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Implementing e-Services in Lagos State, Nigeria: the interplay of Cultural Perceptions and Working Practices during an automation initiative

ABSTRACT

The public sector's adoption of Information and Communication Technologies is often seen as a way of increasing efficiency. However, developing public e-Services involves a series of organisational and social complexities. In this paper, we examine the organisational issues of implementing an ERP system, which was designed and developed within the context of Lagos State's e-Services project. By doing so, we showcase the impact of organisational cultural perceptions and working practices of individuals. Our findings illustrate the strong role of cultural dimensions, particularly those pertaining to religion and multi-ethnicity. Our study provides insights to international organisations and governments alike *toward project policy formulation within the context of ICT-based initiatives and reforms that aim to bring forward* developmental progress.

Keywords: Culture, Power, Interpretivism, E-Government, Nigeria, Lagos State

INTRODUCTION

Over the last decade the capabilities of Information and Communication Technologies (ICTs) have become even more apparent, with an existing general belief that ICTs can contribute towards increasing efficiencies, productivity (Landauer, 1996), and transparency. This has led to lower costs and the sharing of knowledge and resources with a wider base (Weerakkody, Omar, El-Haddadeh, & Al-Busaidy, 2016). Particularly in developing countries, ICTs are viewed as beneficial for the provision of services that can reduce the digital divide between rural and urban areas (Madon, 2004), and for facilitating the social inclusion of marginalised groups (Walsham & Sahay, 2006). Along these lines, Non-Government funded organisations, such as the World Bank and the United Nations, provide developing countries with primarily financial resources for the delivery of ICT-based products and services (Avgerou & McGrath, 2007).

Today, ICTs are viewed to have a tremendous potential for the public sector (Heeks, 2001), paving the way towards electronic government (e-Government) and the provision of public e-services. ICTs allow citizens and businesses to interact with the government, the dissemination of information, and the support of commercial relationships with private sector organisations, among other things (Ciborra, 2005). In developing countries, an issue that is frequently mentioned is that of the public's trust in the government (Bertot, Jaeger, & Grimes, 2010; Welch, Hinnant, & Moon, 2005). In African

countries specifically, governments are seen as having a high level of corruption risk, with particularly Nigeria being criticised for lacking transparency, an overall anti-corruption plan for its defence sector, and for significant opaque, off-budget expenditure (Transparency International, 2015). In this regard, research suggests that ICTs implemented in public e-services can significantly promote openness and transparency; thereby reducing corruption instances (Bertot et al., 2010).

Nevertheless, the implementation of public e-services necessitates a certain degree of reliance on individuals from within and outside the organisation in question. There is a well-documented failure ratio of IT projects resulting from failure of ensuring stakeholders' involvement and acceptance (Ebbers & van Dijk, 2007), and overemphasising the technical aspects of a project while downplaying the human and organisational ones (Symon & Clegg, 1991). However, studies within the Information Systems (IS) research, have shown that the development of systems and technologies need to take into consideration global, societal and communal attitudes and that, especially for cross cultural IS development teams, the existence of different cultures may lead to "different views of the relevance, applicability and value of particular modes of working and use of ICTs which may produce conflict" (Walsham, 2002, p. 360). Furthermore, the implementation and development of information systems in developing countries are often considered challenging given the lack of funds, expertise, human resources, commitment and lack of knowledge and information (Bass & Heeks, 2011; Williams & Boren, 2008). Such challenges frequently cause a design-reality gap, where the design of a system is undertaken by external consultants with little concern for contextualising the overall development to the specific country (Guha & Chakrabarti, 2014).

Recognising that there are different issues associated with systems implementation in developing versus developed countries, and the existence of minimal research exploring and understanding the organisational and social aspects associated with the implementation of an ERP system for the provision of public sector e-services in Nigeria, we were motivated to pursue research in this area. For this reason, the purpose of our research was *to understand the interplay between the implementation of a project for the provision of public e-services in a developing country and the working practices of the involved actors.* We specifically investigate an automation initiative in Lagos State, Nigeria, which entailed the development of an Enterprise Resource Planning (ERP) system for the delivery of government provided e-services. Through the lens of Institutional Theory and the concepts of culture, and working practices, we examine how the conflicting interests of public sector employees and those of external consultants affected the overall implementation of the project.

We find this particular study of interest for a number of reasons. First, the implementation of public e-services projects in developing countries does not necessarily follow the same trajectory, nor does it lead to the same benefits as in developed countries (Ciborra, 2005). Therefore, there is a need for a bottom-up approach, grounded in the context of developing countries. By doing so, we can examine the impact of cultural and social factors, with the latter being rarely and collectively discussed in

relation to public e-services (Kamel Alomari, Sandhu, & Woods, 2014). Second, existing studies investigating the Nigerian context are mostly focused on the country's e-government readiness rather than on issues relating to the implementation of e-government projects. Third, e-government studies that examine the cultural dimension usually build on Hofstede (1980), who describes culture and national culture through polar opposites (Heeks and Bailur, 2007). We consider 'national culture' to be problematic, and even more so for the African context, where "ethnic and cultural groups can exist across many nations" together with "cultural and ethnic differences within nations" (Myers & Tan, 2003, p. 15). Lagos State is characterised by many different cultures and tribes within and across the State and its public sector, and to overcome such diversities, we build on Schein's organisational cultural perspective for our understanding (Schein, 1985).

To provide a background to this study, we initially provide a review of the concepts of public e-services development, culture, and working practices. Next, we describe our research method and then offer a description and analysis of our findings. The paper closes with a discussion and the conclusions of our study.

THEORETICAL BACKGROUND

Within the context of e-government research, among the most influential applied theories, one finds agency theory, actor network theory and institutional theory (Goldfinch, 2007; Heeks & Stanforth, 2007). Agency theory seeks to determine the most efficient contract between the involved parties, where the principal outsources some work to an agent. In this regard, agency theory is typically applied when the aim is to identify and resolve the issues between principal and agent. Resolution could be sought for issues in the form of conflicts between the interests of the two parties or inability to monitor and verify the outcome of the agent's doings (Eisenhardt, 1989a). Second, Actor Network Theory posits that actors, irrespective of their nature, are all equally important for the social network they comprise. In the case of information technology, people, organisations, software and hardware, and infrastructure are all part of a coextensive network of human and nonhuman elements (Walsham, 1997). It considers the relative position of the actors in their network, as well as "the power that emerges from dynamic configurations of these actors" (Höchtl & Parycek, 2014, p. 264). Finally, Institutional Theory is more focused on the social structure of organisations and considers the processes through which rules and norms become established across an organisation and become guidelines of human and social behaviour. It looks into how such rules become diffused, adapted or fall out of use, and how they can lead to wide consensus across the organisation or lead to conflict and change (Scott, 2004).

