

Joint Effect of Organizational Identity and Trust on ERP Implementation Success: A Longitudinal Case Study

Completed Research Paper

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Abstract

As Enterprise Systems (ES) have become almost ubiquitous in large organizations, multi-business organizations are increasingly moving towards developing shared IT infrastructures that support multiple business units. The operational and competitive gains are compelling enough for many organizations to invest in developing shared infrastructures. However, the managerial challenges involved in implementing a shared infrastructure can be quite complex, in particular, challenges arising from trust and identity issues. This study reports a longitudinal case study of the three emergency services organizations that were forced to implement a shared IT infrastructure. Key lessons that extend existing theory are discussed.

Keywords (Required)

ERP, implementation project, success, governance, emergency services, organizational identity, inter-firm trust.

Introduction

Enterprise resource planning (ERP) represents an important step towards the firm use of ES to achieve effective end-to-end business process integration for high level strategic and operational business value realization. Some scholars have even suggested that ERP is the “most important development in the corporate use of IT” (Davenport 1998, p. 122). Indeed, as an integrated software package, ERP offers a viable means to manage and integrate the entire firm’s value chain through the use of a single database, standard business rules and real-time information access and sharing among firm stakeholders (Aloini et al. 2012). And thus, providing greater job flexibility (Robey et al. 2002), faster response times, improved decision making (Shang and Seddon 2002), improved competitiveness (Powell et al. 2013), improved coordination and accountability (Ram et al. 2013).

Recently, interest toward huge opportunities offered by enterprise 2.0 technologies in terms of intra-and inter-organizational integration and transformation has created a growing interest toward using IT as shared infrastructure in general (Ross 2003) and ERP-enabled shared infrastructure in particular. This paradigm shift allows the delivery of applications, hardware and systems software as services over open and private networks, thus allowing on-demand service access, and facilitating the management of distributed workforces (Bose and Luo 2011), as well as reducing the number of IT platforms a firm has to manage (Ross 2003). However, the success of this emerging strategy is contingent to various factors including the firms’ identity, IT capabilities, and trust among participating organizations. Indeed, “IT infrastructure varies from firm to firm in reach, and range” (Bose and Luo 2011, p. 43).

Against this background, the ERP literature shows that while many research studies focus either on antecedents and/or consequences of ERP implementation, very few of them are being directed to exploring how events occur over time in order to identify salient mechanisms for achieving the full business benefits from ERP projects (Robey et al. 2002). Moreover, most studies focus on the adoption, use, and impact at the single firm level, whereas little is being written about the implementation of ERP-enabled shared-platform by semi-autonomous firms to generate network-wide operational and strategic

benefits. However, evidence show that the adoption and use of shared infrastructures could lead to tremendous benefits in terms of standardized processes and communications, transaction costs reduction, and cost reduction of maintaining multiple channels and process (Chen et al. 2006). Therefore, this study aims to fill this knowledge gap in the literature. More specifically, this study seeks to answer the following research questions:

RQ1: What are the key challenges related to the successful implementation of an ERP-enabled shared platform to support multi-business organizations?

RQ2: How does organizational identity influence the successful implementation of an ERP-enabled shared platform to support multi-business organizations?

RQ3: How does the interplay between organizational identity and trust influence the successful implementation of an ERP-enabled shared platform to support multi-business organizations?

In order to address these research questions, this research draws on the extant literature on enterprise systems. We focus on ERP implementation, the Markus and Tannis (2000) ES implementation framework that offers phases-based perspective of ES implementation, firm identity and literature on trust. Then, we perform an analysis of a longitudinal case study of three New South Wales (NSW) state's emergency agencies (The New South Wales State Emergency Service (NSWSES), The Fire and Rescue NSW (FRNSW) and The NSW RURAL FIRE SERVICE (NSWRFS)) that were forced to implement an ERP-enabled shared platform to support multi-business organizations by the NSW State Government, their parent organization.

