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Uncovering Business Benefits From Regulatory Compliance Systems

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Abstract

Information Technology (IT) has become one of the critical components that facilitates any banking institutions' ability to meet regulatory requirements, in an efficient and a cost-effective way. In many instances, dedicated regulatory IT systems have been established, and comparable to most implementations, they are often considered a significant investment. Viewed from the longstanding debate on the value of IT investments to organisations, empirical research within the IS domain seems to have placed less emphasis on the possible business contribution of regulatory IT implementations. This paper has attempted to fill this gap by investigating the implementation of anti-money laundering and counter terrorism financing (AML/CFT) systems within banking institutions. Arising from this study, important new insights into the variety of business benefits, that might arise from the implementation of a regulatory system, has been identified.

Keywords: IT value; benefits realisation; compliance systems

1.0 Introduction

The financial services sector has long been one of the largest investors in IT due to the digital characteristics of its products and services (Ray et al., 2005). Moreover, because of increasing competition, financial institutions are required to routinely implement new technologies just to remain viable (Lee and Bose, 2002), which often has significant impacts on the design of their internal processes, as well as the ways their services are delivered (Berger, 2003). IT has become a critical ingredient and strategic necessity, and failure to swiftly and successfully integrate new technologies may threaten these institutions' very survival (Mahmood and Mann, 2005, Ray et al., 2005). Although most IT investment, within the financial services sector, is driven by clear business needs, an increasingly important influence stems from the wide variety of regulatory requirements with which institutions must comply. Regulatory requirements here can be defined as a form of statutory request, from a regulatory authority, that typically dictate and / or restrict the behaviour of financial institutions, within a specific area of activity.

Due to its propensity to attract the interest of criminals (Kay, 1999), the financial industry is one of the most heavily regulated areas of organisational activity (Weidenmier and Ramamoorti, 2006). Institutions not abiding by regulatory requirements will be exposed to potentially adverse consequences, as breaches can often lead to hefty fines or lawsuits, damage to reputation, or even loss of license to conduct business (Weidenmier and Ramamoorti, 2006, Adams, 2012). For example, the HSBC Bank attracted a hefty fine of $1.9 billion, arising from its failed AML/CFT controls, which allowed the proceeds from drugs and financial transactions, to enter the U.S. financial system (BBC News, 2012).

It is now widely acknowledged that the increasing number of regulations is significantly impacting financial services organisations, and making considerable demands on their IT infrastructures and processes (Adams, 2012). Indeed, due to the complexity of compliance processes, and the speed with which regulatory reporting has to be undertaken, it can only be achieved through the utilisation of IT systems (Lurie, 2004). Therefore, IT is increasingly considered to be a critical component, if

not the critical component, that allows organisations to cost-effectively comply with regulations (Damianides, 2006, Lurie, 2004).

Against this backdrop, the broad aim of this paper is to understand the possible complementary business benefits that might arise from IT investments that have been approved, primarily as a cost-effective response to new regulatory requirements. Therefore, this paper will make a significant departure from mainstream studies of IT value, within the IS domain, by focusing solely on the impacts of regulatory IT system implementations. The rest of this paper is structured as follows. First it will provide further critical review of the literature, including suggestions on potential IT value arising from organisations' regulatory IT implementations. It will then discuss the specific objectives, the research framework, and the research methods adopted by the study. A summary of the findings is presented, together with a framework that can be utilised to structurally assess the possible benefits of any regulatory IT implementations. Finally, the implications of this study, and it associated limitations, will also be discussed accordingly.

2.0 Research Background

2.1 IT Value

Arising from the growing levels of IT expenditure, as well as the critical role of IT in organisational processes, the returns that organisations obtain from their IT investments has been a topic of considerable interest to practitioners and researchers, alike (Chau et al., 2007, Ward et al., 1996, Schryen, 2013). This situation has led to attempts by IS researchers to empirically explore this phenomena (Mahmood and Mann, 2005, Lee and Bose, 2002). However, demonstrating the consequences of IT utilisation on organisational performance has been challenging (Mahmood and Mann, 2000), as all too often, the results from studies have been conflicting and inconclusive (Lee and Bose, 2002, Mahmood and Mann, 2005, Ray et al., 2005). Some researchers have suggested that utilising firm-level orientation as the unit of analysis, and using objective financial measures such as firm's value and return on investment (ROI) (Chau et al., 2007), might pose incorrect or misleading results (Doherty and Terry, 2009, Ray et al., 2004). Instead, a better representation of IT value assessment is said

to be through alternatively conducting a study at a more granular process-level outcomes as the unit of analysis, such as from the perspective of individual IS initiative (Doherty and Terry, 2009, Ray et al., 2005, Bhatt and Grover, 2005).

