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## The Clash of the Leaders: The intermix of leadership styles for resource bundling

Completed Research Paper

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#### Abstract

The advent of digital technologies allows line-of-business (LOB) managers to be more involved in organizational innovation. Such involvements of LOB-managers acting as innovation agents challenge the very nature of how firms used to operate in traditional hierarchical structures. This paper investigates how the LOB-managers and chief information officers (CIO) interact in the information technology resource bundling initiatives. Using insights from five case organizations and analyzing data employing the analytic induction method, the study identifies how the leadership of LOB-managers and CIOs intermix in resource bundling process. Finally, the study proposes three leadership engagement models.

**Keywords:** Leadership Styles, Resource Bundling, Qualitative Analysis

#### Introduction

The recent advances in information technology (IT) are fundamentally changing the very nature of how firms conduct their internal business activities (Ebel et al. 2016). Technologies like SMAC-IoT (social, mobile, analytics, cloud and internet-of-things) have provided firms with unprecedented opportunities to innovate especially at the customer-facing departments (Lokuge and Sedera 2016). As such, departments like sales and marketing have received opportunities to contribute to the profit of the organization in a direct way by responding to customer needs and wants. In particular, Swanson (2012) highlights the important role of the line-of-business (LOB) managers who are becoming ever more important in initiating and adopting IT related innovations. A review of recent literature highlights that the availability of digital technologies, ease-of-use, ease-of-learning and relative low prices of the digital technologies are encouraging innovations to be introduced at the grass-root department levels (Brinker and McLellan 2014; Lokuge 2015). As such, to foster firm innovations, front-line facing departments are introducing new roles such as Chief Marketing Technologist, to align relevant marketing technology with business goals, to liaise with IT, and to evaluate and choose technology providers for marketing department (Brinker and McLellan 2014). A study by Gartner identify that 67% of marketing departments plan to increase their spending on technology-related activities over the next two years (Gartner 2016). Even without such specific roles in relation to technologies, anecdotal commentary suggests that LOB-managers are expected to initiate, lead and manage digital technology innovations. For example, Gartner finds that 61% of firms of a sample of North American companies

are increasing capital expenditures on technology at the LOB-levels (Gartner 2016). Researchers highlight the success of a firm's innovativeness depends heavily on the manager's ability to adapt and progress their business models (Andries and Debackere 2007). However, this emerging phenomenon of the LOB-manager's role in IT initiatives challenges the traditional view of firms taking directions only from the chief information officer (CIO) (or its equivalence) (Arnold et al. 2000). In this emerging model, leadership of the LOB-manager within his/her departmental IT innovations must align well with the leadership of the CIO. As highlighted in their work, Augier and Teece (2009, p. 411) argue, [that] "the new world we are in requires a different breed of managers, and highly skilled employees with capacities to combine and integrate." Not surprisingly, the contemporary firms consider leadership to be a critical success factor for innovations (Stock et al. 2014). However, this emerging scenario of the interplay between the leadership of the CIO and the LOB-manager/s in relation to bundling resources for innovation across the phases of initiation, deployment and management of an innovation has received much less attention. In fact, according to Sirmon et al. (2011), the role of a LOB-manager is the most understudied element in resource management literature. Even though, the impact of leadership styles for innovations has been investigated in a few studies (e.g., Sethibe and Steyn 2015), how the CIO and LOB-managers balance their leadership has not been studied.

To investigate the phenomenon of leadership styles in initiating, deployment and management of an innovation, we observe their respective roles in the resource bundling process. Resource bundling is a process of integrating resources to form capabilities (Sirmon et al. 2011). Specifically, in this research, bundling of IT resources for innovation was conceived as the process in which one or more digital technologies are bundled with the existing technologies of the organization for attaining innovation and competitive advantage. More specifically, the study observed the leadership of the LOB-manager/s for digital technology-based initiatives bundling into the existing IT and its effects on the leadership of the CIO.

As such, the main research question of this study is: 'how CIO and the LOB-manager intermix their efforts in bundling IT resources for innovations?' More specifically, we are set to explore how the leadership styles of the CIO and the LOB-manager/s vary across the phases of initiation, deployment and management, in relation to the various types of technology bundling activities. In investigating this main question, we sub-divided the main question to: (i) what are the leadership styles prominent between the CIO and LOB-manager in the bundling process and (ii) what are the manners the two actors engage in the bundling process? To answer these exploratory questions, a qualitative approach was required (Yin 2010).

The remainder of this paper proceeds in the following manner. Next section introduces the key notions of bundling and leadership. The methodology section highlights the data collection process, respondents sample and the analysis method. Subsequently, the study highlights the preliminary findings using five cases. The conclusion section entails key findings, contributions to academia and practice and an outline of the limitations of the study.

