E-Learning challenges in Iran's higher education system and its implications in the realm of good governance

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Abstract
Good Governance is an approach to government that is committed to creating a system founded in justice and peace that protects individual's human rights and civil liberties. Citizens' learning and education processes, given the huge technological developments and innovations, are changing both in terms of nature and shape. E-governing in Iran despite of all its progresses in the recent years is confronting numerous challenges. To a great extent these challenges are rooted in higher education system, the absence of no systematic approaches to e-learning, and social and political structural restrictions. The aim of this study is to examine the present status of e-learning in Iran's higher education system and its shortcomings structurally. It also argues the challenges and its implications for crystallization of an efficient government specifically from the perspective of e-governing. By using descriptive-analytical research method, based on existing data, Iran's Ministry of Information and Communications Technology (ICT) indices and statistics, and reviewing the theoretical literature and conducted studies, a deep analysis of Iran's current e-learning status and its implications in the realm of good governance are presented. A literature review conducted for the purpose of this study, which has involved a review and synthesis results from scientific publications. The findings indicated that the idea of good governance in Iran because of under developed infrastructures educationally and socially, and political considerations faces major and minor challenges and problems specially in the area of public awareness, allocation of national budget, lack of innovation, and weakness in the area of management.

Keywords: good governance, e-learning, e-governing, Iran's higher education, ICT.

1. Introduction
The evolution of information technology has affected all sections of society, including the education sector. The magnitude of this impact is not uniform everywhere and in every case because the characteristics and infrastructure of societies are not the same and their use of science and technology is, in some cases, very different [1]. The division between the advanced and developing societies in the economic and scientific spheres has also extended to the benefit of information and communication technology. Despite the deep division between 'rich' and 'poor' countries, the benefits of modern technologies regarding the developing countries' shortcomings cannot be ignored, and ignoring them will lead to further deprivation and further retardation. The use of new ICT technologies in the field of distance education can be one of the options considered to fill educational gaps in developing countries.

In all countries, there is a training system that is designed to meet the needs of human resources. Changes to this system and its components and tools require consistent planning and any use of technology in this traditional system must be based on an indigenous needs and facilities approach. In fact, localization means adapting the quality to the benefits of technology in specific cultural and social situations (Business Dictionary). The application

of technology in the field of learning can be one of the useful and beneficiareis of this phenomenon. The precondition for the use of e-learning is the existence of the necessary context and a clear view of it in national development programs. What is the national approach to strategies for using information technologies in the country? The answer to this question, and how the position of information technology in the country is defined and supported, clarifies the task of e-learning.

What is called e-learning is rooted in a phenomenon called 'distance learning'. Distance learning has a rich history, from print-based learning to educational television, and current interactive technologies. Until the mid-twentieth century, correspondent learning was the most common distance learning process in Europe. Since the mid-twentieth century, television and radio education has become commonplace and has begun to become a field of distance learning. The biggest problem of radio and television-based learning was its unilateralism and the lack of mutual communication between the teacher and the student [2]. Over the recent past decatdes, with the development of the Internet and the Web, distance education and learning have undergone fundamental changes. In this evolution, traditional methods have gradually replaced with the web- based learning that is grounded on intelligence and conscious learning by means of databases [3]. E-learning can simply denote the use of electronic devices in education. Rosenberg [4] restricts e-learning to the use of online learning via World Web as “the use of internet technologies to deliver a broad array of solutions that enhance knowledge and performance which is based upon three essential criteria: networked, delivered and focus on the broadest view of learning” [4].

Online learning was the biggest revolution in contemporary education and made a major change in the education system [5]. No wonder millions of students around the world are choosing online education programs. The reason for choosing online education is that the limitations of traditional education such as high costs, the necessity of classroom attendance, and technological advancements are out of question [6]. In addition, technological innovation and development make a sea change in education and provided students and all related beneficiaries with new facilities and potentials in obtaining knowledge in distinctive ways such as online learning or e-learning from any spot of the world [7]. Iran as a developing country is not an exceptional and has been affected by this phenomenon. In the recent years, regarding the technological development, the education generally and the higher education specifically has experienced noticeable progress. For instance, graduated students with sophisticated technological knowledge have better chance in gaining jobs [8]. Furthermore, the results of a study by Shababi & et al [9] indicated that there is a mutual relationship between science development, technology development and economic growth in Iran, so that economic growth and technology development are respectively the most effective and influential criteria in this communication network. Despite the fact that many more advanteges of technology roles in education and related areas could be numbered, there is a lot of challenges and shortcomings in Iran's higher education over e-learning issue and how technology could affected it.

