Mind the queue: Understanding challenges of introducing eGovernment policies for entrepreneurs during Covid-19 in a Latin American country

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Structured abstract

Purpose: This study focuses on understanding the tensions experienced by government officials in introducing e-government policies to support entrepreneurs in a developing Latin American country.

Design/methodology/approach: This study relies on an in-depth qualitative approach based on collaborative and analytic autoethnography. We concentrate on tensions experienced by a government official and how they were addressed when introducing eGovernment policies to support entrepreneurs during the Covid-19 pandemic.

Findings: The findings reveal that paradoxical tensions occur as changes are demanded, multiple concerns are expressed, and decisions about resources have to be made. The findings reveal sources of tensions from government, business, and external sources. Addressing such tensions revolves around a diverse form of paradoxes dealing with contradictions in terms of speed vs thoroughness and short- vs long-term implications.

Research implications: Our study provides several contributions. It advances understanding on the source and management of tensions experienced by government officials introducing e-government policies to support entrepreneurs during the Covid-19 pandemic. It also delineates multiple paradoxes experienced by government officials as new policies and systems were introduced. Finally, it offers a conceptual model explaining how government officials deal with multiple tensions emerging from the introduction of e-government policies in a developing country.

Originality: Prior literature has suggested that e-government initiatives would be guided by a prescriptive, tension-free process, driven by the interest to enhance governmental efficiency. This study reveals that developing e-government initiatives for entrepreneurs and existing businesses during the Covid-19 crisis was not immune to contradictions between government officials and the public. A conceptual model, based on multiple sources of tensions (government-related, business-related, and external sources) and their management, is proposed. Implications and opportunities for further research are presented.

Keywords: E-government; Paradox theory; Covid-19; Latin America; Entrepreneurs; Crisis
1. Introduction

There is a growing interest in capturing richer aspects of e-government (Davison et al., 2005), which broadly relates to the use of information and communication technologies (ICTs) to support the delivery of public services to citizens, businesses, and public agencies, and thus increase their participation in decisions that affect their communities and society (Malodia et al., 2021). Covid-19 has proved a difficult challenge for governments around the world (Siegel and Guerrero, 2021; Santos et al., 2021), with support for entrepreneurs being limited (Ibáñez et al., 2021). Public policies for entrepreneurs around e-government are designed to satisfy public concerns through decrees and regulations that support the introduction of online tools and services (Melin and Wihlborg, 2018). Government officials, that is, any officer, employee or other individual acting in an official capacity for a government authority, have come under scrutiny (Boin et al., 2020) about how they address multiple demands, public health concerns, and the needs of entrepreneurs during the pandemic (Ratten, 2020). Prior literature in developing economies suggest that government officials have to deal with diverse tensions, such as e-government coordination, tool procurement, skills, technical and legal issues, as well as international pressures (Knox and Janenova, 2019), yet the answer to the question of how they negotiate such tensions when introducing policies in the context of Covid-19 is elusive.

Focusing on how government officials deal with tensions around e-government is relevant for several reasons. First, governments around the world had to enforce policies to deal with the health threat of Covid-19, imposing restrictions for entrepreneurs and business owners who demanded solutions to be developed quickly (Ratten, 2020). Second, devising digital policies to tackle such pressures is extremely complex, and is often considered as being somewhat hit or miss, suggesting diverse tensions that ICTs and public administration
s perspectives are limited in explaining (Luciano, 2020). Scholars argue for the need of theoretical perspectives that focus on the competing drivers for action and even contradictory tensions that government officials experience (Bannister and Connolly, 2015; Stefanovic et al., 2016). Recent studies suggest that a paradox perspective (Schad et al., 2016) may assist understanding about the experience of government officials in dealing with diverse tensions (Cherry, 2014; Knox and Janenova, 2019). Finally, there is a general assumption that introducing e-government policies may be easily replicated around the world, overlooking differences between Western and international practices, suggesting that further research in developing countries is needed (Sanabria et al., 2014). Therefore, in this study we focus on:

*How do government officials deal with tensions emerging from the introduction of e-government policies that support entrepreneurs during the Covid-19 crisis in a developing country?*

To answer our research question, we look into Honduras, a developing country in Latin America, where recent studies highlight that entrepreneurs deal with diverse issues related to government requirements (Arias and Discua Cruz, 2018; Guzmán-Alfonso and Guzmán-Cuevas, 2012). In Honduras, the business landscape has been affected by the Covid-19 pandemic (Discua Cruz, 2020), with e-government policies just being introduced (Arias et al., 2014), thus it offers a relevant context to examine tensions experienced by Government officials. We rely on a collaborative and analytic autoethnography approach (Anderson, 2006; Chang, 2016) to explore tensions experienced by a government official in charge of introducing e-government policies (Anderson, 2006; Chang, 2016; Evered and Louis, 1981).

Our findings suggest that whilst Covid-19 acted as an accelerator in terms of the introduction of new policies to support entrepreneurs, the process was far from being tension-free. The source of such tensions related to dealing with diverse pressures from government, business, and external sources. The findings reveal paradoxes revolving around speed and
thoroughness, belief and doubt of past and expected future experiences, and a long-term vs short-term view, thus expanding our understanding of e-government (Knox and Janenova, 2019; Cherry, 2014). Finally, our findings provide insight as to the type of tensions experienced, offering a model that meets the contemporary and future challenges of e-government in developing economies (Grönlund, 2010).

2. Literature review

2.1 Covid-19 policy implications for governments in developing economies

Developing countries have responded to the Covid-19 pandemic differently, with diverse regulatory policies and unique approaches (Donthu and Gustafsson, 2020). The health pandemic, currently with no foreseeable end date, has dramatically changed society, altered current business practices, and pushed governments to rethink support for entrepreneurs (Ratten, 2020). To prevent the spread of Covid-19, governments’ policies and actions, such as lockdowns (e.g. ‘stay-at-home’ policies) and temporary closure of governmental offices, has restricted the ability to comply with many governmental procedures (Ashiru et al., 2022). Such policies have affected the sustainable operations of enterprises (e.g. furlough schemes) and supply chains (local and international), among others (Papadopoulos et al., 2020).