In this research, our aim is to understand the interplay between the implementation of a project for the provision of public e-services in a developing country and the working practices of the involved

actors. Therefore, neither Agency Theory, nor Actor Network Theory could help us meet our objective. Agency Theory requires access to both the principal and the agent in order to examine whether and how an efficient contract between the two could be formulated. However, for this study, access to the principal was not possible (i.e., the Governor of Lagos State, Nigeria). Actor Network Theory places an emphasis on tracing how and why some networks stabilise on the basis of aligned interests, but ultimately it restricts the investigation within the particular local context. It is necessary to adopt a much wider stance to take into account the elements that influence cross-cultural teams, and ultimately to understand how certain rules impact behaviours, practices and govern organisations (Reed, 1995; Walsham, 1997). In contrast, Institutional Theory captures the influence of context on ICTs and on the design and implementation of IS for the provision of public e-services (Luna-Reyes & Gil-Garcia, 2011). Its strength lies on its holistic focus on examining the many different structural factors that pertain to "'[i]nstitutions', 'structures' and '(organisational) forms'" (Meijer & Bekkers, 2015, p. 241), while investigating the interaction of the organisation with its internal and external environment (Weerakkody et al., 2016).

In the next section, we introduce the key concepts used in our research. Our study builds on the concepts of institutional theory, culture, working practices and regimes of work and control, and the ensuing discussion positions these within the context of developing countries, as we embrace Ciborra's approach that the development of e-services in developing countries cannot be treated in a similar vein as in developed ones (Ciborra, 2005). In such cases our understanding needs to be 'reconstructed' following a bottom-up approach so as to observe the interplay of the various actors involved in the automation initiative.

Institutional Theory and the Public Sector

Institutions are often seen as guidelines for human action that constrain the behaviour of individuals. They are thus considered to be rules that draw upon cultural principles, social norms, and mental models (Luna-Reyes & Gil-Garcia, 2011). With regards to technology, Institutional Theory assumes that the various ICTs will become institutionalised within the organisation and become part of the employees' routines. Similarly, it assumes that there will be a continuous interaction between these ICTs and the organisation's employees and other stakeholders. Gradually, this ongoing interplay will lead to new organisational structures and routines, and to the institutionalisation of the various ICTs (Weerakkody et al., 2016). Therefore, in our case, the technology is used as a backdrop to understand the organisational changes and working practices that may occur for the implementation of an ERP system that was used for the e-government initiative in Lagos State.

Beyond this continuous interaction, there are three different mechanisms that make institutionalisation possible: the coercive (or regulatory), the mimetic, and the normative. DiMaggio & Powell (1983)

argue that the coercive (or regulatory) draws upon political and legislative influences, while the mimetic may be put in action during uncertainty, drawing upon other systems' practices. Finally, the normative builds upon prevalent norms within the organisation's sector (in this case, the governmental sector).

Regimes of Control and Work

Developing a public sector IT project requires access to rules, regulations and operational regimes, all pertaining to regimes of control and work (Kallinikos & Hasselbladh, 2009). Regimes of control are "formal templates for structuring and monitoring the collective contributions of people in organisations, irrespective of the nature and particular character of that contribution" (Kallinikos & Hasselbladh, 2009; p. 269). Regimes of work are made of "technological solutions, forms of knowledge, skill profiles, and administrative methods" (Kallinikos & Hasselbladh, 2009; p. 267). Regimes of control relate to the diffusion of formal organisations, an association with the aims and priorities of particular groups (e.g., managers), and shape the criteria of relevance to work regimes. Therefore, within the work environment, one acts according to one's training and in line to particular work regimes, and the goals and actions align to work routines and blend together in a way that is difficult or impossible to distinguish one from another (Kallinikos, 2006).

IS Development and Implementation in Developing Countries

To date, there have been great investments in ERPs, both in the private and the public sectors, as they support decision-making (Rosacker & Olson, 2008), improve efficiency and performance and reduce overall costs (Harris, 2006). In the public sector they are seen as a means of tackling increasing complexity because they provide a comprehensive and unified view of the organisation (Umble, Haft, & Umble, 2003). As a result, they are often treated as a panacea for many organisational problems (Elbanna, 2006). However, as with all IS, ERPs too, suffer from large failure rates, partly attributed to the implementation process (Poba-Nzaou & Raymond, 2010). The implementation of an ERP requires significant, organisational change (Boudreau & Robey, 2005) because they enforce standardised processes across the organisation (Christiansen, Kjærgaard, & Hartmann, 2012). Having said that, organisational change is "*grounded in the ongoing practices of organizational actors, and emerges out of their (tacit and not so tacit) accommodations to and experiments with the everyday contingencies, breakdowns, exceptions, opportunities and unintended consequences they encounter*" (Orlikowski, 1996, p. 65).

Implementing IS in developing countries is challenging due to a lack of financial and human resources, and lack of expertise (Williams & Boren, 2008), where previous studies of IS implementation reveal a design-reality gap (Guha & Chakrabarti, 2014). Heeks (2002b) argues that

there is often a distance, both physical and cultural, that inescapably gets inscribed into the design of the IS. This is because IS are typically designed by developers residing in developed countries and therefore "their contextual inscriptions are liable to be significantly different from user actuality, which leads to an extreme and explicit design-actuality gap" (Heeks, 2002b; p. 9). Even when an IS is designed specifically for a developing country, those responsible for the implementation phase (e.g., external consultants) will inadvertently bring into the project their viewpoints that have been constructed within their own environments. Odedra-Straub (1995) found that it is common for Western consultants and sponsors to consider the transfer of technology across countries without significant customisation to the particularities of the country, a process which Heeks refers to as "*If it works for us, it'll work for you"* mentality (Heeks, 2002b; p. 106). What this means is that views existing within the Western context are often enforced within the African context, with no or little attempt by Westerners to find a common ground. Western consultants seek to impose a standardised practice for IS implementations, which leads to severe discrepancies between designers' views and the actual situation (Heeks & Mundy, 2001).

Adding the Cultural Dimension

The implementation of public sector e-services brings together the organisational context (i.e. the public sector organisation), and the citizens' aspect (Kovačić, 2005). As a result, the implementation of an IT project needs to factor in cultural considerations to ensure increased citizens adoption. This is particularly pertinent for the African context. On the one hand, "African public sector organizations are reportedly more likely to have cultures that value kin loyalty, authority, patron-client relations, holism, secrecy, and risk aversion" (Heeks, 2002a; p. 15). On the other hand, African countries are characterised by the co-existence of multiple ethnic and cultural groups (i.e., tribes, societies) within and across nations and of multinational individuals from different religious groups as well. Therefore, cultural values that relate to how people organise their everyday life (e.g., 'office' versus 'home' time), and to the characteristics pertaining to one's religious life, ethnic, national and cultural background (Hill, et al, 1998) will most probably vary across the various tribes and societies even within the same country and nation.

However, culture is one of the most difficult factors to isolate, define or measure (Trompenaars & Hampden-Turner, 1997). Particularly with regards to national culture, researchers often examine it largely along the dimensions of power distance, uncertainty avoidance, individualism–collectivism, and masculinity–femininity that are encompassed in Hofstede's conceptualisation (1980). We consider this approach to be rather problematic for the African context. Such taxonomies posit that certain sets of values will persist across all countries and societies, differing only in magnitude from region to region. However, in African countries different ethnic and cultural groups coexist across the

many diverse nations, with significant cultural and ethnic disparities within the same nations, which makes the concept of 'national culture' itself to be quite challenging to use (Myers & Tan, 2002).