Regarding e-learning status and technological developments in Iran's higher education studies indicate that traditional thinking is prevalent among Iran's university professors, original research has a low priority, wide gaps between infrastructures and expectations existed, and students' access to the Internet is inadequate and all these have led to that e-learning has had a poor place in teaching and learning and that professors have no particular expectation of e-learning related technologies other than to receive material from credible sources [10], [11], [12]. It is obvious that good governance incorporates technological innovation that enhance development and growth through effective education system. In other word, without sophisticated education system, based on the most up to dated technologies and devices that all rooted in a comprehensive efficient system, achieving the acceptable standards is unrealistic. The technological advances in higher education and scientific fields play a key role and are essential in good governance.

2. Theoretical framework

Governance comprises implementation of policies of one organization or by involvement of many organizations. Mostly, governance is considered related to the government while there is difference between these two. Government is an institution or instrument for distribution of policies related to public in general while Governance is a phenomenon for implementation of schemes and policies of any organization [13]. Good governance is a way of measuring how public institutions conduct public affairs and manage public resources in a favorite way. Governance is the process of decision-making and the process by which decisions are implemented. Good governance has eight chief characteristics. It is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. It assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society [14].

Regarding the higher education, good university governance is a system of good governance to enhance the quality of higher education. The implementation of good university governance is intended to make available a equilibrium between the autonomy granted to institutions and accountability [15]. Good governance indicators act as a robust contributor for increasing educational effects, which further assist in formulating the policies towards the internationalization of universities [16]. Given the accelerating pace of advances in science and technology, gradually from the beginning of 1990s the electronic governament and electronic govrenance were introduced [17]. E-governance is providing government services and information to the public by using electronic means. E-governance allows the government and people to access without difficulty to a wide range of services and facilities. The aim of e-governance is to deliver services in new modes of delivery and more flexible ways through the use of information technology [18]. Given the position of innovative technology in facilitation of training students, governance can play a key role in identifying effective education. govrenment is responsible for creating a condusive environment which is aligned with the educational aims and helps institutions to meet the expectations of society. With the help of technology, government can reinnovate the structure of institutions, motivate students and, persuade actors within education systems to follow new methods of learning [19].

Government and technology, together, has made an crucial change in the entire society structure, values, culture, and particularly the ways of conducting education process. It is clear that electronic government includes several stages or phases of development and it has many advantages to all sectors of government, citizens, and education. However, the implementation of electronic government is not an easy job it faces many challenges and barriers which have to be treated sensibly, specifically in the realm of education [20].

3. Methodology

The methodology of the study is analytic-explanatory. The authors based on their various studies in higher education, good governance related research, and latests available data on Iran's higher education present a comprehensive picture of Iranian E-learning education and its challenges and how this impacts the realization of good governance in Iran. The paper comprises articles related to E-learning, governing and technology in higher education. This was to reflect current thinking and evidence supporting positions and claims relating to good governance and included accounts of technology supported interventions in higher education that to ensure a wide international coverage of journal articles and conference papers relating to higher education, good govrnance, and the majore challenges in these areas in Iran higher education and govrenance system.

