The Role of E-Government in Higher Education

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دور الحكومة الإلكترونية في التعليم العالي

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Abstract:

Achieving the development goals of any nation is greatly influenced by the output of higher education. However, higher education in the Libyan region has grown quickly in recent years, maybe as a result of the integration of e-governance into the educational framework. Information and communication technology-related initiatives contribute to the delivery of top-notch education. A new, more extensive breakthrough has been made possible by the execution of e-governance in the field of higher education. Thus, the destination of this study is to determine the extent to which e-governance improves educational quality and human capital growth. The primary-based quantitative research approach is used in this investigation. Researchers can test the experimental data for their study using this approach, which was gathered via a survey instrument. a questionnaire with a convenient sampling method to get information from specific responders. Three types of samples were used in this study's random sampling: students, academic staff, and non-academic staff at Zintan University. Thus, there are 130 responders in all. The study's conclusions demonstrated that, despite certain drawbacks, information and communication technology greatly raises educational standards and develops human capital that prepares people for the competitive global market. The study's findings will help future researchers and academics investigate the same issue from different angles in more detail, drawing policymakers' attention to this issue.

Keywords: E-Government, Higher Education, Human Resource Development.

الملخص:

يتأثر تحقيق الأهداف التنموية لأي دولة بشكل كبير بمخرجات التعليم العالي. ومع ذلك، شهد التعليم العالي في المنطقة الليبية نمواً سريعاً في السنوات الأخيرة، وربما كان ذلك نتيجة لدمج الحكومة الإلكترونية في الإطار التعليمي، تساهم المبادرات المتعلقة بتكنولوجيا المعلومات والاتصالات في تقديم تعليم رفيع المستوى، لقد أصبح من الممكن تحقيق تقدم جديد وأكثر شمولاً من خلال تنفيذ الإدارة الإلكترونية في مجال التعليم العالي، وبالتالي، فإن هدف هذه الدراسة هو تحديد مدى مساهمة الحكومة الإلكترونية في تحسين جودة التعليم ونمو رأس المال البشري، تم استخدام منهج البحث الكمي المبني على الأساس في هذا البحث.

يمكن للباحثين اختبار البيانات التجريبية لدراستهم باستخدام هذا النهج، والذي تم جمعه عبر أداة المسح. استبيان مع طريقة أخذ عينات مناسبة للحصول على معلومات من مستجيبين محددين، تم استخدام ثلاثة أنواع من العينات في العينة العشوائية لهذه الدراسة: الطلاب، وأعضاء هيئة التدريس، والموظفين غير الأكاديميين في جامعة الزنتان، وبالتالي، هناك 130 مستجيبا في المجموع. وأظهرت استنتاجات الدراسة أنه على الرغم من بعض العيوب، فإن تكنولوجيا المعلومات والاتصالات ترفع المعايير التعليمية بشكل كبير وتطور رأس المال البشري الذي يعد الناس للسوق العالمية التنافسية، وستساعد نتائج الدراسة الباحثين والأكاديميين في المستقبل على التحقيق في نفس القضية من زوايا مختلفة بمزيد من التفصيل، مما يلفت انتباه صناع السياسات إلى هذه القضية.

الكلمات المفتاحية: الحكومة الإلكترونية، التعليم العالي، تنمية الموارد البشرية.

1. Introduction

In recent decades, the world has witnessed rapid technological progress that has led to profound changes in various fields, particularly in public administration, service delivery, and education. Among the most notable developments is the concept of e-government, which represents a qualitative transformation in the way governments interact with citizens and institutions. Through the utilization of information and communication technologies (ICT), e-government facilitates service delivery, increases transparency, reduces costs, and enhances efficiency, thereby reinforcing community engagement. Within this transformative landscape, higher education has emerged as one of the most affected and promising sectors for reform through digital governance initiatives. Higher education plays a pivotal role in achieving national development goals by equipping individuals with the skills and knowledge required to meet labor market demands, support innovation, and foster economic growth. However, in many developing countries, including Libya, this sector continues to face several challenges such as

outdated administrative systems, inefficiencies in service provision, limited accessibility to academic information, and lack of transparency in institutional processes. These obstacles hinder the overall quality of education and reduce stakeholder satisfaction among students, faculty members, and administrative staff. Consequently, the integration of e-government within the higher education sector emerges as a potential solution to address these deficiencies and modernize educational institutions.

