Information Systems Research: Aligning to Industry Challenges in Management of Regulatory Compliance

Norris Syed Abdullah  
_The University of Queensland, norris@itee.uq.edu.au_

Shazia Sadiq  
_The University of Queensland, shazia@itee.uq.edu.au_

Marta Indulska  
_The University of Queensland, m.indulska@business.uq.edu.au_

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INFORMATION SYSTEMS RESEARCH: ALIGNING TO INDUSTRY CHALLENGES IN MANAGEMENT OF REGULATORY COMPLIANCE

Norris Syed Abdullah, School of Information Technology and Electrical Engineering, The University of Queensland, Brisbane, Australia, norris@itee.uq.edu.au

Shazia Sadiq, School of Information Technology and Electrical Engineering, The University of Queensland, Brisbane, Australia, shazia@itee.uq.edu.au

Marta Indulska, UQ Business School, The University of Queensland, Brisbane, Australia, m.indulska@business.uq.edu.au

Abstract

Managing regulatory compliance is increasingly challenging and costly for organizations worldwide. While there is evidence that research on compliance management is on the increase, to facilitate industry-relevance there is a need to inform future research directions with empirical insights from practice. In this paper, we present the results of an empirical study that examines challenges in managing regulatory compliance, derived from Australian compliance management practitioners. The insights from the study are complemented by results from a set of interviews with compliance management experts. The study reveals the consolidated views of challenges in managing regulatory compliance as experienced by practitioners and as perceived by the experts in the Australian compliance industry. The results indicate core challenges that are agreed on by both stakeholder groups. In particular, the speed of regulatory changes/updates, organisational culture, risk management, scarcity of resources and a lack of value-add perception of compliance are considered the most critical five challenges. We present a discussion of these challenges and highlight their importance for Information Systems research.

Keywords: Regulatory compliance, Compliance management, Compliance culture.
1 INTRODUCTION

Regulatory compliance has received much attention from organisations in recent years, both on the local and international scale. While it is predominantly viewed by organisations as a burden (Sadiq et al. 2007), failing to comply is no longer an option (Anon et al. 2007; Butler and McGovern 2008). Breaches of compliance may result in serious, and sometimes disastrous, situations for the organisations concerned. A number of recent, widely publicised, corporate scandals - Enron, WorldCom (USA), Parmalat (Italy), HIH (Australia), and Tyco International (France), to name a few – were associated with significant market and reputational damages. At times such damages can be further complicated by legal action brought against the organisations or those who manage them and, ultimately, a collapse of the organisation.

While demand for compliance has become paramount in business, evidence suggests that organisations experience significant difficulties in managing compliance expectations and are increasingly concerned with high costs associated with related compliance management activities (Bace et al. 2006). Not surprisingly, recent research shows that companies have and continue to spend big on compliance. Recent studies project that spending for governance, risk and compliance in year 2010 will reach US$29.8B in the USA alone (Hagerty and Kraus 2009). This problem of cost is further intensified at the current point in time by the global financial crisis, which is likely to see regulators introduce new and tighter regulations (Caldwell 2009; Caldwell et al. 2009; Opromolla 2009).

The inevitability of coping with compliance pressures points to a need for practical solutions that can alleviate some of the uncertainty, risk and resource consumption of current compliance management approaches. Typically many of such solutions are technology-related. Research indicates that roughly 30% of the spending is related to Information Systems (IS) and Information Technology (IT) investments (Hagerty and Kraus 2009). Indeed, IS research in the compliance management domain is on the increase (Syed Abdullah et al. 2009), but the development of solutions in this domain without input from industry experts and professionals will only serve to increase compliance management spending without delivering on the promise of suitable tools to alleviate problems. Accordingly, this paper aims to address this gap in the body of compliance management knowledge by identifying the main compliance management challenges in practice, and communicate them to the wider research community in a bid to ensure research relevance.