4. E-learning in Iran's higher education

In recent decades, with the progress of Information Technology (IT), novel revolution has taken place in teaching and learning process and methods of education such as using paper, reading texts, and doing exercises can hardly appeal to the young people who live in the era of virtual reality, Internet, and social media [21]. E-learning plays role as an alternative to traditional approaches of education. In existing information society, people have to access knowledge via information and communication technology (ICT) to keep pace with the modern developments. ICT nowadays infuses the education environments and reinforces the success of education process. It is expected the specifics of education will undergo rapid transformation with advances in the technology in the area of learning [22]. Since the 1990s, there has been significant advance in the adoption of technology within higher education. Despite the extensive progress in practice, concerns last to be expressed about the effective use is being made of technology to enhance the learning experience of students [23]. The rapid growth of the Internet has contributed to the increasing popularity of E-learning, and a desire to reach students at a distance to have better chance to keep on their education at higher levels. University students are now realizing that E-learning education is a grave alternative to traditional learning methods and it is now commonplace in higher education and is gaining popularity as well. In comparison with traditional class rooms, students in E-learning or on-line based education play more participation and intraction share in the virtual classrooms because of If students do not enter into the online classroom - do not upload a contribution to the discussion - the instructor has almost no way of knowing whether they have been there or not. Therefore, instatnt intraction and active participation play key role in on-line based education [24]. Universities appealing to E-learning education must be prepared to practice new approaches and skills in order to create an empowering learning process.

In Iran's higher education system, like any other system, knowledge construction and transmission of information without dealing with technologies is unthinkable. In other words, education, learning, and technology are interconnected so much in the new era that imagining technology out of the process of producing and creating knowledge is impossible. E-learning is real no doubt in it and its use is increasing in Iran. however, E-learning isn't being adopted as widely or as quickly as some analysts have predicted. A number of institutions of higher education have employed information technology in the academic services they provide to their students and academic staff—but their structure, and its functioning, are basically conventional. For instance, the University of Tehran as the oldest university of Iran and the symbol of higher education established the e-learning Center in 2002. Later, from 2006, the Center has been reformed and expanded to accept students to online degree programs. Currently, university majors consist of 100 on-line courses in master degree and 3 majors in bachelor degree in the field [25]. For increasing efficiency of courses, in addition to offering e-contents, supportive services such as on-line classes and e-assessments are offered as well. Another university that has acceptable activities in the field of e-learning is Ferdowsi University of Mashhad. The idea of having virtual classes was put forward in 2001. Ferdowsi University has more than 35 undergraduate virtual university subjects. Summer semester classes are also offered virtually at Ferdowsi University of Mashhad. In addition, the content of more than 100 subjects of Bachelor's programs is available virtually on e-learning portals [26]. However Esfahan University of Medical Sciences' first virtual education course was offered to medical students in 2005 which was based on Medline Web, its E-learning Center formally started its activities at this University in 2010 [27].

According to the latest statistics in 2018 by Institution for Research and Planning in Higher Education (IRPHE), there is 37518 students (male and female in public and private universities) in different fields studying based on electronic education [28]. In the Bachelor, Master, and Doctor levels, about 5005 students are studying at Bachelore, 32510 students are at the Master, and only 3 students are at the Doctral levels. As it is obvious in comparison with the whole population of students 3.616.114 in 2018-2019 the students who are studying in electronic education sect is very low.

The virtual institutions of higher education in Iran are not free from the hard regulations, and innovative in their requirements, procedures, academic content and programs, and many other affairs. They are supposed to follow, like conventional universities, the centralized and uniform regulations and procedures [29]. One of the outcomes of E-learning education has been to make higher education more accessible particularly for the marginal groups. This has not been realized in Iran for its high costs. In addition, in E-learning, the role of the teacher has changed from a transmitter of information to a faciliator of learning [30]. Therefore, it is essential in electronic or virtual learning systems that teachers and professors have been specialized in their fields and be able to work with hardware and software equipments. Unfortunately, the professors regarding the the knowledge over technology and innovative in education are not up to dated students view the quality of virtual higher education, according the finding of Saad Mohammadi and et al [10], as poor in terms of teachers' educational services. This means using new teaching equipment such as self-contained textbooks, audiovisual equipment, etc, instructing

professors to attend the virtual classroom on a regular basis, making necessary modifications to the teaching method at the most appropriate opportunity, attending to on time in the classroom and teaching instructional content in a timely manner, observing the academic chapter and conducting scientific and logical evaluation, providing feedback on the shortest possible time by teachers, scheduling teachers to better utilize students in their classrooms and teaching continuity Student service are at low level and poor quality. Given the low quality of E-learning education, while government policies encourage e-learning development, and technical and management infrastructures are relatively provided, lack of motivation and interest of applicants indicates a gap between supply and demand which is realized in the context of socio-cultural [31].

