Innovative Operation Strategies in VUCA world

N. Balasubramanian

(HoD-Operations, Lala Lajpatrai Institute of Management, Mumbai University, India)

Abstract: Today’s business landscape is bounded by factors like global interdependence, flatter and leaner organizations, accelerating and ever changing technology, mergers and acquisitions, spin-offs, closures, frequent disruptions in the market place and constant need for Innovation and changing strategies. Every organization needs to be nimble, agile, adaptable, learning to embrace and implement changes and align their resources to critical business strategies if they want to overcome the world of volatility, uncertainty, complexity and ambiguity (VUCA). The current management approaches and planned business operations strategies in a conventional way has to move on to context mindful framework of involving all stakeholders in the value chain, thereby agility & readiness to move out from known certainty and to catch on the unknowable chaos and disruptions. Process innovation and creativity to the value chain are key elements to successful operations strategies.

Keywords – Agility, Creativity, Digital Transformation, Leadership, Operations Strategy, Process innovation, Strategic fit, Sustainability, VUCA.

I. Introduction

This paper presents only the theoretical perspectives of the subject based on the details studied and provided by many International Institutions and Agencies. Countless number of papers written on VUCA and associated themes, innumerable seminars and workshops conducted world-wide on the necessity of agility, leadership and compulsive business and how essential to move from planned path of certainty to open-ended path of meeting the challenges of chaos and disruptions. This paper emphasize that business organization needs to be agile and become a force that shapes the markets instead of other forces shaking the organization. Since the competitive advantage rests on Operations strategy and fulcrum of the value chain is Operations, this paper is looking at Operations strategies, need for innovation and creativity and how best it supports sustainability. The author had made presentations and papers in the past on the need of Innovation, Digital Transformation and Digital Supply Chain. This paper is on how a Business needs to transform itself into era of volatility, uncertainty, complexity and ambiguity (VUCA). This paper will traverse the VUCA world with examples, evolution and cases and bring in how new Enterprises evolved and how the established players went out of the market. The managers who operate in this risky world of VUCA are unhappy with the traditional linear approach and often misleading projections produced by the forecasting and budgeting systems. The current management approaches and operational strategies which were more tuned for the certainty in planning, identification of risk and meeting some uncertainty are not suitable anymore. Newer tools to be developed with more innovative operation strategies and need to encompass entire value chain stakeholders. The study ends with observation of some of the most innovative companies of the world, their common business premises and approaches that made them successful in the business.

II. Understanding the VUCA World

“If we want things to stay as they are, everything will have to change.” This is one of the most memorable sentences in the novel The Leopard by Sicilian author Giuseppe Tomasi di Lampedusa, when the nephew of the main character, Sicilian nobleman Don Fabrizio Corbera, the Prince of Salina, was trying to convince his uncle to change strategy. The book is all about forces threatening the status quo through class struggle during Italian unification.

Let us look at some of the major human needs like data storage, portable personal audio entertainment and mass viewing over in the last century and emphasis on last five decades.

1.1. DATA STORAGE requirements from the time computing devices were invented.

The right from the time human started recording the data; there was an imperative need for storing the same. Basil Bouchon developed the control of a loom by punched holes in paper tape in 1725. However punched cards which were pieces of stiff paper as the input and output data storage for digital information happened in early 20th century.
1.1.1. The Evolution of Storage Devices

Figure 1 shows the evolution of Data Storage. Source: Internet

![Data Storage Evolution Image]

Data storage was the initial major challenge that confronted the industry with the invention of computers and various computing devices. Data storage devices have evolved drastically from being large trunks where appropriately termed as wardrobe, washing machine, pizza oven in 1960s with the capacity to hold a few kilobytes of data, to the current generation transformation to microchips with ability to hold a few gigabytes of data. Mass data storage started from sequential recording magnetic tapes and evolved into Hard Disk Drive. Data storage capacity optimization led to the newer challenges of i) shrinkage of physical storage size, ii) portability of data, iii) inter media-compatibility and iv) transformation of data from mass production computer systems to personal computing and vice versa. Data storage had paradigm shift with constant evolution of networking where mass and physical storage are converged into today’s cloud data.

