Fashions in the Cloud: A case of Institutional Legitimacy

Completed Research Paper

Melin, Ulf
Department of Management and Engineering, Information Systems, Linkoping University, SE-581 83 Linkoping, Sweden
ulf.melin@liu.se

Sarkar, Pradip K.
School of Business Information Technology and Logistics, RMIT University, Melbourne VIC 3000, Australia
pradip.sarkar@rmit.edu.au

Young, Leslie W.
School of Business Information Technology and Logistics, RMIT University, Melbourne VIC 3000, Australia
leslie.young@rmit.edu.au

Abstract

Organisations claim to adopt IT fashions on the premise of achieving cost-savings, and performance improvements. However, current research reveals that such goals are not the only motivators behind the actual adoption of IT fashions. This paper illustrates, through the case studies of two universities, that the adoption of an IT fashion, such as Software as a Service (SaaS) solutions, can enhance the innovative image of an organisation, and render it “fashionable” to stakeholders. Yet, this very image may erode if issues of concern, associated with the uncertainty of new technologies, are not addressed. Through the lens of the Theory of Institutional Legitimacy, the examination of the two case studies depict IT fashions as “double-edged” swords, which may enhance or erode legitimacy of policy makers, thus bringing about shifts in their viewpoints on such technologies. Therefore, a deeper understanding is required of how IT fashions influence the legitimacy of IT decision-makers.

Keywords

Cloud computing, IT services, IT fashion, outsourcing, universities, Institutional Legitimacy, Software as a Service.
Introduction

An information technology (IT) fashion can be defined as “a transitory collective belief that an IT is new, efficient, and at the forefront of practice” (Fichman 2004; Wang 2010). In addition, all fashions are attributed to approaches and artefacts that are perceived to be innovations (Abrahamson 1991). In this regard an IT fashion deals with an innovative technological artefact. Studies of IT fashion in IS research were given the big “nod” with the application of management fashion theory to IS research and practice (Abrahamson 1996; Baskerville and Myers 2009). Accordingly, they claimed that the notion of management fashions also occurred as IT or “IS fashions” in IS research and practice. Other studies describing innovations in light of this definition of an IT fashion include the phenomenon of business process reengineering (BPR) diffusion across European enterprises (Newell et al. 1998) though described as “management fashion” rather than IT fashion. ERP systems have also been studied as a fashion (Wang and Ramiller 2009). Furthermore, IT fashions as a concept in IS research, through a survey of US firms, revealed that enterprises that adopted IT fashions were viewed with “admiration”, and their active proponents were compensated generously (Wang 2010). Cloud solutions, namely Software as a Service (SaaS), continues to generate interest amongst various areas of research, in computer science (Armbrust et al. 2010; Zhang et al. 2010), and information systems (Marston et al. 2011; Sultan and Van de Bunt-Kokhuis 2012; Venters and Whitley 2012). SaaS is also considered of great appeal to organisations with global spending on such SaaS solutions expected to reach $22.1 billion in 2015 (Kanaracus 2012). SaaS is defined by Gartner as “software that is owned, delivered, and managed remotely by one or more providers” (Gartner Research 2013 p. 1). The three main types of services offered by cloud service providers include Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and SaaS. The adoption of cloud services in governments (Kshetri 2010; Wyld 2010), and educational institutions (Sultan 2010; Wanjiku 2009; Yanosky 2008), has been attributed to the benefits associated with any innovation – primarily performance improvements by cost-savings and efficiency-gains, and higher quality of services. Thus, cloud solutions are an innovation that is considered an IT fashion in this study.

There has been dispute as to whether cloud solutions present a “new paradigm”. From a computer scientist’s perspective, there is actually few innovative dimensions in the notion of cloud computing, taking into account technologies such as centralised and distributed computing, utility computing, and virtualisation that amalgamate to create the cloud environment (Zhang et al. 2010). However, the novelty lies in the integration of these technologies onto a network environment (Weiss 2007) and the various interpretations and use of the concept by relevant stakeholders, varying from IT practitioners to business executives and academics. The “disruptive innovation theory” (Christensen 1997) has been employed to refer to cloud solutions as both sustaining and disruptive innovations (Sultan and Van de Bunt-Kokhuis 2012). Therefore, we can consider SaaS solutions as IT fashions in the realm of IT in organisations.