We identify current industry challenges through a survey of fifty-three Australian compliance management professionals currently involved in compliance management activities at their respective organisations. The findings are further consolidated with compliance management views and opinions of eleven compliance management consultants/auditors, which are reported in (Syed Abdullah et al. 2010). The resulting set of consolidated challenges, ranked in order of criticality, and the related discussion, are a foundation on which Information Systems researchers can base further enquiry in this domain, while ensuring industry relevance of their research. Having motivated the need for an empirical study in the domain of compliance management, the remainder of the paper is organized as follows. The following section discusses related work. We then outline the approach and methodology adopted for the study. In the next section we present the results and analysis of compliance management practitioners’ views. We conclude the paper with a discussion of relevance to research and practice, as well as limitations and future work in this area.

2 RELATED WORKS

Over the past decade, regulatory compliance has received increased attention from the academic community (Syed Abdullah et al. 2009). While some research provides specific technical solutions, other research focuses on much needed guidance for compliance management regimens.

From a technical perspective, Governatori et al. (2006) present a formal system for the representation of contracts including the representation and reasoning about violations of compliance requirements.
within contracts. This work then was also complemented by Awad et al. (2009) to address the problems of resolving compliance violations systematically. Awad et al. (2009) introduce the catalog of violation patterns that captures all possible compliance violation types, and propose resolution operations. The violation catalog together with the notion of resolution context was then used as the basis for automated compliance maintenance.

From a guidance perspective, Sadiq et al. (2007) for example, highlight that a compliance regimen must include three interrelated but distinct perspectives on compliance, viz. corrective, detective and preventative. They introduce the ‘compliance by design’ approach that represents a holistic and effective compliance regimen. The fundamental feature of the compliance by design approach is the ability to capture compliance requirements through a generic requirements modelling framework, and subsequently facilitate the propagation of these requirements into business process models and enterprise applications. In Kharbili et al. (2008), a high level view of regulatory compliance through a policy-based framework for integrating regulatory compliance tasks with business process management presents. They argue that the use of policies presents many advantages, especially when supported with semantic descriptions of business processes.

Balancing the growing Information Systems research focus on technical aspects of compliance, research also focuses on the business or management aspects of compliance. Krell and Matook (2008), for example, investigate the effects of strategic information systems planning (SISP) on regulatory compliance investments. They provide an insight to the identification of correct SISP methods that create competitive advantage from these investments. Ali et al. (2009) empirically explore the culture of compliance in IT. They show how the culture of compliance positively correlated to IT governance.

In Syed Abdullah et al. (2009), the first comprehensive snapshot of the development and focus of compliance management research in the Information Systems (IS) discipline is presented. Although the study reveals that the majority of the related IS publications is exploratory in nature, it also suggests that work towards compliance solutions is active. In such an applied research field it is important to ensure that the solutions proposed by researchers are aligned with the real issues and challenges exhibited in industry.

3 METHODOLOGY

To elucidate the challenges faced by practitioners in current compliance management practice, we adopt a survey-based approach. A short paper-based survey provides us with the means to extract the main problems perceived by practitioners. A survey method was chosen since it allows feedback from a larger subset of the community than would be feasible with other research methods such as interviews or Delphi studies. The collected and codified survey data is triangulated with the results of eleven interviews with Australian compliance management experts (auditors/consultants), which were conducted for the purpose of identifying their perceptions of challenges in compliance management practice (Syed Abdullah et al. 2010). The synthesis of the two sources of data allows us to determine the core challenges in current compliance management practice, as perceived by both stakeholder groups and as ranked by the practitioners in terms of their criticality.

In the following sub-sections we elaborate on the participants and participant selection, the instrument design, and the analysis strategy for the study, which was conducted in Australia in 2007-2008.

