

CHALLENGES FACED BY ENTERPRISES: Critical Analysis & Literature Review

What are the challenges / problems faced by enterprises today?

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1. INTRODUCTION

Challenge means to confront, to defy boldly, to call out to combat, to invite into competition, or to stimulate especially by presenting with difficulties. Therefore, we can say that *challenge* is always associated with some kind of *Objective* or *Goal*; challenge does not probably exist in the absence of goal.

If we wish to understand what challenges business enterprises face, we need to first be able to appreciate the goals or objectives that a business enterprise is trying to accomplish. In my first paper, *Study of an Enterprise*, I carried out literature review of the main objectives of a business enterprise (with some exceptions for not-for-profit enterprises; some exception because these enterprises still need to minimize their operational costs) are a accumulation of pecuniary wealth, making money, whole system of industry – Profit, Social Services, Material Wants of Mankind vs. Beliefs and Values, Higher Profits and Better Service, and Pecuniary Wealth, Integrity, and Social Responsibility. From the study of literature on business enterprise and how it evolved over the last century, the most significant objective of a business enterprise seems to be *Pecuniary Wealth*.

Therefore, this paper will focus on the challenges that enterprises face in accomplishing the core business enterprise objectives outlined above.

2. CHALLENGES FACED BY ENTERPRISES

If the main objective of business enterprises is to make profits and maximize pecuniary wealth, then the primary focus of this paper will be to research the challenges that may prevent business enterprises to meet this objective.

Broadly speaking, pecuniary wealth can be maximized by adopting one or both of the following strategies:

- Maximize Revenue
- Minimize operational costs

Combination of the above approaches will enable the business enterprises to meet the primary goal of accumulating pecuniary wealth. We will now analyze the challenges faced by

enterprises in trying to accomplish these sub-goals. For the sake of this analysis, I will not consider financial challenges that business enterprises face and the options available to them. The challenges that we will discuss here will include some of the less obvious ones.

The *Business Enterprise Goals & Obstacles* model shown below gives an overview of the primary goal of a business enterprise and associated challenges it faces.