The application of e-government in higher education introduces a wide range of benefits, including streamlining of processes such as student registration, examination systems, human resources management, and financial operations. It also enhances communication among academic stakeholders, promotes data-driven decision-making, and facilitates access to institutional services through digital platforms. These improvements contribute to creating a more agile and responsive academic environment that supports both teaching and learning in a modernized and efficient manner.

Nevertheless, the successful implementation of e-government in the Libyan context is not without challenges. Key issues such as limited digital infrastructure, lack of skilled personnel, inadequate training, low awareness of e-services, and institutional resistance to change often stand as barriers to achieving the full potential of digital governance in education. Therefore, it becomes essential to empirically examine the impact of e-government systems on the quality of higher education and the development of human capital in the Libyan context, identifying both the enabling factors and the constraints.

This study aims to assess the extent to which e-government applications enhance the performance and service quality in higher education institutions, with a focus on Zintan University as a case study. By employing a quantitative research methodology, the study collects and analyzes data through a structured survey targeting three primary stakeholder groups: students, academic staff, and administrative personnel. This inclusive sampling approach ensures a comprehensive understanding of perceptions and experiences regarding the use of e-government tools in the educational process.

The significance of this research lies in its ability to bridge the existing gap in literature concerning the role of digital governance in Libyan higher education. It provides empirical data that can support educational policymakers, IT administrators, and institutional leaders in designing and implementing more effective e-government strategies. Moreover, the findings are expected to inform future research by offering insights into how different components of e-governance — such as ICT infrastructure, local area networks, electronic support systems, and computerized data management — correlate with educational quality and human resource development.

In an era where digital transformation has become a strategic imperative, the integration of e-government in higher education goes beyond administrative convenience; it serves as a fundamental pillar for achieving sustainable development. Education systems empowered by digital tools are better positioned to respond to societal needs, adapt to global trends, and contribute to national competitiveness. Accordingly, this study does not only explore the technological dimensions of e-governance but also its socio-educational impact in terms of building capable, informed, and innovative human capital.

In conclusion, by analyzing how e-government systems affect institutional efficiency and academic outcomes, this research contributes to the broader discourse on educational reform and digital innovation in developing countries. It presents a model that can guide higher education institutions in Libya and similar contexts toward more inclusive, transparent, and future-ready educational frameworks ‹by analyzing how e-government systems affect institutional efficiency and academic outcomes, this research contributes to the broader discourse on educational reform and digital innovation in developing countries› It presents a model that can guide higher education institutions in Libya and similar contexts toward more inclusive, transparent, and future-ready educational frameworks.

Moreover, as global educational landscapes continue to evolve in response to digital transformation, it becomes imperative for national institutions to align their governance structures with international best practices. This alignment not only strengthens the competitiveness of local universities but also ensures that students and faculty can engage with a globally connected academic community. Therefore, this study not only addresses a local need but also contributes to the global understanding of how e-government can drive progress in education. It advocates for a strategic investment in infrastructure, capacity-building, and policy reform to ensure that digital technologies fulfill their promise in shaping the future of higher education across Libya and beyond.

2. Problem Statement:

There is gap in the literature related to the factors that concern the when they decide to adopt the e-Government services in higher education. Thus, a study is needed to discover the factors that encourage students and academic staff adopt the e-Government services in in higher education. Therefore, this study's random sampling: students, academic staff, and non-academic staff at Zintan University.