#### **Resource Bundling and Leadership**

The primary objective of an organization is to create and sustain business value through the management of organizational resources (Lokuge and Sedera 2017; Sirmon et al. 2011). Prior research on resource management highlights that organizations should accumulate, bundle and leverage their existing resources to obtain competitive advantage (Sedera and Lokuge 2017; Sirmon et al. 2007). In resource management, bundling refers to the process of combining resources to construct or alter organizational capabilities (Sirmon et al. 2008). Resource bundling is a process that ranges from bundling resources to perform a less complicated task to a complex process and each resource bundle fulfill a specific objective of the firm (Hamel and Prahalad 1994). Since bundling is a capability augmenting/altering process, it can be considered as an innovation process which contains several phases (Castanias and Helfat 1991). They are: initiation, deployment and the management of resource bundling. Prior researchers have highlighted that the amount and the types of resources a firm possess determine its ability to initiate business strategies (Grant 1991; Lokuge and Sedera 2014a). Even though competitors have access to the same resources, resource bundling allows firms holding similar resources to produce

different outcomes (Sirmon et al. 2008; Zott 2003). According to Sirmon et al. (2008), there are three different types of bundling processes that produce specific capabilities. They are (i) stabilizing, (ii) enriching and (iii) pioneering. The objective of stabilizing bundling process is to make minor or incremental improvements to the existing capabilities. Enriching bundling process "extends and elaborates a current capability (Sirmon et al. 2007, p. 281)." For example, the capabilities can be extended by including complementary resources. Enriching bundling process integrates and provides greater value over the other bundling types (Sirmon et al. 2007). Pioneering bundling type creates new capabilities in the firm by bundling completely new resources (Sirmon et al. 2008) and this provides greater competitive advantage for the firm.

Contemporary research argues that IT no longer provide the exclusivity for firm on aspects like valuable, inimitable, rare and non-substitutable resources (Lokuge et al. 2016a; Lokuge et al. 2016b; Sedera et al. 2016). However, researchers recognize that commonly available IT could still provide valuable outcomes if they are bundled effectively (e.g., Nevo and Wade 2010; Stankevice and Jucevicius 2010). To the extent bundling is supported by various mechanisms, for example, well-defined scope (Black and Boal 1994; Lokuge and Sedera 2014b), resource availability (Lokuge and Sedera 2014c; Sirmon and Hitt 2003) and managerial actions (Sirmon et al. 2008), the bundling process will provide firms with favorable organizational outcomes. However, not all 'bundling' types will necessarily lead to the intended favorable outcomes. The success of the resource bundling process depends on the leadership ability of the manager (Sirmon et al. 2011). For example, for initiating pioneering bundling type, the managers need to be creative and ambitious (Sirmon et al. 2011). As such, we posit that different leadership styles facilitate different bundling types in a firm.

According to Bass (1985), the leadership theories only focus on the goal and the role of the follower and how leaders reward or penalize the follower behavior, i.e., transactional leadership. Bass (1985) extends this discussion by introducing the role of a leader to "influence followers to transcend selfinterest for the greater good of their units and organizations in order to achieve optimal levels of performance (Antonakis et al. 2003, p. 264)." This type of leadership is referred to as transformational leadership. Antonakis et al. (2003) in their leadership questionnaire identify three types of leadership styles. They are: transactional leadership, transformational leadership and Nontransactional laissezfaire leadership. Usually, the transformational leaders are proactive and they collectively work for achieving extraordinary goals. Antonakis et al. (2003) theorize transformational leaders through five first-order factors: (i) the charismatic nature of the leader, (ii) collectivist actions of the leader (on values, beliefs, goals), (iii) motivating the followers through communicating the vision (Kahai et al. 1997), (iv) challenging the followers to act creatively for finding solutions to difficult problems and (v) satisfying the followers by advising, supporting and providing individual attention. Transactional leaders are typically fulfilling the given contractual obligations and monitor and control the outcomes of a project. This leadership type is theorized through three first-order factors: (i) clarifying the role and requirements and providing endorsements or punishments (Avolio et al. 1999), (ii) watchfulness of a leader in ensuring the standards and (iii) interfering when a noncompliance has occurred (Deichmann and Stam 2015). Finally, Nontransactional laissez-faire leadership represents the absence or the minimalized role and authority of a leader in decision making (Rubin et al. 2005). This form of leadership is considered as the most passive and ineffective form of leadership.

Although resources are instrumental to attain competitive advantage through resource bundling, there is an important role managers must play (Sirmon and Hitt 2009). Even though researchers have highlighted the importance of leadership for effective resource bundling, little research has been steered in understanding how different leadership styles of the CIO and LOB-manager intermix in the resource bundling process.

