Chapter 10
Enacting Digital Government Services for Noncitizens: The Case of Migration Services

Luz Maria Garcia-Garcia and J. Ramon Gil-Garcia

Abstract Historically, e-government approaches have focused on citizens as the most important audience for government information and services. This focus is appropriate for most traditional public services. However, a large number of service users are noncitizens, including, for example, people applying for immigration services. Theoretically and practically, there are interesting differences between government services targeted to citizens and migration services. Some of these differences are due largely to the rules and laws that apply in each case, but there are also differences related to the fact that the majority of users of migration services are not citizens and they are very diverse in many respects. For instance, in the case of noncitizens the audience and their needs can be as broad as their different nationalities and different contexts they reside in. This chapter identifies and explains some of these differences and also a few similarities. It considers the variables from Fountain's technology enactment framework and includes some additional environmental conditions based on a previous extension of that initial model, applying them to the case of immigration services for border workers in the south of Mexico. Based on this analysis, this chapter suggests a preliminary reinterpretation of the technology enactment framework and highlights the differences between e-government services for citizens and for noncitizens, in order to propose a discussion about a group of users that has not been thoroughly analyzed in the literature, but which is important for scholars and practitioners to consider.

Keywords Digital government • Noncitizens • Migration services • Migration management • Border workers • Mexico • Web portal

L.M. Garcia-Garcia (✉)
Universidad de la Sierra Sur, Guillermo Rojas Mijangos S/N, Cd. Universitaria, Miahuatlán de Porfirio Díaz, Oaxaca, Mexico
e-mail: luz2g@yahoo.com.mx

J.R. Gil-Garcia
University at Albany, State University of New York, Albany, NY, USA

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1 Introduction

The terms *citizen-centered* and *user-centered* e-government have been used synonymously in the literature to refer to the user orientation of e-government projects. In fact the two terms are often used interchangeably in articles, which might refer to citizen-centered e-government in their titles, but they use the terms users and citizens interchangeably in the actual content of the articles [1]. However, in this work, we want to emphasize the difference between users and citizens. A user can be any individual or group, but the term citizen implies a specific political status. A citizen is a subject with rights and obligations, while a user can be a citizen of the nation that offers the service or may be a citizen of another country. We argue that these differences are important in conceptualizing e-government and its successful implementation.

In addition, it seems that there is more e-government literature related to citizens. To illustrate this, the theory that defines e-government considers the relationship between government and citizens. One approach defines e-government as the interactions with several stakeholders: government to citizens (G2C), government to business enterprises (G2B), government to government (G2G), and some scholars even talk about government to employees (G2E) [2]. Most of the time, e-government theories focus on government services that are aimed at citizens, not to more general users, such as individuals from foreign nations.

It is often assumed that e-government is only for citizens, with little attention to e-government services that are provided to individuals from other countries. This discussion becomes more relevant when e-government is implemented in government agencies that do work specifically for domestic and foreign users, such as migration services. Foreigners are not within the category of citizens; therefore, we should consider e-government for noncitizens as an important, distinct phenomenon. This term could create confusion though, as immigrants are not citizens in the host country, but they are citizens in their country of origin. There is likely to be a debate about how to label the target audience for e-government services: citizens, noncitizens, or the more inclusive term of users. The contribution of this book chapter to the literature, however, is to start a discussion about citizenship as a defining feature of e-government and to consider the relationship between e-government and immigration services, since this subject has clearly been underdeveloped.

Based on the technology enactment framework [3] and including some environmental conditions based on a previous extension to that initial model [4], this chapter reviews the technology enactment framework and reinterprets this model in relation to services for noncitizens. This reinterpretation aims to be a methodological and theoretical tool for the study of e-government initiatives, not only for citizens, but also noncitizens. The model will be illustrated using the case of immigration services in the south of Mexico [5] and will include descriptions of the following variables and their interrelationships: (1) organizational structures and processes, (2) institutional arrangements, (3) enacted technology, (4) results, and (5) environmental conditions [4].

2 The Technology Enactment Framework

The technology enactment framework [3] explains how a given technology is implemented within a government agency. Broadly speaking, technology enactment is understood as the perception, design, implementation, and use that organizations and individual users give to technology.