This objective in this paper is to illustrate the deployment of a particular SaaS solution, namely the package of products offered by Google, through in-depth longitudinal case studies of two universities, one in Sweden (UniSwed) and the other in Australia (UniOz), with contrasting dispositions towards IT fashions. The case studies began in 2008 and gradually uncovered how the phenomenon of SaaS reversed the disposition of the two cases. UniOz with a reputation for being conservative towards IT fashions, suddenly accelerated its pace of adopting SaaS, whilst the usually innovative UniSwed halted its pursuit of further SaaS adoption. Whilst previous work employed more economic rationalist theories to comment on the motivations of the two organisations concerning the adoption of SaaS (Melin et al. 2012), it did not offer a comprehensive picture of the motivations behind the adoption of IT fashions. Therefore, to develop a greater understanding, we utilise the explanatory power of institutional legitimacy with its roots in institutional theoretical body of thinking (Meyer and Rowan 1977) (refer to next section).

This paper is arranged as follows: we discuss the institutional legitimacy from institutional theory in the next section, and then, we present the research approach, and this is followed by the case background. The analysis and the discussion based on themes derived from the empirical data are then discussed, and the results are presented in final section.
Institutional Theories

The application of institutional perspectives in IS research stems from the fact that not all managerial decisions surrounding ICT infrastructure are driven by economic, rationalist, and efficiency goals (Mignerat and Rivard 2009). Rather, the “irrationality” in decision-making within an institutional context involving managers as institutional actors needs to be considered (Avergerou 2000; Orlikowski and Iacono 2001), a scenario in which legitimacy replaces efficiency as the goal (Toihert and Zucker 1996). The main premise behind institutional theories, particularly the “new institutional” movement is the basis of seminal work in this area, which claims that to ensure long-term survival of the organisation, the organisation itself and key organisational actors will strive to gain legitimacy in the relevant organisational fields (Dimaggio and Powell 1983; Meyer and Rowan 1977; Scott 2003). Thus, organisations belonging to a particular organisational or institutional field will have frequent interactions with each other, hold similar rationalised norms and meaning systems, and be governed by equivalent regulatory systems (Scott, 2003). Therefore, this concept can be considered to be synonymous to institutional myths (Meyer and Rowan 1977).

Institutional theories have been applied in IS research since it was stressed that there was a lack of studies examining IT innovations from an institutional lens (King et al. 1994). At this stage, the most relevant application of this theory to IS research has been to investigate IT outsourcing from both Transaction Cost (TCE) and institutional theories (Vitharana and Dharwadkar 2007), as well as exploring the deployment of ICT in the Indian healthcare sector using institutional theory (Noir and Walsham 2007). Empirical data suggests that governments in Vietnam and China have influence in how organisations legitimised themselves. For example, in China, cloud activities are supported because of the potential as a major “spying machine” and data can be easily monitored from a centralised location (Kshetri 2011).

Organisational decisions to adopt IT fashions can be “independent of their productive efficiency; organisations which exist in highly elaborated institutional environments and succeed in becoming isomorphic with these environments gain the legitimacy and resources needed to survive” (Meyer and Rowan 1977 p. 352). This legitimacy is rooted in institutional myths, which promote the diffusion of policies and structures that are deemed to be rational and effective by institutional forces. In view of this, are universities also adopting cloud services because it will make them look innovative and effective as dictated by the institutional environment, and to which several enterprises in the organisational field have subscribed to? Indeed, an innovation will be readily adopted if it legitimises the organisation’s continued survival in its organisational field (Zucker 1987). Organisations can then demonstrate its commitment to being innovative and effective, even though a thorough assessment of its internal procedures and processes may reveal the contrary.