2.2 IT Value from Regulatory Compliance

Moving to the perspective of regulatory compliance, in general, the industry's view of the activities that are induced or stimulated by requirements arising from the regulatory authorities, has largely been regarded problematic. Compliance is widely perceived to be costly and resource intensive (van Oosterhout et al., 2006, Pakravan, 2011), and it also reduces process efficiency (Barth et al., 2004, Hüpkes and Zibung, 2008). While this situation is completely understandable, there are nevertheless differing discussions in the literature that have drawn interest to a contrasting perspective, i.e. namely leveraging regulatory compliance activities, to directly benefit the organisation's business, as discussed in the subsequent paragraphs.

The first perspective of potential benefits from leveraging regulatory compliance activities is seen rooted on the understanding that regulatory requirements are typically unavoidable and thus need to be adhered to. Therefore, the possible benefits suggested by this first viewpoint are in the form of increasing organisations' compliance efficiencies, and effectiveness in achieving the intended regulatory objectives and outcomes, such as through eliminating redundancy of efforts and using common approaches. It was suggested that dealing with each regulation individually and treating them as an isolated event just for the sake of complying will be ineffective and costly as they are too many, too complex and will increase over time (Lurie, 2004, Mayer, 2003, Schlarman, 2007). Therefore, this body of literature has called for the minimisation of compliance costs through identifying similar IT changes required, and performing them simultaneously or concurrently (Mayer, 2003). A single set of controls can be used to comply with multiple regulations due to the similarity in the way data are arranged and the common requirement of regulations to maintain data integrity and security (Wagner and Dittmar, 2006). It has also been suggested that organisations take a broader approach by establishing compliance programs that include common methodologies, structures and templates for meeting existing and expected compliance requirements (Gable, 2005).

In contrast, a second perspective from another body of literature has called for viewing compliance activities beyond mere regulatory purposes, and to use it as a catalyst for the leveraging of complementary business benefits. This goal can be achieved by taking the opportunity to incorporate extended activities, additional considerations or optional changes that may directly benefit the organisation's business. Since regulatory requirements tend to highlight the expected goals and outcomes, without normally explaining the means (Lurie, 2004, Gable, 2005), it is therefore sensible for organisations to take the opportunity to incorporate additional goals and objectives within their IT regulatory implementations. Garcia (2004) has suggested that organisations that are forward-thinking should combine tactical business requirements with strategic performance opportunities, and view compliance as an opportunity to transform business processes and improve business performance. Organisations will therefore not only meet regulatory requirements, but also seize the opportunity to implement concurrent IT enhancements that support valid business goals (Garcia, 2004). In addition, Volonino et al. (2004) has posited that if organisations view regulation as an opportunity to enhance operations, they will be able to gain prolonged strategic value from business improvements and competitive advantage. In order to gain maximum return on investment in compliance and enable IT to contribute to the long term growth, organisations should approach compliance holistically (Volonino et al., 2004). In the case of SOX requirements, some organisations have shifted their focus from compliance as a '*necessary evil*', to compliance as a '*competitive advantage*'(Damianides, 2006). Some executives that recognised SOX's potential, at its inception, have already figured out how to utilise the new regulations to realise organisational improvement plans (Wagner and Dittmar, 2006).

Whilst the this emerging body of literature on the potential to leverage complementary benefits, when complying with regulation, is extremely thought provoking, it is important to note that it has been largely composed of conceptual, rather than empirical, studies. However, regulation and compliance do feature in several empirical studies of information systems. For example, in a study conducted by Bharadwaj et al. (1999), regulation was used as a dummy variable to classify whether firms included in the analysis, are operated in a regulated industry or not.

Another study conducted by Hu et al. (2007) had attempted to explore how SOX regulation and internal influences had affected the organisation's information systems security implementations. It is important to note that in neither of these studies was the possibility of leveraging regulatory IT implementations, to deliver business value, explicitly addressed.