The technology enactment framework is based on institutional theory, as technology is adapted from institutional arrangements maintained by organizations. That is why technology enactment varies according to the different organizational factors and institutional arrangements in each organization. The technology enactment framework features a socio-technical approach, as neither technology nor its implementation within an organization is previously determined, but rather the actors decide how to incorporate it according to traditional ways of behaving. The technology enactment framework uses institutionalism to explain the impact that formal and informal institutions have on the adoption of information technologies [3, 6, 7]. The technology enactment framework consists of five constructs: institutional arrangements, organizational forms and structures, objective information technologies, enacted technology, and outcomes.

In the case of institutional arrangements, institutions are understood as constraints on choice and they frame how those constraints operate during technology adoption. Fountain [3] describes how, in the process of technology incorporation, the actors implement the new information and communication technologies (ICT) in ways that reproduce, strengthen, and institutionalize socio-structural mechanisms, even when such implementations lead to irrational and suboptimal use of technology. The actors enact technology by trying to follow the traditional networks, routines, frames, and patterns within the organization.

A different way to operationalize Fountain's institutional arrangements [3] is to classify them in three groups. The first one is formal institutions such as laws and regulations, budgetary processes, and government agencies' autonomy. The second group relates to culture, the value system, and informal institutions. Finally, the third group are the macro institutional arrangements, such as the institutional relationship between government and the IT industry or international governmental agreements [7].

Another construct is the organizational forms and structures, including bureaucracy in the form of hierarchy, communication methods, rules, and interorganizational networks. The most frequent organizational variables in scholarly analyses are organizational structure (organization's size, hierarchical structure, centralized or decentralized authority allocations), human resources, marketing, financial resources, feedback mechanisms, and technological infrastructure.

According to Fountain, there are two ways of conceiving technology—objective and subjective. Objective technology refers to technology as it is conceived: hardware, software, internet, and telecommunications. Whereas subjective technology is the actual use of that technology by individuals, without taking into consideration whether the technology's capacity is fully realized.

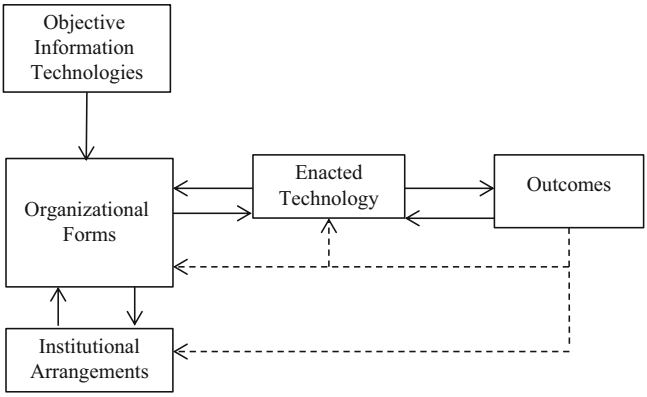

Fig. 10.1 Technology enactment framework (adopted from [3])

Enacted technology is the perception, design, and use of objective technologies. The new information technologies are enacted, one finds the meaning of them, and they are designed and used through existent organizational and institutional arrangements, with their own logics and internal trends. These multiple logics are inserted in operational routines, performance programs, bureaucratic policies, regulations, cultural beliefs, and social networks, as shown in Fig. 10.1.

A great deal of technology used in e-government services is provided through a website that users can access; in that sense, the enacted technology includes the website's technical specifications, which are usability, functionality, and accessibility. The three approaches are seen as key factors to user-centered e-government evaluations [8]. Usability is whether users can easily access and navigate the website [9–11]. Accessibility has to do with the website's universal access, particularly for those with visual, auditory, and/or motor disabilities [8, 12–16]. It also considers potential social inequalities, including language proficiency [17] or even material limitations such as access to the internet, hardware, and software. Finally, the outcomes of technology enactment, according to Fountain [3], are unpredictable and variable. Therefore, the effect of ICTs on the government will be profoundly influenced by local organizational, political, and institutional logics in often unexpected ways. For outcomes in the government context, accountability, transparency, cost reduction, time reduction, and enhancement of services are all considered in the government-citizen relationship.

