

## Fact Sheet

# LAUNCH OF THE FOOD MANUFACTURING INDUSTRY DIGITAL PLAN

## Background

Singapore's food manufacturing industry consists of approximately 1,000 food manufacturers across 10 sub-sectors and houses established MNCs, home-grown heritage brands and an increasing number of food-tech startups attracted by our strong ecosystem. In 2018, the food manufacturing sector employed about 50,500 employees and contributed more than \$10.7b in output of which about 60% was exported globally.

## Food Manufacturing Industry Digital Plan

Aligned to the Food Manufacturing Industry Transformation Map<sup>1</sup> (ITM), the Food Manufacturing Industry Digital Plan (IDP) is part of the SMEs Go Digital<sup>2</sup> programme that aims to make going digital simple for SMEs. It guides SMEs on their digital transformation efforts, providing an easy-to-use, step-by-step guide on the digital solutions and necessary skills to adopt at each stage of their growth.

This Food Manufacturing IDP builds on the ITM, taking into account the current and anticipated future needs of companies in the food manufacturing industry. This is a joint effort by Enterprise Singapore (ESG) and the Infocomm Media Development Authority (IMDA), in consultation with the industry and industry partners.

As newer and more advanced technologies like robotics, augmented and virtual reality as well as Internet-of-Things ('IoT') sensors are now more mature, commercial applications of these technologies in the food manufacturing industry have become more readily accessible. Digital solutions incorporating these technologies have therefore been included in the Food Manufacturing IDP.

The IDP will continue to be updated over time as the industry progresses and newer, more relevant technologies are introduced.

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<sup>1</sup> Launched on 18 November 2016, the Food Manufacturing Industry Transformation Map (ITM) aims to develop Singapore into the leading food and nutrition hub in Asia with globally competitive food companies through various strategies such as food innovation and use of shared facilities.

<sup>2</sup> [www.imda.gov.sg/SMEsGoDigital](http://www.imda.gov.sg/SMEsGoDigital)

**Components of the Food Manufacturing IDP**

**1. Digital Roadmap**

The three-stage digital roadmap of the IDP charts out the digital solutions that enterprises in the food manufacturing industry can adopt at each stage of their growth to support their digital journey.



**Stage 1: Getting Ready for the Digital Economy.** The initial stage aims to help SMEs get ready for the digital economy. It includes digital solutions that enable SMEs to kick start their digital journey, build core digital capabilities and improve their use of resources. The objective is to automate repetitive, manual tasks with easy-to-implement solutions to improve operations.

**Stage 2: Growing in the Digital Economy.** The second stage emphasises the importance of integrating and connecting key processes along the value chain, with digital solutions such as Manufacturing Operations Management and the usage of IoT sensors for Overall Equipment Effectiveness ('OEE'). The objective is to scale up businesses through integrated platforms to optimise operations and identify new opportunities.

**Stage 3: Leaping Ahead.** The third stage guides enterprises to strengthen their competitive edge using Augmented Reality and Big Data to improve overall manufacturing quality and minimise breakdowns. The objective is to use advanced technology to level up capabilities.

## 2. Digital Training Roadmap

The IDP also includes a Digital Training Roadmap to guide the industry in preparing their workforce with the necessary skills and knowledge to adopt digital solutions, so that they are ready for changes that come with digital transformation.