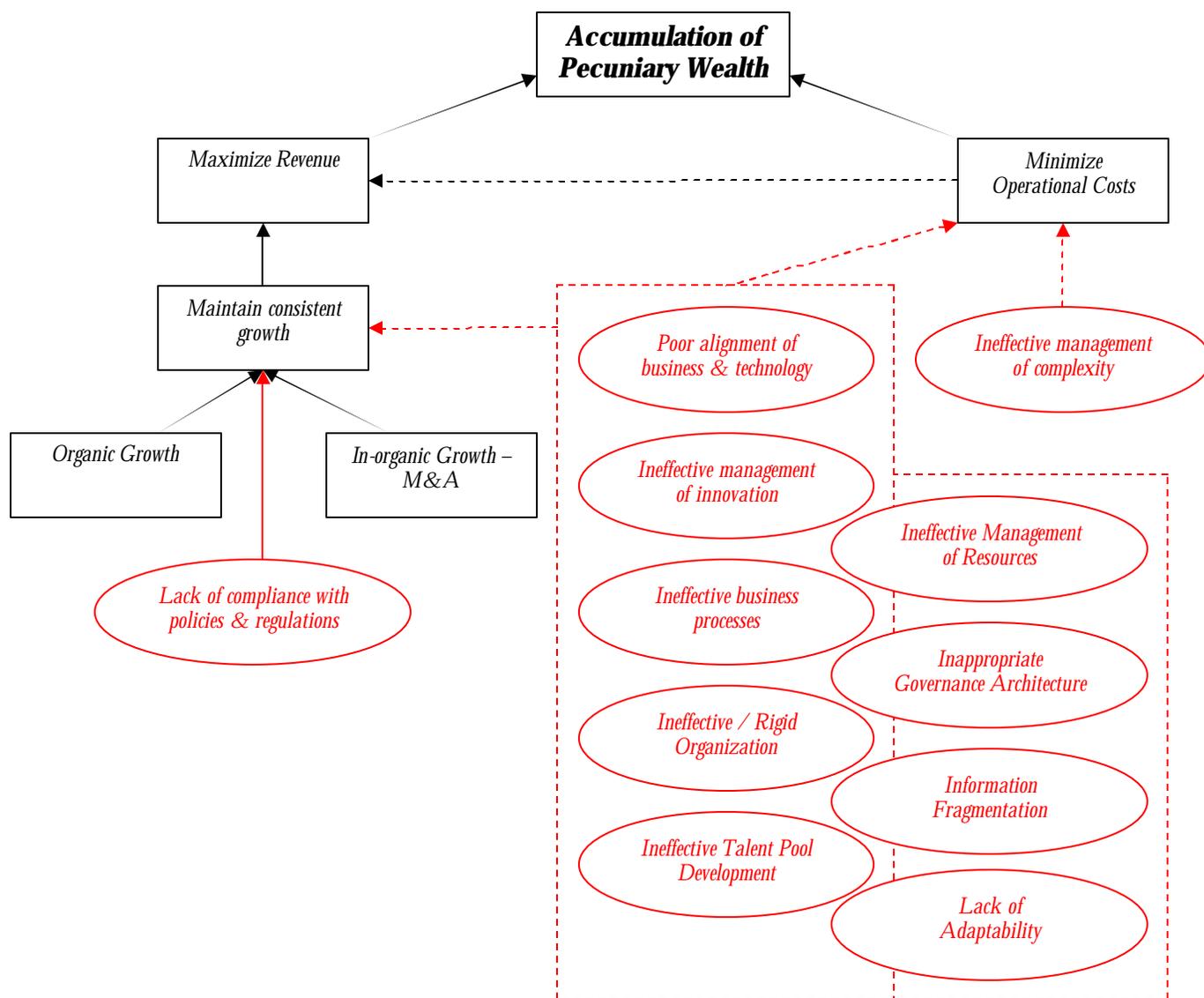


Figure I: Business Enterprise Goals & Obstacles Model

One of the most effective ways to maximize revenue is by maximizing sales of goods and / or services. In order to maximize sales of goods and / or services, business enterprises need to

consistently grow. Growth, itself, is something that every entity starting from single individuals to large multinational enterprises, irrespective of its size, scale, geographic location or evolutionary phase, is concerned with. With respect to business enterprises, nothing creates greater shareholder value or builds a more vibrant organization than generating higher and higher levels of growth in your principle business (Lurie & Thomas, 2002). Reality, however, is that growing a business is one of the core challenges that every business faces across its lifecycle. Long-term profitable growth is the challenge that executives must continually meet to satisfy stakeholders, regardless of market conditions (Rabkin & Bradford, 2002). In addition to maximizing revenues, business enterprises continually examine and implement strategies to minimize their operational costs. As shown in the model, *Minimize Operational Costs* goal indirectly contributes to achieving *Maximize Revenue* goal as well. Most of the challenges shown in the model affect both sub-goals i.e., prevent business enterprises from maximizing revenue generation as well as minimizing operational costs. These challenges will be discussed as follows:

2.1 Information Fragmentation & Complexity

Every decent-sized enterprise has many organizational and technological silos. Product lines, business units, channels, geographies, and IT systems are separated by well-defined and often rigid walls, which diminish the company's ability to build strong, broad customer relationships. Because the walls tend to obstruct the flow of information, different parts of the company can end up selling to the same customers, sometimes competing for the same business without even knowing it. The more decentralized the business, the greater the costs of such fragmentation. As the number and rigidity of walls increase, a company will tend to miss more and more market opportunities (Sawhney, 2001). In addition, such "technological silos" contribute towards increasing complexity which ultimately result in reduced productivity and hence impact the core goal of gaining pecuniary wealth. Company X (*one of the world's largest financial services company, cannot disclose name due to confidentiality*) actually has a goal that states, "\$50b in net earnings by 2009". After carrying out extensive strategic planning, Company X realized that the biggest threat to the accomplishment of this goal was most likely inappropriate management of IT complexity. Now, this may vary for varying sizes of business enterprises but still plays an important role.

Executives understand this problem well – they see and feel its consequences every day. But they often assume it's a people problem. "If we could just get our employees to reach out to one

another across organizational boundaries,” the thinking goes, “we could be much more responsive to customers and much more productive in our operations.” (Sawhney, 2001).

