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THE STATUS OF GOVERNMENT TO CITIZENS ICT SERVICES IN IRAQ UNDER THE IMPACT OF MAN-MADE DISASTER

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Abstract: *This paper shed the light on the status of the Iraqi government to citizens' ICT services during the latest civil conflict erupted since 2014. These services could fit and serve affected citizens due to the difficulties and risks that hinder their access to the government sites. In the absence of an empirical study to clarify the real status of this kind of services from affected citizens' perspective during a man-made disaster, this study aims to fill this gap in the literature and handling the lack of knowledge facing the services providers in unstable countries. A survey questionnaire was carried out to 870 internally displaced citizen in six Iraqi provinces to capture their sentiments about the main fundamentals of successful G2C-ICT services. The results clearly point out the status of these services in regard to availability, benefit, cost, Internet speed, satisfaction, routine, time, and flexibility in such unstable environment.*

Keywords: *G2C-ICT Services, Technology Usage, Disaster Management, IDP, Civil Conflict*

Introduction

Nowadays, the prevalence of Information and Communication Technologies (ICT) has caused various substantial changes in daily life (Kealy & Stapleton, 2015a). The rapid developments in ICT profoundly affected society sectors including organizations and governments. ICT promoted emerging fields such us Government to Citizens (G2C) ICT services as service dissemination methods (e.g. e-learning, e-commerce, e-government and m-government). ICT popularity re-engineered entire service processes and plays a fundamental role globally in serving government agencies and non-governmental organizations to improve its interaction with beneficiaries and heighten their work performance and efficiency (Abraheem & Carl, 2016; Al-Sammarraie & Khaleel, 2016).

Just as the daily life has been influenced positively by the ICT application, it is negatively affected by disasters and calamities. Different countries and reigns currently face various types of disasters, governments are attempting to adopt more ICT to improve emergency response and rescue operations. Disasters can be divided into two types: natural disasters (e.g. earthquakes, floods, and hurricanes) and non-natural or man-made disasters (e.g. war, conflicts, and violence) (Alencar, 2017; Semaan & Mark, 2012; Whybark, 2015).

The first inducement behind this study was that research on ICT in non-natural disasters (unstable or violent environments) are rare (Abraheem & Carl, 2016; Al-Sammarraie & Khaleel, 2016; Alsaeed & Adams, 2015). Existing studies on ICT in non-natural disasters had highlighted how the various technology applications are used by affected citizens to mitigate disaster impacts of disasters within an affected region. These technology applications are websites (Bharosa, Lee, & Janssen, 2009; Foot & Schneider, 2004; Lee & Rao, 2007; Shklovski, Burke, Kiesler, & Kraut, 2010), blogs (Hughes, Sutton, Vieweg, Palen, & Liu, 2008; Torrey et al., 2007), health informatics technologies (Kealy & Stapleton, 2012, 2013, 2014, 2015a, 2015b), online forums (Palen & Liu, 2008; Yan, Wu, & Xiaoqing, 2009), mobile phones (Amailef & Lu, 2013; Law & Peng, 2004), online photo-sharing (Palen & Liu, 2008), social networking sites (Fabito, Balahadia, & Cabatlao, 2016; Hiltz, Kushma, & Plotnick, 2014; Howe, Jennex, Bressler, & Frost, 2013; Semaan & Mark, 2012), geospatial mapping tools (Elebe, 2017; Liu & Palen, 2010), and micro-blogging technologies, such as Twitter (Bock, 2015; Hughes et al., 2008; Kate & Leysia, 2011; Mills, Chen, Lee, & Raghav Rao, 2009; Starbird, Palen, Hughes, & Vieweg, 2010). However, the researchers neglected the role of government to citizens ICT services during and after non-natural disasters (Abraheem & Carl, 2016; Al-Sammarraie, Faieq, & Al-Qasa, 2016; Al-Sammarraie & Khaleel, 2016; Alsaeed & Adams, 2015). In non-natural disasters (e.g. civil conflict erupted in Iraq since 2014), G2C-ICT services are necessary because it is dangerous and difficult for the affected citizens such as Internally Displaced People (IDP) to reach to the government sites, and this is where these services could fit and serve the purpose (Abraheem & Carl, 2016; Alsaeed & Adams, 2015).