As our aim is to examine the implementation of an e-services project, we adopt an organisational perspective and draw from Schein's work (1985), who theorised on the more observable aspects of culture (e.g., technological artefacts, audible and visible behaviour) and the less observable ones (e.g., values). In terms of values, Leidner and Kayworth (2006) discuss that most studies to date conceptualise culture in terms of reference groups, e.g., the value dimensions of national culture (Hofstede, 1980). However, at the organisational level, there is a greater emphasis on the links between cultural values and the behaviours and actions of social groups. Values are therefore sets of social norms that define the context for social interactions through which people act and communicate with each other (DeLong & Fahey, 2000).

To summarise, an e-service project, that encompasses the development of an ERP, is ingrained with both cultural and institutional aspects. Technology is seen to be "a key carrier through which established patterns of action and control are implanted in organizations and other instrumental settings of contemporary society" (Kallinikos & Hasselbladh, 2009). Further, the three institutionalisation mechanisms can inform research regarding the adoption, diffusion, and duplication of an IT project (Kim, Kim, & Lee, 2009). Comparatively, the regimes of work and control (Kallinikos & Hasselbladh, 2009) can assist towards identifying the hierarchical systems within Lagos State's public sector and guide the conceptual development of our findings.

Having identified and discussed the theoretical foundations of our research, the next section provides information regarding our case study and the specific IT project.

SITE SELECTION: LAGOS STATE, NIGERIA

Nigeria is a developing country that struggles with persistent corruption across its public sector. Its government procurement process is characterised by amounts of money being exchanged behind closed doors, and a highly technical terminology, which further obscures the process and prohibits the average citizen from deciphering its benefits. As a result, citizens are often unable to provide the necessary feedback that can potentially ensure effective governance (World Bank, 2013).

Our study focuses on Lagos State, the smallest but most densely populated Nigerian state. In terms of indigenous societies, it has a higher percentage of the Yoruba population, although there is a very high integration of all the indigenous societies (e.g., Igbo). The main practicing religions are Islam (almost 50%), Christianity and indigenous beliefs. Lagos State has five divisions and twenty local government areas, further divided into local council development areas.

In this study, we focus specifically on Lagos State's e-government's initiative. Lagos State has invested considerable amounts in developing various e-services, which in turn led to establishing the

Lagos State Ministry of Science and Technology and the Oracle Training Center (Chete, et al, 2012; Emmanuel, 2007). Along these lines, Lagos State serves as the case of our study for two main reasons. First, it offers us the opportunity to explore the 'inner' workings of an e-services project, which in turn leads to an understanding of the challenges and successes of developing and implementing e-government projects in a Nigerian state, and within the African context in general. Such studies are few as African studies largely focus on the impacts of ICTs e-government initiatives between citizens the public sector organizations or public private sector partnerships, their costs and impacts, the impacts of ICTs on transparency (Bertot et al, 2010; Schuppan, 2009) Second, Lagos State is the most viable, both financially- and industrially-wise city in Nigeria. For many years, it has been quite an affluent city, enjoying a mature infrastructure and wealth in its own right. It therefore offers access to ample empirical material that is not easily available from other African countries.

The Lagos State Initiative

The implementation of advanced ICTs began in 2001 when the then governor considered them as being supportive of good governance and efficient management of the financial, human and material resources of Lagos State. This triggered the Global Computerisation Programme (GCP) that aimed to support the use of information technology across private and public sector enterprises (Tinubu, 2000). A further impetus for implementing ICTs across the state government originated through the National Economic Empowerment and Development Strategy (NEEDS), which was conceived at the federal level aiming to be 'the people's plan' (Nigerian National Planning Commission, 2004). This policy was developed along four main areas, including the government's role for the economy, the development of an enabling environment for the growth of the private sector, the delivery of social services, and developing a new value system. In other words, NEEDS underlined Nigeria's economic policy and the importance of ICTs for organisations and society alike.

At the time, the success of the GCP was deemed to be of paramount importance and the governor formed different committees as safeguarding mechanisms. These committees were meant to: a) evaluate the situation within Lagos State's departments and ministries, and b) to identify solutions for the existing problems. Among the identified issues, ineffectiveness, corruption and bureaucracy were the most obvious ones.

In 2001, as part of the GCP, the Lagos State government established a joint programme together with a USA-based consultancy. This project involved the implementation of Oracle's ERP system with the project management being supported by an external organisation. The project involved the development and implementation of a network infrastructure (fibre optics), hardware, software and capacity building through training on system use. In 2010 there was a change in government, but that did not affect the project as the new government wanted to ensure that the State could further prosper

by enhancing its ICTs capabilities. This meant that the project was considered integral for the growth of the economy and for the provision of e-services. Along these lines, the new government decided to expand the use of ICTs for managing and maintaining records, documents and files across the various Ministries, and the ERP system was seen to be critical to the success of the overall project (Lagos State Government, 2010).

RESEARCH METHOD

Our study focuses on the design and development of ICTs for the provision of public e-services and how these become entangled with rules and behaviours within an organisation. This entails an examination of how different stakeholders (e.g., consultants, public sector employees, middle and senior managers) interact and impact one another for the development, implementation and delivery of these e-services. Positioning this discussion within the African context, Lagos State is characterised by many different nationalities, ethnic and religious groups, all of which share diverse understandings among them. As a result, an investigation of people-system interactions and the various processes as social practices unfold is warranted (Walsham, 1995). Therefore, our view relates mostly to the interpretation of structures, rules and resources, which aligns with interpretivism (Orlikowski & Baroudi, 1991).

We conducted a case study following a bottom-up approach with the aim of assessing the influence of the particular IT project as a whole within its broader context. We consider the case study to be particularly appropriate as the boundaries between the context and the phenomenon were blurred (Baxter & Jack, 2008). To be more precise, we investigated the working practices of external consultants and public- sector employees in depth. This was as they unfolded within their working environment, which dictated examining actions and perceptions and the context within which the implementation of this IT project took place. By doing so, we provide an understanding specific to an African country and identify the challenges that exist in multi-cultural developing countries.

Collection of Empirical Material

The research team consisted of four researchers. There were two local Nigerian researchers who assisted with acquiring and interpreting information on Nigerian cultures, the country's social system and governmental operations. One was a male researcher of Ibo[1] descent, born and raised in Abuja, the capital of Nigeria, and a female researcher of Yoruba[2] descent, born in the UK, who had received her early education in Lagos State. Both researchers were immersed in Lagos State's context where, through their extensive network, it was possible to gain information regarding the particular project.

[1] Ibo is a Nigerian indigenous society.
[2] Yoruba is a Nigerian indigenous society.

The third researcher was a female academic, who was born and raised in Africa, with knowledge of the values and attitudes of African societies. She guided the research team in identifying issues related to Africa, organisational change and culture. The fourth researcher was an academic who assisted with the research by providing an objective view and questioning issues that the other three researchers could not identify due to being deeply immersed in the research context.

The empirical material was gathered using various sources in order to allow multiple perspectives to emerge and to crosscheck evidence and interpretations, which in turn ensured triangulation (Eisenhardt, 1989b). Namely, data was collected through interviews, observations and archival data (i.e., online sources and government documents). Interviews followed the semi-structured format and were mostly face-to-face or through telephone and Skype.