In order to meet the needs of public administration in the information era, a rapid response, supported by digital solutions that would benefit the government apparatus, the general citizen, and the private sector was needed (Alsaad and Al-Okaily, 2021). For some governments, the use of information and communication technologies (ICTs) would allow the provision of some public services to be deployed by digital means (Alcaide–Muñoz et al., 2017; Pazmiño-Sarango et al., 2021), underscoring the importance of what is known as electronic government, which is discussed next.

2.2 e-government
While different definitions abound, scholars propose that electronic government (e-government hereafter) relates to the use of ICT applications to deliver various government services (Malodia et al., 2021). Earlier studies associated e-government with the use of ICT “in public administrations, combined with organizational change and new skills in order to improve public services and democratic processes” (Grönlund and Horan, 2005, p. 719). Such conceptualization is relevant, as it highlights skills by government officials and unavoidable change. Such change demanded policies around improvements of the structures and operations of the government (Twizeyimana and Andersson, 2019). Global institutions, such as the World Bank, have been extensively associated with e-government initiatives through financing the development, implementation, and monitoring of digital projects that deal with “the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government” (e-Government, 2015).

E-government impacts the way that governments interact with their constituencies (private citizens and companies) (Lindgren et al., 2019), by becoming accountable, as well as more cost-effective and time-efficient in the creation of public value (Millard et al., 2006). Some of the advantages of e-government are the improvement of the efficiency and quality of public service, service provision across organizations, social inclusion, openness, community well-being, stewardship, transparency, accountability, and improvement of democratic processes (Cordella and Bonina, 2012; Grönlund and Horan, 2005; Lindgren et al., 2019). These advantages are believed to help government officials fulfill the expectation that government can address changes demanded by individuals and businesses in a society (Grönlund and Horan, 2005), as it signals a commitment to improve public governance, citizen empowerment, and interactions with the private sector (Dada, 2006; ‘e-Government’, 2015). For the World Bank, implementing e-government translates into “less corruption, increased
transparency, greater convenience, revenue growth, and/or cost reductions.” (‘e-Government’, 2015).

There are several theoretical arguments in regard to the challenges that introducing e-government policies for businesses may entail for government officials (Bannister and Connolly, 2015; Malodia et al., 2021). Such theoretical conversations have focused mostly on information systems and public administration theories (Heeks and Bailur, 2007). Technology adoption and diffusion theories would explain that government officials will benefit through the increased adoption of digital tools to perform tasks (e.g. Carter and Weerakkody, 2008). Under such perspectives, e-government promises improvements within the government and with the interactions with its citizens, moving away from traditional ways of doing things (Carter and Bélanger, 2005). Moreover, due to the ICTs' ability to keep electronic logs and advances in cybersecurity, e-government is believed to help with transparency and accountability for business owners and entrepreneurs (Lambrinoudakis et al., 2003).

For example, public procedures become time consuming in in-person queues, and they also tend to take time, as paper trails move from one government office to another. E-government digital tools can provide access to some of these types of documents through electronic requests, and provide results swiftly (Twizeyimana and Andersson, 2019). An example can be found in tax reporting: in some countries across the world, government agencies have created a digital solution to receive tax filings by using only electronic means, where no interaction between government officials and business owners is involved (e.g. Internal Revenue Service (USA) or HM Revenue and Customs (UK)).

A public administration perspective would explain that ICTs translate into the decline of command and control bureaucracy, and increased ‘professionalization’, as government officials are relieved from administrative tasks and increase their value (Bannister and Connolly, 2015; Yildiz and Saylam, 2013). The value of a public administration could be
measured both by how much it fulfils the expectations of citizens and businesses with respect to public services in an expeditious manner (Moore, 2001), and the impact of the efficacy and efficiency of the government services on its stakeholders (Castelnovo, 2013). Governmental services are then improved by allowing government officials, as agents, a faster and more convenient way to interact with entrepreneurs through online means and streamlining bureaucratic procedures (Heeks, 2006; Horák et al., 2021). Such benefits relate to administrative efficiency through better management of public resources, reduced administration burden, plus reduced bottlenecks and queues in the delivery of services to citizens (Twizeyimana and Andersson, 2019).

Notwithstanding the fact that whilst e-government studies, relying on information technology and public administration perspectives, suggest the relevance of the value of digital tools and what they offer, they also warn that such processes may be characterized by lengthy stages addressing the needs of various stakeholders both within the government and outside (Stefanovic et al., 2016). Moreover, digital tools and services have to be developed following the introduction of policies regulated by a country’s legal framework, requiring customization often done by third-party providers, within a governmental technology department or a combination of both, following complex selection and tender processes (Hochstetter et al., 2022).

Prior studies suggest that that 35% of e-government initiatives are complete failures, 50% are partial failures, and only 15% of these projects may be considered successful (Heeks, 2003). In developing countries, more than 60% of e-government projects fail to meet the desired outcomes, often resulting in citizen distrust, reputational loss for involved governmental officials, resource costs, and setbacks for the incumbent government (Malodia et al., 2021). To reach the desired benefits, the implementation of digital policies requires the interaction of several actors, such as government officials, entrepreneurs, software, the Internet,
processes, laws and regulations, organizational structures, etc. (Heeks, 2006). Tensions may arise due to e-government coordination across departments of various agencies, digital tool procurement, skills and resources needed, technical and legal issues, among others (Savoldelli et al., 2014). Yet, current theoretical perspectives may be limited in explaining how government officials deal with such tensions when introducing e-government policies, and call for further exploration of experiences in the process (Bannister and Connolly, 2015; Bekkers and Homburg, 2007).

2.3 The relevance of a paradox perspective

To understand complex organizational phenomena that acknowledge the existence of diverse tensions and how they can be managed simultaneously in organizations, including government agencies, recent studies point to paradoxical perspectives (Schad et al., 2016; Smith and Lewis, 2011). Paradoxes refer to ‘persistent contradictions between interdependent elements’ (Schad et al., 2016, p. 10) which may “seem logical in isolation, but absurd and irrational when appearing simultaneously” (Lewis, 2000, p. 760). For government officials, tensions may exist only because some of the elements in conflict when introducing e-government policies are deeply inter-connected and reinforce one another (Cherry, 2014).

