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Transactions Cost, Reconfigurational Innovation and Sustainable Competitive Advantages: Evidences from the Bottom of the Pyramid

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Abstract

In this paper, we argued that, contrary to received wisdom, firms operating at the bottom of the economic pyramid are motivated more, by a desire to be cost competitive than, by pure philanthropy. We performed a content analysis on the reported cases of firms operating at the bottom of the pyramid using two apriori constructs. We found that cost competitiveness comes from the firms' efforts to reduce transaction costs using a particular type of innovation which we coin as reconfigurational innovation. Reconfigurational innovation imparts competitive advantages to the firms and sustainability in their relationships with their consumers besides the possibility of replicating the advantages back into conventional markets.

Keywords: *Bottom of the Pyramid, Reconfigurational Innovation, Core Utility of Products/Service and Format of Linkage.*

Introduction

Firms exist, to exchange their deliverables within some institutional settings (Coase, 1988, North, 1987, Asher et. al, 2005) and, to balance their needs with that of the society (Arrow, 1974). Institutions tend to influence the rent seeking potential of firms by moderating their transaction costs (North, 1987; Coase, 1960, 1988). In turn, firms also endeavor to minimize their transaction costs by innovating within and outside their boundaries thus supplementing, often, the need for institutions. Internal innovations entail improvements in the internal content (Williamson, 1975) while external innovations involve strengthening the linkages with the environment. Strategic outsourcing and technological alliances that are driven by cost considerations, asset specificities and information technologies (Mahoney, 1992; Parkhe, 1993; Robertson et.al, 1998; Shapiro and Varian, 1999; Nooteboom, 1999) are examples of the latter. These innovative traits are evident with respect to for-profit and philanthropic firms that operate out of poor institutional setting and depend on subsidies. While subsidies per se do not qualify as innovation, but the processes adopted to attract institutional subsidies can be innovative. Further, the choice of innovation itself is a strategic behavior on the part of the firm (Thornhill, 2006).

Given that firms innovate to overcome transaction costs (Winter, 1988; Jacobides and Hitt, 2005; Jacobides and Winter, 2005, Argyres, 2011), and that innovations are strategic choices, then is it possible that firms perceive transaction costs as a strategic tool creating entry barriers for competitors but sustainable competitive advantages for them? Competitive advantages have cost implications (Porter, 1985; Ghemawat & Rivkin, 2006; Pietersen, 2010) and the two primary sources of cost come from production and transaction costs (Williamson 1985; North and Wallis, 1994). Therefore, if a firm can innovatively minimize transaction costs, then it will enjoy competitive advantage given the existence of price based competition. Put differently, firms may actively seek sources and locations of transaction costs, within or beyond their value chains, with a view to minimize them and enjoy subsequent benefits from time compression diseconomies (Dierickx and Cool, 1989). Alternatively, firms may prefer to plough back the learning into their existing conventional markets and further minimize transaction costs to sustain their competitive advantages. But do firms really exhibit this type of behavior and with what mechanisms?

We contend that firms do seek markets that are characterized by high transaction costs, either explicitly or implicitly. Multi-national corporations (MNCs) venturing into the Bottom of the Pyramid (BOP) segment, fall under this category, albeit extant literature type-casted them as philanthropic ventures. In the said literature firms appear either as suppliers of desirable goods and services to the masses (Prahalad, 2002; 2005) or as benevolent procurers in the factor market (Karnani, 2007). Firm's role was restricted to either, satiating the latent consumption aspirations of the poor, or bringing in marginal economic benefits to the poor, by linking them to the mainstream economy. Given that MNCs are profit seeking commercial enterprises, with fiduciary responsibilities, such philanthropic assumptions, presents a partial view at best. The

BOP segment is fragmented and there are uncertainties over the paying abilities of the buyers who have limited surplus (Prahalad et.al, 2002; V. Kasturi Rangan et. al, 2011). This limitation may foster genuine (or otherwise) uncertainties with respect to payments thus increasing the monitoring and enforcement cost for the firm. Further, the low consumer surplus limits the unit sale price thus affecting the margins. Consequently pure market development strategies (Ansoff, 1957), applicable for conventional markets, would not recoup the investments. Therefore it is improbable that the MNC manager would prefer to venture into a segment that poses known risks to the margin, unless the intent is different. And yet the presence of MNCs in the BOP is a physical reality that transcended their reporting by Prahalad (2005).

Therefore, firms can exist in a BOP like markets due to either (a) limited philanthropic orientation enforced by regulatory requirements (e.g. Indian State Owned Enterprises) or, (b) requirement of subsidies from institutions/donors or, (c) need to revisit, decouple and reconfigure their existing value chain and cost structure with a clear focus on margins. The first option is similar to activities under corporate social responsibility (CSR) where expenses are adjusted against pre-allocated funds resulting in clearly defined benefits. However, it is easily replicable and likely to become an industry standard thereby discounting any competitive advantages. The second option is dependent on the munificence of a third party and therefore unreliable. The third option is difficult to build, time and resource consuming to imitate and may result in time compression diseconomies for potential competitors, thus providing competitive advantages and sustainability. The third option also reconciles the role of the firm either as a seller or a buyer or both. We subscribe to this option, given our belief that firms, venturing into the BOP segment, are motivated by a strategic need aimed at sustaining their competitive advantages. Investigating the alteration processes and their possible beneficial outcomes, then assumes importance.

We believe the altering process comes from a special type of innovation that we term as reconfigurational innovation (RI). We define reconfigurational innovation as an innovation that reduces transaction costs by iterating and reconfiguring a firm's external and internal linkages without changing the core utility of products/services. Here core utility (CU) of product/service is the economic utility or value created by the firm through its activities, keeping in view the demand of the target buyer. This is similar to *what* is to be produced given a demand. Similarly, format of external and internal linkages (FL) represents the activities undertaken by the firm to transact and exchange its products and services with the external as well as internal environment. This is akin to *how* the supply is delivered (or procured) for the given demand. Therefore by definition, RI focuses more on the aspects of transaction cost than on production cost as defined by North and Wallis (1994). Our definition of RI is consistent with the received wisdom on innovation in terms of (i) technological novelty, (ii) adoption and diffusion of that novelty into the market and (iii) iteration (Garcia and Calantone, 2002). RI is market centric involving exchange relationship and is process iterative to improve the cost structure. Technological novelty can come in the process of iterating linkages or in the changes in CU. Further, to establish an exchange relationship with the economically weaker market segment, firms must minimize the attended transaction costs. Therefore, RI has strategic dimensions with focus on providing competitive advantages either through CU or FL. We investigated this by raising the following research questions namely:

(i) What is the nature of transaction cost encountered by firms operating at the BOP?

(ii) How do firms minimize transaction cost at the BOP?

(iii) What benefits accrue to the firms as a result thereof?

The above questions are descriptive, exploratory as well as explanatory in nature. Therefore, in this paper, we intend to investigate the content, the process and the logic of firms operating in challenging market segments. The remainder of the paper is structured as follows. In the next section, we surveyed the literature for the linkages amongst the constructs of interest. In the third section, we proposed an appropriate methodology to address the research questions. In the fourth section, we presented the analysis and the findings. In the fifth and final section we presented a set of propositions and an emergent model linking the constructs of interest.

