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Power, trust and control: The interaction of political behaviours in accounting-based ERP system implementation processes

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Abstract

Purpose – The purpose of this paper is to explore political behaviours associated with the implementation of an enterprise resource planning (ERP) system in a public service organisation from an emerging market country, the United Arab Emirates (UAE).

Design/methodology/approach – The authors' theoretical framework is based on the notions of trust, agent reflexivity, ontological security, routines, control and power proposed by Giddens (1984, 1990). The authors explore how the political behaviour of organisation members emanates from the introduction of an ERP system (particularly its accounting modules), and how the interaction between individual power, trust and control shaped its implementation process. The case study methodology relied on diverse data collection methods including semi-structured interviews, documentary evidence and personal observation.

Findings – The authors show that the accounting-based ERP system created an episode of discomfort in the organisation, which facilitated reflexivity and critical reflection by organisation members and led to a re-assessment of ways of thinking pre- and post-dating the implementation of the ERP system. The findings illustrate the entangled relationship between the new accounting-based ERP system and the feelings of trust emerging during organisational change.

Practical implications – Although case studies are intrinsically limited in terms of generalisability, the authors' investigation provides practical insights into the management of the needs of trust, ontological security and sources of power experienced by organisation members, since the fulfilment of such needs is the underlying pillar which the success of ERP systems rests upon.

Originality/value – This study is one of the first to apply Giddens' (1984, 1990) conceptualisation to examine organisation change caused by the implementation of an accounting-based ERP system in an emerging market economy.

Keywords Accounting, Emerging economies, ERP, Structuration theory, Customization, Trust and control

Paper type Research paper

1. Introduction

Although previous studies have suggested that the implementation of an enterprise resource planning (ERP) system could lead to changes in accounting practices, so far, only limited (or even absent) effects have been identified (Booth *et al.*, 2000; Chapman, 2005; Dechow and Mouritsen, 2005; Quattrone and Hopper, 2005; Kholeif *et al.*, 2007; Cadili and Whitley, 2005; Hassan and Mouakket, 2016). In fact, some studies provide evidence that the implementation of ERP systems promote stability rather than change in accounting practices (Granlund and Malmi, 2002; Scapens and Jazayeri, 2003). Some scholars explain the lack of accounting-based ERP change in terms of the technical and "customisation" issues raised by ERP systems (Soh and Sia, 2004), while others attribute the observed lack of change to behavioural issues associated with the adoption of new integrated information

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systems such as ERP (Brignall and Ballantine, 2004). Skærbæk (1998) argues that power is an underlying cause behind organisational stability or change, highlighting the effect of political elements (i.e. conflict of interests among different coalitions) on the implementation of new information systems. Nevertheless, previous studies have not delved into the foundations and premises underlying considerations of power by organisation members.

Prior literature has addressed some behavioural aspects associated with the implementation of accounting-based ERP systems. First, organisations and individuals are rational and make decisions to change their accounting system based on appropriate cost/benefit trade-offs (Arnold, 2006). Second, the cognitive and political aspects of human behaviour enable individuals to resist the change in accounting practices resulting from the adoption of ERP systems. The influence of "power and politics" on organisational behaviour and accounting change is not a newly identified topic (Abernethy and Vagnoni, 2004), but previous analyses lacked a coherent framework to fully explore the phenomenon as well as the role of human rationality in the process. For example, Arnold (2006) proposes behavioural investigations of how top management influences the implementation of ERP systems; the processes aligning routines of organisation members with ERP requirements; and, finally, the reasons for implementing accounting-based ERP systems. Chang (2014) recommends the examination of how organisation members attempt to gain power, secure their self-interest and avoid responsibility relates to their "political behaviour" during the implementation of information systems. Coad and Glyptis (2014) highlight that political behaviour in organisations rests on feelings of trust among people and on the system itself, while Busco *et al.* (2006) propose that political behaviour in business organisations is the outcome of a balance between trust and control. Though insightful, these views and analyses do not resolve how political behaviour interacts with each other and how patterns of political behaviour emerge and dominate the processes of implementing an accounting-based ERP system.

Finally, from the alternative perspective of emerging economies, van Helden and Uddin (2016) concluded that future research in public sector organisations should address how management accounting practices are impacted by the interplay of conflicting interests of developers, users, customers and public servants. They also identified the need of a solid theoretical framework to investigate how social structures, culture and agency are intertwined while capturing the diversity of agent interests. Our study addresses this research gap and examines a transforming public organisation employees' politics, trust and control through a theoretical framework informed by the lens of Giddens (1979, 1984, 1990) structuration theory and his notion of trust (Ashraf and Uddin, 2015a).

The aim of our study is to advance the understanding of the behavioural and political dimensions associated with the implementation of the accounting module of an ERP system. To the best of authors' knowledge, this is one of the first studies that examine how human political behaviours are triggered during ERP implementation in a public organisation from an emerging economy country, the UAE. The study also contributes to prior studies which examine the effects of ERP systems on professionals such as accountants (Caglio, 2003; El Sayed, 2006; Jack and Kholeif, 2008). Furthermore, we propose that the notions of "dialectic of control", ontological security", "trust" and "agent reflexivity" proposed by Giddens (1984) can decisively contribute to a deeper understanding of what organisational theorists call "action-oriented view of power" (Rahman, 1998). Although previous studies have applied the structuration theory to analyses of power and political behaviour (e.g. Orlikowski, 2000; Luo, 2006; Chang, 2014), none has combined the structuration theory with Giddens' notion of "trust". The study is organised in the following fashion. Following this introduction, Section 2 reviews the literature. Section 3 discusses the study's theoretical framework. Section 4 presents the methodology and data collection methods. Section 5 illustrates our case study findings, before the discussion and conclusion section.