Paradoxes can persist over time because they cannot be easily resolved, as attempts to solve one issue may aggravate another, thus tensions may resurface in another form, at a later time, and in other places, thus often remaining latent until contextual conditions, such as plurality, scarcity, and change make them resurface (Schad et al., 2016; Smith and Lewis, 2011). For example, paradoxes could emerge through several stakeholders expressing contradictory perspectives about the relevance of e-government policies over time. Changes in internal governmental processes due to an alteration in the way officials and the public engage in e-government efforts can surface conflicting goals and priorities. Moreover, scarcity of
resources (e.g. financial, temporal, and human) can place government officials between contradictory yet co-existing needs in deciding whether to procure or develop e-government tools or services in-house. Paradox theory explains that managing such contradictions is challenging, as governmental officials may rely on diverse schemes and contradictory responses to avoid discomfort associated with juxtaposing opposite demands (Hahn et al., 2014).

According to Smith and Lewis (2001), paradoxes emerge when government officials must decide what they are going to do in terms of introducing e-government policies, how they are going to do it, who is going to do it, and in what time horizon. By defining how they are going to operate, government officials define how they are not going to operate, creating organizing tensions. Who is going to do what highlights conflicting identities, roles, and values, creating belonging tensions. As government officials consider the time horizon for their actions in terms of e-government policies, between today and tomorrow, they create learning tensions. Finally, by defining what they are trying to do, e-government officials define what they are not trying to do, creating performing tensions. In essence, a paradox perspective is useful for this study, as it takes a view of e-government as a dynamic and complex system, encompassing a variety of tensions (Margolis and Walsh, 2003).

The presence of e-government paradoxes may limit its potential to improve public services for the public, including entrepreneurs (Knox and Janenova, 2019; Savoldelli et al., 2014). Reaching consensus as to what digital infrastructure and tools to develop often results in an e-government paradox, related to a contrast between a high level of investment and low adoption (Savoldelli et al., 2014). Savoldelli et al. (2014) suggest that government officials may draw tensions such as a digital divide, an absence of a legal framework, lack of measurement and evaluation, lack of citizens' participation, and lack of trust and transparency. Moreover, Knox and Janenova (2019) argue that forms of e-government paradoxes can
emphasize technological development (e.g. citizens gain time in dealing with government processes but there is little added value) or digital services, displacing attention from core public services and isomorphic mimicry (e.g. pressure from international organizations or other governmental offices in the use of e-government tools). Schad et al. (2016) hint that a paradox perspective affords exploring tensions around e-government through an e-governmental agency, department or office, and those leading it. Thus, we explore such contexts next.

3. **Context: Honduras, entrepreneurs and e-government**

Honduras, a developing Latin American country of 9.4 million inhabitants, located in the central American isthmus (INE, 2021), was chosen for our study for several reasons. First, during the Covid-19 crisis, the GDP of Honduras reported a drop of 9.0% in 2020 compared to 2019. As of March 2021, one year after registering the first cases of Covid-19, the measurements of the Monthly Index of Economic Activity (IMAE) showed a cumulative growth of 1.0% in the original series, derived from a recovery of productive activities in the country, which was driven by entrepreneurs. The activities with a positive contribution to GDP during the fourth quarter of 2020 were from enterprises in sectors such as commerce, hotels and restaurants, transportation and storage, and the manufacturing industry, which increased the collection of net tax.

Second, prior to the pandemic, entrepreneurs had to register their ventures through in-person applications, which often demanded visits to several governmental agencies and long queues for diverse permits (Arias and Discua Cruz, 2018). In the last five years, nascent enterprises in Honduras have been formalized through a hybrid approach, where entrepreneurs register their ventures through an e-governmental digital portal (Mi Empresa en Linea - *My Enterprise Online* [https://www.miempresaenlinea.org](https://www.miempresaenlinea.org)), which provides official documentation (e.g. a tax code) that can be used to become a member in a local chamber of commerce, and to complete further procedures in governmental offices. Between 2017 and 2021, 10,153
companies were registered on the online platform, of which 5,263 already had a tax and revenue code. The Income Tax Management Service (SAR: Servicio de Administracion de Rentas) provides access to an e-government platform (https://oficinavirtual.sar.gob.hn) to complete tax-related procedures: filing taxes, tax-related queries, sales tax invoice management, etc.

Finally, recent studies in Latin America highlight that whilst e-government may improve the delivery of services and enhance efficiency, governments in the region are under constant pressure to meet citizens’ needs with the fewest resources possible (Porrua, 2013; Sanabria et al., 2014). In Honduras, government actions were needed to increase transparency and introduce policies that could rebuild the confidence of entrepreneurs and the general population. In January 2015, the Presidency of the Republic approved the General Government Coordination Secretariat (SCGG), which, together with input from the National Agency for IT Industrial Promotion of the Republic of Korea (NIPA), prepared the ‘Master Plan for Digital Government for the Republic of Honduras’. Four strategic axes were suggested, proposing a set of initiatives to be carried out to introduce a digital agenda, focusing on digital connectivity with equity, digital government, human talent in ICTs, and the development of an institutional and regulatory framework. In December 2017, the ‘National Plan for Information and Communication Technologies’ (ICTs), prepared for the National Telecommunications Commission (CONATEL) within the framework of the investment fund for telecommunications and information technologies (FITT), was completed. From 2018, a focus on the execution of social policy led to the creation of an information technology office in charge of software development for e-government tools and services.

Yet, e-government digital tools were used only by authorized governmental officers. With the help of the World Bank, a solution for monitoring and evaluation, called the ‘Single System of Evaluation of Social Public Policy’ (SUEPPS in Spanish) was created to support other tracking and reporting systems in use by governmental offices (Arias et al., 2014). It was
not until March 2020, when the Covid-19 pandemic hit Honduras, that the development of e-government policies was accelerated. Thus, under conditions in which introducing e-government policies, tools, and services may cause pressures, understanding how government officials deal with tensions emerging from the introduction of e-government policies that support entrepreneurs during the Covid-19 crisis in a developing country is necessary.