#### **Research Method**

The objective of this study is to understand how different leadership styles of CIOs and LOB-managers intermix during the IT resource bundling process. To explore this phenomenon, a qualitative approach with a longitudinal dataset was utilized as it involves observing data across the bundling process (Yin 2010).

Specifically, a multiple case study method was applied to carry out within-case analysis to identify leadership styles and bundling types, phases prominent in each project as well as cross-case analysis to identify the similarities and differences between the findings of within-case analysis. The findings established through within and cross case analyses enhance the generalizability of the research outcome (Benbasat et al. 1987; Eisenhardt 1989). The overall methodological approach in the study consists of two steps: first, the matrix discerned from the extant mainstream literature were subjected to deductive examination. For example, in this study based on the characteristics of leadership styles, bundling phases, bundling types, each actor's leadership style as well as the bundling types and phases were synthesized. In this phase, we ensured the degree of consensus among LOB-managers and CIOs in their interpretations of their activities and perceptions.

Second, an inductive approach was adopted to discover concepts not accounted for the proposed explanation (Patton 2002, p.494). During the induction phase, we identified and cross-checked the differences and similarities between the leadership styles in each phase between the two actors. To understand the intermix between these two leadership styles we adopted the behavioral control theory. Such an approach has been used by many researchers in the information systems discipline (e.g., Dibbern et al. 2008; Rivard et al. 2011) and is consistent with the approach that scholars refer to as analytic induction (Patton 2002). The advantages of this approach are that it is possible to critically examine the state-of-the-art knowledge about a topic and incrementally build on the body of knowledge, by retaining the aspects found to be empirically valid and reformulating the aspects found to be questionable or invalid.

The unit of analysis was the project, with different phases of the bundling process was considered as sub-units of the analysis process. For the data collection, the study sought firms that have completed IT projects successfully that include a collection of IT and bundled IT for attaining innovation and competitive advantage. Also, the cases represented diverse industry sectors and ownership structures (i.e., publicly listed and multi-national firms). The study sought informants who have actively participated in these IT projects (IT resource bundling projects) from the inception to the end. Data was collected from two types of informants from each organization: the CIO and the LOB-managers. The study commenced with interviews with the CIO, or with the individual holding an equivalent position (i.e., Chief Technology Officer or Technology Lead) as a source of determining the wealth of IT projects completed in the past 12 months. Then the researchers identified a series of projects that were considered successful by the organization. Then the relevant LOB-managers were identified for interviews. Our focus on successful projects is made to scope the study observations. While an inclusion of a wide range of cases was tempting, it would have defeated the purpose of the study by polluting the observations. Further, to obtain an appropriate degree of internal validity, three sources of evidence such as internal documentation, general web search and interviews were used (Dubé and Paré 2003). Data gathered from all these sources was used to corroborate, validate and complement the interview data (Lapointe and Rivard 2005).

All the interviews followed the same case protocol, which included questions about the case organization, each respondent's tasks and responsibilities, the issues they faced, their individual role in initiating the project, managing the project, the important events of the project and their role in those phases of the project. Further, the case protocol included questions regarding the technologies, project objectives, the need to initiate project, each phase, who initiated the project, the reasons, characteristics of the project and the outcomes of the project. When interviewing the participants, we specifically asked questions related to their activities in each phase as resource bundling is a strategic process that consists a set of activities. As discussed earlier and consistent with the argument of Penrose (1959), we captured CIO and LOB-manager's activities in relation to initiation, deployment and management of resources. Using this conceptualization of resource bundling as a three-stage process, classification of the results provided greater consistency in the overall findings regarding the leadership style of CIO and LOB-manager in each phase.

Data collection was conducted through 40 semi-structured interviews, totaling 61 person-hours. Each interview took between 1-2 hours and in most cases, follow-up interviews were conducted for clarification. All the interviews were conducted face-to-face, in the English language, mostly in 2014-2015 and were recorded and transcribed. Research team collected data from 1-2 IT projects in each case

organization. The five case organizations involved in the study were Case1, Case2, Case3, Case4 and Case5<sup>1</sup>. Details of these cases and the details of the informants are provided in Table 1.