Following the introduction, the paper is organized as follows. In Section 2, we provide a theoretical background to the study. In Section 3, we describe the longitudinal case study research methodology that is being adopted to address the research questions. Section 4 deals with the case analysis. Section 5 discusses key lessons learned from the successful implementation of an ERP-enabled shared platform for emergency services delivery. Section 6 presents the conclusion and implications as well as research limitations and future research directions.

Theoretical Background

Consistent with (Staeher 2008), this study considers an ERP-enabled shared platform as a social system since any ERP implementation is dependent on the social environment in which its implementation is conducted. This study endorses that the implementation of an ERP-enabled shared platform to support multi-business organizations is a radical strategic organizational change that could lead to the redefinition of key relational factors such as trust, governance, identity and culture of all key stakeholders involved in the implementation process (Kjærsgaard et al. 2011).

ERP Projects: Focus on the Phase View of ERP Implementation

Interest in ERP projects is large and diverse, and involves studies on critical issues in ERP implementation (Kumar et al. 2003), critical success/failure factors of ERP systems (Amid et al. 2012), ERP benefits (Shang and Seddon 2000), risk management in ERP project (Aloini et al. 2012), as well as on the identification of the key stages of an ERP implementation project (Markus and Tanis 2000). For example, Markus and Tanis (2000) proposed a phase-oriented framework that has four phases to analyze the ES experience cycle namely: the first phase or the "Project Chartering", which is the initial planning phase where major decisions are taken as regards to the project approval and funding, as well as the selection of key project stakeholders. The second phase or the "Project" phase consists of the configuration and the rollout of the system. More precisely, this phase deals with how to get into the system and how end users operate in it, while the third phase or the "Shakedown" phase is about stabilizing, eliminating the "bug," and acceding the normal firm operations. The final phase ("Onward and Upward") encompasses maintaining the system, supporting users, getting results and eventually upgrading the system.

Organizational Identity: Importance of Trust in the Interorganizational Context

Organizational identity is the "set of beliefs shared between top managers and stakeholders about the central, enduring, and distinctive characteristics of an organization"(Scott and Lane 2000, p. 44), while

Trust can be defined as “one’s belief and expectation about the likelihood of having a desirable action performed by the trustee” (Das and Teng 1998, p. 494). Organizational identity represents “organizational members’ collective understandings of the features that are presumed to be essential, distinctive, and relatively permanent about the organization” (Gal et al. 2008, p. 292). Organizational identity is shaped by firm goals, missions, practices, values and actions, and as a result it acts as a key differentiator of a given organization as compared with others (Scott and Lane 2000). While organizational identity appears as a social construct that nurtures a shared and collective sense of “who we are” (Fiol 2001; Whetten 2006), it also plays a critical role in the process of internalizing the cognitive structure of the aim and direction of an organization (Albert et al. 2000). This is actually why organizational identity is considered by some scholars as a firm core competency liable to produce competitive advantage, notably through a contextualization and redesign of new adaptive behaviors (Fiol 2001). Fayard and DeSanctis (2010, p. 384) noticed that the strength of collective identity is even greater within social groups which are “informally structured around shared interests by individuals whose membership is voluntary”.

Trust represents an important social construct. In the organizational context, trust is essential in complexity reduction (Paul and McDaniel 2004), the best predictor of firm overall satisfaction (Driscoll 1978). Previous studies found a strong relation between group composition and trust, as cooperation and trust are said to be dependent on the perception of similarity and shared identity (Lowry et al. 2010). In the interorganizational context, trust has been considered as a key element for effective management : not only does trust acts as a surplus of confidence in partnership, facilitates interorganizational cooperative relationships, but also, it contributes to increased desirable behavior and less formal contracts, all of which facilitate dispute resolution (Das and Teng 1998) and serve as a valuable facilitator of social intercourse (Arrow 1974).