Theory Building

Transaction Cost at the BOP

Transaction cost economics (TCE) considers behavioral uncertainties in exchanges to depend on asset specificity, bounded rationality and frequency (Williamson, 1975; Shelanski and Klein, 1995). A brief review of the BOP segment reveals characteristics that pose the aforesaid transactional hazards for the firm. The consumers have irregular incomes and low per-capita purchasing power, coupled with concentration in pockets away from commercial centers, thus limiting exchanges. Yet the consumption aspirations are similar to conventional markets (Prahalad, 2005) that have to be supplied through dedicated or specific assets. Literature describes specific assets as complex physical assets (Masten, 1984), R&D efforts, worker specific knowledge (Monteverde and Teece, 1982), physical proximity (Rose and Jaskow, 1990) and so on. Uncertainties from such assets may arise from low sales volumes (from consumer base, industry lifecycle or competitive dynamics) that are disproportionate to the investment. Also firms may face ex-post vulnerabilities from competitors who may access and leverage assets created by first movers. Unsold inventories or accounts receivables are not an option for the BOP firms as consumer have low surplus and credit defalcation are a distinct possibilities. Also a fragmented market with information asymmetry makes contracting a costly affair. Moreover transacting partners at the BOP market can perceive the firm to be too intimidating to establish an exchange relationship. All these factors significantly increase the transaction costs for the firm. Consequently, firms must innovatively invest in organizational forms (Williamson, 1975; 1985; 1995; Klein, Crawford and Alchian, 1978; Hart and Grossman, 1986) with assets and networks having utilities beyond the immediate transactional needs. Further, they must not be capital intensive (Shelanski and Klein 1995) and must alter the linkages amongst transaction cost elements that convert a scale problem to a scope opportunity. We believe that reconfigurational innovation is one such mechanism employed by firms to reconcile and link organizational form with transaction cost.

Reconfigurational Innovation at the BOP

Following the taxonomy of Garcia and Calantone (2002), we conceptualize RI to possess novelty in either technological content or market impact or both. Alternatively, they may lead to deliverables that are new to the firm but known to the environment or, known to the firm but new to a particular environment (a new market). For example, ICICI Bank of India has existing competencies in the urban centric retail boutique banking model. But setting up the micro credit infrastructure was an internally novel initiative for the bank that caught the attention of its competitors in the macro environment. However the deliverables from the bank is a well known product for at least the micro credit borrowers of rural India who are also part of macro environment. Likewise Lifebuoy, a disinfectant soap from HLL (now Hindustan Unilever) is an old brand while its disinfectant property may be perceived as a novelty for the rural consumers who are used to some different forms of sanitation like the usage of ash or river sand (for scrubbing). Here the usage of soap as a sanitary disinfectant can be perceived as a novelty to the target market, who are used to its application as pseudo-detergent, shampoo et.al. Likewise by reconfiguring its existing process linkages an existing product, by the firm, may exhibit RI and be acceptable to a new set of customers. ICICI bank, while managing the credit history of its HNI clients for its retail boutiques, outsourced the same to self help groups (SHG) in its micro credit venture. It also established exchange relationships with the SHG by lending money to the groups thus transferring the cost of monitoring the individual to the group. That improved the quality of service like loan disbursal as well as loan repayments.

RI therefore focuses more on the micro and macro level environmental linkages than micro level technological novelties which affect the core utility of the product. With RI thus conceptualized, we next proceed to investigate how RI affects organizational form, and how the same in turn affects transaction cost at the BOP.

Reconfigurational Innovation and Organizational Form at the BOP

The need to innovate and evolve an organizational form, that minimizes a particular combination of transaction costs, is well established in the literature (Coase, 1937; Arrow, 1962; Williamson 1975, 1981, 1985, 1991a, 1991b, 1996; North, 1990; Allan, 1991; Leffler and Rucker, 1991). Literature however predominantly focused on hierarchy and market based governance form (Dahlstrom and Nygaard, 1999) as the cost of exchange and the location of residual rents are easily discernable vis-à-vis hybrid form. This is because in markets and hierarchy, the need and the direction of flow of units of exchange are well defined. In contrast, in hybrid form, the direction and scope of exchange are often not well defined. Assets deployed in a hybrid form may serve multiple purposes beyond the current mandate (Shelanski and Klein, 1995) leading to contentious rent appropriations. However markets that prefer repeat dealings, trades involving kinship, or exchange involving ritualistic and religious overtures without third party interventions (North, 1987) prefer the hybrid form. Empirical evidences show that BOP markets prefer interpersonal exchanges without third party interventions. However, these characteristics are different from hybrid forms like empowerment, piece-rate employment, autonomous profit centers, consortiums, franchising or quasi-integrations (Makadok and Cole, 2009), which have clear principal-agent relationship. At the BOP, the principal-agent relationship is not well established or fragile at best. The consumers are heterogeneous, fragmented, price sensitive, without sensitization on the usage of products and services and with a preference for robustness over finesse. The consumers have aspirations for conventional goods and services but in some cases have traditional/exotic alternatives. For example, the village money lenders in India are a known face and a locally acceptable entity that is present at the time and point of demand. Depending on microeconomic factors, they may show behavioural uncertainties. But their customers don't incur institutional costs like Know Your Customer (KYC) norms associated with lending through conventional banks. Given the prevalence of such conditions, a firm operating at the BOP will incur the following cost attributes:

(i) Complexities due to heterogeneous population, price sensitivity and tradeoff in preference between form and function.

(ii) Uncertainties over degree of product sensitization, price sensitivity, low purchasing power, irregular sources of income, possible local competition and payment defalcation.

(iii) Low and infrequent consumption in fragmented markets with low income surplus.

(iv) Lack of institutional and physical infrastructures and the possibility of investments on specific assets becoming sunk costs with non-commensurate returns.

Given the aforesaid limitations firms intending to venture into those markets must evolve specific forms. Literature recognizes that long term contractual alliances, geographical distance, legal constraints and local market characteristics inhibit hierarchical forms like vertical integration (Scott, 1995; Dahlstrom and Nygaard, 1999). Further, lack of institutional infrastructure and unique social norms make legal enforcement of residual rights difficult. Also, weak institutional infrastructures inhibit specialization due to dissipation of residual rents under impersonal exchange (North, 1987), a sentiment shared by Prahalad (2005) who emphasized innovations involving deskilling of work. Coupled with inadequate governance mechanism, ill-defined cost allocation and incentive structures, both hierarchical and pure market based exchanges are difficult to evolve at the BOP. That leaves us with hybrid form or more specifically the impersonal exchange without third party enforcement (Williamson, 1976, 1991, 1996; North 1987) where the transacting parties are *not unknown* to each other. As a result we find exclusive dealing contracts and co-ownership, investment offsetting norms (Heide and John, 1992), equity linkage or partial ownership (Pisano, 1990), quasi-firms or prime-contractor and subcontractor organization (Eccles, 1981) and long term commercial contracts (Rose and

Joskow, 1990) as examples of hybrid forms. However transacting parties in the hybrid form, including long term contracts, often suffer from incomplete or non-binding contracts (Crocker and Reynolds, 1993). The incompleteness of contracts may lead to emergence of opportunistic behavior even amongst familiar parties. Therefore when familiarity is limited, opportunistic behavior increases all the more to the point that the same has to be preempted through market transactions. But in segments like BOP, where ill developed institutions fail to enforce, transaction itself becomes impossible leading to market failures. However, the above conditions can be overcome if transactions are based on informal contracts or agreements based on reputational assets (Shelanski and Klein, 1995). The underlying characteristics of transaction (Palay, 1985) and mutual dependence on trade arrangement often influence the nature of informal agreement by encouraging and protecting relation specific investments. Such agreements typically preempt the cost of information and the possible opportunistic use of information asymmetry (Ellickson, 1989). Outwardly, nothing prevents one party from violating the informal agreement. However, reciprocal resource commitment supports the reputation of the transacting parties that in turn prevents opportunistic behavior. We investigated this aspect, within our proposed RI at the BOP.

Reconfigurational Innovation and Transaction Costs at the BOP

The non-firm actors at the BOP are severely resource constrained. Consequently reciprocal commitment of financial assets is difficult, either for the firm or the consumers. At the same time, product specific or frequency related uncertainties are difficult as BOP deliverables are mostly non-essential commodities, and in some cases, have alternatives. The above factors effectively negate transaction costs from behavioral uncertainties. But that also raises the danger of exchange not happening at all. Therefore the BOP firm must exist for reasons beyond the immediate requirement of non-essential commodities.