Thus far, only one empirical study appears to have explored whether regulatory systems can be leveraged for wider business benefits. Krell and Matook's (2009) study explored the effectiveness of formal planning methods, which address both mandatory and optional IS investments, for selected low-cost firms in Australia. In this study, the mandatory IS investments imposed by government regulations are regarded to be over and above the optional IS expenditure, relating to normal business needs. By utilising formal planning methods (i.e. business cases; internal contractual arrangements; and post-implementation reviews), it is argued that low-cost firms would be able to combine mandatory and optional investments that would facilitate the attainment of competitive advantage. Results of their study have indicated that only two out of three methods are positively related to competitive advantage.

2.3 Critique of Literature and Research Objectives

The findings of the Krell and Matook (2009) study gave us much reassurance that it could be both feasible and interesting to explore how regulatory IT implementations have been leveraged to directly benefit the business. However, it is important to note that the low-cost firms used in their study offered a very different context to the far more sophisticated and high-cost banking institutions, which are to be the focal point of this study. Therefore, it appears that there is no existing empirical information systems research that has truly attempted to explore and provide sufficient understanding of the possible value that can be leveraged from banking institutions' regulatory IT investments. It was therefore envisaged that a study enhancing our understanding in this respect would make an interesting and potentially significant contribution to the literature.

More specifically, existing literature has provided little evidence of how regulatory IT implementations could provide value to banking institutions through basic compliance

activities (***first research gap***). It is envisaged that this type of value can be accomplished through, for example, minimising the associated compliance cost (i.e. by reducing the redundancy of efforts through identifying similarities in requirements and performing required IT changes simultaneously) (Mayer, 2003). For the purpose of this study, this type of value has been classified as *compliance benefits*, as they are regarded as expected or anticipated outcomes, arising from organisation's efforts to simply meet regulatory requirements. Compliance benefits are therefore accomplished through implementing the fundamental activities required through achieving the expected regulatory deliverables, and avoiding any potential penalties that may be imposed due to lack of compliance.

In addition, there is also lack of understanding on the possible value that is directly benefiting banking business, which could be generated from activities beyond mere regulatory compliance, i.e. by exploring other activities, considerations or changes (***second research gap)***. This type of value has been classified as *supplementary benefits*, arising from the organisation's ability to broaden the fundamental efforts of regulatory compliance, and is achieved over and above to the ones that are usually expected and anticipated. It is important to note at this juncture that for the purpose of this study, the term *compliance*, and *supplementary benefits* will be used as a proxy to refer to IT value. This is done in order to clearly distinguish the two aspects of IT value that are associated with compliance led IT investments.

Against this backdrop, we identified two research objectives, which will be elaborated in the following paragraphs, and have been depicted in Figure 1. This figure is also to assist in the understanding of potential relationships that may exist, as well as aiding in setting the focus and boundary of the study. Miles and Huberman (1994: p. 17) have highlighted that *"any researcher, no matter how unstructured or inductive, comes to fieldwork with some orienting ideas."*

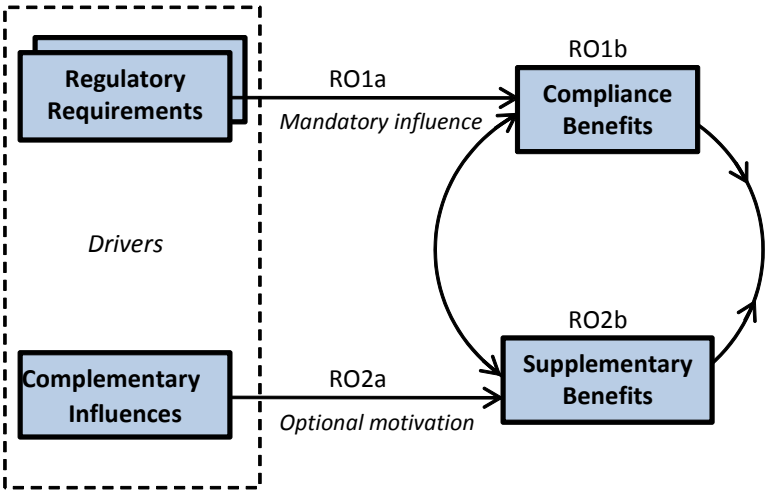

Figure 1: The Research Framework

Our broad interest in how value might best be realised from compliance activities was explicitly explored through the following objectives:

- *RO1a: To understand the overall approaches and mechanisms by which banking institutions translate the regulators' requirements into functional specifications for their compliance system;*
- *RO1b: To understand and appreciate instances of compliance benefits arising from banking institutions meeting the regulatory requirements.*

Our interest in how value might best be realised from incidental organisational activities was explicitly explored through the following objectives:

- *RO2a: To understand the approaches and mechanisms by which banking institutions take into account other influences, when responding to regulators' requirements;*
- *RO2b: To understand and appreciate instances of supplementary benefits that directly benefit banking business, arising from banking institutions decision to leverage compliance activities.*

In **Figure 1**, the distinct compliance and complementary influences, have been represented jointly, as drivers (see dashed rectangle), to indicate that organisations might be well advised to take account of complementary influences, when deciding how best to respond to new regulations. Moreover, the regulatory requirements have been represented as overlapping rectangles, to indicate that in circumstances in which banks are responding to multiple regulatory requirements, simultaneously, then it is better to address then jointly, rather than responding to each in isolation (Mayer,

2003, Wagner and Dittmar, 2006). The overlapping rectangles are also intended to indicate the possibility of banks leveraging existing compliance responses, to address any new and similar requirements, to reduce the likelihood of 'reinventing the wheel'(Gable, 2005).

3.0 Research Methods

The debate on whether quantitative or qualitative assessment is considered to be a better option for measuring IT benefits has been extensively discussed in the IS literature (Bharadwaj et al., 1999, Mahmood and Mann, 2000, Chan, 2000, Chau et al., 2007). In the past, IT benefits have primarily been measured using the quantitative approaches, such as reduced labour and increased throughput (Bharadwaj et al., 1999). Indeed, many researchers have serious reservations about the utilisation qualitative approach, based upon perceptual assessments, as respondents may not necessarily state what they believe or do what they have claimed (Chau et al., 2007). By contrast, it has been argued that reliance on financial data, is one of the reasons why traditional analyses of IT benefits have not been very successful (Mahmood and Mann, 2000, Chan, 2000). Therefore, a more balanced view of IT value is encouraged, to gain better insights and meaningful analysis (Chan, 2000), as well as identifying possible *hidden costs and benefits* (Mahmood and Mann, 2000).

In the context of this study, it was envisaged that difficulties may arise if quantitative indicators were used to assess possible value of regulatory IT implementations. This situation can be attributed to the typical nature of regulatory related IT investments, in which they are most likely not being established to directly benefit organisation's business, improve revenue, or enhance business efficiencies. In situations where there is little prior research that has empirically examine the area of interest, an exploratory approach (Bowen, 2005), supported by qualitative data collection, is regarded as a more viable option. Hence, in view of these important considerations, this study has adopted a qualitative research strategy. This research approach can be used to obtain in-depth and richer understanding, such as the thought processes and experiences, which would be difficult to extract through alternative methods (Bowen, 2005). Importantly, Myers (1997) highlighted research using qualitative dimensions has progressively become more useful as the spotlight of IS research moved from

technological to managerial and organisational issues. Therefore, by utilising qualitative assessments, this paper will further distinguish itself from previous work of some IS researchers, such as Krell and Matook's (2009), which had employed a quantitative perspective. In addition, this study had utilised primary data collected through the interview approach, and therefore will not be relying on a secondary dataset.

Overall, the study had adopted a four stage data collection exercise, and conducted a total of 52 interviews in various banking institutions, including the regulatory authority in Malaysia [see Appendix A]. The key stages were: pilot interviews via phone; first and second data gathering via face-to-face interviews; as well as the supplementary data collection exercises via phone. In conducting the interviews, the principle of *theoretical saturation* was used, as far as possible, to determine whether it would be necessary to conduct further interviews. Theoretical saturation in this context can be regarded as a situation when new concepts have been explored in full, and therefore no new further insights are deemed to be available (Bryman, 2008). Consequently, the motivation is not to maximise the number of interviews, but rather to be saturated with the information being sought, and thus focusing on quality, rather than quantity (Bowen, 2005).

