

# Leveraging Value within IT-Backed Collaborative Alliances

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# Leveraging Value within IT-Backed Collaborative Alliances

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## ABSTRACT

Organizations today make radical use of the IT resources to sustain or better their existing competitive position. One such initiative is forming alliances on a shared IT backbone with partners of their value chain. We term these alliances the collaborative organizational structures (COS). Regardless of the nature of engagement with IT resources, organizations will require unique competencies to obtain performance-differentiating value from these IT resources. In a collaborative environment, these competencies would be a result of the synergy between the alliances' unique competences. We call these the inter-firm IT-related capabilities. The resource centric theoretical frameworks suggest a trajectory of competence development and the structure of inter-firm competencies, but they do not inform the nature of these competencies. We employ an interpretive design to suggest three inter-firm IT-related capabilities for IT-backed collaborative alliances. We discuss these capabilities in this research and suggest that their effectiveness be measured directly against the collaborative rent, and indirectly against the firm-level performance of the alliance partners.

## Keywords

Collaborative Organizational Structures, Relational View of Firm, Dynamic Capabilities, Collaborative rent, Inter-Firm IT-Related Capabilities

## INTRODUCTION

There is no contention that information technology (IT) is now an important element in organizations bundle of resources. In fact, organizations are making radical use of the IT resources to achieve a higher economic position, or to sustain an existing advantage (Pavlou and El Sawy, 2010). Organizations have associated IT with various business processes, which have resulted in automated processes that facilitate innovative production of goods and delivery of services. The competitive forces within today's turbulent business environment are compelling organizations to be more dynamic about their use of the IT resources. An organization's final product or service is the outcome of the activities of a wider and inter-organization value chain (Iyer et al., 2008). The competitive forces have tempted organizations to invest in IT that improves the activities of the value chains that may fall outside of the organization (Ziggers and Tjemkes, 2010). The results of such initiatives are new strategic alliances, the IT-backed alliances.

A strategic alliance is a relationship between two or more parties to pursue a set of agreed upon goals while remaining independent organizations (Weber and Chathoth, 2008). Organizations forming strategic alliances are not a recent phenomena, but IT compels these alliances to change their form and structure (Langfield-Smith, 2008; Mayer and Teece, 2008; Weber and Chathoth, 2008). Organizations are forging voluntary relationships for co-creation, co-development, and co-innovation (de Rond, 2003). We term these innovative organizational alliances – the collaborative organizational structures (COS). We define COS as inter-organizational alliances developed with modern IT resources as their backbone

with no, or very little, ownership interests. These organizations see incremental value in their IT investment in COS compared to a similar within-firm investment in IT (Dyer and Singh, 1998). That is, organizations see more value in investing in IT that fits the objectives of COS rather than only the objectives of their own organization.

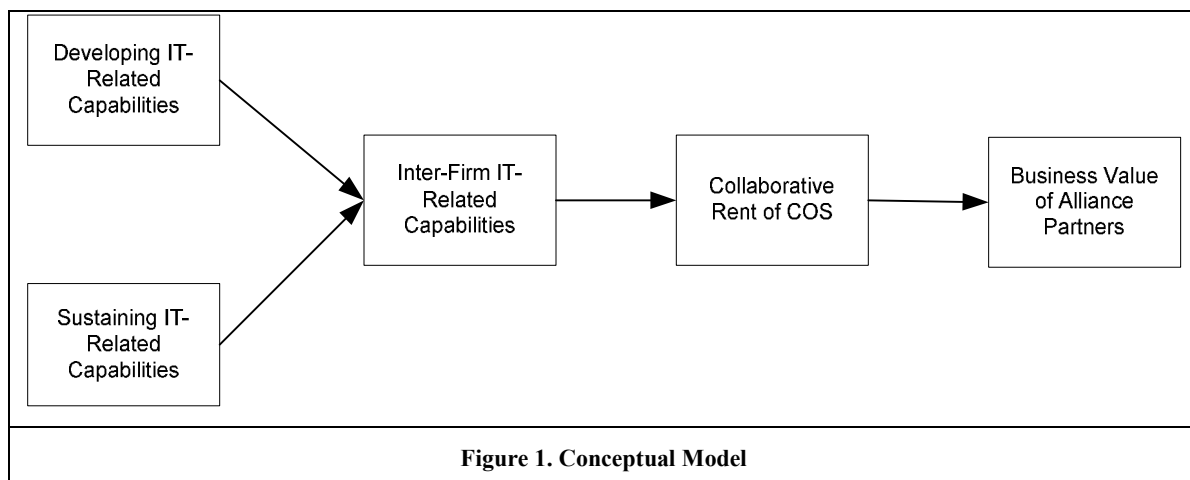
New business arrangements like COS require new techniques of achieving and sustaining competitive advantage. The resource centric approach (Barney, 1991) argues that organizations unique resources differentiate them from their competitors. That is, to leverage the IT resources uniquely, organizations need to have unique IT-related capabilities. IT-related capabilities are organizations unique IT-related knowhow about the fit of the IT resources to their business processes. Much of these IT-related capabilities lie with organizations human resources (Hitt et al., 2001; Huselid, 1995). However, creation of alliance structures like COS means a rethink on what constitutes the IT-related capabilities. That is, executives and managers of the alliance partners will need to organize themselves differently to leverage the IT resources in the new business environment.

