

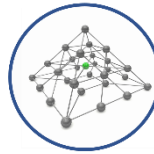
Surfing the Waves of Disruption:

Developing the necessary Competencies matter.

BUSINESS STRATEGY

DIGITAL READINESS

INNOVATION CAPABILITY



By now most companies, including yours, have likely put in place one or more enablers for innovation – be it collaborative spaces for ideation, an idea-wiki, time and funds allocation for innovation, reward mechanisms etc. Leaders realize the importance of Innovation (The Future), but many find it a challenge to balance the same with Operations (The Present) priorities. Innovation efforts thus often become fragmented and do not yield exciting results which further reduces the motivation to innovate.

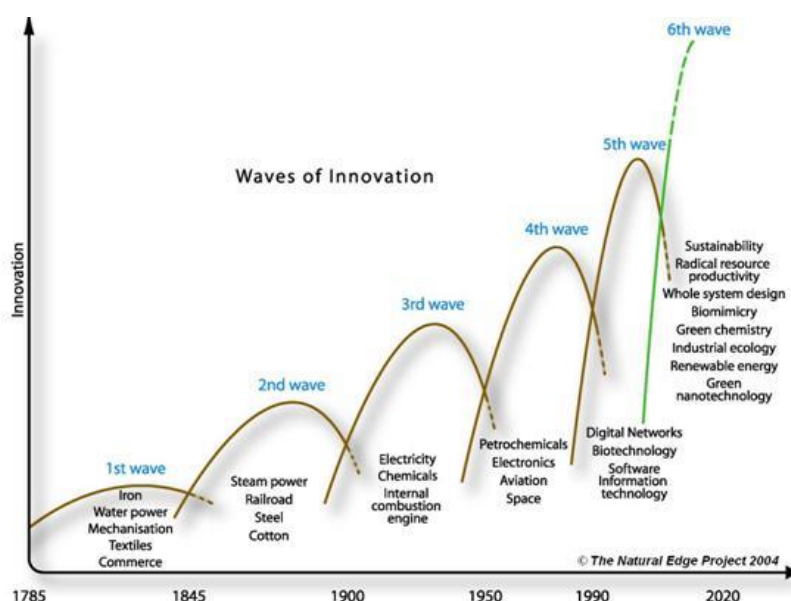
This article attempts to focus on the Economic and Technological directions that drive innovation, the resultant impact on developing newer skills and competencies and a model which can be practically implemented to build a continuous innovation capability in a firm. It also attempts to highlight the impact on individuals and the need to develop new personal competencies

Business Cycles and Innovation - The Economic Perspective:

Today, we live in times when hardly a day goes by without the mention of the words innovation, entrepreneurship, and start-ups as vehicles for economic development. Yet, this is not something new. Many renowned economists have postulated theories around these topics. It is Joseph Schumpeter, the noted Austrian economist who is acknowledged for his concept of innovation and entrepreneurship, and its role in economic development.

Schumpeter argued that anyone seeking profits must innovate. He goes on to say that the invention phase of an innovation has less of an impact on economy as compared to its diffusion and subsequent imitation¹. It prompts a new business, or its element, to replace the old. As a result, a normal economy is not the one that is in equilibrium, but one that is constantly disrupted causing booms and recession. Such cyclical phenomenon was posited as early as 19th century by Russian

economist Nikolai Kondratieff (also Kondratiev) and referred as Kondratieff waves. Other economic cycle theories also exist.



More recently, an extension to the theory of K- waves was published by The Natural Edge Project. The graphic illustration², while being self-explanatory, points out to the important fact that the Waves of Innovation are getting more intense and last for a shorter period.

Schumpeter argues that in a developing economy where an innovation prompts a new business to replace the old (a process he later called “Creative Destruction”), booms and recessions are, in fact, inevitable and cannot be removed³. Does it mean that we shall be witnessing more frequent disruptions in future?