In addition, a *mixed-design approach* has been adopted, by firstly utilising cross-sectional, and subsequently, comparative research designs at separate stages of the research. This approach is in line with the literature, which have suggested that in determining the best approach that would be suitable for a research, deliberate choices need to be made on *"alternating and/or combining/integrating methods as the study proceeds"* (Miles and Huberman, 1994: p. 174). The decision to initially adopt a *cross-sectional design* during the first phase of data collection can be attributed to the understanding that while the notion of benefits may be credible arising from the review of the literature, there could always be instances where such benefits may not be detectable for various reasons. Hence, the approach adopted during the first phase was *exploratory* in nature, taking on the principle that the organisation is to be treated as the unit of analysis. This is done as it was aiming to understand and appreciate the likelihood of benefits arising from the implementation of regulatory driven IT systems in banking institutions. Nevertheless, when benefits had eventually been identified,

the plausible approach going forward was not be to continue with the exploratory approach, but rather to gain deeper *explanatory* insights. For that reason, the study adopted a *comparative design* approach during the second phase, in order to obtain richer understanding, by primarily concentrating on a smaller set of banking institutions (i.e. identified as Bank A and B), as well as focussing upon an individual IS initiative (i.e. the AML/CFT IT system) as the unit of analysis.

The data collection was conducted using a semi-structured interview approach (Hu et al., 2007, Doherty et al., 2006, Doherty et al., 2012), with some interviewees being interviewed more than one occasion (Bryman, 2008). In addition, open ended questions had also been utilised, especially in any situation where it was deemed desirable to attain a more detailed and comprehensive explanation from our interviewees. In ter, the study has targeted three general categories of research participants. The first category will be members of staff from the Compliance department, who are typically made responsible for the implementation of organisation's activities that relate to the management of regulatory requirements. Meanwhile, the second category of research participant comprises staff from the IT department, as they are perceived to be the key party responsible for or assisting in the implementation of regulatory IT systems in the organisation. The last category of research participant was obtained from relevant business departments that are most likely to have realised business benefits from regulatory compliance activities.

Staff holding some managerial position were targeted on this study, as managers are said to be the most informed people on issues of IT utilisation, and therefore would be in an excellent position to evaluate IT value in their organisation (Doherty and Terry, 2009). Also, interviewing business executives is important for the research as they are considered ideal to act as key informants in a qualitative assessment of IT benefits (Tallon et al., 2000). Business executives are typically direct consumers of IT, and thus would be proficient to establish an overall perception of IT benefits based on their personal experience (Tallon et al., 2000). Moreover, as suggested by Tallon et al. (2000: p. 146), *"by virtue of their seniority within the corporation, business executives are in an ideal position to identify how and where IT creates value for the business."* To complement this very significant, interview-based data collection exercise, a comprehensive review of relevant documentation (both public and private)

was conducted, to provide an alternative perspective. For example, we obtained important documents from the Basel Committee, the FATF, the UN and the Central Bank of Malaysia, as well as from Banks A and B.

4.0 Research Results

The aim of this section is to review the results of this study, in respect of each of the stated research objectives.

4.1 Value from Basic Compliance Activities

In relation to **RO1a**, there was lack of evidence to suggest that organisations were utilising predetermined methodologies; structures; or templates, which could be viewed as a standard approach or mechanism to facilitate regulatory compliance. Rather responding to regulatory requirements was generally treated as an ad-hoc activity. In practice, we found no evidence to support the view that efficiency could be increased and costs reduced, through the adoption of standardised compliance approaches. Although compliance projects were always treated as a very high priority, because of the potential adverse repercussions that might ensue from a regulatory authority, this had not been translated into any standard, formal and enterprise-wide response strategies.

Meanwhile, with respect to **RO1b**, it is interesting to note that a wide range of benefits, which stemmed directly from banking institutions efforts to meet regulatory requirements were readily found. A total of fifteen distinct compliance benefits were uncovered by the research, which could be divided into five categories [see Table 1]. These results are important as they demonstrate that even when organisations aren't explicitly looking to realise complementary benefits, the mere act of compliance often has some positive impacts on organisational performance.