3.1 Study Design

The participants of the study were recruited via a series of two workshops conducted by the researchers for a large Asia-Pacific institute that concerns itself with compliance management guidance and compliance management certification/training. The institute’s members - compliance managers and related roles in Australian organisations – are required to attend a number of education seminars/workshops each year and have a large selection of seminars/workshops to choose from. One of the workshops in this study was conducted as part of the education seminar series in August 2008. The other was conducted at the annual conference organised by the institute for its members in
November 2007. At the conclusion of each of the workshops, the participants were invited to fill out a short paper-based survey. It was made clear to the participants that while their input would help align research to industry needs, their participation was anonymous and not mandated. Fifty-three individuals participated in the survey out of a workshop attendance of 65. Accordingly, we achieved a response rate of 81.5%. The presented workshops were on the topic on Business Process Management and the content of these workshops had no bearing on the survey results. In other words, the workshop content did not introduce a bias in the responses, nor was attention required during the workshop to fill out the survey at the end. For all intents and purposes, the workshop and the survey were separate, however the workshop did at the conclusion introduce the purpose of this study.

The survey was designed in two main sections. The first section aimed to gather background and basic information of the participants such as role, experience and the organisation of the participant. The second section required the participant to provide a list of (up to) five challenges they faced in managing compliance, ranked in order of their criticality. Once filled out, the surveys were collected from the participants and the data was codified in an Excel spreadsheet to facilitate analysis. Most participants responded with three to five challenges – 35.8% of participants (19) responded with five challenges, 20.8% of participants (11) with four, 41.5% of participants (22) with three, and 1.9% (1) with one challenge, respectively.

The participants involved in the workshops ranged from very experienced compliance practitioners (18 years of experience) to those that were relatively new in the field (6 months of experience). Such broad range in experience enables us to identify challenges faced by a variety of compliance management roles in organisations. An in-depth look at the participants uncovers that 23% (12 participants) had less than 4 years experience in the area, 42% had 5 to 9 years of experiences, and 25% had significant experience of ten years or over. The remaining participants (6) did not provide details of their experience. The majority of the participants currently play a vital role in compliance management within their organisation. Among them, 8 work as compliance consultants, 21 work as compliance officers, 15 work as compliance managers, and nine work in other related roles.

We were also motivated to contrast the perceptions of the compliance management practitioners to those of compliance management experts – senior consultants and auditors in the field. To that end we utilised data from a published study that conducted interviews on the same topic with eleven experts (Syed Abdullah et al. 2010).

3.2 Analysis

The data analysis conducted for the purposes of this study centers mainly on the identification of the overall ranked challenges from the individual rankings obtained through the conduct of the survey. After all survey responses were codified into an Excel spreadsheet by one researcher, the correctness of the spreadsheet was verified by a second researcher. Having established that no errors had been introduced in the codification process, we proceeded to consolidate the data into distinct challenges. This process was necessary due to the open-ended style of questions that allowed participants to, in their own words, describe the challenges they face. Such design results in the potential of the same challenges being described in different words or at different levels of abstraction. To reduce the data to a set of distinct compliance management challenges we embarked on a dual-coder approach to consolidation.

Two researchers separately analysed the identified challenges and eliminated duplicates, while keeping track of their ranking and frequency. The titles of the higher level challenges were derived from the data independently by the two researchers. Once completed, the researchers then met to discuss their analysis and resolve any conflicts. Eleven discrepancies were identified, all relating to the same higher level challenge, and were resolved such that the researchers were in 100% agreement in this second round. The raw percentage agreement in the first analysis round was 95%. The high percentage agreement indicates high reliability and objectivity of the classification of the compliance management challenges.
In the next step we set out to derive the final ranking of the identified challenges by considering the frequency of each challenge. After identifying the list of the most critical challenges mentioned by the survey participants, we utilise a parallel study that considered the opinions of compliance management experts (Syed Abdullah et al. 2010).

