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Viable Strategies for Innovation in Telecom Industry in Tough Times

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Abstract: Uncertain economic times have substantial impact on global markets. With economic recessions come drastic changes in business dynamics. This paper explores the effect of economic recessions on market stability and delineates practical aspects of innovation that can be effectively utilized to boost economic sustainable development and combat downturns. The paper also presents operational strategies for organizations across industries and in telecommunications industry in specific. The findings described in this paper stem from the innovation theory and the value chain framework, and are based on modeling the best practices that can be used by organizations to not only survive, but also thrive in turbulent times.

Keywords: Economy, Recession, Telecom, Stability, Innovation, Operational Strategies, Sustainable Growth, Value Chain

1. ECONOMIC RECESSION AFTERMATH

Throughout history, the world has witnessed times of economic growth as well as times of high turbulence. One of the most common misconceptions about the economy, though, is that it can be "stable". The truth of the matter is that the world, thus economy, is constantly changing.

In modern times, the shaping powers of economy have been highly influenced by technology evolution. The information revolution accelerated the rise of a global economy. Communications costs plummeted and information became available everywhere (Zakari, 2008). The world is steadily becoming connected into a large mesh network of fundamental structures that take form in politics, economics, technology, resources, environmental ecology and other facets that constitute the pillar of an integrated world. Nowadays when a crisis hits one country, almost all other countries are affected, directly or indirectly (Estrada, 2008).

Change has been a constant phenomenon. Upturns and downturns in business and economy are inevitable, and therefore they were expected to happen even in the past. The difference, however, is that the recent depression that started in 2008 was preceded by a golden era of global economic growth. The world economy grew from $31 trillion in 1999 to $62 trillion in 2008 (Zakari, 2008). In 2006 and 2007, 124 of the world countries, roughly two thirds of total countries, grow faster than 4% annually (Zakari, 2008). Comparatively, the recent slump in economic growth has had a strong impact on global markets.

1.1 Global Instability

Long gone are the times where only specific industries were affected by global markets. Over the past two decades, globalization has been widely spread across nations and industries (Sabri, 2006). No doubt, one of the reasons that many organizations have been severely impacted by this economic recession is that their business is tied in one way or another with partners overseas. Although many believe that the recent recession started first in the US, shortly afterwards the slump affected big players in the global markets such as China, Japan and the whole European Union (Estrada, 2008).

The proliferation of information technology and constantly adjusted trade policies are accelerating the transformation of national markets into one giant global economy (Zakari, 2008). Even as we speak, trends of globalization are playing a strong role in shaping the global economy. Outsourcing to China and India has started to take a back seat compared to outsourcing to Vietnam. For example, Developing software in Vietnam is estimated to be 90% cheaper than in the United States, and between one third and one-seventh the cost of developing in India (Gallaugher and Stoller, 2004). Choices of qualifications and capabilities are no more limited to one country or region.

Globalization has undoubtedly boosted the growth of economies, both developed and emerging, over the past years. The upsides are qualitative, such as knowledge transfer, as well as quantitative, such as increase in foreign trade (Dreher, 2003). For example, Dreher found out that in the period from 1975 to 2000 globalization contributed an increase of 2.14 points to China's economic growth rate index (Dreher, 2003).

Despite the fact that governments are regulating the globalization effect to a certain extent through different laws and policies, globalization has transformed the world economy into interdependent financial markets. In tough economic times, globalization becomes a double-edged sword. Other than tying the conditions of one market to many others, it certainly affects the internal dynamics of the same market. From a governmental perspective, suddenly cash becomes too valuable to be precariously spent and driven out to foreign markets through global deals, especially when cash flow becomes an important side of the liquidity crisis equation.

With fewer limits to foreign markets, competition has also intensified. Business opportunities are pursued by organizations from all over the world. Each competes for securing business deals through presenting their own unique selling proposition (Zakari, 2008). If business deals are to be won, companies must be able to compete globally and provide the same quality, performance and price levels regardless of the location of their subsidiaries.

