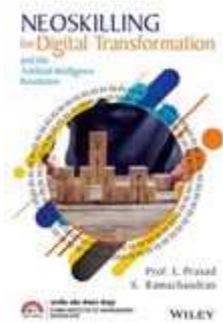


## The Chapter-end Takeaways



*Excerpts from the end of each chapter of the book*

### **Neoskilling for Digital Transformation and the Artificial Intelligence Revolution**

**By Prof. L Prasad, S. Ramachandran**

**2018 / 180 Pages / Paperback / Rs. 729 (rs. 700 on Amzaon India)**

**ISBN: 9788126577156 / Wiley India**

#### **CHAPTER 1 The Need for Neoskilling – Beyond Reskilling**

The rapid adoption of digital technologies across the society is a given. All other factors remaining the same (awareness, access to technology, funding, resources), the availability and effective deployment of capable employees will be the differentiating factor between organizations that successfully adopt emerging technologies for significant business impact, and those that do not and hence lag behind.

In the continuum of skill development, neoskilling or preparing individuals and teams for futuristic skills is at the top of the pyramid, followed by reskilling for present-day needs. Neoskilling is not just about offering training in upcoming technologies. It needs a revamp of the purpose of a business starting from the top, leading to higher-order thinking and eventually skill development as an outcome of the exercise.

To avoid the MINIMEC trap for strategic long-term, sustainable, intellectually strong growth with ethics and integrity, it is important to have the Gardener, Farmer, and Forester mindset for short, medium, and long-term perspectives.

Organizations should consider the entire cycle of creation, capture, and delivery of value in mind, backed by skilled resources, to ensure that innovative ideas reach the market and retain a steady, sustainable, and profitable revenue stream.

#### **CHAPTER 2 Ownership – The Buck Stops Here**

At a macro level, our study findings show that the two owners for reskilling of the society are the industry and industry–government collaboration. Awareness of ongoing global initiatives beyond one’s industry and geography will be important to leverage them, avoid duplication of effort and for benefits to be derived.

At the corporate level, with the alphabet soup of designations available today, it is vital to have clear ownership and accountability on who in an organization will own neoskilling with policies put in place. Reskilling for today and neoskilling for tomorrow need inputs from business units and functions for specific skill development. Skill needs today are not generic that can be managed as a horizontal function.

Change management is the biggest challenge in reskilling. A people-centric approach will be important for the reskilling owners to ensure that any concerns among employees such as loss of jobs during technology adoption are addressed.

#### **CHAPTER 3 The Hierarchy of Reskilling**

Neoskilling is not limited to the traditional classroom training offered for emerging technologies, out of the “fear of missing out.” It is strategic, should start with the board room and be implemented as a well thought-out and planned ongoing program. The logical chain starting from awareness to accessibility, funding, appetite, and “ambition to implement” should be kept in mind.

Limiting the sources of input and information for skill identification to direct stakeholders alone - clients, senior management, and employees (or the first-order environment), is fraught with risk and inadequate. It is important to reach out to the external environment (second order) by building a network of partners, analysts, subject matter experts, consultants, and policymakers. With “awareness” for reskilling being the biggest challenge from our study findings, reaching out to the second-order environment becomes even more important.

For professionals and policymakers who worry about “employability,” Perrow’s Technology classification along the Novelty and Programmability dimensions is crucial to identify the “craft” and “non-routine” type of work, which will need humans. The other two types of jobs, “routine” and “professional” will be targets for digitization, automation, and AI-driven systems to perform. Such a generic, technology-agnostic approach will be required to look at the big picture, before going to the deep dive at specific jobs, roles, and task levels.

It will be inevitable for repeatable jobs to be replaced by automation or AI systems. A gradual shift to craft and non-routine category jobs, along with a neoskilling strategy to match, will help the employability aspects and for the organization to

maintain its competitive edge. This shift cannot happen overnight but be planned and implemented gradually over a 5- to 10-year time frame.

#### **CHAPTER 4 Socially Inclusive Reskilling – Digital for All**

Digital Transformation today is ubiquitous and not limited only to the corporates. There is an opportunity for policymakers, to make it inclusive in nature for those at the bottom of the pyramid. As socially responsible organizations, corporates can play an active role in this inclusive growth. It will also open up a market that needs to be tapped.

Technology by itself is becoming affordable and scalable to ensure that all layers of the society receive the benefits of the digital revolution and are skilled enough to tap it, irrespective of the levels of formal education, with intuitive user interface design for devices such as the smartphone or tablets.

The rural segment should not be considered only as consumers of technology. They have several best practices and vital information that, if shared in a timely manner across a wide network, can be beneficial for the overall society.

Technology if implemented in the correct way ensures transparency for flow of public funds from the corridors of power until the last mile, with a vast potential to avoid corruption. These technologies should be leveraged for avoiding leakage of funds in government-sponsored projects and initiatives.

Technology offers a level playing field for everyone irrespective of their formal education, age, gender, social background, or economic status. Those willing to pick up these emerging skill sets can define a sustainable and rewarding professional career. Government initiatives for skill development should be made use of effectively.

#### **CHAPTER 5 Industry Analysis**

Both reskilling and neoskilling will be specific to each industry, and within an industry, specific to each enterprise, business unit, and function. It will offer a competitive advantage for organizations that identify the appropriate skills and train their teams in them. At the same time, best practices beyond one's industry should also be utilized where possible.

Industry-specific initiatives such as Industry 4.0 in manufacturing need not be limited to their points of origin. Other industries can adopt the applicable practices, for example, a connected world borrowing from Industry 4.0 in a hospital.

Technology itself is offering ways and means for reskilling and adoption of emerging areas by democratizing them – for example, cloud-based deployment of tools such as advanced analytics, Machine Learning and MOOCs for online education. SMEs should not shy away from digitization initiatives but be aware of and make use of these avenues.

Technology providers are taking up initiatives to create a network effect for fully leveraging the benefits offered by their solutions. In cases where the technology is readily available in the market, the gap in the skill set is a road block that needs to be filled and everyone should play their role for reskilling and neoskilling.

