to adopt a distinguished strategy based on modern technologies and to use them effectively. Thus, the study's questions revolve around:

- To what extent can the level of attention of leaders in the research sample be determined through behavioral capabilities that influence orientation toward the correct path of digital maturity in the investigated organization?
- What is the impact of behavioral capabilities on achieving distinguished digital maturity for the institution?

In response to these challenges, this study aims to analyze the role of behavioral capabilities—including flexibility and innovation—in enhancing educational institutions' orientation toward achieving digital maturity, by identifying the behavioral factors affecting the acceptance and adoption of advanced digital technologies among beneficiaries (Ajoudanian & Aboutalebi, 2025, 878).

The importance of this study lies in providing a multi-dimensional perspective that integrates the leadership behavior of digital leaders—one of the dimensions of digital leadership capabilities—and reveals how behavioral capabilities—such as flexibility and innovation—can be employed in formulating and implementing effective digital strategies that enhance the institution's ability to adapt to changes and reduce resistance to change (Taleshmekael, etal., 2025, 198).

Accordingly, the study contributes to bridging an important knowledge gap and provides practical recommendations for decision-makers and academics regarding the development of training and developmental programs that focus on strengthening the behavioral capabilities of employees and leaders alike, as a pivotal element for enhancing digital maturity and ensuring the sustainability of the institution's competitive advantage.

The study adopted a descriptive-analytical method based on relevant theoretical literature and applied studies, and conducted a field survey on a sample of educational institutions undergoing digital transformation, including the University of Nineveh, Al-Hadbaa University, Alnoor University, and the University of Mosul, as representative public and private universities in the northern region.

The remainder of the paper is organized as follows: Section Two reviews related prior literature; Section Three presents the proposed model for the role of behavioral capabilities in enhancing digital maturity; Section Four addresses the research methodology; Section Five discusses data analysis and results; and finally, Section Six concludes the study with conclusions and proposals.

2. Literature Review and Conceptual Model

Behavioral capabilities are considered among the essential components that enable individuals within institutions to interact effectively with a continuously changing digital environment (Alawaji, etal., 2025, 2). Digital maturity refers to the stage an institution reaches when it becomes able to integrate digital technology deeply into its core processes, thereby enhancing operational efficiency and achieving sustainable added value (Shahiduzzaman, 2025, 2). Behavioral capabilities are not limited to technical skills; they extend to include patterns of thinking and behaviors that support adaptation to digital transformation (Xin, etal., 2025, 6).

Among their most prominent dimensions is flexibility, which is the ability to adapt to sudden changes in digital systems and technologies, reducing resistance to change and enhancing speed of response (Corbelli, etal., 2025, 3). Another key dimension is creativity and innovation, defined as the ability to employ digital tools to generate new and creative solutions to organizational and educational problems (Patal, 2025, 36 & Ani). Hence, behavioral capabilities represent the fundamental entry point that determines an institution's ability to maximize the benefits of its technological resources and makes its digital transformation stages smoother.

The orientation toward digital maturity represents the framework that guides the use of behavioral capabilities and translates them into practical practices aligned with the institution's objectives (Sumual, etal., 2025, 272). It is not merely the adoption of technology, but a comprehensive institutional vision seeking to integrate digital technologies across all administrative and educational levels (Yusuf & Malik, 2025, 3). This is manifested in:

- Formulating a clear vision for digital transformation aligned with the institution's mission (Ali, etal., 2025, 12).
- Aligning digital technology with the institution's long-term goals (Howard, etal., 2025, 2).
- Spreading a digital organizational culture that supports innovation and renewal (Avci & Ardiç, 2025, 3).
- Allocating resources and efforts to enhance the ability to face technological challenges (Boundy, 2025, 5).

Digital maturity is also manifested in effective management of digital infrastructure such as cloud computing and intelligent systems (Omol & Mburu, 2025, 20), transforming data into knowledge usable for decision-making (Cresswell, etal., 2025, 3), speed of adaptation to technological changes and renewed markets (Aliy & Lawelai, 2025, 113), and achieving integration between human and technological resources to achieve institutional goals (Jaciow, etal., 2025, 6). Digital maturity is not only an end goal; rather, it is a continuous process requiring ongoing assessment and development of both digital and human resources.

