

# F&B DIGITAL PRODUCTIVITY ROADMAP

Retail and F&B Productivity Nexus

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# FOREWORD DIRECTOR GENERAL

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**Datuk Zahid Ismail**  
Director General  
Malaysia Productivity Corporation

The Digital Productivity Roadmap for Private Healthcare is a strategic initiative to accelerate digital adoption, enhance efficiency, and drive innovation across the sector. As healthcare demands evolve, digital transformation is no longer a luxury but a necessity. This roadmap provides a structured framework for private healthcare providers to leverage digital technologies—such as artificial intelligence, big data, and automation—to improve service delivery, optimize operations, and enhance patient outcomes.

Malaysia's private healthcare sector has long been a pillar of excellence, attracting both local and international patients. However, to sustain this competitive edge, embracing digital productivity is crucial. By integrating digital solutions, healthcare providers can streamline workflows, reduce administrative burdens, and deliver more personalized and efficient patient care. Telemedicine, electronic medical records, and predictive analytics will be key enablers in ensuring greater accessibility, affordability, and quality of healthcare services.

MPC remains committed to supporting the private healthcare industry in this digital transformation journey. Through collaboration with stakeholders, policy advocacy, and capability-building programs, we will drive the adoption of digital best practices to enhance productivity and competitiveness. I encourage all industry players to embrace this roadmap and collectively work towards a future where Malaysia's private healthcare sector stands as a global leader in digital innovation and patient-centric excellence.

# FOREWORD CHAMPION

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**Datuk William Ng**  
Champion  
Retail and F&B Productivity Nexus

The Digital Productivity Roadmap for the Food & Beverage (F&B) subsectors mark a significant milestone in driving digital adoption to enhance efficiency, operational excellence, and industry resilience. As digital transformation reshapes the global business landscape, Malaysian F&B businesses must embrace technology-driven solutions to remain competitive. This roadmap provides a structured approach to integrating digital tools such as automation, artificial intelligence, data analytics, and smart supply chain management to streamline operations, reduce costs, and improve customer engagement.

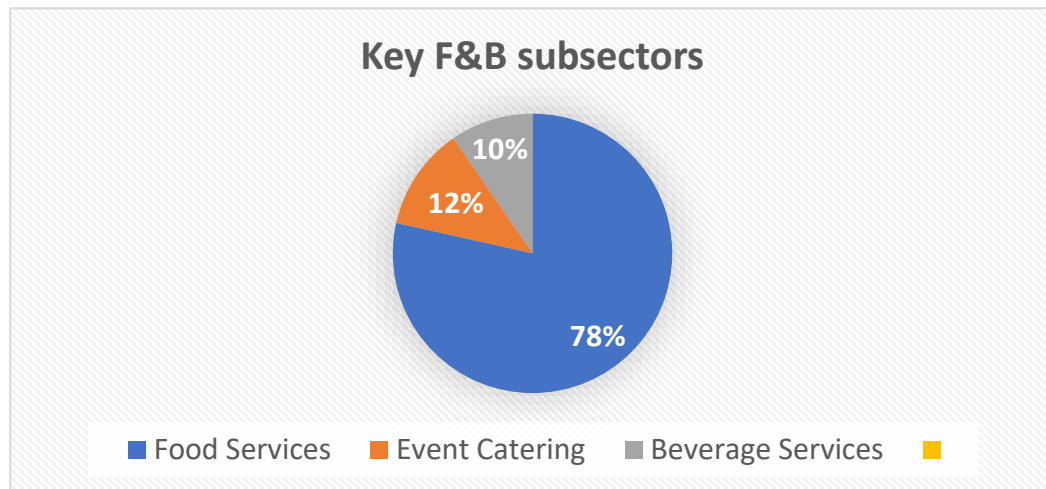
With rising operational costs, evolving consumer expectations, and increasing competition, digital adoption is no longer optional but a necessity. By leveraging digital technologies, F&B businesses can enhance operational efficiency, optimize supply chain management, and improve customer experience. AI-driven demand forecasting, cloud-based POS systems, and real-time data analytics are transforming how businesses operate, enabling better decision-making and cost control. Additionally, digital ordering and cashless payment solutions are revolutionizing customer interactions, ensuring businesses stay ahead in the market.

