

E-governance and university of Ha'il institutional excellence in the light of the Kingdom's vision 2030: An empirical study on faculty members



Neveen Mohamed Galal Ibrahim ^{1,2}, Manal Kamal Kamel Soliman ^{1,3}, Tarek Attia Abdelrahman ^{4,*}, Fatheya Mohamed Alsedeq Albekheit ¹

¹Social Work Department, University of Ha'il, Ha'il, Saudi Arabia

²Rural Sociology Department, Tanta University, Tanta, Egypt

³Community Organization Department, Assiut University, Assiut, Egypt

⁴Rural Sociology Department, Kafrelsheikh University, Kafr el-Sheikh, Egypt

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ABSTRACT

This research aimed to determine the impact of e-governance on achieving institutional excellence at the University of Ha'il from its faculty members' viewpoint regarding the Kingdom's vision 2030. The study was conducted on a random sample of 152 faculty members from various university faculties. Data were collected using the questionnaire as a means of data collection after confirming its suitability for measurement. The questionnaire was distributed electronically, due to the study suspension because of the Corona pandemic. The study relied on the social survey method. Means and standard deviations, simple correlation coefficients, and multiple regression analysis were used in the data analysis. The study found that the University of Ha'il practices e-governance. Besides, there is a statistically significant positive correlation between e-governance and institutional excellence. The combined dimensions of e-governance explain 78.9% variance in institutional excellence. Like most of the previous research studies, the present study also finds that the most investigative dimension of e-governance was the infrastructure's availability, followed by transparency mechanisms, accounting accountability, effective participation, and job empowerment. The least of those dimensions was the human resource development dimension. It is suggested after analyzing the data that universities pay attention to practicing e-governance. It increases their competitiveness and promotes the chances of distinguishing their performance. There is a dire need to validate the necessity of refining the faculty members' skills concerning implementation and dealing with various electronic transactions.

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1. Introduction

Global transformations have produced new trends. It witnessed several changes that affected all institutions imposing a new reality and introducing modern concepts. It has featured technologies that are compatible with the nature of the contemporary world. It has opened the way for excellence to various types of institutions. These are based on movement, change, technology, and communication. Especially, educational institutions can achieve

institutional excellence to achieve precedence over their competitors in their activity field. It is required to achieve high degrees of governance in general and e-governance in particular. As governance is at present one of the essential requirements for achieving excellence in institutions, whether governmental or private, it has become a requirement at all levels to address some of the issues that hinder the achievement of development in various fields (Cicekli and Kabasakal, 2017). It deals with practicing the powers of sound control. This method improves management's processes and the organizations' general performance through their rules and principles, which are considered a guide and a model for optimizing management to achieve excellence in various aspects.

E-governance is a vital project because it represents the correct standard of the institutions' development in all their forms in terms of electronic

* Corresponding Author.

Email Address: trahman2050@gmail.com (T. A. Abdelrahman)

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Corresponding author's ORCID profile:

<https://orcid.org/0000-0002-8069-5505>

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communication and information. It leads to link all state institutions and departments with a unique communication system. It contributes to the elimination of red tape and administrative and financial corruption. It works to accomplish all work easily, quickly, and smoothly. It achieves all organizations' institutional excellence forms, whether service or productivity. It is worth noting that this distinction is not random, temporary, or in one aspect without the other elements. Instead, it is organized, continuous, and comprehensive. Also, it helps to cope with rapid changes in the environment in which institutions operate to overcome competition by providing the best services (McGrath, 2013). The previous researchers see that excellence needs sustainability and strategic planning, and implementing the planning stages contributes to achieving that distinction. They have also indicated in their study that the strategic orientation towards total quality is the way to achieve excellence in beneficiaries' services. So, the use of governance as a competitive weapon is considered a strategic decision that leads to payment. The change process to achieve excellence requires that the application requires strategic awareness and an integrated strategy (McGrath, 2013). E-governance is defined as the process by which traditional governance is modernized using ICT applications to facilitate citizens' access to services (Qadri, 2014). It is also defined as applying information technology in government processes to achieve simplicity, flexibility, transparency, and disclosure in governance processes (Alhrouf and Nasereddin, 2018). Many studies have emphasized the importance of governance for universities which aim to identify the degree of governance implementation at Prince Sattam bin Abdulaziz University in light of the Kingdom's vision (2030) from the administrative and academic leaders' perspective. It has also aimed to uncover the requirements for implementing governance in the university and the obstacles it faces. The most important findings of the study are that there are differences between the sample members' estimates for applying standards (independence, the rule of law, and accountability in favor of females).