4. Method

The Covid-19 pandemic adversely affected the ability of scholars to conduct research. Thus, methodologically, answering a question about how government officials dealt with tensions when introducing e-government policies during the unprecedented times of the Covid-19 pandemic calls for an in-depth understanding of social reality through novel methods. In this regard, qualitative research is well positioned to extend understanding about digital policies, especially about aspects that are hard to measure, such as, for instance, the rationale and approach (Wastell et al., 2009). Yet, as physical isolation, social distancing and diverse restrictions were introduced to prevent the spread of the virus, it became problematic for researchers to use traditional qualitative methods (Tremblay et al., 2021, Roy and Uekusa, 2020). Roy and Uekusa, (2020) argue that to overcome the obstacles and research challenges during a pandemic (e.g. stay-at-home restrictions, social distancing), the use of autoethnographic methods could support productive qualitative research.

Autoethnography broadly relates to a qualitative approach that helps describe and systematically analyse (graphy) personal experience (auto) in order to understand and critique the embedded cultural experience (ethno) (Adams et al., 2014, p. 24). The features of autoethnography for this study lie in its methodological and theoretical rigor, which illuminates aspects of a cultural experience (Ellis et al., 2011). Adams et al. (2014) hint that key reasons for researchers to engage in autoethnography may relate to their desire to: critique, make contributions to and/or extend existing research and theory, disrupt taboos, break silences,
reclaim lost and disregarded voices, and finally, make research accessible to multiple audiences. Autoethnography is a relevant approach to research e-government policies around entrepreneurship influenced by the Covid-19 pandemic, because it is a tool through which one individual or a team of researchers can embed themselves into theory and practice based on personal lived experiences, and explicate a phenomenon under investigation or intervention (Adams et al., 2014; Holman Jones et al., 2013; Lapadat, 2017).

Nevertheless, when studying complex social realities, recent studies call to move beyond the solo autoethnographic research approach, where the credibility of one person may be criticized as being too close to a sociocultural milieu to analyse it in a holistic or nuanced manner, and engage in analytic and collaborative autoethnography – an approach where multiple autoethnographers collaborate dialogically, as critical peers, to analyse their interpretation of a social phenomenon (Anderson, 2006; Chang, 2016; Hernandez et al., 2017; Lapadat, 2017). Analytic autoethnography demands a team approach, where at least one of the researchers is a complete member of the social world under study (e.g., a government official). It also requires a narrative visibility of the researcher’s self, dialogue with informants beyond the self, and commitment to theoretical analysis (Anderson, 2006). This approach provides clear advantages for e-government officials and entrepreneurship researchers, such as multiple reasons and incentives to spend time in the field, facilitating access to data, vantage points to access certain types of data, and opportunities to draw upon personal experiences to inform broader understandings with others.

Through collaborative autoethnography the expertise of an ‘interdisciplinary team’ entails that the analysis of a particular phenomenon can be undertaken by all researchers involved, or it can be affected partially, where one member engages in collecting the data (e.g. a government official) and writing the autoethnographic text, while the others help analyse the data (Chang, 2016). In line with analytic and collaborative autoethnography, we limited the
research team size to be between three and five members (Roy and Uekusa, 2020). Our analysis was driven by a collaborative effort to balance the second author’s involvement as a government official with two academic members: one being a researcher and an entrepreneur, and the other a computer scientist and researcher who has created and evaluated digital tools for commercial and governmental use, thus creating an ‘insider–outsider’ research team (Evered and Louis, 1981). Using collaborative autoethnography allowed adding a multidisciplinary lens to inquiry, thereby minimizing the possibility of criticisms about lack of rigor, narcissism or self-indulgence (Lapadat, 2017).

4.1 Data collection, analysis, and representation

Guided by Bourgoin et al., (2019) we started with the process experienced by a government official in introducing an e-government initiative to support entrepreneurs during Covid-19. It demanded knowledge and critical reflection on roles occupied, cultural influences, and how reality is constructed (Spry, 2001). To generate rich data for analysis, the autoethnographic experiences of the second author were chosen to engage in insider research, using his insider position as a methodological and interpretive tool (Butz and Besio, 2009). In this study the ‘insider’ has been a government official since 2014, becoming the deputy minister for e-government in Honduras from 2020 until February 2022, having unrestricted access and insight not available to ‘outsiders’ (Karra and Phillips, 2008).

Data collection demanded the provision of personalized accounts or narratives of the experience. Autoethnographies benefit from several types of data, such as fieldnotes, official documents and artifacts, as well as interviews (including memories and narratives) (Anderson and Glass-Coffin, 2013, p. 65). Of all these data types, personal memories represent the foundations of autoethnography (Giorgio, 2013, p. 409). Thus, in this study, data were gathered through memory, including memories of events, conversations, meetings, emotions, as well as
other sources such as field notes and official and publicly available data from governmental sources (Holman Jones et al., 2013; Kouamé and Liu, 2021), collected from March 2020 until March 2021. Through collaborative autoethnography (Chang, 2016) the analysis was undertaken by all authors. One member (the government official) engaged in collecting the data and writing the ethnographic text, while the others helped to analyse the data (Fernando et al., 2019).

Guided by Bourgoin et al. (2020), our analysis comprised several steps, framed by a constant comparative approach between the data and the theory (Corbin and Strauss, 2014). The first step of analysis was done by the second author during data collection. It resulted in the production of a chronological narrative of written and digital video accounts describing events and situations experienced when introducing digital tools during the Covid-19 pandemic. By bringing different areas of expertise, theoretical insights became more pronounced over time and the empirical grounding stronger, which facilitated creating a conceptualized narrative and time-framed compositions (Berends and Deken, 2021).

Throughout the initial narrative, several themes surrounding tensions appeared consistently in a variety of forms: governmental pressures, contradicting demands, and external pressures. Through analysis of the data, the authors became immersed in the related events and created opportunities to relive details, leading to a recursive process of meaning-making (Ellis et al., 2011; Kouamé and Liu, 2021), which turned into the writing of seven short autoethnographic episodes (situations, digital tool projects, etc.), used as analytical bracketing devices (Eriksson et al., 2008) to delve into tensions experienced. The authors analysed the conditions of these episodes, as well as the connection among them, to enable readers to situate details and follow the unfolding of events (Berends et al., 2010).

