

DOCTORAL CONSORTIUM: APPLICATION OF TECHNOLOGY IN A DEVELOPING COUNTRY: A CASE STUDY

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Abstract

Costly and burdensome regulations lead to higher increase of underground economy. This is what happens to a developing country with low 2006 “ease of doing business” ranking. The accountants come out with a workable solution. It requires them to link themselves together into an extended value chain and “run in pack.” The “connect and collaborate” business model will utilise wider real-time knowledge sharing and communication and require radical examination of hidden assumptions. The expected consequences will impact radically on how organizations undertake compliance and communicate with their accountants. Inevitably, there will be unexpected unfavourable consequences. The research will study the diffusion process and trace the outcomes which are usually both causes and consequences. It will attempt to reconcile knowledge and to find solutions in wider context.

Keywords: Diffusion of innovations, Extended value chain, Change agents, Opinion leaders.

1 INTRODUCTION

Over-regulation causes informal economy. (“Hernando de Soto,” 8 Feb 2006; Friedman, 2005, p 318), complicates doing business, and ultimately increases unemployment. Doing Business in 2006 shows that better ease of doing business creates more jobs. Where regulations are burdensome, more businesses operate in the informal economy. New Zealand tops the world in the ease of doing business. The developing country where this research will be done has 40% GNP of informal economy.

Granularity deals with breaking large things down into small parts (Kellaway, 2005). The smaller the part, the greater is the flexibility of the whole. This concept applies to differentiating levels of features and customers services. It assumes that customers are not homogenous. Since increasing level of customer services and features come with a cost, customers who need differentiated service level pay.

Thomas L Friedman (2005, pp 173-200) stresses that “connect and collaborate” will affect everything including how organisations conduct their business. It is driven by emerging information technologies and caused by the triple convergence: the real-time knowledge sharing, wider use of knowledge in the work place, and influx into market place of upwardly ambitious people from societies with rich heritages like India, China, and Russia. A good example of the first two forces is how Southwest Airlines empowers its customers to buy ticket, check-in, and print boarding pass on-line.

Above three elements signify the past, the present, and the future. “Doing business” describes the past including the present. Granularity is the must-do tactic now. “Connect and collaborate” is a change vision involving web-enabled information systems, up-to-date information, and extended value chain. It does not simply engage people but requires radically looking at works and existing assumptions. There is no turning back as it inevitably affects all business processes and exerts pressure on power, anxiety, and organisational control (Dettmer, 2003; Quinn, 1996; Trompenaars & Prud-homme, 2004).

Collaboration redefines how accountants pay taxes for their clients or employers in the developing country where electronic payment, postal and banking services are not effectively in place. Internet

likewise allows information sharing. In Figure 1, accountants A and B have clients outside their operational locality. They could outsource tax payment to members of the network. Accountant B could pay taxes of P_A on behalf of accountant A. The same arrangement applies to other accountants in the network. However if one failed to pay tax on time, the other suffers a stiff penalty. This risk puts off cooperation. Other barriers are trust and privacy. “Connect and collaborate” business model introduces three important participants. Forwarder (F) takes charge of picking up documents from one accountant and delivering to another accountant. Insurance company (I) underwrites possible risks. C&C is the nucleus. It handles receipts and payments and manages the network.

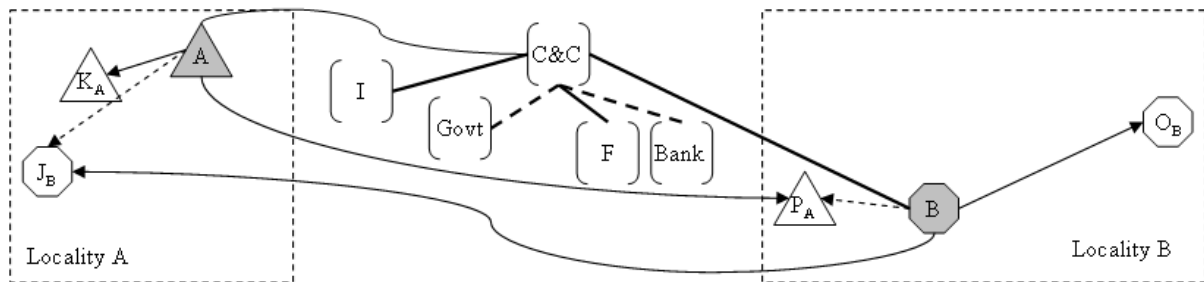


Figure 1: “Connect and collaborate” business model

2 LITERATURE REVIEW

Five prerequisites (Nadler & Tushman, 2004; Rogers, 2003; Trompenaars & Prud'homme, 2004) are necessary to change. Innovation (prerequisite 1) passes through an innovation process from awareness (learning what it does and how it works), to persuasion (inclination toward innovation), decision (eg, accepting), implementation, and confirmation (searching evidence to prove that the decision was right). It needs long gestation period and at the same time may require competitors to “run in packs” (Van de Ven *et al*, 1999). Its success lies in the social system (prerequisite 2) and understanding the homophilous or heterophilous adopters, their norms, challenges, and value. How the social system interacts bears impact on change agents, aides, opinion leaders, and gatekeepers. Communication channels (prerequisite 3) are crucial in innovation. So is the essence of time (prerequisite 4). People adopt innovation during different time stages of innovation. The innovators are pioneers who then are followed by early adopters (the opinion leader) and later by the early majority who triggers the fabled tipping point. Since change agents are most of the time in loggerhead with gatekeepers when it comes to priorities, organisation control (prerequisite 5) enforces timely communication.