The second inducement was that the huge congestions on the Iraqi government offices made by the IDPs seeking to accomplish the governmental transactions (Al_Sabah, 2014; Dalshad, 2014; IHCHR, 2016, 2018; Interior, 2017a, 2017b; Matthew, 2014; Mohammed, 2014; Rights-Iraq, 2015). The number of people waiting outside the offices reaches the thousands a day, while most of these transactions can be accomplish through the Iraqi G2C-ICT services (Iraq Electronic Services, 2016). This status indicates to the unwillingness of IDPs to use the G2C-ICT services provided by the Iraqi government. These services enable the IDPs to accomplish the transactions with low cost, shorter time, and reduce their exposure to the explosion, killing, and kidnapping while physically visiting the government agencies (Abraheem & Carl, 2016; Alsaeed & Adams, 2015). The existing studies, especially in Middle East, have neglected IDPs which led to a lack of information and data relating to them, especially in the ICT area. Currently, the Iraqi government is attempting to support IDPs and other citizens through using the G2C-ICT services (Alallaq, 2015) because of their capabilities to provide utility in terms of information and transaction.

The third inducement is that the post-conflict areas under extreme situations with numerous additional complicating features for large-scale ICT projects (e.g., G2C-ICT services) (Kealy & Stapleton, 2015a, 2015b). This indicates that the status of G2C-ICT services has likely worsened after the ISIS war erupted in Iraq (ITU, 2017). Steps to investigate the

status of the Iraqi G2C-ICT services to achieve successful implementation in war environment are necessary. Therefore, it is imperative to shed light on the real reasons behind the lack of use as of the citizens' point of view, especially IDPs, to increase the usage acceptance of G2C-ICT services in Iraq, as a one of countries suffering from non-natural disaster (conflicts and violence).

Literature Review

G2C-ICT Service in Iraq

Ministry Of Science and Technology (MOST) and the Iraq Commission for Computers and Informatics (ICCI) were the two primary centres that worked together to link with public administration agencies with the aid of Wireless Broadband Network (WBBN). WBBN used as the wireless network that serves as the backbone to integrate electronic government and Management Information System (MIS) (UN-ESCWA, 2007). Iraq has three main electronic centres for the delivery of G2C-ICT services; Baghdad, Nasiriya, and Erbil. Iraqi G2C-ICT services project at present reached the two-way interaction stage in the G2C-ICT services projects development (Chatfield & Alhujran, 2009). There are many benefits achievable from the expansion of implementing these services in Iraq. Examples are the enhancement of good governance, transparency and accountability among the agencies; thus, increase the mutual trust between the government and their citizens. The G2C-ICT services reduces the running cost of the government administration, so it makes the government budget more reasonable and masses-friendly. Finally, the government to business service will enhance and strengthen the intra-agency communication within all levels of the government and the entire society as well (UN-ESCWA, 2007; UNPAN, 2014). According to (Abraheem & Carl, 2016; Alsaeed & Adams, 2015), the known advantages of G2C-ICT services in stable environments, expansion in unstable and conflicted environments, because of the seriousness of a citizens' movement.

Evaluating the Iraqi G2C-ICT services' efficiency and technical sophistication is critical issue, because maybe it is not at the acceptable level to accomplish the governmental transactions. According to (Moon, 2002), there is a 5-stage model of interaction for G2C-ICT services with its users and the degree of technical sophistication. The model emphasises that there be various stages of G2C-ICT services, which reflect the level of technological sophistication and interaction with users. Each stage is described further in the following:

Stage 1. Simple information dissemination (one-way communication): The government's basic electronic and static data used to view the articles in the website online.

Stage 2. Two-way communication (request and response): At this stage is the interaction between the two represents the mode of interaction between citizens and government at this stage is for the special government applications can interact with the citizens of these applications, then process and responds to service requests.