Methodology

Research Design

As the main objective of this study is to improve our understanding of the effects of relational factors, such as firm identity and trust on the implementation of ERP-enabled shared platform for emergency services delivery, the research method is exploratory and the research design adopts a longitudinal case study. A case study was selected as a suitable research approach to answer the research questions, as it allows the exploration and the understanding of complex phenomena within real-life settings (Eisenhardt 1989), and thus induce theories (Benbasat et al. 1987). In addition, the case study approach is appropriate when exploring research questions such as “how” and “why” things are done (Yin 1994). In order to increase the validity of our constructs (Yin 1994), data collection involved multiple sources of evidence including: on-site observations, semi-structured interviews with key projects, industrial reports, strategic planning reports, annual reports, newsletters, technical or non-technical documents and project reports. Each interview was recorded and took approximately one hour. The final files were transcribed by a consulting firm.

Research Sites

Emergency services organizations have not yet received a lot of attention from scholars. They are in charge of responding to man-made and natural disasters crises including: floods, fires, hurricanes, tsunamis, earthquakes and terrorism activities. The number of casualties related to these disasters is increasing steadily. In 2011 for example, 332 natural disaster were registered worldwide, causing huge human and economic impacts estimated respectively to 244.7 million victims worldwide and US \$366.1 billion in losses (a 235% increase compared to the annual average losses from 2001 to 2010) (Ponserre et al. 2012). Thus, positioning emergency services organizations at the core of various governments’ strategies around the world toward the effective management of these disasters. However, the NSW emergency sector is facing critical challenges including relying on outdated IT infrastructure to support key emergency processes. For example, the vast majority of emergency services volunteers (about 90,000) within the state are still managed using a set of disparate legacy systems across all agencies. The FRNSW and NSWSES were using in-house developed systems that were ill-equipped to manage their volunteers. As for the NSWRFSS, it was using an outdated system to manage its volunteers. This system was at high risk as it was no longer supported by the providing company and hasn’t been updated for about five years,

thus positioning the system at a real risk of failing. As a result, this made core processes related to high risk transactions such as travel and expenses, and Government credit cards, vulnerable to fraud (SAP Human Resources for the Emergency Services Sector 2009). In fact, a recent investigation by the Independent Commission Against Corruption revealed this situation, prompting the NSW Government to integrate a specific section on emergency services in its 2012 strategic planning, which should guide the NSW state throughout the following decade. In particular, the NSW Government is seeking to promote integrity and accountability in the public sector, reduce operational costs, consolidate IT investments and ensure an adequate equipment of the state for all man-made and natural disasters responses. To this end, the NSW Government has been promoting cross-agencies collaboration to assess and adopt cutting edge technologies, so as to help meet these global challenges and implement the private sector reform program set forth (NSW Government 2011). The push toward the adoption of ERP-enabled shared platform for emergency services delivery is in line with this government's new strategy.

Three state emergency services agencies were selected and participated in this study. The focal firm, The NSWSES, was formed in April 1955 by the NSW State government to offer support to the community during flood disasters across the NSW state, an area of approximately 800 642 sq. km. Since then, the NSWSES responsibilities have been expanded to include providing leadership and relief during heavy storms, tsunami, and disasters management; resupplying the communities affected by disasters; launching air, flood, and road crash rescue operations; and developing community responder, vertical rescue, land search, evidence search, logistics support, and primary industries. The NSWSES relies on a small group of 250 core staff and a large number of approximately 10,000 volunteers to operate. The firm has developed over time specific characteristics that highlight the unique firm identity, including the need for wearing uniforms with a distinctive logo and colors, organizing firm structures around 17 regions and 229 volunteer units to increase a local sense of belonging and camaraderie between members, and so forth. Furthermore, the firm uses various channels to engage with their stakeholders; they include a collaborative platform to facilitate the collection and sharing of information among them by means of Web 2.0 tools, and newsletters to promote the firm and its member's achievements. Also, the firm relies on advance IT infrastructures for emergency services delivery.