Table 1. Case details and the informants

Pseudo Name	Project	Project Details	IS Resources Involved	Hours	Role	No. of interviews
Case1		Passing master data to		3	CIO	2
	C1-1	customers (display purposes)	ES, Cloud	6	LOB Manager x 2 (Sales)	3
	C1-2	Creating projects in ES	Makila EC	3	CIO	2
	C1-2	using mobile	Mobile, ES	4	LOB Manager (Admin)	2
Case2		To provide analytics data to	Analytics,	3	CIO	2
	C2-1	To provide analytics data to customers	Mobile,	2	LOB Manager (BI)	2
		customers	Cloud	2	BI Analyst	1
	C2-2	To provide predictive maintenance analytics data	Analytics,	4	CIO	3
			ES, Maintenance system	1	LOB Manager (BI)	1
				2	BI Analyst	1
Case3	C3-1	New business model for claim processing	ES, Mobile, Claim	3	CIO	2
				2	LOB Manager (Sales & Claims Processing)	1
			processing	4	IT Consultant	2
	C3-2		ES, Mobile, Claim processing	3	CIO	2
		New business model for assessors		3	LOB Manager (Sales & Claims Processing)	2
Case4	C4	New business model of	ES, Analytics, Mobile	2	CIO	2
		dynamic pricing		3	LOB Manager (BI)	3
Case5	C5	Passing master data for	ES, Mobile	5	CIO	2
	C.5	truck drivers	LS, MOULE	6	LOB Manager (Logistics)	5

After transcription, two researchers developed a comprehensive case description detailing each project. Next, the researchers created categories and codes from the theoretical viewpoints of resource management and leadership, as well as being open to emerging new constructs through the analysis of data. For the within-case analysis, a separate table, Table 2 was created which highlights the categories and codes used for coding the transcripts. In the cross-case analysis, analytic induction was applied to identify the similarities and the differences in relation to leadership styles among cases.

<sup>&</sup>lt;sup>1</sup> The cases selected here are referred to with pseudo-names due to the confidentiality agreements signed between the organization and the researchers.

Table 2. Categories and Codes

Category	Codes				
Actor	CIO, LOB manager				
Technology Responsible	enterprise system, mobile, analytics, cloud, maintenance system, claim processing system				
Leadership Type	transactional, transformational, nontransactional laissez-faire				
Transactional characteristics	clarifying the role and requirements of followers, providing endorsements or punishments,				
Transactional characteristics	watchfulness to ensure the project standards, interfere when a noncompliance occur				
	charismatic, collectivist actions such as considering the values, beliefs, goals of the project, motivating				
Transformational characteristics	the followers, challenging the followers to act creatively, advisor, supporter and provide individual				
	attention to followers				
Nontransactional laissez-faire characteristics	passive, absence or the minimalized role and authority in decision making				
Bundling phases	initiation, deployment, management				
Characteristics of initiation phase	come up with the idea, discuss among the group, look for required resources, preliminary assessment				
Characteristics of deployment phase	develop prototypes, assemble resources, launch project				
Characteristics of management phase	assessing the outcomes of the project, making modifications based on assessments				
Characteristics of stabilizing bundling type	incremental improvements to firms' existing IS capabilities, increase the production scope and market share of existing products, no major changes in the strategy, incremental changes, consistency in the routines, supports the current strategy of the firm and do not implement a new strategy				
Characteristics of enriching bundling type	extend existing capabilities and add new skills to the firm, bundling to respond to the changes in the market competition, configuring new and existing IS resources in different ways, rapid strategic change, respond to new opportunities in the market and develop and introduce new products to the market				
Characteristics of pioneering bundling type	create new capabilities that add value to the current IS capabilities, replace current IS capabilities, implement and support a new entrepreneurial strategy, produce radically new capabilities, created from new resources, a combination of newly acquired/developed resources and current resources, identifying new uses for existing resources, implement a new strategy that responds to major changes in their markets, proactive				
Project Outcomes	efficiency, effectiveness, productivity, business insights, customer connectedness, competitive advantage				

#### **Preliminary Findings**

By coding the transcriptions based on the categories in Table 2, bundling types for each project, bundling phases and leadership styles that were prominent for each actor was identified. Through the data analysis, Projects C1-2 and C2-2 were identified as those that employ the stabilizing bundling type. Projects C1-1, C2-1 and C5 employed the enriching bundling type, while Projects C3-1, C3-2 and C4 found to employ the pioneering bundling type. Table 3 demonstrates evidence for deriving the leadership styles for the three bundling types for the initiation phase. Due to page limitations, evidences for identifying the leadership styles for the other phases for the two actors are not provided. The derivation of the results in Table 3 was done through pattern matching whereby the characteristics of each informants were compared against the characteristics of leadership styles derived through the literature analysis. The phases were also identified through the interview data. The derived phases, bundling types and the leadership styles were validated through the follow-up interviews.