5. E-learning challenges in Iran's higher education system

Designing E-learning challenges is essential to alert to build more focus, provide the necessary foresight, appropriate preparation, and investment, prepare a strategic plan for the learning system, and take action to succeed. It seems the main reasons for the failure of e-learning initiatives were the lack of personalization, the lack of collaboration and interaction, and the lack of "learner-centered" approach in E-learning.

The level of development of countries affects the extent to which they use information technology. Information technology equipments such as computers and communications networks are expensive and are usually not accessible to the general public in underdeveloped countries. The inadequate number of computers is one of the important barriers to the development of E-learning education. It is true that lack of computers is one of the barriers to technology development in educational environments, but other root factors appear to be involved. One of these could be the national approach to technology; If the use of technology in learning is inadequate in large-scale planning, the existence of a computer mass cannot solve or promote education problems [32].

Having universities and colleges equipped with E-learning services is an urgent and essential needs in developing countries such as Iran. Therefore, the higher education system, in order to keep on, needs making sound and fundemental strategies. On the other hand, it is imperative that universities concentrate on students' attitudes and their expectations with regard to the role of E-learning within their higher education experiences [33]. Nowedays, the role of information technology not only in education but also in all aspects of life is out of question. In fact, as much as higher education students be able to study in an environment equipped with the most innovative technologies, their chance to have better job and opportunity in the future would increase dramatically and Iranian students are not exceptional [8]. Iran E-learning's status is not so much satisfying despite the recent years progress. Given the current situation of E-learning, the most noticeable challenges in Iran's higher education system are:

- There is no a comprehensive educational policy regarding E-learning in higher education;
- The slow pace of the Internet, dissatisfaction with the quality of service; high cost and inappropriate investment; low funding and advocate for higher education students, no ICT-based place or enviroment for students in universities and institutions; and shortages of skilled manpower and professors in the area of IT;

- The weak or lack of ICT knowledge among policy-makers and managers. This weakness originates from the conservative attitudes and approaches that exist among the majority of policy makers;
- Students unability and low familiarity with the English language becoming a big barrier on the way of implementing of pro E-learning and ICT based courses effectively;
- Weak IT infrastructure in the country generally and universities specifically;
- Insufficient awareness about e-learning among the public and its benefits and advantages that impact their judgments about efficiency of electronic learning;

Supposedly, the challenges regarding E-learning in higher education of Iran could be categorized as infrastructural, cultural, pedagogical, human, and support factors [34]. Each of these barriers or a set of them can affect ICT applications in the following training.

The learner's entry into the on-line learning environment requires prerequisites. Some of these prerequisites require prior experience and some depend on the learner's mental readiness. Entering the learner into the learning environment is not a waste of knowledge and skills, but a waste of time, a loss of morale, incomplete learning, and failure to plan. In addition, learners who are not ready to enter the e-learning field but have been forced to enter it have bitter experiences that can even negatively impact the opportunities available in the future. Providers of e-learning opportunities must also admit that the learner is allowed to think, acquire knowledge and skills, and even provide them with facilities. This is another big challenge in Iran's education system that dose not prepare the students properly in high school and pre-university periods.

When it comes to challenges and barriers, it is not to be expected that E-learning can be fully implemented by removing these barriers. These barriers are part of the existing challenges of technology with the social, cultural, political, and economic components that emerge as technology evolves.

6. ICT and good governance

In fact, one of the most significant characteristics of civil society is the existence of independent and critical mass media. Citizens are often informed by the media that an issue is accurate or inaccurate. The media plays an important role in shaping the public opinion of civil society as it examines different policies in many ways. the mass media are important agents of socialization that influence how people think and behave politically. Some argue that the mass media will replace parties as major means of informing and mobilizing citizens. Mass media are very important in democratic politics, but they have riddles, contradictions, and difficulties in playing their role [35]. Individuals depend on the fairness, impartiality, and accuracy of news for playing their roles as informed citizens. Therefore, the internet, information technology, and IT based facilities have critical share in the modern world. Consequently, citizens of every society should be prepared and trained to use the most advanced technologies and innovations in order to be effective and have noticeable share in building and sustaining their society.