Moreover, there are no differences between the sample's estimates of applying the criteria (participation, disclosure, and transparency) due to the gender variable. It faces significant obstacles from the point of view of the target sample. Khan and Vijayashree's (2015) study has aimed to know the effect of applying e-governance on workers. It has clarified the information technology importance as one of the modern methods. It conducts its business reaches the best governance, and remains in competitive markets. The study has pointed to the positive relationship between creativity, efficiency, and effectiveness among employees in the e-governance scenario. Beg and Ashok's (2015) study has also aimed to identify the most critical obstacles to good governance in Indian universities. It envisioned the steps that can be followed to develop

good governance in them. The most important study findings are that many different obstacles have prevented good management in universities. With a closer look at these studies, the researchers agree with the importance of focusing on e-governance mechanisms because of their great importance in achieving its aims. Still, the current study differs from these studies in its focus on examining the impact of e-governance on achieving institutional excellence for universities. In this study, e-governance means an integrated system of transparency, accountability, effective participation, human resource development, job empowerment, and infrastructure availability. These are vital elements that the University of Ha'il provides to its faculty members through information technology applications to achieve high institutional performance excellence among Saudi and international universities.

University performance excellence is the educational institution's (the university) ability and competence to implement its strategic aims in light of the international excellence standards (Dhamuniya, 2015). It is the ability to improve performance in all areas at the university. It includes talent management, motivation, creativity, improving individuals' participation, and improving the output level to achieve prospects. It can be said that excellence in university performance comes as a reconciliation between the effectiveness of the extent to which the goals are achieved and how resources are used (Qawasmeh and Al-Bourini, 2016). The institutional excellence of universities is linked to the systemic thinking that views the organization as an integrated whole. Its elements interact, and mechanisms are intertwined. Thus, it is connected to the organization's ability to achieve the highest rates of effectiveness and reach a level of output that achieves the stakeholders' desires and expectations. The institutional excellence of universities requires building an electronic system that contains improvement and systems development. It is based on the procedures and standards for working with these in line with the global trends. The universities are directed to take many measures to ensure the academic programs' quality, output quality, and the quality of the procedures to achieve competitiveness institutional excellence. It is confirmed that competitiveness and productivity enhancement and performance excellence in organizations can only be achieved by applying total quality management, quality control, and disseminating the quality function. The study's most important findings are that organizations and institutions must pay attention to training and development, especially education related to learning, innovation, and quality, to achieve excellence in performance (Alvraez and Monge, 2015). In this study, institutional excellence is intended to excel at the University of Ha'il in providing educational services efficiently and effectively. This excellence is achieved by following the e-governance mechanisms related to policies and

systems, human resource management, educational processes, internal administrative processes, excellence in achieving and measuring the faculty staff members' satisfaction, and excellence in university performance results.

Universities are among the active institutions concerned with raising the scientific and educational values and educational level in any society. Communities' progress is measured by the levels of education in them and their need to enhance the methods of e-governance. It falls within the framework of their endeavor to find suggested solutions to crises and strengthen management with participation, interaction, and achievement in the university. Governance helps them build better capabilities, manage more rationally, enhance institutional transparency in interactive ways, and create modern work mechanisms. It makes them highly effective institutions and broad community actions that improve performance and achieve excellence in internal performance and service delivery. All of these reasons lead to the application of e-governance mechanisms in universities and fulfilling institutional excellence. That is why many researchers have emphasized the importance of e-governance and achieving excellence for various institutions (Khan and Vijayashree, 2015; Beg and Ashok, 2015). According to the above discussed and the results of previous studies regarding the importance of universities' e-governance, it is found that it has played a role in raising and improving the universities' performance and ensuring their outputs. The university governance concept arises from applying the concepts of justice, equality, transparency, participation, and the application of laws. It plays an influential role in achieving excellence for universities. It thus contributes to a great degree in building societies and realizing the Kingdom's vision 2030. Its objectives include performing a qualitative leap in universities' performance by achieving high degrees of institutional excellence for these universities through its association with achieving the highest levels of e-governance in all its academic, administrative, and financial practices. The study problem is identified in determining the nature and the description of the e-governance organizational mechanisms at the University of Ha'il and its relationship to promoting institutional excellence from the faculty members' point of view. The research importance stems from the importance of e-governance, whose application is one of the fundamental success tools for organizations and institutions, including universities as one of the largest educational institutions. Its importance also lies in the matter of e-governance in achieving institutional excellence for universities. The main research aim is to determine the impact of e-governance dimensions on achieving institutional excellence for faculty members at the University of Ha'il. It can be achieved by defining the reality of practicing the e-governance dimensions (transparency, accountability, effective participation,