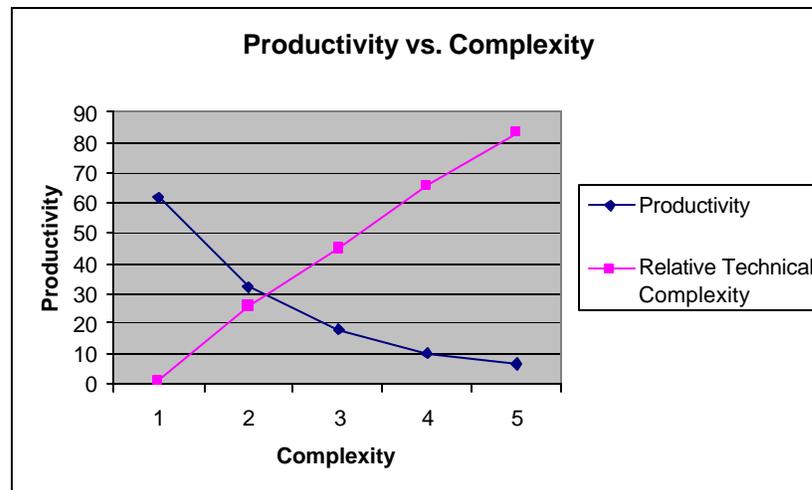


Figure II

2.2 Adaptability, Innovation, Organization & Processes

Adaptability has always been the strategic imperative for biological entities in a natural ecosystem. Now it is the strategic imperative for market participants in the evolving insurance business ecosystem (Rabkin & Bradford, 2002). Key characteristics, according to Rabkin and Bradford (2002), that successful entities exhibit in ecosystems are:

- **Being Aware:** Also known as “sense and respond”. Market participants in the business ecosystem must understand the pertinent events happening in their environment – introduction of new competitors, technology, regulations, shifting demographics and expectations – develop action plans and implement those actions.
- **Self-Organizing:** Continual realignment with the changing marketplace; an organic process independent of central control that enables the firm to continually question, tune, and at times, significantly alter the current structure, decision making processes, operational processes and even products and services.
- **Creating Perpetual Novelty:** Biologists call this characteristic the need for never-ending newness. In the natural ecosystem, prey develops novel capabilities to better fend

off predators, while successful predators counter with their own evolutionary innovations. In the business ecosystem, firms must continually experiment with new products, services, distribution channels or process efficiencies and be prepared to implement successful experiments on a transformational scale, even if this means disruption to or extinction of traditional ways of doing business. Perpetual novelty requires an organization that rewards innovation, tolerates honest failure and is resolute and flexible enough to implement even painful changes.

- **Learning Under Pressure:** In the natural ecosystem, biological species survive by adapting as quickly as the rate of transformation of their predators and the ecosystem. In the business ecosystem, this dynamic plays out for specific companies rather than for the industry (the man-made equivalent of species). Competitive advantage comes to those that learn the most quickly. The quick learners are best able to leverage their knowledge into innovative plans, operations, and products.

Regardless of the cause of change in the natural or business ecosystem, organisms and organizations must adopt or perish (Rabkin & Bradford, 2002). There are five key questions that a firm must address to determine how prepared it is to adopt in the evolving market:

- How aware is your firm of competitive environment? How well does it identify the pertinent aspects of the world around it – which are sometimes at the periphery – and how quickly does it process that information?
- How robust are your firm's mechanisms for coping with discontinuous change? How quickly and how effectively does it respond to the introduction of new competitors, new products, new regulations or shifting customer expectations? How rapidly can it respond to events such as Sep 11 terrorist attacks or the burgeoning customer fear of losing their retirement from mismanaged 401(k)s?
- Is experimentation encouraged? How comfortable are your firm's executives with failure? Do they battle with the inertia of "not invented here"?
- How frequently does your firm truly innovate? How does it create products or services to fulfill existing customer needs in new ways or uncover new customer needs and fulfill those in innovative way? What does your firm do – processes,

hiring, training, relearning – to keep itself from settling into a stagnant state of equilibrium? Lack of innovation can be harmful.

- How does your firm go about learning and building on that knowledge so that it is better able to continually adapt?

Every executive feels palpability of market turbulence and is looking for the right strategic framework for success in a competitive landscape that is under constant transformation. The lessons are insights from natural ecosystems offer a fresh and realistic perspective for achieving persistent profitability over the long term in a dynamic environment. One obvious caveat is that companies are social constructs with the ability to respond in ways that purely biological organisms cannot. In nature, it is entire species that evolve, not individual organisms. In the business ecosystem, individual companies can, and must evolve in response to a changing environment (Rabkin & Bradford, 2002).

Organisms in biological systems operate within a limited environmental context (a specific pond, or specific forest), while participants in a business ecosystem have the ability to grow their environment (through new products, new territories or new customer segments) or at least to be aware of a larger context than the one in which they currently operate. Scientists working in complexity theory call this having a “God’s Eye View”. The winners in the business ecosystems will be those who adopt this view to not only continually adapt to market upheavals but, more importantly, create those upheavals and force other market participants to evolve, become a market player or go extinct (Rabkin & Bradford, 2002).

