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The Issue of Technology Implementation in the Classrooms in Iraqi Universities

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ABSTRACT

In recent years, information technology (IT) has become one of the most important cultural practices for the Iraqi society. The technology industry has experienced tremendous growth and development over the last ten years in Iraq. During Saddam Hussein's administration, the use of technology was limited for the Iraqis. After the 2003 war, there was a boom to use all type of IT in communication among the Iraqi citizens. However, the problem is that the use of Internet and computer technology is still not implemented in each classroom, in most if not all, in the Iraqi universities. This study attempts to answer the following research question: why the technology is not implemented yet in the classroom settings in the Iraqi universities? The aim of this case study is to identify the challenges that face the Iraqi government and universities administrations from implementing the computer technology in each classroom. To examine the research problem, the researcher examined the country case and also shared his lived experience of the use of technology as a tool for facilitating instruction while he was teaching in Iraq. The results indicate that the country's current educational and telecommunications infrastructure is weak and the government needs to build the infrastructure capacity of schools, and also to improve teacher training programs at all levels.

Keywords: *Iraqi Education; Internet; Information Technology; Technology Implementation.*

1. INTRODUCTION

Iraq is an Arabic Middle Eastern country and has an area of 169,234 square miles. It is surrounded by Iran from the east, Jordan and Syria from the west, Kuwait and Saudi Arabia from the south, and Turkey from the north. Baghdad is the capital. The oil industry constitutes the majority of Iraq's economy. The Iraqi population consists of several ethnic groups, including Arab Muslim Shiite, Arab Muslim Sunnis, Kurds, Assyrian, Turkoman, Chaldean, Armenian, Yazidi, Sabean, and Jews. Arabic is the spoken language in most provinces and Kurdish is the official language in Kurdistan [13].

Selfe and other researchers show the importance of using computer technology in learning and productivity [18]. Technology is used in teaching and learning methods in most countries. However, the Iraqi faculty do not use technology in their teaching methods and the classrooms still lack of technology. This study follows a qualitative research approach to examine this issue and identify the reasons of why the Iraqi universities and faculty do not use the technological tools to facilitate the process of communication, to make the methods of teaching better, and to improve the students' learning skills.

2. LITERATURE REVIEW

2.1 Technology and Information Age

In the past 50 years, electronic devices (radio, TV, computers, satellite, etc.) were the central tools and communication technologies in assisting with transmitting the information to people [15]. The Information Age brings new challenges since 1950 where people would like to have multimedia sources available for them to use. The term is used to describe a cybernetic society, which depends on the computers and data transmission. The familiar frame of understanding an industrial society relies on the human labor and the machines they use to produce goods. Because of the continual changes over decades, geographic barriers are being dissolved, and relation between the employees and their workplace is changing rapidly. New information technologies and forms of communication have emerged to solve problems and set new directions for issues that have been around for some time. If we take literacy as an example, we will see that people can read, write, type, print by using computer literacy [14].

In our society, the nature and function of technology has been changed essentially through the use of digital technologies in communication and in keeping the public informed on matters of public importance [16]. IT is the cause of changes for majority of industries. IT is a strategic tool and without information and technologies, changes are not possible. In the 1990s most of the industries all over the world used telecommunicated networks of computers at the center of information systems and communication processes. The innovation of new technologies makes teaching and communication more powerful and easier. Technology does not solve the social problems, but it is the essential tool for development and creativity in society's education [7]. Research has shown that the use of technology can assist in facilitating the teaching and learning process where it connects faculty and students with the outside world. Moreover, technology can offer resources and experiences that books are not able to offer. Computer technology can also assist with data analysis. They can facilitate the management of large volumes of data and enable faculty, students or analysts to locate, labels, and collects different combinations of segments of textual data [17].

2.2 Information Technology (IT)

IT is, in fact, the core business for most industries including education. IT is the field which pertains to the skills needed to

increase, retain, and use information processing systems, software, hardware and networks for the processing and delivery of data [3]. IT has become the backbone of the industries operations in the 21st century. IT links the business with their customers [6]. Generally speaking, it is good for any industry to get rid of the other inadequate business and to implement new strategies [5]. IT helps in improving measures of business value such as the revenue and productivity. IT value models have several assumptions like a commodity input and cost efficiency which enable firms to set their strategic plans regarding product quality and consumer value [20]. Educational institutions are part of these industries that depend on IT in providing their academic services to faculty, students, and staff.