2.1 Prior Literature and Hypotheses Development

The study by (Forliano, etal., 2023, 2), within the framework of dynamic capabilities theory, indicates that digital maturity represents a decisive factor in enhancing organizational resilience, as it enables institutions to convert their technological orientation into effective adaptive and response capabilities during crises. The results suggest that a mature digital strategy acts as a key mediator between technological orientation and resilience, confirming that institutional resilience emerges from adopting a mature strategic digital approach that enhances sustainability in volatile environments. Likewise, (He, etal., 2023, 149) highlights that digital transformation and mature digital strategies form a foundation

for strengthening organizational resilience by enabling operational sustainability and crisis adaptation through flexible digital systems and transformational governance. An integrated digital strategy contributes to building a supportive organizational culture and transformational leadership that enhances employees' creativity and effective interaction with sudden changes, positively reflecting on institutional robustness and overall performance. Based on the above, Hypothesis H1 can be formulated as follows:

H1: Behavioral capabilities have a statistically significant effect on the digital maturity strategy.

(Stachowiak & Pawłyszyn, 2021, 4) confirms that enhancing flexibility depends on the maturity of the digital strategy and the strength of the digital infrastructure, as integration between them enables accurate diagnosis of the current situation and identification of a future improvement pathway. A mature digital strategy supported by robust infrastructure enables institutions to adapt quickly to environmental changes and achieve sustainable growth by directing their digital resources effectively. In addition, the study by (Sincorá, etal., 2023, 151) shows that organizational resilience arises from the integration between process maturity, digital strategy, and digital infrastructure, where this integration enhances adaptability and performance continuity during crises. A mature digital strategy supported by strong infrastructure transforms operations management into a flexible system capable of innovation and dynamic response to changes, enhancing organizational robustness and sustainability. Accordingly, the second hypothesis can be formulated as:

H2: Flexibility has a statistically significant effect on the digital strategy.

Regarding innovation, the study by (Ajer & Øvrelid, 2023) confirms that digital innovation is closely associated with digital strategy maturity, as such maturity enables institutions to integrate innovation initiatives within digital infrastructure in a coordinated and sustainable manner. The integration of organizational entrepreneurship, institutional anchoring, and digital infrastructure creates an advanced innovative environment that enhances scalability and continuity of innovation, making a mature digital strategy a key driver for renewing organizational capabilities and deepening digital transformation.

Likewise, (Canina & Bruno, 2021, 4) explains that innovation is a fundamental pillar for achieving digital maturity, since successful digital transformation depends on mature digital strategies that enable effective deployment of emerging technologies such as artificial intelligence and the Internet of Things.

Enhancing creative capabilities and advanced digital skills is crucial for implementing such strategies and supporting innovation in designing digital solutions. The research confirms that a mature digital strategy creates a supportive environment for sustainable innovation by developing digital human capital capable of keeping pace with technological transformations and leading them efficiently. Furthermore, (Vezzani, 2024, 3) confirms that digital innovation is closely linked to digital infrastructure strategy, as this infrastructure enables institutions and societies to absorb technological transformations and harness their transformative capabilities effectively.

The more mature and strategically aligned the digital infrastructure is, the greater the ability of individuals and organizations to generate innovations and anticipate the impacts of emerging technologies. Thus, innovation is not merely a product of technology, but a direct result of an integrated strategic digital plan that supports sustainable adaptation to future developments and enhances societal readiness for deep digital transformation.

Based on the above, the third hypothesis can be formulated: Related governance and readiness considerations for AI-driven digital ecosystems have also been highlighted in Iraqi institutional contexts (Ali, 2024).

H3: Innovation has a statistically significant effect on the digital strategy.

(Bruno & Chakraborty, 2023, 7) indicates that digital innovation is closely linked to advanced digital infrastructure,

as such infrastructure enables institutions to absorb emerging technologies and employ them to redesign processes and behaviors. Investment in digital capabilities and creative talents enhances infrastructure effectiveness and contributes to achieving digital maturity and supporting sustainable innovation within organizations.

(Nylén & Holmström, 2015, 59) indicates that digital innovation fundamentally depends on the existence of an integrated digital strategy, enabling companies to manage innovation processes that are dynamic and unpredictable effectively. This strategic digital framework supports skills development, monitoring digital developments, and improving user experience and value proposition, thereby strengthening institutions' ability to adapt and innovate continuously. Similarly, (Indrianti, 2023, 7) shows that achieving innovation and technological entrepreneurship depends essentially on digital strategy maturity, as a mature digital strategy enables startups to leverage human creative capabilities effectively to extract value from technological transformations.

The integration of digital strategy with human creativity enhances sustainable innovation capability, contributing to competitive advantage and successful transition toward technological entrepreneurship.