The second step consisted of coding these episodes, using open-coding techniques (Miles et al., 2013). During multiple online meetings, academic co-authors critically reviewed,
validated, and evaluated the government official's notes and recollections. The two academic authors considered that implementation of e-government tools or services was constantly affected by recurring tensions from several sources, and those episodes were especially interesting, as they were influenced by the level of participation of entrepreneurs and the level of empowerment of government officials. The authors then narrowed down the number of episodes to three. These were chosen because they illustrated moments in which the experiences of tensions were most salient, and where the government official had to reflect on his approach, making it necessary to describe the events in detail. At this stage, triangulation and theory application related to the broader context of e-government. Moving between the various sources of data available, the authors thoroughly rewrote these episodes to support them with additional evidence (e.g. public documents). These initial rounds of coding made them realise that whilst paradoxes existed, the management of tensions was engaged throughout. Thus, aspects such as co-created value and the development of technical/legal infrastructure influenced the continuous adaptation of e-government policies.

Finally, during multiple meetings, the third author offered a theoretical take on the analysis produced so far, based on his experience as a computer scientist and evaluator of digital tools for e-government. He challenged the existing themes and codes and tested whether they were supported by the data. He also underlined the need to identify whether the implementation of e-government tools or services changed following the appointment of the government official as deputy minister, and whether or not paradoxes were managed. Such an approach would avoid the pitfall of observing only successful performances, and revealed that aspects such as delay in e-government implementation, or the selection of third-party providers, may ensue if tensions are disregarded.

The data are then represented through a writing style that combines multiple ‘voices’, including theory and subjective experience, to increase the authentic quality of the accounts
presented (Rambo, 2005). Consistent with our approach, we depersonalize the second author’s accounts by using the name Pablo. In doing so we maintain distance between his position as a governmental official and main actor in events analysed. We acknowledge the risks of autoethnographic accounts (Roy and Uekusa, 2020) by letting the data ‘speak’, often through the voice of the third author as ‘devil’s advocate’ in virtual meetings, to discuss the issues at hand (Bishop et al., 2019). Using an analytic and collaborative autoethnographic approach, we offer a detailed analysis of the tensions experienced by a government official during the introduction of eGovernment policies to support entrepreneurs in a developing country.

5. Findings

Data analysis revealed how government officials in a developing country dealt with tensions during the introduction of e-government policies. Evidence suggested that Covid-19 accelerated e-government policies in Honduras, and that policy makers experienced paradoxes in doing so. Initial tensions existed due to the prior experiences of officials with digital tools developed by third parties, a lack of experience in interacting with entrepreneurs, and the absence of a legal framework and empowerment to operationalize diverse policies. Several episodes suggested that tensions were managed when the advantages of specific and simple tools for eGovernment were demonstrated, when policies were co-created with citizens and the results monitored by international agencies.

5.1 Episode 1: ‘A wakeup call’ – Addressing government officials’ related tensions

Data analysis revealed that during the initial months of the pandemic (March-June 2020), tensions emerged in terms of government officials being sceptical of e-government being used successfully for the functioning of their institutions. For Pablo, this represented a contradiction to the advantages perceived through his journey as a government official involved in the implementation of e-government.
Pablo noted that there was a generalized interest in preserving a status quo, and hence a reluctance by government officials to transform the way things were done. During the first meetings following the news of government-imposed restrictions in March 2020, data analysis revealed a contradiction in the action of government officials. Pablo mentioned, “Government officials who expressed their interest and support to any digital initiative we would come up with [prior to the pandemic] quickly showed a rejection in the implementation stage [during the pandemic]. There was this unfounded assumption that e-government tools would take away the influence or input they [government officials] would have within their institution over time... there were arguments supporting that processes could continue to work as in the past, as advantages were not easy to understand... and that they needed careful thinking.”

The pressures emerging from central government underscored the need to rely on ICTs and digital tools to continue offering their services to entrepreneurs. Pablo noted that policies had to be implemented swiftly to make the previously in-person processes more efficient, yet such approaches challenged the way that government officials expected the process to unfold. Entrepreneurs and business owners were demanding a channel to complete forms required to start their companies, or to continue operation during restrictions. Whilst officials welcomed decisions and guidance by Pablo, their concern was that the introduction of digital tools would be costly, take time to implement, and could fail to address the pressing needs of entrepreneurs.

Tensions were experienced because of the urgent decisions that had to be made, and the course of action that should be followed to provide basic services to entrepreneurs during a crisis. Whilst the interest in introducing digital tools that could expedite processes was welcomed, as it could reduce bureaucratic burdens, contradictions were found in the perception that such introductions would demand such a dramatic change that it would exacerbate public criticism. During subsequent meetings, government officials dealing with entrepreneurs were preoccupied, as the performance measurements of services provided by their offices or
agencies were low, and thus their actions would be questioned. Pablo expressed, “...changes in the processes or the way things had been traditionally done were needed urgently. Culturally, that represented a natural tendency to resist the changes required by digital transformation...they [government officials] needed a wakeup call and COVID-19 was just that!”

Evidence revealed that talks about modernizing governmental processes for entrepreneurs had occurred in the past, yet such talks became stagnant, as initiatives were perceived as not adding any value to the function of government officials, other than accumulating extra tasks. Pablo noted that resistance was heightened by previous experiences of not receiving sufficient and periodic information or demonstrations about the advantages that e-government could offer. Public records of meetings provided suggestions about new structures, optimization of existing processes, and new personnel linked to e-government policies. Yet actions were lacking. Government officials were simply sceptical of the advantages that new digital tools would bring, and decided to minimize the importance of their implementation.

Data analysis also revealed that government officials were doubtful of e-government policies, due to past experiences of digital tools being developed by external consulting firms (e.g. local IT firms (Mazzoni Pizzati et al., 2018)), building continuous tensions about who should be involved in developing digital tools during a crisis. Such an approach previously involved investing large amounts of public funds in IT hardware and software that were often disconnected from know-how within governmental agencies. A disconnection between government officials and what entrepreneurs wanted translated into quickly outdated software and a lack of continuous technical training. Government officials demanded resources to train people in their institutions who could respond quickly to the needs of citizens and entrepreneurs, but who could also develop expertise to update such tools in the future.
Evidence showed that to manage such tensions, Pablo engaged in introducing policies that could show government officials both short- and long-term benefits. This was done first through introducing the electronic signature. An electronic signature provided increased security measures in verifying the identity of a government official for usage of a computer system to control access or authorize a transaction (Minihan, 2001). The first governmental office to engage in the electronic signature process was the Foreign Affairs Ministry, in May 2020. As of May 2021, 14 offices within larger governmental institutions that provide official documentation for entrepreneurs in different sectors have adopted electronic signatures. Among such governmental offices are the Property Institute, the National Institute of Forest Conservation and Development, the Police Directorate, the Secretariat of Foreign Relations and International Cooperation, the National Graphic Arts Company, the Secretariat of Commerce, the National Electric Power Company, and the Tax and Revenue Office.