2.2 Portable Personal Audio Entertainment

Music must be as old as the human race since it is integral to every human irrespective of the ancestral age to the current distributed world. Music which embodied the culture of that human race has moved on from a community listening to almost individual listening over the centuries.

2.2.1. The Evolution of Music playing formats.

Like paper, advent of the radio was the major innovation at those times. Community listening was the era where mass band played in front of music lovers who congregated together in a location. With radio, the listening reached to the music lovers’ individual locations. The first successful attempt to record sound signals was achieved in the late 1850s by Edouard-Leon Scott de Martinville who invented the first sound transcription device, called the phonautograph. It was able to record music, but did not support audio playback. Inventor Thomas Edison furthered the work done with this technology with the invention of the phonograph which pioneered recording and playback, and paved the way for future innovations.

Flat discs, much like LP records, were used just over 10 years later on the gramophone, marking the start of the rise of the music industry. The gramophone operated on a hand-crank. In 1925, electric record players were introduced to the market. Music listening rapidly in last few decades became full-scale personal entertainment with advance in technologies that made easier portability, higher storage capacity, reduction of physical size and weight, analog to digital era and convergence of voice, data and later videos. At this stage, music is full-fledged personal entertainment not confined in homes or cars with usage of specific devices but at the click of a button music-at-a-go. As with the data storage, cloud has become central repository for all music lovers.

Figure 2 – The Evolution of Music Playing Formats. Source – Internet.
2.3 Mass Viewing

The human quest for recording and retrieval of data, voice led to inventions in paper, data storage, computers and music systems. Similar quest for viewing led to the initial building of amphitheaters, open-air venues used for entertainment, performance and sports. The term amphitheater derives from the ancient Greek ἀμφιθέατρον (amphitheatron), from ἀμφί (amphi), meaning "on sides" or "around" and θέατρον (théatron), meaning "place for viewing". Amphitheaters led to Arenas both covered and uncovered and later to modern day stadiums. Today mass viewing venue is the epitome of different technologies and event performances produced by mass performers for mass viewers. Mass viewing initially was in terms of physical view, fixed duration, venue capacity and size and limited audience. Today mass viewing is both physical and virtual and for pan-global audience.

In all the above instances, the need for storage, personal audio entertainment and mass viewing remained the same but everything in the evolution has changed drastically. The organizations like IBM, Sony and Apple might have been the leaders in most of the evolutions in their domain but did not get vanquished like other leading companies.

VUCA is an acronym developed by the U.S. military after the collapse of the Soviet Union in 1990s Afghan war to describe a multipolar world: volatile, uncertain, complex and ambiguous.
1. Volatility reflects the speed and turbulence of change.
2. Uncertainty means that outcomes, even from familiar actions, are less predictable.
3. Complexity indicates the vastness of interdependencies in globally connected economies and societies. And
4. Ambiguity conveys the multitude of options and potential outcomes resulting from them.

What was certain and predictable in erstwhile decades of business has moved to volatile and uncertain. Manufacturing which was clear say in terms of, In-house vs Outsourcing and Offshoring, Mass Standardization vs Mass Customization, Pan-National vs Pan-Global, Fixed vs Multiple locations has lost its sheen these days and thereby nothing concise and definite about the choices. Today we are aghast to find every industry is affected by digital turbulence and current industry models are blurred rapidly and even in India, newer behemoths are emerging in the market with no ownership or prior domain experience. Oyo Hotels is the largest branded network of hotels in India with no hotels or any service operations experience. Ola cabs are a major driving service with no cabs on their own. Flipkart, an ecommerce company without any in-house manufacturing or warehouse facilities selling millions of items to billions of customers in a year. The companies who have gained are the ones which moved out of their comfort zones and transformed with better operational excellence, innovation, technology, leadership, agility and readiness to face the challenges. “The best way to predict the future is to create it.” —Peter Drucker.

III. Does VUCA mean end of Strategy and Leadership?

In today’s Volatile, Uncertain, Complex and Ambiguous (VUCA) world, Operations personnel face multitude of challenges that too dynamic and completely different from the past. There are a number of drivers of these changes. Technology, easy access to information, a fast changing world economy, the formation of a global customer community and a very demanding consumer are only some factors that have created a very complex world. SMAC (Social Media, Mobility, Analytics and Cloud Computing) has catapulted the concerns and requirements of the consumers multidimensional whereas the resolution of these concerns needs to be addressed in the same or even lesser stipulated time.