The Disruptive Power of Digitalisation- a Technology Perspective:

Not too long ago, the technology world was busy exploring the impact SMAC (Social Media, Mobility, Analytics and Cloud) environment in the B2B as well as the B2C segments. The diffusion of these technologies has happened at a rapid pace. This diffusion has influenced further innovations in the semiconductor and hardware industry. The digital technology fabric now assumes a larger dimension called Digitalisation. Many Industry Research firms such as Gartner, Mckinsey and the likes are publishing technology trends which are bound to restructure business models across all sectors and walks of life. Automation, Artificial Intelligence and Machine Learning are expected to boost productivity, IoT is shaping the Industry 4.0 wave, social media- mobility- Internet is influencing consumer behavior and governance. Data and Identity thefts will give rise to cyber-security issues. This can have huge impacts across different socio-economic strata. The abundance of software tools and apps is automating or simplifying functions such as programming and testing. The question is how many firms are equipping themselves to manage such rapid changes- be it technology creators or consumers.

These technologies are also creating significant opportunities in countries like India to accelerate and potentially leapfrog development phases. Education, Healthcare, Financial transactions, Electrification, Infrastructure can be better distributed and managed by Digital technologies

How long will existing expertise last? The Need for New Competencies:

Such waves of disruption mean economies get restructured, job flows get redefined resulting in firms reallocating their resources. In such a scenario, some existing jobs get liquidated, while new ones are created. Interestingly the frequency of job liquidation is far greater than job creation till some stability is reached⁴.

Relevant to the Indian context, let us see what experts are saying:

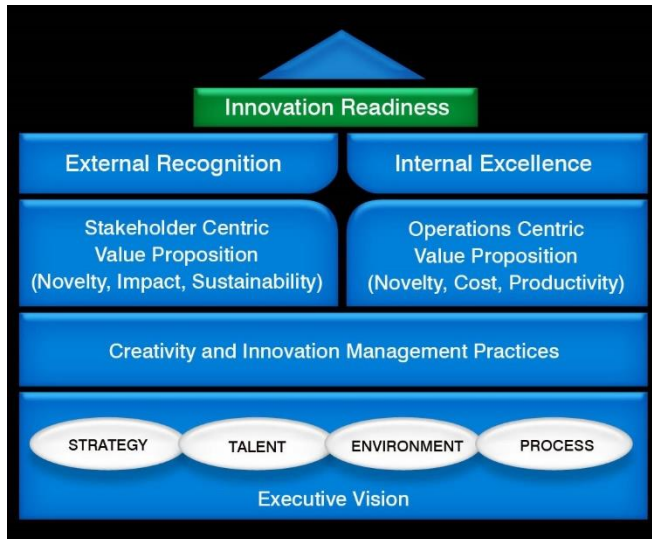
- 50-60% jobs will need new skills⁵
- 20-25% less jobs in IT over next 3 years, reskilling of people at all levels will be the key focus area in the coming years⁶.
- Whether it is manufacturing, services or agriculture, we are seeing technology disrupting all sectors. The hallmark of future is going to be innovation- Amitabh Kant, CEO Niti Aayog⁷
- Software development jobs are next on the chopping block Employers will soon be on the hunt for candidates who excel at creative and critical thinking. - Mark Cuban⁸

While there is abundance of talent, what the scenarios tell us is that everyone in a firm needs to develop competencies to surf the innovation wave. The need to develop new technical expertise is obvious and does not need much discussion. However, trends such as automation, AI and ML shall also result in job contraction. To minimise this impact, skills such as human-centered design need to be mastered. This in turn would need competencies such as problem discovery, creative and critical thinking^{8,9}. Leaders need to develop the ability to spot weak signals, insights to shape innovation strategy and manage innovation.