2. Literature review

2.1 Accounting and ERP systems

ERP is an integrated enterprise-wide computing system. It operates as a set of integrated software programmes or modules (Scapens and Jazayeri, 2003). ERP automates business processes, shares common data across organisation departments and generates real-time data (Brignall and Ballantine, 2004), improving decision making, planning and control (Davenport, 1998). One of the key aspects of ERP is that it incorporates the best practices of the industry in computerised form. Another key aspect is that the system integrates traditional accounting transactional activities with associated functions such as production, human resources management and sales (Dillard, 2000; Dillard *et al.*, 2005; Dillard and Yuthas, 2006). Under the ERP integrated system, the entry of data into one module affects data and operations of some or all other system modules (Brignall and Ballantine, 2004).

Davenport (1998) argues that the backbone of the ERP system is the central database, as it stores data retrieved by various modules and makes them readily available to users. The central database standardises and streamlines data collection, analysis and dissemination throughout the organisation. O'Leary (2002) adds that the central database and \incorporation of best practices require organisations to adopt "best practices" designed into the system. Consequently, the implementation of the ERP system leads to re-engineering of business processes and organisational change. Such re-engineering involves: integration of information, information flow across functional areas, acceptance of the best practices programmed into the ERP system software, information accessibility and the recognition of the power derived from real-time access of information (O'Leary, 2002).

Another consequence of ERP implementation is a change in individual behaviour, but so far, only a few studies have addressed this process. Drawing on Gidden's (1979, 1984) structuration theory, Granlund (2001) case study described the resistance to the introduction of an ERP system as the result of the desire of organisation members to preserve their institutionalised routines. Resistance to change was interpreted as the result of the fear of disruption created by the new system. Granlund's study highlighted that the resistance and unsuccessful implementation of the practices promoted by the ERP system was also the outcome of fear of increasing workloads, and of uncertainties and anxieties stemming from a possible lack of knowledge and skills necessary under the new system.

Scapens and Jazayeri (2003) undertook a longitudinal case study of ERP implementation at the European division of a large US multinational organisation. They concluded that accounting-based ERP organisational change involves integration, standardisation, routinisation and centralisation, whose implementation implied that routine tasks were eliminated, line managers began a search for more knowledgeable employees, and de cision-making processes were centralised in the hands of those who had access to ERP shared databases. Scapens and Jazayeri (2003) also identified significant changes at the operational and middle management levels as a result of the ERP implementation, as well as important behavioural changes across different departments. For example, management accountants shifted towards more analytical at the expense of routine tasks because they were provided with more forward-looking information and therefore played wider roles in supporting the strategic goals of the organisation.

Caglio (2003) undertook another case study of ERP system implementation and its impact on accountants of an Italian firm. He observed that the high degree of standardisation of accounting activities, integration across functional departments and centralisation created by the ERP shared database allowed the accounting department to acquire a prominent managerial role. The ERP system provided accountants with wide organisational knowledge and the opportunity to take charge of information systems. As a result, the introduction of ERP systems led to "hybrid" positions occupied by management accountants carrying out additional business consulting and information system maintenance tasks.

Quattrone and Hopper (2005) examined the impact of ERP systems on reducing distances between headquarters and branches, postulated as is one of their main benefits. They argued that the use of shared databases eliminates the distance between the controller (headquarters) and the controlled (branches). However, they found that only one of the examined branches used the ERP system to break down functional barriers and distances, while others maintained existing distances in pursuit of improved operations.

Dechow and Mouritsen (2005) found that the ERP systems entailed a shift from financial to nonfinancial information use. Jack and Kholeif (2008) conducted a case study in Egypt and found that the work of management accountants kept restricted to their traditional role of collecting cost information after the implementation of ERP system. Teittinen *et al.* (2013) conducted a case study examining management control practices four years after the implementation of an ERP system in a middle-sized company operating in Europe and concluded that financial control practices preserved a privileged preference despite the expectation of top management that new strategic control practices would emerge.

Silva and Fulk (2012) examined organisational power and politics at Gulf Coast University during ERP system implementation. They explored political behaviour of members by examining how disturbances to "circuits of power" (Clegg, 1989) created tension and intensified power struggles during the process. Chang (2012) explored the adoption of political tactics by an information systems manager reflected his personal interests and expert knowledge during implementation of a new information system. Based on Gidden's (1979, 1984) structuration theory, Chang (2014) discussed how different political tactics interact and affect an organisation and information system implementation. In the USA, Nwankpa (2015) examined the appropriateness of a standard ERP system to organisational needs in terms of data integration and standardisation, business processes and user interaction. The study concluded that organisational fit is the missing piece in the puzzle of understanding success in ERP implementation.

2.2 Power and accounting change in emerging economies

Ashraf and Uddin's (2015b) study examined how different social groups and their interrelationships contributed to shaping and transforming management accounting control systems in a state-owned enterprise in Pakistan. Their study examined how dominant social groups form a "power bloc" that can either facilitate or prevent changes in management accounting control systems. Informed by a critical realist interpretation, they concluded that the political strategies of dominant social groups eventually led to a compromise that limited changes in their organisation.

Informed by old institutional economic theory and Hardy's model of power mobilisation, Youssef (2013) provided a contextual explanation for changes in management accounting practices within an Egyptian organisation that implemented B2B e-commerce procedures. She concluded that habitual behaviour and organisational power shaped processes of change, and that the new B2B e-commerce system facilitated greater control over inventory, invoicing and improved the planning process through accurate and real-time information about sales, receivables, cash collection and inventory turnover. Youssef (2013) findings suggested that the CEO strategy to purse gradual change, the participation of accountants in the design and modification of the new system, the simplicity of new accounting routines created by the B2B system, the users' satisfaction with new system rules and monitoring the implementation of the new routines were factors facilitating the processes of routinisation and institutionalisation of the new system.

