

INDUSTRIALIZATION

Business and Technology Perspective



Abhijeet Ballurkar

Industrialization: Business and Technology perspective

Abstract

Industries have evolved by incorporating innovations. These innovations, today, have brought in technologies that have transformed industry. The advent of computerization and digitization has further enhanced the processes of industries across the globe.

Today, technology has made its inroads in every industry. Application of Information technology has automated industry processes in a thoroughly new way, establishing systems to monitor and control operations. This has reduced strenuous efforts, and relieves humans from the stress of reliability and perfection.

This has also increased varied opportunities, at the same time, demands from the industries have expanded. These demands challenged the growing work population as well as Universities and Colleges to synchronize with the changing needs.

Industries constantly aspire and encourage individuals to take over variety of roles in several sectors. However, this significant change that technology has brought in, demands the fresh graduates to improve their performance.

There is a continuous search for individuals who can bring innovative results in industries. Companies have varying requirements and opportunities, and the need for individuals to experiment has multiplied. Industries have become highly techno-centric as this assists in implementing minor to major processes. Companies seek young minds who can align with the system, fulfil the requirements of their clients, understand the industry processes and deliver effective results.

Industrialization (representing book, in this context) is an endeavour to impart skills that make the readers reach their career goals. It sets out to provide a 360° view of the applications of technology across industries. It focuses on bridging the gap between education and workplace. The book provides a platform to engage readers into a rich learning experience, encouraging them to take informed decisions about their career and enhance their employability.

As industries are evolving with every passing year, it becomes essential for fresh graduates to understand the know-how of the changing industries. The book brings in the best industrial practices with scholastic learning to enable readers to analyse the needs of current market and prepare them by enhancing their skills required in the industry.

By providing an opportunity for readers to understand the concepts at their own pace, the book reduces the dependency on an external industry expert to deliver Industrialization workshops. It is structured in a manner to make it easier for readers from different domains to comprehend and apply the concepts at ease.

In addition to focusing on the core needs, **Industrialization** also emphasizes on enhancing readers' business communication, interpersonal and soft skills, personality development and creative thinking; all of which are required to perform efficiently in organization. The concepts enable readers to understand the complexity involved in decision-making process and guides them to implement these learnings in real life situations. It also focuses on technical delivery and business acumen enhancing readers' potential, while accelerating their productivity and increasing proficiency.

The book induces corporate values and groom readers to meet the requirements of the industry. The book also works in tandem with educators to help readers gain a practical mind-set.

In overall, **Industrialization** provides an engaging platform for readers to:

- ✓ Understand the applications of Information Technology across various industries
- ✓ Enhance business acumen, technology and domain skills
- ✓ Develop entrepreneurial and innovation skills
- ✓ Comprehend the latest trends in technology
- ✓ Get nurtured and groomed to be Industry-ready