In addition, (Boh, etal., 2023, 346) indicates that digital innovation is closely linked to digital strategy maturity, as such strategy enables institutions to develop flexible capabilities that can absorb shocks and adapt to the resulting disruptions. A mature digital strategy enhances the integrated use of digital technologies, supporting continuous innovation in products and services and enabling institutions to move toward more stable operating environments.

Thus, innovation can only be achieved within a robust strategic digital framework that supports organizational resilience and adaptation. Moreover, (Chowdhury, 2024, 2) indicated that institutional innovation fundamentally depends on the digital infrastructure strategy, as this strategy allows the exploitation of digital technologies to enhance organizational resilience and improve operating models.

Mature digital infrastructure supports the development of innovative and adaptable solutions to sudden changes, reinforcing institutions' ability to adapt and grow sustainably in volatile, highly digitalized environments. (Gao, etal., 2022, 1) shows that innovation within institutions is significantly enhanced through adopting a mature digital strategy, where digital capability serves as a key mediator between external support and the institution's ability to develop innovative solutions.

The study clarifies that digital strategy enables institutions to convert resources and governmental support into adaptive innovative capabilities. Thus, investment in digital maturity enhances organizational resilience and provides a strong push for sustainable innovation in the face of crises and changing environmental challenges.

(Lichte, etal., 2022, 1) indicated that effective innovation in vital infrastructure systems is closely linked to the maturity of the digital infrastructure strategy, as this strategy enables institutions to coordinate core resilience capabilities—response, monitoring, prediction, and learning—to face emergency situations efficiently.

Integration between digital twin technologies and operational resilience management enhances innovation's ability to respond to uncertainty and system complexity, enabling the development of innovative and sustainable solutions that support performance stability and operational safety. Furthermore, (Peschl & Fundneider, 2023, 2) indicated that enhancing innovation in creative settlements depends on an integrated digital strategy that enables the use of smart environments and digital technologies to support startups and innovative activities. Strategic digital planning for living, learning, and working spaces creates a sustainable ecosystem supporting innovation and continuous learning.

(Hussain, etal., 2025, 3772) indicated that innovation performance is closely linked to the institution's digital infrastructure strategy, as advanced digital infrastructure supports digital innovation and enhances companies' ability to develop new products and services effectively.

The integration of electronic knowledge with this infrastructure enhances innovation impact and acts as an important moderating factor, indicating that digital infrastructure strategy constitutes the foundational framework

for enabling sustainable innovation within institutions. Based on the above, the fourth hypothesis can be formulated:

H4: Innovation has a statistically significant effect on digital infrastructure.

(Kurniawan, 2024, 893) showed that flexibility is enhanced through integration between continuous innovation and the digital maturity of strategy, as this strategy enables institutions to employ digital technologies and infrastructure effectively for rapid crisis response.

Innovation in processes and business models supports adaptability and improves operational continuity, highlighting that achieving flexibility requires a mature digital strategy that directs innovation efforts in line with each sector's characteristics and enhances sustainable performance. (Boh, etal., 2023, 3) confirms that digital resilience arises from digital strategy maturity, as such maturity enables institutions to employ digital technologies effectively to absorb shocks, adapt to disruptions, and transition toward more stable operating conditions.

Therefore, a mature digital strategy represents the core framework for building resilient capabilities that enable entities to confront future crises and respond dynamically to environmental and economic changes. Moreover, (Nkomo & Kalisz, 2023, 405) indicates that an effective digital strategy is a fundamental factor in building organizational resilience, as the success of digital transformation depends on empowering individuals and developing a supportive organizational culture and advanced digital skills.

Investment in technological infrastructure becomes more effective when guided within a mature strategic framework that balances technology with the human element, enhancing the institution's ability to adapt and remain resilient in the face of environmental and economic changes. Based on the above, the fifth hypothesis can be formulated:

H5: Flexibility has a statistically significant effect on digital infrastructure.

Based on the above, the proposed research model can be illustrated as shown in Figure (1).