In addition to Fountain's original constructs, scholars have added environmental conditions as a theoretical construct of technology enactment, which has been applied in other models [4]. In the case under discussion in this chapter, the environment is fundamental to understanding the user conditions when interacting with e-government, and we examine some of the case's broader economic, political, and social factors. Economic factors are one of the most influential forces for enhancing e-government use. In developing countries, an e-government project's success is related to that country's economic status, because it is directly related to

the government budget, but also because many people do not have access to Internet and, therefore, cannot use online services easily. In fact, the spread of the internet, e-commerce, and e-government are significantly influenced by the availability of wealth, measured by GDP per capita in a country or region [18]. Consequently, countries with more financial resources have larger programs for e-government website services.

Political factors are also crucial for the success of information systems [19, 20]. Bolgherini [21] argues that political and administrative traditions play an important role in e-government, pointing out that only when an e-government policy has political support will it also have a good chance of success. Therefore, e-government policy must be part of a larger, more politically-centered project with a long-term goal. Political factors include the political party of the elected leaders, citizens' political orientation, and the percentage of votes for each party in recent elections. Talking about social factors, these are useful to understand the context and conditions surrounding the user, which influence whether the user has the skills and capacities to use the information as presented on government websites. The concept of the digital divide considers gaps in individual skills for digital literacy, the resources available to individuals (computers and internet access), and the potential impact of socio-demographic characteristics: gender, age, level of education, and income [22–26].

The technology enactment framework offers an explanation about technology adoption and use within government and the possible outcomes. In Fountain's approach [3], the user's perspective is not included explicitly and is separate from the organizational perspective. This chapter, however, focuses on the user, including noncitizens, in the case of migration services for border workers in the south of Mexico.

3 Context: Migration of Border Workers in the South of Mexico

In Mexico, the phenomenon of migration consists of emigrants, immigrants, and transmigrants. In this case, we are interested in the documented immigrants who come from Guatemala and cross the southern Mexican border in order to work, which requires them to have a relationship with the Mexican government. These workers cross the border in order to harvest coffee in one of the poorest regions of Mexico. Most of these workers are men, mainly between 20 and 34 years old, some of them speak an indigenous language, some are illiterate, and the majority have only completed 6 years of school at best. It is with this backdrop that this chapter presents the delivery of electronic services for noncitizens from divided social conditions.

Mexico's southern border is 1149 km long and sits next to Guatemala and Belize. It is not physically visible like the US-Mexico border in the north, but there are natural borders, like the Suchiate River, separating Mexico and its neighbours.

As a result, the border is extremely porous as it lacks the natural infrastructure and authorities to patrol it. In addition to formal border crossing points, there are hundreds of informal pedestrian and vehicle crossings, in addition to the frequent raft crossings on the Suchiate. This border was historically disputed by Mexico and Guatemala at the end of the nineteenth Century, particularly the Soconusco region in Chiapas. Finally, the two countries signed a deal in 1882 declaring this border belonged to Mexico [27, 28]. From then on, the dynamic there is one of a cross-border region with important commercial exchanges and population movements, mainly due to Guatemalan workers crossing for employment in the agricultural sector of the border state of Chiapas. The Guatemalans have crossed the border to work in the coffee states since the end of the nineteenth Century, although Mexican authorities did not track migration flows at that time [29].

Migration to Mexico changed in the 1980s. Due to armed conflicts in Central America, greater numbers of migrants came to Mexico from that area; migration ceased being solely for labor and switched to refugee migration. The Mexican Commission for Refugee Aid (COMAR) was created in 1980 and it began to operate in the border state of Chiapas to manage Guatemalan refugee flows. The large refugee population made it necessary to register these Central American citizens and to somehow legalize their stay in Mexico.

At the end of the 1990s, a series of reforms in migration management at the southern border of Mexico began to record foreigners seeking work or engaging in other lawful activities (visiting their relatives, going shopping) at the border. The first record of agricultural workers was done through a collective list that employers presented, which included the names of the agricultural workers who would be hired. In 1993, the National Institute of Migration (INM) was created, which is a technical body dependent on the Secretary of the Interior and which implements the secretary's migration policy. In 1997, the Institute set about registering all Guatemalan workers individually by means of the Agricultural Visitor Immigration Form (FMVA), which was a paper document. It included some restrictions—they could only have a job in Chiapas, exclusively in the agricultural sector—and it was only given to Guatemalans. This immigration form was valid from 1997 to 2008.