Ernst Young and CII report “Succeeding in the VUCA paradigm: Making change happens” brings out an excellent study on the taxi and cab industry of India. This industry is witnessing a major overhaul. Even by
the standards of India’s rapidly evolving e-commerce ecosystem, the past five years have been an utter whirlwind. The years 1940–2000 witnessed as few as three major innovations in the taxi industry, whereas the last 16 years have seen as many as eight major disruptions! The last five years have seen the combined valuations for the top two players in the country rise over US$5b, with ridership rising from a few hundreds a day in 2010 to over a million today!

Figure 3 below shows the Evolution of the Taxi and Cab industry in India.

Evolution of the Taxi and Cab industry

- Fare meter-enabled yellow-top cabs
- Increasing number of transporter-owned cab fleets
- Launch of the app-enabled fleet-aggregation model
- Innovations through differential pricing and model-based service differentiation
- Foray into mass transportation through shuttles and buses

The traditional business models are shattered and there is a paramount need for better Operations strategy to combat VUCA. Since change is no longer the exception but has almost become the rule, managers need to rethink about strategy and implementation. Marco Mancesti R&D Director at IMD Business School and an alumnus of the High Performance Leadership (HPL) suggested a new framework as shown in the Figure 4. The conventional “set the goal - plan - execute the approved plan” approach clearly does not work anymore. One needs to embrace a “context-mindful” framework involving all the stakeholders in the supply chain and addressing each stake factor. VUCA brings two additional consequences in executing strategic initiatives. One is Strategic thinking and the second one Responsibility of leading the changes in managing the complexity and contradictions. Since there are many stake factors, an organization is compelled to make more decisions. By definition, strategy is about evaluating options and making choices.

Stake factors emerging out of different stakeholders in the supply chain reign in difficulties of priorities, acceptable losses, win-wins, trade-offs and other context-mindful options. It does not mean that strategy is constantly to be changed. The relevance of a particular chosen strategy needs to be reassessed frequently and accordingly become more agile and adaptable. Role of a leader has to be changed drastically to meet the onslaught of the disruptive factors like technology, pan-global environment, multiple operating and tax jurisdictions.

Figure 4. Convention to Context mindful approach

IV. The need and the role of Operations Strategy
Innovative Operation Strategies in VUCA world

Operations management is the core function in every organization, directly responsible for making its products which intrinsically includes services. Operations managers make all the decisions related to operations, starting with the original design of products and processes, continuing through production, and ending with the delivery of products to final customers. Some of these decisions are strategic, with repercussions felt over many years – to decide different operational parameters like locations, facilities, products, and offshoring/outsourcing centers. These decisions are the basis of an Operations Strategy. Slack and Lewis in their book describe this as, “the total pattern of decisions which shape the long-term capabilities of any type of operations and their contribution to overall strategy”. Organizational success is only likely to result if short-term operations activities are consistent with long-term strategic intentions and make a contribution to competitive advantage. Table 1 below details different types of strategic decisions made by Operations Managers.

Table 1 – Different types of strategic decisions made by operations managers – Source “Book on Operations Strategy by Donald Waters”.

<table>
<thead>
<tr>
<th>Aims</th>
<th>Strategic Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations Structure</td>
<td>settings the long-term purpose, goals and objectives</td>
</tr>
<tr>
<td>Type of product</td>
<td>choosing the best way to organize operations</td>
</tr>
<tr>
<td>Quality management</td>
<td>deciding the type of products to make and timing the introduction of new products</td>
</tr>
<tr>
<td>Type of process</td>
<td>showing how to ensure high quality products</td>
</tr>
<tr>
<td>Capacity</td>
<td>setting the size of the facilities</td>
</tr>
<tr>
<td>Structure of the supply chain</td>
<td>showing how materials are moved from suppliers to customers</td>
</tr>
<tr>
<td>Location</td>
<td>choosing where to make products</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>deciding how much of the supply chain to own</td>
</tr>
<tr>
<td>Alliances, partnerships and outsourcing</td>
<td>describing relations within supply chains</td>
</tr>
</tbody>
</table>

**Tactical Decisions** of planning, product development, technology, layout, logistics, quality assurance, replacement, staffing, make/buy, performance, systems and **Operational Decisions** like scheduling, staffing, inventory control, ordering, reliability, maintenance, quality control, job design and work measurement are consequences of the above **strategic decisions**. Close look at these decisions brings out the importance of each stake factor and role of the stakeholders before formulating the decision.