Stage 3. Service and financial transactions: At this stage, the government allows for financial transactions through the financial services provided by the government, such as paying taxes and fines and pay the bills of water and electricity in addition to financial aid.

Stage 4. Integration (horizontal and vertical integration): At this stage the government to integrate services and the participation of all the data to enhance efficiency and ease of use and effectiveness of G2C-ICT services and this stage is difficult for the government because it will take a long time and many resources to merge services.

Stage 5. Political participation: At this stage is to promote and develop political participation through the Internet, such as electronic voting and opinion polls, where broader and direct interaction with the citizens. At this stage, highlights the political activities online by citizens.

The majority of Iraqi ministries in touch with the Iraqi citizens by many transactions for services they deliver. It is worth mentioning that many transactions can accomplish by relying (even partially) on governmental ICT services, which helps to shorten steps and reduce the time and effort to accomplish the transaction (Ibrahim, 2014; Iraq Electronic Services, 2016; The Iraqi Ministry of Interior 2014). For instance issuing the ID card, nationality certificate, birth certificate, death certificate, and marriage certificate. It is noteworthy that the offices belong to directorates of the Ministry of the Interior have suffered the largest crowds of IDPs (Alsabah, 2014; Dalshad, 2014), because of the lack of identity documents and the seeking of IDPs to issuing missing documents (IILHR, 2015).

There are eight main fundamentals indispensable for any G2C-ICT services to ensure successful implementation. These fundamentals are availability, benefit, cost, Internet speed, satisfaction, routine, time, and flexibility (Al-Sammarraie & Khaleel, 2016; M. Faaeq, 2014; Lallo, 2012; Osman et al., 2014). Availability, in this case, means the awareness of the citizens about the availability of the governmental services on the Iraqi G2C-ICT services. The benefit, refer in this case to the perceived benefits of the G2C-ICT services for its users, and how it could increase their intention to use the services in the future. The cost in this case refer to the user's belief that using the G2C-ICT services will decreases the cost of governmental transaction. Regarding Internet speed, to investigate if available Internet speeds impact the G2C-ICT services in such difficult circumstances. As for the satisfaction with the service, denote the general satisfying of the citizens with the current G2C-ICT services in Iraq. Routine and time, in this situation refer to the sense of the extent to which G2C-ICT services lead to reduce the normal administrative routine and time in Iraq. As for flexibility, in this case is meant the perceived belief of the citizens that the Iraqi G2C-ICT services are flexible.

Iraqi Internally Displaced People

Former UN Secretary General Boutros B. Ghali is the first person attempt to define the term ‘internally displaced persons’ IDP as “Persons or groups who have been forced to flee their homes suddenly or unexpectedly in large numbers, as a result of armed conflict, internal strife, systematic violations of human rights or natural or man-made disaster, and who are within the territory of their own country” (UNCHR, 1992). IDPs are among the world’s most vulnerable people. Unlike refugees, IDPs remain in their home countries, as long as they have not crossed any international border to find sanctuary, they are legally under the responsibility and protection of their government (UNHCR, 2015b). According to Global Peace Index 2015 report (Institute for Economics and Peace, 2015), the number of IDPs globally reached the highest level since 1945 with 38 million people historically. Moreover, there are 78 countries became less peaceful which, in turn, maximises the likelihood of increasing the number of IDPs.

At the onset of 2014, major conflicts began between the Iraqi government forces and the terrorist organisations called the Islamic State of Iraq and Sham (ISIS). The battles raged on until the present time. To this end, the collapse of the Iraqi army as a result of the fighting led to the loss of over 1/3rd of the Iraqi land, that all came under the control of ISIS. This results in the displacement of 3.3 million citizen were driven away from their homes and businesses in the conflicted and occupied areas towards safer locations (North & South Iraq) as well as to the neighbouring countries (UNHCR, 2015a; UNOCHA, 2014).