Transactions, not leading to immediate creation of residual rights that are perceived as sources of profits, are likely to be costless for the transacting parties in the short run. Alternatively, even if economic benefits accrue, but the same are disjoint with respect to the transacting parties, then the transaction is likely to be costless. We extend this logic to propose that firms can enjoy residual rights if they are different from those enjoyed by the consumers. This is a win-win situation and no one complains – provided the transaction can happen. Therefore for the transaction to happen, ex-ante transaction cost due to bounded rationality and opportunistic behavior must reduce. This requires the two parties to connect and reduce information asymmetry. Since lack of connectivity is one of the predominant contributors to ex-ante transaction cost, hence specific investments ex-ante (Grossman and Hart, 1986, Langlois, 1992) has to be made by both the parties in the form of some optimal linkages. RI essentially enables a firm to create these linkages that do not necessarily lead to creation of residual rights in the face of distributive game, ex-post. Creation of residual rights ex-post will adversely increase the transaction cost for the firm (Barzel, 1982; Cheung, 1972) who may quit the market as a consequence thereof. Consequently the consumer suffers. Therefore RI for the firm must lead to the creation of mechanisms that pre-empt its claim over residual rights ex-post as perceived by the transacting partner.

At the other end, given poor institutions, the BOP consumer cans exhibit opportunistic behavior by enjoying consuming without reciprocal payments. It is therefore important that RI must mitigate these hazards in the linkages. Empirical evidences have revealed that some firms respond to such hazards through a mechanism termed value co-creation (Prahalad and Ramaswamy, 2004). We prefer to describe the same as cost externalization to willing partners for the following reason. Value co-creation raises concerns over sharing of ex-post residual rights over the created value. Intent to control the residual rights may encourage an economic entity to betray opportunistic behavior (Barzel, 1982). But when cost dominates value, then one of the causes of opportunistic behavior is effectively reduced (Williamson, 1985; Tirole, 1988; Dietrich, 1994). Therefore if firm devices mechanisms by which costs of exchange predominate in the short and medium run and some of these costs can be externalized to willing partners, then the threat of opportunistic behavior from such partners can be minimized. We suggest that firms through RI externalize costs from information asymmetry, effectively preempting transaction costs from BOP consumers.

Several other forms of RI are also adopted by firms at the BOP segment. Institutional subsidies, in the form of access to established (or depreciated) infrastructure (e.g. telecom network for Voxiva in Peru), help firms reduce their asset specific sunk cost. An example of direct subsidy by Government institutions is evident in the technology transfer between ISRO and BMVSS for the manufacturing of Jaipur Foot. Such indirect subsidies come from the firm's negotiation skills using philanthropic orientation. Likewise, perceived philanthropic orientation helps mitigate the perception of opportunistic behavior, with buyers being less prone to demanding information. While it reduces the consumer's searching cost, it also reduces advertisement cum promotion related cost for the firm. A sense of trust appears to bind the consumer with the firm against a set of deliverables that lack asset specificity. This in turn further reduces transaction costs for the firm thereby enhancing competitive advantage.

These innovative approaches like cost externalization, preferential access and enabling institutional mechanisms have helped BOP firms to reduce costs (Grossman & Rossi-Hansberg, 2008) and increase profits. They also possibly help explain the existence of firm in a non remunerative segment like the BOP. Therefore, we believe that RI serves two broad purposes. It minimizes transaction costs from information asymmetry (uncertainty and complexity) and asset specificity (dedicated capital intensive linkages). It also reduces the appropriation of ex-post residual rights through the mechanism of equitable cost sharing and cost externalization leading to building of mutual trust. We empirically investigate our contention in subsequent section.

Research Method

We adopted a qualitative research method to explore and establish the linkages amongst RI, transaction cost and sustainable competitive advantages. Also, due to the non availability of precise measures for innovation and innovativeness constructs (Garcia & Calantone 2002), we could not adopt a statistical validation. Further, systematic and reliable data set on firms operating at the BOP was another impediment. Consequently, we restricted the scope of our study to qualitative investigation only.

Data Set

We derived our data from two sources namely (i) cases from Harvard Business School (HBS) repository and (ii) the seminal book by Prahalad (2005) consisting of the original nine cases. The choice of HBS cases is driven by three considerations. First, given the context, HBS and its allied repositories ensure reasonable data reliability through case clearance form. Second, HBS and allied cases have their specific structures which provide insights into the firm and its environment at a macro and micro level thereby providing a frame of reference to compare activities. Finally, most of the cases had teaching notes which provided necessary background information to validate or modify the apriori constructs (Eisenhardt, 1989). We adopted this technique by exposing the cases to our MBA and PhD level students and refined the constructs as we proceeded.

Case Selection Criteria

For selecting the appropriate cases, we used search algorithms consisting of key words like Bottom of the Pyramid, BOP, BOP strategies, emerging economies, poverty alleviation etc. We read the summary of the cases and downloaded 103 cases with due permissions from Harvard Business School Publishing (India). From the initial 103 cases, we performed a second level content analysis to select (i) private enterprises, (ii) public enterprises but operating in conjunction with private sector under a public-private-partnership (PPP) mode, (iii) projects undertaken by above firms. We included in the above set both for-profit and philanthropic firms. We included philanthropic organizations because professional management of philanthropic organizations can often pursue economically oriented goals. We did not include pure government organizations as a one off success in a government project does not ensure repetition and replication. Also financial and fiscal disciplines in government organizations (in emerging economies) are different from those of the private organizations – the later being more focused on returns on assets and investments. Further philanthropic organizations have to showcase their performances to obtain grants while public/political considerations determine government projects often at the cost of efficiency. Thus using the above criteria we settled for a sample size of 42 cases including the original cases of Prahalad (2004).

Data Presentation

We performed a manual content analysis, of the 42 cases thus selected, in terms of core utility (CU) of the products and their format of external and internal linkages (FL). We used these two parameters to define reconfigurational innovation. We specifically looked into (i) what are the primary offerings/deliverables of the firm/project undertaken and (ii) how the same reaches the intended users/beneficiaries. We compared our findings with that of our doctoral students from strategic management area and related areas like organizational behavior and human resource management. We did not use Standard Industry Classifications (SIC Code) as the samples came from diverse geographical locations and that too from emerging economies. We presented the content analysis in Appendix A1 in tabular format and used it to investigate the innovation, transaction cost and competitive advantage linkages.

Appendix A1at about here

Analyses and Results

We further analyzed the content analysis (Appendix A1) along two broad criteria namely (i) the relative novelty within the deliverables and (ii) the transaction cost implication. Within the first criteria, we investigated the changes (novelty) effected in the CU and FL vis-à-vis the conventional industry practices as given in the cases. The same is presented in Table T1 below.