Interview participants were selected to reflect the diversity of Lagos State, while ensuring that they had adequate experience with the project. They were selected using the snowball sampling approach, which has been applied in a previous Nigerian e-government study (Okunola et al, 2017). Participants belonged to 'a circle of friends' rather than to a hierarchical system (i.e., parents or grandparents), in which case there is a risk for bias due to respondents being keen to obey their seniors' command and align their replies with the researchers' perceptions. Thus, we sought to ensure that participation was entirely on a voluntary basis and that employees participated from all organisational levels. Finally, we proceeded with additional interviews only if we considered them to provide supplementary and substantial perspectives (i.e., adding value to the study), so as to ensure the theoretical saturation of the empirical material.

Overall, there were 83 participants in the study, which included the ICT director, IT advisors to the Federal government and Lagos State, Oracle employees (USA), consultants from management consultancies, ERP users, accountants, human resources employees, and employees of the Science and Technology, and Information & Strategy Ministries. These participants were derived from all organisational levels (lower, middle and higher), from all the main departments involved in the implementation of the ICTs project, and from the main indigenous societies of Lagos (Yoruba, Hausa and Ibo). While there are other indigenous societies within Lagos State, our aim was to investigate the cultural aspect within the public sector, and it is these three societies that are mainly represented within the Lagos State's public sector. The participants' full details are provided in Table 1.

Table 1. Study Casebook

Age	Gender	Organisational Positions			
		Lower Management	*Middle Management*	*Senior Management*	*Total*
18 – 29	Male	13	1	0	14
	Female	10	0	0	10
30 – 39	Male	8	8	2	18
	Female	6	7	2	15
40 – 49	Male	2	2	8	12
	Female	4	2	2	8

50 +	Male	0	2	2	4
	Female	0	1	1	2
Total		43	23	17	83

Most interviews were held at the participants' work places, but some were conducted at their residences. This was done for two reasons. First, this approach was chosen so as to allow participants to speak more freely regarding their involvement in the project. Second, in some instances, the researchers were informed beforehand that the participants did not want to interrupt their work schedule and preferred to be interviewed outside their work hours, which led to interviews being conducted in their residences. We recognise that this potentially introduces bias in our study. However we pursued this strategy regardless as we considered it to provide us with greater richness, and more in depth answers, as we would be allowing individuals to share their opinions freely.

Some of the interviews were conducted in Yoruba and Ibo, because participants expressed a preference towards the local language. Each interview lasted approximately 60 to 90 minutes, and was conducted on a one-to-one basis. When verification and validation were necessary, follow up interviews were mainly completed using telephone conversations, which resulted in an overall 120 interviews.

The set of questions we established for guiding the process of interviews revolved around interviewees' background, the management of the overall project, interviewees' prior experience and knowledge of IT and ERP systems, as well as the training they received within the context of the particular project, and their role during the project. Generally, this set of questions was used consistently across participants. However, the interviews followed the semi-structured format, which meant that we allowed for the interviewees to express their own thoughts and concerns regarding the project, which ultimately resulted in much richer descriptions, and experiences and evaluation we did not account for (Table 2 includes some examples of questions). For example, one of the questions was "Could you tell me whether there were any changes introduced in the organisation as a result of the ERP?" which led to a discussion and further probing of the participant, but to different directions depending on the actual content of the answer.

Table 2. Examples of Interview Questions

Overall Theme	Examples of Questions used in the interviews
Personal Involvement	What was your role during the project? Did you participate in the decision-making or not? How long were you there for?
Knowledge on/Experience with ERP	Did you know how to use an ERP system? Did you know what an ERP system is used for? What is your understanding of ERP systems now? How long have you been using the ERP system?
Training	Were you provided with training? What training did you receive?

	How much time did you spend on it? What did you like about the training? Why did you like it (or why not?) Did you prepare notes during the training? Hand written or digital notes? Did you want to store them for future use? After the training, did you meet again for follow up for further information?
Culture	What would you ideally value in your workplace? Why, or why not? How and why did you find the behaviour of the overseas team members different to yours? How did you discover this? Did you observe it, or was it hearsay? What was being done differently by the organization in terms of the overseas team and your own? How did you find this out?
Project Management	Were there frequent project management meetings? Did you participate in many of them or not? What were they about? Were they helpful? Why (not)? Were there enough people, money, time to work on the project? Which one was provided the most?
Overall evaluation	What would you do the same (or differently) now? Why? Could you tell me whether there were any changes introduced in the organisation as a result of the ERP?"
E-government questions	What is the relationship between the Global Computerisation Programme and this Oracle ERP system? Is there any relationship or not? How will the ERP system help with the government's aim of e-government?

The content of the interviews was cross-validated across participants and across different sources of information. Such cross-validation allowed us to examine the validity of interviewees' comments, triangulate our material for reliability and achieve saturation for completeness (Eisenhardt, 1989b). Specifically, researchers had access to the Lagos State Ministry of Science and Technology and the Oracle Training Center. As such, supporting evidence was obtained using the observations of everyday working practices, the write up of field notes, and the consultation of hard copy archival documents. These were otherwise inaccessible. During our study, the internet infrastructure was still disjointed and different websites were still under development. However, other sources of information were accessible. For example, Lagos State's website contained numerous state-level publications that helped in assessing the differences between Lagos State government and the local government. As supporting evidence, the Lagos State government website presents a techno-savvy, informative, advanced and well- designed website (http://www.lagosstate.gov.ng/) and provides evidence of its revenue sources. Comparatively, the local government website (http://www.amuwo-odofin.gov.ng) showed at the time that several of its features were still under development and, until now, is still not as advanced as the State's website. Such diversities were further highlighted by Olasupo, who emphasised that local government is autonomous in Nigeria and should therefore keep *"governing at the grass-roots or local level"* (Olasupo, 2013).

Empirical Material Analysis

All the interviews were recorded and transcribed, as were our field notes. While doing so, we prepared detailed memos of our observations and of any emerging themes that were later re-examined in light of the evolving theoretical background.

The analysis was conducted using a deductive approach, where the process began with a preliminary examination of the data and comparing to the theoretical themes and theories of this research study. The coding technique was based on the classical grounded theory methodology (Glaser & Strauss, 1967). The coding scheme derived from the extant literature and referred primarily to conceptualisations of culture, institutional theory, regimes of work and control (Kallinikos & Hasselbladh, 2009) and extant theory regarding systems development and implementation, as applied within the context of developing countries (Heeks, 2002a, 2002b; Odedra-Straub, 1995). The specific coding technique was chosen over others because it functioned as a robust and systematic instrument for coding, without necessarily restricting the researcher into any preconceived codes and categories, and offered a tangible method for building relationships between them (Urquhart, 2012). In other words, we used the grounded theory methodology as the mode of analysis.