Operations strategy needs to be vertically consistent with higher strategies to help achieve their broader goals and objectives as well as be horizontally consistent with strategies in the other parts of an organization making sure that all parts work together to achieve the organization aims. Skinner – 1969 & 1978, conceptualized that operations managers need to actively participate in forming the core strategy and implementing it, rather act as passive managers. Effectively it means operations strategy (i) to implement, (ii) to support and (iii) to drive the higher strategies. Operations at Rolls Royce for example made very high quality cars and this became the basis of their business strategy. Distinctive capabilities are the key activities that set an organization apart from its competitors and that is the third type of support that drives the business strategy. Table 2 details some of the common sources of distinct capabilities in operations.

Table 2 – Common sources of distinct capabilities in operations - Source “Book on Operations Strategy by Donald Waters with some additions”.

<table>
<thead>
<tr>
<th>Products</th>
<th>Facilities</th>
<th>Processes</th>
<th>Technology</th>
<th>Performance</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>Finances</td>
<td>Customers</td>
<td>Markets</td>
<td>Suppliers</td>
<td>Logistics</td>
</tr>
<tr>
<td>Organization</td>
<td>Knowledge</td>
<td>Innovation</td>
<td>Patents</td>
<td>Offshoring/Outsourcing</td>
<td>Environment</td>
</tr>
</tbody>
</table>

The most important competitive features of Marketing are the traditional four Ps of product, place, price and promotion. A broader implementation of the above competitive features can be classified as five broad operations performance objectives resulting in competitive advantages though based on the competitive priorities of the business. Slack et al. (2004) argue that there are five operations performance objectives:

a) **Cost:** The ability to produce at low cost.

b) **Quality:** The ability to produce in accordance with specification and without error.

c) **Speed:** The ability to do things quickly in response to customer demands and thereby offer short lead times between when a customer orders a product or service and when they receive it.

d) **Dependability:** The ability to deliver products and services in accordance with promises made to customers (e.g. in a quotation or other published information).
e) **Flexibility:** The ability to change operations. Flexibility can comprise up to four aspects:

i. The ability to change the volume of production.
ii. The ability to change the time taken to produce.
iii. The ability to change the mix of different products or services produced.
iv. The ability to innovate and introduce new products and services.

V. **The resources view of Operations Strategy and concept of strategic fit**

A **resources view** says that an organization’s success comes from the way that it owns and uses resources. Strategic resources are those resources that in general are scarce (knowledge, specialized facilities, research facility), difficult to move (loyal employees, culture, infrastructure), difficult to copy (patents, specialized knowledge) and difficult to substitute (efficient supply chain, brand, expertise). These strategic resources provide the long-term advantage and success comes both from ownership, leadership and management of the resources. Efficient utilization of resources builds distinctive capabilities with **Operations Excellence** giving superior performance that differentiates an organization from its competitors.

A **strategic fit** occurs when managers design internal operations that are in harmony with their external environment. Figure 5 shows the concept of strategic fit. Operations managers have to balance the requirements of operations as well as of external environment. This can be really intricate since each market may require different features and requirements. Gary Hamel and C.K.Prahalad wrote in HBR in 1990 about the core competencies of an organization. They emphasized how it is important to move from fixed environment and fitting the operations into that environment - instead organization should build flexible environment and allow operations to make changes even if they are limited in scope. The strategic fit here is the collective framework of the stake factors but definitely move away from certainty into the chaos and disruptions ordained in VUCA world. **Strategic drift** is the opposite of strategic fit. World leading organizations like Kodak, Nokia and Orkut even though they were the pioneer of the concept as well as had the first mover advantage drifted by failing to manage the requirements and external environment which lead to the ultimate demise of these organizations.