3.Review of Literature:

The majority of e-government initiatives in developing nations rely on high-tech processes, yet the populace is ill-prepared for them. Effective endeavors have chosen the cheap route (7). This study examines one such initiative in order to assess the factors that have led to its advancement. The study comes to the conclusion that development is fuelled by stakeholders' involvement. The primary problem for the success of e-government is not technology,

but rather a mutual understanding between the populace and the complementary governing body (1). Due to the active involvement of stakeholders, birth registration and immunization rates have increased along with some unintended benefits that have also been realized. These benefits include better public and elected officials' reputations, the use of data for school and higher education enrolment, and the ability to make decisions about the management of vaccines for the general public. (18)

Furthermore, technological developments would enable nearly everyone to purchase sophisticated computing machines. It is to be expected that information technology will be widely used in college instruction and training (2). The growth of professional academic members is contingent upon the broad acceptance of ICT education in public education environments. All educational levels, including elementary, secondary, upper secondary, and university education, must have access to ICT and computer-aided instruction tools. Libya will increase the number of public universities offering ICT degrees. It is required of the education board and universe management network to offer diploma programs, computer-related courses, and educational schemes. (17)

Libya has enormous potential for e-learning. Prior to using e-learning as a cutting-edge trick in Libya, it is critical to evaluate our preparedness in a quantifiable manner (3). The primary constituents of e-governance at the first level are identified as government, business, education, and society. For that Libya, the path previously taken by the top-ranking e-governance-ready nations needs to be followed. E-governance initiatives promise more citizen-centric administration and reduced operating expenses for the majority of countries. Regrettably, a number of these initiatives fell short of the promised advantages. An emphasis on technology rather than governance is always the reason given for this failure. (19)

Government agencies' use of information technology, including mobile computing, the internet, and wide area networks, has the power to alter their interactions with the public, businesses, and other policymakers (5). These technologies may be used for better citizen service delivery, stronger ties with business and industry, information access that empowers individuals, or more efficient governance. Less corruption, more openness, ease of use, more sales, and cost savings are possible outcomes. (10)

Information and communication technology (ICT) is used in e-governance, a civil and political activity of government that improves communication between citizens and governments by giving people more access to resources and more effective and productive ways to participate in politics (4). Any action or encounter that has a lasting impact on a person's intellect, personality, or physical capabilities is considered education. Additionally, education plays a vital role in the active transmission of society's acquired knowledge, abilities, and values from one generation to the next. The basis for assisting employees in enhancing their organizational and personal aptitudes, knowledge, and talents is human resource development. The ability to empower individuals with knowledge and skills is the most crucial component of increasing human capital. (11)

The context framework proposed in Figure 1 contains eleven major components: Information and Communication Technologies (ICT); Local Area Network (LAN); Electronic Performance Support System (EPSS); Component Data Computerization (CD); Registration (RG); Examination (EX); Training (TR); Result Processing (RP); Teaching (TC); Strategy and Policy (SP); Admission (AD); and Quality of Education Human Resource Development (QEHRD).
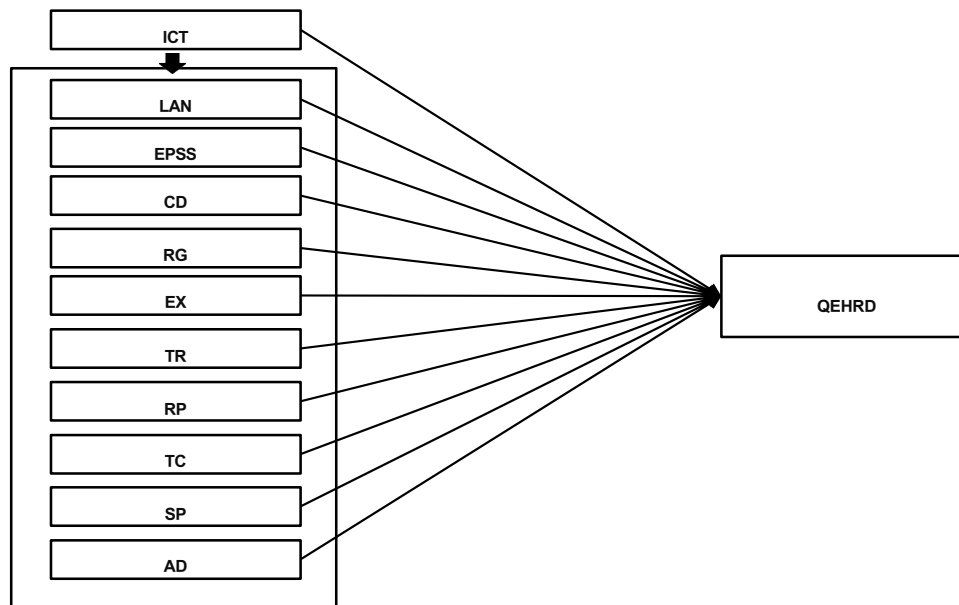