We adopt the resource centric approach in this study and correspond that organizations need to understand, develop, and sustain their within-firm IT-related capabilities to leverage the dynamic IT resources. However, to leverage the IT resources in COS, organization need to understand the synergy between their sustainable IT-related capabilities to develop inter-firm IT-related capabilities. Inter-firm IT-related capabilities will allow the alliance partners of COS to leverage uniquely their alliance-specific investment in IT. While extant literature reports well on the value of COS-related investment in IT, we lack understanding on the inter-firm IT-related capabilities that leverage this investment.

We address the following key question in this research. What inter-firm IT-related capabilities are required to leverage the IT resources uniquely in COS? The alliance partners need to develop and sustain their within-firm IT-related capabilities. Extant literature suggests various ways to develop and sustain these IT-related capabilities. We will not repeat these arguments in this research. However, a COS will build its inter-firm IT-related capabilities from alliance partners' within-firm IT-related capabilities. This effort will require the alliance partners to understand the synergy between their IT-related capabilities, and ways to fuse these IT-related capabilities to leverage their IT investment in COS.

We will also consider the issues of evaluation the effectiveness of these inter-firm IT-related capabilities. But this in not included in this research. But, to justify our approach, we suggest that these capabilities should improve the collaborative rent within the COS, which would lead to better business value for the alliance partners. We define collaborative rent as incremental value generated through the collaborative relationship not generated alone by the collaborative alliance partner. Collaborative rent requires fusion of the idiosyncratic resources of the alliance partners. The inter-firm IT-related capabilities will contribute to understanding this fusion between the idiosyncratic resources. Business value is the things that determine the health and well-being of organizations at both the business process and the firm levels. Figure 1 below conceptualizes our approach to understanding ways to leveraging and evaluating value within IT-backed collaborative alliances.

The overall study adopts a mixed method design in this research for the following reasons. This research intends to develop a model of leveraging value and evaluating this value within IT-based collaborative alliances. The resource-based view and the dynamic capabilities view inform us on organizations' IT-related capabilities, and ways to sustain these capabilities. The relational view of the firm informs us on the need for inter-firm collaboration to develop inter-firm IT-related capabilities.



That is, while we know that COS requires inter-firm IT-related capabilities to leverage their IT investment, our understanding of the nature of these inter-firm IT-related capabilities is inadequate. Thus, first, we employ an interpretive design to identify the inter-firm IT-related capabilities for COS. We then develop a model of leveraging value within IT-based collaborative alliances, and adopt a survey research design to collect data to validate the model. This study reports on the findings of the interpretive study of suitable inter-firm IT-related capabilities for COS.

## **THEORETICAL FRAMEWORK**

The resource centric approach (Barney, 1991) advocates that an organization is a product of combination of a bundle of resources. Some of these resources from this bundle are common to all organizations, and some resources are unique to organizations. The resource-based view of the firm (RBV) (Wade and Hulland, 2004) suggests that the organizations unique resources, their capabilities, leverage other common organizational resources to achieve and sustain a competitive advantage. IT resources are common resources as they are easily available to all organizations (Powell and Dent-Micallef, 1997). However, organizations capabilities to fit these IT resources to their business processes are their unique resources. That is, organizations IT-related capabilities help them to obtain distinctive value from their IT resources. The RBV, however, suggests the capabilities that organizations may need to have at the point in time. Continuous investment in new IT resources means that organizations need to sustain their unique competencies to enjoy distinctive value from their IT resources.