Siti-Nabiha and Scapens (2005) examined changes in management accounting in an East Asian state-owned gas processing company. Informed by concepts adopted from both old institutional economics and new institutional sociology, they investigated the implementation of value-based management system by a parent company on all its subsidiaries.

They concluded that the new system's key performance indicators became decoupled from the day-to-day activities. They also showed that the new accounting system was implemented in a ceremonial manner, as the system's performance indicators were produced and reported to the parent company without affecting the activities and decisions taken within the subsidiary company.

Munir *et al.* (2013) examined the adoption of a performance measurement system by a bank from an emerging economy. Relying on the institutional theory, they found that changes in accounting procedures occurred due to financial losses experienced by the bank, major regulatory changes and the appointment of a new president. The study revealed that the new leader overcome the resistance to change through the provision of adequate technical and training support. Adhikari and Jayasinghe (2017) applied the strong structuration theory to day-to-day activities of the central government in Nepal implementing accounting changes. Their study found that key stakeholders attempted to preserve the same routinised accounting practices under the new accounting system. Tsamenyi *et al.* (2017) described the transformations in management accounting control systems in an African gold mining company from pre-colonialism to recent times. Through the lens of the Hopper framework, which incorporates micro- and macro-factors operating at different stages of state development, they concluded that political factors brought about only minor differences in control systems during the period of state capitalism.

Nagirikandalage and Binsardi (2017) combined the institutional theory with Clifford Geertz's cultural theory to explore drivers and inhibiters of adopting cost accounting systems by manufacturing and service sectors in Sri Lanka. Their study revealed that isomorphic institutional powers (coercive, mimetic and normative) were either a trigger or a barrier to change while incompatibility between the ethos behind the new costing systems and organisational processes hindered the adoption of the new systems. Likewise, Burns (2000) examined the importance of power in directing processes of accounting change. He defined power as the exercise of dialogue to influence and shape perceptions, cognitions and preferences, describing how a managing director convinced others that new accounting systems were both "desirable" and "legitimate" through skilful mobilisation of meanings.

3. Theoretical framework: power, trust, control and organisation transformation

Power and political action have received significant attention in the accounting and ERP literature (e.g. Walsham, 1993; Rahman, 1998; Collier, 2001, Caglio, 2003; Kwok and Sharp, 2005; Kholeif *et al.*, 2007; Hassan, 2008). Rahman (1998) argues that the most significant problem in applying a model of power to analyses of accounting and information systems is that the concept remains elusive and controversial. Kwok and Sharp (2005) also agree that constructs of "power" are problematic. Nonetheless, the literature on accounting-based ERP organisational change stresses the significance of power and politics in organisations in understanding why and when particular changes can be successfully implemented (Arnold, 2006).

Hardy (1996) distinguished between "power" ("a force that affects outcomes") and politics ("power in action"). For Buchanan and Badham (1999), power is a way of achieving desired goals, while politics is the practical domain of power. Pfeffer (1981) defined politics as the exercise of power and described the attempts of organisation members to support or resist policies, rules or other decisions affecting them. Power and politics contribute to shaping ongoing organisational processes (Nizar *et al.*, 2015), and while power does not necessarily mean conflict or resistance to change, this is often the case when interests are divergent (Collier, 2001). Informed by Giddens' (1979, 1984, 1990) notions of "power", dialectical of control", "trust", "routines" and "ontological security", the following sub-sections discuss a theoretical framework that captures our case study evidence.

3.1 Giddens' concepts of power and dialectic of control

Giddens (1979, 1984) argues that individuals are able to achieve goals when they use their allocative and authoritative power resources. Allocative resources involve the rights of some individuals to hold command over material objects (factories, computers, information and ERP system) and the knowledge to operate them (experience, skills, know-how). Authoritative resources comprise the rights of some individuals to command others to organise and co-ordinate activities of other individuals. Giddens sees the exercise of power as non-unidirectional process since all social relations involve autonomy and dependence, which defines the "dialectic of control" describing the asymmetrical distribution of resources among members of a social system. This implies that even the most "subordinate" individual possesses resources (means of production, raw materials, information, skills, knowledge and experience) that can be used to influence the actions of their "superiors".

Giddens' view of power emphasises both its conflicting and enabling characters. Power is enabling when actors are mobilised to satisfy their interests, and conflicting when these interests are different. However, the conflicting character is understood within the realm of the dialectic of control. For example, an accounting-based ERP system is designed and implemented to constrain the behaviour of subordinates, yet those subordinates have the potential to manipulate the system to their advantage during the ERP system customisation processes.

The process of implementing accounting-based ERP systems involves the activities of various individuals or groups. It involves the policies of trainers and consultants towards organisations undergoing the transformation process, as well as the actions of key individuals within targeted organisations towards such policies. In summary, transformation processes are shaped through the interaction among members of targeted organisations, and the interaction between key individuals in organisations and trainers or consultants. The relative power of those various agents determines both the form and content of the accounting-based ERP implementation process. The accounting-based ERP organisational change may have distributional consequences, as individuals are likely to be either favoured or harmed. This may lead to a redistribution of power and loss of autonomy by some actors, which may engender resistance or possibly conflict.

Our case study empirical findings illustrate that consultants introduced new policies and procedures associated with ERP systems. These policies had redistribution consequences. On the one hand, accountants felt that their relative position and autonomy were undermined by the ERP implementation. On the other hand, the relative position of ERP system specialists became more prominent, which led their position and trustworthiness to be questioned by accountants. Our case study empirical findings also illustrate the dialectic relationship between ERP system and accountants. Prior to the ERP system, accountants were not under close monitoring and controlling and therefore they felt high level of trust and autonomy. The ERP system undermined that feeling and led accountants to question the underlying essences of the ERP system under the banner of "trust and control".