The increasing number of displaced people still make many problems in various fields. One of the most significant problems that have arisen is with governmental service's fields. Due Iraqi government, until recently, have one channel based on paperwork in the majority of official transactions such as issuing passports, licence, birth certificates, death certificates, paying the fines, and else. This channel requires the presence of citizens in government offices. However, according to the Ministry of Interior (IHCHR, 2016; Interior, 2017a, 2017b), interview with the General Manager of the Nationality Department (Al_Sabah, 2014) and with Director of Immigration and Nationality office in Erbil (Dalshad, 2014), one of the biggest problems faced by the Iraqi government is the great crowds on government offices in IDPs' host cities. Which adversely affect the workflow in these offices, or disrupted work completely.

The majority of the services required by the IDPs provided in the Iraqi e-services portal and Ministries' web pages – these include e-Passport, e-License, e-Fines, e-Birth Certificates and e-Death Certificates (Iraq Electronic Services, 2016). For instance, there are huge congestions on the passport offices made by the displaced citizens seeking to obtain passports (Al_Sabah, 2014; Dalshad, 2014). The number of people waiting outside the offices reaches the thousands a day, while the displaced can complete most of this transaction through the Iraqi G2C-ICT services (Iraq Electronic Services, 2016), this situation indicates to the unwillingness of IDPs to use ICT services provided by the Iraqi government. The two photograph presented in Figure 1 below give the reality picture of the straitened situation for Iraqi government offices in the host cities.

Figure 1: Congestion near the passport offices in northern Iraq (Matthew, 2014)

There is a marked distinction between the lives of IDPs compared to the lives of ordinary civilians or lives in the rural areas as the IDPs faced with challenges, and they encounter several stressors that could significantly influence their behaviours. This dissimilarity reflected in their interaction and communication with each other and with people around them, with their effective tools that they use in coping with their new situation that may continue for an indefinite period. These stressors can be categories and illustrated as economics (Ehrlich et al., 2010; Picou & Hudson, 2010; Salah, Ayazi, Lien, Eide, & Hauff, 2015) recovery (UNHCR, 2015a; Xu & Song, 2011a, 2011b), rebuilding (Carroll, Balogh, Morbey, & Araoz, 2010; UNHCR, 2015a; Xu & Song, 2011a, 2011b), loss of physical possessions or resources (Ehrlich et al., 2010; Zwiebach, Rhodes, & Roemer, 2010), health (Salah et al., 2015; UNHCR, 2015a; UNICEF, 2016), family (Salah et al., 2015; UNHCR, 2015b), and social stressors (Salah et al., 2015; UNHCR, 2015b).

IDPs are facing many challenges and conflicts (kidnapping and killing) as well as insecurity (violence environment). The current conflict affects their life making their move, travel or get help more difficult (Abraheem & Carl, 2016; Alsaeed & Adams, 2015; Alsaeed, Adams, & Boakes, 2014; IILHR, 2015). The Iraqi displaced people are forced to travel frequently from remote areas (where shelters camps) to city centres to achieve many governmental transactions. Consequently, this may expose them to accidents and cause a great risk to their lives, especially when they are crowding outside the governmental offices making them targeted by terrorists (International Organization For Migration, 2014; Younus, 2014).

Lack of Legal Documentation

According to the report made by IILHR (2015), many displaced families were forced by ISIS to flee quickly without any form of identification, such as their public distribution system (PDS) cards for rations and bank cards. Other IDPs had their documents confiscated by ISIS forces or abandoned them to avoid detection (i.e. Christ, Shabak, Yazidis, Assyrians and Shiites). This issue created some difficulties that further exacerbate the vulnerability of displaced minority members. A late-2014 survey conducted by USAID indicated that 44% of all IDP families had one or more members without a critical national identity card (IILHR, 2015). In particular, lack of identification makes some services unavailable to IDPs and restricts their movement. Identity documentation is also critical for registration with the Ministry of Migration and Displacement, which allows the Iraqi government to track IDPs and provide them with Non-Food Items (NFI) support, such as heaters, stoves, blankets, carpets and plastic sheeting.