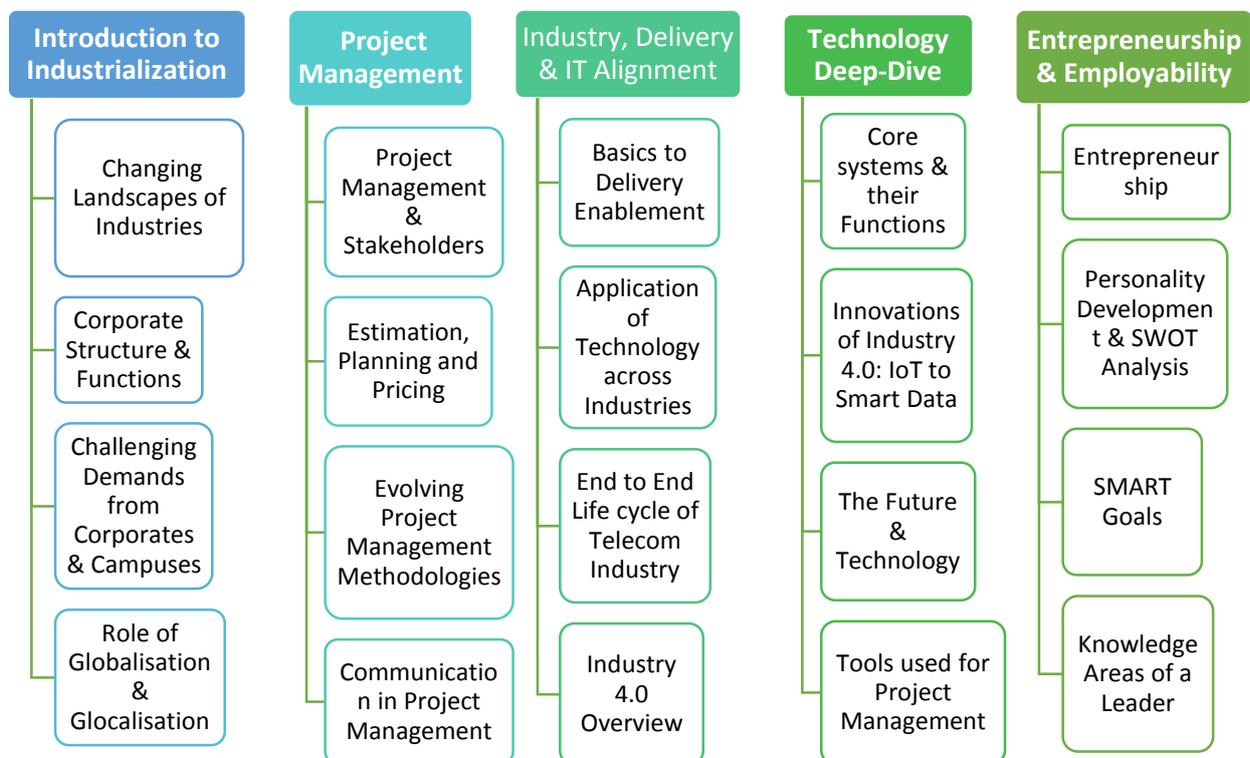
Industrialization broadens the horizons of readers’ existing knowledge to make them industry-ready through learning environment that nurtures them to develop entrepreneurship while equipping them to be employable and successful in the industry of their choice.

OUTLINE:

The book is structured in a way to make it easier for readers from different domains can comprehend and apply the concepts. Each part includes relevant case studies, life simulations, activities and exercises that provide experiential learning.

It is broadly divided into **Five Parts**, each consisting of Sections and Subsections.

Below is a broad classification of the book:



Part-1 Introduction to Industrialization

This part highlights the significant changes that technology has brought into the functioning of the industries. It begins with *Changing Landscape of Industries*, which provides a comprehensive picture of the updating systems in terms of both business and production. It gives readers a background to understand how industries have evolved through years bringing out the needs of the current Industries.

In the next chapter, the book defines the industries and the contemporary industries around us with their scope in this competitive world. It showcases the increasing growth of opportunities in each sector. The part continues to discuss on the typical structure of a corporate organization and its function at each level.

In the following chapter, it deals with different types of companies that are observed. It talks in detail about the functions of each type of company. It further drafts the challenges and demands that the corporate and the campuses encounter. Moreover, this part examines Globalisation and showcases the establishment of companies outside their native region and making the world as their 'global market'.

At the end of the part the readers will:

- Understand the Industrial changes with the time
- Realise the demands and challenges of the Corporate organization
- Have a clear understanding of types of companies and their functions
- Interpret organizational structure
- Increasing opportunities with globalisation

Part-2 Project Management

Project Management is applicable to all tasks the individual endeavours to accomplishment. It is also an intrinsic component of any organization. Management of such projects is highly important as they fetch both revenue as well as reputation for the organization.

This part enables the readers to understand the several dimensions involved in project development. It teaches readers the ability to handle projects and encourages them to take up everyday tasks by adopting different models. These models provide them with a path to manage the tasks effectively. The detail description of the developmental models for project completion enables the readers to choose the model depending on the context and the requirements of the project.