Collaboration between industry players, technology providers, and policymakers is crucial in realizing the full potential of digital productivity. This roadmap serves as a call to action for F&B businesses to invest in digital capabilities and foster a culture of continuous innovation. By embracing this transformation, we can build a more agile, competitive, and future-ready F&B industry that upholds Malaysia's reputation as a leader in digital-driven productivity growth.

# INDUSTRY OVERVIEW AND DIGITALISATION CHALLENGES

The **Food & Beverage (F&B) subsector** is a major pillar of Malaysia's economy, comprising over **136,453 establishments** and **1.07 million workers** as of 2022. It spans food services, event catering, and beverage services, together contributing **RM99 billion in gross output**. While digitalisation is reshaping the industry, many businesses still rely on manual processes, face supply chain inefficiencies, and struggle with workforce constraints. This roadmap aims to guide the F&B sector toward smarter, more sustainable operations through structured digital adoption.

## INDUSTRY OVERVIEW



- 136,453 F&B establishments (2022)
- 1.07M workforce
- RM99B in gross output value (2022)
- Gross output up 49% since 2015, despite 18% fewer outlets

## DIGITALIZATION ADOPTION BARRIERS

1. **Fragmented Platforms:** Disconnected digital platforms and supplier tools create inefficiencies in stock, order and inventory management
2. **Cost & Infrastructure Issues:** High cost of digital tools combined with fragmented and incompatible systems makes integration difficult for adoption

## OPERATIONAL PRESSURES ACCELERATING DIGITAL NEEDS

1. **Labour shortages & talent gaps:** Chronic staffing issues push businesses to automate operations and reduce dependency on manual labour

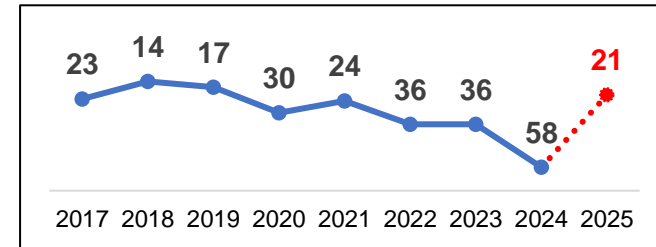
# SPEARHEADING DIGITAL TRANSFORMATION

Malaysia's digital adoption has seen a worrying decline, as shown in the **Use of Digital Tools and Technologies, Digital Transformation in Companies, and Digital/Technology Skills** rankings. The **sharp drop in 2024** suggests businesses are struggling to adopt digital tools, scale transformation efforts, and build necessary skills. This downward trend highlights a growing gap in digital readiness, limiting enterprise competitiveness in an increasingly digital economy.

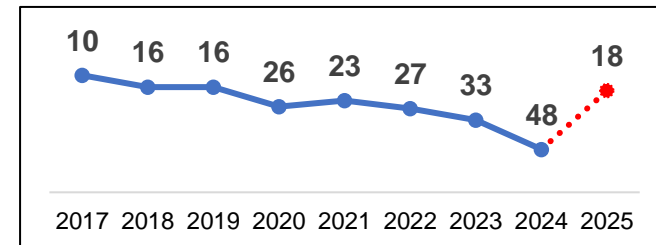
Key challenges include **high costs, lack of expertise, and inconsistent digital skills development**, which hinder businesses from fully embracing digitalisation. Without intervention, Malaysia risks falling behind global competitors. A structured approach is needed to support industries in adopting technology and strengthening their digital capabilities.