3.2 Power, trust, routines and control

Trust is a concept that has been widely explored in the management (Bachmann, 2001) and accounting literatures (Busco *et al.*, 2006; Busco, 2009; Coad and Glyptis, 2014). Our study links the conceptualisation of trust to what Giddens (1984) called the agent's psychological make-up and the agent's need for routinisation and ontological security. These concepts incorporate a preference for a stable and predictable environment as well as the avoidance of the anxieties of change. Accordingly, trust in its broadest sense is a mechanism that can increase coordination, reduce uncertainty in the context of interactions and facilitate the functioning of organisational systems through the behaviour of social actors or organisational employees (Bachmann, 2001; Busco *et al.*, 2006; Coad and Glyptis, 2014).

Different scholars argue that routinisation of activity including accounting and information systems is the most important mechanism for the storage of organisational knowledge and creation of feelings of trust (Busco *et al.*, 2006; Busco, 2009; Coad and Glyptis, 2014). Organisational routines play a pivotal role in raising feelings of trust across organisation members (Busco *et al.*, 2006). Since accounting systems are purposively designed by management and drawn upon by organisation members, they have the potential to sustain trust. When accounting systems sustain organisational routines, they are likely to promote the emergence of a "comfort zone" and the feeling of being "safe" across the organisation members. Burns and Scapens (2000) proposed that routines incorporate actions, knowledge and know-how of organisation members. Therefore, organisational change occurs not only in response to the interests of organisational top management, but also in accordance with the history, memory, knowledge, experience and level of trust embedded in institutionalised routines. Routinised patterns of behaviour provide a sense of stability and predictability, enabling individuals to cope with the complexity of specific situations and to take appropriate actions comforted by the feeling of trust (Busco *et al.*, 2006).

Our case study findings show how patterns of organisation members' political behaviours are intertwined with their feelings of trust which is a necessary condition for coordination and control. The findings illustrate how organisation members' trust emerges from the need for feelings secure through the routinisation of tasks, and how such need re-defines trust into mistrust. Our case highlights how organisation members' behaviour turns out to be highly political in mistrust situations.

3.3 Psychological make-up and trust

"Reflexivity" refers to the ability of individuals to observe and understand their own actions. It entails the ability to continuously monitor and evaluate the practices of their own and of others, and then respond in terms of the implicit stocks of mutual knowledge (Giddens, 1984). Giddens argues that reflexivity rests on individual motivation present at unconscious level, which maintains ontological security or the individual need for regular social encounters to avoid anxiety. Ontological security can explain to a significant degree why individuals routinely reproduce and keep the same routines, simply because routines provide individuals with a feeling of security and trust thus reducing unconscious anxiety (Giddens, 1984). Individuals derive a great sense of security through repetition, routines and the resulting belief that they know "the way things are".

Giddens (1984) stressed the importance of routinised patterns of behaviour in providing continuity and ordering to social life, or "organisational stability". Social systems or organisations cannot exist without trustworthy routines (Coad and Glyptis, 2014). Trust is a fundamental mechanism for coordination and control. Giddens' comments on the importance of trust appeal to the interplay between the development of personality, processes of routinisation, and the reflexive monitoring of action. He argued that trust depends substantially on predictable routines, and is necessary for ontological security in the face of risk and uncertainty. Trust is found in the deepest layer of ontological security (Giddens, 1984, p. 53). Trust, therefore, is the assumption of continuity of what we are familiar with, and is evident in the institutionalized routines. Giddens (1990, p. 34) defined trust as "confidence in the reliability of a person or system, regarding a given set of outcomes or events".

When agents attempt to improve the state of their organisations, the role of trust comes to the fore. The complexity of organisational change requires what Giddens (1990) calls "personal trust" and "system trust". These two forms of trust are often interdependent, as individuals are usually the access points into systems, and through face-to-face contacts such individuals can absorb risk by assuring potential users that these systems are trustworthy (Bachmann, 2001). Although face-to-face contacts represent an important source of trust in systems, the strength of stable and anonymous standards of expertise, rules, procedures and systems can also contribute to reinforce personal trust. Whenever trust is undermined, individuals (and social groups) are unable to rely on anticipated behaviours and routines, and experience "ontological insecurity".

Giddens (1990) also argues that personal trust depends on interpersonal interactions. It is based on personal familiarity, while system trust refers to the reliable functioning of certain systems and does not depend on face-to-face interaction. System trust derives from abstract principles, such as ERP or systems of technical or professional knowledge believed to satisfy individual expectations. Giddens equated abstract systems with societal and organisational institutions, such as legal, educational, political and professional bodies. In this respect, confidence in accounting-based ERP systems or the effects of major societal institutions are both examples of systems trust. Trust, therefore, can be interpreted as the processes in which someone (the trustor) has trust in someone or something (the trustee) in some respect and under certain conditions (the context) (Coad and Glyptis, 2014). Our case study findings show how the accounting-based ERP system (the trustee) has disrupted the organisation members' (trustors) ontological security leading them to cast doubts on the trustworthiness of the trustee (i.e. the ERP system) in a transforming public organisation from an emerging market country, the UAE (the context).

4. Methodology and date collection methods

This study examines power, trust and control in a UAE organisation during the transformation and customisation of its practices and implementation of an ERP system. The complex interactions between organisational members and the ERP system led us to select the interpretive case study methodology (Scapens, 1990; Yin, 1994; Walsham, 1995).