Table T1 at about here

After that, we analyzed how the changes in either the CU or the FL or both impacted the transaction cost. In the process of determining the relative novelty in CU or DL, we found that in 5 instances, changes in CU have been effected that influenced the product deliverables. At the same time in 2 instances, we found no specific change in the FL. That included the instance where no specific information was interpretable from the case itself. In the remaining 35 cases, the novelty was clearly in the format of linkages (FL). Therefore FL appeared to be the area where the majority of innovative activities had occurred. Next we did a content analysis on the nature of changes within FL by isolating the dominant themes or the dominant constructs and plotting or linking them with transaction cost. We interpreted the constructs and checked for convergence from academic peers. We present the same in Table T2 below:

Table T2 at about here

Discussion

The results of our analysis shows that RI, operationalized through CU and FL, tend to reduce various types of transaction cost for firms operating at the BOP. A closer search reveals that with transactional costs like searching, negotiating, contracting, monitoring, tariffs and taxes being known ex-ante, firms actively seek subsidies or institutional support to hedge an adverse impact on their balance sheets. Also, there are evidences of firms hedging their entry risks into the BOP by adopting either a project mode or a Public Private Partnership (PPP) mode. In the project mode, the owner of the project bears whole or part of the cost of infrastructure and delivery related costs. In the PPP mode, the terms and conditions of sharing of activities and finances are settled apriori. Consequently these are like subsidies given to venture into non-remunerative segments by offsetting cost of setting up delivery mechanism. Further, these subsidies enable firms to enter and gauge the core utility demanded by BOP consumers. From the firm's perspective, part of the cost towards developing a market in the conventional sense of Ansoff, (1957), is externalized to a willing partner. This is what we propose as cost externalization within the overall FL. Therefore cost externalization within format of linkage (FL) appears to be a key innovative activity exhibited by BOP firms that reduce their cost structure despite the possibility of a sub-optimal return. Therefore we propose the following:

Proposition 1 (P1): Firms operating at the BOP segment use reconfigurational innovation to minimize ex-ante transaction costs to make their investments attractive.

Post entry, BOP firms establish linkages to bridge cultural, language and other informal barriers that foster opportunistic behavior (Chen et al. 2002; Brown et al. 1989) and ex post transaction costs. Given that most of the BOP deliverables are commodities, a differentiating factor that can provide sustainable cooperation and coordination is trust (Putman, 1995). Trust between the firm and the customers build up when firm is able to bridge informal barriers by altering its legacy FL. Trust reduces information asymmetry and the consequent opportunistic behavior. Trust within the FL appears to be one of the key constructs in the firm's endeavor to serve the BOP market. Therefore we propose;

Proposition 2 (P2): Firms operating at the BOP undertake reconfigurational innovation to foster trust and minimize ex-post transaction costs to sustain their business in the segment.

Another dimension at the BOP deals with the ability of the firm to leverage trust, embedded within local groups like SHGs. BOP firms show a preference to group lending rather than individual lending. Intra-group information sharing reduces the risk of individual level behavioral uncertainties. Also the group identity in terms of credentials gained from past transactions becomes the critical linkage that binds the firm with the group. This linkage reduces risk of lending and improves the margin thus providing competitive advantages to the firm. Finally, through this linkage and a sense of association, trust emerges (Gulati, 1995) between the firm and the group. While the firm can obtain aggregate level information on the internal dynamics of the group, the same is not a sufficient (dis)incentive for the group to break away. For one, the group had already optimized its information searching cost when it entered into the relationship. Secondly, at least the same transaction costs will have to be re-incurred while establishing a new linkage besides incurring the cost of separation in contract liquidation. Thus mutual cost reduction deters opportunistic behavior from both parties. This lends sustainability to the relationship. Hence we propose that:

Proposition 3 (P3): Trust based linkages between the BOP Firm and its consumers emerge from a sense of association and group identity derived from past transactional credentials.

Conclusion: Reconfigurational Innovation and Sustainable Competitive Advantages

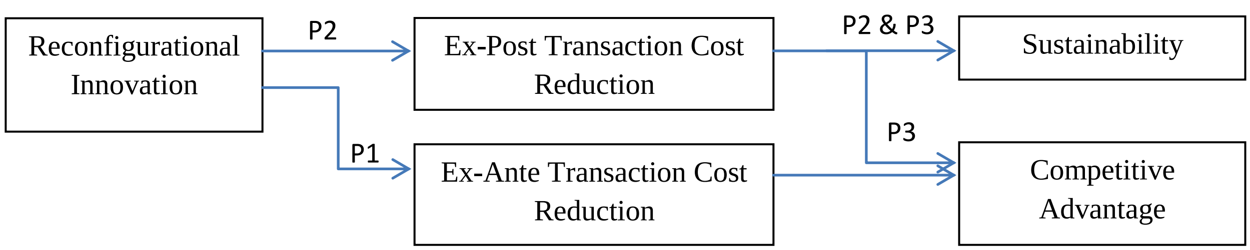
Reduction of transaction cost and improvements in margins per se, cannot induce an economic agent to venture into BOP segment given the risks involved. The BOP segment must offer some more tangible advantages like an opportunity to perfect activities leading to competitive advantages vis-à-vis conventional competitors. This is possible through replication of the advantages across contexts, leading to sustainability (Ghemawat, 1991; Seelos and Mair, 2007). But what are those advantages in a commodity setting?

Literature broadly describes competitive advantage in terms of relative profit margins (Porter, 1985; Ghemawat, 1986, Pietersen, 2010). Competitive advantage is operationalized in terms of both production and transactional activities like marketing and sales, intended to minimize information asymmetry and sustain exchange relationship (David and Han, 2004). Trust based exchanges tend to minimize information asymmetry leading to reduction in marketing and sales expenses, thereby reducing transaction costs for the firm. Therefore any activity leading to relative reduction in transaction cost is likely to give competitive advantages by overall cost reduction. Mechanisms like reconfigurational innovation that involve cost externalization to partners cum consumers are likely to reduce overall cost leading to competitive advantages.

But the same set of activities can be imitated by competitors thus threatening the sustainability of competitive advantage. Therefore firm must perform some activities that disincentivize a rational profit maximize from imitating. BOP firms foregoing residual rights thereby preempting opportunistic behavior is one such activity. This happens when cost elements are shared and the benefits are disjoint. The BOP firm obtains the rent and the BOP consumer gets the service. The spin off benefit is trust which creates two way loyalties and prevents opportunistic behaviors.

It may be noted that innovations leading to cost reduction by the firm and cost sharing by the consumer happens in the process of exchange or delivery. With the cost sharing roles implicitly or explicitly known to the transacting parties, there appears to be no incentive either ways to break the status quo. This status quo ex-post, renders sustainability to the firm's competitive advantage and a hedge against supply side shock to the fragmented BOP segment. For the firm therefore, the added incentive to enter BOP is to reconfigure its process in its format of linkage. That possibly enables the firm to determine the limits of the aforesaid status quo in the cost sharing mechanism. Replicating the innovative cost sharing mechanism ex-ante in the format of linkage and maintaining the status quo relationship ex-post, across different contexts, lead to the emergence of a pattern that may provide competitive advantages on a sustainable basis. We present the same in framework F1 below. In the same figure, P1, P2 and P3 represent the propositions used to link the constructs of interest.

Framework F1: Relational Framework amongst Reconfigurational Innovation, Transaction Cost and Sustainable Competitive Advantages



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Appendix

Appendix A1 (Key Activities in Reconfigurational Innovation at the BOP)

SL. No.	Firm	Key Deliverables	Key Activities
01	Aaron's Inc.	Rent to Own - House hold appliances	Stress on Lease Ownership, monthly rentals, prominent display of self manufactured furniture
02	Acumen Fund	Venture Capital Funding	Venture Philanthropy – funding socially relevant non-profit organizations, providing efficient portfolio management practices to non-profit organizations
03	The Akshaya Patra Foundation	Free Midday Meal (School Children) and Low Cost Meal (Labourers)	Centralized Kitchen in Bangalore City Schools, decentralized kitchen at villages operated by Self Help Groups, religious overtone ensures hygienic food. Funding by Government Subsidies
04	Alpen Bank	Credit Card Business	Same as normal banks
05	Ancora Project – Catholic University of Chile	Primary Health Care Service	Operates on a family health model. Uses both therapeutic and prophylactic approach by education. Medical teams composed of nurses, psychologists and social workers. Professionally managed and protected from trade union induced inefficiencies. The Ministry of Health, Chile, subsidizes the project.
06	Aravind Eye Care	Cataract Operation and Related Eye Care Services	Deskilling – Activities broken down – performed by paramedics, Doctor perform only operation – achieve scale economies, Eye Screening Camps – as advertisement and to