Open coding commenced by identifying as many codes as possible. In many instances, some concepts were newly emergent that led into placing them into newly created codes for further examination. Open codes were then grouped together so as to develop the core categories. This stage formed the stage of selective coding where several open codes were grouped into subcategories, being each other's variants, or dimensions and properties of the core category (Urquhart, 2012). This resulted in identifying the core categories, i.e., work practices, regimes of control and work, and concepts derived from institutional theory and conceptualisations of culture, which allowed us to scale up the analysis. Table 3 offers examples of our process, where 'first-order data' refer to the interviewee's constructions, 'key idea' refers to the extraction of the quotation's essential meaning, and 'second-order concepts' contain our constructions, based on our analysis and extant literature (Walsham, 1995). Finally, while developing our study's chains of evidence, the analysis began revealing the relationships among the various core categories. This entailed extracting representative vignettes from the empirical material to highlight findings and support our arguments.

Table 3. Example of the Interpretation Process

	First-order data	Key idea	Second-order concepts
Cultural Analysis	*"When we arrived, it was really hot, there was a ceiling fan, files lying on desks and some chairs. There were some old computers also available for us to work with. We also found out how it feels when electricity goes. We did not have power cuts in USA as much as here and on such hot days"(Oracle employee 2)*	The overseas team considered the existing infrastructure as unsuitable. In contrast, the local individuals were used to such conditions –thus conflict arose in many occasions.	The 'quality' value of a working place should be much higher according to the perceptions of the overseas team. This is different to the local individuals' values.
Systems Development and Implementation and	*"When providing training for using Oracle and operating the various screens, we found that paper notes were essential, which was something we wanted to*	Project management in an organised, structured manner of conducting work.	The behaviour of the development team is being constrained by the behaviour of the local individuals. This suggests that there is a gap

Regimes of Control Analysis	*discourage. Why? If anything went wrong, the users would want to refer to them and not pay attention to what we were saying. Then, if they wanted the notes that was another problem. Keep notes somewhere where you can refer to them. When we continued with the training, many of them would not have copies of the notes and wouldn't even bother returning to their offices and getting their notes. Instead, they would want another copy. This caused a lot of frustration, wastage and delay for us and we wanted to get the project complete. Our deadlines, organised and structured way of getting things went out of the window*" (IT consultant 1)		between what was originally designed and planned for and what is being pursued in reality. In terms of the development, this suggests the enforcement of the view: "*If it works for us, it works for them*". The IT consultant was used to having a very organised environment where participants were on time, had the required content and were willing to learn. This was not the case in the Lagos State ERP. There is also evidence of control regimes where the IT consultant is the project's owner who wanted to ensure that the project is on time. Therefore, it was essential to have deadlines and to work with an organised team, willing to learn, but he found out that the participants would not co-operate, that they would cause delays, leading to his frustration.

FINDINGS AND ANALYSIS

The affordances and constraints in work practices rely on organisational processes, procedures and social capacities nesting within the organisational culture and on the characteristics of technological information based on data schemes that act as reference to physical, social and interactional items (Kallinikos, 1999, 2001). As a result, in order to understand the changing working practices, the technology and organisational culture need to be considered (Mariátegui, 2013). Namely, technology affects work practices, which in turn affect the implementation, use and non-use of the technology. When work practices change, they impact organisational culture and, in turn, the change in culture affects work practices (**Error! Reference source not found.**).

Figure 1. The relationship between technology, work practices and occupational cultures (adapted from Mariategui (2013)).

Following this, our study's findings referred to mainly three organisational levels: a) culture, cross-cultural differences and differing working practices between locals and external consultants; b)

regimes of control and work, primarily in relation to time; and c) the development and implementation of the ERP system that was envisaged to make possible the delivery of public e-services. Figure 2 presents a summary of our findings along these dimensions, which are detailed and discussed further in the following sections.

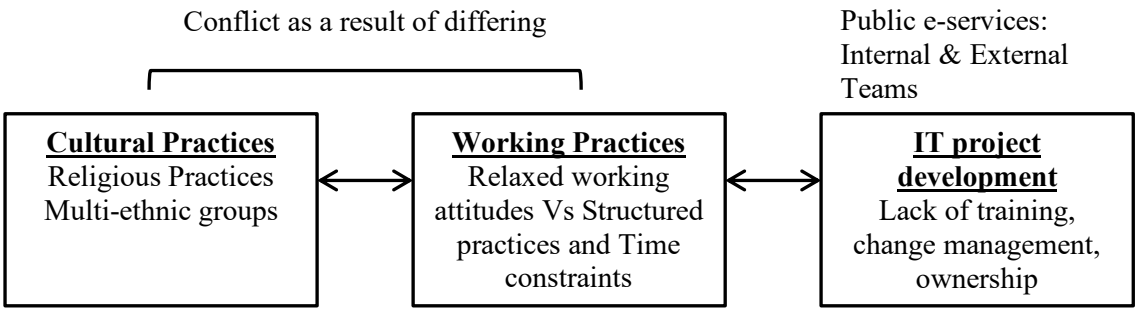

Figure 2. Relationships between work and cultural practices and their impact on the development of IT projects for the delivery of e-services, in the case of cross-cultural teams.

Culture-driven Conflicts

During the implementation of the ERP and the roll out phase of the public e-services project, both the overseas team (US contractors) and the local team (state employees) faced a series of issues that were affecting their working practices. One of the major issues was that the overseas contractors failed to understand local customs, which primarily related to *religious matters*.

Many state employees, working as part of the local team, were Yoruba, Hausa Muslims, which meant that for them, Friday afternoon was a time for rest and prayers. Therefore, even if the overseas team had to consult with them about project related issues, they would be unavailable during that time. On many occasions, this resulted in having meetings cancelled at the last moment, and eventually missing important deadlines, which led to the gradual building of frustration. One of the local IT developers mentioned that *"It was funny when we had a meeting for the first time in June/July during the month of Ramadhan. The room had food and the Muslims would not eat. The overseas team manager joked and asked: Is there something wrong here? Am I not getting something? The local person replied that it was the fasting period and so, lunch was not allowed for them then."* However, the same local IT developer praised the overseas team for not eating during that meeting. He commented that, gradually, the overseas consultants became more mindful with regards to scheduling meetings around lunchtime, or featuring food during the Ramadhan[3] period.

[3] Ramadhan is the 9th month of the Islamic calendar and is a month of fasting from dawn until sunset. Fasting is obligatory for adult Muslims (except in cases of illness) and it includes refraining from liquids, food, smoking etc.

Understanding culture and cultural differences involves an investigation of structures and artefacts (Schein, 1985). Along this dimension, we uncovered issues pertaining to both *tangible and intangible artefacts*. What the overseas consultants and developers highlighted were aspects regarding the overall working environment; namely the climatic conditions, power cuts and office equipment. *"When we arrived, it was really hot, there was a ceiling fan, files lying on desks and some chairs. There were some old computers also available for us to work with. We also found out how it feels when electricity goes. We did not have power cuts in USA as much as here and on such hot days"* (consultant from USA 1). The same incident was mentioned by a member of the local team, who, while chuckling mentioned that the accommodation they made for the overseas team did not include contingency plans, and when power cuts did occur, they were resolved with the help of power generators. "*When the developers first arrived, it was a hot day and we had fewer fans. They had to get used to that. Then, after a little while, the power went out. That was something that we then mentioned one needs to get used to. After some time they got used to it, but it did disrupt ours and their work as the computers could switch off any time and if there was some training going on, we had to stop*" (HR manager 1). Briefly, the offices at Lagos State council were somewhat rough in comparison to the sophisticated environment to which the overseas team was accustomed.