Figure 1 :(Conceptual Model)

The study tested the following hypotheses accordingly:

1. Information and Communication Technologies have a significant positive effect on educational quality and human resource development.
2. Implementation of Local Area Networks contributes positively and significantly to education quality and human resource development.
3. Use of an Electronic Performance Support System has a significant positive effect on educational quality and human capital.
4. Computerization of data positively and significantly contributes to education quality and human resource development.

4. Methodology

The method of quantitative analysis was utilized by the researcher. Studies that employ statistical data frequently also employ a quantitative research methodology. Specifically, using the survey instrument to gather empirical data and create a relational impact design, identifies and characterizes the impacts and correlations between the study variables. (12)

The survey instrument used in this study was created by the researchers. All research constructs are included because they are based on the model. But thanks to the data gathering tool, researchers were able to get more expertise and hands-on experience in the actual world of e-governance in the education sector on their possibilities in Libya. The survey used the following measuring scale:

(5 Strongly Agree, 4 Agree, 3 Neither Agree nor Disagree, 2 Disagree, 1 Strongly Disagree.)

Three types of samples were used in this study's random sampling: students, academic staff, and non-academic staff. Thus, there are 130 responders in all. Males make up over 57% (n=74) of the entire survey sample that voluntarily participated in the study. Over 43% of the participants were female (n = 56). Concerning the age groupings of 18–25 years old (39.3% n=51). While 30 percent (n = 39) of the survey respondents were between the ages of 26 and 35, 16.1% (n = 21) of the survey sample as a whole was between the ages of 36 and 45. Lastly, among those 46 years of age and older, (14.6% = 19). Table 1 further showed that all survey respondents are quite well qualified, with 40% (n=52) was Students; however, the percentage of respondents with a Bachelor's degree was (27.7%, n=36). But among those with Higher Diploma (16.9%, n = 22), there were also master's degrees (9.1%, n = 12) and PhD was (6.2%, n = 8). The majority of survey respondents had 15 or fewer years of total work experience (40.7%, n=53). In addition, 5 reached fewer than 10 years (23.8%, n=31). Additionally, 6.2% (n=8) of the sample as a whole reported having more than 20 (see Tables 1a., 1b., and 1.c)

Table 1a :(Gender Distribution).

Gender	N	%
Male	74	56.9
Female	56	43.1
Total	130	100

Table 1b: (Age Distribution).

Age Group	N	%
18–25	51	39.3
26–35	39	30
36–45	21	16.1
≥ 46	19	14.6
Total	130	100

Table 1c. Highest Academic Qualification.

Degree Level	N	%
Students	52	40
Bachelor's	36	27.7
Higher Diploma	22	16.9
Master's	12	9.1
Doctoral	8	6.2
Total	130	100

Table 1d. Years of Work Experience.