Over the past decades, advances in IT have restructured industries and formed huge importance. During the new era, the vast development of communication and IT has influenced cultures everywhere. The technological innovations changes are an example of what is happening where they turn the world into a small global village. These changes include the emergence of new technologies: satellites, cable television, disks, computer and digital technology, etc. [6].

2.3 Sociology of Education in Iraq

Iraq's education was one of the best in the Gulf region. It is established in 1921, and the government requires all eligible-aged children to attend primary school. This helped lay the foundation for one of the most developed and literate populations in the region. During the years of 1970-1984, a period some identify as the nation's "Golden Years," Iraq's education system gained significant leadership recognition in the Middle East. Today, the Ministry of Education (MOE) and Ministry of Higher Education and Science Research (MOHESR) manage the Iraqi education system ([13]; [4]; [12]).

2.4 Internet Technology in Iraq

In recent years, the Internet technology, as a means of communication, users have been growing very quickly. There was no clear number of the Internet users under Saddam Hussein's administration because there were only few people who had access to the Internet. However, the number of users stated to increase following the removal of Saddam from power [2]. Currently, the Internet situation has improved dramatically, as there are now 26 Internet hosts [8]. The last data collected regarding civilian access to the Internet was in 2009 and at that time approximately 325,900 Iraqis had home internet access, ranking 126th for Internet access globally [8]. While this is an improvement, people access, small businesses, educational institutions, and government infrastructure continue to cripple Iraq in becoming globally competitive. IREX audience research shows that mobile devices play a vital role in the life of the Iraqi citizens on which they depend to communicate with one another [19].

After the 2003 war, Iraq and the coalition forces led by the United States government invited the investors and big organization to invest in Iraq to start the process of the country reconstruction. In 2004, the United Nations Development Group Iraq Trust Fund (UNDG ITF) started in Iraq. UNDG ITF is one of the International Reconstruction Fund Facility for Iraq (IRFFI). The Iraqi government consulted with the United Nations and the World Bank to design the IRFFI and open the doors for donors and international sources to support Iraq's reconstruction activities including technology implementation projects [21].

3. METHODOLOGY

The aim of this research is to identify the challenges that face the Iraqi government and universities administrations from implementing the computer technology in each classroom. This study attempts to answer the following research question: why the technology is not implemented yet in the classroom settings in the Iraqi universities? This study follows a qualitative research approach to analyze the problem.

3.1 Model and Data Sources

The models of country risks analysis, such as the Economic Intelligence Unit (EIU), Business Environment Risk Intelligence (BERI), and Euromoney help companies and their managements understand well, which country is a good market for investment and which one is not to avoid losses to their businesses. These models work as risk assessment to help firms in making market entry decisions, operations standards, and exit strategy decisions. These models and techniques include important information on Iraq's political situation, legal, investment overview, social, cultural, environmental, and geographical risks of the country. The reports on Iraq from these models were not positive which make it harder for the Iraqi government to move fast with the technology implementation projects in the academic institutions.

Although, the use of computer technology in classroom settings can help in facilitating the teaching and improving the student's learning skills, the classrooms in Iraqi universities still lack the availability of this technology due to several challenges that the country faces. These challenges will be explained in the following section.

4. RESULTS AND DISCUSSION

I was a full-time faculty teaching English language and linguistics courses at Wasit University in Iraq. I moved to the U.S. in 2005. Based on my experience in Iraq, we did not have computer technology in classrooms. For example, the English education in Iraq is based on traditional instructional method and usually the class size is very large. The number of students is about 40 in each class. The method in which the students learn English is a teacher-centered. Reading comprehension takes a large part of class time and grammar is important. Speaking and listening seem to be neglected in teaching

English as a foreign language in Iraq. In addition, small-group work, which is common in the communicative teaching method (the method most widely accepted by foreign language teachers nowadays), is neglected in the Iraqi English classroom, which is also teacher-centered instead of student-centered.

As a former professor in Iraq, we never used the computer technologies to facilitate learning through online discussion groups, watching videos and clips inside the classroom, speaking and recordings, etc due to the lack of language labs and computer technology in classrooms. This issue is still present in Iraq till now as many of my colleagues who still teach in Iraq notified me of this an on-going problem.