Undoubtedly, globalization has been one of the greatest leaps into the future of economic evolution in the 20th century. Organizations were able to pursue opportunities overseas to fulfill international as well as local demands. Businesses were established, having globalization as strong pillar in their foundation. Yet, organizations were also hit by the side effects of globalization during the economic downturn.

1.2 The Stagnant Market

Once an economy entered a recession, there are far more dangerous factors that can prolong the recession other than liquidity traps or accumulating debt. Almost in all recessions, and most notably in a recessions of credit crisis such as the most recent one, most organizations enter a “winter-freeze” operational mode.

Recessions are self-reinforcing. If most investors believe that the climate is hostile for growth and for risky business, they will make fewer investments in new firms. Established firms also will be less adventurous when organizing new projects. If fewer firms are visibly growing, it fosters the perception of un-rosy future, reinforcing the hesitation to make investments. After a while, the recession feeds on itself (Greenstein, 2001).

Indeed, it may eventually become difficult to identify causality-are the bad times causing low investments or is it the other way around? (Greenstein, 2001). The danger this poses is that once an economy sinks into a self-reinforcing downward spiral, it’s difficult to overcome.

The times of monopoly markets are over and even in those past times organizations would find it extremely difficult to sustain their businesses by providing the same product and/or service, which is the inevitable result of lack of investment in business development. Eventually the commoditization effect will catch up to long overused, worn products. Customers will not be willing to pay the same price for them, leading the organization into the same downward spiral of stagnation.

Unfortunately, the resolution to a recessionary economy is the very same thing that is viewed by many as the approach to be avoided in tough times. What organizations must realize is that investment in its nature involves a risk factor and undertaking investments in times of credit crunch doesn’t necessarily mean carrying out reckless business endeavors.

Markets cannot recover on their own, and stock market indicators will not rise in a stagnant market where organizations are crippled by fear of capital expenditure on investment, lest they go bankrupt. With well-directed investments based on calculated risks, investors will secure their return on investment and organizations will pave their way out of recession back to times of sustainable growth.

1.3 Crippled Organizations Means Crippled Business

In good times business failure comes about for an assignable reason. There is someone or something to blame and lessons to be learned. Not necessarily so in bad times. When firms fail in good times it’s easier to identify why. Reasons could include a business plan that was too optimistic about a specific customer’s needs, a chief financial officer who set up an inept cash-flow tracking system, or a product whose second generation simply did not work (Greenstein, 2001).

During a recession, in contrast, firms can ostensibly do many right things and still fail. It seemingly becomes acceptable to many to blame external factors. It is as if success or failure is out of the firm’s control and placed solely in the hands of market conditions.

Missed by many, what underlies the seemingly less controllable factors of success and failure in bad times is that the margins for mistakes in bad times become much smaller than in good times (Greenstein, 2001). What could have been a tolerable error in good times can become suddenly fatal. Competitors sit on the edge of their seats, anticipating every potential business venture and eagerly competing to secure business with their customers in times of “buyers” when price discounts are a presumed given (Altman, 2001).

To complicate the matter, many organizations follow the steps of others and “play it safe”. They start taking “general recession” measures, even if their conditions were much better than their rivals. In a market where some organizations are facing difficulties and others are bracing themselves for the worst, a psychological vicious circle starts to spread among organizations. They resort to commonly followed strategies that are not necessarily based on actual conditions of the market, rather on precautionary measures. Often times these measures are unnecessary and can as well backfire.

2. MAJOR CHALLENGES FACED BY TELECOM OPERATORS

2.1 Accelerated Commoditization

The advancement of technology in the telecom world has been shaping the industry since its inception. At the same time, it has been setting the standards. While many telecom operators have been focusing on maintaining and operating the infrastructure of the network, they may have overlooked the fact that technology is making a commodity of more of its services (Hasbani et al, 2009).