To reduce the gap between the legitimised action and the actual internal processes, organisations resort to decoupling of activities, which is essentially a separation of legitimising activities from actual organisational practices (Meyer and Rowan 1977). This decoupling of activities is apparent in universities where conformity to certain “standards” ensures legitimacy, despite the fact that there can be inconsistencies between these standards and actual practice (Meyer et al. 2007). Therefore, for the purposes of this study, we have opted for this type of approach to new institutional theory (Meyer and Brian. 1991). The study will also inculcate the notion of SaaS as an IT fashion to enhance the examination of its adoption by the two universities.

Research Approach

A qualitative approach consisting of two cases, UniOz and UniSwed, was chosen on the basis of the fact that these two institutions afforded the authors the rich in-depth empirical data needed and access to analyse the phenomenon of how IT fashions influenced managerial decisions and why changes in viewpoints were instigated (Benbasat et al. 1987; Eisenhardt 1989; Walsham 1995). The longitudinal, and in-depth manner in the study were conducted, provided this research project with revelatory empirical data (Yin 1994). The qualitative approach applied in this study is based on the notions of phenomenology (Boland 1985), and the findings interpreted through inductive reasoning (Bryman 2001).

The project, initiated in 2008, began as participant observations of “unofficial” uses of SaaS, by university staff, which indicated the popularity and widespread use of such applications, (DeWalt et al. 1998;
Douglas 1976). The impetus to embark on the study with participant observations was inspired by Avison and Myers (1995), and a study by Sarkar and Young (2011). This led to the current study of how universities viewed SaaS, and changed their viewpoints over such IT fashions in these two cases. It is to be noted that this paper discussed a dual case study in order to compare and understand the reversal in viewpoints, in opposite directions, of policy-makers over SaaS (Kaarbo 1999). As part of previous research purposive sampling was then used to select participants for in-depth semi-structured interviews in both universities (Patton 1980). Interview participants were selected on the basis of their intimate involvement with institutional decisions regarding SaaS, and an open-ended interview guide was used in both cases. We interviewed three senior IT managers from UniSwed and several non-IT staff, and five senior IT managers (including informal discussions with the new CIO), and senior non-IT staff, acting as advisors over a period of three years at UniOz. Several follow-up interviews were conducted from 2011-2013 in line with the longitudinal nature of the studies. In addition, participant observations of staff and students were continued as a complement to the interviews.

Data analysis was undertaken by in an iterative manner (cf. reflexive research, (Alvesson and Skoldberg 2009)), in which the interview transcripts were read several times and codes/themes generated accordingly (Strauss and Corbin 1998), by the authors individually and together to ensure interpretative quality, and then matched with the theoretical lens. A limited number of illustrative citations from the larger study are used in the analysis and discussion below. Note that one limitation in our methodology at this stage is the focus on management and staff perceptions only, having applied a qualitative approach. This is insufficient if one wishes to develop hypotheses relating to a multitude of factors that show causal relationships between IT fashions and managerial decisions. However, this study is a part of a longitudinal project that will broaden perspectives on the phenomena in the future. We also found no evidence of the moderating effect of cultural differences between Sweden and Australia with regards to the national mind-set of the interviewees (Hofstede 2010). On the contrary, there seems to be a set of global trends and fashion in IT, related to CIO norms and jargon surrounding SaaS.

Case Background

Though both UniOz and UniSwed are similar in their focus on scholarly pursuits of science and technology and in their adoption of cloud services, they have different histories and motivations with regards to IT implementation. UniOz has experienced “misadventures” in its IT undertakings in the past and thus developed a somewhat conservative and cautious approach towards disruptive technologies. UniSwed, on the other hand, has historically held a reputation as an early adopter of disruptive technologies. It was the first university in Sweden and one of the early adopters in Europe to gain a first mover advantage through its adoption of Gmail for students. The following sections provide a brief overview of these two university cases.