human resource development, job empowerment, and infrastructure availability) from the faculty members' viewpoint at the University of Ha'il. Furthermore, it can be accomplished by defining institutional excellence at the University of Ha'il from the faculty members' perspective at the University of Ha'il (policies and strategies, human resources management, operations, achieving employee satisfaction from the faculty, and performance results). It determines the nature of the relationship between e-governance and institutional excellence for the University of Ha'il.

2. Literature review

Many researchers have studied e-governance in various countries from the Arabian Peninsula. As a part of the Kingdom's Vision 2030, Saudi institutions aim to acquire a prominent position among the top 200 foreign universities (Basahell and Yamin, 2017). As a result, the universities make every effort to attain excellence while also moving toward e-governance and applying its principles into practice (Ibrahim et al., 2021). The first phase of Saudi Arabia's e-governance was established in the middle of the first decade of the twenty-first century (Alghamdi and Beloff, 2016).

The universities must employ e-governance to improve educational quality. Many elements of e-governance in the Kingdom of Saudi Arabia have been investigated by researchers since its inception. For example, Alshehri et al. (2012) were one of the first researchers in the e-governance sector. They discovered several barriers to the adoption of e-governance in Saudi Arabia, including weaknesses of government IT infrastructure, lack of public awareness about e-government, lack of systems to ensure data security and privacy, and lack of qualified IT professionals. Likewise, Basamh et al. (2014) in their study highlighted e-governance implementation issues in Saudi Arabia.

E-governance plays a vital role in the performance of a university. It plays a role in raising and improving the performance and ensuring the outputs of a university. The university governance conception stems from the concepts of justice, equality, transparency, participation, and law enforcement concepts. It plays an influential role in achieving excellence for universities. It serves as a positive factor between practicing human resource management dimensions and improving performance (Al-Din, 2012). The study recommends the necessity of motivating the faculty staff members and administrative staff members at the university to maintain this high level of application of e-governance by providing appropriate support (Al-Din, 2012). In the field of institutional excellence, Morrison's (2019) study was one of the first studies in the e-governance sector. The study intended to achieve the idea of e-governance at King Abdul Aziz University. It displays the impact of e-governance on administrative operations and job performance.

According to Carter and Bélanger (2005), customers' willingness to use these services determines the success of e-government programs. In Saudi Arabia, Abunadi (2012) discovered social and cultural constraints to e-government acceptance and adoption. In a likewise manner, Alsaif (2014) has pinpointed cultural concerns as the reason for the slow adoption of e-government in Saudi Arabia.

There is hardly any specific study that attempted to determine the impact of e-governance in achieving educational excellence in Saudi educational institutes. Considering the aforementioned studies, as well as numerous other studies (Khan and Vijayashree, 2015; Beg and Ashok, 2015), it can be concluded that determining the impact of e-governance on achieving institutional excellence at the University of Ha'il from the

perspective of its faculty members concerning the Kingdom's vision 2030 is necessary.

3. Research methodology

This study has used a descriptive-analytical approach using the social survey method via the sample. The research community consists of all the faculty members belonging to the University of Ha'il in the two halves, whether contracted or Saudi. The sample was chosen in a simple random way, where 5 colleges were randomly selected out of 14 colleges. The questionnaire was sent to the colleges' faculty members' groups, and 152 valid responses for statistical analysis were received. Table 1 illustrates the characteristics of the sample of the study.