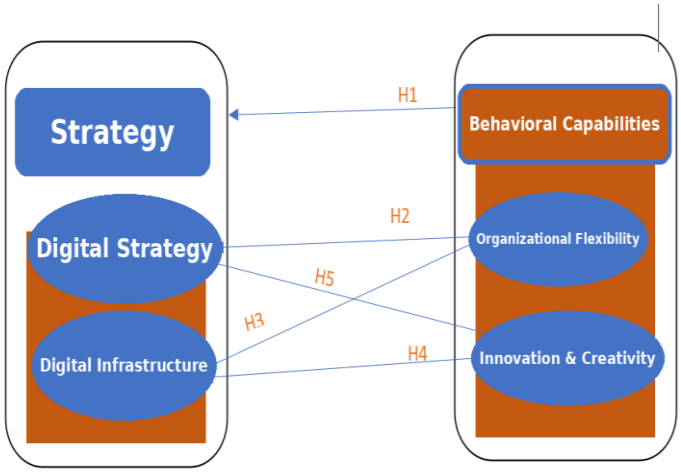

Figure 1. Proposed Research Model

3. Research Methodology

3.1 Research Design and Questionnaire Development

A quantitative research design was employed to evaluate the study's proposed conceptual model and to test its hypotheses (Mordecai & Dori, 2018, p. 30). This design was selected because it enables the results to be presented in a measurable, numerical form. The study focused on the higher education sector in one Middle Eastern country; therefore, data were collected from both public and private universities in the country. According to the Ministry of Higher Education report, the northern universities are among the most affected and require improvements to their information and communication technology (ICT) infrastructure. These universities represent a reflection of the higher education sector as a whole in a Middle Eastern country, which allows the study findings to be generalized.

A closed-ended questionnaire was developed and divided into two main sections. The first section included participants' personal information (demographic data), while the second section contained the variables related to the study constructs (see Appendix A). Table 1 presents the questionnaire items and the measurement scale used for each item. The questionnaire was designed in English and then translated into Arabic with the assistance of a language expert. Before distributing the questionnaire, it was sent to PhD professors for final review in case minor modifications were needed.

Table 1. Questionnaire Items and the Measurement Scale for Each Item

Construct	Measure/Dimension	Sources
Behavioral Capabilities	Flexibility; Innovation	Benitez et al. (2022, p. 29); Klus & Müller (2021, p. 7); Kocak & Pawlowski (2021, p. 61); El Sawy et al. (2020, p. 161); Mihardjo et al. (2019, p. 1063)
Digital Maturity	Digital Infrastructure; Digital Strategy	Maaß (2024, p. 22); Christensen (2023, p. 6); Schröder et al. (2022, p. 225); Aagaard (2021, p. 7); Weik et al. (2024, p. 5); Ladu et al. (2024, p. 10)

3.2 Research Population and Sample

The research population includes all university leaders in the surveyed institutions, which will be clarified in the practical section. These universities were selected because their educational material needs were adversely affected as a result of the most recent war they experienced. In addition, the Ministry of Higher Education and Scientific Research—through directives issued by His Excellency the Minister—has emphasized the importance of digital transformation and enhancing universities' digital maturity, given its contribution to improving educational standards.

The researcher was compelled to conduct this study to identify the contributions of behavioral capabilities—namely flexibility and innovation—since university leaders are the ultimate beneficiaries of these technologies in their work. The study is also justified by the need to overcome any problems or obstacles that universities may face due to weak information and communication technology (ICT) infrastructure, particularly with regard to networks in terms of capabilities and resources, as well as the sharing of information resources at the Ministry and among a wide segment of beneficiaries within the university.

Regarding the study sample, a total of (201) responses were analyzed. Males accounted for (73.13%), while females represented (26.37%). Age is a personal characteristic related to individuals' maturity in their interactions with digital leadership and its behavioral capabilities. In this context, the descriptive results presented in Table ( ) show that respondents were distributed across five age groups. The (41–50) age group achieved the highest percentage at (38%), followed by the (31–40) group at (29%). The (51–60) group represented (18%), and finally, the (20–30) group recorded the lowest percentage at (3.5%). These results indicate that a wide segment of leaders in the surveyed institutions possesses distinctive behavioral capabilities and skills, and that such capabilities are not limited to older age groups.

The data in Table (2) indicate that individuals holding a PhD constitute (54.2%), which is the highest proportion. Master's degree holders represent (34.8%), while those holding a bachelor's degree account for (6%), and diploma holders represent (5%). This suggests that the study sample has the academic qualifications, experience, and competence required to manage institutions digitally and to utilize a digital maturity strategy.

Table (2) also shows that those holding the title of Professor in the study sample are (25), representing (12.4%). The proportion of leaders holding the title of Assistant Professor is (39%), while those holding the title of Lecturer constitute (28.3%). Leaders holding the title of Assistant Lecturer represent the highest proportion at (30.1%). Administrative unit officers with the job title "employee" represent (9.7%). This indicates that most university leaders hold advanced academic degrees.

Based on the above, the behavioral capability maturity of the study sample becomes evident, representing a positive step toward describing the study variables, as clarified in the following paragraph.