The FRNSW is another NSW State emergency service organization that is in charge of managing fire emergencies within major cities and towns across the state of NSW. The firm was first established on 14 February 1884 and named The Metropolitan Fire Brigade and now has the main following objectives: enhance community safety, quality of life and confidence by minimizing the impact of hazards and emergency incidents for the people, environment and economy of the state, fire prevention and suppression, terrorism consequence management. The firm is considered as one of the world's largest urban fire and rescue services in responding to rescues, hazardous materials incidents, and terrorism activities. Like the NSWSES, the FRNSW heavily relies on volunteers for its services delivery, with about 7000 volunteers organized into 605 units, but also a large number of core staff for emergency services delivery: approximately 3516 full-time fire officers, 3382 on-call fire officers and 414 administrative and trade staff. FRNSW is definitely the biggest NSW state emergency services in terms of size and IT capabilities. By 2009 it was already running on an ERP-SAP infrastructure, while using a SAP for Finance, Procurement, and Human Capital Management basic components.

The NSWRFSS is the third agency part of this study. It was first formed by the residents of the south-western NSW township of Berrigan a century ago, as the first Australia official bush fire brigade to combat the threat of bush fires. The firm's current structure was formed on the 1 September 1997 with the aim of combating bushfires and enabling the community to be better prepared and protected from bushfires. In addition, the NSWRFSS members are involved in providing assistance to various other operations including road accidents, assistance in search and rescue operations, and storm and flood recovery. In 2012 the NSWRFSS relies on approximately 70,246 volunteers distributed into 2,094 brigades, apart from its 700 core staff members.

Case Analysis

In the following section, we are going to present our case analysis using the Markus and Tannis (2000) ES implementation framework as the analysis guideline.

Project Chartering

The main driver toward the adoption of the ERP-enabled shared platform for the emergency services delivery was from the NSW State Government, who was seeking various strategies to reduce its IT investment costs while streamlining operational processes across the emergency services agencies and fostering collaboration among them. Then, it suggested to four agencies (including the Ministry for Police and Emergency Services NSW (MPESNSW) which did not participate in this case study) to work together on a joint implementation of the ERP system. As The FRNSW Director of IT stated: *“The official story is that the Government decided that sharing platforms was a good thing, and there was a particular mini-budget in 2008, which actually dictated that the Emergency Services would share a common back office platform to gain efficiencies”*.

Afterward, a project governance structure was established to assess various ERP adoption scenarios including: (i) a Project Board, which represents the higher level interests of the sector within the project. This board is in charge of ensuring that the project objectives are attained on time, within the approved budget and within the agreed quality specifications; (ii) The Interdepartmental Governance Committee (IDGC), which is responsible for providing primary project governance, coordination and direction for the execution of the Project. It reports to the Project Board, and the three agencies composing it have each two representatives, while only one member is from MPESNSW; each representative has one casting vote. On the other hand, Chairmanship of the IDGC was realized through a rotating chair of 12 months at a time, and the chairperson was elected annually, notably in March. All meetings were scheduled every two weeks, with every second meeting held via teleconference. Face-to-face meetings will be held at rotating agency venues, in line with an agreed schedule and location. Within the IDGC, decisions are taken unanimously, and failure to that, the issue under discussion will be sent to the Board for further discussion and decision; (iii) The Steering Committee (SC). This committee was aligned to the IDGC and acted as a regular consultative body for the execution of Projects. Other duties of this committee were to ensure that the requirements and interests of all participating agencies are met throughout the lifecycle of the project by referring to the agreed scope, budget, schedule and quality plans. The IDGC core members were the departmental representatives of the module to be implemented, and the Project Manager in each agency; (iv) the Project Management Working Group (PMWG) that provides an additional layer of governance, coordination and direction for the execution of the Project. The core members of the PMWG are the nominated Program and Project Managers in each agency. Where relevant, other Project staff may be invited to attend PMWG meetings to provide specific input into matters on the PMWG agenda; and (v) The Joint Volunteer Consultative Group (JVCG) and Users Group, formed respectively by selected volunteers and end-users from the three agencies. The extra groups provide another layer of governance during the execution of various projects.