Higher education as the focal point of dissemination of knowledge and awareness has a huge responsibility for training the students. Interconnection of technology and life is increasingly developing to the higher and more complex levels and apparently its inevitable. In such circumstances, training of students for dealing with the latests advancements in the realm of technology should be considered seriously. It is obvious that without informed citizens building democratic, progressive, and sustainable society is impossible. In a case of no responsible and informed citizens, the realization of good governance would be in danger and consequently the wholeness of society as an efficient identity would come into question.

The electronic readiness is considered as one of the most chief aspects in E-governmence process. In fact, electronic readiness is the ability to use information and communication technologies in developing economy and improving wellbeing [20]. It obvious that development economicaly, socially, and culturally is directly depend on ICT development and without an efficient educational system, any progress in IT is unimaginable. Consequently, the realization of not only good governance but also the minimum of competent governance without and ICT–based education system would face with huge barriers. Therefore, here this question brings up that how ICT-based higher education system facilitated the realization of good governance?

Given the modern day circumstances, technological advances have been thriving source for the efficient good governance. The technology specifically in the area of higher education provided effectual alternatives to the traditional ways of learning and consequently it has had implications in the realm of governance. Higher education has unquestionable role behind all developments in modern area. The improvement of a society depend on the progress of education system in that society. ICT acts in facilitating the transmission of information and knowledge between government and citizens and renovating the style of intraction governments and citizens. countries throughout the world have made massive investments in ICT in order to improve governance processes. ICT and related innovations have had a constructive impact in the delivery of public service delivery processes and its socio-economic structure [36].

ICT enables function in facilitating access to information and communication; improved access to governmental resources; creates new opportunities to design, manufacture, and market products through internet; improved education through computers and related technologies and equipments; opportunities to earn a better living by learning a new skill in the knowledge-based economy, etc., that are essential elements in today's society [37].

Fig. 1. Good Governance charectristics
Source: UNESC

ICT has a profound impact of government and its function by improving transparency, accountability and empowerment [38]. Transparency means that information about the processes of government is visible and accessible to citizens. Empowerment more broadly, to mean full cultural, social and political inclusion in a society. And accountability means to hold the authorities responsive. Free flow of information is necessary to have a transparent government to hold it accountable. ICT has been increasingly praised as an effective way to assistance citizens to hold their politicians accountable by getting information [39]. Therefore, ICT can play a key role in the realization of good governance.

The connection between ICT and good governance is so close that it is believed that E-government has never fulfilled its mission if it does not lead to better governance. E-government is a way of ensuring that all citizens have an equal opportunity to participate in decisions that somehow affect their status and quality of life. This form of governance based on ICT transforms citizens from passive into state actors who can comment on the kind of services they need. E-government provides a wide range of opportunities for identifying the goals of good governance and employs new communication and information technologies to improve public service delivery processes, accelerate service delivery to citizens, make government officials more accountable, heal information, reduce distance between people and governments, more effective participation of citizens and members of civil society in the public decision-making process, promoting social justice through equal opportunities for people to access information, and so on.

7. The challenges of good governance realization in Iran

The fact is that the Iranian society has not yet passed through the transition period to a full-fledged democracy. This has led to the formation of a dual state that neither promotes democracy nor fosters civil society, nor does the political system move towards despotism [40]. Therefore, it could be said that the Iranian society is living in a duality situation that there is no certainty about its future. Regarding the education as well, there is no coherent governance education sector, as responsibility for public education, higher education, and medical education has been delegated to three ministries, although this is not the case in

many countries around the world [41]. Therefore, it is noticeable that such "Multiplicity" in different sects and levels would be very challenging for policy making and managing in higher education and governaning leading to uncertainty. The lack of alignment of value, normative and institutional preferences of organizations and stakeholders in higher education and policy-making is the source of obstacles such as prioritizing organizational interests over national interests and the differing cultural-social values and norms of policymakers. In addition, The lack of a comprehensive system in the higher education indicate that we are facing a multiplicity of policy makers in the higher education system, and that there has been a lack of coordination between higher education institutions and policy makers [42].