Figure 1 depicts the different leadership styles identified in each phase for the three bundling types. Some of the insights derived through the preliminary analysis are:

- (i) The leadership styles of the CIO and LOB-managers differ across the three bundling types,
- (ii) For the stabilizing and enriching bundling types, the leadership styles between the CIO and the LOB-manager differ, illustrating a balancing act,
- (iii) For pioneering, both the CIO and the LOB-manager adopts a transformational leadership type,
- (iv) The leadership characteristics such as motivating, challenging and supporting are localized characteristics which means each actor was motivating, challenging and supporting their immediate staff (i.e. CIO IT staff, LOB-manager LOB staff).

In addition, it was evident that for the bundling process to be successful, it is important to balance different leadership styles between the two actors. According to Pepper (2010), to facilitate student success, it is important to balance transformational and transactional leadership styles of the principals (Rosemann et al. 2000). Transformational leadership, as defined by Bass (1991), is the application of collaborative efforts, shared decision-making, motivation, taking up challenges and supporting the followers. This leadership style further ensures an efficient management of activities (Bass 1991). On the other hand, having clear goals and objectives, adhering to the project needs are also important for

the success of a project (Bass et al. 2003). Bass et al. (2003) further highlight the assimilation of both approaches is required to maintain project performance. In a project, each actor's ability to balance these leadership styles, will effectively build an innovation favoring environment which facilitates successful resource bundling. What we observed was a leadership negotiation that takes place between the CIO and the LOB-managers. One actor is always taking a responsible role to protect the territory while the other actor is showing a more agile behavior. In here, when the leadership style between the two actors is Nontransactional laissez-faire, we identified the other actor to have more responsible behavior. Considering the nature of the transactional leadership style, they always take a responsible behavior. Transformational leadership style usually takes an agile, innovative, responsive behavior.

Table 3. Sample quotations for identifying leadership styles for initiation phase

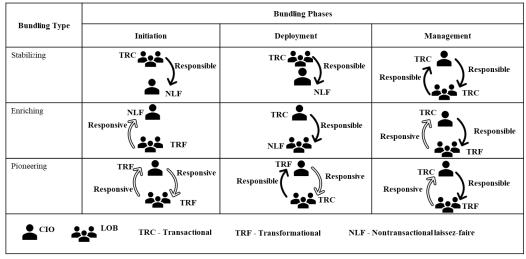
Bundling Type	CIO Leadership Style		CIO Quotation		Leadership Style	LOB Quotation		
Canbillinian -	T R C	(i) Clarifying role	"The information received from the mobile app creates a project, but there is a responsible person to make sure that this information is assessed before creating the project" C1-2	N L	Minimalized role and authority of a	"We always had the issue of getting farm		
Stabilizing		(ii) Watchfulness (iii) Non-	"The pre-assessment confirmed us that we do not harm our SAP" C1-2 "Maintenance team is not required to wait until we get the final alarm, we are able to		leader in decision making	information, but it was actually our IT department that initiated this project" C1-2		
		compliance	proactively initiate it" C2-2		(i) Charismatic	"When we had the first discussion about the		
		minimalized role and authority of a leader in decision making	"It was BI lead who came up with the idea of identifying the blackspots in road accidents. I was actually taking a backseat in this project" C2-1	T R F	(ii) Collectivist	digital display, everyone was surprised" C1-1 "We saw this need of the public and I went through some videos on web and came up with this idea. We discussed among the project		
Enriching	N L F				(iii) Motivating	and initiated this project" C2-1 "Everyone said the project is too ambitious, but we managed to convince others that this is possible, and we are capable of doing this project" C2-1		
					(iv) Challenging	"I asked my team to get as much information as possible and overlay many technologies to get useful information to see the possibilities" C2-1		
					(v) Supporting	"I sub-divided my team and gave them separate goals to achieve, during the design phase, we worked as a team" C2-1		
		(i) Charismatic nature	"When we came up with the dynamic product offering idea, our top management team did not believe that it is possible" C4		(i) Charismatic nature	"In our opinion, claim processing was old school, we wanted to change it" C3-1		
		(ii) Collectivist	"We worked together with assessors and claim processing staff to come up with the best solution" C3-2	n	(ii) Collectivist	"CIO and the IT staff worked hand in hand, amazing team work" C4		
Pioneering	T R F	Motivating	"My staff actually struggled to assess the feasibility of the resources we have, but what all my staff wanted was a pat on their backs" C3-1	T R F	(iii) Motivating	"Assessors could not understand the concept, so we had to show them how we are going to do this" C3-2		
			"When assessing the project idea, passing the mobile app data simultaneously to two systems and not hurting the existing data was challenging for my staff. What we took the challenge"	1	(iv) Challenging	"We wanted to pass the customer information to two systems simultaneously, it was challenging" C4		
		(v) Supporting	"All what we did was paying attention to claim processors needs, then we discussed and came up with the idea" C3-1		(v) Supporting	"IT staff needed our support to understand our processes, we worked closely with them" C3-2		