4 RESULTS

The survey collected 225 individual challenges pertaining to compliance management. Accounting for obvious wording differences between the responses, of the 225 items only 23 were unique. This situation indicates a high level of agreement in general on the top 5 challenges in current practice. These challenges were identified by between one to thirty participants, and hence were split into two groups by comparing the number of responses for each challenge with the mean response of all challenges i.e. 9.8. The first group represents challenges for which responses received were equivalent to or higher than the mean response, indicating higher concern and priority ranking in the survey. These challenges together with the ranking score are listed in Table 1.

The second group of challenges – those with a frequency lesser than the mean response – indicate a less critical but still notable set of concerns. These challenges include high cost, change management, time to complete compliance activity, complexity in interpreting regulation, lack of consistency in process from business to business, overlapping of regulations, language differences, inadequacy of internal controls, lack of process standardisation, remediation, lack of observance of procedures & policies by operations, and lack of effort in considering compliance as a basis of audit opinion.

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>Ranking Score (RS)</th>
<th>Response (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent Changes in Regulation</td>
<td>9 8 6 6 1</td>
<td>30</td>
</tr>
<tr>
<td>Lack of Compliance Culture</td>
<td>7 13 3 -</td>
<td>24</td>
</tr>
<tr>
<td>Lack of Top Level Management Support</td>
<td>8 1 3 5 2</td>
<td>19</td>
</tr>
<tr>
<td>Lack of Efficient Risk Management</td>
<td>5 4 5 2 3</td>
<td>19</td>
</tr>
<tr>
<td>Difficulties to Integrate Compliance Needs</td>
<td>6 4 3 2 -</td>
<td>16</td>
</tr>
<tr>
<td>Lack of Perception of Compliance as a Value-add</td>
<td>4 3 4 -</td>
<td>14</td>
</tr>
<tr>
<td>Lack of Resources</td>
<td>4 - 5 2 3</td>
<td>14</td>
</tr>
<tr>
<td>Lack of IT Support/Tools</td>
<td>2 4 4 4 -</td>
<td>14</td>
</tr>
<tr>
<td>Inadequate Reporting/Documentation</td>
<td>1 3 3 4 3</td>
<td>14</td>
</tr>
<tr>
<td>Lack of Understanding on Obligations</td>
<td>5 5 3 - -</td>
<td>13</td>
</tr>
<tr>
<td>Inadequate Monitoring</td>
<td>3 5 3 1 1</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 1. Core Challenges identified by Compliance Management Practitioners.

In the following discussion, we focus primarily on the higher ranked challenges. As shown in Table 1, practitioners identified the frequent changes in regulation as the highest ranking challenge in dealing with compliance management. This challenge is closely followed by lack of compliance culture, lack of top level management support, lack of efficient risk management practice, and difficulties to integrate compliance needs. Other challenges i.e. lack of perception of compliance as a value-add, lack of resources, lack of IT support/tools, inadequate reporting/documentation, lack of understanding of obligations, and inadequate monitoring; while not ranked as highly, are still considered as significant by the participants.

We now turn to our efforts to identify whether the perceptions of practitioners are mirrored or supported by the opinion of compliance management experts (auditors/consultants). Syed Abdullah et al. (2010) identified, via a series of interviews, challenges perceived by experts and classified these into three categories, viz. challenges relating to: regulatees, regulations and solutions. The final challenges from the qualitative study are presented in Table 2. We believe that consolidating the viewpoints of both practitioners and expert can facilitate deeper insight and understanding of challenges faced by the compliance management professional community in general and will lead to better focused research that more readily addresses industry needs.
By consolidating both tables (Table 1 and Table 2), we found that both sets of stakeholders (practitioners and experts) share similar opinions on current challenges. Table 3 depicts the overlapped issues and challenges as identified by the two groups namely practitioners and experts.