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Table 2. Demographic Characteristics of the Study Sample

No.	Variable	Category	Frequency (n)	Percentage (%)
1	**Gender**	Male	147	73.13
		Female	53	26.37
		Total	201	100
2	**Age**	20–30	7	3.5
		31–40	58	29
		41–50	76	38
		51–60	24	12
		61 and above	36	18
		Total	201	100
3	**University**	Alnoor University	40	20
		Al-Hadbaa University	30	15
		University of Nineveh	111	55
		University of Mosul	20	10
		Total	201	100
4	**Academic Qualification**	PhD	109	54.2
		Master's	70	34.8
		Bachelor's	12	6
		Diploma	10	5
		Total	201	100
5	**Academic Rank / Position**	Professor	25	12.4
		Assistant Professor	39	19.5
		Lecturer	57	28.3
		Assistant Lecturer	60	30.1
		Administrative staff (Employee)	20	9.7
		Total	201	100

Source: Prepared by the researchers based on the study sample data and the statistical output generated using AMOS (Version 24).

4. Data Analysis and Discussion of Results

4.1 Confirmatory Factor Analysis (CFA)

The study model for the surveyed institutions will be presented to determine the extent to which these indicators conform to standard benchmark indicators, as well as to identify the factor loading values of the model, as illustrated in figure two.

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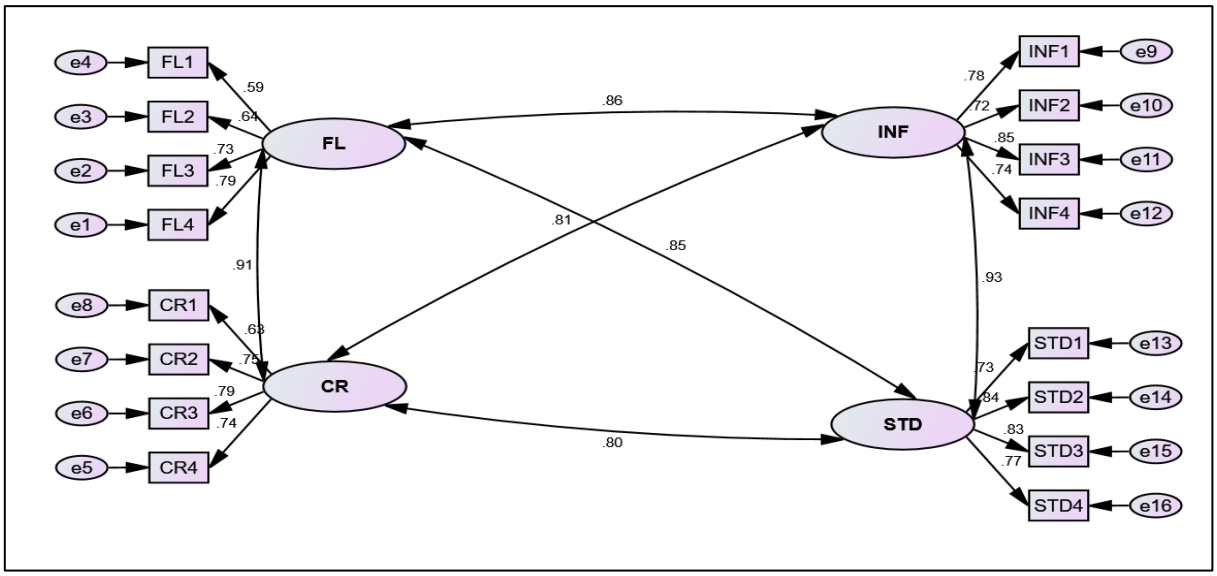

Figure 2. Factor Loading Values of The Model

Source: Prepared by the researchers based on the statistical results generated by AMOS (Version 24).

Table 3. Goodness-of-Fit Indices for the Initial Model (After Modification).

No.	Fit Index	Acceptable Threshold / Decision Rule	Model Value	Fit Result
1	Normed Chi-square (CMIN/DF)	CMIN/df < 2 = excellent fit; CMIN/df < 5 = acceptable fit	0.297	Supported
2	Root Mean Square Residual (RMR)	RMR ≤ 0.08; the closer to 0, the better the fit	0.033	Supported
3	Comparative Fit Index (CFI)	CFI > 0.90 = good fit; CFI < 0.90 = poor fit	0.989	Supported
4	Adjusted Goodness-of-Fit Index (AGFI)	AGFI > 0.85 = acceptable fit; AGFI = 1 = perfect fit; AGFI > 0.90 = better fit	0.985	Supported
5	Parsimony Goodness-of-Fit Index (PGFI)	Values closer to 1 indicate better model fit	0.713	Supported
6	Normed Fit Index (NFI)	NFI = 1 = perfect fit; NFI > 0.90 = better fit	0.986	Supported
7	Relative Fit Index (RFI)	RFI > 0.90 = good fit; RFI > 0.95 = better fit; RFI = 1 = perfect fit	0.983	Supported
8	Relative Model Parsimony (PRATIO)	0 ≤ PRATIO ≤ 1; values closer to 1 indicate greater parsimony	0.817	Supported
9	Parsimony Normed Fit Index (PNFI)	0–1; values > 0.90 indicate good model fit	0.805	Not supported