**UniSwed**

UniSwed is a large, multi-faculty, public university in Sweden with its origins in the technology disciplines. The University has an enrolment of 30,000 students and employs over 3,800 academics and administrative support staff. The old internal email system, Microsoft Exchange, hosted by UniSwed IT department, was in urgent need of improvement. In addition, the IT managers were aware of the fact that students were largely forwarding their student emails to their own externally-provided email accounts (many of whom were using Gmail). During that period, UniSwed was also undertaking a strategic assessment of its IT resources in terms of cost reduction and re-allocation of resources to core business services, directly related to research and teaching. The shift in focus towards moving some IT applications externally was driven and legitimised by all key actors within UniSwed. Therefore, in May 2007, as an innovative move, UniSwed redeployed student emails to Gmail. However, the innovative moves stopped here. Although it was discovered that a number of staff members were also using SaaS solutions on their own accord, it was without the official endorsement of UniSwed policy-makers. Some of the SaaS tools were being used for collaboration (The Projectplace), and for storage and sharing (Dropbox). Some academics, like students, were also forwarding their UniSwed emails to their own Gmail accounts. However, as prominent internal stakeholders view staff email content as an integral part of the university’s portfolio of information assets, staff email – at least so far – did not move to Google.
UniOz

UniOz is a large university in Australia, offering programs in the fields of technology (computer science, engineering), management, architecture, social sciences, and the arts. It has an enrolment of 70,000 students and employs over 3,900 academics and administrative support staff (which include IT support staff). The IT department at UniOz operated under a conservative approach, owing to a poor reputation gained from troubled projects in the past. When we first approached senior IT managers in 2008 for their views on cloud services, they expressed skepticism. Our informal interviews with non-IT staff uncovered complaints about the continued use of out-dated IT infrastructure. There appeared to be a general air of dissatisfaction with the applications sanctioned for official use by the IT department, and the process of requesting new applications and hardware was considered to be cumbersome. At the same time, it was within common knowledge that several staff members were using SaaS solutions, which was revealed through our participant observations. However, in late 2010, a new CIO was recruited, renowned for his extensive industry experience, and forward-thinking approach to emerging technologies, such as cloud-enabled services and solutions. Then, in 2011, the university proceeded rapidly with the adoption of Gmail for students, spearheaded by the new CIO. The new CIO’s pro-cloud directive was also supported by other senior staff in the university.

Analysis and Discussion

The findings from the two longitudinal case studies, examined through the application of the institutional theory, offers explanations surrounding the role of legitimacy in influencing how the universities viewed IT fashions. What both organisations were striving for was continued (and enhanced) legitimacy, which influenced their stance of IT fashions. In this section, we discuss how the myths around IT fashions present a “double-edged” sword to policy-makers - enhancing legitimacy as well as eroding legitimacy.

Enhancing Legitimacy

In line with the notion of institutional legitimacy (Meyer and Rowan 1977), the adoption of SaaS was perceived as propagating the myth of IT fashions bringing forth perceptions of an increasingly innovative organisation, which can earn it a favourable image in the organisational field of technology-oriented universities. This is apparent in UniOz where the “new IT regime” accelerated the migration of students and staff email systems onto Google while proceeding with increased virtualisation of computerised workspaces. Great importance was attached to the reversal of negative views surrounding the IT department in the eyes of the university stakeholders, both internal and external. This is in line with the institutional theory with the claim that organisations seek to enhance the legitimacy of their role as policy-makers to their stakeholders, with the aim of ensuring organisational survival (Scott 2003). Moreover, there was a “collective belief” (Wang 2010) amongst influential members of UniOz that SaaS solutions would inject efficiency into the ICT infrastructure, and improve the quality of IT services. Both IT managers and senior staff members suggested that Google’s popularity with other universities and general appeal to students had to be considered in addition to other decision-making criteria. Thus, the rational legitimacy of SaaS adoption as a step in the direction of higher innovativeness was perceived to be favourable to UniOZ IT managers, as stated by one of the senior IT managers:

“...it is highly important for IT departments to stay ahead of the game with SaaS tools and technologies” (senior IT manager A, UniOz, November, 2011).