Category	Description	Name
Customer Verification Benefits	Benefits of being able to effectively authenticate, validate, and ensure the up-to-dateness of customers' identifying information.	Customer Validation
		Information Reliability
		Termination of Business Relationships
Customer Monitoring Benefits	Benefits of continuously monitoring customers' financial activities and patterns due to the need to detect instances of suspected money laundering and terrorism financing (ML/TF) incidences.	Discrepancies in Financial Transactions
		Customer Risk Profiling
		Violations in Threshold Limits
		Politically Related Customers
		Customers from Countries Under Observation
		Matching of Names Under Surveillance
Customer Categorisation Benefits	Benefits from the ability to differentiate organisational customers based on the risk profiling information that has been established due to regulatory requirements.	Differential Engagement Strategy
Computerisation Benefits	Benefits that arise from computerisation and automation of AML/CFT activities.	Management Information System
Reputational Benefits	Benefits that are experienced the organisation as an entity, which will be achieved through complying with all the requirements on AML/CFT.	Effectiveness in Monitoring and Detection
		Mitigation of Regulatory Penalties
		Mitigation of Adverse Organisational Reputation
		Facilitation of Overseas Operations

Table 1: Identified Compliance Benefits

4.2 Value from Broader Compliance Activities

With regard to **RO2a**, there was also little evidence to indicate any formal attempts to incorporate extended activities, additional considerations or optional changes were being carried out by organisations, when responding to regulatory requirements. In effect, organisations were generally found to meet the minimum regulatory requirements, in order not to attract any fines or other sanctions. Ensuring successful compliance is always seen as the overriding principle. A sense of urgency and the absolute priority of being fully compliant were invariably found during the interviews. This situation can be particularly attributed to the understanding that deployment of AML/CFT IT solution was typically the responsibility of a Compliance department. Therefore, it is understandable that the principal motivation to establish these systems

were intended to primarily address compliance objectives, and not to deliberately consider incorporating extra or optional activities.

Despite the primacy of achieving compliance, in relation to **RO2b**, it is important to note that instances of supplementary benefits were detected. However, such benefits could not be associated with any deliberate attempt to extend activities or modify functionality during regulatory compliance efforts. These detected complementary benefits had not arisen from any extended compliance activities, as suggested by the literature (Krell and Matook, 2009). Rather, they are seen to be mainly linked to possible alternative usage of compliance information that had been gathered; processed; and generated by regulatory IT system, upon successful implementation. These supplementary benefits have been detected through the analysis of the interview data, as well as, from a comprehensive review of related documentations [see Appendix B]. Importantly, the analysis had also significantly capitalised on the extensive discussion of compliance benefits in order to provide the discovery and deeper understanding of supplementary benefits.

Table 2 presents the supplementary benefits, also classified into five categories. The smaller number of detected supplementary benefits can be rationalised through the perspective that these benefits were in effect, *not* the expected outcomes of a regulatory driven IT implementation.

Category	Description	Name
Customer Information Benefits	Benefits arising from the opportunity to leverage various readily available customer information established for regulatory purposes.	Leveraging Identification and Background Information
		Leveraging Riskiness Information
Selective Customer Benefits	Benefits arising from the opportunity to utilise the AML/CFT screening process to effectively be selective on the type of customers that the organisation wishes to accept and maintain.	Leveraging Opportunity to be Selective
Fraud Mitigation Benefits	Benefits arising from the opportunity to leverage the functionalities for fraud monitoring and detection that have been incorporated in the AML/CFT IT system.	Leveraging Fraud Functionalities
Information Repository Benefits	Benefits arising from the opportunity to leverage regulatory IT repository established for regulatory purposes.	Leveraging Regulatory IT Repository
Event-based Information Benefits	Benefits arising from the opportunity to leverage selected event-based customer transactional alerts generated by the AML/CFT IT system.	Leveraging Time-critical Event-based Information

Table 2: Identified Supplementary benefits

It is important to note the general sentiment articulated by an interviewee from the regulatory authority, in relation to the supplementary benefits that can be obtained by the organisations arising from complying with AML/CFT requirements. As mentioned by this particular individual, organisations will not be breaching any regulatory requirements if they wish to harvest their compliance investments for business benefits, provided that all requirements have been firstly met:

> *"If I'm running a business, I want to be in compliant with whatever regulations that have been imposed on me. That's not an issue. That's a priority. But at the same time whatever benefits that I can get out of the compliance cost that I have to incur, I will reap that benefits. I don't see anything wrong with it, but again this is my personal view."* (**016**)

The above view has therefore suggested that there are no unwritten rules to prevent organisations from leveraging their regulatory investments to directly benefit business. Hence, it has provided a positive insight and good grounding for organisations to pursue this path, and further justify the significance of this study. Moving forward, it is worth reflecting upon some of the key statements made by interviewees from the financial institutions, with respect to supplementary benefits. For example, in relation to the benefits of leveraging customer riskiness information,

an interviewee had suggested about the potential of using lower customer risk scoring as a basis to enhance the business relationship with customers:

> *"So from day one, you can apply this* [scoring] *to every customer actually, when you start scoring on the location… from which location is the guy, what kind of business he is doing... So you can assign a score. If you find all these are low scores, and it ties in with the business nicely, if they got a lot of money, then you can do something about it."* (**022**)

The above is supported by another interviewee, who also highlighted the opportunity to leverage the information on customers to benefit business in terms of marketing to those that have been classified as low-risk:

> *"If let's say this customer's transactions, maybe probably we classify under high net worth customer, and they are clean. The risk profiling shows that they are low, you know, in terms of risk. So business can leverage these customers to do their selling… marketing…"* (**034**)

Moving to the interview statements pertaining to leveraging opportunity to be selective, one interviewee had explicitly highlighted the opportunity to weed out unwanted customers through AML/CFT implementation, and the organisation's ability to be able obtain (and retain) customers that are valuable to the organisation:

> *"By complying with this Bank Negara's* [central bank's] *requirements, we are able to weed out those customers that don't fall into the category that we want to deal with. Most people who are involved in these things won't really be a valuable customer of the bank."* (**042**)
>
> *"It's good that we are able to weed out these individuals so that more effort, focus and resources can be channelled towards the customers that we want to deal with in the first place. Chances are, this is the one that's going to bring the most benefit to the bank. "*(**042**)

Moving to the interview statements pertaining to leveraging IT repository, an interviewee had provided confirmation regarding the linkage between the AML/CFT system and the system in the CRM department. In this regard, transactional information from AML/CFT system has been used as an input to measure the possibility of enhancing business relationships with customers:

> *"Yes, they* [i.e. the CRM department] *are actually using our AML/CFT system's data to do their data mining and cross-selling. So that is another benefit for the bank."* (**034**)

The above is supported by another interviewee from the CRM department, which had mentioned that by gaining access to transactional information from the AML/CFT

system, the information has been regarded as *"a single source of truth"* (**030**). This is arising from the appreciation that the cleansing process has indeed been implemented, in order to address issues pertaining to missing and incomplete data, as well as ensuring a consistent and coherent formatting. From the CRM department perspective, the AML/CFT system has performed the gate keeper function in ensuring that the quality of data is at the highest level:

> *"So the AML/CFT system has already done the gate keeping, the quality checking before it goes to CRM. So on our side, we can do away with that quality checking knowing what has already put in. So the AML/CFT system has provided us with the single source of truth."* (**030**)

5.0 Discussion

Arising from the many useful findings and insights, presented in this study, it is possible to discern a number of significant new contributions that have been made to the extant research literature. One of the most significant contributions, arising from the empirical evidence, relates to the relationship between the activities undertaken to meet regulatory requirements and the resultant realisation of benefits to the host organisations. More specifically, although regulatory compliance activities are commonly regarded as a cost of doing business that generally burdens the organisation (van Oosterhout et al., 2006, Pakravan, 2011), this study has provided real-life testimony to show that this situation is not always the case. The various expectations for abiding with AML/CFT requirements can, in effect, be effectively evaluated from the perspective of enhancing organisational performance, through the leveraging of the various informational assets that have been made available, as a result of the regulation. Such benefits have been classified as being either compliance benefits or supplementary benefits.

More specifically, this study has explicitly outlined the various compliance benefits that have been experienced by the case study organisations, through their efforts to simply meet AML/CFT regulatory requirements, and thus avoid any associated penalties. Whilst prior studies may have intimated that the introduction of IT to facilitate an organisation's compliance with regulatory requirements may be a sensible and positive strategy, this study is the first to have explicitly articulated a taxonomy of compliance benefits, in any regulatory context. Consequently, the

identification of fifteen distinct compliance benefits to be leveraged from the introduction of AML/CFT systems, is an important new contribution to the literature.