<table>
<thead>
<tr>
<th>Practitioner Challenges</th>
<th>Mapping to Experts’ Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Regulatees</td>
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<tr>
<td>Frequent Changes in Regulation</td>
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<td>X</td>
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</tbody>
</table>

Table 3. Overlapped Issues and Challenges as Identified by Practitioners and Experts.

In the discussion that follows, we present a detailed insight into the various challenges, including a summary interpretation of the challenge itself as well as a comparison of the two perspectives of compliance management practitioners and experts.

### 4.1 Frequent Changes in Regulation

Regulations are subjected to frequent changes (Robinson and Hawkins 2004). Different geographical regions, introduction of new government, and violation of current regulations may result in updates to the regulation. This inevitable situation forces organisations not only to be aware of the newly introduced regulations but also to ensure their business will be able to comply with the changes as required. Compliance management practitioners suggest that regulatory changes require a holistic approach across the organisation in order to be properly addressed. One practitioner highlights “updating process controls when new regulations or obligations change at a micro level (processes not documented in detail)” as one of the main challenges that need to be addressed. Their view is also supported by another practitioner who identifies “effective documentation - up to date with legal/regulatory changes” as the most significant challenge in compliance management. The concern on the regulatory changes also shared by the compliance management experts which suggest that frequent regulation updates contribute to organisations becoming inefficient in meeting obligations. More spending, especially associated with on-going costs also needs to be undertaken - such as, for example, cost to re-train employees in accordance with the changes.
4.2 Lack of Compliance Culture

Culture associated challenges are connected with the acceptability and adaptability of the people with the new regulation introduced (Warkentin et al. 2006). In this case, the challenge is to infuse compliance management into the organisation. Although considered as difficult to achieve (Morton 2005), planning the right initiatives towards compliance culture is expected to offer organisations a good return. Compliance management practitioners indicate that most culture associated issues are related to management commitment and the overall organisational culture. This is indicated in practitioners’ responses which identify the following issues: “management buy-in/commitment to cultural change”, “top management commitment”, “organisational culture to accept change & compliance; obtaining buy-in by staff for implementation of change”, and “establishing a compliance culture within front line staff”. A similar perception also shared by the compliance management experts who indicate that culture plays a vital role in inculcating compliance. Experts relate culture associated challenges with top level management beliefs, readiness of operational level, and mindset of the organisation.

4.3 Lack of Efficient Risk Management

Most organisations tend to see compliance as part of a risk management framework. Therefore, it is essential for them to have an effective risk management framework in place. Developing effective risk management begins with a clear understanding of an organisation’s appetite for risk (Abrams et al. 2007). Given the frequently changing nature of regulations, keeping business processes and practices aligned with the regulation requirements, as well as with the organisation’s risk appetite, adds a further level of complexity to compliance management. This issue disclosed by one of the practitioners who indicating, for example, that “constant change in business structure and priority activities results in changes in risk appetite” as one of the challenges in compliance management. This view is supported by another practitioner who suggests that “there should be a balance consideration between risks of not doing versus complex compliance controls in deciding risk appetite in a competitive market”. The same issue also highlighted by compliance management experts as one of the greatest challenges, namely ensuring that a risk assessment framework aligns with the organization’s risk appetite as well as requisite regulatory requirements. Experts also highlight that regulatory risk is not transferable. Thus, organisations cannot escape from their obligations. As a consequence, organisations need additional care in dealing with regulation risk, as violations may not only incur fines, penalties, and cost of remediation work, but also reputational damage. Both, practitioners’ and experts’ views are found align with (KPMG 2008) recommendation which suggest risk appetite for an organisation to incorporate a balance mix of both quantitative and qualitative measures. Qualitative measures here referred to reputational impact, management effort, and regulatory compliance. This is also implying that compliance initiatives rely on the amount of risk organisation willing to take.