The change in key IT personnel (a new CIO and the promotion of project IT managers) coincided with the establishment of a new “state-of-the-art” facility, which can be viewed as an act of being innovative on part of UniOz itself. In this climate of perceived innovativeness, it was imperative for the IT department to re-design the IT infrastructure accordingly. Hence, the migration of staff and student emails to Gmail and the deployment of Google Drive to facilitate collaboration, file management and storage, also served to legitimise the status of the “new guard” at the IT department. Even as the IT department was weighing the pros and cons of choosing either Google or Microsoft’s Online Exchange and Office 365, the myth surrounding Google’s applications as being efficient and robust played an implicit role in the final decision.
“Academic units were heavily involved in pushing the collaborative aspect of Google – they were definitely the spring-board in the move towards Google” (senior IT manager B, UniOz, September, 2012).

This was corroborated by an operational IT manager who stated:

“Google was not chosen from a strictly technical viewpoint, but, rather, from a business viewpoint. The major non-IT departments were involved in driving Google adoption” (operational IT manager, September, 2012).

Our interviews with UniOz IT managers did not reveal rigorous cost-saving measures associated with replacing old in-house applications with Google. In other words, immediate or even “near future” cost-savings were not given priority over the need to be seen as being and appearing as innovative, which is considered an important step in enhancing legitimacy amongst stakeholders. It is to be noted that the myth of Google as an enabler of improved IT services, which includes digital communication and collaboration, prevailed throughout the decision-making process. The wide spread dissatisfaction, prevalent amongst staff and students with previous in-house applications and IT services, diminished with the deployment of Google. This was uncovered from participant observations of and informal interviews with staff and students during the course of this longitudinal study. The IT department wanted to be seen as facilitating remote-working, which was addressed with Google in view of its offer of standardised interfaces across all digital devices.

With UniSwed, it was a different form of legitimacy enhancement that occurred, following its early adoption for Gmail for students in 2007, from which it gained considerable legitimacy within the organisation among policy makers and students. In the institutional field of Swedish universities, SUNET (the major network infrastructure provider), is a major actor and holds considerable influence on the legitimacy of IT department within Swedish universities. Accordingly, SUNET is responsible for the establishment of norms, procedures, policies and practices, when it comes to large-scale ICT infrastructure, and acts as a broker in the sourcing of new technologies from third party vendors. This is why the SUNET sanctioned Box.com was chosen over the more popular Dropbox as the official file storage application, thus confirming the observations of institutional legitimacy (Meyer and Rowan 1977; Noir and Walsham 2007), in terms of dominant norms and beliefs from the perspectives of IT policy makers and the SUNET body. Although box.com was officially sanctioned, the academic users continued to use dropbox.

Eroding Legitimacy

The expected benefits of IT fashions may enhance the legitimacy of an organisation in terms of its innovativeness. Conversely, the manifestation of concerns, arising from myths surrounding the new and untested nature of “fashionable” solutions, can undo this legitimacy (Meyer and Rowan 1977; Noir and Walsham 2007). Thus, it came as no surprise that concerns surrounding certain aspects of cloud solutions were voiced by the IT managers and staff in both universities.

As UniSwed is not formally obliged to provide students with email, it was not a difficult decision to migrate student emails onto a free service such as Google, in that legitimacy issues were not at stake. However, staff emails at UniSwed, a Microsoft Exchange application hosted internally, were viewed by prominent internal stakeholders as an integral part of the university’s portfolio of IT and information assets, and seen as having a significant legitimising influence. As the university had already earned its reputation by being an early adopter of Google for students, it did not feel the need to further enhance its image by deploying Google for staff. Rather, a post-fashion state is being hinted, in which performance metrics are needed to support expectations of efficiency gains from further deployment of IT fashions (Meyer and Rowan 1977; Noir and Walsham 2007; Wang 2010). UniSwed IT managers felt that if such expectations were not eventually met, their legitimacy might be diminished. In comparison, UniOz did not hold such concerns about the migration to Google.