Accessing online educational materials and the use of Blackboard tools in Iraqi institutions are still not available. The country's current educational and telecommunications infrastructure is weak because of the country's political instability. Post-2003, the Iraqi and United States (US) governments have been trying to modernize the educational system and to enhance online educational libraries. This includes building educational partnerships between Iraqi and U.S. schools, exchange programs and visiting scholars, and sponsoring Iraqi students and teacher to study or to get training in the U.S institutions. Although this support is very helpful, the overall progress is very slow [1].

MOHESR still lacks of a logical policy vision because it does not have a development process and a well-planned a national policy of Information and Communications Technology (ICT). In 2003, one of the U.S. companies presented an ICT roadmap for Iraq, but it was not taken into consideration [1].

Coleman, CountryWatch's Editor-in-Chief, uses a method of scoring countries from 0-10 based on their political risks. If the country scores the lowest scores, it poses the greatest political risk. Iraq's score is 3.5. With score 3.5, it is very risky to operate business in Iraq. It is very challenging to start business in Iraq because the country is not fully secured. The political risk can be calculated based on political stability and parties conflicts, democratic accountability, freedom of speech, security and crime, jurisprudence and regulatory transparency, and corruption [9]. Other noticeable challenges facing the future business in Iraq include the need to build the infrastructure capacity of information technology equipments, paved roads, new buildings, electricity, purified water, libraries, and laboratories. There is also a need to focus on improving business training programs at all levels. Recruitment and retention strategies are needed to help attract quality staff into the business workforce [13].

Moreover, for business investment, development and operation, it is a risk to enter the Iraqi market if the business managements fail to know the Arabic and Kurdish languages. They have also to have knowledge about the people's different religion practices so the customers' needs will be met. Health issues and services must also be taken into consideration within such unstable situation.

The other challenge is the blockage or the bans the Iraqis face once something related to the country security and instability happened. The problem of not having Internet available is one of the big challenges of continuous communication. Sometimes, the government shuts down the Internet for security purposes [10]. This challenge makes the technology implementation useless due to power and Internet outage.

Because of the still unsecure situation and the political instability in Iraq, it is not easy to implement technology in all schools in the short run. The improvement process is very slow. However, the good thing is that Iraqi schools and universities started to have a computer lab where teachers and students can use for educational purposes. Within these computer labs, they also opened centers for the Test of English as a Foreign Language (TOEFL) and the Graduate Record Examinations (GRE) [1].

Moreover, there are also some success stories. We can see that many economic, business, human rights, media, and other civil society organizations have the freedom to work online. Many schools and universities have also built their own websites and started to create online content [1]. The other quick options identified by the schools' management are to have a fully equipped computer labs with Internet access to facilitate the process of students' learning and teachers' teaching methods, and to have also Internet café for undergraduate and graduate students to use for their out of class study and research.

5. CONCLUSIONS AND RECOMMENDATIONS

The research findings show that if country risk analysts compare Iraq's education technological status with the United States, they can see that accessing online educational materials in Iraqi institutions is still not of that high quality, and the country's current educational and telecommunications infrastructure is weak. Moreover, Iraq faces a number of challenges after 2003 war. One of these challenges was to regain the prominence that its education system once held in the Middle East, the need to build the infrastructure capacity of schools, and also to improve teacher training programs at all levels [13].

Because of the unsecure situation and the political instability in Iraq, it is not easy to implement technology in all schools in a short time. Therefore, the options identified are to have a computer lab in each school as a first step to have Internet access and technology tools to facilitate learning and teaching, and to have Internet café for undergraduate and graduate students to use for their out of class study and research.

The recommendations outlined in this research are the Iraqi government must have an exact timeframe for the completing of the project and outline the cost of the project. It should also specify which schools that can benefit from the technology implementation. There should also be a political stability and

security in the country to protect the workers and organizations that will take the project and perform the business. The Iraqi government has also to contract with big construction organizations to rebuild the country infrastructure and not only to depend on the local companies.

The Iraqi government has also to encourage Iraqi teachers and students to attend workshops and conferences to gain more knowledge and development. MOE and MOHESR may hire international staff and faculty to help with the education development process and technology implementation in classrooms. Sending Iraqi students to study in foreign countries will be a benefit for the country once they return to exchange with the local staff their personal experiences and knowledge.

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