Table 1: The study sample characteristics

	Response	Frequencies	Percentages (%)
Age	Less than 30	4	2.6
	From 31 to 40	26	23.6
	From 41 to 50	92	60.4
	More than 51	20	13.4
Gender	Male	80	52.6
	Female	72	47.4
Faculty	Theoretical Faculties (Literature)	142	81.6
	Practical Faculties (Applied)	24	15.8
	Preparatory Year	4	2.6
	Teaching Assistant	4	2.6
Career	Lecturer	4	2.6
	Assistant Professor	108	71.1
	Associate Professor	32	21.1
	Professor	4	2.6
No. of experience year in the university	Less than 5 years	84	55.3
	From 6 to 10 years	60	39.5
	11 and more years	8	5.2
Nationality	Saudi	8	5.3
	Not Saudi	144	94.7
Are you holding an administrative position?	Yes	60	39.5
	No	92	60.5
Total		152	100

Table 1 clarifies the research sample characteristics. It is evident from the data that the distribution of the research sample according to the age group indicates that the age group (41 to 50 years) represents the highest percentage of the study sample by 60.4%. For the distribution of the study sample according to gender, the shares of males and females were very close. For the study sample distribution according to the faculty to which the faculty members belong, the theoretical faculties obtained the highest percentage of the study sample, reaching 81.6%. According to the type of position, faculty members' distribution occupies the portion of those holding an assistant professor position called about 71.1%, which is considered one of the highest rates. For the distribution of the research sample according to years of work experience at the university, those with years of experience (less than five years) came in the first order 55.3%. Moreover, non-Saudi represented the highest percentage by 94.7%. As for those who are not employed administrative positions of faculty members, the study sample represents the highest percentage 60.5%.

The study variables were measured for the prepared questionnaire. E-governance was

measured with 43 items distributed into 6 dimensions. Institutional excellence was measured with 25 items distributed into 5 dimensions. Table 2 shows the study variables, their dimensions, and the stability coefficients.

Table 2: Study variables and stability coefficients

Variables	Dimensions	No. of items	Alpha Cronbach
E-governance	Transparency	7	0.835
	Accountability	7	0.924
	Active participation	6	0.882
	Resource	8	0.918
	Development	6	0.926
	Job empowerment	9	0.957
	Infrastructure	9	0.957
Whole e-governance		43	0.907
Institutional excellence	Policies and strategies	5	0.950
	Resource management	5	0.927
	Processes	5	0.951
	Employee satisfaction	5	0.883
	Performance results	5	0.939
Whole institutional excellence		25	0.939

Table 2 shows that the reliability coefficients are high enough to allow the questionnaire application and the data collection. It is reported with the

independent variable's stability coefficient, which is the e-governance dimension with 0.907. The stability coefficient for the dependent variable in institutional excellence is 0.939. The questionnaire's validity was verified by sending the questionnaire to 6 specialists to express their opinion. Afterward, it was applied to 10 faculty members who were excluded from the sample. Many descriptive and inferential statistics methods, such as averages, standard deviations, simple correlation coefficients, and multiple regression analysis, were used in data analysis using the (SPSS) version 25 program.

4. Study results and discussion

First: The reality of practicing e-governance at the University of Ha'il from the faculty members' perspective. The averages and standard deviations of e-governance dimensions were calculated to resolve this. The order of the dimensions of e-governance practicing reality at the University of Ha'il is arranged according to averages obtained after analyzing it. The results are shown in [Tables 3](#) and [4](#).

Table 3: The averages and standard deviations of e-governance at the University of Ha'il