“…using SaaS applications for emailing and file-sharing do not increase the level of risk than had already been present when we hosted these in-house. Google is not increasing the level of risk.” (Senior IT manager A, UniOz, November, 2011).
Thus, the legitimacy of the UniOz department was not at risk with the adoption of Google for its internal stakeholders. The IT department adhered to a rigorous risk-assessment process, derived from the COBIT framework. At UniSwed, on the other hand, Microsoft Office 365 is being considered as a better alternative to Google due to perceptions of superior security features. UniSwed also raised the question of data integrity, such as patents and loss of data. The following citation describes the issue of data integrity at UniSwed:

“Privacy and data integrity are important issues – can we rely on the service providers to safeguard our data? Can we read different logs from here; can others read the information, US government (referring to the reports of NSA surveillance of data centres)?” (IT Manager, UniSwed, September, 2013).

Interview participants in both universities acknowledged that the issues of privacy and security in public clouds were critical for further adoption of SaaS. Moreover, such concerns were magnified with the storage of confidential data in offshore data centres, with different privacy laws and security regulations.

“...we know that we have a transparent relationship with our cloud vendor, but we may not have such a level of transparency regarding the relationship between our vendor and its affiliate, to whom the former outsources some of its processing or storage functions. The affiliate may be owned by a company with an offshore data centre.” (Senior IT manager A, UniOz, November, 2011).

Interviewees in both universities stressed the importance of transparent and comprehensive service-level agreements with cloud vendors for the purpose of protecting intellectual copyright.

“We had to carefully examine whether putting emails in the public cloud was in compliance with our privacy policy. Then, we drafted a contract that addressed our specific privacy requirements” (Senior IT manager B, UniOz, September, 2012).

In order to reduce the concerns associated with SaaS, IT managers in both universities placed considerable emphasis on the undertaking of careful risk-assessments and close evaluation of service level agreements. Furthermore, they expressed the need to monitor current deployments and exercise caution with future adoptions of SaaS, in order to maintain the legitimacy of their status as agents of innovation.

“At this point in time, SaaS solutions are still a bit leading edge (yet to be mature), having just passed the phase of bleeding edge. Even though, such solutions are becoming more powerful and robust, we are not quite there yet to have them replace our internal legacy systems.” (Senior IT manager A, UniOz, November, 2011)

Conclusions and Implications

In summary, as shown in Table 1, the findings, based on an institutional legitimacy perspective, can be categorised into two explanations of how IT fashions such as SaaS can enhance or erode legitimacy, thereby prompting organisations to shifting from conservative to innovative and vice-versa.

<table>
<thead>
<tr>
<th>Explanations/Cases</th>
<th>UniSwed</th>
<th>UniOz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing Legitimacy</td>
<td>Influential institutions such as SUNET play an important role in influencing legitimacy of the IT dept. for certain applications. However, the student body was also influential in raising the legitimacy of UniSwed as an innovative university and the action was viewed favourably by other Swedish universities.</td>
<td>Influential groups such as the student body and academics play an important role in influencing legitimacy of the IT dept. This explains why UniOz switched its position from being a risk-averse organisation to one opting to be perceived as innovative.</td>
</tr>
<tr>
<td>Eroding Legitimacy</td>
<td>A lack of guarantees around privacy and security issues may lead to staff concerns and thus, potentially threaten organisational legitimacy.</td>
<td>Untested nature of Google solutions in the long term had to be approached with caution as unfulfilled promises and service expectations could create a</td>
</tr>
</tbody>
</table>
Within the environment of UniOz, there are subtle pressures for IT personnel to create an image of innovation through IT fashions (Baskerville and Myers 2009). This coincided with the appointment of a forward-thinking CIO and the promotion of progressive IT managers with the ranks. The “new IT regime” was keen on gaining legitimacy with organisational stakeholders, namely staff and students who held negative views about the IT department. Hence, it embraced the myth of innovativeness around Google products. This explains the switch of the UniOZ IT department from the position of risk-averseness to one that can be perceived as innovative. However, at the same time the IT department expressed awareness of the untested nature of IT fashions such as Google products, and conducted a rigorous risk-assessment of its adoption to safeguard its legitimacy.