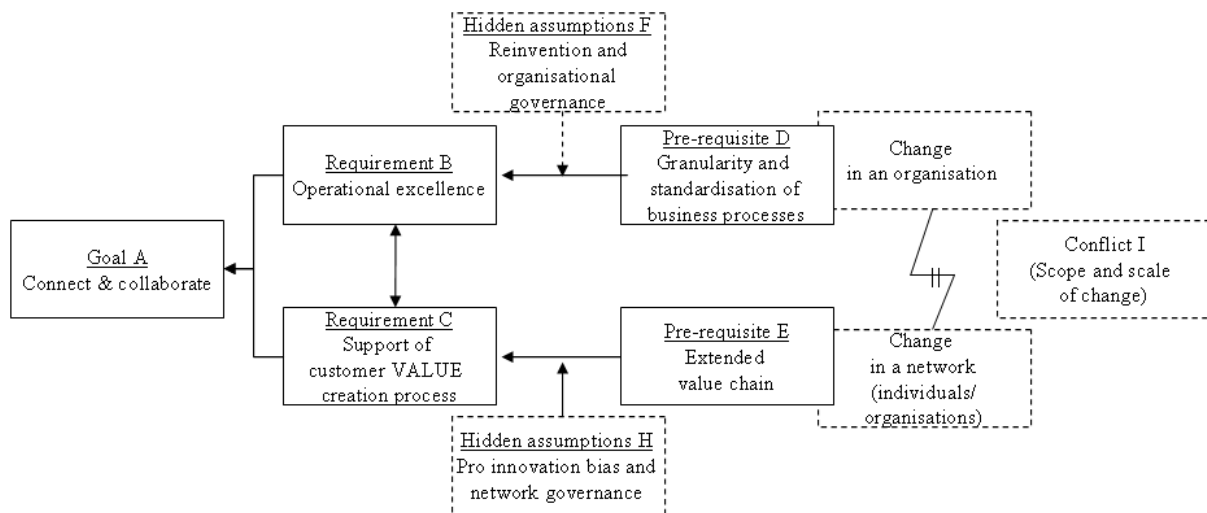


Figure 2: The change vision, its requirements, and prerequisites

To connect and collaborate (A in Figure 2), operational excellence (B) and support customer VALUE creation process (C) must both be present. The latter encompasses differentiating offerings and customer service levels at granular level. It considers ways of reducing costs, enhancing convenience, providing timely information, or reducing risks such as the risk of non-compliance of regulations. Operational excellence necessitates breaking down business processes, justifying, and standardising granules (Kellaway, 2005; Weill & Ross, 2004). Efficiency is crucial but in itself it is not the best performance indicator (Light, 2004). Standardisation fosters simplification, co-operation with stakeholders, and enforcement (DPSS, 2005b, pp 5.2, 5.4, 5.7-5.8). Discipline and governance ensure expected behaviours (F). Setting up electronic linkages with customers and suppliers extends an organisation's value chain. However, it needs a fundamental shift in attitudes (DPSS, 2005a, p 13.5) and implies (H) that all parties are willing to collaborate, share information, and be governed. This is where conflict exists. Although business processes (D) extend to suppliers and customers, their granularity and standardisation are nevertheless internal. Uncertainty in external environment makes the value chain more dynamic but gives rise to conflicts between external and internal stakeholders.

3 MOTIVATION, LIMITATION AND RESEARCH APPROACH

Discontinuance is possible at any stage of the innovation process. However, it is a calculated risk. Accountants of this developing country have no better choice but to "run in pack." Seldom does researcher have opportunity to document an innovation from its conception. Between risk and opportunity, this researcher accepts the latter. Another motivation is more employment if this business model could be put in place successfully.

Rogers (2003, p 470) cites several reasons why consequences have not been studied adequately. The ultimate goal will be to examine consequences especially on changes to individual socioeconomic profile to stakeholders especially the accountants. How does the network impact on the distribution of Good among members of the system? This question demands documenting *initial* and series of change of socioeconomic profile of prospective accountants who are active in their profession. The PhD level of the research will put in the foundation to be put in place to facilitate examination of consequences.

This research will examine the business model from its initiation phase. It will challenge the hidden assumptions (Figure 2) to ensure positive consequences. The extended value chain envisioned in "connect and collaborate" requires time and perseverance. The case study not only requires in-depth approach to yield idiosyncratic descriptive data, it requires a long time frame of more than five years. Committing such a long time period for a PhD undertaking is not realistic. Therefore, the PhD level of this study will stop at initiation phase. Other levels will consider this study as a work in process from initiation phase, to implementation phase, and finally to completion phase of change agents.

This is a real-life phenomenon: real people and real problems. Some research questions will be improved or changed and others will be added as literature review continues and leads to more refined insightful questions about the problem. The case study research is that of multiple cases. Each individual stakeholder, not necessarily an accountant, could be a case. However the same case can be further classified for example as CPA or accounting technician. It can be further classified by localities, adopters, as well as role in the change initiative (eg, change agents). Selection of cases will emphasise more on some criteria and less on other criteria. The selection process will start with creating awareness of the research in the business sectors. Interested groups will be asked to motivate their members to fill in a web-based survey and to get insights as to the social network.

The design phase will be planned for construct and internal validity as well as reliability. Whether the findings are generalisable beyond the immediate case or cases is a challenge. Cross-case examination or within-case examination, if deemed necessary, will be explored (external validity). Aside from the

web-based survey, other tools to collect data will include in-depth interview, focus group interview, field observations on accountant practitioner and smaller business levels, documentation review, and even artefacts.

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