Whilst many previous studies have highlighted the possibility of using customer-related information to leverage improvements in competitive positioning (Subbulakshmi, 2012), no previous studies have explicitly attempted to identify the types of customer-related benefit that might be leveraged from the introduction of regulatory systems. Consequently, this study makes another important contribution by identifying and describing the specific types of customer-facing, supplementary benefits, which financial services organisations might leverage from the implementation of AML/CFT technologies. More specifically, six distinct types of supplementary benefits, which might arise from the implementation of AML/CFT IT systems within banking institutions, have been successfully identified. By so doing, the study has not only managed to place the spotlight on possible benefits arising from regulatory led IT investments, but has also successfully identified and differentiated these two types of benefits, which seemed to have not been attempted by IS researchers in any previous studies. Indeed, value research focusing on mainstream IT systems (Mahmood and Mann, 2005, Peppard et al., 2000, Doherty and Terry, 2009) is abundant, yet, research on compliance systems has been given far less emphasis by IS researchers.

Moving to the managerial implications of this study, an important consequence from the deployment of this research is pertaining to the specific knowledge on regulatory information that could alternatively be used by bankers to directly benefit business. In this regard, information that has been gathered, processed, and generated due to compliance may be used as one of the considerations to assess a customer's potential for an enhanced business relationship. As can be appreciated from the research findings, for example, genuine even-based customer information that is time-critical in nature, detected through AML/CFT monitoring, might indicate specific instances of a customer's needs and wants. Similarly, IT repository containing cleansed customer transactions being gathered and processed for AML/CFT may likewise pose an opportunity to be leveraged by business for efficiency purposes.

Although this study provides many interesting and novel insights, there is now a

pressing need for follow-up studies, which employ different methods and target different populations, not least because of the staggeringly large sums of money that banks will spend on their compliance activities. It has been reported that banking institutions' global IT spending (as well as on operations) in order to comply with AML/CFT requirements is estimated to reach USD5.8 billion in 2013 (Adams, 2012). Consequently, more work is urgently needed to understand how IT-enabled compliance initiatives can best be supported and managed, so that they are increasingly viewed as opportunities to leverage benefits, rather than just as a costly threat.

Appendix A: Profile of Interview Respondents

Institution	Role	Interview No
Bank A	Head of Analytics (Group Compliance)	001[^]; 002[^]; 017*; 044[#]; 045[#]; 046[#]; 049[#]
	IT Department lead for RSA2 system	004; 018*; 048[#]; 052[#]
	Head of Corporate Regulatory	009
	Head of GCIF	019
	AVP National Sales	023
	Head of CRM	024
	Head of National Leads	030; 047[#]; 050[#]
	Chief Information Officer	031
	Head of AML/CFT and Compliance Strategy	003; 034*
	Head of Group Compliance	008; 035*
	Head of Solution Delivery II	036
	Head of Integrated Risk Management	037
	Head of CRM Technology	051
Bank B	Director for Business Process Development	005
	Vice President for Consumer Bank Risk Monitoring	006
	Head of Group Compliance	007
	Director from Corporate Office	010
	Director of Consumer Bank Risk Monitoring	025
	Head of Retail Banking	039
	AVP, IT Department	040
	Head of Preferred Banking	041
	Project Manager from Transformation Office	042
Other Banks (Local)	Head of Branch Operations	012
	Compliance Manager	015
	Head of Group Compliance	020
	Head of Compliance	021
	Head of Operations Risk and Compliance	014; 022*
	Executive Director	026
	Chief IT Officer	027
	Chief Information Officer	038
Other Banks (Foreign)	Regional Head of Compliance and Assurance	011
	Head of Compliance and Corporate Secretary	013
	Compliance Manager	028
	Chief Information Officer	029
Regulatory Authority	Manager of the Central Bank	032
	Deputy Director (2) of the Central Bank	033
	Deputy Director (1) of the Central Bank	016; 043[#]

Note: ^Pilot interview; *Re-interview (via face-to-face); [#]Re-interview (via phone)

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