Through multiple discussions, the IDGC agrees on the use of a single SAP instance to manage all the three agencies operations with, however, independent company structures for each agency. Thus, it agrees to embark on the existing SAP infrastructure within the FRNSW facilities to leverage existing IT capabilities, then develop specific IT capabilities based on each agency's requirements. At the same time, the FRNSW has begun to assume the main role that was previously provided by the ERP vendors and ERP consultants at each agency level. However, some collaboration links were maintained with some ERP consultants and solutions providers for their assistance during the development of training contents.. As The FRNSW IT Director highlights: *“SAP is considered the strategic back office solution for not only FRNSW but also the sector and the State. The environment is robust and provides a highly scalable solution that will cater well for the Sector moving forward”*. He adds: *“The FRNSW also has the organizational capability and resilience to support other government agencies during and after bushfires, storms, floods, landslides, building collapses earthquakes and other emergencies and was already using SAP”*.

These agencies are expecting to use this one-SAP instance strategy to meet the NSW Government requirements as well as to facilitate knowledge sharing and experiences. More importantly, they expect to use this single instance of SAP to consolidate volunteers and paid staff's human resource information across all emergency services agencies within the NSW State, by looking at the organizational and personnel data storage and management, the payroll and time management for all paid staff, the employee and manager self-service for common transactions, the travels and expenses, and the personnel development and learning management solution. As The FRNSW SAP Team Leader states about the single SAP instance infrastructure: *“it has lead to economies because you only have to have one set of*

programs programmed a particular way and it sets the scene for future shared services in the transactional areas and standardization". In the same line of thought, The NSWRFB Senior Officer/Group Manager adds, now we will have *"same system but effectively build their own system on it"*. More important, the single platform will *"provide a high standard of information to external reporting bodies and ensures support to the core roles of NSWES"* highlights The NSWSES ICT Director. However, this strategic move also generates some trust issues from the NSWRFB toward the FRNSW. In fact, the two agencies provide similar services: NSWRFB operates in the rural regions while FBNSW deals with the urban metropolitan regions. Having all core processes within a single platform managed by the FRNSW was probably viewed by the NSWRFB as a threat to its organisational identity (*"who they are"*) and a potential step toward a *"take over"* strategy by the FRNSW. This concern is probably well highlighted in the following comment from The NSWRFB Senior Officer/Group Manager, *"Look, we are only a relatively small agency in the grand scheme of things, both in number of people (...). The other agencies are a lot bigger than what we are. So, you know, I think there are times when we think we can easily be absorbed in to a larger organisation. That then does come with an enormous number of problems as well, because you are then part of some massive bureaucracy instead of a small bureaucracy. And we like to pride ourselves in being able to change and being relatively nimble and flexible which you don't get with the big bureaucracy when you are swallowed up"*. This was also a concern to The FRNSW IT Director, who said: *"At the time it was a very contentious issue. There was a lack of trust between the agencies. The two agencies that were being forced to come to the table thought that they were in some way going to lose their autonomy, that possibly Fire and Rescue was going to take them over or bring about undue influence and that was not seen as a good thing by the other agency. So there was a lot of mistrust and there was some very difficult conversations that happened from time to time"*.

Resolving this issue was a key step toward building trust among all agencies, and therefore ensure the success of the overall project. To achieve this, the FRNSW who acted as the *"IT solution provider"* decided to take some key strategic moves including: giving-up one vote on the IDGC, relocating the whole implementation project team to a new floor, allowing the implementing team to run autonomously from FRNSW, remane the SAP system to foster the sense of belonging from other agencies and highlight the joint ownership of the system, and prioritising other agency's projects in terms of execution and delivery. *"I think a key lesson is you can only make something like this work if there is trust. To gain the trust there must be sacrifice. So egos have to be got rid of. People have to hand over some autonomy. You can't gain trust overnight. It is going to be a long process"*, FRNSW IT Director. Talking about the impact of trust toward the success of the single SAP instance strategy, he added: *"I think the gaining of trust is the number one thing that has made it happen"*.