Yet, as electronic signatures were introduced, government officials voiced the need to gradually eliminate dependence on third parties for digital tool development over time. Government officials believed that in-house development would help the development of tools based on internal know-how of entrepreneurs’ demands and specific information needed. This would also help across agencies to attain official digitalized documents. Such an approach could minimize the tensions produced by government officials being unable to manage requests by entrepreneurs swiftly in times of crisis. Government officials did not want to be dictated to or provided a prescription on what to do from third party providers distanced from what entrepreneurs wanted. Yet, such a request would take time to implement and demand scarce resources (e.g. hardware, specialized training) compared to the use of third-party providers.

5.2 Episode 2: ‘Mind the queue’ – tensions around public participation and official monitoring.
During the first months of the government-imposed restrictions, tensions were also identified around the selection of digital tools that would address the needs of entrepreneurs and business owners. Data analysis suggests that Pablo experienced tensions when implementing new initiatives based on unanswered requests made by the public. Such tension emerged due to the lack of understanding as to which processes needed to be tackled first during the initial months of the pandemic (March-May). In addition, pressures from the World Bank and other external parties about the way business was done in Honduras (e.g. www.doingbusiness.org) were constantly highlighted, as this affected international perception.

To manage tensions, the office of the presidency became involved. The office proposed implementing a social media campaign to ask citizens and entrepreneurs what was the most time-consuming government procedure in any particular office that could be tackled during the pandemic. The campaign started in July 2020 and lasted for two months. It motivated citizens to participate, advertising the conferral of monetary or tangible awards. Such an approach received attention from the public and allowed government officials to receive input from citizens quickly. The result was a list of bureaucratic processes that the public demanded to be addressed. This list was then matched against the official perception of the government, revealing discrepancies between the government and public opinion. Prizes for the most insightful responses were awarded in October 2020.

Based on such a list, the process considered most problematic for entrepreneurs was the official registration of their enterprise in the national registry. It implied long queues in several governmental offices for more than six weeks, hence a policy that would digitalize such a process and reduce the registration time was introduced. The e-Gov digital tool developed was named SIN+FILAS (No More Queues in English). In the subsequent months, the registration process was reduced from six weeks to four days, representing a major breakthrough in the implementation of an e-government policy to support entrepreneurs during the crisis.
Using digital tools for entrepreneurs to voice their concerns about how to make processes more transparent and expeditious became a guiding principle for e-government policies. Other governmental offices, such as the police department and the Foreign Office, were contacted to initiate the development of digital tools. The former provides records for applicants aiming to work in a new enterprise, and the latter offers translation services for entrepreneurs exporting their products. Tensions emerged when monitoring the outcome of changes and the evaluation of further governmental processes that needed to be reduced during the pandemic. Pablo noted that further decisions were taken to address cumbersome processes identified by international agencies, such as the World Bank and Transparency International.

From mid-2020, the Office of Management and Public Innovation, in charge of e-government, approached the issue of the digitalization of procedures to support entrepreneurs through co-creation, asking the public to participate in the process. In doing so, the results have reduced the public health risk exposure through long queues, including the following measures:

1. **Trademark Registration**: Application for trademark registration through an administrative procedure grants its holder the right to exclusive use and exploitation of a trademark in the Republic of Honduras in accordance with national laws and international treaties.

2. **Authentic documents and Apostilles**: The authenticity of a signature of a government official can now be certified digitally, specifying the position, office seal, or stamp used within an official public document.

3. **Registration of Small-and-Medium-Sized Enterprises (SMEs)**: The ‘My Enterprise Online’ platform aims to provide entrepreneurs with a means to register in the microentrepreneurs market; successful completion of the process generates a registration record that can be verified on governmental websites.

4. **SSE Registration**: Registration of Social Enterprises.
Contracts of Adhesion of Individual Merchants or Legal Persons: The electronic agreement of adhesion for natural or legal persons allows generation of a user profile in the governmental digital system, to carry out procedures within the Honduran Customs platform.

SAR SIN + FILAS: The electronic adhesion contract for natural or legal persons allows a user of the system to be able to carry out procedures within the Honduras Tax and Customs platform.

Solidarity Credit: This initiative promotes a socially inclusive economy through a program focusing on the microenterprise sector, providing microenterprises with technical assistance and favorable credit conditions following their registration on the online SAR platform.

Translation Certificate: This service allows entrepreneurs to review, correct, and approve the translation of official and private documents for international matters.

Police Records: The Request of Police Records online; these confirm whether any citizen has committed any offense or crime; they are a requirement for staff in any governmental or private company.

Pablo noted that citizens’ expectations about public value creation were improved, based on the evaluations from using online applications (e.g. the SIN+FILAS platform, online police and translation records request platforms). Waiting times identified by international organizations (e.g. the World Bank) dropped dramatically in the second half of 2020. Such a response signals positive public acceptance of the digital tools developed for the future, yet a concern remains about what would happen to policies once government restrictions would be lifted.
5.3 Episode 3: ‘Battling the bureaucracy office by office’ tensions around the lack of a legal framework.

Since the beginning of the pandemic, Pablo encountered several challenges related to ‘constantly battling the bureaucracy’. This related to officials being hesitant about making decisions without a policy framework from central government. As a deputy minister, he saw the opportunity to accelerate the introduction of e-government policies because of Covid-19 and noted: “We [Honduran Government] can no longer be an ink-and-paper government”. Evidence suggested that current governmental processes were outdated and needed transformation. Yet, tensions arose when other government officials were hesitant to adopt digital tools, arguing the lack of a regulatory policy framework. The development of such a framework would signal a serious commitment to a long-term strategy, rather than responses that would only address issues in the short term.