Without supporting civil status documents, however, IDPs cannot even register with the Ministry of Migration and Displacement. As a result, some IDPs are now trapped in the camps, temporary shelters or along roads and at checkpoints. Moreover, without these documents, IDPs cannot use banks to access their savings (IILHR, 2015). Therefore, great crowds on government offices in cities that received the displaced people, to issue a replacements formal documents, which adversely affect the workflow in these offices, or disrupted work completely (Al_Sabah, 2014; Dalshad, 2014). The G2C-ICT Services provided by the Iraqi government could make a significant different to those people (Abraheem & Carl, 2016; Alsaeed & Adams, 2015).

The Material and Method

The present study examine the eight fundamentals showed in Figure 2 that lead to the success of the application of G2C-ICT services (Al-Sammarraie & Khaleel, 2016; M. Faaeq, 2014; Lallo, 2012; Osman et al., 2014). This utilizing of the framework in unstable environments will add theoretical contributions for this study and create a new facts (Al-Sammarraie et al., 2016; Faaeq et al., 2013).

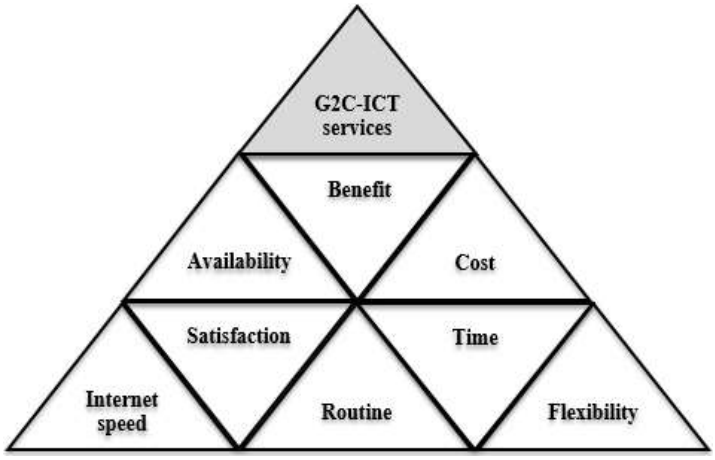

Figure 2: The main success fundamentals of the G2C-ICT services application.

Thus, this study use eight items with the dichotomous scale (yes or no) adapted and translated to Arabic from previous related literature (Al-Sammarraie & Khaleel, 2016; M. Faaeq, 2014; Lallo, 2012), in order to mildly measure these eight fundamentals as illustrated in Table 1.

Table 1: The adapted items used in the current study

Fundamental	Statement	Answer	
1-Availability	I am aware about the availability of G2C-ICT services in Iraq.	Y	N
2-Satisfaction	In general I am satisfied with the current G2C-ICT services in Iraq.	Y	N
3-Benefit	I am aware of the benefits of the current G2C-ICT services in Iraq.	Y	N
4-Routine	G2C-ICT services reduce the normal administrative routine in Iraq.	Y	N
5-Cost	Usage of current G2C-ICT services decreases the cost of citizen transaction.	Y	N
6-Time	Current Use of G2C-ICT services enables me to complete transactions more quickly.	Y	N
7-Flexibility	The current G2C-ICT services are flexible.	Y	N
8-Internet speed	G2C-ICT services are affected by Internet speed.	Y	N

Individual IDP is considered to be the unit of analysis as it is the individual user who utilises the G2C-ICT services. After deciding the type of respondents, the task of getting the list of IDPs distributed across provinces of Iraq based on last statistics report and master list issued on 24th of November, 2016 from the International Organization for Migration-Iraq Mission (International Organization for Migration, 2016). These statistics indicate that Iraq has about 3.3 Million IDPs, distributed in all governorates of the Republic of Iraq. After piloting, pre-testing and translate the questionnaire, we required to complete security clearance procedure, because of the critical and sensitive circumstances in the study area. After that we expend 41 days to distribute the 890 copy of self-administered questionnaire to the adult IDPs settled in 29 places. The places located in the top six provinces in terms of the number of IDPs (Baghdad, Dahuk, Erbil, Kirkuk, Sulaymaniyah, and Salahuldeen). The researcher used

Systematic Random Sampling method to choose approximately 2% of IDPs places in each governorate to be visited due to the high number of IDPs places (1470), which is more than the 890 questionnaire copies that needed to be distributed. Table 2 illustrates the number of locations visited and the number of questionnaire copies that have been distributed for each governorate.