No.	Items	Averages	Standard deviations
Transparency			
1	The university announces the rules, regulations, and instructions regulating faculty members' work on its official website.	4.2632	0.78679
2	The university announces its policies electronically for granting rewards to a faculty member.	3.8684	1.15480
3	The university announces the promotion criteria for faculty members electronically.	4.2368	0.81164
4	Faculty members are informed of the results of their evaluation electronically.	4.4211	0.91003
5	The university discloses on its website the criteria for filling various positions.	3.8158	1.07606
6	The university has an exact mechanism for information flow between faculty members and its organizational structure.	3.8947	1.02394
7	Decisions related to faculty members are made according to electronically announced rules for faculty members.	3.8947	1.04949
Accountability			
8	The university has transparent electronic systems for exercising internal control over faculty members.	4.0789	0.986840
9	The university uses technological means to familiarize members of the faculty with accountability systems.	3.7105	1.10166
10	The university evaluates the performance of a faculty member electronically.	4.3421	0.73786
11	The university electronically sends the results of the performance reports of faculty members.	4.2632	1.12018
12	The university allows faculty members to object to the results of the annual evaluation electronically.	3.9211	1.22624
13	The standards declared on the performance of faculty members are commensurate with their job duties.	3.9211	1.08893
14	There are electronically announced standards for accountability of faculty members.	3.9211	1.08893
15	The university has transparent electronic systems for exercising internal control over faculty members.	4.0789	0.986840
Active participation			
16	The university activates the participation of faculty members electronically in decision-making.	3.6842	1.05743
17	The university engages faculty members electronically in developing academic programs in their various departments.	4.0526	0.88990
18	Faculty members participate electronically in the university's strategic planning processes.	4.0000	0.94903
19	Faculty members participate electronically in the development of the university's internal systems.	3.8947	0.85473
20	The university announces the mechanisms electronically for faculty members' participation in various work aspects at the university.	3.7895	0.92523
21	The university holds joint (electronic) meetings through modern technological means between faculty members and scientific bodies inside and outside the Kingdom.	3.9474	1.02801
Developing resources			
22	The university determines the training needs of faculty members through electronic questionnaires.	3.7895	1.05875
23	The university provides modern training programs for faculty members compatible with the renewed needs in higher education.	3.9474	0.97512
24	The university announces the strategic plan for training programs needed by faculty members on its website.	4.1316	0.83535
25	The university seeks to spread the culture of electronic governance among faculty members.	4.0263	0.84530
26	The university trains faculty members on how to practice electronic governance with all its mechanisms.	3.7368	1.07184
27	There are clear strategies for developing a faculty member to improve his performance.	4.0526	0.88990
28	There is facilitation in procedures related to participation in internal and external conferences.	3.3421	1.24542
29	The university encourages a faculty member to publish research in scientific journals.	3.7368	1.14358
Job empowerment			
30	The university has transparent electronic systems to exercise internal control over faculty members.	3.9737	0.87608
31	The university uses technological means to familiarize members of the faculty with accountability systems.	3.9737	0.84530
32	The university evaluates the performance of the faculty member electronically.	3.6053	1.25100
33	The university electronically sends the results of the performance reports of faculty members.	3.6316	1.11393
34	The university allows a faculty member to object to the results of the annual evaluation electronically.	3.6842	1.08219
35	The declared criteria for the performance of faculty members are commensurate with their job duties.	3.7632	1.13777
36	There are electronically announced standards for the accountability of faculty members.	3.3215	0.9251
Communications and I.T. infrastructure			
37	The university relies in all its dealings on technology and activating all means of communication.	4.1579	0.84654
38	There is internet at the university available to all faculty members.	4.2895	0.82696
39	Connecting the university to all its units in one network facilitates communication and information flow.	4.2368	0.87449
40	The university provides computers for its faculty members.	4.0526	1.12638
41	The university provides maintenance services for computer malfunctions and internet networks used by faculty members.	4.2368	0.93311
42	The university provides training on technological aspects for faculty members.	3.9737	1.04182
43	The university provides an electronic administrative system for the administrative transactions of faculty members.	3.9474	0.97512
44	The university has a department for information technology.	4.3158	0.83326
45	The university has an easy-to-access website.	4.2895	0.82696
	The whole variable.	3.9725	0.6847

Table 4: The order of the dimensions of e-governance practicing reality at the University of Ha'il

No.	Dimensions	Averages	Standard deviations	Order
1	Transparency	4.0564	0.69562	2
2	Accountability	4.0226	0.87896	3
3	Active participation	3.8947	0.75606	4
4	Resource development	3.8454	0.81095	6
5	Job empowerment	3.7719	0.90654	5
6	Infrastructure	4.1667	0.79970	1

Tables 3 and 4 show that the arithmetic means and standard deviations of the e-governance practice are reality at the University of Ha'il from the faculty members' perspective. It has an average of 3.9725 with a standard deviation of 0.6847. It indicates that the University of Ha'il satisfactorily applies e-governance, which means an actual governance practice. The results suggest that most dimensions of e-governance are investigated electronically after the availability of the infrastructure. It is followed by applying transparency mechanisms, accountability, effective participation, and job empowerment. The best of these dimensions is the dimension of human resource development, which indicates that the University of Ha'il provides the infrastructure for communication and information technology in a big way. It applies transparency to a large extent, which means that there is a continuous flow of information. The information circulates without the presence of

ambiguity, confidentiality, or misleading. The information technology facilitates the flow and transmission of useful information between the university and faculty members. It also applies accountability (the principle of reward and punishment) and announces the mechanisms used to achieve this. It provides opportunities for the faculty members to participate in policy-making, decision-making, and decision-making processes through various technological means.