	Phases						
	INITIATION		DEPLOYMENT		MANAGEMENT		
	CIO	LOB	CIO	LOB		CIO	LOB
STABILIZING	Transactional	Laissez-faire	Transactional	Laissez-faire		Transactional	Transactional
ENRICHING	Laissez-faire	Transformational	Transactional	Laissez-faire		Transactional	Transformational
PIONEERING	Transformational	Transformational	Transformational	Transactional		Transactional	Transformational

**Figure 1. Primary Findings** 

As such, as a preliminary analysis across bundling phases and across different bundling types, we identified two different types of interactions between CIO and LOB-manager. We named it as (a) responsible behavior and (b) responsive behavior. Table 4 illustrates all the interactions we identified in the analysis.

The responsible behavior refers to the conventional role of managing the territory by assessing the readiness of the organization (Lokuge and Sedera 2014c; Tate et al. 2013), assessing the suitability of the initiative and ensuring the organizational standards. A responsive behavior on the other hand is focusing on the new opportunities, new technologies and shows a degree of freedom in initiating innovation. A CIO is usually expected to be responsible for IT related activities. As such, we expected the CIO to have a dominant role in sensing and responding to the IT needs of the organization (Grover et al. 1993), which we refer to as responsive behavior. However, the preliminary data analysis of the data sample showed the responsive behavior of the LOB-managers during the IT resource bundling process.



**Table 4. Interaction among leaders** 

Further, we also observed that when there is Nontransactional laissez-faire in one entity, there is no interaction behavior but a dominant role of one entity. From the initiation phase to the management phase, leadership styles change between the two actors. The leadership styles observed in the initiation and deployment phases diminishes and the leadership styles observed in the management phase remains. Since the management phase remains, we considered this phase to study the interaction between the two actors. Finally, the LOB-manager is protecting and taking a more responsible role in not hurting their existing business activities. Even though the CIO shows a more innovative role, the LOB-manager balances this behavior. This interaction behavior among IT leaders finally aligns the business goals and make sure the organizations attain better IT-business alignment. Table 5 provides supporting quotations for the two behaviors identified.

Table 5. Characteristics of Responsive vs. Responsible behaviors

Prominent Leadership						
Behavior	Characteristics	Supporting Quotations				
STANTO	Efficiency focused project initiation	"We can either extend our SAP system or we can easily add the relevant information to a cloud and pass it to the customers. We chose the most cost-effective solution."				
	Assess the organizational readiness	"We didn't think we were ready to provide access to farn assessors. It is a big thing. We wanted to see whether our SAP can handle all that information." C1-2				
Responsible	Assess the IT-business alignment	"Well, it is true we have the capacity to easily provide a mobile app for the drivers. But, we always wanted to make sure that it is required by the business." C5				
	High authority in related to IS activities	"It is simple as a cake to overlay the technologies and get the finest insights and share it with the customers. But, it is important to ensure that we do have control over the information we provide. So, we always talked to IT staff and got their approval." C2-1				
	Innovation focused project initiation	"We talked to our claim processing department and the manager and I wanted to change the way other do business. Well, we are in the digital era, we could do marvelous things in the mobile platform. That's exactly what we did." C3-1				
Responsive	Continuous assessment of the opportunities and challenges	"We developed the app for the assessors some time ago. But, we wanted to have the closest assessor to arrive to the accident location. That's why we added the functionality to find the nearest assessor." C3-2				
	High degree of freedom	"When I presented my idea of dynamic pricing models to the CIO, he loved it. They helped me, and we did it without any issue." C4				
	Agents of change	"To survive in this competitive market, everyone needs to be innovative. I truly think, it is not only our IT department's job to do IT innovations. We know best for our department. We need to be innovators too." C3-2				

#### The intermix of the leadership styles

In the data analysis phase, to explain the responsive and responsible behaviors of the two leaders, we identified the possibilities of applying behavioral control theory perspective (Kirsch 1996). Behavioral control theory is much used in outsourcing literature. However, we identified that the process of IT resources bundling in a project is an ongoing social process which involves multiple stakeholders, thus, the success of the project highly depends on the management of these multiple stakeholders (Kirsch 1997; Soh et al. 2011). Especially, IT resource bundling is ultimately a responsibility of the CIO and the IT staff (Walther et al. 2013a; Walther et al. 2013b). Therefore, whatever changes the LOB-manager and the staff carry out, in terms of bundling IT resources, they need to consult the CIO. Further, in introducing new IT bundling projects, it is important to align them with the existing organizational strategies. As such, in an IT resource bundling project, the CIO becomes the controller and the LOB-manager becomes the controlee. There are many existing theories and frameworks available to explain how the supervisors/controller control their subordinates. Especially in resource bundling context the relationship between the CIO and the LOB-manager is not completely similar to a supervisor-subordinate relationship. In terms of initiating an IT bundling project, the two actors' interactions become similar to a controller-controlee relationship.