Table 2: The Probability Sampling of IDPs for Each Governorate

Governorate	Number of IDPs	Number of adult	% of sampling	NS of IDPs	No. of IDPs locations	No. of locations Visited
Baghdad	424,842	225,166	21.3%	189	618	12
Dahuk	395,040	209,371	19.8%	176	140	3
Erbil	361,464	191,575	18.1%	162	185	4
Kirkuk	359,892	190,742	18.0%	161	111	2
Salah al-Din	301,452	159,769	15.1%	134	165	3
Sulaymaniyah	153,018	81,099	7.7%	68	251	5
Total	**1,995,708**	**1,057,725**	**100%**	**890**	**1470**	**29**

As shown in Table 3.5, in Baghdad, 189 questionnaire copies distributed because it hosts 225,166 adults constituting 21.3% of the total adult IDPs in the selected six governorates. In Dahuk a number of 176 questionnaire copies have been distributed as it hosts 209,371 adults IDP constituting 19.3% of the total adults IDP in the chosen six governorates. Kirkuk and Erbil host approximately the same number of IDPs; therefore, the number of questionnaire copies for each of them was 162 for Erbil and 161 for Kirkuk. Salah Al-Din hosts approximately 159,769 adult IDPs; therefore, 134 questionnaire have been distributed there. Finally, Sulaymaniyah take the lowest number of questionnaire copies because it hosts 81,099 adult IDPs.

The current study use Stratified Random Sampling. It is the most probable sampling design because the researchers can gain more information about a given sample size (Sekaran, 2014). Following this further, 870 adult IDPs requested for their opinion concerning the status of G2C-ICT services, adequate as a sampling size (Sekaran, 2014) and consistent with the study objective. Furthermore, regarding data analysis techniques, Statistical Package for Social Sciences (SPSS) V21 used in this study.

Findings and Discussion

The researchers collected 503 responses from which, 391 was valid, which represent 77.7% of the respondents. After data entry, we use IBM SPSS V21 for data analysis process. The descriptive analysis was conducted to understand the demography of the respondents. Table 2 presents the demographics of the respondents for this study.

Table 2: Demographics of the respondents

	Category	Freq.	Percentage
Gender	Male	250	63.94%
	Female	141	36.06%
Age	18-23	177	45.27%
	23-36	133	34.02%
	36-46	34	8.70%
	46-56	34	8.70%
	≥56	13	3.32%
Marital Status	Single	272	69.57%
	Married	101	25.83%
	Divorced	5	1.28%
	Widowed	13	3.32%
Education Level	Ph.D.	9	2.30%
	Master	15	3.84%
	Diploma	21	5.37%
	Bachelor	157	40.15%
	Sec-School	181	46.29%
	Read/Write	8	2.05%
Occupation Status	Public sector	72	18.41%
	Private sector	21	5.37%
	Freelancers	75	19.18%
	Jobless	223	57.03%
Former Residential Area	Urban	201	51.41%
	Rural	190	48.59%
Monthly Income	≤ 200$	172	43.99%
	201- 400$	85	21.74%
	401 – 600$	57	14.58%
	≥ 601$	77	19.69%

The results for each of the eight fundamentals' items from the perspective of IDPs are illustrated in Table 3.

Table 3: The analysed results

Items	Scale	No.	Percentage
Availability of services	Yes	213	54%
	No	178	46%
Satisfaction	Yes	92	24%
	No	299	76%
Benefit	Yes	253	65%
	No	138	35%
Routine	Yes	310	79%
	No	81	21%
Cost	Yes	303	77%
	No	88	23%
Time	Yes	312	80%
	No	79	20%
Flexibility	Yes	176	45%
	No	215	55%
Internet speed	Yes	315	81%
	No	76	19%

Table 3 shows that more than half of the respondents who participated in the availability of G2C-ICT services in Iraq answered "yes" (213). This result shows that about 54% of the

respondents confirm their knowledge about the availability of the services in Iraq. Additionally, the importance of awareness about G2C-ICT services was confirmed by the recommendation of users in the comments section of this study's questionnaire.