Second: The reality of institutional excellence at the University of Ha'il from the faculty members' perspective. The averages and standard deviations of institutional excellence dimensions were calculated to resolve this. The order of the dimensions of institutional excellence reality at the University of Ha'il is decided according to averages obtained after analyzing it. The results are shown in Table 5.

Table 5: Averages and standard deviations for institutional excellence at the University of Ha'il

No.	Items	Averages	Standard deviations
Policies and strategies			
1	University policies and strategies are based on the actual needs and expectations of the beneficiaries of its services.	4.0526	0.85961
2	University policies and strategies depend on reliable information derived from performance evaluation.	4.0789	0.77653
3	University policies and strategies are subject to continuous development according to the results of the evaluation.	4.0000	0.79735
4	University policies and strategies are based on the results of the analysis of the external and internal environment.	4.1053	0.79032
5	University policies and strategies are implemented in light of clear and specific plans.	4.3421	0.66218
Human resources management			
6	The abilities of the faculty members are consistent with the goals and objectives of the university.	4.0000	0.92070
7	The university's work system creates an equal opportunity system for faculty members.	4.1053	0.79032
8	The university has an advanced system for managing human resources.	4.0526	0.85961
9	The university's human resource management system includes mechanisms that determine standards for evaluating faculty members' performance rates and levels.	3.9474	1.00192
10	The human resource management system includes mechanisms that define the university's faculty members' tasks and burdens.	3.9474	0.91918
Processes			
11	The feedback provided by faculty members is used to develop and improve the educational process.	4.0526	0.76157
12	The university develops its internal operations to support its policies and strategies.	3.8947	0.94314
13	University internal operations meet the needs of faculty members.	3.7895	1.05875
14	The university uses innovative and creative methods to improve its internal processes.	3.8947	0.88518
15	The university develops its university services based on faculty members' needs as one of the development's target groups.	3.5526	1.04716
Employee satisfaction			
16	The university has an integrated system for measuring the satisfaction of faculty members.	3.7368	0.96794
17	The university is concerned with measuring the degree of satisfaction of faculty members with the quality of services provided to develop their performance.	3.5526	0.99528
18	The university sets up a system for complaints of faculty members.	3.8158	0.97261
19	The university conducts endless questionnaires and surveys to identify employees' needs.	3.9211	0.84200
20	There is continuous improvement in the quality of educational services provided by the university.	4.0263	0.74538
Performance results			
21	University performance is monitored at all levels based on clear performance indicators.	3.9737	0.84530
22	The university has an integrated system for measuring institutional performance.	4.0000	0.76340
23	The university evaluates the achievements by measuring the goals set and the established performance standards.	3.9737	0.78011
24	The university has indicators to monitor the quality of university productivity in light of pre-defined standard specifications.	3.8421	0.90697
25	The university has an integrated system for measuring individual performance.	3.6053	1.25100
	The whole variable.	3.9565	0.694860

Table 5 data shows that the average of the institutional excellence manifestations at the

University of Ha'il has come to 3.9565 with a standard deviation of 0.69486. The presentations of

institutional excellence vary between excellence in policies and strategies, human resources management, internal processes, and the level of employee satisfaction and performance results. The highest of which were related to excellence in policies and strategies and the least related to employee satisfaction excellence.

Third: Bilateral correlation transactions between the dimensions of e-governance and institutional excellence. The bilateral correlation coefficients between the e-governance and the institutional excellence dimensions are shown in [Table 6](#).