05 DIGITAL ROADMAP ON TRAINING			
This training roadmap serves as a guide to prepare companies' workforce to adopt digital solutions at each of the three stages of growth. For more information, please refer to <a href="#">MySkillsFuture Portal</a> .			
	STAGE 01	STAGE 02	STAGE 03
<b>"TECH BASICS"</b> All employees in the industry	<b>GETTING READY FOR THE DIGITAL ECONOMY</b> <ul style="list-style-type: none"> <li>• Smart Industry Readiness Index (SIRI) Implementation</li> <li>• Data Analytics for Workplace</li> <li>• Assurance and Governance - A Practical Approach</li> <li>• Safer Foods Through Rapid Technology</li> <li>• Design Thinking 101</li> <li>• Effective Digital Marketing And Sales</li> <li>• Transport Management</li> <li>• Procurement &amp; Materials Management</li> <li>• Human Resource Management</li> <li>• Digital Intelligence: Opportunity Identification</li> <li>• Starting an Online Business</li> </ul>	<b>GROWING IN THE DIGITAL ECONOMY</b> <ul style="list-style-type: none"> <li>• Social Media Marketing Strategies for Startups</li> <li>• Machining Analytics</li> <li>• e-Commerce for Starts-ups: All You Need to Know</li> <li>• E-Payments Made Easy</li> <li>• Machine Learning in Finance</li> <li>• The Economics of Supply Management in the Sharing Economy</li> <li>• Creating an Interactive Web Presence for Digital Marketing</li> <li>• Digital Manufacturing Essentials</li> <li>• Automation &amp; Digitalisation in Food Manufacturing</li> <li>• Smart IoT Basics</li> <li>• Strategies for Effective Data and Information Management</li> <li>• Sensor Technology and Traceability for Digital Manufacturing</li> <li>• Design Thinking &amp; Innovation</li> </ul>	<b>LEAPING AHEAD</b> <ul style="list-style-type: none"> <li>• Create Your Own Augmented Reality (AR) Applications</li> <li>• Introduction to Predictive Analytics for Maintenance</li> <li>• Application of Robotics</li> </ul>
<b>"TECH ADVANCED"</b> Employees that use or are exploring advanced tech in their work / organisation	<ul style="list-style-type: none"> <li>• Robotic Process Automation (RPA) for Executives</li> <li>• Benefits of using Analytics for Start-ups</li> <li>• Predictive Analytics</li> <li>• Cyber Security for Non-IT Professionals</li> </ul>	<ul style="list-style-type: none"> <li>• Augmented Reality Design and Development</li> <li>• IoT for Engineers</li> <li>• Immersive Experiences: Introduction to AR, VR and 360 Media Creation</li> <li>• Developing Your First Chatbot</li> </ul>	<ul style="list-style-type: none"> <li>• Python for Robotics</li> <li>• Cloud Computing Awareness</li> <li>• Data Visualisation - Beyond the Basics</li> <li>• Deep Learning with Python</li> </ul>

Training programmes aligned to **Skills Framework** and emerging areas under **SkillsFuture Series**

### 3. Consultancy Services

For a more comprehensive review of their businesses, SMEs can approach Business Advisors at their nearest **SME Centre**<sup>3</sup> for business diagnosis and advisory on digital solutions relevant to their operations. SMEs that require specialist consultancy on sophisticated technologies, such as data analytics and cybersecurity, will be referred to the Principal Consultants at the **SME Digital Tech Hub**<sup>4</sup>. These digital consultancy services are provided at no cost to SMEs.

Companies may also approach the Singapore Manufacturing Federation and Food Innovation Resource Centre @ Singapore Polytechnic to seek support from industry experts who can help diagnose and design bespoke automation and digitalisation solutions.

### 4. Pre-Approved Solutions

To make it easy for SMEs to adopt digital solutions recommended in the Food Manufacturing IDP, IMDA provides a list of pre-approved solutions assessed to be market-proven, cost-effective and supported by reliable vendors. SMEs can visit GoBusiness Gov Assist for the list of pre-approved solutions that are supported by the Productivity Solutions Grant (PSG). GoBusiness Gov Assist is a one-stop, centralised platform aimed at improving SMEs' access to technology and digital solutions. SMEs can visit <https://govassist.gobusiness.gov.sg/productivity-solutions-grant/> for more information.

SMEs can also participate in digital sector projects that are initiated jointly by IMDA and industry leaders. Such projects pilot new digital solutions or platforms that have the potential to uplift the whole sector.

### 5. Start Digital

For SMEs that are just starting their business or are new to digital technology, they can take up a Start Digital Pack to start their business right with foundational and competitively priced digital solutions. These solutions cover: Accounting, Human Resources Management & Payroll, Digital Marketing, Digital Transactions, Digital Collaboration and Cybersecurity. SMEs can take up any two solutions and receive cost waivers for at least six months when they sign up for a minimum 18-month contract. The solutions are pre-approved by IMDA and offered by Start Digital Partners like DBS, M1, Maybank, OCBC, Singtel and UOB.

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<sup>3</sup> List of SME Centres can be found at <https://www.enterprisesg.gov.sg/smecentre>

<sup>4</sup> For more information, please refer to [www.digitaltechhub.sg](http://www.digitaltechhub.sg).

## **6. Advanced Digital Solutions**

SMEs can also receive funding support to adopt advanced and integrated solutions<sup>5</sup> to improve their business resilience and long-term competitiveness. Supported solutions include those for integrated facilities management and security services.

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For media clarifications, please contact:

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<sup>5</sup> For more information, visit: [www.imda.gov.sg/advanceddigitalsolutions](http://www.imda.gov.sg/advanceddigitalsolutions)