As a result, there were several different provisions available to the overseas team. As the temperatures in Lagos State were particularly high and power cuts rather frequent, the council installed additional fans throughout the offices. Further, overseas personnel had the option to use offices equipped with air conditioning and additional office equipment, such as white boards, filing cabinets and they were also able to work remotely from their hotel rooms or apartments, where conditions were of a much higher standard with electricity always available.

While the local staff were used to working under rougher conditions, they felt that they should also have access to these facilities and equipment. However, these were made available only to the overseas team. As such divisions began to emerge they quickly resulted into a division between the two teams and feelings of resentment and mistrust within the members of the local team towards overseas consultants. A local end user commented: *"You know how it is in a country like Nigeria, it is hot. I would tell and tell my manager, but he told me that he could not do anything. I had to go to work and work there even if it was hot. I also saw that the consultants would not be in. One day, at lunchtime I asked my manager about them and he said that they were working somewhere else. Slowly I found out that they were in their rooms or somewhere else".* To release their frustration, the local team would cause mishaps and delays in the development of the project, which caused further problems for the overseas teams.

The local team gradually formed a united front. Rather than adapting to the new working requirements that would help with meeting the project's objectives on time, they continued with their usual working norms. On the other hand, the overseas team carried on with work activities that

excluded the local team. This was due to the overseas teamoperating within the context of a formal control mechanism, which involved an established time frame and a contractual agreement dictating their working practices.

Regulation of Work

With regards to regimes of work, from the onset of our study, it was quite obvious that the two teams were following quite different working practices, with the most prominent difference being the perception of time. The local team worked strictly between 8:30am and 4:30-5:00pm. Within this context, working overtime was a very unusual concept. Also, local employees had adopted a somewhat informal working style. Their attitude was relaxed and casual, where they enjoyed tea breaks and, in certain instances, long lunch breaks. These suggest loose and informal control mechanisms.

In contrast, the overseas team were much focused and highly organised. When their contract for the implementation of the ERP was initiated, they had specific deadlines for each specific implementation phase. Therefore, in order to meet the deadlines, if and when necessary, they worked longer hours during the project development and implementation phases. Yet, this also suggested that oftentimes it was difficult to establish contact with State officials and local staff in order to acquire data or information on processes. Further, it was found that at the time there were no established processes for data gathering. This significantly extended the data-gathering period and in many instances additional delays were the result of fear and scepticism towards the overseas team.

Local customs and practices had an impact on placing and receiving orders and services, too, with the impact being greater when orders were placed or expected to be delivered during a Friday. Beyond a certain time, local staff and businesses would not receive or process any placed orders. Instead, they would do so on the following Monday. In addition, deliveries were always delayed by a few days. While the overseas team would sigh with relief upon receipt and note the delay, the locals would usually commend them for actually receiving the order earlier than usual. In fact, it was found that deliveries would take much longer if dealt with by the locals rather than the overseas team. Nevertheless, such instances meant that the overseas team had to deal with additional setbacks and delays.

Cultural and work practices differences between the two teams also emerged as a result of different perceptions regarding time. When scheduling meetings between the two teams, the overseas team would always be on time and at the agreed premises. In contrast, the members of the local team were always late without any excuse, nor making any apologies for their delay. The overseas team was informed that being late for meetings was the norm, and although not mentioned explicitly, it was implied that they would have to get used to it.

Regulation of Control

In terms of regulation of control, we focused on the practices of local managers and the local staff members' sense of ownership of the project. Many local employees considered imperative the existence of a person championing the project across the various departments. The governor of Lagos State was widely recognised as being the absolute champion of the project. However, our findings revealed that the project's stakeholders, particularly local ones, felt that someone from within the council had to champion it and promote it because (s)he would have a greater understanding of their needs and requirements. An HR Manager commented that "*Some groups of people sit down somewhere whether consciously or unconsciously, whether good or bad, think of all kinds of projects and while sitting in the comfort of their office, they approve the project and they send it out to be done. I am the one that is going to use the system. I should have a say from the planning stage. I am not saying they have to involve everybody in every government policy, but for things like that you need to have two or more end users involved. When you sit somewhere and you ask a project to be executed and to be used by end users, I do not think it works like that. Because of this I do not want to use this new system. If they had champions it would have been better, people would have responded better to using the system*" (HR Manager 1).

Prior to the specific IT project, local staff were responsible for handling any IT projects. With the ERP system the council had decided that there was a need to change the established practices, and that the development and implementation of the project would be handled by external consultants, with the support of local personnel. It was thus decided that an overseas team would be contracted to work on the project until the local employees were able to understand all the features and capabilities of the system and to use it effectively.

As expected, the exclusion of local staff from the decision-making process led to push back and conflicts between the two teams from the moment the overseas team arrived in Lagos State. Despite the majority of local staff understanding that the specific IT project, and the ERP system in particular would require external expertise, they appeared largely uncooperative. The IT project required significant changes to occur, and therefore the overseas team was viewed to threaten indirectly the existing status quo. As a result, the local employees exhibited resistance towards the proposed changes as employees had already formed a negative opinion of the overseas team. Therefore, the benefits of the new system were largely disregarded and local employees' detachment was quickly recognised by the overseas team: *"Unfortunately the higher- level authorities did not involve the relevant stakeholder and this is another challenge, because there has been no acceptability since there is no ownership from the business user"* (US consultant). In short, both teams recognised the need for involving the actual end users of the ERP system, as well as the challenges of the project. However, as neither of the teams was involved during the decision-making process, it was difficult to

overcome the communication breakdown. This mentality of 'us' and 'them' led to the division of labour with locals practically refusing to co-operate productively with the overseas team. Similar findings have been reported in other studies, where the exclusion of locals brought about cultural clashes (e.g., Leidner & Kayworth, 2006).

As soon as the local employees began familiarising themselves with the ERP's features and functionality, the overseas team began handing over the project and leaving Lagos State. This gave rise to further struggles. Local employees felt that, instead of improving processes and their work, the ERP system would jeopardise their jobs. Thus, it was difficult for them to display a collaborative behaviour. In addition, as the project costs increased and as there were clashes between the two teams, the council decided that the local team should quickly be assigned to the ERP. Yet, at that point, there had been no meaningful training on its use, and the entire project was questioned once more: *"It has added to my workload and slowed down the efficiency for now. Presently you see me doing double work. I still use hard copy files of documents particularly when information is not available"* (Local Project Manager 1). Less tech savvy employees could not grasp the necessity of the system: *"Why do we need this system? It is not going to be any good"* (Local Accountant) and these issues were attributed in some cases to the initial exclusion of business users from the design process: "*You will have issues because by the time I tell you the many issues, either you go and redesign it or it dies naturally somewhere. Due to these issues, I am not motivated to use it*" (Local IT advisor).