4.4 Lack of Perception of Compliance as Value-Add (Business Value)

Appreciating the existence of compliance controls embedded in their business processes remains a challenge for most organisations. One practitioner highlights that “measurement of the value-added offered by compliance to the business” as the challenge that should be addressed. This view is also supported by the other practitioners, who identify the following related challenges: “business sees compliance as inhibitor”, “business recognising the value add, i.e. implications of not complying, …”, “education of management/board - to see compliance as more than policeman”, “ensuring compliance is not seen as an add-on function which needs its own processes & therefore increases workload”. The same issue also attracts the concern from compliance management experts. Compliance management experts indicate that some organisations argue that they see no returns for the time consuming and expensive documentation that compliance often requires. Experts also highlight that some organisations believe that risk and compliance frameworks add complexity to the business. Both points of view from compliance professionals indicate that although there is value-add for the
business in managing compliance effectively, the general perception of practitioners and even top level management seems to indicate otherwise, and needs to be changed.

4.5 Lack of Resources

Managing regulatory compliance is a burden that can drain the resources out of even the most robust and well-run business (Bace et al. 2006). Therefore, allocating reasonable resources for managing compliance within organisations is considered as another contributing factor towards good compliance governance. Since cost is explicitly mentioned by many practitioners, we consider the issue of cost to be a separate issue to that of resources, which is related to human resources, IT resources, etc. The practitioners’ indicate that organisations faced difficulties in finding and allocating the qualified staff for compliance tasks. This is implied through the practitioners’ responses e.g. “lack of resources to identify/manage risks across the business” and “finding qualified staff”. This view is also supported by the compliance management experts. Compliance management experts highlighted the lack of allocated resources particularly for advisory services results in the organisation to overlook problems in their business processes. The experts also argue that many organisations do not have sufficient expertise to analyse existing processes wrt. relevant regulations. While, intuitively, one may discard such insights as being borne out of a vested interest in ensuring that organisations continue to spend on advisory services (after all, many of the experts are consultants), the findings are supported by the practitioners in the earlier discussion.

4.6 Inadequate Reporting/Documentation

Reporting/documentation challenges in compliance management are mostly associated with the need to demonstrate compliance and the need to address changes in regulations. One practitioner highlights that it is challenging to provide compliance which is “demonstrable, defendable, and documented towards ongoing monitoring”. This view is also supported by other practitioners who indicate challenges such as, “ensuring practice matches documentation - doing it in accordance with documents - issue of normalised deviation”, “process documentation & maintenance conformance with documented processes”, and “evidencing compliance”. The same issue also emphasized by compliance management experts who indicate that effective demonstration techniques are necessary for every organisation in order to prove to regulators that their business processes conform to obligations. Compliance experts emphasise that difficulties in demonstrating compliance could be the consequence of ineffective documentation mechanisms (they fail to record incidents of activities that are associated with non-compliance).

4.7 Inadequate Monitoring

Monitoring compliance is associated with the use of tools to assist monitoring of organisation’s business operations. The need for comprehensive compliance monitoring tools is also highlighted by practitioners as one of the challenges. The practitioners’ responses indicate that compliance monitoring activities need to be continuous and cover various levels and degrees of compliance, and able to provide them with knowledge of the activities found crucial to the organisation in reviewing their compliance status. These challenges have been articulated by the practitioners as “monitoring ongoing compliance at all levels in an efficient, effective way”, “ongoing control testing & monitoring to determine compliance status”, “conducting effective compliance monitoring reviews”, and “establishing/monitoring different degrees of compliance (e.g. "best endeavours")”. Comprehensive monitoring tools also being the concern of compliance management experts. Experts suggest challenges in monitoring usually occur as a result of the sizeable volume of transactions, the arbitrary occurrence of fraud, and inability to trace back the breach. This leads to a need for comprehensive monitoring tools that have the ability to oversee all business operations, to issue breach reporting, and to provide incident recording.
4.8 Lack of IT Support/Tools