As per the behavioral control theory, the term 'control' can be explained as mechanisms that the controller sets to govern the actions of the controlee (Nuwangi et al. 2013; Soh et al. 2011). Controls affect the management and the performance of the stakeholders and it provokes them to adhere to organizational goals. As Jaworski (1988) states, controls are the efforts to ensure that those who are working on projects act according to an agreed upon strategy to achieve desired organizational goals. In any project, controls play a pivotal role in determining the effectiveness and efficiency of the project (Huang et al. 2010; Kirsch 1997; Verona and Ravasi 2003). Also, by adhering to controls, the risk associated with the implementation is minimized (Grabski and Leech 2007). Consequently, inappropriate control mechanisms between the CIO and the LOB-manager have been attributed to IT

implementation project failures (Soh et al. 2011). The CIO-LOB relationships are not entirely governed by formalized organizational mechanisms. For example, the LOB-manager is not required to do IT innovations in an organization. However, the advent of digital technologies has changed their roles and the responsibilities of a manager. Even though, the LOB-managers are given the freedom to initiate new ideas, from the deployment to management phases, the CIO and the IT staff get involved. This highlights the controlling behavior of the CIO and the need to maintain the controls of an IT project.

According to Zeithaml et al. (1996), the quality of an engagement is the difference between the quality of the deliverable and the expectation of the other party. Controls support both parties (CIO and LOB-manager) in maintaining the quality of the bundling project and the deliverables. When utilizing controls the CIO (controller) needs to clearly specify the expected deliverables, and thereby helping the LOB-manager to avoid unsatisfactory outcomes (Mitchell 1994). As McLachlin (1999) explains, major issues can occur if the CIO neglects to establish controls of the engagement. As such, to maintain this, during the deployment and management phases, the CIO gets more involved in the project. As such, we identified more prominent leadership role of the CIO in the last two phases of the bundling process. For example, interestingly, in initiating enriching bundling type, the CIO did not have much of a role. However, in the deployment and management phases, the CIO plays a more responsible role. This was required to maintain the quality of the bundling process as well as maintaining the controls of the organization.

Prior literature on behavior control theory has discussed the vertical relationship between the controller and controlee (Soh et al. 2011). Soh et al. (2011) explained that as the project management complexity increases, the horizontal relationships increases. For example, Soh et al. (2011) further discuss that the presence of multiple stakeholders such as LOB-manager and the CIO have diverse business objectives, the complexity increases. Each of these parties have different objectives and as Kirsch (1996) explained divergent objectives leads to project failures. Therefore, as in an outsourcing arrangement, in an IT bundling project, the LOB-manager need CIO to: (i) provide additional expertise (Nuwangi et al. 2014; Poulfelt and Payne 1994; Sedera et al. 2014) and knowledge (Dawson et al. 2010; Subasingha et al. 2012), (ii) derive solutions for complex problems arise during the deployment (Kitay and Wright 2003; Poulfelt and Payne 1994), (iii) provide an independent perspective (Poulfelt and Payne 1994), and (iv) perform system integration (Gartner 2010). In analyzing the interview data, similar to Schein (1990), we identified three CIO-LOB engagement models.

- 1. Purchase of expertise this is a detached relationship. The LOB-managers are only seeking independent perspective on their business problems.
- 2. The doctor-patient model the LOB-managers seeks advices from the CIO and the IT staff for their technical and business problems. The model is focused more on diagnostic approach.
- 3. The process consultation model the CIO and the IT department are facilitators providing the technical expertise on defining the business problem by offering frameworks and methodologies. The roles and responsibilities of a CIO or the IT staff is well defined, and the LOB-manager is responsible for deciding the outcome or solution, CIO or the IT staff may provide alternative solutions.

As discussed above, the CIO and the IT staff support can be used by LOB-manager in the above-mentioned models to perform a wide range of tasks in IT resource bundling. Depending on the nature and the complexity of the bundling process, the CIO or the IT staff can select the most suitable engagement model (Kitay and Wright 2003). Even though the LOB-staff is equipped with knowledge and expertise in initiating IT bundling projects, there are three ways they can utilize the expertise of the CIO and the IT staff in their IT projects. As the next phase of the analysis, we will consider under what circumstances the LOB-manager can select the suitable engagement model.