Lowering prices that is almost mandated by economic recession cannot be good news to an industry, which is constantly under the threat of commoditization. Telecom operators need to determine whether they have the scale to compete by offering the lowest possible cost.

Similarly, suppliers of network equipment have long struggled with the rapid commoditization that is trigged by new technologies. Converging standards make network components an increasingly undifferentiated commodity, forcing suppliers to reduce prices on a regular basis and bringing on severe global price wars (Hasbani et al, 2009).

For example, the rapid progress in technology introduced many ventures of services such as smart phones and the use of mobile applications, which has made network bandwidth a commodity (Guerin et al, 2003). With bandwidth available from a number of sellers at almost the same price, getting connected and isn't where the profit margin is. Instead, opportunities for driving profit lie in providing services that customers value and are willing to pay for.

Like in any other industry, the move is upward in the food chain (Guerin et al, 2003). Those who still cling to conventional operational strategies cannot cope with the constantly changing market conditions and will eventually lag behind the dynamic players. Quite often when there is a shift in customer's needs, a similar parallel shift in business model is necessary.

2.2 The Pressure of Constant Tariff Reduction

Many operators still find themselves entangled in the open war of Tariff reduction. Tariff price has been continuously decreasing over the past decade. One of the reasons behind it is the introduction of new players to the telecom market and the threat of potential new competition coming in from foreign markets, facilitated by globalization. Another reason that has made this strategy viable was cost leadership (Lechler et al, 2007). Operator's ability to reduce the operational cost and optimize internal processes has made it possible to provide "more for less" to their customers. On the other hand, the main driver for embracing the Tariff reduction business model for many operators, if not all, is the ultimate customer acquisition game.

When AT&T consulted Mckinsey & Co. in mid 1980s for advice on the mobile phone market, the company concluded that the world potential was 900,000 units. Almost two decades later, 900,000 became mobile phone users every three days (Govindarajan and Trimble, 2004). Even later on, in early 1990s when a mobile phone was still a luxury, 100 million subscribers would have been an achievement.

As mobile services were being constantly reinvented, boosted by the miniaturization and technology convergence, attaining one billion subscribers became feasible. Now with over 4 billion subscribers worldwide, it is predicted that 5 billion subscribers milestones can be accomplished in the near future (ITU, 2010).

Views on the evolution of the Tariff model have been divided between believers and skeptics. The industry bulls highlight the vast potential of the model expansion. With subscriptions continuing to rise with the support of miniaturization, mobility and applications proliferation, and the view predicts that penetration rates will continue to soar, especially in data usage. Reliant on continuous steady expansion of utilization, this view predicts more years of sustainable growth of the business based on the current Tariff model.

Bears of the business, however, indicate that constantly giving more for less to customers will eventually lead to bankruptcy of the industry. Essentially, the spiral of offering more free minutes and fewer data utilization limits for the same average revenue per user (ARPU) will lead to massive CAPEX levels and eventually huge losses in profitability.

In some telecom markets, the Tariff reduction strategy has been played up almost to its full potential. The average Tariff price in the Indian market, for example, has fallen to one cent/minute with potential further reductions in the horizon (ITU, 2005).

Conventionally, the test for the saturation of profitability of this operational strategy would be considered based on revenue. Yet constant Tariff reduction has considerably heavyweight side effects. The notorious efforts made to constantly reduce Tariff price are primarily meant for acquiring customers, which consequently mandates huge costs of market campaigns. These campaigns are usually flat across market segments and rarely targeted for specific customers, which make them less effective in acquiring high-value customers.

Tariff reduction also results in Tariff complexity. Operators come out of their way, trying to satisfy as many customers as possible by creating customized Tariff plans. However, the overly complicated Tariff models get effectively scaled to cope up with technology advancement. This leaves customers often trapped in one Tariff plan, which doesn't cover all services that could be used by the customer and contribute to the ARPU.