Data collection included semi-structured interviews, documentary evidence and direct observation. To facilitate access to the organisation, formal written permission was obtained from top management who requested that the organisation should remain anonymous and is henceforth referred to by the fictitious name of "Noon". One of us initially interviewed some organisation members, took notes of the interviews, while another author read the notes and met "Noon" employees in follow-up interviews to clarify and expand on details of the implementation of the ERP system. Interviewees were chosen to cover a range of functions associated with the implementation of the ERP system, and should have been working at Noon before or at least during the move towards ERP. Interviews were initially undertaken with top management and heads of the finance and revenue departments (Finance Department (FD) and RD). The heads were then asked to name employees who were either end-users or involved in the implementation of the accounting module of the ERP system.

A set of 13 semi-structured interview questions allowed interviewees to provide views through a free-flowing discussion. The question order was altered and contextually oriented depending on each interviewee. We conducted 25 sessions with 13 employees. Interviews were carried out with four groups. The first group included the top management (Vice CEO of Finance, Director of Business Affairs, Head of the FD and Head of the RD). The second group included members of the RD (Customer Accounts Section). The third group included members of the FD. The fourth group included members of IT or management information systems (MIS) department. Each interview lasted between one and two hours and was carried out during working hours. In addition, we interviewed the project manager (PM) and manager of the ERP system. We took extensive notes during the sessions although recording was not allowed.

This study also triangulates data by relying on documentary evidence, direct observation and e-mail correspondence. Documents included written internal reports, internal memos and training programme materials. Some documentary evidence was also provided by interviewees who wanted to illustrate their work and clarify their points of view. The use of multiple sources enabled us to reach a more thorough interpretation of the evidence.

5. The case study

5.1 ERP: power, politics and dialectical of control

Since its creation in 1997, Noon purchased the accounting system "Delta" to automate processes in the FD. Although Delta system is an off-the-shelf product designed for small commercial organisations, the Delta vendor agreed to customise the software to suit the needs of Noon. The software has two modules: general ledger module and budgeting module. In addition to Delta, Noon purchased "Logsis", which was primarily designed to record account receivables. The Logsis system was then integrated with Delta software to keep coherent accounting records for general ledger, budgeting, payables and receivables.

The Director of Business Affairs said:

> We used the Logsis system as an account receivable system, and the Delta system as an accounting information system. The current ERP system covers both systems and adds human resources and others advanced systems such as relationships with other organisations, suppliers etc.

The fundamental problem with Delta and Logsis was the weakness of their databases. The MIS Department System Administrator stated:

> There is no integration between these two programs; there is more than one database – one for account receivables, namely Logsis and another one for accounting, namely Delta. In addition, data security under both programs is very low and almost no security exists.

The top management thus decided to adopt the ERP system in different departments. None of the FD employees participated in the decision:

> In 2006, a decision was taken by top management to implement the ERP system module in the FD. FD employees were told that Delta-Logsis systems are out-of-date and that "Noon" needed to change these systems to better systems. (Head of FD)

An FD employee added:

> The ERP system was imposed on the FD, and no one in the FD was asked about their needs in that new system. There was no participation of the Head of FD in the decision related to choosing the new accounting system. This is to a large extent why I believe we have ended up having a system that does not match our needs.

Following the top management decision to adopt an ERP system, a well-known ERP system vendor was contracted, organised a training programme and provided consultancy services to Noon's employees. Although the top management imposed the ERP system, they used the language of efficiency, cost effectiveness to convince employees (Burns, 2000; Granlund, 2001). The top management also referred to operational efficiency and automation to reduce manpower and costs:

> The old systems were simple, easy to use, inexpensive, and did not require too much manpower. We did not expect the new systems to be costly and require to increase manpower. We had to deal with the new ERP system problems because the system is very important for the image of our organisation. (Vice CEO of Finance)

For the perspective of the "allocation and authoritative resources of power" (Giddens, 1984), the quotes show the transformative capacity of individuals. The top management of the organisation relied on their hierarchical position and authoritative power to impose the ERP system due to its centralised database, online integration and high level of data security.

However, organisational members are "reflective" (Giddens, 1984). Some members monitored the adoption processes, and the ERP technical and operational benefits. Hence, they questioned the motivation behind its adoption, feeling that their routine activities were disrupted and thus compromise their ontological security that provides them with the feeling of trust which reduces unconscious anxiety. Organisation members thus possess the power to shape ERP implementation through the dialectic of control.

In April 2007, Noon formed a steering committee that hired a PM to monitor the implementation of the system. The PM's five employees were then delegated the responsibility to oversee the implementation of the ERP system modules. The PM and steering committee named one employee from each department as an ERP system module owner responsible for implementing the module and to inform the PM team of departmental needs that guided customisation of module outputs. The PM implemented ERP system modules in the following order: customer accounts, accounts receivables, accounting and finance, human resources and, finally, purchases and inventory. The steering committee is formed solely by members of top management:

> The Steering Committee consisted of the CEO of Noon, Vice CEO of Finance, and the Director of Business Affairs. (Director of Business Affairs)

The steering committee had no representatives from ERP system users or departmental members. The committee relied on a newly appointed PM unfamiliar with the work and routine activities of the organisation, while other members had to implement a system that they could not monitor. The composition of the steering committee led members to feel that the system could be extended beyond the uses claimed by top management, which brewed mistrust in the system and top management:

> I did not receive proper training. I just had to enforce the required changes to my department employees. The ERP system consultants were very much aware that the system would be implemented regardless of the amount of training; therefore, they neither paid attention to the users' needs nor gave any considerations to their requirements. Users were not taken into account. (Head of RD)

> We had training sessions, yet trainers taught the system in an authoritarian way, such as "you have to do that" […] "the system requires you to do that" […] "the system does not accept that you do that" […] There was a big problem in that particularly trainers and the project manager are not accountants and do not have the sense of what the accounting and FD are talking about. (FD member)

> In the FD, there was a weakness in terms of deciding who was going to take the ownership of the ERP system module, which made the implementation of the new system very difficult. (Director of Business Affairs)