Table 6: Bilateral correlation transactions of the e-governance and institutional excellence dimensions

E-governance and institutional excellence	Policies and strategies	Resource Management	Processes	Employee satisfaction	Performance results
Transparency	.596**	.662**	.696**	.512**	.662**
Accountability	.667**	.692**	.709**	.480**	.604**
Active participation	.685**	.728**	.809**	.569**	.657**
Resource Development	.721**	.674**	.733**	.526**	.608**
Job empowerment	.869**	.712**	.806**	.651**	.599**
Infrastructure	.604**	.717**	.595**	.512**	.598**

**Significance at 0.01

[Table 6](#) shows the bilateral correlation coefficients between the e-governance and the institutional excellence dimensions. The results indicate a high degree of agreement between all dimensions of e-governance and the institutional excellence dimensions at the level of 0.01. This result is consistent with a previous study that was aimed to evaluate the efficiency of e-governance and analyzed the effect of e-governance in reaching the best results ([Salam, 2017](#)). Another study has shown that adopting governance based on modern technology and integrating it appropriately in management processes leads to the opening of new doors that allow workers to improve work and share their views ([Tilahun and Sharma, 2015](#)). Besides, [Dhamuniya \(2015\)](#) has tried to study the impact of e-governance on higher education institutions. The study results have demonstrated the e-governance impact in establishing a knowledge-based and participatory society. It has contributed to the application of information and communication technology and contributed to individuals' access to information with full transparency. Furthermore, multiple linear regression coefficients were calculated between the combined dimensions of e-governance and institutional excellence. The results are shown in [Table 7](#).

Table 7: Multiple linear regression coefficients between the combined dimensions of e-governance and institutional excellence

Correlation Significance	Determination coefficient	(F) value	Level of significance
0.888**	0.789	90.43	0.01

**Significance at 0.01

By using the multiple linear regression analysis ([Table 7](#)), it is found that there is a positive and significant positive direct link between e-governance and institutional excellence. The combined dimensions of e-governance explain 78.9% variance in institutional excellence. The remaining 21.1% of the variance in institutional excellence is due to other factors. The results have shown a strong positive correlation between the e-governance mechanisms application and institutional excellence at the University of Ha'il. This direct correlation

highly exists between all dimensions of e-governance and institutional excellence at a level of 0.01. The difference of 21.1% of the variation in institutional excellence is due to other factors not included in the study, which calls for further studies and research. The most effective dimensions of e-governance are possible after the availability of the infrastructure, followed by the implementation of the transparency mechanisms, application of accountability, effective participation, and job empowerment. The current results help achieve scientific sobriety, avoid financial and administrative corruption, and improve and develop the university's performance. It supports the university in formulating, building sound strategies as it contributes to ensuring the faculty members' rights, and the governance of their performance reveals their training needs. The results of the present study also support the findings of [Al-Din's \(2012\)](#) study that recommends the need to motivate faculty members to maintain a high governance implementation level by providing them with appropriate support. It is also indicated the information technology application in all aspects of its work. It leads to improving efficiency and effectiveness in achieving the desired outputs. It is identified the most critical elements that distinguish university performance in following policies and systems to maintain administrative and financial stability. These help in maintaining work continuity. It attracts the workers to follow teamwork and create alternative leaders.

5. Conclusions and recommendations

After analyzing the research data, it is found that the arithmetic means and standard deviations of the reality of e-governance practice at the University of Ha'il from the faculty members' perspective has an average of 3.9725 with a standard deviation of 0.6847. It indicates that the University of Ha'il practices e-governance, as most dimensions of e-governance are investigated electronically after the availability of the infrastructure. The information technology facilitates the flow and transmission of useful information between the university and

faculty members. The information circulates without the presence of ambiguity, confidentiality, or deception. It encourages faculty members to participate in policy-making and decision-making through various technological means. Simultaneously, the average of the institutional excellence at the University of Ha'il has come to 3.9565 with a standard deviation of 0.69486. It varies between excellence in human resources management, policies and strategies, internal processes, employee satisfaction, and performance results. Furthermore, a high degree of agreement exists between all dimensions of e-governance and the institutional excellence dimensions at the level of 0.01. It shows a strong positive correlation between the e-governance mechanisms application and institutional excellence at the University of Ha'il.

It is recommended that universities pay attention to practicing e-governance because it increases their competitiveness and enhances the chances of distinguishing their performance. It is suggested to expand e-governance methods and use them to get out of problems and obstacles related to work and its procedures. There is a dire need to create the appropriate environment to achieve excellence in the university's institutional performance by preparing the proper infrastructure. Attention must be taken to the faculty members' opinions regarding attaining distinction in their field of work. The universities are instructed to prepare training cadres capable of advancing all university transactions into electronic transactions. It is essential to validate the necessity of refining the faculty members' skills concerning implementation and dealing with various electronic transactions.

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Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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