Post- Islamic revolutionary higher education policies did not typically follow the justified logic of sustainability. They lacked the necessary attributes that would normally be expected of a political system. Much of the academic problem in Iran has come from one of the major policy deficiencies and inaccuracies. Issues such as the weakness of autonomy and the power of initiative in Iranian universities, degree orientation, subjectivism, disproportionate academic programs and training to the real needs of the community and the jobmarket, their helplessness in developing knowledge-building abilities, critical thinking, creativity and entrepreneurship. Slight growth beyond the minimum standards of quality, barriers to growth and faculty growth, undesirable development of international cooperation and the like are among the implications of our higher education policies [43]. For example, research shows that public universities take 2.7% students more than their actual capacity. In addition, the policy model of higher education in Iran, rather than emanating from the field of social science and independent field research and causal and scientific models of explanation, derives from formal ideology, is too political and less rational and social [44].

Regarding dominated approaches, higher education policymakers operate on two major economic and cultural approaches. The one-dimensional look at higher education policy, depending on the point of view, sometimes undermines the foundations of the cultural sector of higher education and at times weakens the economic roots. Some policymakers give preference to the cultural dimension and give it more value, while others neglect the cultural dimension, weighing on the economic dimension [45]. In the recent years, the economic oriented approaches to higher education has taken the lead which as discussed face higher education system with serious challenges not only in the area of education but other sects of the society. All these unappropriated, unwise and unjustified decisions and approaches in the realm of policy making in the higher education of Iran back fire and create huge challenges specially in governance. In fact, the realization of good governance in Iran is unimaginable at least in the near future.

It can be firmly emphasized that much of the reason for the failure of good governance in Iran comes from its political challenges, which are mainly in the area of political culture [46]. There are components of political culture, in front of any good governance indicator that have proven their negative impact on those indicators in the decision-making environment and in the context of the realization of good governance in Iran. This wrong political culture influenced many areas and sects in the country particularly in education

and higher education. Governance in Iran faces another major obstacle, called "centralization," that prevents citizens from accessing rulers and preventing them from speak up their demands as well as the authorities' respond. The centralization of governance and the process of decision and policy making in Iran lead to consolidation of power and unfortunately the unrealization of good governance idea.

The impact of decades of poor governance in Iran can be seen in virtually all major challenges facing Iran: a underdeveloped economy (external sanctions, of course, have played a big role in this sect), low employment ratio which is a direct impact of wrong policies in education system, water crisis, and eroded social trust. Therefore, the ineffectiveness of the governance system can be attributed to multiple factors including: low responsibility and accountability of the government, the weak social and cultural values among citizens and the reluctance of government toward the society, economic corruption, lack of specialization in various political, social and economic spheres, and wrong policies and strategies in implementation of policies in main areas particularly in education and higher education.

8. Conclusion

E-learning in Iran's higher education is a new phenomenon, which was created in less than two decades. The experience of this type of teaching and learning included successes and failures. In the age of globalization, ICT and E-learning, the government is one of the most important political actors in the society and the dominant expression of collective interests. The benefits of using ICT for governance are manifold such as enhanced accessibility, affordability and innovation. In addition, ICT provides tools and capacity for better participation of peoples in expanding the democratic space. It is clear that good governmence involves multiple stages or phases of development and it has many advantages to all sectors of government, citizens and education. However, the implementation of good governance in Iran faces many challenges and barriers which have to be treated very carefully. In order to have a efficient government, effective systematic measures and arrangements are inadequate. Education and particularly higher education researchers and institutions, and research organizations should be able to influence policy processes effectively through participation in the process of policy making and decentralization.

The findings indicate the interact of good governance and ICT oriented higher education is bilateral and in the case of any failure in any of these areas, the realization of the efficient society based on democratic criteria would be interrupted. There is a significant relationships among good governance indicators and how much education in higher level can be influential in building it. The main concentration of this paper was on the challenges and barriers on the way of Iran's higher education system, the weakness of ICT base education and its implifications in the realm of good governance. Also, the failure in the realization of good governance in Iran leads to a wide range of crises and challenges in different areas including economy, politics, culture, and particularly the higher education system. In fact, as mentioned, the policy model of higher education in Iran, rather than emanating from the field of social science and independent field research and scientific models of explanation, derives from formal political agendas which is defined based on unrealist objectives.

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