Migration management in the southern border received greater attention from the Mexican government during the 2000–2006 presidential administration, particularly in 2005 when new plans were created to discuss migration policy in the south of the country [30]. The newly proposed plans would include legal, procedural, and technical changes that would take into account the unique context of the Mexican southern border. In addition to updating immigration laws and increasing border security, the plans called for an upgrade to the migration services infrastructure to modernize and automate entry and exit at the border. A new information system, the Integral System of Migratory Operation (SIOM), was designed to be used in all southern border states and included capabilities for migration flow tracking, issuance of temporary work visas, and identity verification. These technical improvements were accompanied by updates to the documentation required for border crossings.

In 2008, the Border Worker Visitor Card (TVTF) was created, which had an ID format and expanded the employment categories from the agricultural field to

other areas, such as construction and hospitality services. In addition, workers were now allowed in the states of Chiapas, Tabasco, Campeche, and Quintana Roo. The TVTF is valid for 1 year and workers can come in and out of the country whenever they wish [31]. To obtain a TVTF, Guatemalan workers must present a written job offer signed by the employer, three photos of themselves, and have paid the fee (approximately US$18). The Guatemalan workers must go to any of the seven points of entry at the southern border, a migration officer checks their documents and interviews them, and after that the officer checks the SIOM and submits the resolution. If approved, the worker's biometric data is registered: fingerprints, iris, signature, and digital photo. Finally, they are given the Border Worker Visitor Card.

Beginning in October 2009, revisions were made to the migration process and the INM developed a new information system: the Electronic System for Migration Processes (or SETRAM). In 2010, not only were there important reforms in regulation, but also greater ICT adoption in order to improve the tracking of migration flows. The principal administrative reform was the publication of the Manual of Criteria and Migration Procedures in which INM issued newer and simpler immigration forms, as well as an electronic application procedure. Among the technical aspects this modernization implemented were updates to computer equipment, the SIOM re-engineering (including revisions to the "Central Biometric Engine" that scans and stores workers' irises, fingerprints, and photos), and the creation of SETRAM's biometric identification technology that allows INM to verify the identity of individuals regardless of whether they are carrying paper documentation.

Part of the INM's procedures to complete immigrant workers' documentation is the use of the information systems SIOM and SETRAM. The use of these information systems for document processing is important because of the number of people who are granted this working visa. From 2008 to 2014, an average of 23,734 Guatemalans received a TVTF each year. However, from the user's perspective, migration management and the information systems only provide them with information. The actual process to obtain the Border Worker Visitor Card has to be done in person.

Life in the cross-border region between Mexico and Guatemala has a long history in which the citizens of these two nations had family and other relationships even before their borders were defined and the region was divided into two countries. In spite of the establishment of a legal border, the economic dynamic in that area has continued to function, but the conditions of interaction have become more complex as time passes and have been accompanied by a rise in problems such as crime and violence.

One of the resources Guatemalan border citizens have had is that they can work in the Soconusco region between Mexico and Guatemala. This access to workers has helped companies in the region, mainly the coffee industry, as they require a cheap labor force. Since the entry of Guatemalan workers has long been part of the economy of the region, and it has contributed to both countries' economic stability, it justifies the existence of this complex migration process. These workers' registration and documentation allows them to exercise their working rights and legally secure

their stay in Mexico. In a case like this one, noncitizens are important stakeholders who require quality government services that are easy to access and ensure their personal safety.

4 An Application and Preliminary Reinterpretation of the Technology Enactment Framework for Noncitizens

This work aims to be used as a guide for the electronic administration of migration services, shifting the citizen-centered approach into the context of noncitizens. There is complexity in immigration services, because when we talk about the "user" as a non-citizen, the possibilities for the potential user's profile are broad and the challenges for personalized attention are major, since the aims of migration can be very diverse: work, tourism, or business. Furthermore, migrants may come from different nations, where local conditions may have an effect on the procedure they follow. For instance, some countries may be experiencing political and social conditions such as armed conflicts, the operation of organized crime, or even terrorism that influence access to migrant services, whereas other countries that are not experiencing these events may have fewer constraints on access. Plus, the profile of the immigrant him- or herself may be very different from that of the citizens. For instance, speaking a different language may pose a challenge since some immigration services websites do not have translation options to universal languages such as English. Another aspect is being comfortable with technology; some users are familiarized with it, whereas others are not. These access barriers represent a relevant problem that can lead to an applicant's misunderstanding of the procedure and slow down the process.