The FD utilised their expertise or power of "know-how" (Burns, 2000) to delay the implementation of ERP system and mould it in accordance with the history, memory, knowledge and experience embedded in the institutionalised routines of the organisation. Because of the technicality of the accounting routines, FD and RD are more powerful units and can secure their interests at the expense of the less powerful members such as the PM. For example, the PM has advised the top management to hire an ERP system consultant specialised in accounting-based ERP problems and assumed to work under his supervision. However, the top management decided that the new consultant would work instead with the FD to deal with accounting module customization problems:

> Although I highly recommended hiring an ERP system consultant, I was surprised that Noon contracted a new employee as the ERP system manager to work in the FD. I expected that the employee will work in my team. (PM)

As a result, Noon had two managers: a PM affiliated with the steering committee and overseeing the implementation of ERP system, and the ERP system manager affiliated with the FD and monitoring accounting-based ERP system customisation. In addition, the Head of FD is the accounting module owner. The outcome is that ERP implementation was delayed:

> Any successful project needs full responsibility and a single manager in charge of the system until its completion. I lost control over the ERP accounting module and this may have caused a delay in the implementation processes. (PM)

Giddens' (1984) dialectic of control is pertinent to those events. The technical accounting knowledge of the ERP system manager and the FD's "know-how" of accounting routines became a source of organisational inertia and a guide for organisational transformation (Ocasio, 1999). Both relied on their power and knowledge to take control of the implementation processes from the hands of the PM. As a response, the PM applied his authority and position to restore the lost powers:

> The PM refused to grant full access to the ERP system Manager in FD. Consequently, the authority of the ERP system manager in the FD was very limited. (Head of FD)

5.2 ERP customisation and accounting routines

Since the creation of the organisation, its FD has routinely applied UAE governmental accounting rules. Once the ERP accounting module was introduced, the FD employees raised many concerns as it does not match existing routines:

> The ERP system accounting module has no relation to what we do. It is a governmental accounting system based on the American system. Our governmental accounting has different rules and regulations that do not fit with the ERP accounting module. (Head of FD)

An FD employee revealed concerns about how the new accounting module would be linked to the organisation budgeting system:

> The new data input system is too detailed, has several new concepts, and does not follow our governmental accounting rules. For example, the new module asks about the source of fund (state allocation, donation, and grants), how each fund has been used, which unit in Noon received the funds, and which activity has been resourced by that fund. But our existing budget classification system is based on chapters for salaries, materials and capital investment. How can we match the old and new systems? Despite our concerns and complaints, the top management refused to change its mind about that new accounting module.

Similar views were expressed by the ERP system manager and the Head of FD:

> Fund accounting was not available in the old system. It is a unique feature of the ERP accounting module. Users had problems with this new feature. They resisted that new feature because their responsibilities will increase. (ERP system manager)

> We, the accounting and finance members, had too many concerns and opposed too many functions of the new system, yet the system developers clearly state we had to try to customise your data input in accordance with the system needs. We were told to modify our procedures to match the new system and this is what is happening now. In other words, the new system was not developed to match our needs, but instead, we, the users, customised the way we input data and our procedures in order to match the ERP accounting module needs. This has added too much pressure on accounting and FD since the amount of work has been doubled or tripled, and at the same time there may be conflict with certain accounting conventions that we currently apply. (Head of FD)

FD and RD employees gave examples of how accounting routines were kept and yet circumvented:

> One of things we have here at Noon is petty cash (advance payment) for employees. Pre-ERP, we used to know how much each employee owed Noon. Post-ERP, this function does not exist in the

accounting module. The ERP consultants suggested to treat employees as suppliers. This enabled module users to create an invoice record, and a payment function for that invoice. Consequently, we can know how much each employee owes the organisation. This is not a suitable solution because now the suppliers list includes both external suppliers and Noon employees.

Now we are trying to play around ERP system modules. We are adjusting and customising our requirements according the ERP system module functions. It should be the other way around. […] I'll give you an example to explain my point. You see, instead of directly entering and charging fine transactions to the customer account as it should be, we had to create a dummy transaction to an intermediate account and increase our revenues. Later we charge the customer account and close that intermediate account.

Another example of getting around the system relates to cheques. According to the UAE regulatory system, post-dated cheques are equivalent to notes payable or receivable depending on whether the organisation receives or issues cheques. According to the American regulatory system, cheques are considered cash even post-dated. The setup of the ERP system module therefore recognises cheques received or issued by Noon as cash. As the Head of RD pointed out:

ERP is an American system which does not take into account the local circumstances of organisations operating outside the USA. For example, our organisation relies on cheques. However, post-dated cheques in UAE are equivalent to notes receivables or payable. Therefore, if we receive a posted-dated cheque we cannot convert it into cash until the check due date. Therefore, as users, we had to play around the system to overcome that problem. I had too many discussions the ERP system consultancy team to persuade them with a proper way to account for cheques. This new way is through having an intermediate account for a post-dated check until the collection date of that cheque.

Another employee added:

We have to complete too many tasks manually. We also have to take separate notes of things like fines, grants and post-dated cheques to sort them out them manually. The consequence of this way of customisation is that we feel that Logsis is a more accurate system despite being slower.

The above quotes show that accounting routines and activities are repeated day after day. Therefore, Noon's employees had no need to consciously think or speak about those activities. Much of the employees' interactions were at what Giddens (1984) defines as "the practical level of consciousness" that helps employees to sustain their ontological security through enabling the feeling of trust. Organisational change towards the accounting-based ERP system clashed with deeply instilled governmental accounting routines. The adoption of ERP system in general, and the accounting module in particular, tries to replace some routines, accountability relationships and economic resources allocation with new practices described as best practices introduced under the banner of the ERP system. Since change and transformation are central features of adopting a new accounting-based ERP system in our case study, Giddens (1979, 1984, 1990) concepts of dialectic of control, reflexivity, routines and trust enable to study the dynamics of transformations. In relation to individual reflexivity, employees were able to monitor ERP organisational changes and the disruption of daily routines. However, the need for ontological security, at unconscious level, rendered accounting-based ERP changes unacceptable, given the rationalisations that members made regarding the future of their organisation. Noon's employees were anxious about the ERP system resulting in manpower reduction.