Information technology (IT) has been identified as a key enabler to help companies manage compliance imperatives and to minimize related risks (Butler and McGovern 2008). Most practitioners’ responses focus on IT systems and software in highlighting the lack of IT support. This is indicated through their responses such as “IT support to implement compliance objectives is critical”, “lack of software”, “the time to source & test appropriate IT systems”, “time to implement the chosen IT system & to integrate it with correct systems”, and “finding appropriate software to manage compliance”. The similar view also shared by the compliance management experts. Given the high investment associated with IT investment, compliance management experts recommend organisations to take careful measures in identifying the correct tools and the suitability of tool features to their requirements. The experts also suggest that IT tools be equipped with the ability to assist organisations in monitoring and reporting compliance violations, to perform self-assessment on compliance status, and to provide newsfeed, alert, updates on regulation changes.

5 DISCUSSION

Meeting regulatory compliance requirements is associated with significant spending in organisations. Many studies, Leuz (2007) and Zhang (2007) for example, have explored the effect and economic consequences of regulatory compliance on the organisation. In the end, cost of compliance is one of the vital issues that make organisations hesitant to put a compliance framework in place (Kharbili et al. 2008). Accordingly, we were surprised to find in our study that the challenge of cost, while mentioned, was not highly ranked. In the final ranking obtained from the practitioner survey, cost ranked 12th in terms of criticality of the challenge. We believe that cost, although not ranked as highly as the other eleven challenges, still remains the concern of many organisations. The survey responses show that cost was mentioned by three compliance officers, four compliance managers, and two participants from the top management level of the organisation. We posit that practitioners in the roles of compliance officers do not have the responsibility for financial decisions in the organisation, hence they do not identify cost as a critical challenge. On the other hand, compliance managers and top management may have a different view of the situation. Compliance management experts associate the cost for compliance management with the size of the company. They suggest that allocating cost for compliance management is challenging especially for small to medium sized companies (SMEs). Due to the human resources and financial capital limitations, these companies are found to struggle to put a compliance framework in place. Another concern of the expert regarding the cost-related issue is that of compliance being seen as a cost rather than an opportunity. Both insights by the experts are also shared by the compliance management practitioners. Practitioners associate the challenges with “cost of keeping up with requirements” and “difficulty in showing ROI for compliance”.

Beside the challenges agreed on by both compliance management experts and practitioners, other challenges identified by either stakeholder present distinctive viewpoints. Even though not listed as a challenge by experts, top level management and integration are the challenges experienced by practitioners who spend most of their time dealing with the organisational activities and personnel (as opposed to the experts who are generally brought in after top level management approves the expense related to their involvement). We posit that both issues are found as a result of challenges experienced specifically by the compliance management practitioners. Our interpretation is based on the following responses by the practitioners who addressed senior/top level management buy-in as one of the core challenges. Their concern on top level management challenges is reflected through their responses e.g. “top management commitment”, “active management & supervision”, “commitment from the leadership”, “executive buy-in to obtain further resources...”, “having business units top-down develop & enhance compliance plan”, “obtaining management buy-in”, “acceptance by executive management”, “securing senior management buy-in”, and “senior management support/buy-in”.

Among integration issues highlighted by the practitioners, difficulties to integrate or to embed compliance mechanisms into business processes are perceived. This challenge relates to identification of the appropriate approaches to deal with compliance requirements. Other contributing factors
toward challenging integration task also include the difficulty to synchronise language used by the process designers with language used by the policy/regulatory experts. Consequently, the policy/regulatory requirements are wrongly or overly embedded in the processes. This situation is highlighted by practitioners with comments such as: “system/process designers speak a different 'language' to policy/regulatory experts” and “ensuring we don't over comply, complex regulation often leads to complex controls as concern is we will under comply.”.

While not highlighted by the practitioners, other challenges i.e. difficulties in demonstrating compliance evidence, lack of proactive approach, lack of communication among staff, legislation weaknesses, inconsistencies, overlap in regulations, and lack of practices yet still require the proper consideration in planning for compliance management research agenda. In particular, these challenges are based on perceptions of compliance management experts.