Experience (years)	N	%
< 5	10	7.7
5–< 10	31	23.8
10–< 15	28	21.5
15–< 20	53	40.7
≥ 20	8	6.2
Total	130	100

The researcher utilized partial least squares structural equation modeling (PLS-SEM), a popular statistical approach for analyzing path models and latent variables in particular, to examine the study model and validate its assumptions. The measurement model has been constructed by the researcher in the first stage of PLS analysis. The directions between the measured latent variables are therefore shown in this phase. Before looking at the study hypotheses, (PLS-SEM) has three important analyses (13). These investigations include evaluations of discriminant validity, convergence validity, and the structural model's linear regressions between constructs. In order to establish convergent validity, each latent variable's composite reliability (CR) should be higher than 0.80 and the average variance extracted (AVE) more than 0.50. Additionally, for any latent variable to have discriminant validity, its connections to all other latent variables must be bigger than the square root of the average variance extracted from that variable.

5. Results

The researcher examined the findings of each latent variable by the loading of the AVE and the CR, where the value of (AVE) is more than 0.5, in order to demonstrate convergence validity. The CR values above the 0.7 threshold for every latent variable indicate that the eligible components continue to exhibit strong dependability. As a result, the findings supported the study model's convergence validity. Additionally, we established reliability by using the Cronbach's α test. As the results are shown in (Table 2, the loaded values of all latent variables are higher than 0.6, and this evidence is sufficient to assess the reliability of the survey instrument.

The findings of the Smart-PLS structural model indicate that each dimension of information and communication technology has a noteworthy, positive impact on both educational quality and human capital growth, leading to each of the research hypotheses being supported by the data.

Table 2: "Convergent Validity and Internal Consistency Metrics".

Construct	AVE	CR	α
ICT	0.824	0.959	0.946
LAN	0.812	0.945	0.923
EPSS	0.692	0.9	0.851
CD	0.808	0.954	0.94
RG	0.852	0.958	0.942
EX	0.818	0.957	0.944
TR	0.778	0.946	0.928
RP	0.802	0.942	0.917
TC	0.797	0.94	0.915
SP	0.73	0.915	0.876
AD	0.78	0.934	0.905
QEHRD	0.789	0.949	0.933

6. Conclusions:

The current study explored the role of e-government and its related dimensions in enhancing the quality of higher education and the development of human capital in Libyan universities, with a particular focus on Zintan University، The findings clearly demonstrate that the implementation of information and communication technologies (ICT), along with their supporting components such as local area networks (LAN), electronic performance support systems (EPSS), and computerized data systems, significantly contributes to improved educational services and institutional effectiveness. The positive linear correlation found between ICT usage and educational outcomes provides strong evidence that digital transformation in higher education is not only desirable but also essential in today's knowledge-based economy.

The research validated the impact of several specific e-government dimensions—ranging from digital student registration to online examinations, training systems, result processing, policy planning, and admission management—on both the functional and strategic performance of academic institutions. These digital systems improve transparency, reduce administrative workload, and enhance the user experience for both students and staff, leading to a more dynamic and adaptive educational environment، The convergence and reliability metrics used in the analysis further reinforce the robustness of the study's conclusions.

Furthermore, the results highlighted the importance of ICT in human resource development. By offering tools for staff training, performance monitoring, and strategic alignment with institutional goals, e-government platforms play a central role in shaping competent, motivated, and well-equipped human capital. In the context of global academic competition, the development of human capital is not merely a national goal but a necessity for integration into the international higher education community.

However, while the findings are promising, they also underscore the challenges that remain in fully realizing the potential of e-government in Libyan higher education. These include issues such as inadequate digital infrastructure, a lack of qualified personnel, low digital literacy among users, and limited policy support. Such challenges indicate that while technology provides a framework, it must be accompanied by organizational readiness, regulatory reform, and long-term investment.

In summary, this study adds valuable empirical evidence to the growing body of research advocating for digital transformation in education. It emphasizes that the use of ICT and e-governance tools can play a critical role in elevating educational quality, institutional performance, and the overall development of human resources. The insights gathered from the case of Zintan University can serve as a model for other institutions in Libya and the broader MENA region that seek to modernize their operations and educational delivery. Ultimately, the integration of e-government in higher education is not a luxury but a strategic necessity for building resilient, inclusive, and future-ready academic systems.