Figure 5 – The concept of strategic fit - Source Book on Operations Strategy by Donald Waters.

VI. **How Innovative Operations Strategy transforms Business?**

The following top 10 Innovative Companies had an innovation premium of 64% and more as per by their study. Innovation premium is the premium the stock market gives a company because investors expect it to launch new offerings and enter new markets that will generate even bigger income streams.

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Business Thinking</th>
</tr>
</thead>
</table>

**TABLE 3:** Top 10 Innovative Companies in 2017 as listed by Forbes
Innovative Operation Strategies in VUCA world

<table>
<thead>
<tr>
<th>#</th>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Salesforce.com, USA</td>
<td>Customer relationship management software and services</td>
</tr>
<tr>
<td>2</td>
<td>Tesla, Inc., USA</td>
<td>Engages in the designing, development, manufacturing and sale of electric vehicles and electric</td>
</tr>
<tr>
<td></td>
<td></td>
<td>power train components.</td>
</tr>
<tr>
<td>3</td>
<td>Amazon.com, USA</td>
<td>Provides online retail shopping services. It provides services to four primary customer sets:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>consumers, sellers, enterprises, and content creators.</td>
</tr>
<tr>
<td>4</td>
<td>Shanghai RAAS Blood Products Co Ltd, China</td>
<td>Engages in the research, development, and manufacture of blood products and plasma-derived</td>
</tr>
<tr>
<td></td>
<td></td>
<td>medical products.</td>
</tr>
<tr>
<td>5</td>
<td>Netflix, Inc., USA</td>
<td>Operates as an Internet subscription service company, which provides subscription service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>streaming movies and TV episodes over the Internet and sending DVDs by mail.</td>
</tr>
<tr>
<td>6</td>
<td>Incyte Corp., USA</td>
<td>A Bio-pharmaceutical company, which focuses on the discovery, development, development,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>formulation, manufacturing and commercialization of proprietary therapeutics to treat serious</td>
</tr>
<tr>
<td></td>
<td></td>
<td>unmet medical needs, primarily in oncology.</td>
</tr>
<tr>
<td>7</td>
<td>Hindustan Uniler Ltd., India</td>
<td>India-based fast moving consumer goods company. The Company operates in seven business</td>
</tr>
<tr>
<td></td>
<td></td>
<td>segments.</td>
</tr>
<tr>
<td>8</td>
<td>Asian Paints Ltd, India</td>
<td>Asia’s third-largest paint company is expanding into the home improvement and decor segment.</td>
</tr>
<tr>
<td>9</td>
<td>Naver, South Korea</td>
<td>Engages in the provision of internet advertisement and search portal business.</td>
</tr>
<tr>
<td>10</td>
<td>Regeneron Pharmaceuticals, USA</td>
<td>Operates as a biopharmaceutical company. It discovers, invents, develops, manufactures, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>commercializes medicines for the treatment of serious medical conditions.</td>
</tr>
</tbody>
</table>

This model of Innovation premium is more about the investors’ confidence in that particular company which is ready to face disruptive factors and come with continuous innovations and confident of churning the innovation into commercial success. Analyzing details of each of these companies, one recognizes each one of them have the readiness to meet the uncertainty, willing to stride in a jerky environment, have long term operational vision of their business domain and ready to work in unison with their stakeholders.

There are many interesting commonalities with these companies:

a. Operational Innovations involve and revolve around human welfare or knowledge. Every individual concern / view and access is part of the business thinking.
b. Innovation is continuous process as well as a strategic thinking.
c. Willingness to invest in future technologies.
d. Agile and ready to adapt newer business models. Leadership ready to combat uncertainty and complexity.
e. Understanding the internal and external resources thereby enabling higher ownership and management of resources.
f. Strong Tomorrow’s Competitive edge with today’s business innovation and sustainable approach.
g. Flexible to work in any environment and operationally ready to make changes.

