

# Driving Digital Readiness

A Framework for  
Manufacturing Firms





## Introduction

Never since the industrial revolution has there been a development with potential to disrupt businesses as digitization. While digitization was driven initially in the consumer space, it is rapidly becoming the norm in the manufacturing and services space. With the rapid decline in data costs and the increasing competitiveness of the Indian manufacturing sector, India is on the cusp of a phase of revolutionary growth in manufacturing if it were to leverage digital initiatives. However, as India is making rapid strides in these fronts, it is important that Indian companies adopt best practices in digitization to remain globally relevant and competitive.

In this environment, it is critical for every company to understand where it lies in terms of digital readiness, and accordingly develop and implement a strategy to enhance the same. In this paper, we present a framework for assessing Digital Readiness of Manufacturing Firms, and some thoughts on how manufacturing firms can go about building Digital Readiness.

# Understanding Digital Readiness

Implementation of various SMACIT (Social, Mobile, Analytics, Cloud and IoT) tools are often mistaken for digital readiness. However, these tools only provide digital capabilities, which is only one of the components of Digital Readiness. For understanding Digital Readiness, it is important to understand the process by which a company becomes Digitally Progressive.

## Elements of Digital Readiness



### Awareness

What is the Digital IQ of the business?



### Strategy

Is there a clear, long-term digital strategy and how does this dovetail with the overall business strategy?



### Capability

To what extent does the company harness the power of digital through its various functions?



### Culture

How engrained is the digital mentality within the firm, and what does this mean for decision making?

The journey towards Digital Readiness starts with **Awareness**. For a company to be able to initiate any digital program, it is important to be aware of the environment it operates in, and the various possibilities that digital solutions offer. Awareness of the developments at the customer's end that could impact your business will be a key starting point. For manufacturing companies that are B2B focused, this would involve understanding the end consumer of their product who may be many degrees separated from them.

For the Awareness to translate to action, a company should ideally make digital a part of its **Strategy**. Mere implementation of digital initiatives does not make a company digitally ready. For digital to really become part of a company's DNA, a holistic view on how digital integrates into its various business operations is important. What is required is not a "Digital Strategy", but a **Business Strategy** that **seamlessly integrates digital**.

A digital strategy translates to action through development of **Capabilities**. Digital solutions include various options that can be classified as Social, Mobile, Analytics, Cloud and Internet of Things, together called SMACIT. Capabilities in various SMACIT options that are relevant and fitting into the firm's business strategy are vital for the digital transformation of any company.

The presence of physical infrastructure, relevant software and connectivity does not make a company digitally ready. The most vital link is the people. Unless people in the company utilize the various digital capabilities built, the digitization will at best be sub-optimal, or at worst be counter-productive. Herein comes the importance of **Culture**. Aligning people to strategy, with a culture of high and fast adoption of digital solutions is the most important factor that differentiates a high-performing, digitally ready firm from the others.

All the 4 elements as described above have to be considered for making an organization digital-ready.



## Assessing Digital Readiness

Avalon Consulting has designed a **Digital Readiness Assessment Tool** for the manufacturing industry. The assessment is based on the company's performance on four key elements described in the previous section - **Awareness, Strategy, Capability and Culture,**

While Strategy is assessed at firm-level, Awareness, Capability and Culture are assessed at a function level. For each function in a manufacturing firm (plant operations, logistics, sales & marketing, etc.), key processes have been identified for assessing level of digital readiness. This helps not only to understand which functions require strengthening, but also what are the aspects within those functions which need to be focused on. For instance, a company with low awareness of the potential of IOT, can engage with technical consultants who can shed light on how IOT can be practically implemented for enhanced operational efficiency along with exploring best practice case studies and developing a business model. This can be followed up by a pilot implementation project to showcase the benefits of IOT and optimize the implementation project. Trainings can be scheduled for relevant employees to ensure they are not overwhelmed by the sophisticated technology deployed and help ease them into increasing adoption.

The Digital Readiness Score for manufacturing firms is based on three functions - production, logistics & procurement and Sales & Distribution as these are the 3 core functions in manufacturing. Within each function, the Digital Readiness Questionnaire covers a comprehensive set of questions to understand the level of digital readiness in all key activities.

The list of activities covered under the 3 functions is provided in the Table below.