A Model for building Creativity and Innovation Capability

Analysing the situation and identifying the need for new competencies is one thing. Moving forward to implement the same effectively and with agility is another. Various industry research reports as

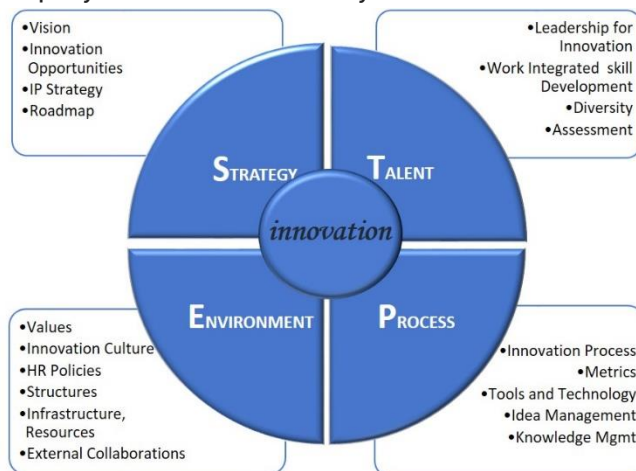
well as thought articles from management gurus list multitude elements which are needed to build the Creativity and Innovation Capability. After studying many such reports and articles ^{9,10} including the responses for the Innovation Readiness survey conducted by us , we have identified four key drivers which represent these multiple elements and form the foundation for the model – STRATEGY, TALENT, ENVIRONMENT & PROCESS (S.T.E.P)



The model showed alongside thus uses S.T.E.P as its foundation elements. The subsequent blocks enable firms to build Creativity and Innovation Capability on a continued basis. It can yield a measurable outcome, while balancing day to day operations priorities. The activities in the individual blocks though need to be customised. In our limited experience this approach has delivered different strategy linked results for different companies. These results include, identifying future oriented strategic initiatives, increase in number of patents, significant cost savings, new product ideas and more.

Understanding the Key Drivers for building Creativity & Innovation capability:

Strategy: Innovation success of a firm depends on having innovation, not as a second-cousin, but as a part of the mainstream business strategy. Technology may force the Strategy formulation process itself to be innovated. A survey done by the World Economic Forum’s Global Agenda Council on the Future of Software and Society shows people expect artificial intelligence machines to be part of a company’s board of directors by 2026 ⁹.



Talent: The need for skilling new talent and up-skilling existing talent is extremely important. Mere domain expertise is not enough. As an example, the focus is moving from Big Data to Thick Data. Such a shift will need newer thinking for executives, managers as well as individual contributors. From a management perspective, there is a lot of discussion on how existing workforce models would get disrupted in future. Talent market places would provide the

needed talent and agility to firms. Managing Creativity and Innovation thus needs a completely different approach compare to managing operations.

Environment: Having the right infrastructure, resources, policies and culture within the firm plays a significant role in motivating employees, removing barriers to creativity and encouraging collaboration- both within and outside the firm. Externally, collaborations with Research Labs or academia are known to accelerate innovation. It should be noted that in a digital world, partnerships across the value chain are expected to explode. As an example, just see how Indian automotive companies are acquiring design companies or are investing in aggregator start-ups

Process: Innovation activity by nature is chaotic when compared to operations. At the same time, it does need a process so that its progress can be monitored and risks minimised. However, operations processes are not conducive for innovation. A careful selection of process to manage innovation is needed. One cannot blindly adopt popular process frameworks as every firm's needs are different. With constant changes in the economic, social and technological environment, such processes will undergo innovation too.

Conclusion:

Even though there is an abundance of talent, businesses will need a new set of skills and competencies that enable them to quickly refresh existing business models, solve relevant problems that provide impactful solutions as against nice-to-have.

On the other hand, individuals- be senior leaders, managers or individual professionals – must plan their personal development to emerge successful in the emerging world.

The proposed model to build Innovation capability, though focusses on business organisations, is flexible enough to be adopted by other organisations or even building ecosystems.

Organisations and individuals who are adequately skilled to surf new waves of innovation could experience attractive growth and gains, whereas others may find themselves desperately latching on to opportunities that are dwindling, providing at best stagnant growth or salaries.

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