Also, the three following project management methodologies: Prince II, PMBoK and the ASAP were selected to guide current SAP implementation and all subsequent SAP projects within the share platform, and thus providing a common ground and understanding during the implementation process in terms of project governance, roles, controls, and clear execution of roles in a timely manner. This is because each agency has its own specific organisational identity that influenced how their internal IT projects are managed. Thus, it was critical to select and use well established project management methodologies to enhance information flow and sharing among all agencies involved in the project, and therefore ensure the effective project governance and execution.

Regarding the project funding, the three early emergency agencies including the MPESNSW put forward a business case to successfully secured an approval for \$7.848 million in capital funding and \$184k in ongoing recurrent expenditure to support the single SAP instance project (with the potential of 100,000 users).

Project

The project phase was heavily influenced by the FRNSW organisational identity: less planning as a culture from Fire and Rescue. Indeed, the project team was mainly focused on *"implementation and delivery as opposed to ticking a box"*. This aggressive orientation towards making things happened has had a huge impact on the overall success of the project. As The FRNSW SAP Portal Specialist states: *"sometimes millions of dollars are spent on planning; documentation, a whole heap of arrows and boxes drawn on paper. A lot of experts that come in to the room and collect money and leave. The direction that this has taken within emergency services – the big difference I have seen is the focus on getting it done. There is a*

focus on: let's get that, we will debate it afterwards if it is the right or the wrong thing. Let's debate it afterwards and we will clearly see if it is wrong or right. We need to get their first, you know, kind of build the money – getting there. That is something that I have seen with – it is unique to its implementation”.

Drawing on this strength as well as from the close collaboration with others project teams, within a year, the following SAP modules were implemented across these agencies: Self Service, Travel & Expenses, Learning Solution Online and Volunteer Management, on budget and on time, with about 95,000 people on the system. Furthermore, many agency specific functionalities were also realized. For example, the NSWSES went live in December 2009 with finance and asset management followed by the NSWRFSS in July 2010. That is probably why The Project Leader from FRNSW states: *“Our primary objective was achieved. I think, yeah. And I think in some areas we have delivered additional functionality that was never envisaged”.*

Appropriate staffing and training are considered as key success factors of ERP implementation. In this project, even if all project teams were stretched in terms of human resources and training, they all were able manage to deliver on time and on budget. In fact, most of paid staffs within these agencies were formal volunteers. Therefore, they are used to willingly offer their time to push forward their respective agency agenda. Thus, working overtime and sharing knowledge through peers was considered as the normal thing to do.

Project Shakedown

Currently, all agencies have successfully been on boarded into the shared SAP infrastructure. In addition, all the following modules were successful added: SAP for Volunteers and Human Resources across the three agencies, Finance, Procurement, Inventory and Asset Management across all NSWSES within the state and Finance and Procurement across NSWRFSS.

As a result, not only did the shared platform help meeting the Government mandate, but also it led to tremendous operational and strategic benefits. At the operational level, the system allows a central data repository capable of storing, updating and managing all human resources records (e.g., volunteers and paid staffs) across all agencies. This therefore improves the intra- and inter-organizational transparency and compliance related to high risks transactions, facilitates business process innovation (e.g., removing manual processes and forms, standard processes across agencies), enables faster access to volunteers and paid staffs (e.g., training event information, skills, and qualifications), improve both planning for incidents and emergencies and the end-to-end visibility. Now, the FRNSESS can use the system to better delivery of fire-fighting and rescue services to the community.

At the strategic level, the new system has improved information and knowledge sharing across the organization, thus improving inter-agency coordination and allowing joint decision making during major disasters events. Another key benefit derives from the project is the human resource interoperability offers by the new system across agencies. As the NSWSES Director of ICT highlights: *“when we have a really, really large emergency occur, (...) I can now get on the telephone and I can call my colleagues in any of the other emergency services and say: hey, I am really busy, I need a hand. Can you send a few of your administrative staff over to help me out? And they can walk in the door and they can sit down behind a computer terminal and they already know how it works without any retraining because it is the same as the work that they are doing already in their agencies. So from an intra-operability point of view an enormous benefit that hasn't been realized”.* In short, *“we gained: efficiency, interoperability, cross agency support, governance across agencies. Now we can share our members knowing that they know the system”.*