5.3 ERP system trust and control

As discussed above, routines play a pivotal role in raising feelings of trust across organisation members (Busco *et al.*, 2006). Yet, the accounting-based the ERP system has created a loss of trust, which rests on routines and the need for ontological security (Giddens, 1984). Noon's employees manifested both personal and system mistrust due to the ERP functional problems, database security and controlling processes:

> The ERP system vendor was not able to go through the list of users' requests, either because the system did not support them or because they were too costly. (PM)

The ERP system manager added:

> A high level of customisation was required by the FD. They requested too many missing functionalities that the system had to incorporate.

On the one hand, the ERP system experts (PM and ERP system manager) recognised that the customisation level was very high in the FD. On the other hand, FD members believed that those experts did not possess the required accounting background, and therefore should not be trusted:

> It is a particularly big problem that the project manager is not an accountant and does not have an idea of what accounting and the FD are about. (FD employee)

Employees were therefore questioning the technical knowledge of the PM, who represents the access point to the system (Giddens, 1990). Furthermore, FD employees felt that the ERP system was not trustworthy, based on their face-to-face contacts with the PM and ERP system manager. Their trust in the ERP system was undermined, and they were thus burdened with ontological insecurity. RD employees also had a number of technical complaints and doubts about the trustworthiness of the ERP system:

> The ERP customer accounts module required us, Noon employees, to perform too many tasks manually. For example, if a customer changes an order, we cannot process that transaction directly through the ERP system, we have to do it manually and feed the consequence of the customer order changes to the system. (RD employee)

Likewise, the Head of RD stated that:

> Sometimes we have customers who either receive grants and donations or have to pay fines. In both cases, to make changes to the customer account is a nightmare simply because we have to deal with them manually as the new system module does have the function or option to charge fines on customers.

Another RD employee complained that:

> The ERP system module does not keep historical records of activities performed on the customer account. The system only keeps the results of the last transaction performed. […] the Logsis system provides historical records of activities performed for each customer. Now we have to keep and prepare historical records ourselves manually. This is not only a very time-consuming task but also places more responsibilities on our shoulders.

The non-existence of historical records or an archive was seen as a serious technical issue:

> We still need paper archives. The new system does not have an electronic archive. This is very time consuming practically when auditors want to verify some transactions. We have to look for the printed documents. Though printed document is the best audit evidence, the existence of electronic archive should have helped to speed up the processes of verifications. (Head of FD)

A Customer Officer in the RD department raised another major issue related to the number of screens, windows and interfaces involved is a single task:

> Under the old systems (Delta and Logsis), we had to perform one or probably two steps in order to process a transaction, however under the ERP system we need to perform five steps in order to get a transaction done. For example, under Delta and Logsis system we had to do less work to perform

> transactions related to sponsored customers. Now under the ERP system we perform too many tasks, some of which manually, just to get a single transaction to a sponsored customer done.

Another Customer Officer stated that:

> Although we have to use several screens to perform a single transaction, the ERP module only allows opening one screen at a time.

The Head of RD added:

> Logsis was a much better system. We have never trusted the ERP system module. Now we double check every output from the ERP module because we are not sure whether the figures are correct. Some mistakes were found in the ERP system module output. We still rely on Logsis as a reference point to check customer accounts established before the implementation of the ERP system module.

In another discussion, an FD employee stated:

> Under the old system, I could process various parts of a single transaction and finish it on time. Consequently, my line managers praised my efficiency and effectiveness, and my performance was highly valued. Under the ERP system, I can only process one part of the transaction. Other parts are done by other individuals. This means that even if I finish my task in that transaction quickly, it does not mean that the transaction is done, yet it means that I have to wait until others have done their tasks on the same transaction. This also means that my effort is irrelevant whenever other people are too busy and therefore late. My efficiency and effectiveness will drop in the eyes of my superiors, and this does not seem good. The new system also needs to open 7 or 8 interfaces just to complete a part of a single transaction. This was not the case under the Delta system.

With respect to the above issue, the ERP System Manager expressed a sharply contrasting and positive view of the situation:

> One of the advantages of the new accounting module is that it provides higher security and higher level of authorisation and control-ability through separation of duties. Therefore, internal auditors can trace mistakes, errors and audit all procedures. This will hold employees accountable to their mistakes.

An FD employee however presented a very different appraisal:

> Although we understand that the separation of duties is an important controlling principle, distributing too many tasks related to the same transaction among too many members leads to total mistrust among the members operating the system. This perception may have a harmful effect in the long run. We need to feel that we are trusted, as we used to feel under the old system.

The above quotes are best articulated through Giddens' notions of agents' reflectivity, trust, routines and ontological security. Noon employees have responded to change with their implicit stocks of mutual knowledge, routines and their monitoring, understanding and evaluation of the new systems. The disruption of routines, increase in levels of control through excessive segregation of duties, and ERP technical problems created a sense of mistrust in the accounting-based ERP system module and anxiety towards changes. With the ontological security of employees being undermined, they were no longer able to predict daily events, felt vulnerable to change and were led to question the motivations behind the implementation of the new ERP system. The view of the PM in this regard was that:

> Top management wanted to improve the image of the organisation, reduce manpower and cut costs. They thought that the ERP system would reduce the number of hired people, control and get the most out of employees. However, they never expected that the improving the image of the system would have such a high cost, and they may also need to hire more skilled people with higher salaries.