When discussing training, lower level employees mentioned that higher level managers were not interested in receiving training themselves or in the project and that they had included the training without any consideration for individual needs and requirements: "*Our top managers don't show any interest in Oracle training. They were not involved in the training programme, though they should be the core training subjects because their background means they have knowledge on information systems and information security"* (IT manager 1). Another super user from the local team mentioned that: "*The Information Centre only organised several simple lectures for us. Almost all the contents were about technologies. How could we understand that? It is supposed to be aimed at the IT staff, not us. We need to know about how to get passwords, how to deal with the interface, keys, codes and such. Besides, we were very busy getting ready for all these new changes. Arranging software, job changes. We did not have time."* (ERP super user 1).

Another aspect of regimes of control emerged through the organisational level distinctions. Lagos State government is technologically and financially advanced compared to other Nigerian states. Higher positioned individuals are likely to have travelled and studied abroad and are usually from the Igbo (or Ibo) or Yoruba ethnic groups and of Christian faith. In contrast, lower level individuals are usually from the Hausa group, with some individuals also from the Yoruba communities and being from the Muslim faith, which also explains the several religious rest days. These distinctions mean that managers and developers belong not only in different professional groups but have different

cultural backgrounds and belong to different systems. It may be said that higher-level individuals belong to a wealthier, educated system, whereas, the lower level individuals are less travelled and more used to local norms and customs.

To summarise, there was a need and an expectation for higher-level individuals to be more involved, offer support and champion the project across the council, facilitating the required changes. Control regimes affected the working practices of individuals and made it difficult for local employees to develop a sense of ownership over the project.

Development and Implementation Analysis through Institutional Theory

While analysing the development and implementation of the ERP system, there were conflicts during the development and project management methodologies. The overseas contractors pursued a structured approach, whilst the local staff, a rather unstructured one. In essence, it became clear that the behaviour and working practices of the local staff were constraining the overseas staff's efforts. "*When providing training for using Oracle and operating the various screens, we found that paper notes were essential, which was something we wanted to discourage. Why? If anything went wrong, the users would want to refer to them and not pay attention to what we were saying. Then, if they wanted the notes, that was another problem. Keep notes somewhere where you can refer to them. When we continued with the training, many of them would not have copies of the notes and wouldn't even bother returning to their offices and getting their notes. This caused a lot of frustration, wastage and delay for us and we wanted to get the project complete. Our deadlines, organised way of getting things went out of the window,*" (USA IT consultant 2). Such instances led to a shift in power from the development and project management team to the local team, which frustrated the overseas team assigned to the implementation project.

The American project management organisation had convinced the government that a structured methodology would be most beneficial for the project. Further, such structured methods could be used to facilitate change. This method was accepted and pursued when the overseas team was present in Lagos State. Therefore, there was clarity thanks to the standardised documentation in the form of online and hard copy manuals created for the various audit checks.

It is important to highlight that due to the new working patterns introduced by the overseas staff some local employees abandoned their old work habits and adopted the new and structured ways of project management. Nevertheless, some local employees exhibited a resistance to the changes, which caused delays and frustration across the teams. Eventually the issues were resolved using the process of mediation by an older, local individual. This person was a local qualified accountant in his fifties, who realised the importance of having a structured IS development and project management

methodology. He also began taking more interest in the project, which was the breakthrough both teams needed. He pacified the overseas team when frustrations and delays occurred and relayed knowledge and information in a more informal manner to which local individuals were used to. This is similar to the "rock of discipline" introduced by Nicholson and Sahay (2001), present in the form of a local individual.

When the overseas team returned to the USA, the local team abandoned some of the American methods and tailored them to their ways of working. A current super user and end user characterised this as "*our way of working, which is the right way*". Such views gave way to a diverse form of divide within the organisation and surfaced as a subtle form of corruption. Here, there are two different cases that should be highlighted. The first one involves the pursued auditing process. With the American teams located in Lagos State, there was a structured form of documentation and specific processes pursued for the development and implementation of the ERP system. Upon their departure, familiarity with the 'old way' of processes and documentation emerged. In addition, as hinted earlier, one characteristic of some Nigerian organisations is indolence. The combination of these two led to inefficiencies. Nevertheless, in order to receive the certification for the expected quality at the auditing stage, networking was sought once again. The second case is the individuals who received training and education. Individuals from wealthier backgrounds were trained, and in some instances, these employees received their training abroad. Another group of individuals, who obtained a place in the teams and received training, belonged to those societies where nepotism existed. In other words, those who did not belong to any one of the aforementioned groups, and wanted to work with the 'elite' groups of users, sought their participation through networking and other, similar means, which demonstrates the emergence of politics and corruption.

Thus far, it is apparent how several processes and actions were pursued for the system's development. However, it should be noted that, while the project was initially designed to align with the federal level policy document, there were several independent measures taken at a state level; the governor was travelling with a delegation to the USA, and did not wait for the federal level government to organise things and direct him to future actions and strategies. Therefore, the project was directed as the government saw fit.

DISCUSSION

E-government is viewed as essential and important for all countries, developed or developing ones.

In this study, we examined the implementation of an information system within an economically deprived country, but within a state that is financially affluent. Adopting Institutional Theory and using the lenses of culture, regimes of work and control within the context of the specific case study, it was possible to understand the circumstances and interpret them so as to assess the dominant

structures at the organisational level. We identified a federal, a state and a local hierarchy, all of which were prevalent during the development of the ERP system. To be more precise, NEEDS was initially formed by the World Bank, but tailored to the Nigerian context (federal level). The instruments and policies provided by NEEDS helped Lagos State to form its own vision, which was partially fulfilled through the development of the ERP system (state level).

According to Suchman (1987), "instead of trying to look for a structure that is invariant across situations, we should try to identify the processes where particular constituted circumstances are uniquely interpreted so as to render meaning shared and action rational" (as cited in (Sahay, 1998)). Indeed, our study has focused on these processes and circumstances and their respective interpretations by the participants themselves, in order to better understand the constraints identified in other studies (e.g., Korpela, Soriyan, Olufokunbi, & Mursu, 2000). Previous studies on e-government and culture (e.g., Carter & Weerakkody, 2008) have shown that culture is an important aspect within developed countries. We have extended this concept taking into account the values, the work practices and regimes of control, so as to consider national and organisational perspectives.

Our findings show that when Lagos State sought to adopt e-government, it was crucial to be aware of and understand, besides the technological aspect, the cultural, the political and the power aspects (regimes of control), and work practices as well. The lens of regimes of control showed that Western consultants do not necessarily understand local requirements and needs. This aligns with Heeks' view that "Western consultants form an important component that both drive and shape the reform agenda, including the e-government agenda within Africa" (Heeks, 2002a, p. 2). In addition, our findings show that culture has a strong impact within the context of developing countries, too. The analysis revealed that older individuals and those who travelled abroad were respected more than others. While aspects pertaining to the working conditions are often disregarded by studies conducted in developed countries (e.g., existence of equipment, infrastructure), our study shows that for developing countries may be important factors, governing and affecting the working practices.