A dynamic capability (Teece, 2007) is the organization's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. The dynamic capabilities framework (Teece et al., 1997) suggests mechanisms by which organizations could renew and sustain their capabilities to enjoy and improve on their achieved competitive advantages. The dynamic capabilities framework, however, suggests that these competencies are achievable within an organization. This situation is possible because organizations can organize various things internally with various magnitude and variability. Leveraging directed IT investment in COS requires inter-firm IT-related capabilities and competencies across the network of alliances of the COS. Accordingly, the relational view of the firm (Borgatti and Cross, 2003; Dyer and Singh, 1998) is an appropriate framework to suggest inter-firm IT-related capabilities for COS.

The relational view of the firm posits that an organization's critical resources may extend beyond organizational boundaries (Dyer and Singh, 1998). This situation means that for structures like the COS, business value is possible when alliances are willing to make alliance-specific investments and combine resources in unique ways (Dyer, 1996). That is, idiosyncratic linkages of dynamic capabilities are the source of sustainable competitive advantage for COS. This characteristic implies that organizations in COS would need to understand the synergy between their within-firm sustainable IT-related capabilities to develop inter-firm IT-related capabilities to leverage COS-specific investment in IT.

These inter-firm IT-related capabilities would contribute to the collaborative rent of the COS. Collaborative rent is possible through specialization of assets (Amit and Schoemaker, 1993). Organizations in COS may develop higher-level specialized assets by combining their individual specialized assets (Teece, 1987). This outcome is only possible if the alliance partners are able to develop higher-level IT-related capabilities, the inter-firm IT-related capabilities. A fundamental requisite for effective COS is alliance-based knowledge sharing. Organizations often learn by collaborating with others (Levinson and Asahi, 1995). This situation has been proved in various industries (Powell et al., 1996; von Hippel, 1988). These outcomes suggest that collaboration within the partners in COS is the key source of new ideas and innovation. New sources of ideas will direct organizations to develop and invest in performance enhancing IT and infrastructures.

The above theoretical frameworks suggest the characteristics of organizations IT-related capabilities, ways to sustain these capabilities, and the value of understanding the synergy between sustainable IT-related capabilities. These frameworks, however, do not inform us to the exact types of inter-firm IT-related capabilities for COS. An interpretive design that requires deeper level of interaction and investigation of the practice and management of COS will help to obtain insights on the exact nature of these performance-differentiating inter-firm IT-related capabilities. We discuss this research design next.

## **RESEARCH DESIGN – STAGE 1**

The alliance partners require new capabilities and skills to leverage the IT resources in COS. The relational view theoretical framework suggests a collective effort in securing value from the IT investments within COS. The eventual objective of this study is to propose a model of effective use of IT, and its evaluation in COS. To the best of our knowledge, extant literature inadequately informs us on the types of inter-firm IT-related capabilities required to leverage the IT resources in COS. Thus, a deeper understanding of the reality of the mechanics of use of IT in COS is required before we could develop testable propositions. This paper reports on this interpretive stage of the research.

A common approach to unpacking the diversity of issues involved in effective use of IT resources within COS is to undertake an interpretive case study (Yin, 1994). The interpretive approach affords an in-depth look at the dynamic relationship that exists between partner organizations in the effective use of the IT resources. This approach considers the shared meanings and experiences of the people involved (Walsham, 1995). These are interpreted from the perspectives of the individuals themselves, given that multiple realities exist in the organizations, which have been shaped by their experiences and actions. This effort becomes instrumental in making generalized assertions on the inter-firm capabilities required for effective use of the IT resources in a collaborative environment.