In order to understand how innovative operations strategies helped an organization success, one can compare the revenues of Apple vs Microsoft during the two decades of 1995-2015. Figure 6 list the revenues of Apple and Microsoft – Source [https://revenuesandprofits.com/apple-vs-microsoft-revenues-and-profits-1995-to-2015/](https://revenuesandprofits.com/apple-vs-microsoft-revenues-and-profits-1995-to-2015/).

Apple had $11 billion of revenues in 1995, whereas Microsoft had $6 billion revenues at that time. Microsoft revenues kept increasing consistently from 1995 to 2015, except for the year of 2009 when they had a small dip in revenues. In contrast, Apple revenues went up and down from 1995 to 2004. In 2004, Microsoft revenues were four-times more than that of Apple. From 2008 onwards, Apple has continued to grow at a
much faster rate than Microsoft and has added much more incremental revenues every year. As a result, in 2015, Apple generated 2.5-times more revenues than Microsoft. Apple generated $234 billion of revenues in 2015, whereas Microsoft generated $94 billion of revenues.

The growth of Apple in the last 5 years of 1995-2015 periods was the time frame when Apple focused more on the best user experience and integration of hardware, software, OS and services seamlessly to build easy use products. Apple constantly innovated at its own pace on different user interfaces and hardware but started in early 2000s. However they created the base premises for today’s Apple architecture in the form of iOS operating system in 2009. Microsoft which started at almost half of Apple revenues and thrice of Apple net profits in 1995 grew continuously in terms of revenues and profits. Microsoft overtook Apple in terms of revenues in 1997 and maintained constant growth in revenues and profits. Microsoft in mid-1990s transformed the lives of everyone with one innovation Microsoft Windows. The product to revenue to culture based on that single idea catapulted into one of the premier companies of the world in that era. Satya Nadella, CEO, Microsoft rightfully said in an interview that “Once you’re an Innovator, It’s Hard to Keep Innovating” and said what was successful in fuelling growth cannot be perpetual motion machine. Microsoft won hands down in certainty market but Apple overtook Microsoft in a VUCA world. Apple revenues which was marginally higher than Microsoft (65.2 vs 62.5 billion USD) went to 108.2 against 69.9 billion USD. During the same period 2011, Apple profits zoomed to 25.9 against Microsoft 23.2 billion USD. Apple growth is spectacular over the five years in spite of advent of other giants like Google, Alphabet (now Google) and others.

Dell managed to become one of the heavyweights of the industry because of its direct sales model which is sustained by an on-demand supply chain. Dell’s competitors never thought that this strategy would work out, which provided Dell with an opportunity. Toyota pioneered Toyota Production System (TPS) operational model and subject of business case studies world-wide. However competition found it is not easy to emulate that model. Zara a Spanish textile company reinvented the business model in its sector by “conscientiously applying its supply chain vision to its business.” Instead of outsourcing its production to countries with low labor costs, as most of its competitors have, Zara managed to use local suppliers for part of its production. This has enabled Zara to become more agile responding to trends in the market. IBM, General Motors and SEARS the original pioneer and market leaders lost out to the above companies since they tried to wade in conventional model.

Wal-Mart pioneered a great many innovations in how it purchased and distributed goods. Cross-docking and companion innovations led to lower inventory levels and lower operating costs, which Wal-Mart translated into lower prices. Progressive Insurance is one of the world best non-life insurance companies and leader in auto and motor cycle insurance. Progressive introduced Immediate Response claims handling where a claimant can reach a Progressive representative by phone 24 hours a day, and the representative then schedules a time when an adjuster will inspect the vehicle. Instead of taking between seven and ten days for an adjuster to see the vehicle, Progressive’s target is now just nine hours and end of it give the final estimation and even payment. Progressive did not stop with one innovation but transformed into 24x7 website for rates against the competition and later with another innovation - advanced pricing calculation using policy holder credit rating. IBM in 1990s invented new product development process giving 75% reduction in the time to develop new products, a 45% reduction in development expenses, and a 26% increase in customer satisfaction with these new products. Shell Lubricants reinvented its order fulfillment process by replacing multiple activities of multiple parts order into single vendor relationship manager thereby turning order into revenue cycle time by 75%, 105% increase in customer satisfaction, and 45% reduction in operations expenses.