Another serious downside of having the tunnel vision of Tariff price reduction is that it leads to alienating customers. Loyal and high-value customers often require value and good customer service more than lower prices.

Underlying the surface issues, these side effects pose a serious threat on the sustainability of business. Operators need to adapt a much broader and more holistic operational strategies, focusing on retaining customers and driving value out of their services, which will position them for maintaining and increasing profitability for years to come.

2.3 Scarcity of New Subscribers

While the core of most telecom operator's operational strategies has been acquiring market share, the rewards, whether in terms of cash or value, are no longer immediate, nor are they guaranteed. Operators in developed markets may have realized the necessity for a paradigm-shift earlier than those operating in emerging markets. Africa and the Middle East are the regions with largest potential for traditional growth of voice and text services (Hasbani, el al, 2009). Yet, it is no longer an easy acquisition, even in those regions.

Potential customers tend progressively to be in rural and less inhabited areas rather than urban and dense areas. Considering the comparatively low rates of ARPU, the investment of expansion into rural areas is no longer easy to justify. In addition to running, maintenance and depreciation costs of cell site equipment, the threat of retiring customers makes the decision of investing in new acquisition difficult to make, especially when weighed against investment in a progressively lucrative market such as data usage.

3. LEADING OUT OF RECESSION

3.1 Now is The Time For Innovation

When the business is revolved around innovation, it is much easier to maintain growth and sustainability of that business regardless of external factors. One of the most powerful characteristics of innovation is that it substantially enhances business agility. The moment business stressors change, organization that runs with innovation at the heart of their operations will not struggle with finding ways to adapt and create a competitive advantage while other organizations find themselves challenged by changed market conditions, dwelling on stagnant parts of their business (Govindarajan, and Trimble, 2004).

In a five-year study of growth, it was found out that 86% of the business launches of 100 companies incremental improvement initiatives accounted for 62% of total revenue and only 39% of total profit. While the remaining 14% of the launches, which were directly associated with value innovation, generated 38% of total revenue and an overwhelming 61% of total profits (Kim and Mauborgne, 1998).

Innovation boosts organizations' capability of producing more with the resources at hand. It often requires willingness to explore new ventures and employ strategies that may not have been tested before. As a matter of fact, agile organizations are those who are not only open to innovative change, but they also intentionally create it to leverage opportunities that emerge almost every time the market shaping factors change.

3.2 Strategic Investment While Maintaining Lean Operation:

Recession-induced decline in demand along with the associated reduction in prices have forced corporations to go for the default reactive action, which is cutting cost across the organization, freezing investments and reducing capital expenditure. What the situation really calls for is excellent management of cash flow and balance sheets (Hasbani et al, 2009). By thorough inspection of the value chain, corporation can find many gaps and weak points that may affect the performance or cause cash leaks.

Lean operation ensures that every resource is fully utilized as part of the processes that add tangible value towards producing the organization's products and services. As mentioned earlier, small errors may become intolerable in tough times, which emphasize the fact that scrutinizing the value chain of the organization can help eliminate waste, streamline processes and ultimately increase productivity.

Although it may be counter intuitive to spend any form of capital in times when most corporations pull in their horns (Altman, 2009), those corporation that can successfully use the value released from cost-optimization to smartly invest will find themselves in a position of strength as the downturn abates (Hasbani et al, 2009). Corporations tend to forget, especially in times of economic downturn, that strategic investment creates a sustainable competitive advantage that opens new doors of business opportunities and sets them apart from the competition, as long as it is not undertaken at the cost of burdening the balance sheet with unnecessary excessive debts.

Strategic investments are targeted at a certain aspect of the business. They are made for a specific purpose to produce a measurable result, which is expected to come to fruition in a defined timeframe. Strategic Investments should be essentially linked to increasing the bottom line. They are also smart which means they are executed at a calculated risk and backed by thorough study of return on investment. While many corporations prefer fast pay off, smart investments are not necessarily short-term based. Ideally, they stem from the corporation's roadmap for business development that is designed to position them for thriving in the market.