In summary, the outcome of implementing the accounting module is that both top management and other employees in the organisation developed mistrust in the ERP system.

Top management had placed a significant trust in the ERP modules, but this trust engendered unexpected forms of risk, manifested as the failure of the system to satisfy the high expectations nurtured by the top management. Noon's employees also mistrusted the new ERP system because of its potential impact that may cause a reduction in the manpower.

6. Discussion and conclusion

Our case study of the Noon organisation provides insights into: how the object of change (accounting-based ERP) is acted upon by sources of trust during processes of organisational change; how forms of personal trust and system trust were implicated in the introduction and implementation of the new system; how the new system altered the power relationships across employees; and how the new system mediated and triggered feelings of trust and control among employees during the customisation process. Our evidence reveals that the accounting-based ERP system created an episode of discomfort that brought about reflexivity, critical reflection and a re-assessment of old and new ways of thinking.

Accounting-based ERP organisational change enabled Noon employees to reflect on the processes of change and to assess the trustworthiness of the new system, the motives behind transformation and the associated risks. In summary, the top management purposively imposed the system to create a new business image, and associated the new system to the concepts of efficiency, effectiveness, cost reduction, single shared database, systems integration and improved performance. Nevertheless, those factors became sources of mistrust. The ERP system is costly to adopt, required highly skilled and knowledgeable employees, and lacked many operational benefits originally promised by "automation", such as better data security and reduced workload.

Our case study reveals the intertwined relationship between accounting-based ERP systems and feelings of trust during the processes of organisational change. The new system engendered complexity and uncertainty across Noon employees because it requires knowledge not currently available to its users. Noon employees lacked technical knowledge of accounting-based ERP system, while the ERP system PM lacked technical knowledge of accounting, a situation that created feelings of uncertainly, organisational instability and, consequently, mistrust in the new system. Since it is difficult to separate trust in specific people representing the expert systems (personal trust) from the trust in the institutional mechanisms themselves (system trust), employees questioned and mistrusted the top management motives for change, namely, to reduce costs through downsizing and reducing manpower.

The accounting-based ERP system is rooted in the very heart of the conceptualisation of stability and change, with Giddens (1984) suggesting that stability is based on the repetition of routinised patterns of behaviour, while change requires a slow drift away from a set of practices to another set of regularised behaviours. Although the top management forced the implementation of the accounting module of the ERP system, the module customisation processes reinforced the pre-ERP routines. For instance, interviewees reported that they had to customise their work procedures and develop workarounds. In other words, they aimed to keep pre-ERP system routines while allowing the ERP system to function.

Our study presents both limitations and opportunities for future research. First, the study explored how top management implemented the ERP system in a short time frame; however, it would be relevant also to explore the effects of the ERP system on users' attitudes in the long run. This investigation is beyond the scope of our study but should be addressed by future research. Second, our study focussed on the political behaviour and feelings of trust and control within an organisation. Further research should also examine the political behaviour of internal or external stakeholders interested in the implementation of ERP systems. Third, our case study, in an emerging economy, poses obvious limits to generalisation of findings. However, our study is unique in revealing how power, trust and control are intertwined during accounting-based ERP system implementation in a non-Western context. Hence, our study is a relevant contribution to a limited literature on political behaviours associated with implementation of the ERP systems mostly in Europe and North America. An important avenue for future research is therefore to conduct cross-cultural studies comparing the findings from UAE, Europe and America.

Our study has a number of implications for the understating of power, trust and control during organisational change. We illustrated how personal or system trust plays a pivotal role in reinforcing the power of the organisation to promote change, and how mistrust became a source of power to hinder organisational change. Our study adds to Fincham's (1992) and Hardy's (1996) frameworks of power that failed to highlight the power of "trust and mistrust" and their antecedents. Fincham's (1992) framework addresses institutional, managerial and processual power incorporating the micro-politics of coalition formation. Hardy's (1996) framework of power incorporates four dimensions: power over resources, power over decision-making processes, power over meaning through a dialogue to influence individuals' perceptions, cognitions and preferences, and power of the system embedded within the organisation. Our theoretical framework and findings have shown how trust is intertwined with the frames of power discussed by Fincham (1992) and Hardy (1996), and examined the pillars underlying organisational trust and mistrust through the lens of Giddens' (1979, 1984) structuration theory.

We conclude that the power of trust and mistrust lies in the individual need for ontological security and uncertainty avoidance, while individuals should still be able to critically reflect, understand, monitor and evaluate the process of organisational change. Trust is therefore a basis for power, yet it is not a sufficient condition for the achievement of intended outcomes. Trust is understood as a process that incorporates both antecedents (reasons) and consequences with regards to actions and relationships with other individuals and groups. Our study has expressed this dynamic view of trust and thus contributed to a better understanding of evolving trust relations and their outcomes during accounting-based ERP system implementation processes.

Researchers interested in organisational power can draw on our work to build a better understanding and appreciation of how political behaviours emerge and intensify during accounting-based ERP organisational change. In this sense, our study pursued the line of critical management accounting research that connects empirical findings to a theoretical framework informed by Giddens, while also explaining paradoxical findings (Alawattage *et al.*, 2017). Finally, our study relies on structuration theory, which is not free from criticisms. Critical realists oppose the structuration theory because of its conflation of structure and agency and the concept of "duality of structures". What mitigates this criticism is that our study examined the "the position-practice relations" advocated by Ashraf and Uddin (2015a) and informed by Giddens' notions of trust, ontological security, agents reflexivity, dialectical of control, agents' knowledgeability and capacity to change through allocative and authoritative resources. Future research can pursue a similar line research by relying on Giddens' (1979, 1984, 1990) notions while also being informed by critical realists.

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