VII. Some of the Indian Companies experiences in VUCA world.

Indian Companies are gearing to the challenges of VUCA by shift in their strategic thinking, leadership changes, readiness to combat the uncertainty by resourcing into flexible internal and external environment, and moving into context-mindful framework.

a) GSK (GlaxoSmithKline Pharmaceuticals) is leveraging technology to improve real time flow of information and ride the digital revolution by reaching to 400,000 Health care professionals (HCPs), by providing iPads to 3000 strong field force for instant dealing and real-time reporting, centralized integrated CRM tool covering all digital channels including webinars and setting communication system with doctors for real-time information and health care.

b) Hindustan Unilever Ltd in addition to the economic value growth parameters viz. consistent, competitive and profitable recognized the need for growth in social value and that too in a sustainable way. In 2010, they wanted to double the size of business while reducing their environmental footprint and increasing their social impact. HUL to consistently succeed in the VUCA world adopted the mantra of thinking local but acting global. HUL try to understand what local consumers and customers need or want. Then they leverage
their global understanding, technology and knowledge to provide the best solutions to meet these local needs.

c) Asian Paints Ltd vision is to be innovative, agile and responsive world class research and technology organization that aligned to customers needs and successfully moved from Paints Company to Home improvement and Décor Company.

d) Target India in conjunction with its US counterpart has created a demand forecasting engine that supports decisions taken across various business teams to provide accurate forecast like inventory (on hand) and assortment mix.

e) Paytm emerged in most volatile environment starting as mobile wallet application and swiftly moving to full-fledged mobile payments bank.

f) Reliance Jio has started competitive war disrupting the existing voice and data market in India with freebies and later emerging as leader in this segment.

g) Infrastructure companies like State Electricity Boards (SEB), Tata Power, and Reliance Energy etc needs to gear for the future. Today what is supply market can quickly move into demand market with the new age batteries that are getting into commercial mainstream.

h) BEST which was the vanguard of public transportation in India is losing their operational excellence to local public transporters like NMMT and TMT.

i) Metro connectivity in different cities has disrupted the traditional transportation players in most of the cities. Suburban railway which is the bloodline of Mumbai metropolis can be reduced to another transportation mode in next decade when all metro lines get commissioned.

VIII. Conclusion

Mario Benedetti once said: “when we thought we had all the answers, suddenly, all the questions changed”. Business is no exception to it. The world has changed dramatically and in all dimensions. Volatility, uncertainty, complexity and ambiguity characterize the economic, social, political and technological environments. The age of certainty and fixed environment is moving into uncertainty, flexible environment, disruptions and chaos. Any organization needs to embrace a “context-mindful” framework involving all the stakeholders in the supply chain and addressing each stake factor. VUCA brings two additional consequences in executing strategic initiatives. One is Strategic thinking and the second one Responsibility of leading the changes in managing the complexity and contradictions. Operations strategic decisions need to be more innovative, agile and manage resources by building strategic fit. VUCA doesn’t mean that everything is unpredictable and unsurmountable. Vision, Understanding, Clarity and Agility is the new primer that needs to replace existing VUCA.

References

Journal and White Papers and Weblinks:


[7] Six Key Levers To Succeed In A VUCA World - BW Businessworld.html

[8] Leading in a VUCA World - Executive Development.html

[9] Is VUCA the end of strategy and leadership_.html

[10] Living Strategy in VUCA-World.html


[12] Danone Nutricia, supply chains and the VUCA world _ Procurement _ Supply Chain Digital.html


[15] Is VUCA the end of strategy and leadership_.html

[16] Leadership in a VUCA World _ News _ Hindustan Unilever Limited website.html

[17] Microsoft's Satya Nadella_Revisit the Mission - Office Hours.html

[18] Winning in the VUCA World - key principles and transformation priorities for enterprises.html


[21] Target India_ How India is powering US retailer Target with digital innovations, IT News, ET CIO.html

[22] Setting up supply chain strategies for innovative products_ Forbes India.html

Books


[27] Innovation and Management Strategies, Concepts and Tools for Growth and Profit – Shlomo Maital and D.V.R. Seshadri, SAGE.

**Proceedings Papers:**