2.3 Challenges in engineering appropriate business processes

Although business process reengineering has in some circles become a euphemism for mindless downsizing, it has in fact done a world of good. It has enabled companies to operate faster and more efficiently and to use information technology more productively. It has improved the jobs of employees, giving them more authority and a clearer view of how their work fits into the operations of the enterprise as a whole. It has rewarded customers with higher-quality products and more responsive service. And it has paid big dividends to shareholders, reducing companies’ costs, increasing their revenues, and boosting their stock values. Most of all, though, reengineering has changed the perspective of business leaders. No longer do executives see their organizations as sets of discrete units with well-defined boundaries. Instead, they see them as flexible groupings of

intertwined work and information flows that cut horizontally across the business, ending at points of contact with customers. Having said this, firms that do not engineer their business processes appropriately will certainly be more challenged to build more productive teams and profitable enterprises.

2.4 Innovation & Related Challenges

According to survey respondents (Oke, 2003), the following definitions demonstrate how respondent enterprises view innovations:

- Brining new products and services to our customers, which are, market leading. Could also include developing new ways of doing business which improve internal efficiency in all its forms
- The successful (commercial) exploitation of new ideas
- The application of creativity (i.e., the generation and implementation of ideas, not just the idea). New way of doing things, new things to do, internal or outward facing, with the end point of further enhancing the value we deliver to clients
- Improvement of service processes. Introduction of products to aid service.
- The development of new products and services that improve the customer offer, improve delivery to customer and improve internal costs and profitability
- A process of research build, test and learning leading ultimately to the creation of new services
- Changing services and/or processes so that customer needs are met in a profitable way
- Identifying and introducing either new products or services that either enrich the customer experience, reduce operating costs or differentiate ourselves from competitors

Innovation is seen as the life blood of organizations. Innovation is applied at different levels of an enterprise to address varying challenges. In fact, “innovation” seems to be a core attribute of activities that enterprises will need to carry out to overcome most of the obstacles as identified in Figure I. For instance, you need to be innovative to define appropriate business processes for a

given segment of a business; processes will be different for operations organization compared to R&D. As Clayton Christensen had said, “It’s no wonder that innovation is so difficult for established firms. They employ highly capable people – and then set them to work within processes and business models that doom them to failure.” (Christensen & Overdorf, 2000). As is evident from the survey above, the meaning people attach to it tends to vary widely – and hence the way in which they behave can vary widely (Dodgson & Bessant, 1996). Freeman offered a useful definition of innovation as: “... the technical design, manufacturing, management, and commercial activities involved in the marketing of a new (improved) product or the first commercial use of a new (or improved) process or equipment (Freeman, 1982).

Innovation is often described in terms of changes in what a firm offers the world (product / service innovation) and the ways it creates and delivers those offerings (process innovation). Since the Palaeolithic Period (Curwin, 1954) some, but not all, human societies *formed enterprises that created new or improved artifacts*, devised ‘better’ processes, developed new ways of selling and devised alternative models of organizing (Diamond, 1997). These enterprises were innovative – they found ways to exploit the latent potential of ideas. Innovation can be defined simply as “the successful exploitation of new ideas” (DTI, 1994). Others have defined innovation more elaborately, but in similar terms; for example, according to Baumol (2002), innovation is the recognition of opportunities for profitable change and the pursuit of those opportunities all the way through to their adoption in practice.

Embedded in these definitions is the notion that innovation can be managed. For example, Drucker (2002) argues that innovation is a core process for a firm; he suggests that: “in a period of rapid change the best – perhaps the only – way a business can hope to prosper, if not survive, is to innovate. This is the only way to convert change into opportunities. This, however, requires that innovation itself be organized as a systematic activity”. Baumol (2002) argues that, “virtually all of the economic growth that has occurred since the 18th century is ultimately attributable to innovation”. This is also true at the level of the firm. Tidd and Bessant (1997) in their review of the field conclude that: “Management research suggests that innovative firms – those which are able to use innovation to differentiate their products and services from competition – are on average twice as profitable as other firms”. Company X is investing heavily on managing innovation to engineer efficient ways for managing IT complexity.

It is reasonable to assume that an innovative firm must generally possess ‘innovation capability’ – underlying capacity to gain advantage by implementing more and better ideas than

rivals. However, innovation capability may not be a unitary set of attributes – just as physical fitness can be sustained in different ways so different kinds of innovation may require distinctive approaches. Indeed, it may be that the capability needed to support some types of innovation conflicts with that needed to support other types. (For example, this situation is central to the argument surrounding the ‘innovator’s dilemma’ in dealing with both sustaining and disruptive technologies) (Christenson, 1997). Innovation is widely seen as a critical imperative for survival and growth of firms. But responding to this challenge needs to be balanced against the resource constraints of the organization in terms of money, skills, time and knowledge base (Francis & Bessant, 2005). According to Hall and Vrendenburg (2003), “... innovation is one of the primary means by which companies can achieve sustainable growth.