## Function-wise Processes Covered for Assessment of Digital Readiness

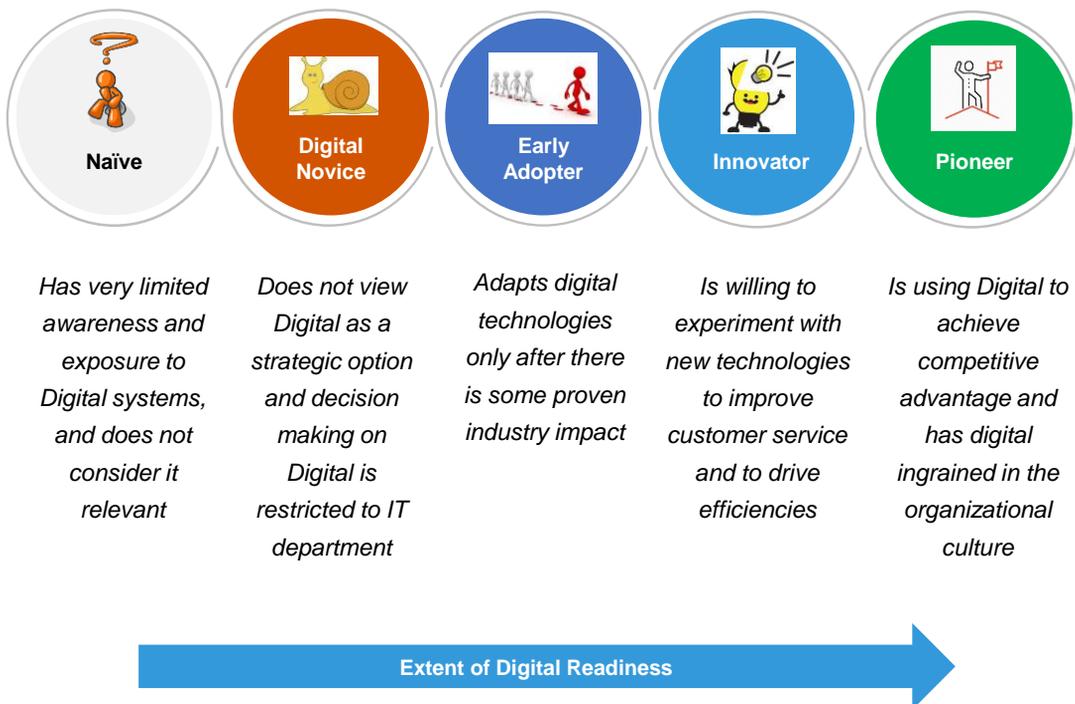
Function	Key Process-related Questions
 <p><b>Production</b></p>	<ul style="list-style-type: none"> <li>• Operations Planning — MRP, MPS</li> <li>• Purchase &amp; production activity control (MES, Inventory control, etc.)</li> <li>• Packaging and Labelling</li> <li>• Smart Production (Sensors, IOT)</li> <li>• Flexible Manufacturing</li> <li>• Manufacturing Facility Integration</li> <li>• Quality testing and assurance</li> <li>• Research and Development Lifecycle</li> </ul>
 <p><b>Logistics/ Procurement</b></p>	<ul style="list-style-type: none"> <li>• Vendor Management — Labor/ Raw Material</li> <li>• Warehousing and inventory</li> <li>• Procurement Planning</li> <li>• Import/Export related duties and processes</li> <li>• Vendor Management — Outbound freight</li> <li>• Outbound freight tracking visibility — for internal/ customer tracking</li> </ul>
 <p><b>Sales &amp; Marketing</b></p>	<ul style="list-style-type: none"> <li>• Sales force Management (route planning etc.)</li> <li>• Leads Management</li> <li>• Sales Quotation Management</li> <li>• Customer order placement</li> <li>• Sales Forecasting</li> <li>• Customer relationship management</li> <li>• Pricing and discounting</li> <li>• Marketing campaigns/promotion management</li> </ul>

Comprehensively covering all processes under each function helps identify specific areas of improvement and provides clear directions for initiating and implementing digital initiatives with the highest business impact.

# Digital Readiness Levels

Based on the responses on all parameters, Avalon Consulting will help classify firms into 5 categories based on their Digital Readiness.

## Digital Readiness Classification



**Pioneers** are organizations that fare high on all 4 elements of Digital Readiness. These organizations are characterized by **high awareness** across levels on digital trends. Digitization is **part of their business strategy**, and they **actively pursue digital capability building**. Most importantly, **digital is part of the organization culture** with employees across levels believing in a digital future and adopt in in their respective work areas.

**Innovators** differ from **Pioneers** - while they fare **high on awareness, strategy and capability**, digital is still **not part of the organization's culture**. However, innovators are experimenters in digital, and match the pioneers in constantly exploring new digital solutions across functions.

**Early Adopters** are companies that are **high on awareness** particularly at **leadership level** and **consider digital as important part of their strategy**. They are also **fast in adopting proven digital solutions**. However, they **do not experiment** much on their own, and **digital is still not part of their culture**.

**Digital Novices and Naives** are organizations that at varying degrees are **largely ignorant about digital trends and solutions**. **Digital** usually **means IT** for them and involves implementation of some basic systems driven by the top management or an IT Department.