A large number of organizations today engage in some form of IT-related alliances. Acquiring a deeper understanding of the IT-related capabilities within COS would mean extracting reality from the organizations that are at the forefront of using such alliances. Successful operation of the IT-dependent alliances implies an understanding of the unique inter-firm capabilities required to leverage the IT resources. We approached twenty organizations that are heavily involved in inter-organization IT-dependent collaboration to manage their business processes. These organizations collaborate to manage their digital supply chain, manage e-channels and logistics, manage tourism and leisure services, and engage in collaborative commerce. The organizations were informed about the purpose of the study, the personnel of interest, and the nature of discussion in which they will be engaged. Twelve organizations agreed to participate in the study. These twelve organizations engage in various forms of IT-related collaboration to manage their business processes. These organizations formed the sampling frame for this part of the study.

### DATA COLLECTION AND ANALYSIS

We conducted twenty-five semi-structured interviews, each lasting about thirty minutes. Table 1 presents the demographics of the interviewees. The collection of data from different management levels permits the elicitation of multiple viewpoints from individuals within the same division to be contrasted across divisions. The intent of this approach is to identify common conceptions that represent key inter-firm IT-related capabilities for effective use of IT resources in COS. The interviews were semi-structured. The opening question was very general, seeking opinion on IT-related capabilities required for COS. The interviews then progressed with some focus around the inter-firm capabilities, but with enough flexibility to capture perceptions on various perspectives of the inter-firm connections. The transcribed interview data were analyzed for its thematic content, which involved identification of a number of conceptions relating to possible IT-related capabilities for COS. The conceptions related to inter-firm IT-related capabilities and they provided a narrative of the mechanics of such capabilities. The conceptions emerged using the following steps (Dey, 1993). The step first was the establishment of the unit of analysis, which involved identifying concepts from the interviewees' expressions ranging from a few words to complete sentences. The step second was code attachment. Labels on the unit of analysis were attached and they represent the conceptions prevalent in that section of text. The third was conception categorization into broader conceptions. These steps required numerous iterations of reading and analyzing of the interview transcripts. We also provided copies of the transcribed notes and thematic analysis to the interviewees for verification and additional comments to ensure validity of our analysis.

Interviewee	Position	Age	Industry	Experience (Years)
1	IT Manager	36	Retailing	8
2	Chief Information Officer (CIO)	41	Manufacturing	12
3	Manager Logistics	32	Transportation	13
4	Managing Director	55	Retailing	15
5	IT Manager	33	Communication	6
6	CIO	38	Banking	20
7	Department Manager	28	Distribution	6
8	Department Manager	29	Distribution	8
9	CIO	35	Banking	21
10	IT Manager	42	Retailing	8
11	Director Operations	49	Banking	12
12	CIO	48	Manufacturing	3
13	IT Manager	33	Communication	5

14	Operations Manager	39	Manufacturing	16
15	IT Manager	34	Distribution	13
16	Division Manager	45	Communication	12
17	Business Development Manager	44	Production	15
18	Product Development Manager	36	Production	8
19	CIO	51	Retailing	22
20	Director MIS	50	Retailing	25
21	IT Manager	35	Telecommunications	15
22	Department Manager	42	Retailing	18
23	Customer Service Manager	38	Retailing	16
24	Director – MIS	49	Service Industry	18
25	Supply Chain Manager	46	Wholesaling	20
<b>Table 1. Interviewee Demographics</b>				

## RESULTS AND DISCUSSION

Broad Conceptions	Key Themes
Proactive Top Executive Synergy	Proactive Investment in IT by Alliance Partners, Reduced Time lag in IT Investment Opportunities, Understanding the IT Resources Synergy, Shared Vision from the Top Management, Top Executive Awareness of IT
Collaborative and Agile IT Infrastructure Platform	Understanding the Fit of IT investments with past IT Investments, Creating a Bigger IT Resource Base, IT Agility, Knowledgeable IT, Smart IT, Faster Innovation on the IT Platform, A Shared IT Base
Cross-Functional Tactical Management Synergy	Tactical Management Synergy, IT Management Synergy, Unit Management Synergy, Cross-Functional Management Synergy, Cross-Functional IT and Unit Management Synergy
<b>Table 2. Key Themes and Broad Conceptions</b>	