However, the project team is still working on stabilizing and eliminating bugs. At this time, it is experiencing a very low level of debugging. As the SAP Technical Team Leader at FBNSW points out: *“My biggest concern when we actually went live was the low number of calls that we were getting. Yes. Just in implementation I have gone – done in the past: really, gee, that was a lot of resource, region support and yeah, I was incredibly surprised at the low number that was coming in. (...). I think the support that was done this time is probably better than other things in the past. And the next lot we will do it even better”.*

Project Onward and Upward

This project phase is ongoing. A post implementation review was done on the 13 September 2012 in order to celebrate the team's collaboration and achievements, review and reflect on the project successes and areas for improvement and develop recommendations for future SAP projects. Currently, managers across agencies are exploring the potential of analytics tools that will help them leverage the huge amount of structured and unstructured data or "big data" across multiple systems within the network of agencies. As the IT Director from FBNSW notices: *"I think the greatest benefit of the project has not yet been realised. Because I think the – hardly anybody really realises that it is a very large foundational feat for what will follow. There is a future which is to have all the information of the three organisations; people, places, things, assets, in the system and the next phase is to leverage that to actually manage emergencies to make sure that the community is safer. To use analytics to predict things better"*.

Key Lessons Learned

Importance of the Shared Identity as Enabler of Informal Training

The direct effect of training (e.g., formal and informal training) toward the successful implementation of ES (Sharma and Yetton 2007) is highlighted in the IS literature (Kumar et al. 2003). Evidence from this case show that the organizational identity will have an effect on the type of training provided (formal vs. informal), which in turn will affect the ERP implementation success. Indeed, in this study, even if the level of formal training was identified as very low or inexistent by all key stakeholders (within and across agencies), the organizational identity has enabled the innovation design of various strategies to alleviate this lack of training: peer support, informal meeting, knowledge sharing (within and across project teams and end users), and learning by doing. In the case of the NSWSES, in addition to the above strategies, all end users have the opportunity to access a very detailed online user guide develops by the Project Manager. Overall, all these training strategies highly contributed to the success of the implementation of the share platform. As one of the NSWSES Finance Officer/Accounts payable staff (User) mentioned, *"I think once you learnt a few of the steps and you got used to it – because it is easy to use – you were then more confident to try other things"*. This observation is shared by the second NSWSES Finance Officer/Accounts payable staff (User) who added: *"I felt it was a system that was easier to use, and I am not very IT literate. But I found it an easy system to use. Very user-friendly. (...) We are still training today. We are still learning stuff ourselves today. It is a big credit to the manual. They have done a lot of screen shots with all your steps through and when you get that visual it is just so much easier to go into that."*

Top Management Support and Trust Building Mechanisms within Multi-business Organizations IT Projects: Keys for Success

Prior studies on ES implementation usually focus on gaining and securing top management support and buy-in to ensure the success of the IT project (Robey et al. 2002). They also show that in the interorganization context, firm will usually initiate new linkages with the primarily aim of gaining "control over a critical resource (e.g., shared system)" (Nidumolu 1995, p. 91). However, evidence from this case show that gaining and securing top management support and buy-in to ensure the success of the project is not enough. Indeed, executives were at the forefront of the planning, execution, coordination and control of the implementation of the ERP-enabled shared platform. For example, after jointly working toward securing the funding from the NSW Government, they were actively involved within the IDGC in the decision process leading to the selection of the single SAP-instance as the share infrastructure. Moreover, they were making sure that the "right" information about the project was communicated to all key stakeholders, specially end users and volunteers (e.g., by attending and presenting at the volunteers meetings). They were also in charge of ensuring that all reports sent by each project manager from each agency were in line with the overall project requirements (e.g., financial objectives, scope, time and functionalities). This active involvement of cross-departmental senior managers increases the "buy in" of the overall project by the project board. As The Director of ICT of NSWSES says: *"The one consistency across all the projects has been that the CIOs from each agency have had a place on the steering committee, which I think has been invaluable and the level of executive support. (...) So the executive support has probably been the most important thing across all of it. And that is where we have had representation at a senior officer or a director level from each agency sitting on those steering"*