			reduce primary screening time, Tiered cost structure, in-house production of lens
07	Banco Compartamos	Microfinance, loans without collaterals	Service centres across Mexico. Agent based loan recollection and loans to groups composed of women and local acquaintances. Interest rate nearly 90% p.a.
08	Baring Private Equity Partners India Limited-*Safe*Save	Micro-Financial Institution with savings account to urban slum dwellers	A community member from slum acts as collecting agent. The minimum savings balance should be one third the loan amount. Interest payable on minimum balance. The collecting agents have minimum qualification in reading and mathematics to use a hand held computer
09	Casas Bahia	Commoditized but Branded Retail Goods	Credit Rating based Easy Financing Schemes, Higher concentration of outlets in Congested areas, Largest assorted Trucking Fleet, Biggest Warehouses, Linux based IT systems
10	Cemex (Patrimonio Hoy)	Ready Mix Concrete for *unit based* construction	Aggregation of homemakers in groups of 3 or more; 6 weeks savings – 10 weeks supply, technical advice & support, technical training
11	Codevasf	Irrigation Infrastructure	PPP model adopted to develop arable plots and licensed on 25 years lease hold basis. Govt. to fund road and energy infrastructure while private concessionaire to build irrigation infrastructure and establish agricultural operations and water supply. Concessionaire can engage Anchor companies for agricultural produce and collect water and land tariff.
12	Danimal	Yoghurt – a milk product	A network of Danimamas as primary distributors who retailed their merchandise to Daniladies. Daniladies did the direct selling. The firm – Danone did a onetime capital investment on Danimamas. All subsequent risks are borne by them through realizations from Daniladies. Danimamas are free to sell other products through this channel
13	E+CO	Seed Investment to Clean Energy Enterprises	Source of E+Co's funds from social investors, donors and charitable organizations as well as E+Co managed accounts.
14	Empleados Ya	Low Skilled Labour Intermediation	Matching the Accounts Executive (interface with business people) with Recruiter (the representative of workers); Capital infusion from Net-For-Work a not for profit employment agency. Contemplating on Franchise model to scale up.
15	Esquel	High quality cotton fabric	Contract of Cotton Futures with Farmers, Spinning Mill near cotton producing area to augment trust amongst cotton producers, Guaranteed Minimum Purchase Price to Farmers producing special ELS cotton. Contract undertaken through Government intermediaries
16	Farmacias Similares	Drug Stores cum Medical Clinic	Sell generic drugs with 30% less price. Open frontage to increase viewership, aggressive marketing and public complaints against large foreign pharmaceutical laboratories and bureaucratic nexus. Medical Clinic adjacent to drug stores – the prospect of young doctors were advertized although doctors of all ages practiced in the clinics. Model operates both through own shops and franchisee.
17	Habitat for Humanity International	Housing for Low Income Group	Housing project site in proximity to job opportunities, public infrastructure and schools. Political relationship and connections, Subsidy from Government, cross subsidy using mixed income model.

18	Health Reach Clinic	Language advocacy for Health Care Service	The initiative was subsidized initially by Catholic Campaign for Human Development and Federal Grant Fundings.
19	HLL – Annapurna Salt	Iodized Salt – K15 Microencapsulation Technology	TV (DD) to advertize, Shakti Ammas (local women) to establish brand credentials; use Shakti Ammas network to push other FMCG Products
20	HLL - Lifebuoy	New Fragrance, New Size, & Triclosan	Mass Media, Existing Markets & New markets, Hired Rural arm of O&M, stress on "Do – Good" attributes, Focus on Family as Unit, children young mothers & Village elders as influencers
21	ICICI – Micro Finance	Rural Micro Credit, SHG Savings Account	SHG model of Bank of Madurai – scale up, the onus and cost of expanding network on SHG members – ICICI Bank pay commission; SHG Savings Account – members collect money – deposit to bank as a single account – less transaction cost for Bank
22	IDFC India	Infrastructure Financing	Through acquisition of businesses from other banking and financial institutions. Creation of foundation to fund technology demonstrators or training civil servants on infrastructure and management issues.
23	Integrated Health Outreach System	Health Care Service	Service delivery by partnership with local population speaking local dialect (Spanish). Financial support from donor organization. Stress on securing funds from local institutions
24	ITC – e-chaupal	Real-time information, intermediary elimination	Internet Connection via Phone line/VSAT, Some Favorite Pages – relevant to farmers, Forward and reverse transactions directly between buyers and sellers
25	Jaipur foot (BMVSS)	Flexible Prosthetic Limbs	Designed to capture Cultural Aspects of Bare Foot, Reception, admission, measurement, manufacturing, fitting and discharge – within 24 hours; Free boarding & lodging of patient & family at selected centres, Cost borne by Govt & Philanthropic Groups
26	Kaskazi Network Limited	Retail Distribution Solution	Deployed Bicycle Sales Representatives (BSR) and Foot Soldiers to access densely populated areas with narrow and poor access. BSRs uplift stocks from whole sellers and sell directly to retailers at the recommended wholesale price. Also provides retail census information for prospected clients.
27	Keggfarms India	Genetically modified poultry products	Supplied to poor as well as relatively well off farmers – who rear up the chicks in rural households. Others include the chick vendors who both supply chicks to rural households and raise the same in their own house hold.
28	Magazine Luiza	Retail Commodities in small cities	Use of Virtual Show Rooms, Home delivery within 48 hours, Social Insertion strategy to partner with local providers, partnering with Unibanco to provide financial services and payment period for 24 months. Active follow up with inactive customer, Special weekend offers.
29	McDonald's strategy for Corporate Success and Poverty reduction	Inclusive development through Fast Food Franchise	Franchise Business model has given employment and decent employment to large number of people. Employees are incentivized to enrol in retirement funds or complete their education

30	Merck: Global Health and Access to Medicines	Access to affordable drugs	Pricing on a case by case basis. Partnering with national Government to set up clinics, collaborate with UN organizations to distribute critical drugs in under developed economies with limited infrastructures.
31	Micro Insurance Agency – Malaria Voucher System	Inclusive micro-financing and risk management	Works globally through wholly owned subsidiaries; adapting the financial products and providing training to local staff; tying up multiple products; vouchers sold through a variety of retail locations, use of IT infrastructure to connect purchaser, vendors and healthcare facilities; use of technology to minimize transaction costs;
32	Narayana Hrudayalaya Hospitals	Heart Care and Related Medical Services	Used a hybrid strategy of attracting paying patients, consistent focus on lowering cost of operations and subsidized poors who could not afford; For managing operations followed “Wal- Martization” of health care- rented expensive machines instead of buying them- reducing sunk cost and fixed overheads; collaborated with other hospitals to have higher bargaining power as buyers and get discounts on supplies and equipments; uses IT and software to minimize inventory and quicker processing; Developed next generation talent pool by offering courses and trainings and made health care affordable by offering micro- health- insurance products
33	Oprah Winfrey’s dream school	Underprivileged School Programme	Charity driven initiative
34	Orange Cameroon	Telecom services to low income group	No significant description of the processes adopted to address the lower rung of the economic ladder
35	P&G Children’s Safe Drinking Water	Water Purifier	Subsidy based approach. Partnered with seasoned and expert local and international government and non- government organizations to expand the use to developing countries. Program operated either on partial cost recovery, where the user paid only for the product and donor funds subsidized other program costs. In case of emergencies, full subsidies were provided.
36	Partners in Health- HIV care in Rwanda	Health care and socio-economic service	A community based care model using local and trained health workers for counseling and educating about preventive health products was used. The program extended support to needy patients and their families such as payment of school fees and construction of houses etc. The programs targeted broader health system beyond the 4 evaluation criteria.
37	Procter and Gamble (Brazil)	FMC Goods in emerging markets	Adapting (Tropicalized) globally successful products, brands and marketing communications to meet the needs of BOP customer while upholding PVP- purpose, values and principles. Desired performance at affordable prices; attractive packaging and communication; appropriate balance between lowest costs and the right superior technology.
38	SELCO:	Sustainable customized energy service to the poor	Facilitates funding for purchase of products. Maintains close relationship between employees and customers. Stress on pre sales and post sales services and AMCs. Assessment of the customers’ requirements and the repurchase capacity.
39	Salud Digna	Preventive health care	Assembly line mode of operation to streamline scheduling