Source. Prepared by the researchers based on the statistical results generated using AMOS (Version 24).

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Based on the results reported in Table (3), the model fit indices indicate that the model values are consistent with the standard goodness-of-fit criteria and fall within the required benchmark levels. In addition, the factor loading values of the latent variables were satisfactory and within the acceptable range. Therefore, the modified model is considered adequate to proceed to the next stage, which involves testing the study hypotheses, as presented in Table (4).

Table 4. Regression Analysis Results for the Study Model.

Latent Construct	Direction	Observed Indicator	Estimate	Lower	Upper	p-value
Behavioral Capabilities	→	FL4	0.794	0.721	0.852	0.013
	→	FL3	0.728	0.646	0.809	0.090
	→	FL2	0.644	0.513	0.736	0.015
	→	FL1	0.586	0.471	0.685	0.012
	→	CR4	0.735	0.632	0.813	0.016
	→	CR3	0.788	0.697	0.844	0.020
	→	CR2	0.754	0.660	0.809	0.032
	→	CR1	0.628	0.533	0.720	0.090
Digital Maturity	→	NFI1	0.778	0.709	0.835	0.011
	→	INF2	0.719	0.654	0.776	0.014
	→	INF3	0.847	0.793	0.890	0.090
	→	INF4	0.741	0.662	0.813	0.020
	→	STD1	0.731	0.652	0.809	0.090
	→	STD2	0.840	0.787	0	

The results presented in Table (4) show that the standardized regression coefficients are statistically significant, as indicated by the p-values (P-value), which are less than 0.05. This is further supported by the Estimate values falling within the confidence interval limits (Lower and Upper), where the interval does not include the value zero. Moreover, all observed indicators exhibit satisfactory loadings on their corresponding latent dimensions, indicating that the data are valid and appropriate for statistical analysis.

Based on the above, the findings of the confirmatory factor analysis (CFA) demonstrate that the current study model and the sample data achieve an acceptable fit. Therefore, the model can be relied upon to measure the study variables, namely behavioral capabilities and digital maturity.

Accordingly, the study hypotheses—previously stated in the methodology section within the proposed hypothetical model—can now be tested. After conducting the confirmatory analysis, the model can be adopted as a measurable model suitable for testing the hypotheses of the present study.

4.2 Hypothesis Testing

H1: Behavioral capabilities have a statistically significant effect on the digital maturity strategy.

To test and verify this hypothesis, a structural equation model (SEM) was developed, as illustrated in Figure (3). The test values derived from this model provide guidance on whether to accept or reject the hypothesis, as presented in Table (5).