### Proactive Top Executive Synergy

The concept of proactive top executive synergy relates to the top executives' ability to understand how they could proactively contribute to the IT-resource base of the COS. That is, alliances' top executives should be able to understand the nature of investments in IT that they should make to increase the leveraging potential of existing IT resources. The interviewees felt that this capability will put the COS in a unique position, and such a feat would be difficult to mimic or substitute easily. This environment requires the unique support and vision of the top executives. The top executives will need to make IT investment-related decisions swiftly to ensure they create an environment to facilitate co-innovation and co-development on refined business processes. This effort will require mutual understanding on the need for various IT resources for the COS, a feat achievable only through a common understanding (synergy) and the resultant proactive action. The interviewees shared the following:

*"I think the key element in creating a unique co-innovative environment is the innovation with regard to IT by the top executives. We see many times that we do not get the best out of an environment because someone delayed in making some crucial decisions. The result is a less-than-premium environment to engage with our*

*strategic partners. I think the vision of the top executives plays an important role here. Top executives must understand their peer's position and act proactively to ensure they make decisions to nurture an existing dynamic environment." T18*

Other interviewees shared this:

*"The key component to surviving in an alliance structure is equal and related executive commitment to IT investment. The top executives should understand their IT and should not hesitate to make quick decisions on any presented opportunities. Of course, this may present some risk, but I think value also lies within these risk elements." T5*

*"Really, it has to come from the top. If they do not understand each other and make the correct choices, we at the mid level would suffer because we would lag behind on the right mix of tools and importantly without an ideal environment to co-innovate." T11*

*"The relationship at the executive level is important. I think better relationship at the top level would level any alliance-related risk and 'free' the top management in making proactive IT-related decisions despite invisibility of any immediate tangible benefits." T3*

The top executives need to think 'tactically' for the growth of COS. That is, the top executives need to consider an immediate vision, and then be able to relate that to their strategic visions and values of engaging in a COS. This would bring about proactive decision making, an act not prevalent in strategic decision making, but perhaps vital to drive the IT base in a COS.

### **Collaborative and Agile IT Infrastructure Platform**

The concept of collaborative and agile infrastructure relates to having an IT infrastructure that promotes collaboration and renders the agility to engage in co-innovation and co-creation. This platform is only possible through the alliance partners' initiatives with the right magnitude of IT-related contribution at the right time. This concept calls for a supernormal fit within the invested IT, where the sum of the alliances' invested IT creates an infrastructure that is difficult to mimic in a COS with a set of standard investment. A collaborative and agile IT infrastructure calls for more commitment by the tactical managers of the alliance partners. While the top management can be proactive with their investment in COS, their decisions, per se, may not be able to establish an agile IT infrastructure. Achieving this feat requires a radical reorganization of the IT resources, something that the tactical and operational managers of the alliance partners could achieve best. This aspect is an important inter-firm capability that other COS would find difficult to mimic. The interviewees shared the following on a collaborative and agile IT infrastructure platform as being an important inter-firm capability.

*"I am of the view that the strength of IT-backed alliance structure is the base on which we are working on. The strength of this base depends up the decisions that we make regarding our IT. More importantly, it is how we rearrange our IT that will bring the unique advantage for us. If we see a different and better way of doing something, our IT should be changed quickly to allow us to do that. When that IT becomes too rigid, any perceived opportunity would be lost." T11*

*"One important aspect of an IT-backed alliance I think is the ability of the alliance to shift and reorganize their IT backbone to quickly take advantage of an opportunity. I think continuous investment in IT can create a cumbersome resource. There is need to think, and continually chip and rearrange that IT to continue to weave value from it. This is the job of all parties in an alliance." T 22*

*"Even though companies invest in COS because they see better value than investing in-house, lack of attention on the invested IT is a big danger. I reckon there is need for a continual investigation of the IT, and thinking of ways to bring freshness in IT. Otherwise, you may just be building a silo of computers and other resources. You need to slice and dice that IT either to resource an opportunity or bring to life an identified opportunity." T14*

### **Cross-Functional Tactical Management Synergy**

The concept of cross-functional tactical management synergy relates to inter-firm knowledge sharing by the IT and business unit managers. Not only do the managers of the alliance need to share this information, but this information should be shared cross-functionally with the IT and business unit managers of the alliance partners. This environment creates an array of knowledge sharing within the COS, which is a rich source of knowledge that would be difficult to emulate within other COS

settings. There is a need for cross-functional understanding between the alliance partners' business unit and IT managers on ways to facilitate the fit of the IT resources of the COS to various value chains within the COS. This collaboration would untangle the rigid objectives of the IT and business unit managers, and promote a common technical and operational importance of IT to the COS. The cross-functional understanding will allow the IT managers of the alliance partners to penetrate each other's business processes, and the business process managers to contribute to the IT requirements of a wider value chain of the COS. These sets of competencies create a unique environment of cross-functional knowledge sharing within the COS, which the interviewees felt is an important inter-firm IT-related capability. They shared the following.