As Fountain (2001) has discussed, IT has the power to redistribute, among many organisational responsibilities, the functional one, as well. In this respect, our findings show that IT can promote power through structured development and project management methodologies. Power has surfaced through the development of a formalised, disciplined way of working and also dictated the provision of improved, 'state-of-the art' facilities. IT allowed certain individuals to demonstrate their potential, which was not possible before. For example, the accountant in our study was a local employee who became the project's champion. We showcased that divisions across the communal, caste, communities and ethnic groups may occur within the workplace due to segregation on the basis of wealth, education and policies, because these inadvertently create elite groups. As a result, some local individuals, who did not meet the education and wealth requirements, resorted to politics in order to subscribe to the aforementioned criteria and work with the 'local elite'. Notwithstanding, the pressure

exerted to meet deadlines suggested that training was seen as secondary in many respects. However, it is integral for the successful implementation and adoption of an IT project and it has to be aligned to the stakeholders' needs and requirements. As this did not even manage to attract the interest of higher level managers, it led to the first signs of divisions between the teams and across the different organisational levels of the hierarchy.

Finally, local individuals attempted at first to adhere to the 'western' ways of working. This suggests that the specific IT project, made possible through the support of international non-government organisations, led to "socioeconomic improvements through locally situated action" and brought positive transformations (Avgerou, 2010). However, when the overseas team members returned to the USA, the locals fell back to their old ways and practices, which suggest that these transformations and improvements were not entirely adapted and embedded within the local practices. It also shows that this new form of NPM cannot be a seamless and direct transfer of ideas and processes in developing countries. Instead, it has to be aligned to local customs and working practices.

Implications for Theory and Practice

When considering Nigeria, other social issues need to be acknowledged, which are different from the context of developed countries where cognition, language and their relationship to technology could be key (Kallinikos, 1999). As our research focused on a developing country and placed less emphasis on the technology, it differs from other Nigerian-focused studies.

IT projects frequently involve local and non-local teams. When referring to multicultural teams, these teams most likely have different cultural systems, hold different values and have been exposed to different working practices and experiences (Walsham, 2002). While collaborating, differences across the aforementioned dimensions will surface and if not acknowledged and catered for, they will impact the project. This is an important implication for the development and implementation of a large IT project like an ERP for the support and provision of e-services within a developing country as such projects are often rolled out with the support of Westerners. Along these lines, the most important contribution of our study is that by applying the lens of interpretivism, institutional theory and social constructivism, we have uncovered the role of religion, local customs and multi-ethnicity and their impact on the working practices and collaboration between multicultural teams, which are common occurrences in IT development but infrequently discussed in the relevant literature.

Next, ICTs are an integral part of e-government. Developing e-services involves human actors and encapsulating how local councils interact with citizens. This means that cultural values and practices are in one way or another 'engraved' on the processes developed and made available through IT. Therefore, the relationship between ICTs and culture needs to be formally accounted for. First and foremost, this suggested that there exists an infrastructure for the delivery of e-products and e-

services. As far as culture is concerned, when examined in relation to technology, it may be seen as 'culture in technology', 'technology culture', and 'cultural values towards technology' (Hasan & Ditsa, 1999). In our study, we focused on the latter and considered cultural thoughts, actions and affects being shaped while interacting with IT. In this sense, our study offers a unique contribution to e-government literature by identifying the impact of local practices in Lagos State.

With respect to practical implications and contributions for the industry, in our study we have emphasised the intangible social and religious norms that often emerge in developing countries, and affect the development and management of IT projects. Stemming from this, it may be said that IT projects that involve both local and non-local staff, particularly in developing countries, need to unfold by incorporating the views and opinions of both groups as they both in position to provide pertinent information and knowledge. This is an important implication for the development and implementation of a large system, such as an ERP, and allows us to make 'sense' of complex situations. Next, an important implication of this research is that when considering e-government and relevant IT projects, the role of the infrastructure and not only that of technology is important. In this respect, infrastructure should not be restricted in examining aspects of hardware, software, networks and the likes, but also facilities and equipment.

Finally, in our study we adopted the qualitative approach in order to investigate concepts such as culture, regimes of control and work practices. In doing so, we provided a rich description of the impact of religious matters, cultural values and multi-ethnic groups on the working practices within a public- sector organisation when collaborating with external consultants. We view this as a strength of qualitative studies as they allow researchers to showcase exactly how their findings may affect an organisation. In our study, for example, we have shown 'how' and 'why' a religious day (e.g., Friday) or month can impact the working practices of an organisation. In terms of the development of a system, this study reveals that designers and managers need to consider the design-reality gap, which is not easy to fully explicate through a quantitative study. For the public sector, the implications of this research show that there are different expectations from the various groups. The involved individuals (i.e., employees) do have certain expectations from their government and the implemented project, while the government on the other end also holds expectations from its employees. In turn, these views and expectations have an impact on the adoption process and the acceptance of e-government. Finally, in terms of developing countries and the public sector, our study shows that the role of non-government funding agencies is also critical to achieve success in a public- sector project. The support may not necessarily be monetary, but could be in the form of a human resource. Therefore, particularly for developing countries, e-government projects supported by the public sector should also consider the role of a non-funding government agency.

CONCLUSIONS

Our research focused on the implementation of an e-services project in Lagos State, Nigeria, with the aim of understanding the impact of the working practices of the involved actors. We applied Institutional Theory and Kallinikos' and Hasselbladh's work on regimes of work and control (Kallinikos & Hasselbladh, 2009) through the lens of cross-cultural differences and investigated the conflicting interests and interactions of public sector employees and external consultants that led to the implementation of an ERP system for the provision of e-services. Our analysis showed that despite the close collaboration between local staff and overseas consultants, divisions of labour and conflicts did emerge as a result of cross-cultural differences. Upon the departure of the overseas team, the locals attempted to tackle these issues through politics and networking, which is a common practice within the particular region (Heeks, 2002a). In addition, the overseas team employed a structured development and project management methodology. This however was later customised to the local norms once the local team took over the responsibility for the e-government project. In all these instances, our findings also illustrate the prominent role of culture and power in a developing country, which in our study took form through the concepts of religion, multi-ethnic groups, and different hierarchical systems within the organisation as a reflection of those in society.

As other studies, our study also faced some limitations. Despite our study being conducted using a large sample population, its nature is qualitative. Therefore, our findings cannot be generalised widely, and across similar contexts, but this research can assist researchers to consider carefully their questions that can be pursued by adopting our approach. In the first instance, we consider that the specific case of ICT implementation may be seen as an example of a reform project. In this case, our findings can be generalised in a broader manner taking into account different types of reforms introduced in the public sector and where different cultures may clash. In the future it may be useful to conduct a mixed methods study, where both quantitative and qualitative data are collected and analysed. Quantitative data may help in identifying pertinent concepts for further analysis through more focused analysis using quantitative data.

Second, this research was completed at a time when the e-government initiative including the implementation of the ERP system was still under development. Therefore, citizens' awareness and stakeholders' expectations were still evolving, with the project itself being under contention, and the adoption of the envisaged e-services being unclear. We consider these to be important aspects. Presently, Nigeria-centred studies tend to examine e-government initiatives through a different perspective, i.e., the government's role in facilitating e-payments (Ifinedo, 2012), identification of opportunities and challenges (Asogwa, 2013), and pinpointing barriers to deployment and adoption (Oseni, Dingley, & Hart, 2015). Our findings suggest that a more in-depth qualitative study of the factors affecting e-government adoption would be beneficial. This will offer an understanding of the

experiences of individuals that could in turn lead in understanding the factors driving or inhibiting end-user acceptance of e-government projects.

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