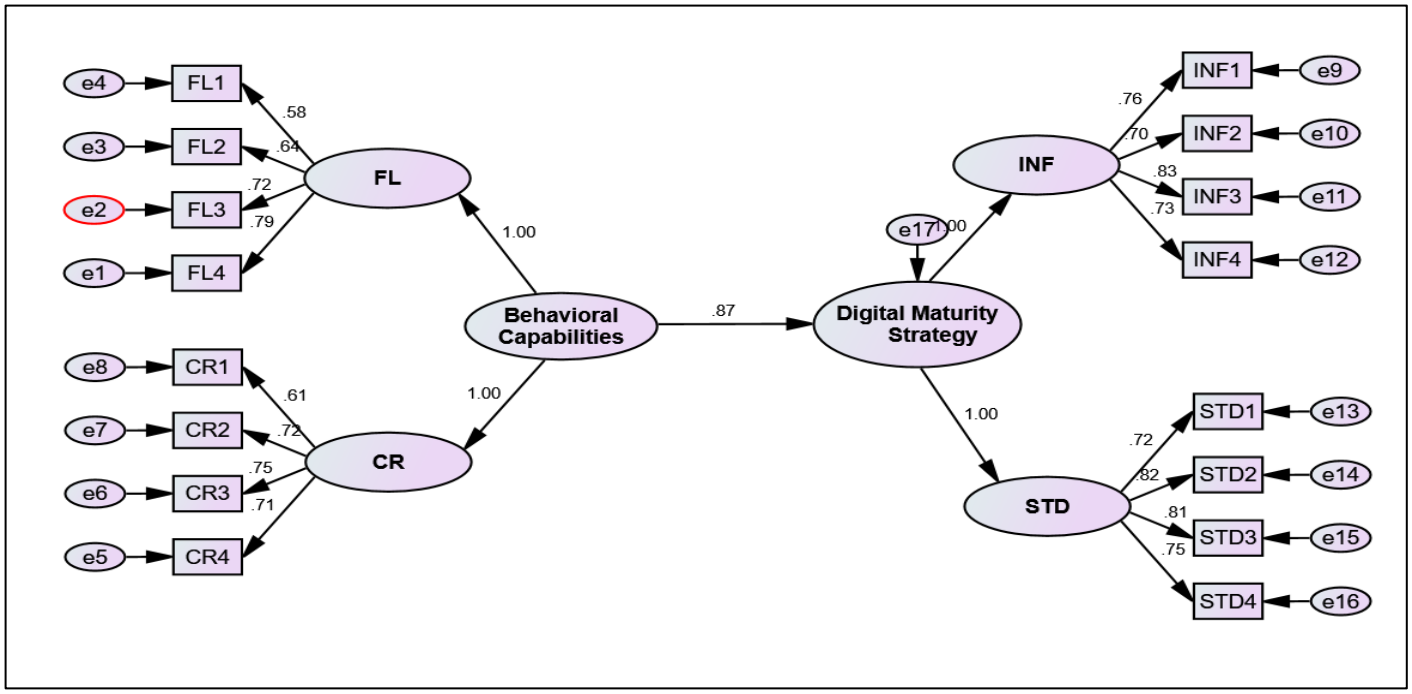

Figure 3. Hypothesis Testing Model

Source: Prepared by the researchers based on AMOS (Version 24).

Table 5. Analysis Values for Hypothesis H1.

Result	P-Value	Upper	Lower	Standardized Regression Coefficient	Dependent Variable	Effect Direction	Independent Variable
Accepted	0.13	0.918	0.798	0.866	Digital Maturity Strategy	—	Behavioral Capabilities

Source: Prepared by the researchers based on the statistical results.

The data reported in Table (5) indicate that there is a statistically significant effect of behavioral capabilities on the digital maturity strategy, as reflected by the standardized regression coefficient (Estimate) of 0.866. This effect is statistically significant based on the probability value (P-value) of 0.13, which is less than 0.05. The same result is also supported by the confidence interval for the standardized regression coefficient, with lower and upper bounds of (0.798–0.918). Observing this interval shows that it does not include the value zero, which provides evidence of the significance of the effect of the independent variable on the dependent variable. Accordingly, the hypothesis is accepted.

In the context of discussing the above results (behavioral capabilities and digital maturity), the statistical analysis results for the first hypothesis indicate that there is a significant effect of behavioral capabilities on digital maturity.

4.3 Sub-Hypotheses

Based on the data presented in Table (6), the standardized regression coefficients are all statistically significant, as indicated by the p-values (P-value), which are less than 0.05. This is further supported by the values falling within the specified confidence interval limits (Lower and Upper), which do not include zero between their bounds. The p-value for the second hypothesis is 0.718, which

lies between the bounds (0.666–0.753) and does not include zero; therefore, the second hypothesis is accepted.