*"When we share our IT in an alliance, I think we need to share ideas about our IT in the same way too. I feel that the IT guys should be able to talk to each other, but also be able to have access to partners' business processes. What I mean is that they should be able to talk to the managers to see how they could contribute to better use of IT within that process. At the end of the day, the key is being able to help each other. The best way to do this is to understand each other well and contribute to each other's success." T15*

*"The concept of knowledge sharing is important in organizations. I think there is need to break the barriers, and business managers should feel free to engage in open communication and talk IT. On the same token, there is a need to IT people to be able to talk business. This needs to happen more between the partners, and perhaps less within organizations." T22*

*"From where I come from, constant communication is the key. There is a lot of knowledge with people when there is an alliance. It is just a matter of creating an environment to weave out that knowledge and have some form of engagement. Look, new people means potential new knowledge, and there is an important need for the teams of the alliance partners to engage in some form of discussion and basically create niche of unique knowledge sharing. I feel this is the crucial advantage factor for an alliance backed by IT." T7*

## SUMMARY

Alliance partners need to understand the synergy between their within-firm sustainable IT-related capabilities to develop unique inter-firm capabilities. This outcome is crucial for survival in an environment like COS. New IT-backed alliance structures are emerging regularly and being part of an alliance only would no longer be a source of competitive advantage. That is, organizations engaging in COS would become a common activity. Organizations ability to survive within alliances would be contingent upon their ability to understand the synergy between their individual capabilities and merge those capabilities to develop unique alliance-based inter-firm capabilities.

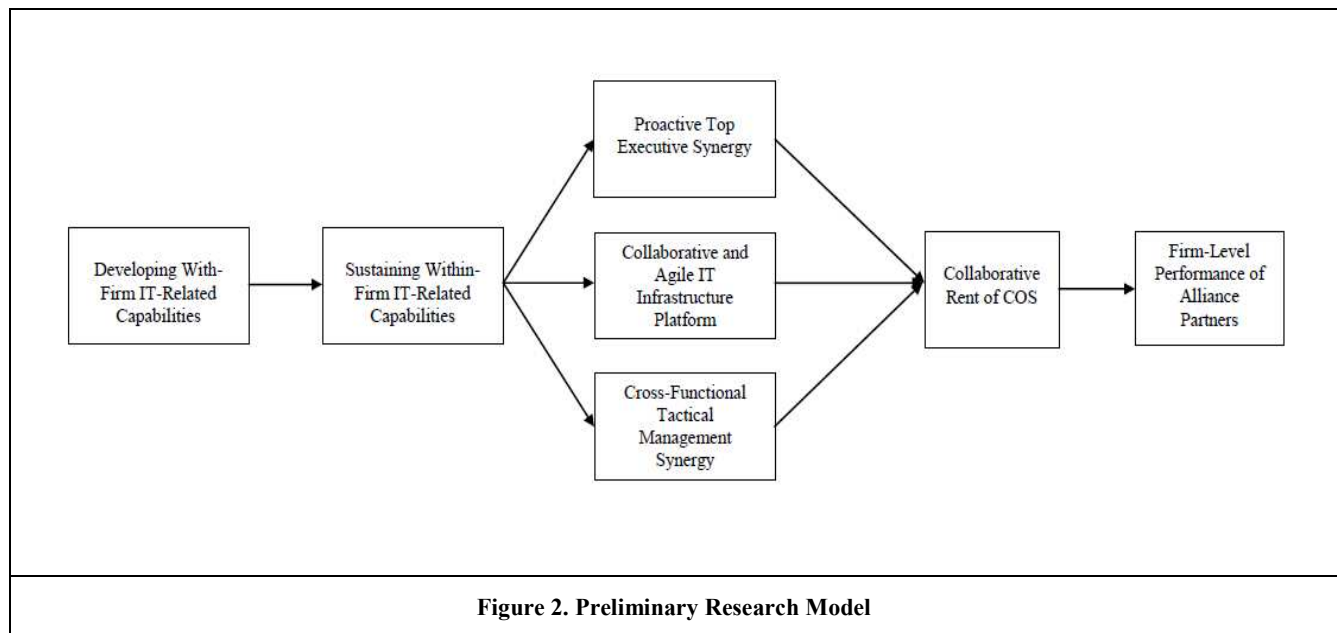
The interpretive design aspect of this research informs us of three important IT-related inter-firm capabilities for COS. These capabilities are a product of the synergy of existing sustainable capabilities of individual alliance partners. Proactive top executive synergy is an important capability as it ensures that appropriate IT resources are available to the COS at the opportune time. The availability of the COS IT resources is an important prerequisite to its ideal fit to the business processes. A common understanding of the need for an array of IT resources for COS by the top executives is an important inter-firm capability of COS. But, the availability of an array of IT resources does not imply a fit of the IT resources on which to obtain or sustain competitive advantage. An important requirement of this fit is a collaborative and agile IT infrastructure platform. This situation is because the COS can engage in radical development of new information systems or reengineering of existing information systems on an IT infrastructure platform that facilitates collaboration and demonstrates agility in its reorganization.