In this case, we selected Fountain's framework [3] and applied it to the migration management approach and services described here, emphasizing the differences and similarities between citizen and non-citizen users (Fig. 10.2). Focusing on this application, we will start by describing what happens with the original constructs of the technology enactment framework, to which we have added the analysis of environmental conditions as a variable.

4.1 Organizational Processes and Structures

In this case, the organizational processes can vary between a citizen and a non-citizen. Within the organizational structure of government, there are areas and positions specifically designed to assist with immigration. In general terms, citizens and noncitizens encounter different organizations within government, thereby leading them to have different experiences of organizational structure and processes.

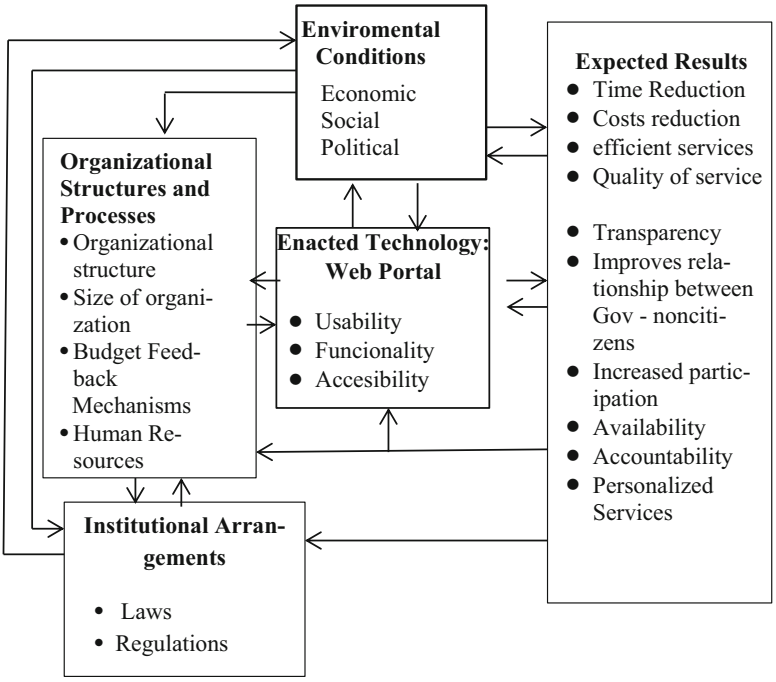

Fig. 10.2 Enacting digital government services for noncitizens

The size of the organization is another variable that may present interesting similarities and differences in terms of its effect on online migration services. It is related to the size of the migration flow, with the number of entry points to the country, and even with the foreigners' mobility. That means that there are borders where the economic and social dynamics cause the need for more facilities and staff, which is similar to other government services. Linked to the size of the organization, there are the human resources that can change, including something as simple as the number of people who work in the migration department. Training can also be different, leading to differences in the staff's understanding of regulations and the need for additional training when a new information system is introduced. The processes that an organization's staff follow may also vary according to each of the migration conditions of the users. In addition, other types of training in foreign languages to communicate with the users or cultural knowledge of other countries are likely necessary.

In the organization there is a specific budget for the activities related to immigration. Apart from this budget, there are external funds coming from other sources, including those from international agreements signed with the purpose of increasing border security or communicating and exchanging information with international security agencies. The ICT budget can therefore come from different

sources, not all of them domestic, which is not necessarily the case for other government services.

The feedback mechanisms are understood as the recommendations, suggestions, or comments that the users of the services provide that can then be used to improve service. In the user-centered approach, feedback is a key aspect to achieving success. Feedback mechanisms include satisfaction surveys or any other section of a website that can be used to leave comments or complaints about each of the processes. If these sections do not exist, then the users' perspective is never captured. A user-centered approach assumes that the information systems and websites are designed according to the needs and interests of users. However, it is not clear whether the opinions of citizens and noncitizens will be equally taken into consideration and in the case of migration services there are not clear feedback mechanisms. Finally, not only can citizens provide their opinions about the service, but they could also vote to re-elect the current government—or not. This is not the case for the noncitizens, who do not have voting rights or any other political means to voice their interests, needs, and opinions about government information systems and services.