committees and meeting on a regular basis, normally every couple of weeks either face-to-face or via teleconference to drive the projects. You have got people there that are able to make decisions and that do make decisions, can commit their agency and have influence as well inside their agency.” He adds: *“So again you have got a lot of senior buy-in for it all which I think was essential in the success of the implementations”*. Also, the “ERP solution provider and consulting provider” for this multi-business organization’s ERP implementation, the FRNSW, has willingly decided to give-up one vote on the IDGC and relocate the whole implementation project team to a new floor to allow the implementing team to run autonomously from FRNSW, thus, renouncing to exercise its potential control over the shared platform in order to foster trust among agencies involved in the implementation process.

Cross-Units Project Governance Structures as Vehicles for Developing a Shared Identity

Early studies on ES implementation posit that end users requirements in terms of identification and management are pivotal in realizing successful project (Law et al. 2010; Tsai et al. 2011). However, very few studies actually explain how to achieve this. The results of this case study show that a cross-units project governance structure that integrates end users can facilitate the identification and the management process related to their requirements. Overall, this governance mechanism allows the efficient and effective planning, execution, coordination and control of the implementation of the ERP-enabled shared platform. For example, the members of The Joint Volunteer Consultative Group that represents the core members of the three agencies were “actives” members of the ERP-enabled share platform in terms redesigning intra-and inter-organizational processes to fit their “common shared” requirements (e.g., designing common processes, and transactions). In short, they were at the core of the implementation process. Their active participation allows capturing and integrating their requirements into the project implementation at all stages. The NSWSES Director of ICT explained the importance of this group toward the success of the project: *“members of the JVCG were able to solve a significant number of problems for us because again, as you can imagine, internally we have got our 229 units across the state who aren’t doing stuff the same way and we had to get – agree on processes for them. Well again, they were different between the agencies as well. So that body with representation from all agencies was the body that we would put issues to about how we would need to start aligning things. (...) So they were very, very important in terms of helping you to redesign and make sure that you have common processes, common transactions and common work processes and transaction”*. He adds, *“we formed the JVCG of I think it was around thirty-odd volunteers from right across the state that we would fly in regularly and we would work with them for the project initiation through to SAP blueprinting on what the processes would be and what the requirements were.”*

Conclusion and Implications

ERP has been considered as the most important step towards the firm adoption and use of EIS for improved intra-organizational efficiency. The literature about ERP is quite mature and diverse. However, ERP-enabled shared platform across multi-business organizations is an emerging topic which is still under research. This study focuses on the implementation of ERP-enabled shared-platform by semi-autonomous firms to generate network-wide operational and strategic benefits in real-time emergency service management environments. The study draws on prior studies on ERP implementation, organizational identity and literature on trust, as well as the analysis of a longitudinal case study of three NSW state’s emergency agencies that are currently implementing an ERP-enabled shared-platform for emergency services delivery. The study provides some important insights about the fundamental role played by the organizational identity and the trust during the implementation process of the shared-platform. Also, case results show that we need to go beyond the general belief that securing the top management support and “buy-in” is enough to guarantee the success of ES implementation, especially in the context of emergency services where the vast majority of employees are volunteers. Indeed, the focus on social constructs such as the organizational identity and trust during the implementation process of ES among multi-business organizations may not only help to better identify issues that may act as inhibitors of the successful implementation, while fostering those that may act as facilitators; but also facilitate the communication, knowledge generation and sharing among stakeholders. Thus, the study contributes to the emerging literature on ERP-enabled shared-platform across multi-business organizations. Even if case study is considered as an appropriate research approach when studying emerging topics, where

theories are still at their early and formative stages, this approach also present some limitations in terms of the generalization of our findings. Future research should focus on measuring the impact of organizational identity and trust on the of implementation success of ERP-enabled shared-platform across multi-business organizations using a mixed method approach.

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