Moreover, the second question is related to the satisfaction towards the G2C-ICT services, 299 respondents (76%) answered "no"; this means that more than three-quarters of the IDPs surveyed were dissatisfied with the G2C-ICT services, while the remaining quarter were satisfied. Next, regarding question number three which is related to the benefits of G2C-ICT services, 253 of the respondents (65%) indicated "yes", while 92 gave a "no" response. This means that most of the respondents were conscious about the benefit of the G2C-ICT services but they were dissatisfied with the current services. For the fourth question, the researcher examined the IDP's opinion about how the G2C-ICT services reduce the normal administrative routine in Iraq. Table 2 shows that 79% agreed, while 21% disagreed with the statement in this question.

Question number five was about the cost and how usage of current G2C-ICT services reduce the cost of citizen's transactions in Iraq. 77% of the IDP surveyed answered "yes", whereas 23 answered "no". This means that the available G2C-ICT services are reducing the cost of citizen's transactions in Iraq as of IDP's perspective. Regarding the current G2C-ICT services status in Iraq, the sixth question investigated the G2C-ICT services time efficiency. 80% of the respondents answered "yes", but 20% answered "no". This means that G2C-ICT services are faster than the traditional way (by going to the office and meet the employee, to get appointment, etc.), based the IDP's viewpoint. Question seven investigated the flexibility of the current G2C-ICT services, where 45% of users found the services are flexible, while 55% answered found it not flexible. Finally, for the eighth question related to the Internet speed, this item tested how the G2C-ICT services are affected by Internet speed among surveyed IDP, where the majority of them (81%) answered "yes", nonetheless 19% users answered "no". Again, in spite of supporting the infrastructure (Internet) by government, the use of G2C-ICT services among Iraqis is nevertheless affected by violence and conflicts environment. This means that more than three quarters of IDP emphasize internet speed effects the online services. Consequently, through initiating and developing process of G2C-ICT services in unstable countries, the suppliers are required to prioritize increasing satisfaction of the citizen, enhancing flexibility as well availability of services, and increase the awareness about the benefit of these services to the citizens respectively.

Conclusion

The authors had presented part of the research in this paper, i.e. the research background and problem, literature, objective, issues regarding Iraqi internally displaced people, the research materials and methodology as well the findings. Research gap has been identified based on the reviewed literature, in which to clarify the status of G2C-ICT services from Iraqi IDP perspective after ISIS conflict erupted. This research is timely in the management era of non-natural disaster rampant in the world these days. Several governments (e.g. Iraq (Interior, 2017a, 2017b; Qader, 2014)) are trying to increase acceptance by highlighting and understanding the reasons behind the lack of use of G2C-ICT services in such dangerous circumstances. This study attempts to help in reach efficient and wider implementation of G2C-ICT services among IDPs, which will assist them in accomplishing the needed governmental transactions, saving their lives, money and time, and even contributing slightly to the

alleviation of their daily suffering. Moreover, this will enhance transparency and aid in more cost-effective use of the government budget allocated for the IDPs.

As a second contribution, this study successfully provided valuable knowledge for the G2C-ICT services' suppliers by clarification the status of this service from the perspective of IDP as civil conflict affected citizens. This knowledge can support them in the development process of the G2C-ICT service, and draw an effective strategy to increase the IDPs dependence on G2C-ICT services instead of manual transact in such dangerous environment. As well, it will support the efforts towards alleviating the overcrowding on the governmental offices in the cities hosting IDPs. Thirdly, this study contribute to the existing body of knowledge in the area of IS studies that focus on utilizing ICT among long-term displaced people, particularly in the middle east environment, due to the scarcity in the field of such studies. The findings of this study initiate further research in the field of ICT among displaced people by providing new empirical facts. Furthermore, this study can be used as agenda setting for scholars working in the field of conflicts and their effects on the ICT usage by citizens affected by war.

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