7.Recommendations:

In light of the findings presented in this study, it becomes evident that the implementation of e-government in the higher education sector in Libya holds significant potential to elevate educational standards and support human capital development. However, to harness this potential effectively, a series of strategic recommendations must be considered to ensure the sustainability, inclusivity, and institutional alignment of such digital transformations.

First and foremost, the successful adoption of e-government systems requires the establishment of a robust information and communication technology (ICT) infrastructure within universities. This includes the availability of high-speed internet connectivity, reliable digital networks, and secure data storage solutions. Without such a foundation, efforts to implement digital governance mechanisms may remain superficial or fragmented. Investments in infrastructure must be accompanied by comprehensive capacity-building programs targeting both academic and administrative staff. These programs should aim not only to develop basic technical proficiency but also to cultivate a deeper understanding of the pedagogical and organizational benefits of e-governance tools.

In parallel, it is essential that national educational authorities and policymakers develop and enforce supportive legal and institutional frameworks. Such frameworks should facilitate the standardization and interoperability of e-government platforms across universities and ensure that data protection, digital privacy, and ethical use of technology are embedded within institutional practices. These policies must also account for the need to continuously assess and upgrade technological systems, recognizing the dynamic nature of digital innovation.

Awareness and engagement at the user level play a critical role in the success of e-government implementation. Therefore, universities should actively promote awareness campaigns that highlight the advantages and functionalities of e-services, particularly among students who are primary stakeholders in the educational process. Creating feedback mechanisms that allow users to report issues, suggest improvements, and participate in the system design process will further enhance usability and adoption rates. Furthermore, integrating student feedback into decision-making processes can foster a sense of ownership and trust in digital initiatives.

Another important aspect involves benchmarking and performance evaluation. Higher education institutions should establish internal mechanisms to measure the efficiency, accessibility, and impact of e-government applications on institutional operations and educational outcomes. Regular assessments and comparisons with both domestic and international institutions can help identify best practices and areas for enhancement.

Moreover, there is a growing need to ensure that e-government systems are inclusive and accessible to all stakeholders. Digital services should be designed with consideration for students and staff from rural areas, those with disabilities, or individuals with limited digital literacy. Addressing this dimension of equity requires the implementation of user-centered design principles, mobile-friendly interfaces, and language localization features.

Finally, higher education institutions should position themselves as active hubs for innovation and research in digital governance. This includes supporting academic research on e-governance models, encouraging interdisciplinary collaboration between IT and education departments, and participating in regional or international networks focused on digital transformation in education. By doing so, Libyan universities can not only enhance their internal operations but also contribute to the global discourse on educational reform through e-governance.

Ultimately, the integration of e-government in higher education should not be viewed merely as a technological upgrade, but as a strategic transformation that requires coordinated action across policy, infrastructure, training, and stakeholder engagement to achieve sustainable and impactful results.

References

(1) Abdullah, K. M., Mustafa, H. A., Othman, B., & Majed, Z. (2020). The Impact of Information System on Improving Academic Staff Performance of Colleges and Institutes – a Case of Erbil Polytechnic University. Journal of Xi'an University of Architecture & Technology, XII(Iv), 292– 304.

(2) Ali, M.A., Omer, S.O. & Sadq, Z.M. (2018). The Role of Information System Efficiency Human Resources in the Strategic Practices of Human Resources Management. Iraqi Administrative Sciences Journal. 2(2): 219-233.

(3) Bhanti, P., Lehri, S., & Kumar, N. (2012). E-Governance: An approach towards the integration of the higher education system in India. International Journal Ot Emerging Technology Ans Advvanced Engineering, 2(8), 225–229.