In any industry, the **Pioneers** and **Innovators** are the ones who lead the development of industry standards. These are the companies that constantly experiment with digital solutions, often aiming for incremental improvements. The solutions they develop are the ones adopted by the **Early Adopters** which makes them industry standards. However, **Early Adopters** are usually always playing catch-up, and usually do not get the full advantage of digital initiatives, especially on initiatives related to customer engagement.

The **Digital Novices and Naives** are in the high-risk zone on two key accounts:

- They live with the risk of become obsolete with their customers as their more enterprising competitors find new ways of engaging with these customers through digital platforms
- They run the risk of becoming uncompetitive against competitors who have leveraged digital for improving efficiency and product quality

Even if they try to implement proven digital solutions in their companies, the chances of success of these initiatives is low as they are not based on strong foundations of a knowledgeable team and clear strategy.

## Approach to Accelerate your Digital Journey

So, how does an assessment of the current position help in improving Digital Readiness? Avalon Consulting supports clients through a 6-step process starting with the Digital Readiness Assessment to quickly accelerate the Digital journey. The process is illustrated as below:



- 1 Digital Readiness Assessment** – Understanding the current state of digital readiness across the organisation based on the above defined framework. Avalon Consulting conducts detailed discussions with key stakeholders (CXOs, Plant Heads etc.) to ensure that both the current state of digital readiness of the organization, and the key factors which have impacted the digitization drive are understood and brought to the fore
- 2 Identifying Digital initiatives** –The comprehensive and granular feedback from the digital readiness assessment helps in understanding the specific areas across the organization where digital intervention is required. Avalon Consulting’s strong understanding of digital solutions based on our vast project experience, along with inputs from experts helps list down a comprehensive list of initiatives
- 3 Prioritizing Digital Initiatives** – Prioritization of the identified initiatives is done based on the extent of impact on digital readiness and the urgency for implementing the same. This is done by aligning the initiatives to the business strategy. Avalon Consulting helps identify quick wins, so that there is better buy-in of the digital initiatives across the organisation. For instance, use of tried and tested IoT solutions for energy savings or cloud-based distribution management helps quickly realize benefits and gets better buy-in for digital programs

- 4 Initiative Planning & Budgeting** – Avalon Consulting will work with management to identify Initiative Champions and will work closely with them to detail out the initiative roll-out. While some of the initiatives may be internally managed, others may require external vendors (identified by Avalon Consulting through an objective assessment). A detailed workplan is developed with all activities, along with supporting budget estimates and RoI for review by management. Once approved, it sets the ball rolling for execution. The key here is to ensure the initiatives can be piloted and results visible in 3-6 months
  
- 5 Initiative Monitoring & Review** – As multiple digital initiatives may need to be executed simultaneously, management bandwidth and ability to ensure effective implementation is impacted. Hence, there is a need to manage the initiatives through a proper monitoring and review process so as to ensure timely completion with desired impact. Avalon helps set up a Project Management Office and implements a review process to ensure that the projects are completed on time. Periodic reviews with management ensure alignment to strategy
  
- 6 Roll-out and Change Management** – Development of a tailored digital solution for an organization is only the first step in undertaking the digital journey. For an organisation to successfully leverage the digital solution, it needs to become a part of the way the organization works. This may involve employees as well as interfacing with external stakeholders such as customers, vendors etc. to make the digital solution a part of the organization’s new way of functioning. Some of the initiatives may need a review of organization structure and processes. Avalon Consulting will ensure a comprehensive change management process is adhered to, helping ensure that digital projects are successfully implemented, and the benefits are derived for the organization

We invite you to read the Report of the Avalon-CII Study of Digital Readiness of the Manufacturing Sector in South India where this tool has been used. The learnings from best practices in the Industry in the Report would also be of interest in the report.

<https://bit.ly/2Vv7gJ4>



## About Avalon Consulting

Founded in 1989, Avalon Consulting is part of the 2,200+ strong Avalon Group with operations across the entire knowledge spectrum covering Consulting, Business Research and Analytics. At Avalon Consulting, we provide solutions to business problems related to Strategy, Performance Improvement, Organisation Transformation and Transaction Support to companies across the globe. Our practice areas include Agri and Food Processing, Automotive, Chemicals, Engineering & Capital Goods, Metals and Infrastructure, among others

Avalon Consulting is a member of Cordence Worldwide (CWW), an agile global management consulting alliance with 70+ offices across 23+ countries globally. The Cordence Worldwide alliance member firms help clients all over the world achieve remarkable, sustainable results, share world class capabilities and expertise, and maintain the autonomy to serve each individual client free of distant influence or agendas. To discuss more about the tool, and for a digital diagnostic of your company, please contact:

## Contact Us

Avalon Consulting is happy to engage with interested companies to help in diagnosing their Digital Readiness, and to support in their Digital journey using the approach outlined in this thought paper.

For more details please contact:

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