A major component of this infrastructure is the communication and collaboration platform. This is because the backbone of any co-innovation and co-development is a strong and agile collaboration platform. In fact, IT resources in COS should be able to provide avenues for better collaboration and not become a cumbersome commodity that is difficult to manage. A co-created flexible and agile IT infrastructure will provide this platform, and this is an important inter-firm capability for COS. Alliance structures like COS aim to improve their value chain, which are the product of the interlinked business processes. An important element in the task of improving the business processes is an appropriate fit of the IT resources of the COS to the processes. That is, the information systems associated with the processes should be the best fit to the reality. In a COS environment, this requires cross-functional tactical management synergy. That is, there is a need for the business unit managers of the alliance partners to understand the various roles that IT can play in improving the value chain. Similarly, IT managers of the alliance partners should understand the operations of the various processes of the value chain. This cross-functional understanding is an important inter-firm capability for the COS, and would not be easily emulated by other



alliances. Together, these three inter-firm IT-related capabilities form the important resources for COS to uniquely leverage the invested IT resources.

The interpretive design of this research, motivated by the resource-centric theoretical frameworks, informed us of the inter-firm IT-related capabilities for COS. Understanding on these inter-firm capabilities does not inform us whether these capabilities are in fact effective within the COS. A mechanism to evaluate their effectiveness is required. As stated earlier, the alliance partner invests in COS-specific IT resources because they perceive this investment to provide incremental value compared to investment in firm-specific IT resources. That is, these IT investments should contribute to the collaborative rent of the COS. Since organizations' inter-firm IT-related capabilities should uniquely leverage the IT resources of the COS, the ideal way to evaluate these capabilities is to consider their relationship with the collaborative rent of the COS. Organizations would eventually differentiate their unique value from the collaborative rent against their objectives for joining a COS. This means the ideal next step would be to evaluate the association between the collaborative rent of the COS to the firm-level performance of the alliance partners. We present this extended model of leveraging value within IT-backed collaborative alliances as Figure 2. We will validate this model in the next phase of this research.



## CONCLUSION

COS requires inter-firm IT-related capabilities to leverage the IT resources and contribute to its collaborative rent. The broader aim of this research is to develop a model of leveraging and evaluating value within IT-backed collaborative alliances. We present the results of our interpretive stage of this research where we have identified three inter-firm IT-related capabilities for COS. This research will progress with development of testable propositions to relate the inter-firm capabilities to the collaborative rent and relate the collaborative rent to firm-level performance of the alliance partners. We will then develop the measures for these inter-firm IT-related capabilities and measures of business value for COS and the alliance partners, and would validate the proposed model by sourcing data through a field survey. We envisage sharing the progress of these aspects of this study at AMICS 2012.