In the case of UniSwed, an external infrastructure provider for all Swedish universities (SUNET) has considerable clout in what universities within the relevant organisation field select as official SaaS tools. However, UniSwed enjoyed legitimacy gains from the student body and other universities in its institutional field by being the first adopter of Google products for students. On the other hand, the myth associated with Google products and other popular SaaS solutions as having inadequate privacy and security safeguards raised concerns with UniSwed staff. This can explain why UniSwed, reputed for being innovative, stopped short of adopting Google products for staff and assumed a more conservative stance on such IT fashions.

It is apparent that the movements of both cases towards cloud services revolve around aspects associated with the survival of the organisations, which might be connected to norms, myths, or coercion. As mentioned in the discussion about the institutional legitimacy, organisations such as UniSwed and UniOz, may not only strive for rationalised or efficiency goals, but aim to survive and even thrive through legitimisation within their organisational or institutional fields. IT managers in both universities acknowledged the innovative appeal of IT fashions, such as SaaS, but were aware of the dangers that prevail if such applications fail to deliver expectations or address concerns of influential stakeholders. The concerns pertaining to SaaS can be attributed to the technology moving into the “middle phase” of an IT fashion, somewhere in the middle between early adoption and the stage of maturity – a phase that demands close scrutiny, in terms of expected benefits and uncertainty-reduction, and is crucial to IT innovations in general (Moore 2007). Proponents of SaaS need to be aware of the fact that “unfulfilled promise generates backlash, which quickly drives the innovation out of fashion...” (Wang, 2010, p.66). To this effect, the importance of service level agreements (SLAs), risk analysis, and other modes of evaluation using metrics to assess the nature of risks associated with new technologies has been highlighted. Thus, IT fashions are seen as “double-edged” swords, which can enhance or erode legitimacy. It should be noted that this is a study of how IT fashions influence organisational legitimacy and cause them to shift viewpoints towards new technologies. In view of this, the study of how stakeholders influence legitimacy and the inherent politics of the organisational field are beyond the scope of this study.

The implication of this paper has two dimensions: one associated with contributions to research and other, contributions to practitioners. Although economic-rationalist elements have been applied to decisions regarding cloud services adoption (Melin et al. 2012), it is when an institutional perspective and legitimacy is applied, that a deeper understanding is gained on how IT fashions play a role in the legitimacy of IT departments. This explains why UniSwed IT managers, retreated into an environment of conservatism, despite having earned its reputation as an innovative body. On the contrary, UniOz’s new outlook can be attributed to the new IT regime (new CIO) that was more responsive to stakeholder preferences for innovations. Unlike their conservative predecessors who had suffered backlash from failed IT endeavours, the new IT department did not share this history. Thus, they were able to start with a clean slate and look at innovations that enhance their legitimacy. Therefore, this study augments the explanatory power of institutional theories, in offering illustrative explanations on how organisations view IT fashions. In addition, steps are taken towards the establishment of a comprehensive picture pertaining to the adoption of IT fashions, such as SaaS, to complement economic rationalist theories. Another
contribution of our study is a novel approach where the legitimacy and studies of IT fashions have been combined to examine the deployment and use of SaaS and other cloud technologies. This is also a combination that can be further explored.

From the perspective of universities, the insights from this research’s theoretical analysis offer policy makers a better appreciation of the complexity involved in the decision-making process associated with IT fashions, such as SaaS. We believe that this line of thinking and the combination of the approaches of institutional theories and IT fashions can be analytically generalised and applied to any new technologies, such as mobile computing or wearable computers, that are perceived as being innovative and yet their potential benefits are untested or unproven. This study highlights the importance of understanding how powerful groups within an organisational bureaucracy or institutions within an industry influence policy making. This needs to be taken into account by technology companies and vendors during their marketing efforts. Given this is a dual case study, statistical generalisation should not be made on how organisations at large view IT fashions, and legitimacy may not always play an influencing role in why organisations change their viewpoint on IT fashions. Future research will be directed at investigating other universities and organisations where similar shifts in viewpoints of IT fashion occur and to more explicitly include and analyze other complementary stakeholders’ view on cloud computing besides the overall management perspective taken in this piece of research. There is also a potential future contribution linking the emerging organizational culture theme in the empirical data to e.g. studies on culture and leadership in ERP implementation (Ke and Wei 2008).

REFERENCES