With regards to marketing, the advertising and diffusion of the migration services for citizens and foreigners may vary. For citizens, there are more communication opportunities thanks to proximity and there is a wide range of resources such as broadcasting, billboards, and adverts in airports and bus or train stations, whereas for foreigners, marketing resources are mostly focused on the internet. ICT infrastructure is no necessarily different for citizens and noncitizens, but the information systems must be adequate for immigration, with certain modules in the system to assist immigration processes or foreigners' arrivals, which goes beyond a web page. For example, technology enables biometric identification (which has become necessary due to the environmental conditions related to border security) and that biometric information is found on identification cards such as visas and work permits. The level of security and identity verification for migration services is high when compare to other government services.

4.2 Institutional Arrangements

Institutional arrangements are understood as laws or regulations and there are important differences between the rules applicable for citizens and noncitizens. In the case of migration management, most of the rules apply to foreigners only. There are laws and norms established for each type of process depending on the conditions of the migrants and their country of origin. Therefore, the rules indicate how to perform procedures, which has also been incorporated into ICTs. There are a series of laws that apply to immigrants. These laws determine how migration management should proceed, from constraints or conditions to enter the country to duration of stays, fees, visas, or other types of permissions. These constraints depend on the immigrants' nationality, reasons for immigrating, length of residence, and many other aspects.

Migration policy is considered as an institutional aspect. It changes according to migration flows and a series of conditions related to the background of an applicant, such as economic, political and social aspects. That is the case of the border in the south of Mexico; the migration policy for some migrant groups was nonexistent until the number of undocumented immigrants was so high that it drew more attention and better recordkeeping began. Ten years later, during another federal administration, efforts were made to create a migration policy for the southern border in the context of a change of government and different social and economic conditions.

At the same time, migration policy modifies organizational processes. The organizational structure, the size of the organization, its resources, and its infrastructure change according to the actions that the government takes around immigration. Since some international agreements are linked to international security, they may also have an effect on the entry policies for immigrants. Therefore, the effect of institutional arrangements on organizational structures and processes also exists for migration services, but some rules vary for different foreigners, even if they are applying for the same service, and there are also some additional rules that need to be carefully considered such as international agreements.

4.3 Enacted Technology

In theory it may seem that technical matters are not closely related to citizenship, however, technology is influenced by the organizational variables and by institutional arrangements, which, at the same time, are influenced by the environmental conditions that will indirectly modify the use of technology. And since technology is placed in an institutional context in which a set of cultural and cognitive elements, values, and rules are related, then when that technology is adopted it will make sense in the place where it is enacted. For those who are outsiders of that institutional context, technology is adopted differently and, therefore, understood differently.

For instance, in the beginning, the technical features of websites could be indistinguishable for citizens and noncitizens. It is likely, however, that some citizens may have an easier time accessing certain services because the technology will be introduced in particular institutional and cultural contexts, and it will be understood inside those contexts. In the case of citizens, a government website, from their perspective, would be easier to navigate and more usable, because they speak the same language and are immersed in the same culture. Use of that site becomes more difficult when users are not native to the country and therefore cannot easily understand what the processes are, taking into account that not all websites have translations and that the cultural context could be very different. Furthermore, the structure of the page can be similar to other governmental pages that citizen users have previously used, making the design and the location of its elements more familiar. While the technical rules of accessibility require websites to meet certain standards, the degree to which accessibility is achieved can vary with the interest and the will of a government organization, regardless of the rules established by

the law. The context and social conditions of immigrants are often unknown and can vary widely, as we previously said, making it difficult to adapt the technical elements to that population.

4.4 Results

Results are where we see the largest difference between citizens and noncitizens. In general, the outcomes of government services for citizens can have a series of advantages such as time and cost savings or better communication between government and citizens, among other potential benefits. In contrast, for the noncitizens results are determined by what the legislation states, by the country they come from, and by the constraints related to the specific purpose for migration. One of the main advantages of e-government is time savings. However, in the case of migration services, the differentiated application of rules and the additional security concerns mean that most websites only provide information, but do not allow transactions; therefore, users normally need several face-to-face visits to government offices. Therefore, time and cost savings are not as clear as in other government services designed for citizens.