		service at a nominal fee.	and workload distribution. Quick appointment for patients. Focus on measurement of each activity. Intensive use of IT infrastructure. Results of test known online. Publicity by word of mouth. Philanthropic orientation enables cheap procurement of capital items.
40	The Generic Pharmacy	Low priced pharmaceutical products with free checkups.	One central warehouse, one company owned retail store and one packaging and forwarding center, franchises located near markets, hospitals and large drug stores. Locally respected members as franchises, predominantly cash business. Order processing by telephone and distribution exclusively by the firm.
41	Unitas	Micro finance for small business venture	Developed a market based, standardized approach, the Unitus Acceleration Model (UAM) for accelerating the growth of MFIs that could be replicated on a world-wide basis. UAM has 3 different aspects- Partner selection; Partner relationship and the exit and transformation process. Direct interventions in financing MFIs. Provides consulting services and direct grants. Helps in converting partners from non-profit to for-profit commercial banks.
42	Voxiva	Voice and Data Service to Health Care Sector	Extensive usage of telephone/internet lines to transfer realtime data to a dedicated server, dedicated – shared application platform ALERTA,

Table T1: Relative Novelties within Deliverables

SL. No.	Name of Firm/Project	Changes in Product Utility from Industry Practice	Changes in Format of Delivery from Industry Practice
01	Aaron's Inc.	No Change	Cost Reduction by selling own manufactured products, stress on Lease Ownership – a well known concept
02	Acumen Fund	No Change	Stress on operational efficiency in philanthropic projects
03	The Akshaya Patra Foundation	Contextual Novelty – Mid Day Meal is India specific – but similar to lunch is place of employment	Cost Externalized to Government. Risk mitigation through SHG and religious overtures
04	Alpen Bank	No Change	No Change reported in case
05	Ancora Project – Catholic University of Chile	No Change	Cost Externalized to Government. Risk mitigation by education (information sharing). Government protection against opportunistic behavior by Trade Unions.
06	Aravind Eye Care	No Change	Scale and Scope Economies. Vertically integrated due to requirement of specific precision equipments.
06	Banco Compartamos	No Change	Risk mitigation through group lending. Group mitigates opportunistic behavior of individual.
08	Baring Private Equity Partners India Limited-	No Change	Information asymmetry induced risk – mitigated by employing local slum dwellers. Stress on savings instead of lending – financial assets in the control of

	*Safe*Save		the firm.
09	Casas Bahia	No Change	Information asymmetry induced risk – mitigated by employing local people. Searching cost externalized to credit rating agencies.
10	Cemex (Patrimonio Hoy)	No Change	Risk mitigation through group lending. Group mitigates opportunistic behavior of individual. Free Technical support leads to captive customers.
11	Codevasf	No Change	Cost Externalized to Government or concessionaire. Risk of development to concessionaire.
12	Danimal	No Change	Creation of informal channels and network which reduces risk. Risk externalized to Danimamas as intermediaries.
13	E+CO	Change – in the broader context of investment in energy infrastructure	Cost of operation externalized to donors. Almost risk free preliminary testing of concepts.
14	Empleados Ya	No Change from standard employment exchanges	Cost borne by partners. Reduction of information asymmetry by reconciling Accounts Executives and Recruiters – who represent opposing interests.
15	Esquel	No Change	Mitigating supply side risks by guaranteed minimum price. Government intermediaries mitigate contractual risks.
16	Farmacias Similares	No Change	Self advertisement by campaigning against bureaucratic and MNC nexus – mitigating information asymmetry. Open frontage display increases viewership and reduces information asymmetry.
17	Habitat for Humanity International	No Change	Cost externalized to Government. Political relations help mitigate opportunistic behavior.
18	Health Reach Clinic	Novel Concept – as the focus is to bridge language divide between the doctor and the patient for more efficient diagnostics	Cost externalized to third parties as granting organizations
19	HLL – Annapurna Salt	No Change	Creation of an informal distribution channel – with cost externalized to channel partners
20	HLL - Lifebuoy	No Change	Market penetration by creation of informal channel – cost of development shared/externalized to partners.
21	ICICI – Micro Finance	No Change	Risk mitigated through group lending. Group prevents opportunistic behavior. Also cost of setting up an informal channel shared by SHG.
22	IDFC India	No Change	Training of civil servants will facilitate prevention of opportunistic behavior by borrower. Creation of informal networks to reduce information asymmetry and leverage legal enforcements
23	Integrated Health Outreach System	No Change	Reduce information asymmetry by employing local population. Cost shared by donors
24	ITC – e-chaupal	No Change – the	Reduce rent seeking intermediaries. Usage of low

		required information is typically obtainable from the Officers of Agricultural Departments operating at Block Level	cost infrastructure
25	Jaipur foot (BMVSS)	No Change	Economies of scale. Cost borne by Government and Philanthropic organizations. Brand built without cost involved
26	Kaskazi Network Limited	No Change – retail vendor	Reduce information asymmetry by employing local population. BSRs are an efficient sales and distribution channel.
27	Keggfarms India	Superior quality eggs and chicken as a result of selective breeding	Creation of vendor cum chicken raiser – who help popularize the brand. Leads to positive externalities.
28	Magazine Luiza	No Change	Risk shared by partnering financial institution. Virtual show rooms reduce information asymmetry for buyers.
29	McDonald's strategy for Corporate Success and Poverty reduction	No Change	CSR activities aimed at brand strengthening and reducing information asymmetry.
30	Merck: Global Health and Access to Medicines	No Change	Partnering and Cost sharing with global institutions. Brand Image strengthening through distribution of affordable drugs.
31	Micro Insurance Agency	Novelty in Packaging of products – some change in utility of product like malaria voucher system.	Use of IT infrastructure to reduce information asymmetry. Local staffs helps to reduce asymmetry.
32	Narayana Hrudayalaya Hospitals	No Change	Cross subsidy model where the rich subsidize the poor. Cost advantage through collective bargaining. Low overhead costs. Implicit subsidy from the junior doctors who work for long hours to gain experience. Insurance scheme aimed at reducing risks.
33	Oprah Winfrey's dream school	No Change	Charity driven and hence cost to donors.
34	Orange Cameroon	No Change	No significant descriptors
35	P&G Children's Safe Drinking Water	No Change	Cost externalized to local and international institutions and user. Subsidy is the key.
36	Partners in Health- HIV care in Rwanda	No Change	Community based care model minimizes opportunistic behavior. Additional services ensures loyalty.
37	Procter and Gamble (Brazil)	No Change	Customized products increase asset specificity with customers. Technological advantages in reducing

			costs.
38	SELCO:	No Change	Risk mitigation exercise by assessing customer's requirement and purchasing power. Close liasoning reduces information asymmetry.
39	Salud Digna	No Change	Scale Economies. Brand building through informal channel – by word of mouth. Philanthropic brand enables lower input cost.
40	The Generic Pharmacy	No Change	Risk mitigation by operating through franchise model and partnering with respected citizens of the locality.
41	Unitas	No Change	Risk mitigation by operation through MFI. Value added consulting services prevents client attrition. Conversion of non-profit organizations to for profit organizations help share economic risks
42	Voxiva	No Change	Usage of amortized infrastructure – no additional investment cost. Customization (asset specificity) likely to prevent client attrition.