Let’s look at couple of surveys to gain deeper understanding of the relationship between innovation and growth. Technical and industry specific skills had a highly significant direct relationship with growth, while the external environment was less of an influence. Sims, Breen and Ali (2002) found that technical capabilities were significant in their relationship with growth. According to a survey carried out by Sims et al (2002), Table I below shows the *Impediments to Growth*.

Impediments	% of all respondent firms n = 409	% of high growth respondent firms n = 39
Lack of Finance	31	11
Lack of right mix of employee skills	26	14
Lack of market knowledge	18	14
Lack of innovation – new markets	23	6
Lack of innovation – new products	20	5
Technology constraints¹	23	6
Inadequate business systems	25	8
Lack of management expertise	19	3

Table I: Impediments to Growth

¹ From the survey 23% of all respondents and 6% of high growth respondents were less than satisfied with their technology compared to what they felt was needed to sustain growth of their business. In this case, the low proportion of high growth firms was in conflict with those selected for the case studies, as five of the businesses (20%) referred to technological constraints as an inhibitor of growth. In some cases it was the prohibitive cost of new technology and in others the difficulties and cost of hiring or training employees with the skills or flexibility to adapt to changing technology. Some referred to the difficulties of keeping abreast of new developments and responding quickly enough to them.

In an annual survey carried out by Technology Management Research (2001) and concluded immediately before their Spring 2001 Annual Meeting, 113 senior technology directors from Industrial Research Institute member companies for the first time voted “*Accelerating Innovation*” the biggest problem they currently face. “*Managing R&D for Business Growth*” was a close second. The following Table II shows the Industrial Research Institute’s “Biggest Problems” Facing Technology Leaders, in 1993-2004 (Ayers, 2005).

IRI’s “Biggest Problems” Facing Technology Leaders in 1993–2004 (% of Total Responses)

	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
Growing the business through innovation	33	41	37	20	20	16	14	17	10	6	N/A	N/A
Balancing long-term/short-term R&D objectives/focus	17	12	12	14	14	19	18	19	17	15	17	14
Accelerating innovation	16	12	12	26	23	5	6	3	9	8	11	11
Leadership of R&D within the corporation	9	5	12	8	8	13	8	8	8	5	6	7
Management of global R&D	5	2	2	5	4	4	3	6	5	4	3	4
Measuring and improving R&D productivity/effectiveness	4	5	3	7	5	6	6	4	12	12	15	15
New business ventures	4	3	3	4	2	N/A						
Attracting and retaining talent	4	2	2	2	N/A							
Improving knowledge management	4	2	3	1	4	N/A						
Integration of technology planning with business strategy	3	5	8	7	13	13	12	13	11	7	10	11
Managing innovation through cycling local/global economic conditions	0	2	N/A									
Total # Responses:	99	133	151	113	191	230	174	223	242	258	193	248

Table II: “Biggest Problems” Facing Technology Leaders

In the second such survey, “*Business Growth Through Innovation*” turned out to be the biggest problem currently facing the 151 senior technology directors who responded to the Industrial Research Institute’s annual survey of its 200-plus member companies. This year’s “Biggest Problem” survey was conducted online during May and June. Business growth has topped the list every year since 1997, with the exception of 2001 when “Accelerating Innovation” drew the most votes. The most important issue facing business leaders who wish to maximize shareholder value is how to achieve sustained profitable business growth (Copeland, Koller, & Murrin, 2000).

With growth comes complexity. If innovation plays an important role in enabling growth, enterprises will need frameworks to grow in ways that ensure appropriate management of resulting complexities. Otherwise, growth can itself become a threat to further growth. Company X is at a point where its future growth is being impacted by the fact that it has grown fast. Barriers and gaps for innovation management include the current organizational capability and architecture for

innovation management that restricts leadership, organization, business processes, collaborative learning with customers and other suppliers, partnership, funding and other resources, incentives, and cultural transformation (Miller, 2001).

Having discussed innovation in detail, let's now look at some of the drivers that drive innovation. As shown in Figure III below, business innovation can drive technology innovation. For example, John Reed had this vision of "Citi (bank) never sleeps". Then there was no notion of ATMs. John's business vision was the driving force for the technological innovation. Combined, these two enabled Citibank to become the leaders in introducing ATMs to the banking world.