## REFERENCES

1. Amit, R., Schoemaker, P.H.J. Strategic Assets and Organizational Rent. *Strategic Management Journal* 1993; 14: 33-46.
2. Barney, J.B. Firm Resources and Sustained Competitive Advantage. *Journal of Management* 1991; 17 (1): 99-120.
3. Borgatti, S.P., Cross, R. A Relational View of Information Seeking and Learning in Social Networks. *Management Science* 2003; 49 (4): 432,414.
4. de Rond, M. *Strategic Alliances as Social Facts*. Cambridge: Cambridge University Press, 2003.
5. Dey, I. *Qualitative Data Analysis: A User-Friendly Guide for Social Scientists* London: Routledge, 1993.

6. Dyer, J. Specialized Supplier Networks as a Source of Competitive Advantage: Evidence from the Auto Industry. *Strategic Management Journal* 1996; 17: 271-291.
7. Dyer, J., Singh, H. The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Strategy. *Academy of Management Review* 1998; 23: 660-679.
8. Hitt, M.A., Biermant, L., Shimizu, K., Kochhar, R. Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service Firms: A Resource-Based Perspective. *Academy of Management Journal* 2001; 44 (1): 13-28.
9. Huselid, M.A. The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance *Academy of Management Journal* 1995; 38 (3): 635-672.
10. Iyer, L., Aubeterre, F.D., Singh, R. A Semantic Approach to Secure Collaborative Inter-Organizational Ebusiness Processes (Ssciobp). *Journal of the Association for Information Systems* 2008; 9 (3).
11. Langfield-Smith, K. The Relations between Transactional Characteristics, Trust and Risk in the Start-up Phase of a Collaborative Alliance. *Management Accounting Research* 2008; 19 (4): 344-364.
12. Levinson, N., Asahi, M. Cross-National Alliances and Interorganizational Learning. *Organizational Dynamics* 1995; 24: 50-64.
13. Mayer, K.J., Teece, D.J. Unpacking Strategic Alliances: The Structure and Purpose of Alliance Versus Supplier Relationships. *Journal of Economic Behavior & Organization* 2008; 66 (1): 106-127.
14. Pavlou, P.A., El Sawy, O.A. The Third Hand: It-Enabled Competitive Advantage in Turbulent Environments. *Information Systems Research* 2010.
15. Powell, T.C., Dent-Micallef, A. Information Technology as Competitive Advantage: The Role of Human, Business, and Technology Resources. *Strategic Management Journal* 1997; 18 (5): 375-405.
16. Powell, W.W., Koput, K.W., Smith-Doerr, L. Inter-Organizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology. *Administrative Science Quarterly* 1996; 41: 116-145.
17. Teece, D. Expliciating Dynamic Capabilities: The Nature and Microfoundatio of (Sustainable) Enterprise Performance. *Strategic Management Journal* 2007; 28: 1319-1350.
18. Teece, D.J. Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing, and Public Policy. In: D.J. Teece eds. *The Competitive Challenge B2 - the Competitive Challenge*. New York: Harper-Collings, Ballinger Division, 1987: 185-219.
19. Teece, D.J., Pisano, G., Shuen, A. Dynamic Capabilities and Strategic Management. *Strategic Management Journal* 1997; 18: 509-533.
20. von Hippel, E. *The Sources of Innovation*. New York: Oxford University Press, 1988.
21. Wade, M., Hulland, J. Review: The Resource-Based View and Information Systems Research: Review, Extension, and Suggestions for Future Research. *MIS Quarterly* 2004; 28 (1): 107-142.
22. Walsham, G. The Emergence of Interpretivism in Is Research. *Information Systems Research* 1995; 6 (4): 376-394.
23. Weber, K., Chathoth, P.K. Strategic Alliances. In: eds. *Handbook of Hospitality Marketing Management*. Oxford: Butterworth-Heinemann, 2008: 501-523.
24. Yin, R.K. *Case Study Research: Design and Methods*. Thousand Oaks, CA: Sage Publications, 1994.
25. Ziggers, G.W., Tjemkes, B. Dynamics in Inter-Firm Collaboration: The Impact of Alliance Capabilities on Performance. *Int. J. Food System Dynamics* 2010; 2: 151-166.