On May 19, 2020, in response to the need to press on with e-government initiatives, the office of the president, through the executive decree PCM-044-2020, created the Office of Presidential Priorities and Public Innovation. Pablo engaged in such a process, being aware that such an executive decree and newly created office would allow the deployment of efficient and transparent e-government policies. He noted: “The support came from the highest national authority, the president, who requested that immediate action was taken... [As a result] there was a willingness to cooperate by the authorities of governmental agencies”. Such endorsement helped manage tensions related to the lack of a legal framework to guide the introduction of policies, tools, and services for entrepreneurs.

Yet the creation of such an office raised a new set of tensions, as government officials perceived that e-government policies would imply increased bureaucracy, and did not cater for the issues of ICTs for the public. Strong political support needed to be communicated amongst mid- and low-level government officials for implementation. As a response, in August 2020,
Decree PCM-044-2020 was reformed to give greater priority to e-government and public innovation, and the Office of Management and Public Innovation (OMPI) was created, with more specific functions to develop policies in relation to information technology, cybersecurity, and other aspects related to e-government. Pablo became the deputy secretary of OMPI in August 2020. In the initial meetings, as deputy minister Pablo expressed: “e-government initiatives will aid in transparency and corruption prevention because our new systems record every transaction. This is part of the diverse aspects of the legal framework devised by the Government that addresses not only this emergency now, but also the future approaches... yet we needed some room for action, as government officials needed such a framework”. The office represented the creation of new boundaries for promoting the advantages of e-government, e.g. security (Lambrinoudakis et al., 2003) among governmental offices.

Data analysis revealed that when such a legal/technical framework was set up, it provided a greater scope of action for government officials, as policies would be better supported by Government officials, raising their level of empowerment. Under such a legal framework, digital tools and services could then be created through in-house ICT departments financed through central government. Government officials felt that this would increase the perception of accountability and transparency in public information management and resources allocated for ICTs. In doing so, the function of preparing, coordinating, and ensuring compliance with the policies emanating from OMPI would empower ICT departments of diverse institutions to deploy alternative channels to deliver their services online.

Yet, whilst such empowerment generated greater encouragement to introduce e-government policies for the future, and ensured that tools developed would adhere to the legal framework created, it also made officials aware of overlapping boundaries set by current legal frameworks, such as the law of transparency and access to public information. Such laws,
administered by another governmental office, could support e-government policies through informing procedure simplification, public innovation, and digital services geared to provide access to relevant information to citizens, yet their leaders needed to be involved, otherwise a new set of tensions might emerge.

Finally, data analysis revealed that advances in introducing e-government policies could experience further tensions should government-imposed restrictions be revoked, or should a new government take office. Pablo expressed: “The advantage of these IT systems is that they were born out of a real and urgent need of all stakeholders, and all have been able to appreciate the benefits of using these platforms in a short period of time... but we may go back to paper and ink if officials feel there is no need to consider digital tools in the long term.” As more governmental offices are asked to redesign existing processes and make their procedures available for compliance with e-government guidelines, then concerns of continuity remain, thus becoming a never-ending source of tensions.

6. Discussion

In answering our question about how government officials dealt with tensions when introducing e-government policies for entrepreneurs, our study provides evidence of paradoxes in a context where Covid-19 was an accelerator and disruptor of government action (Ashiru et al., 2021). In contrast to prior studies focused on developed economies (e.g. Papadopoulos et al., 2020), the findings provide insight on how this occurred in a developing country, suggesting that acceleration stems from intensive efforts to devise tools that replace in-person transactions in order to stop the spread of infection (e.g. minimizing agglomeration of entrepreneurs in long queues demanding public services).

How government officials dealt with tensions is related to the form of paradoxes experienced. Findings revealed that a government official may face organizing tensions by deciding how the approach to introduce e-government policies is organized (e.g., deciding
which cumbersome processes to tackle – first and then subsequently – in a pandemic). Processes have to be redesigned at an unprecedented speed, demanding the participation of the public, which streamline the approach of government officials to pinpoint solutions. In deciding who might be involved in the development of digital tools (e.g. government ICT departments or external consultants) they face belonging tensions (Cherry, 2014) and the provision of e-government tools and services, while the new ways in which government officials perform their work have required a change in existing processes, aimed directly at providing services to entrepreneurs, but also strategic, tactical, and operational instruments (e.g. electronic signatures) to support processes performed day-to-day by officials in diverse government agencies (Gabryelczyk, 2020). As they consider the time horizons to address several processes identified by the public, they face learning tensions (e.g. immediate and long term). Performing paradoxes were experienced when dealing with multiple internal and external demands (e.g. the needs of entrepreneurs, concerns of government officials, international perceptions). In essence, our findings advance the view of paradoxes encompassing a variety of tensions that government officials experienced when introducing e-government policies (Knox and Janenova, 2019).

Based on the discussion above, two interrelated paradoxes expand our understanding of how government officials deal with the introduction of e-government policies in developing economies (Schad et al., 2016). **Thoroughness vs speed:** ICTs have accelerated the managerial productivity of government officials, which is crucial in the creation of tools for entrepreneurs. Because of the abilities of ICTs, government officials are expected to be faster in the deployment of e-government (Horák et al., 2021). Yet they are also expected to be thorough, which demands time and resources. **Short term vs long term:** Government officials must at the same time honour the difference between short- and long-term needs of governmental offices, and recognize that both time frames may be intertwined (Twizeyimana and Andersson, 2019).
The findings suggest that tensions are exacerbated when officials try to solve an immediate issue, not realising that the solution proposed will likely sacrifice or condition the long-term success of e-government initiatives. A related tension was found in focusing so much on the long-term implications of a legal e-government framework that decisions about what is needed during a crisis could be undermined. Tensions to work in accordance with a new and evolving legal framework using ICTs reveals that both paradoxes are interrelated (e.g. starting with general support, then progressing to the introduction of decrees, and later to a dedicated agency).

Finally, the findings allow us to suggest a framework that can explain how government officials deal with tensions when introducing e-government policies (Figure 1).