(4) Brwa Sardar Ahmad, Zana Majed Sadq, Festoon Othman, and V. S. H. S. (2019). The Impact of the Quality of Work Life on Organizational Intelligence. International Journal of Psychosocial Rehabilitation, 12(8), 32–45. https://doi.org/10.17010/pijom/2019/v12i8/146413

(5) Farhad Al-Kake, Amran Harun, Festoon Othman, N. M. H. (2019). The Effect of Corporate Governance on

Firm's Profitability: Evidence from London Stock EX- CHANGE. International Journal of Psychosocial Rehabilitation,23(2),727–742. https://doi.org/10.1080/10599231.2019.1572421

(6) Majed, Z., Othman, B., & Omer, H. (2020). Attitudes of managers in the Iraqi Kurdistan region private banks towards the impact of knowledge management on organizational effectiveness. Management Science Letters, 10, 1835–1842. https://doi.org/10.5267/j.msl.2019.12.035

(7) Nawzad sabir, M., Othman, B., Al-Kake, F., & Rashid, W. (2019). The influence of entrepreneurship characteristics on attitude towards knowledge commercialization. International Journal of Psychosocial Rehabilitation, 23(2), 566–582. https://doi.org/10.37200/IJPR/V23I2/PR190316

(8) Othman; B. A. H. N. M. D. A. Z. M. S. (2020). The effects on customer satisfaction and customer loyalty by integrating marketing communication and after-sales service into the traditional marketing mix model of Umrah travel services in Malaysia. Journal of Islamic Marketing, 11(2). https://doi.org/10.1108/JIMA-09-2019-0198

(9) Othman, B., Harun, A., Rashid, W., & Ali, R. (2019). The impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia. Management Science Letters, 9, 1763–1772. https://doi.org/10.5267/j.msl.2019.6.014

(10) Ping, L., Jing, X., Othman, B., Binti, Z., Kadir, A., Yuefei, F., & Ping, X. (2019). An Intercultural Management Perspective of Foreign Student ' s Adaptation in Chinese Universities : A Case Study of China Three Gorges University. Engineering, Technology & Applied Science Research, 9(2), 3971–3977.

(11) Rajput, V. (2017). E-Governance Culture in Institutions of Higher Education. International Journal of Educational Planning & Administration, 7(1), 1–4. Retrieved from http://www.ripublication.com

(12) S.dr.inderjeet. (2016). 7 . Application of e-government in — issues , challenges and prospects in India Abstract : Application of e-government in. SOCRATES, 4(91), 91–109.

(13) Sabir, M. N., Rashid, W. N., Al-Kake, F., & Othman, B. (2019). Entrepreneurship characteristics and attitude towards knowledge commercialization: Evidence from Malaysia. International Journal of Psychosocial Rehabilitation, 23(2), 844–859. https://doi.org/10.37200/IJPR/V23I2/PR190335

(14) Sadq, Z. M., Mohammed, H. O., Othman*, B., & Saeed, V. S. H. (2020). Attitudes of Managers in the Knowledge Private University towards the impact of Human Capital in Achieving Competitive Advantages. TEST Engineering & Management, 82(393), 393–401.

(15) Sadq, Z. M., Ahmad, B. S., Sulaiman, V., Saeed, H., Othman, B., & Mohammed, H. O. (2020). The relationship between intellectual capital and organizational trust and its impact on achieving the requirements of an entrepreneurship strategy (the case of Korek Telecom Company, Iraq). International Journal of Advanced Science and Technology, 29(02), 2669–2682.

(16) Sadq, Z.M., Aljaf, N.A. & Hasan, R.S. (2018). The Role of Human Capital in Achieving Competitive Advantages. International Journal of Social Sciences & Educational Studies. 4(4): 53-63. DOI: 10.23918/ijsses.v4i4p53.

(17) Shrivastava, D. R. K., Raizada, D. A. K., & Saxena, M. N. (2014). Role of e-Governance to strengthen the higher education system in India. IOSR Journal of Research & Method in Education (IOSRJRME), 4(2), 57–62. https://doi.org/10.9790/7388-04215762

(18) Türk, K. (2016). Performance management of academic staff and its effectiveness in teaching and research – Based on the example of Estonian universities. Trames, 20(1), 17–36. https://doi.org/10.3176/tr.2016