Business Innovation driving Technology Innovation

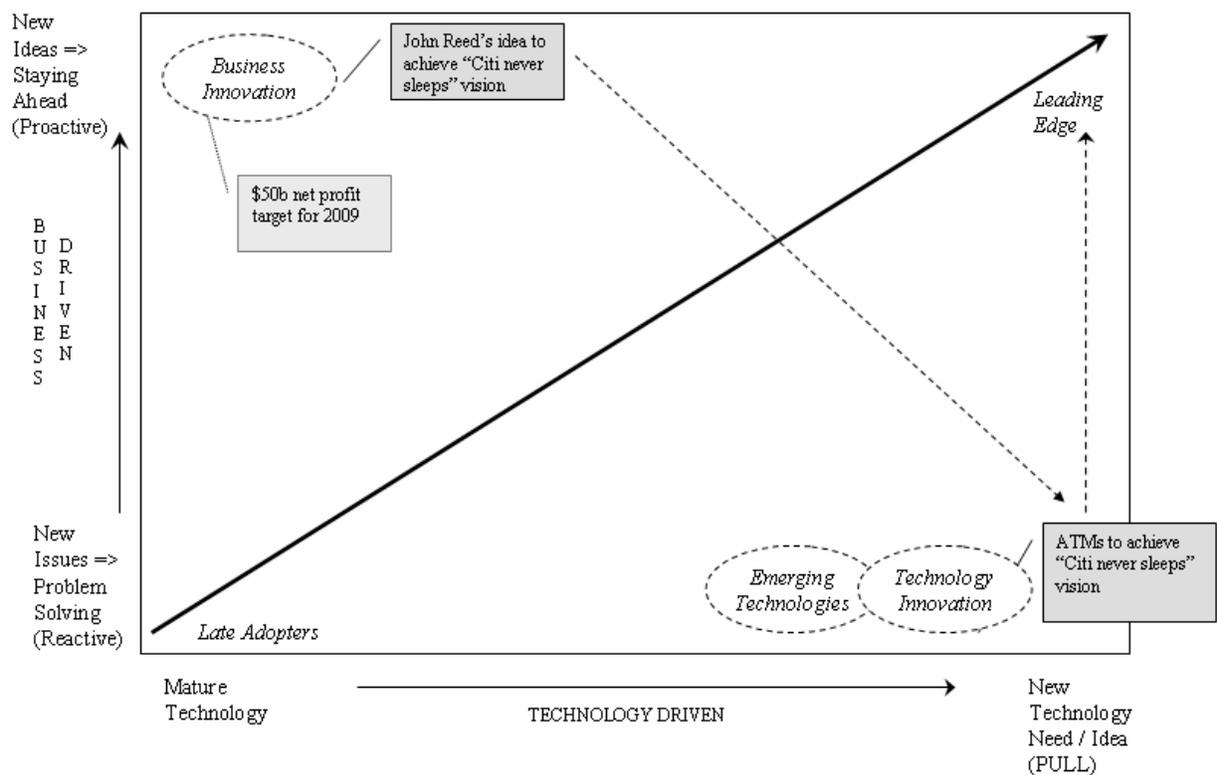


Figure III

Technology Innovation driving Business Innovation

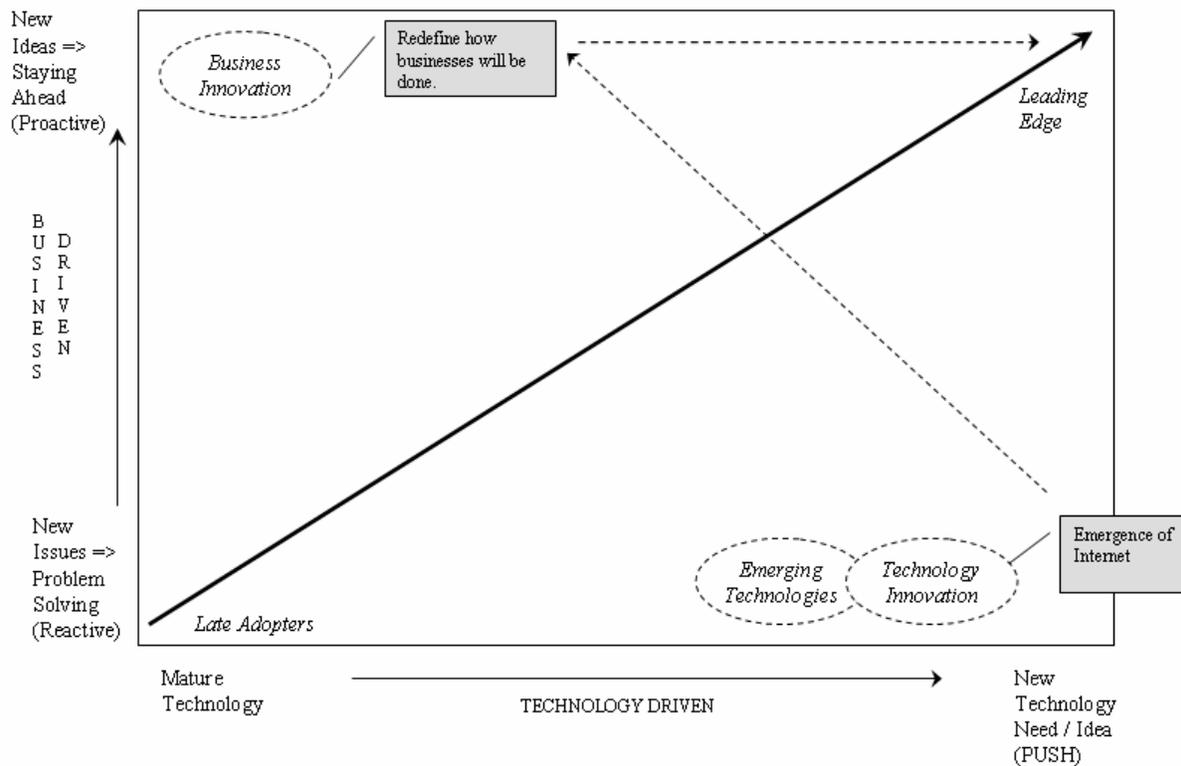


Figure IV

In a similar way, technological innovation can drive business innovation. For instance, Internet was never meant to impact the way business were conducted; it generated an entire new way of doing business.

Technology & Business Driven Innovation

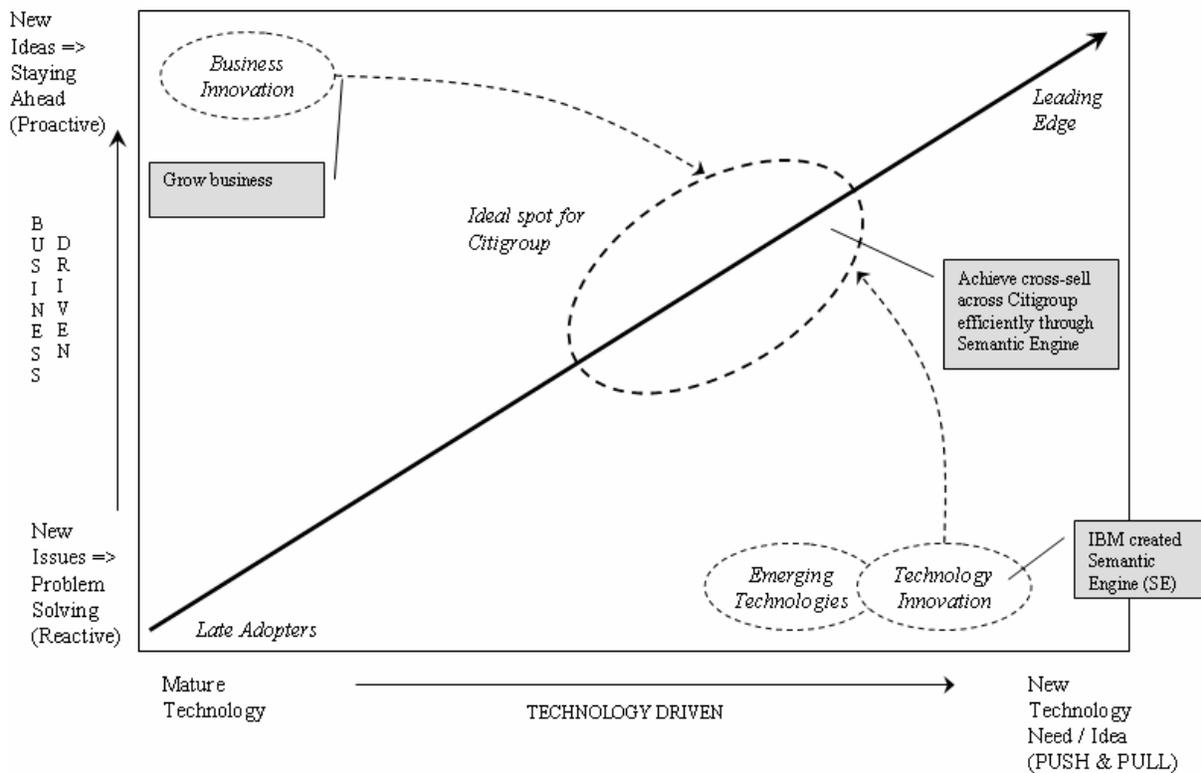


Figure V

To be most effective, both business needs and technological advancements should enable the enterprises to grow and maximize profitability as shown in Figure V.

Based on my deeper understanding of innovation and its impact on growth of a business enterprise, I feel appropriate to update the *Enterprise Model* that I presented in the “Study of an Enterprise” paper. I feel that *Innovation* really seems to be the underlying foundation that drives successful growth of most business enterprises.