Table T2: Elements of Reconfigurational Innovation and linkages to Transaction Cost

Elements of Reconfiguration Innovation	Identified Constructs	Linkage to Transaction Cost
Core Product Utility	Mid Day Meal	Interpreted as an incentive for attendance
	Bridging Language Divide between Doctor and Patient	Means to reduce informal barriers like language
	Superior quality of eggs and chicken, selective Breeding	Selective Breeding produce chickens which are specific to the breeding firm and quality ensures customer loyalty.
	New Product/Service like Malaria Voucher System	Reducing health related costs like monitoring, safety etc.
Format of Delivery	Lease Ownership	Reducing uncertainty due Information Asymmetry
	Subsidy from Government	Reducing cost of monitoring, enforcement etc
	Risk mitigation by engaging groups	Monitoring Cost reduction
	Risk Mitigation through Education	Reducing cost of cultural barrier
	Government Protection against Trade Union Activities	Reduction of Opportunistic behavior
	Group Lending	Monitoring Cost reduction
	Externalization of Searching Cost	Reducing searching, contracting and monitoring costs
	Free technical Support	Creating asset specificity and means of continued engagement
	Development Risk to Concessionaire	Reducing searching, contracting, monitoring and enforcement costs
	Creation of Informal Channels and	Creation of specific assets thereby

	Networks	ensuring customer loyalty
	Mitigating Supply Side Risk by Guaranteed Minimum Price	Reduce negotiating and contracting costs
	Training of Civil Servants	Reducing monitoring and enforcement cost
	Usage of Low Cost Infrastructure	Reduce transportation cost
	Brand Building through Philanthropic Activities	Reducing searching, negotiating and contracting cost
	Community based care model	Reducing monitoring costs
	Cross Subsidy Model	Reducing tariff, tax etc
	Operations through Franchise Model	Reducing monitoring and enforcement cost.

Reference: Cases

Bell, D. E., Neves, M. F., Castro, L. T. E., & Kindred, N. (2010). Codevasf. Harvard Business School. Product Code: 9-510-042.

Baron, D. P. (2008). Social entrepreneurship:banco compartamos. Stanford Graduate School of Business. Case:P-71.

Chu, M., Koljatic, M. & Silva, M. (2010). Ancora: a private university providing healthcare for the poor. Harvard Business School. Product Code: 9-306-088.

Chu, M. & Cuellar, R. G. (2011). Farmacias similares. Harvard Business School. Product Code: 9-307-092.

Chu, M. & Smithgall, C. (2010). Aaron’s: Household goods for the U.S. base of the pyramid. Harvard Business School Case. Product Code 9-311-047.

Denend, L. (2007). Unitus (A): microfinance2.0- reinvesting an industry. Case: SI-87A.

Frei, F. X. & Pinho, R. R. D. (2006). Magzine luiza: builing a retail model of “courting the poor”. Harvard Business School. Product Code: 9-606-048.

Grossman, A. & Cuellar R. G. (2010). Salud digna: dignified health for everyone. Harvard Business School. Product Code: 9-311-051.

Healey, J. F., Hoyt, D. & Meehan, B. (2007). Acumen fund and waterhealth international: The role of venture philanthropy. Stanford Graduate School of Business Case. Product Code: SM-158.

Hawarden, V. & Barnard, H. (2010). Danimal in South Africa: management innovation at the bottom of the pyramid. Product code: 910M99.

Hagiu, A. & Corsi, E. (2009). Planet finance: broad scope in microfinance. Harvard Business School. Product Code: 9-708-441.

Isenberg, D. (2008). Keggframes (India)- which came first, the kuroiler or the KEGG?. Product Code: 9-807-089.

Jones, G. & Lluch, A. (2010). Ernesto tornquist: making a fortune on the pampas. Harvard Business School. Product Code: 9-807-155.

Koljatic, M., Silva, M. & Herrera, J. (2009). Empleados ya: a headhunter for the poor. Social Enterprise Knowledge Network. Product Code; SKE- 129.

Kakani, R. K. & Thakur, M. (2009). Baring private equity partners India limited: banking services for the poor in Bangladesh. Richard Ivey school of Business. Product Code; 909M52.

Kohli, U. (2008). Consultancy development organization. Richard Ivey School of Business. Product Code; 908M34.

Kanter, R. M. & Bird, M. (2008). Procter & gamble brazil (A): 21/2 turnarounds. Harvard Business School. Product Code: 9-308-081.

Kayalkar, J. (2011). The generics pharmacy. Richard Ivey School of Business. Product Code: W11061.

Khaire, M. & Mcginn, K. (2011). Sewa trade facilitation center: changing the spool. Harvard Business School. Product Code: 9-810-044.

Monsegur, A. O., Zagazeta, F. & Rodriguez, P. (2006). Cementing the bottom of the pyramid; a new direction at cemex. Darden Business Publishing. Product Code: UV0665.
Mckague, K. & Branzei, O. (2007). E+ co: a tipping for clean energy entrepreneurship (A). Richard Ivey School of Business. Product Code: 907M54.
Mukherji, S. & Jose, P. D. (2010). Selco: harnessing sunlight to create livelihood. Product Code; IMB 321.
Macomber, J. D. & Balsari, V. (2010). IDFC India: infrastructure investment intermediaries. Harvard Business School. Product Code: 9-210-050.
Mwezi, L. (2008). Kaskazi network ltd- distributing to the bottom of the pyramid (A). IMD International. Product Code: IMD385.
Pamela, V. (2006). Health care & the isolated poor in the lower rio grande valley: the quest to make a lasting change. Kennedy School of Government. Product Code: HKS342.
Rangan, V. K. & Yong, S. (2010). Alpen bank: launching the credit card in ramania. Harvard Business Publishing. Product Code: 4559.
Rangan, V. K. & Rajan, R. (2007). Unilever in India: Hindustan lever's project Shakti- marketing FMCG to the rural consumer. Harvard Business School. Product Code: 9-505-056.
Retsinas, N. P. & Segel, A. (2007). Habitat for humanity international in south Africa. Harvard Business School. Product code: 9-207-016.
Rangan, V. K. & Lee, K. (2009). Merck: global health and access to medicines. Harvard Business School. Product Code: 9-509-048.
Sebenius, J. K. & Qian, C. (2010). Esquel group: building a substantial partnership with cotton farmers in xinjiang (A). Product Code: 9-911-031
Sheehan, J. (2008). Healthreach and hable (A). Darden Business Publishing. Product Code: UV11152.
Upton, D. M. & Fuller, V. A. (2004). The ITC echoupal initiative. Harvard Business School. Product Code: 9-604-016.
Vachani, S. (2009). ITC in rural India. Richard Ivey School of Business. Product Code: 909M36.
Wolfe, R., Hartman, L. P., Sheehan, J. & Mead, J. (2008). Started as crew (C): mcdonald's strategy for corporate success and poverty reduction. Darden Business Publishing. Product Code: UV1156.

Articles and Books

Allen, D. W. (1991). What are transaction costs? *Res Law Econ*, *14*, 1-18.
Ansoff, H. I. (1957). Strategies for diversification. *Harvard Business Review*, 35(5), 113-124.
Argyres, N. (2011). Using organizational economics to study organizational capability development and strategy. *Organization Science*, 22(5), 1138-1143.
Arrow, K. J. (1962). Economic welfare and the allocation of resources for invention. In Abernathy, W. J. & Utterback, J. (Eds.), 1978. Patterns of industrial innovation. *Technology Review*, June-July: 40-47.
Arrow, K. J. (1974). *The limits of organization*. New York: Norton.
Asher, C. C., Mahoney, J. M. & Mahoney, J. T. (2005). Towards a property rights foundation for a stakeholder theory of the firm. *Journal of Management and Governance*, 9, 5-32.
Barzel, Y. (1982). Measurement cost and the organization of markets. *Journal of Law and Economics*, 25(1), 27-48.
Brown, L. T., Rugman, A. M. & Verbeke, A. (1989). Japanese joint venture with western multinationals: Synthesising the economic and cultural explanations of failure. *Asia Pacific Journal of Management*, *6*(2), 225-242.
Chen, C. C., Peng, M. W. & Saparito, P. A. (2002). Individualism, collectivism and opportunism: A cultural perspective on transaction cost economics. *Journal of Management, 28*(4), 567-583.
Cheung, S. N. S. (1972). The enforcement of property rights in children, and the marriage contract. *The Economic Journal*, 82(326), 641-657.
Coase, R. H. (1988). The nature of the firm: Origin. *Journal of Law, Economics and Organization*, 4(1), 3-17.

