Innovation journey: *Design thinking* in the value chain

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**ABSTRACT:**

*Amidst the turmoil of global markets in recent years new strategies are sought for engaging stakeholders in new creative ways toward generating sustainable value. Both value chain analysis and design thinking methods have drawn considerable attention in recent years as economies seek to revitalise or reconfigure existing innovation systems in the pursuit of sustainable value. The import of design thinking into value chain processes may further stimulate innovation at intermediate value chain levels, and the value chain as a whole further consolidating the focus on end consumer needs. This consumer centric characteristic is strongly embedded and common to value chain analysis and design thinking approaches and worthy of inquiry as a melding of two constructs. The following paper is exploratory.*

**Keywords:** value chain; strategy and culture; entrepreneurship and business model (design and innovation).

There are few studies that draw attention to the potential of value chain analysis or design thinking beyond the theoretical base even though the results are plentiful, many successful, but seldom reported upon. Each method envisages higher rewards through a series of steps toward successful operationalisation. Despite this, the challenge to seek new combative strategies is required to forge and invigorate new innovation pathways that leverage value chains to new heights. New innovative approaches may lead to new innovative outcomes providing more robust linkages between players in discrete value chains and provide insights to differentiation and resilience through strengths against competing chains. The literature suggests that there is considerable scope to further explore value chains. The same may be concluded for explorations in the design thinking strategy domain as those studies that exist occur mostly in academia not practice level (Meinel, Leifer, Plattner & SpringerLink 2011).

Given current progress the combination of the two constructs suggests that there is little developed as an amalgamation of value chain thinking and design thinking in the literature nor the benefits of doing so. A keen example of defining new value creation opportunities through visualisation techniques emerges from the work of Liedtka (2010) where value chain analysis appears third out of “Ten tools for Design Thinking”. Visualisation, journey mapping, prototyping, customer co-creation and story telling are common to value chain analysis and
to design thinking strategy and may therefore act as a catalyst with a lead player emerging from either methodological viewpoint.

Champions are sought, as are new methods of approach in the evolution of new innovation paradigms. Apple Computer and its successes are often reported as the ideal blend of business model and design sensibility in the configurations of product and software design and its unique value delivery system in the virtual web-space or physical as experienced in Apple retail stores. It would be hard to find a firm in any field that would not wish to replicate Apple’s meteoric rise (Edson 2012). This suggests that a firm with a sound business strategy must also possess a design strategy which is core to the business model and which permeates all levels of the firm and interacts with internal and external social, economic and environmental dimensions (Fearne, Martinez & Dent 2012). Firms which trade upon a developed design policy have been known to outperform firms in the stock market who did not implement such design strategies (Design Council 2005).

A CONSUMER CENTRED APPROACH

The most successful value chain outcomes are based on good dialogue, transparent inter-firms relationships, building upon new and continuing trusted collaborations leading to new benefits for stakeholders through direct response to end-customer needs (Porter 1985). Discourse has increased around human-centered and process problem solving using ‘design thinking’ methods for deeper engagement with stakeholders and end users (Brown 2008). This draws parallels to the ambitions of value chain methodology in the way customer value is central and value engaged in a holistic approach and seen as essential to new value creation opportunities. Both methods seek to enhance innovation processes leading to new discoveries and competitiveness. This interactive paper seeks to engage dialogue toward the potential of design thinking to the value chain and possible impacts in resource management, logistics, manufacturing, new product development, marketing, retail and sustainable value chains. The potential goal is to engage stimuli at each level of the value chain, and
simultaneously across the value chain. Multiple stimuli appear in the form of design-framed
inquiries incorporating design thinking strategies to draw out emerging themes and lead to
focal projects which can be researched, visualized and developed toward tangible
representations of value chain goals.

RETHINKING VALUE CHAIN RELATIONSHIPS

Few studies have returned results that map the historic procurement of value chain
stakeholder inter-relationships, inter-relationship longevity, or the deliverable outcomes and
associated measured impacts as stakeholders join or depart a dynamically evolving value
chain. How the relationships are scaffolded then managed as formal value chains is not
immediately tangible to most value chain participants and therefore matters that arise often
with short lead times may place considerable stress on available governance resources
within the chain as it operates on a dispersed network of responsible managers across
multiple firms. It is therefore appropriate to seek how these relationships can be promoted to
organically evolve and challenge current value creation organisational models that rely on
shared often-informal metrics based on exchanges of tacit knowledge. Governance in value
chain is critical to a discrete value chain’s inception, evolution, and subsequent broadening
as resilience is consolidated through small victories in the expansion of efficiency and new
value creation for each value chain member and the discrete chain as a whole. As some
value chain resident firms are smaller and some larger and some better financed it is also
unclear how firms find inter-firm relational equality in the ways in which benchmarks attained,
audits conducted, and value mapped.

The gathering of firm data, patterning inter firm discourse, knowledge sharing, and
technology exchange requires a level of understanding of the entire value chain and
managing which in the most part no one firm is entirely qualified. This therefore challenges
the value chain to be better informed by seeking advice or guidance from ideally an impartial
but diversely experienced practice based consultant with the prospect of contributing tangible
and immediate advocacy and directional stimulus. Though it may be possible to source a
governance lead from the value chain itself the value chain methodology alone may not be
able provide timely advisory. A systemic approach is sought to act as an adhesive between
firms building upon existing relationships in a stepped and logical manner. Tidd, Besant and
Pavitt (2005, p.13) support that optimal results in innovation are achieved through sustained
increments and accumulative over time. Design thinking methodology is driven by the
process of iterative exploration and discovery and complementary to identifying potential at
discrete value chain levels base on a project brief may reflects the ambitions of the entire
value chain.

DISCUSSION: OPPORTUNITIES FOR INNOVATION
Motivations can only match ambitions in the value chain when management of the value
chain is guided by transparency in decision making and good governance practice. Despite
the intentions of an ideal recipe for transforming both tacit and explicit knowledge into
actionable steps most value chain stakeholders miss out on understanding their true
contribution in the value chain. This may disadvantage stakeholder profits even for the larger
players in the chain and for this reason a catalyst which advances dialogue and observation
around value chain planning is sought to dissolve barriers to collaboration and collective
value creation strategies. Design thinking may hold advantages in driving innovation
processes at discrete value chain levels and the value chain as a whole.