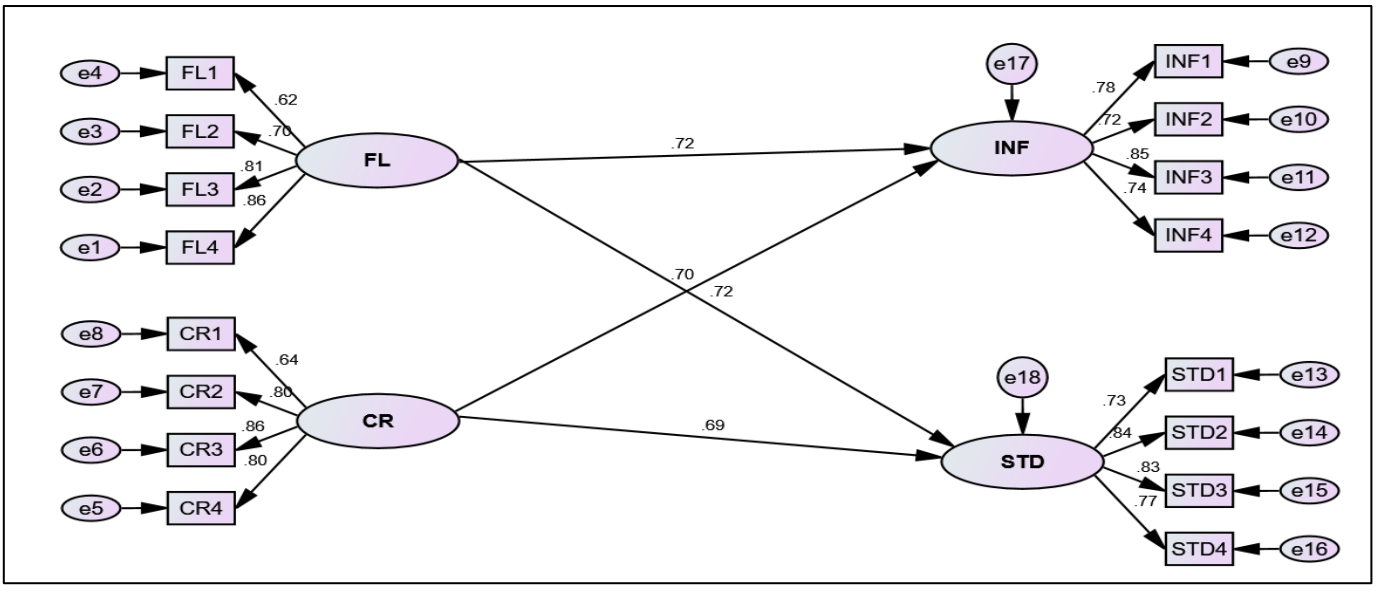

Figure 4. Sub-Hypotheses

Table 6. Analysis Values for the Sub-Hypotheses.

Latent Variables	Observed Variables	Estimate	Lower	Upper	P-value
Behavioral Capabilities	FL—INF	0.718	0.677	0.756	0.009
Behavioral Capabilities	FL—STD	0.717	0.666	0.753	0.15
Digital Maturity Strategy	CR—INF	0.699	0.648	0.750	0.008
Digital Maturity Strategy	CR—STD	0.691	0.640	0.749	0.007

Source: Prepared by the researchers based on the statistical results.

Based on the data in Table (6), the p-value for the third hypothesis is 0.717, which lies between the bounds (0.677–0.756) and does not include zero; therefore, the third hypothesis is accepted.

Based on the data in Table (6), the p-value for the fourth hypothesis is 0.699, which lies between the bounds (0.648–0.750) and does not include zero; therefore, the fourth hypothesis is accepted.

Based on the data in Table (6), the p-value for the fifth hypothesis is 0.691, which lies between the bounds (0.640–0.749) and does not include zero; therefore, the fifth hypothesis is accepted.

From the above, it can be concluded that the statistical analysis (confirmatory factor analysis) confirms that the current study model and the sample data achieve an adequate fit; therefore, they can be relied upon to measure the study variables, namely behavioral capabilities and digital maturity.

5. Conclusions and Recommendations

5.1 Conclusions

1) Relying on behavioral capabilities, including flexibility and innovation, is not merely the introduction of a new technology into an institution; rather, it represents a fundamental transformation in the concept of work, its patterns, and its management.

2) The results indicate that the surveyed organizations place considerable emphasis on benefiting from digital leadership capabilities and on monitoring developments in modern technologies to enhance digital maturity.
3) Attention to digital infrastructure is still below the required level; therefore, institutions need to increase awareness of the importance of allocating a dedicated budget for digital infrastructure due to its critical importance.
4) The digital strategy is still below the required level because the surveyed institutions are constrained by a set of regulations and instructions issued by the Ministry.

5.2 Recommendations

1) Raise leaders' awareness of the importance of behavioral capabilities and the extent of their contribution to strengthening their strategies related to their institutions' digital maturity.
2) Qualify leaders working in the educational sector by involving them in training courses and scientific seminars in order to become familiar with the most prominent modern technologies used in the educational sector. We also recommend that top management provide the necessary support to help leaders overcome challenges that hinder the adoption of a distinguished digital maturity strategy.
3) Increase attention to behavioral capabilities by continuously using technologies that emphasize flexibility and innovation (such as computers and other modern technologies) within the surveyed institutions, which in turn will positively reflect on the adoption of a distinguished digital maturity strategy.
4) Develop the infrastructure and provide the necessary resources and specialized experts to offer support in case difficulties arise in implementing the strategy related to digital maturity.

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