Coase, R. H. (1937). The nature of the firm. Economica 4 386405. Reprinted. In, O. Williamson & S. G. Winters (Eds.), 1993, The nature of the firm: Origins, Evolution and Development. Oxford University press, New York, 18-33.

Coase, R. H. (1960). The problem of social cost. *Journal of Law Economics, 3*, 1-44.

Crocker, K. J. & Reynolds, K. J. (1993). The efficiency of incomplete contracts: An empirical analysis of air force engine procurement. *RAND Journal of Economics*, 24(1), 126-146.

Dahlstrom, R. & Nygaard, A. (1999). Ownership decisions in plural contractual systems: Twelve networks from the quick service restaurant industry. *European Journal of Marketing*, 33(1), 59 – 87.

David, R. J. & Han, S. (2004). A systematic assessment of the empirical support for transaction cost economics. *Strategic Management Journal, 25*, 39-58.

Dierickx, I. & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12), 1504-1511.

Dietrich, M. (1994). *Transaction cost economics and beyond: towards a new economics of the firm.* London: Routledge.

Eccles, R. G. (1981). The quasifirm in the construction industry. *Journal of Economic Behavior & Organization*, 2(4), 336-367.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*(4), 532-549.

Ellickson, R. C. (1989). A hypothesis of wealth maximizing norms: Evidence from the whaling industry. *Journal of Law, Economics and Organization*, 5(1), 83-97.

Garcia, R. & Calantone, R. (2002). A Critical look at technology innovation typology and innovativeness terminology: a literature review. *Journal of Product Innovation Management, 19*(2), 110-132.

Ghemawat, P. & Rivkin, J. W. (2006). Creating competitive advantages. Harvard Business School Publishing. Product Code 9-798-062. Rev. February 25, 2006.

Grossman, G. & Rossi-Hansberg, E. (2008). Trading tasks: a simple theory of offshoring. *American Economic Review, 98*, 1978-1999.

Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal, 38*, 85-112.

Hart, O. & Grossman, S. (1986). The costs and benefits of ownership: A theory of vertical and lateral integration. *Journal of Political Economy*, 94(4), 691-719.

Heide, J. B. & John, G. (1992). Do norms matter in marketing relationship? *Journal of Marketing*, 56(2), 32-44.

Karnani, A. (2007). The mirage of marketing to the bottom of the pyramid: How the private sector can help alleviate poverty. *California Management Review, 49*(4), 90-111.

Klein, B., Crawford, R. G., & Alchian, A. A. (1978). Vertical integration, appropriable rents and the competitive contracting process. *Journal of Law and Economics*, 21(2), 297-326.

Langlois, R. N. (1992). Transaction cost economics in real time. *Industrial and Corporate Change*, 1(1), 99-127.

Leffler, K. B. & Rucker, R. R. (1991). Transactions cost and the efficient organization of production: A study of contracts. *Journal of Political Economy*, 99(5), 1060-1087.

Masten, S. E. (1984). The organization of production: Evidence from the aerospace industry. *Journal of Law and Economics*, 27(2), 403-417.

Mahoney, J.T. & Pandian, J. R. (1992). The resource based view within the conversation of strategic management. *Strategic Management Journal*, 13(5), 363-380.

Makadok, R. & Coff, R. (2009). Both market and hierarchy: An incentive-system theory of hybrid governance forms. *Academy of Management Review*, 34(2), 297-319.

Monteverde, K. & Teece, D. J. (1982). Supplier switching costs and vertical integration in the automobile industry. *The Bell Journal of Economics*, 13(1), 206-213.

Nooteboom, B. & Nooteboom, B. (1999). *Inter-firm alliances: Analysis and design*. London: Routledge.

North, D. C. (1987). Institutions, transaction costs and economic growth. *Economic Inquiry,* 25(3), 419-428.

North, D. C. (1990). *Institutions, institutions change and economic performance.* Cambridge University press.
North, D. C. & Wallis, J. J. (1994). Integrating institutional change and technical change in economic history – A transaction cost approach. *Journal of Institutional and Theoretical Economics, 150*(4), 609–624.
Parkhe, A. (1993). Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal*, 36(4), 794-829.
Palay, T. (1985). The avoidance of regulatory constraints: The use of informal contracts. *Journal of Law, Economics, and Organization*, 1, 140-162.
Pietersen, W. (2010). Defining competitive advantage: How much more value do you deliver than your competitor. *European Business Review,* September-October, 34-39.
Pisano, G. P. (1990). The R&D boundaries of a firm: An empirical analysis. *Administrative Science Quarterly*, 35(1), 153-176.
Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance,* New York: Free Press.
Prahalad, C. K. & Hammond, A. (2002). Serving the world's poor, profitably. *Harvard Business Review, 80*(9), 48-57.
Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing, 18*(3), 5-14.
Prahalad, C. K. (2005). *Fortune at the bottom of the pyramid: Eradicating poverty through profits.* Upper Saddle River, NJ: Wharton School Publishing.
Putnam. R. (1995). Bowling Alone: America's Declining Social Capital. *Journal of Democracy 6*, 65-78.
Rangan, V. K., Chu, M. & Petkoski, D. (2011). Segmenting the base of the pyramid. *Harvard Business Review, 89*(6), 113-117.
Rose, N. L. & Joskow, P. L. (1990). The diffusion of new technologies: Evidence from the electric utility industry. *RAND Journal of Economics*, 21(3), 354-373.
Scott, J. F. A. (1995). Franchising vs. company ownership as a decision variable of the firm. *Review of Industrial Organization*, 10, 69-81.
Seelos, C. & Mair, J. (2007). Profitable business models and market creation in the context of deep poverty: A strategic view. *Academy of Management Perspectives*, 21 (4), 49-63.
Shelanski, H. A. & Klein, P. G. (1995). Empirical research in transaction cost economics: A review and assessment. *Journal of Law, Economics and Organization*, 11(2), 335-361.
Thornhill, S. (2006). Knowledge, innovation and firm performance in high and low technology regime. *Journal of Business Venturing, 21*(5), 687-703.
Tirole, J. (1988). *Theory of industrial organization.* London: MIT press.
Varian, H.R. & Shapiro, C. (1999). *Information rules: A strategic guide to the network economy*. Cambridge: Harvard Business School Press.
Williamson, O. E. (1975). *Markets and hierarchies: analysis and antitrust implications.* New York: Free Press.
Williamson, O. E. (1981). The economics of organization: the transaction cost approach. *American Journal of sociology*, *83*, 539-577.
Williamson, O. E. (1985). *The economic institution of capitalism.* New York: Free Press.
Williamson, O. E. (1991a). Strategizing, economizing and economic organization. *Strategic Management Journal,* winter special issue *12*, 75-94.
Williamson, O. E. (1991b). Comparative economic organization: the analysis of discrete structural alternatives. *Administrative Science Quaterly, 36,* 269-296.
Williamson, O. E. (1996). Economic organization: the case for candor. *Academy of Management Review, 21*, 48-57.
Winter, S. (1988). On Coase, competence and the corporation. *Journal of Law, Economics and Organization,* 4(1), 163-180.