Another potential benefit of e-government is that it improves the relationship between government and citizens, according to the majority of the literature. In the relationship between government and noncitizens, however, the government has fewer incentives to seek a better or more direct relationship. One of the typical ways to improve the relationship between government and citizens is through participation. However, participation is generally understood as citizens contributing to the improvement of a service or public policy, but this role is not clear for noncitizens and migration services websites rarely have multiple participation mechanisms. Another area in which e-government can provide improvements is in transparency and accountability. In the case of citizens, they have the right to transparency in governmental actions, whereas for noncitizens these rights are not as clear, and sometimes are even invalid, depending on the legal framework of a specific country. The same happens with accountability; it is the government's duty to be held accountable to the citizens, but not necessarily to noncitizens, arguably because they do not pay taxes and do not hold voting rights.

In practice it is easier to create personalized services for citizens rather than for noncitizens. Citizens and companies from the host country usually need the same types of processes and services in relation to migration. These services will be very few for citizens (such as a permit to hire a foreigner in a small business), plus users' profiles are more or less homogeneous (same language, same culture). In general, the relative homogeneity helps to design highly functional websites and information systems for citizens, irrespective of the type of service and the policy domain. It also helps to include more participation and feedback mechanisms that truly

reflect a user-centric approach. In contrast, noncitizens have a variety of profiles, with different types of processes, applicable laws and regulations, different cultures, multiple and diverse countries of origin, and different admission conditions.

4.5 Environmental Conditions

With regards to economics, the situation for citizens and foreigners may also vary. Some users come from countries where there are better economic conditions, but others come from countries where the economic conditions are much worse. The economic conditions are aspects that influence most immigrants, positively or negatively. Based on the country of origin, if the economic conditions are unfavorable, it is likely there will be more migration flows. This volume of migration also can lead to greater visibility of those migration flows, which can lead to changes in the dynamics of the approach to migration management and create constraints in the destination country.

On the other hand, the social conditions of noncitizens and citizens of a country may be similar or vastly different. It may be possible that some noncitizens have better opportunities and capabilities for the use of ICTs than the citizens themselves, whereas other foreigners have less capability. In the most developed countries, people will have the opportunity to speak more than one language and greater access to the internet or different technologies, while in underdeveloped countries the opportunities would be more limited. In the case of the border between Mexico and Guatemala, the environmental condition of armed conflict led to a change in the regulations for migration and its associated records. The social conditions of crime and organized crime have also initiated the use of biometric identification. In economic terms, citizens that cross to work in a poor region such as the south of Mexico are likely to be poorer and their distance in the digital divide will be even greater.

5 Conclusions

Migration is omnipresent around the world and it is forecasted that in the future it will increase, from voluntary migrations (work, study, family) to forced migrations (refugees, displacement). That is why it is important to consider migration management as a government task that requires revision and constant adaptation to the environmental conditions and circumstances, including the use of emergent information technologies. Through the case of the border workers in the south of Mexico, we have shown some of the differences between services for citizens and services for noncitizens. Most of the variables of the technology enactment framework were modified or reinterpreted in order to consider how the aims, the background, and the results affect the way services are managed for noncitizens.

However, in most cases the reinterpretation refers only to the details of the indicators and specific circumstances and not to fundamental changes to the constructs and overall hypothesized relationships.

There are greater similarities in organizational processes, although there are specialized areas of migration services. And, even when the information systems could be considered the same, the system modules and their rules vary for different noncitizen users. The institutional arrangements are also different for citizens and noncitizens, particularly in terms of additional international rules and the differentiated application of certain laws and regulations. Regarding technology, it can be stated that both have the same aspects, however, the technical features and the usability and usefulness of the systems may differ due to differences in culture and skills. For instance, to make it easier for a noncitizen to use web pages, there should be translations or explanations of the processes that must be followed in more universal terms, which is not always easy to accomplish.

Another aspect that is different are the results, because a great deal of the expected results or benefits of e-government do not take noncitizens into account, such as improvement of the relationship between the government and citizens, transparency or accountability, increases in participation, and personalized services. Many of these potential benefits rest on strong assumptions about the nature of the relationship between government and users, which are normally thought of as citizens. One of the main constructs that change in the migration management context is the environmental conditions. It is important to consider that for noncitizens there is a very different context from that of citizens, which can be related to how the websites and information systems are used and the success of certain government services and programs in national and cultural contexts.

Finally, this reinterpretation of Fountain's framework aims to provide a useful example to remind practitioners and academics that the services for noncitizens should not only consider the standards for citizens, but also all the conditions that surround the noncitizens' reality and their environment. Considering all these variables will help to develop information systems and digital services that would be more appropriate for different users, including noncitizens.

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