6 ROLE OF INFORMATION SYSTEMS RESEARCH IN ADVANCING COMPLIANCE MANAGEMENT PRACTICE

The consolidated views of compliance management challenges from practitioner and expert perspectives provide us with the basis to profile the role of information systems research in advancing compliance management practice. We believe that proper profiling of information systems research will explicitly highlight the possible significance contributions of IS research community in compliance management practice. In the following, we outline how IS research can assist organisations in advancing compliance management practice with respect to eight main overlapped challenges identified by practitioners and experts.

In the first place, we suggest that IS research may help to investigate and introduce more pro-active solutions in managing frequent changes of regulation. Adaptable or flexible information systems and business process management is a well studied area in IS. Contributing towards this, studies can be initiated by the IS community to improve the adaptability of existing compliance initiatives towards new or changing regulatory requirements, resulting in “regulatory-friendly” compliance regimens.

A lack of compliance culture has also been identified as a challenge. Case studies that highlight or show compliance management as an opportunity with business value can be instrumental in changing perceptions of compliance. Community awareness through such benchmarking studies, which IS researchers are well equipped to handle, help organisations cultivate a positive compliance culture.

Managing regulatory compliance demands a balance between accountable risk and compliance management frameworks. Therefore, the vast body of knowledge on risk management related research can be utilized by IS researchers to provide assistance in formulating such frameworks. This proper utilisation of knowledge will provide an organisation with a framework that strategically incorporate and relate the risk appetite of the organisation and their compliance requirements.

Clear understanding of compliance returns is essential to improve compliance practice within organizations. IS research can help through developing a comprehensive model that incorporates the compliance investments, types of benefits the business may gain and the related beneficiaries. This conceptualisation of compliance return can be expected to improve the organisations’ perception of the value provided by compliance.

IS research is well positioned to address problems related with managing resources in information systems development. We believe a proper understanding on resource allocation for management of compliance can be developed through IS research. Such understanding will be helpful for top management to see the importance of compliance management resources, thus, improving the allocation of appropriate and sufficient resources for managing compliance related tasks.

Improving the existing compliance management tools to ease, encourage and enforce (when needed) compliance reporting, documentation, and monitoring is another vital role that IS research could contribute to. This role calls for an elementary study of the components and “state of the art” features
that should be incorporated in compliance management tools i.e. frameworks, guidance and software. Such study would provide better usability of the compliance management tool landscape and identify desired or missing functionalities.

Finally, we recommend a study to formulate a matrix of tools to support compliance management tasks, and related compliance management activities. Through such a study, a better understanding of connections between IT offerings and capabilities as well as compliance management tasks in an organisation can be facilitated. Thus, the matrix would assist organisations in planning and implementing better IT support and tools in managing compliance, where little guidance currently exists.

7 CONCLUSIONS

This paper provides an exploration of the challenges in compliance management practice as perceived by compliance management practitioners. Additionally, we have presented and described the consolidated views of compliance management practitioners and experts with respect to compliance management challenges. Further, we outlined the roles of information systems research aimed at advancing compliance management practice. We believe the identified roles will be of interest to the IS research community in particular as they were derived from challenges perceived by both practitioners’ experiences and experts’ views.

Our study is not without limitations. Apart from focus on the practice of compliance management in Australia, this study is also limited in term of inputs from other stakeholders in the organisation. Further studies that incorporate views from other stakeholders such as top management and operational level personnel will be beneficial to provide the aggregated views of the challenges. Given the respondent in our study are compliance management practitioners, our study also did not delve deeply in details issues related with IS development and implementation in within compliance management domain. In our study, we have taken careful measures throughout codification and coding processes to ensure the neutrality of the analysis, but due to the qualitative nature of the study, we acknowledge that there can always be an element of subjectivity.

References