Emphasising on the types of projects that are most commonly undertaken by the organizations, the part describes the estimation process which is very crucial for the initiation of a project and discusses the methods with examples for project estimation. The part provides an overview of the challenges in project management

All of this provides scope for the reader to learn the process of project development. It also highlights the essential criteria requirement for the accomplishment of any project. It details on the estimation procedures and gives a typical timeline of the project. The part also includes the importance of communication in project development.

Outcomes:

- Learn to effectively manage day-to-day projects

- Able to identify and work with key players in a project
- Explore the different types of projects
- Master the phases that are involved in project development through two specific models
- Learn to estimate the three crucial assets: time, money and workforce

Part- 3 Industry, Delivery & IT Alignment

This section introduces several terms that are associated with technology, delivery and telecom. It emphasizes on procedures involved in End to End Business Processes. It differentiates COTS and Custom Products with a discussion of each individually.

It provides distinction between products and services with relevant examples. The part, further, details the Siebel Process Flow to comprehend campaign management in order to import leads and prospects for the business. It deals with incorporating Factory of a model of work for mass delivery of the products.

The part also discusses on major industries around us and their integration of technology to regulate several (or all) processes of the organizational and business processes. It emphasizes on the incorporation of technology models that took a leap in manufacturing to delivery of products and services across industries.

The unit provides a clear discussion on services and functions of the management systems in 'Telco World'. It introduces to Operational Support Systems and Business Support Systems. It examines all the systematic alignment of operations from undertaking an order to delivery of the services to the customers. The part assesses concepts like Fraud Management and Fault Management which are often dealt in the Telecom Industry.

Outcomes:

The readers will:

- Be familiarized with the key terminology of the IT
- Learn the type of products available: COTS and Bespoke Products
- Comprehend the most commonly used data architectures and their operation
- Understand the Campaign flow and management procedure
- Imbibe management techniques in Telecom Industry

Part-4 Technology Deep Dive

Technology plays a significant role in every industry. The unit discusses different aspects of technology that enabled automation and controlled procedures in industries. It deals with how Internet of Things (IoT) has transformed day to day operations.

It talks in detail about operating systems which play a key role in any electronic devices. It, next, discusses the importance of database systems and its ability to analyze the data and storage of the same. It provides examples of the most commonly used databases of several organizations and their functionality. Web Technologies are included in the part that explains the operations carried out while managing a website or a web page.

It recounts Content Management System which enables the individual to create content and share content in a repository. It also deals with the usage of technology for Enterprise Integration. It

continues on how these technologies have modified the process of project development and management or Software Development Life Cycle. It details the tools that aid to reach the goals effectively.

Further, the unit discusses different aspects of technology that enabled automation and controlled procedures in industries. It deals with how Internet of Things (IoT) has transformed day to day operations and inclusion of Cyber Physical system to monitor the tasks. It defines several Industry 4.0 technologies that have leveraged the functioning of the systems today. Internet of Things, Cyber physical systems, cloud storage, additive manufacturing, and advanced robotics form key components of the Industry 4.0.

The part understands the needs of the readers and enables the readers to:

- Obtain an overall horizontal view of the latest IT/software technologies
- Grasp the functions of the Web Technologies
- Understand the enterprise integration, which forms a major component of any organization
- Explore different tools used for the Software Development Life Cycle
- Comprehend innovations of Industry 4.0

Part – V Entrepreneurship & Employability

This part discusses the skills essential for readers to work efficiently in an organization. The part encourages readers to adopt a few techniques and ways to manage time and balance the work schedule.

It also equips the readers to moderate emotions in while managing organizational tasks. It also enables the reader to understand the mechanics of a team and collaboration necessary for the team to function with cooperation. This part also emphasises on the areas of knowledge that are essential for a leader to succeed.