It is time for corporations to start taking measures to address structural cost drivers and reconsider their operating models so that they can strike the winning balance of sustainable lean operation while making the right investments.

4. FROM MARKET PLAYERS TO MARKET LEADERS

4.1 The Necessary Identity-Shift

Adapting the same operational strategies over the past decades has led telecom operators to a tipping-point. Is it wise to assume that vertical expansion is still possible?

The high penetration rate of user acquisition across developed and many emerging markets coupled with the impact of the recent recession and the compelling challenges of the industry present a real dilemma for telecom operators, a Network Operator vs. Value Provider (Lechler, 2007).

A Network Operator: Over the past two decades, operators have been justifiably concerned with the operability and sustainability of their networks. Waves of new customers were joining the market year after year, stimulated by miniaturization, technology convergence and price reduction.

Price of mobile handsets has been decreasing to almost half of the original price at the introduction of a newer model. New plans with promotions, reduced tariff price and free minutes are released to customers every couple of month and cost of mobile handsets was subsidized as part of the service contract (ITU, 2006). Consequently, telecom operators have been focusing on maintaining and expanding the network.

A Value Provider: The rules of the game have changed for the industry. Easy growth is no longer feasible in developed and emerging markets alike. Commoditization is increasingly threatening the industry and already has reached services, such as network bandwidth, that were considered a luxury only a few years ago.

Evidently, operational and marketing strategies that were embraced in the past are about to permanently fail. It is unquestionably critical to ensure network availability and maintain minimum service downtime, yet it is not where operators can get the "biggest bang for the buck".

Customers now expect to receive tangible value that is realized in service that are tailored to their needs. Clearly data usage is soaring among corporate and individual customers which make data services all the more lucrative. Yet, providing value to customers is not exclusive to data services.

The ultra-competitive telecom market emphasizes the paradigm-shift that comes with the identity-shift. When telecom operators perceive themselves mainly as value providers rather than network operator, it is mandatory to adapt different operational strategies (Guerin et al, 2003). Suddenly the most important priority becomes providing what the customer needs.

A value provider will also focus on consistently coming up with innovative services to combat the effect of commoditization and meet customer expectations. Certainly, such a transformational shift can be viable only through gradual but earnest changes across the organization.

4.2 Network Capacity That Measures-Up

Many wonder if there are practical solutions that can slow down the ever-increasing demand for more bandwidth. Short-term measures can, on one hand, control the demand to a certain extent. Operators may employ usage-based pricing to limit data usage by users and try to maintain even traffic distribution among them. Assigning caps to Tariff plans, with premium charges once the cap is exceeded, can also help cutting back on data usage (Guerin et al, 2003).

On the other hand, these are but temporary measures that will not work in the long run. The soaring sales of smart phones and the proliferation of heavy bandwidth application will render these short-term strategies ineffective in the very near future. The increasing demand for bandwidth is a one-way trend that cannot be stopped. While it puts massive strain on the network, it is also one of the main drivers behind a dynamic sustainable industry (Hasbani et al, 2009).

Long-term solutions must consider the fact that bandwidth is becoming a commodity. This means that operators will definitely need to restructure their networks for ten times, or more, the current capacity. But such restructuring doesn't have to be all capital-intensive.

The fast evolution of technology has given telecom operators options. They can choose to keep building on the capacity of the 3G-Network through less costly upgrades from 3.2 Mbps and 7.2 Mbps to 14.4 Mbps and upward. The relatively lower cost of necessary hardware upgrades will be more appealing in such times when cash flow is scrutinized and new capital expenditures is difficult to swallow.

Confident operators can consider the introduction of LTE or WIMAX. Other than becoming the pioneers to commence the transition to 4G technologies and benefiting from attracting heavy data-demand users, which means more data-driven revenue, operators will leverage a transition that will moderate the continuous demand for network upgrades. A less burdened network allows better distribution of bandwidth and higher quality of service.