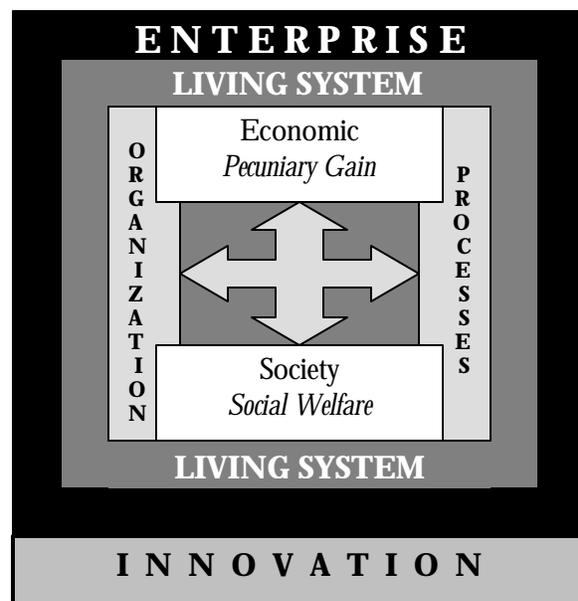


Figure VI: Enterprise Model

2.5 Resource Development & Management

Barney (1991, p. 101) expands the common notion of a firm's resources to encompass "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc.", and indicates how such resources enable the firm to conceive of, and implement, strategies that ultimately improve its efficiency and effectiveness. Barney seemed to overlook the fact that poor rationalization and consolidation of these resources can also impact the operational efficiency of an enterprise. Therefore, it is extremely important to ensure proper strategy around enterprise resource management and associated issues.

3. DISCUSSION & CONCLUSION

Based on my research, discussions, and professional experiences, business enterprises can meet the challenges with a right combination of IT operating strategy which must balance existing values, such as business execution, with enhanced standardization, innovation, and resilience. Traditionally, enterprises' current IT operating strategies are characterized by their focus on immediate business execution above other core values, which impact their ability to scale and grow effectively over time. With growth, there is a definite need for a more balanced approach towards enterprise-level guidance in the IT operating strategies. A **framework** is required that enables enterprises to create future state of IT operating environment which is an evolution of the current state, with increased enterprise involvement in order to scale IT capabilities. This framework must enable enterprises to apply innovation to:

- Better align businesses with technology
- Improve processes
- Ensure appropriate organization - adaptability
- Effectively build and manage resources
- Ensure compliance with regulations in an efficient way
- Ensure focused research
- Reduce fragmentation – ensure enterprise-wide CRM

An enhanced governance structure is necessary to support and enforce IT strategic values and business / IT alignment across business enterprises. Focusing investment on emerging and

imminent strategic technologies will enhance productivity, improve operational efficiencies, and support new review opportunities. In addition, operational risk is mitigated through the successful execution of security policies, supported by a rigorous governance structure and investments in technologies. IT complexity can be reduced by rationalizing and consolidating IT assets.

4. FUTURE RESEARCH

In this paper, we have seen a variety of most significant challenges that business enterprises face in accomplishing the primary goal; “*Accumulation of Pecuniary Wealth*”. In case of other enterprises, such as ‘*non-profit*’ enterprises, they may not have the same primary goal. But, they do care about minimizing the cost of their operations and as shown in the model above, most of the challenges that impact the growth of the firm, do affect the operational costs. *What* is surprising is the fact that both researchers and practitioners have approached to deal with these challenges on individual basis as if they do not feed into each other i.e., organizational related, business process related, innovation related, operations related, technology related, policy and compliance, resource planning etc.; I have been unable to find a thorough work that addresses how to deal with challenges that influence each other. It is not a trivial exercise to even deal with a single challenge effectively. Holistic analysis of all these challenges will require a deeper understanding of each of these major challenges and their inter-relationships. Analyzing and dealing with a single-dimensional challenge in isolation affects the other dimensions. For instance, in order to organize your enterprise to effectively operate in the global environment, you need to keep all different perspectives i.e., if one specific organization is great for governance, how does it impact the innovation in the global environment, how should policies be designed, how should processes be re-engineered, how will operations be affected and much more. The point that I am trying to make here is that numerous perspectives of an enterprise, as presented in the Enterprise Model shown in Figure VI (discussed in the *Study of an Enterprise* paper) depend on and affect each other. Designing strategies to deal with enterprise challenges require a model that encompasses different perspectives and enables managers to be able to appreciate the impact of their strategic decisions. This is a non-trivial concept and will need a detailed and dedicated research.

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