Outcomes:

- Cultivate an entrepreneurship
- Realise their goals and set SMART goals
- Identify their own strengths and weaknesses to convert their threats to opportunities
- Master the art of managing the time
- Understand different social styles and collaborate for mutual growth
- Learn areas of knowledge of a Leader

COURSE METHODOLOGY

The book adopts a learning-centric methodology which demands active participation of the readers. Several activities and exercises are designed to engage readers to think out of the box.

The instructors adopt learning centric approach to administer this book for maximum reader engagement which helps to achieve the book/ book learning objectives.

- Delivered through a well- structured series of lectures
- A reader-centric approach where readers play the key role in imbibing the book topics
- Engaging reader sessions with stimulating situations.
- Providing real life examples to comprehend the operations in life

- Teamwork with distribution of the responsibilities

Further, the faculty from the institutions will be given exclusive training by industry experts with extensive experience in multi-national corporates to conduct the book in their respective institutes.

ONLINE SUPPORT & FORUM

Industrialization shall have an online version with more detailed references, videos and articles. This is to give the reader more ways to explore the textbook beyond the classroom. The reader shall also have the opportunity to ask questions and build a discussion with like-minded readers from across different colleges. Experts and Authors of the book shall aid the reader to master several topics in the book.

About the Author

Abhijeet Ballurkar is the founder and Managing Director of Targetorate Consulting. He received immense recognition and appreciation for significantly improving top-line growth and bottom-line performance of organizations. He has employed innovative Go-To-Market Strategies that aided both established enterprises and budding organizations to extend their products and services globally.



Two decades of experience with different Industries and Master's degree in both Computer Applications and Business Administration has enabled him to provide a holistic picture of dynamic nature of the Industry. He also holds a Project Management Certificate from PMI and Achievement certificates from other industry organizations.

Prior to setting-up Targetorate Consulting, Abhijeet worked as a Vice-President with Accenture, Global Presales Head with iGATE and Lead Architect with Tech Mahindra. Besides a unique blend of background in various industries combined with his International exposure to Asia, Europe, Africa, Australia and USA regions, Abhijeet has been applauded for his work in Communications, Information Technology, M&E, Utilities, Healthcare and other industries. He has also led several workshops on Business Strategies, Entrepreneurship, Digitalization and Sales/Delivery Enablement for several corporates and academic institutions.

With such comprehensive knowledge, the author provides insights about the industry that aim at shaping the new generation to inculcate, and comprehend the nature of the industry and develop skills that aid them to align with the organizations.

About the Author

Abhijeet Ballurkar is the founder and Managing Director of Targetorate Consulting. He has received immense recognition and appreciation for significantly improving top-line growth and bottom-line performance of organisations. He employed innovative Go-To -Market Strategies that aided both established enterprises and budding organisations to extend their products and services globally.



Two decades of experience with different Industries and Master's degree in both Computer Applications and Business Administration has enabled him to provide a holistic picture of dynamic nature of the Industry. He also holds a Project Management Certificate from PMI and Achievement certificates from other industry organisations.

Prior to setting-up Targetorate Consulting, Abhijeet worked as a Vice-President with Accenture, Global Presales Head with iGATE and Lead Architect with Tech Mahindra. Besides a unique blend of background in various industries combined with his International exposure to Asia, Europe, Africa, Australia and USA regions, Abhijeet has been applauded for his work in Communications, Information Technology, M&E, Utilities, Healthcare and other industries. He has also led several workshops on Business Strategies, Entrepreneurship, Digitalization and Sales/ Delivery Enablement for several corporates and academic institutions.

With such comprehensive knowledge, the author provides insights about the industry that aim at shaping the new generation to inculcate, and comprehend the nature of the industry and develop skills that aid them to align with the corporates.

"Abhijeet Ballurkar's workshops have always been of great value to our students. His insights significantly assisted them to be Industry-ready. I am extremely glad to introduce his new book as primary reference for INDUSTRIALIZATION subject, being introduced in our institution."

Abhishek Reddy, Executive Director, Annamacharya Institute of Technology & Science