![Insert Figure 1 here]

The model posits that government-related, business-related, and external sources of tensions surface when a policy maker experiences plurality, change, and scarcity in order to meet requirements to introduce e-government initiatives during a crisis (Schad et al., 2016). Figure 1 illustrates that the quality and type of interaction between policy makers and the public (e.g. entrepreneurs) can affect the way paradoxes are later handled. When introducing tools and services that facilitate existing tasks for government officials, then tensions are managed through the participation of the public by helping to co-create digital tools or services to pursue. Government officials can then manage tensions related to the development of technical departments. Such an approach then opens up a path for thinking about future requirements for the deployment of e-government policies and the ongoing development of a legal framework that can ensure policy continuity over time. Where tensions are unresolved and persist, the model speculates that policy makers with unfulfilled motivations or minimal political support will delay implementation, or allocate e-government projects to external parties. The model
suggests that introducing e-government policies will constantly involve tensions that will be problematic to resolve (Bekkers and Homburg, 2007; Cherry, 2014).

7. Conclusions

The focus of this paper was to understand how government officials deal with tensions around the introduction of e-government policies for entrepreneurs during the Covid-19 pandemic. The data and analysis showed that many of the decisions that government officials make are attempts to deal with paradoxical tensions. Our study contributes theoretically and empirically in two ways: First, it advances theoretical understanding on the source and management of tensions experienced by government officials who needed to act urgently and become innovative as a crisis unfolds. Second, our study delineated multiple paradoxes experienced by government officials as new policies and systems were introduced. In proposing a model related to such paradoxes, we have made a connection between the sources of tensions and the way government officials approach and attempt to manage them. Summing up our contributions, our study expands understanding around how several of the paradoxes experienced relate to multiple and often contradicting reactions from government officials associated to change towards a digital environment, and resources to develop digital tools appear to be scarce.

7.1 Implications for policy makers

A key interest for policy makers is how to make e-government initiatives succeed during a crisis. Our findings suggest that this is not straightforward. For policy makers engaged in tackling paradoxes to implement e-government initiatives, we are offering a good, practical model: what we see as the best explanation (Calder and Tybout, 2016; Grönlund, 2010) of how government officials have handled tensions when introducing e-government policies in a developing country during the Covid-19 pandemic (Figure 1). Our model should be of value to
researchers and government officials seeking to understand tensions in the introduction of e-government policies and services and how they could be managed.

Our findings highlight that the use of digital tools can support the long-term impact of policies to create public but also private value in tandem (Davison et al., 2005). A crisis may allow policy makers to argue for the importance of e-government and demonstrate its value, yet this may create further paradoxes. Moreover, for government officials to manage paradoxes, then policies must answer a clear and evident need from different stakeholders. E-government initiatives may fail because an elected official starts the project and manages to put it into action, yet, when succeeded by another official, the tools developed are ignored or a new application has to be created (Dada, 2006). Thus, without a focus on changing culture around e-government, such policies may generate diverse tensions.

There would be obvious recurring tensions for governmental offices that lack an up-to-date IT infrastructure, as restrictions in the development of tools to respond to several crises over time may emerge. Whilst external ICT consultants may provide guidance in e-government, they may not offer the same level of attention as a dedicated ICT department within governmental agencies. Dedicated digital innovation teams may provide sustained solutions to diverse services needed (Hadjielias et al., 2021).

Finally, policy makers should not underestimate the importance of government-citizen interaction and the importance of careful planning. The introduction and development of digital tools and services that address citizen demands for better interaction and the opportunity to participate could help minimize tensions and support the continuity of e-government. Failure to do so may result in the implementation of solutions that are seldom used or criticized and the wasted of valuable public resources. When an e-government tool is forced onto the public in times of crisis, then tensions may arise, as the process may lack both a co-constructed approach (with entrepreneurs) and internal support. In addition to technical training, there is a
greater need for policy makers to connect policies with entrepreneurship education, which needs to be supported through e-government (Siegel and Guerrero, 2021).

7.2 Limitations and future research

This study is not without limitations, particularly in regard to the generalizability of the results and the method used. This study highlights that policy makers can become actors and protagonists in a study; they understand the meaning of what they think, feel, and do (Ellis et al., 2011) in terms of their experiences and position as government officials (Anderson, 2006). We call for further studies that adopt (auto)ethnographic methods in the study of e-government and its approach to support entrepreneurs. Such studies can extend our understanding of e-government during the Covid-19 crisis and set new research directions. Video ethnography, such as event-based (e.g. e-government tool presentations) or participant-led videos and digital ethnography, may allow the capturing of digital interactions (e.g. Twitter, WhatsApp), which may help identify dominant and marginal voices in the public sector when introducing e-government policies (Van Burg et al., 2022).

As every country around the world has responded in a different way to the Covid-19 crisis (Santos et al., 2021), our findings suggest that context plays a more central role in theory development, based on paradoxes encountered (Johns, 2017). The contextualization of our findings in the Honduran e-government has allowed us to identify and appreciate the tensions experienced by policy makers in a developing country in Latin America, but also limits our findings to that specific context. In our study, e-government was legally and politically restricted to a thin range of public services for entrepreneurs. Regional developments (e.g. the Andean and Central American regions) demand further scrutiny (Pazmiño-Sarango et al., 2021). For example, we did not explore a cross-country e-government policy plan influenced by Covid-19. More scholarly work is needed to incorporate cultural variation, and thus we encourage researchers, particularly those from developing countries, to consider their personal
experiences as a point of departure in future studies (Hernandez et al., 2017). Exploring multiple research methods and contexts could expand our current research knowledge.

A paradox lens offers much promise to researchers looking to understand different types of tensions in e-government (Schad et al., 2016). It provides an alternative approach to contrast perspectives that dominate e-government literature, offering a natural fit to study tensions. The administration of e-government and the provision of public services in any country is complex; many of the tensions experienced are, by their nature, a part of the managerial function of government officials, yet such complexity may be amplified by a crisis. How diverse paradoxes in the implementation of e-government are dealt with will shape the evolution of public governance after the Covid-19 crisis, which merits further attention.
Figure 1. A paradoxical perspective in e-government policy introduction to support entrepreneurs in a developing country.
References


Figure 1: A paradoxical perspective in e-government policy introduction to support entrepreneurs in a developing country

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