Frequency spectrum can also be better utilized. Operators can redesign their frequency spectrums to allocate more of 2G bands to 3G, which will enhance coverage and raise network capacity. In 2009 the European Union allowed the re-farming of 900 MHZ bands that was originally dedicated for 2G for use of newer technologies (Sirio, 2009).

As mobile handsets are getting cheaper by the day and users are getting newer models with every new contract signed, the need to worry about technology compatibility is getting less legitimate. In the future, it is likely that 2G technologies will become completely obsolete, being incapable of providing scalable bandwidth that can cope up with the new standards of data usage.

4.3 Re-evaluate The Value Chain

Telecom operators form the vital link in the supply chain between manufacturers, system developers and content providers at one end and the user at the other end of the chain. While customers may face issues that are directly related to the content or the handset, that side of the supply chain is operating in the back scene (Marchegiani, 2006).

This indicates that customers' satisfaction depends mainly on the effectiveness of telecom operators in providing innovative products (Tariff plans and bundles) & service. Operators play a critical role in aggregating hardware and software resources from supplier and transforming them into value delivered to the customers.

When operators start to realize that managing the network is not a core competency to their business any longer, they can re-think the value each part of the business contributes (Hasbani et al, 2009). Freed from the limiting network-operator concept, they can share cell sites with other operators in order to reduce the operational and maintenance cost and also increase the coverage range. Some operators have already started sharing some cell sites with other operators. Yet, this is not the end of it. Operators can virtually double the network capacity through sharing RAN and transmission networks.

It may seem to be a costly and risky endeavor. Networks will definitely need redesigning and rerouting. Still, many operators already have their networks maintained by equipment vendors with very little supervision and/or intervention. Many vendors have also earned operators' trust through excellent service level and promotional hardware and software upgrades. The transition, conducted gradually, will not be as cumbersome as feared. It will also present minimal risks to customer experience if closely managed.

As operators start focusing on the high end of the supply chain and start sharing network platforms to maximize capacity and cut back on operational costs, they may as well consider outsourcing some parts of the network.

Operators can get rid of many operational hassles and save costs by outsourcing the operation of their network platforms to vendors through managed-service contracts. Some operators, such as Baharti in India, have already full leveraged this concept and outsourced the whole network (Martinez et al, 2006).

Indeed, it is very likely the telecom industry will witness the emergence of vendors and/or joint ventures that manages networks of different telecom operators.

4.4 What customers are really worth

In an industry where competition is extremely fierce and the main success criterion, that hasn't changed for years, is the volume of the subscriber database, customers quite often find themselves alienated.

It is not unusual in telecom market that new customers get better deals than existing ones. Quite often new offers are only effectual for new customers. This is meant to entice other competitors' customers so that they would change their service provider, all for the sole purpose of benefiting from new offers and price discounts.

Unfortunately, in the telecom market today it is not uncommon that operators, driven by the "land grab" strategy, still measure their quarterly and yearly progress by net addition of subscribers rather than net addition of valuable customers. Operators need to realize that the customer-hunt is incurring a lot of marketing and administration costs and also jeopardizing the loyalty of their existing customers. If success measures are to be altered, marketing strategies will require a radical overhaul. The main criteria for success should be revenue increase and net addition of valuable customers.

This requires "smart marketing" as well as excellent customer service. Instead of engaging in marketing campaigns that target all customers, through detailed market segmentations operators can focus their efforts in attracting true-worth customers. It should be also considered that valuable customers are often service-knowledgeable as well as high spending and/or loyal customers (Peters and Waterman, 2003).

Remaining close to valuable customers and maintaining a frequent dialogue with them is essential to identifying the level of service they require (Peters and Waterman, 2003). This will boost operator's capability to solve, on the spot, any service-issues and to effectively investigate the services that would best meet their needs and ensure their satisfaction.

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