#### Conclusion

The objective of this study was to explore the intermix of leadership styles of the CIO and the LOB-manager in the IT resources bundling process. Resource bundling has been studied extensively in management discipline (e.g., Huang et al. 2010; Sirmon et al. 2008). However, IT resource bundling and the impact of managerial activities, specifically, the impact of leadership styles in enabling resource

bundling has been understudied. As such, to investigate this phenomenon, the study analyzed data collected from eight large projects (five case organizations) that successfully bundled IT resources to gain innovation and competitive advantage. We were interested in observing the leadership styles, especially the roles of the CIOs and LOB-managers in initiating, deploying and managing the resource bundling activities. The bundling types were derived from the resource management literature (Sirmon et al. 2007; Sirmon et al. 2011) and the leadership styles were adopted from Antonakis et al. (2003). Different types of leadership styles that enabled three bundling types across three phases were identified from the data sample. Further, the analysis of the data sample revealed that the leadership styles changes across each phase highlighting the transient nature of the leadership styles. The study provided empirical evidence for the emerging role of the LOB-managers (responsive behavior) and how the orthodox view of CIO's role in managing IT related activities (responsible behavior) were challenged.

Literature on asset orchestration (Sirmon et al. 2011), resource bundling (Sirmon et al. 2008; Sirmon et al. 2007) have highlighted the importance of managerial action for enabling resource bundling. We aim to fill the gap of understanding "how" managers as leaders are enabling the IT resource bundling process in terms of leadership. The study identified specific leadership styles of CIOs and LOB-managers across the bundling process for different bundling types. To-date there are no studies investigated how leaders enable IT resource bundling. As such, different leadership styles for different bundling types across phases of bundling process is a contribution to the management and information systems disciplines. The study contributes to leadership and IS body of knowledge by extending the understanding of how leadership styles differ across phases for both CIOs and LOB-managers and conceptualized two behaviors of leaders in the IT resource bundling process. Further, the study findings highlighted the new emerging role of the LOB-managers. The observations in this study yielded the conclusion that organizations are already changing their view of the role of LOB-managers. For example, Gartner (Brinker and McLellan 2014) predicted that by 2017 each salient LOB (i.e. all functional departments, such as marketing) in all major companies will have a designated Chief Technology Officer. Brinker and McLellan (2014, p. 83) point out that Kimberly-Clark had introduced the role of chief marketing technologist (CMT) to better deliver functional requirements through the wealth of available technologies. They explain that the main objective of the CMT's role is "to create the best technology vision for marketing" and that the CMT will enable departments to campaign for "greater experimentation and more-agile-management of that function's capabilities" as they are "change agents of innovation." As such, this study provides insights into the evolving role of the existing LOBmanagers than creating a new role.

In addition, this study introduced two leadership behaviors between the two actors. The identification of new business requirements and being agile to respond to the market needs is the 'responsive behavior' of a leader. Even though the responsive behavior of the LOB-managers were prominent in the initiation phase, the CIOs played more 'responsible role' in the deployment and management phases. Especially for the stabilizing and enriching bundling types, the leadership styles between the CIO and the LOB-manager differ, illustrating a balancing act. The reason for having two different leadership styles between the two leaders is that even though the IT resource bundling project focus only on the department, the use of IT will have an impact on the whole organization. As such, the CIO plays a more responsible role. The study also identified three engagement models between the CIO and the LOB-manager in managing bundling projects. These findings extend the understanding of the leadership studies as well as resource management studies. As the future research, the authors will look further into how LOB-managers can decide on the engagement model based on the nature of the IT bundling project.

There are several implications for practitioners. The study findings highlighted the emerging role of the LOB-managers in initiating, deploying and managing the IT resource bundling process for sustaining competitive advantage. The three bundling types provide guidance for the IT manager (e.g., the CIO) to bundle multiple resources for a given IT project. The study provides prescriptive guidance for understanding the leadership role of the CIO and LOB-managers across bundling process for each different bundling type. Further, the study highlighted the collaborative role both CIOs and LOB-managers should play to successfully complete a resource bundling project. Further, the study provided three engagement models for CIO and LOB-manager to conduct bundling projects. It is evident through

the findings that the conventional leadership approach of CIO leading IT related decision making is not suitable for the contemporary business environment. The LOB-manager's role has evolved to a more responsive role than a passive role.

Though the initial findings of this study are encouraging, there are several limitations of the study and further analysis required to understand the transient nature of the leadership across IT resource bundling process. First, the study was conducted using a small sample and a qualitative methodology. To verify these findings, further study is needed using a quantitative approach that includes variation through industry sectors, countries and other contextual characteristics. Such an approach will further improve the robustness and generalizability of these findings. Finally, the transient nature of the leadership behavior provides a new research perspective for all leadership and behavioral related theories. Such explorations can have substantial research and practical implications for managing human resources in organizations.

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