To tackle this, **MPC is launching the 'Boosting Enterprise Productivity via Digital Roadmap' initiative**. This roadmap will provide guidance, industry-driven insights, and structured support to help businesses integrate digital solutions. By addressing gaps in **tools, transformation strategies, and workforce skills**, MPC aims to **revive digital adoption, enhance productivity, and drive Malaysia's enterprises toward global competitiveness**.

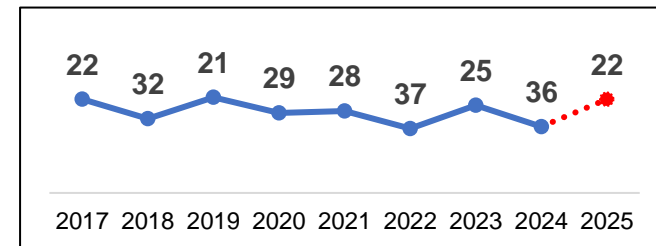
## i) Use of Digital Tools and Technology



## ii) Digital Transformation in Companies



## iii) Digital/Technological Skills



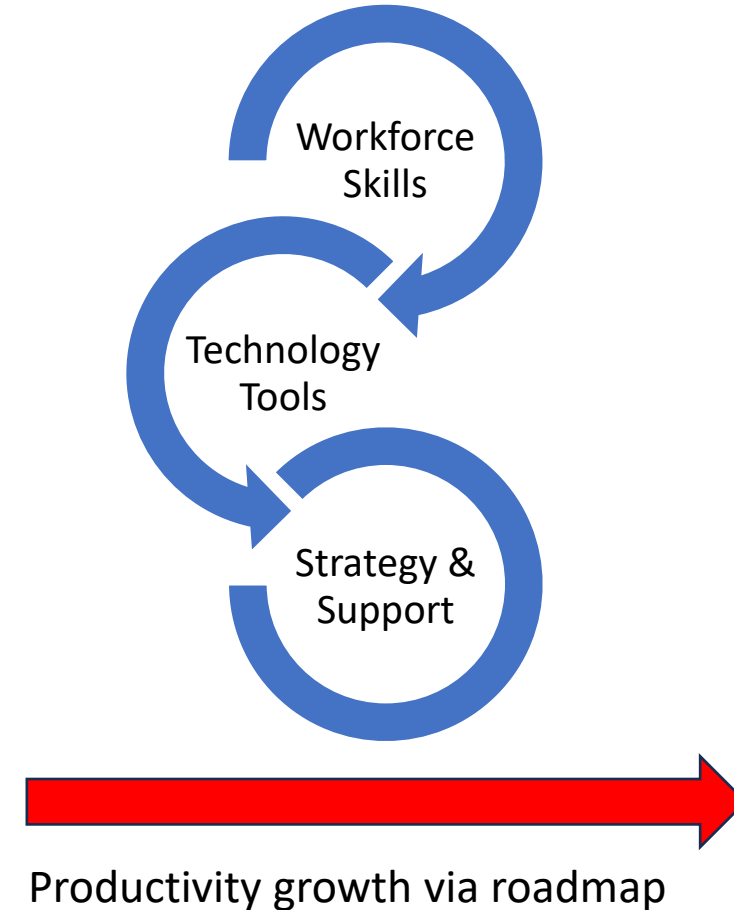
# CLOSING THE GAPS: WHY IS A ROADMAP NEEDED?

Malaysia's F&B industry is evolving but faces challenges in sustainability. While digital tools are transforming how businesses operate, many SMEs still **lack a structured path to adopt, scale and benefit** from these solutions.

Without guidance, businesses face:

- Skill gaps that delay or derail adoption
- Limited growth due to fragmented support systems

Action: Bridging productivity gap via a roadmap for a structured path to adopt, scale and benefit



# BUILDING A STRONG DIGITALIZATION ECOSYSTEM FOR TRANSFORMATION

**Step 1** - The process begins with identifying the requirement of the enterprises which is part of the 136k of overall number establishment in Malaysia, ensuring a clear understanding of industry needs

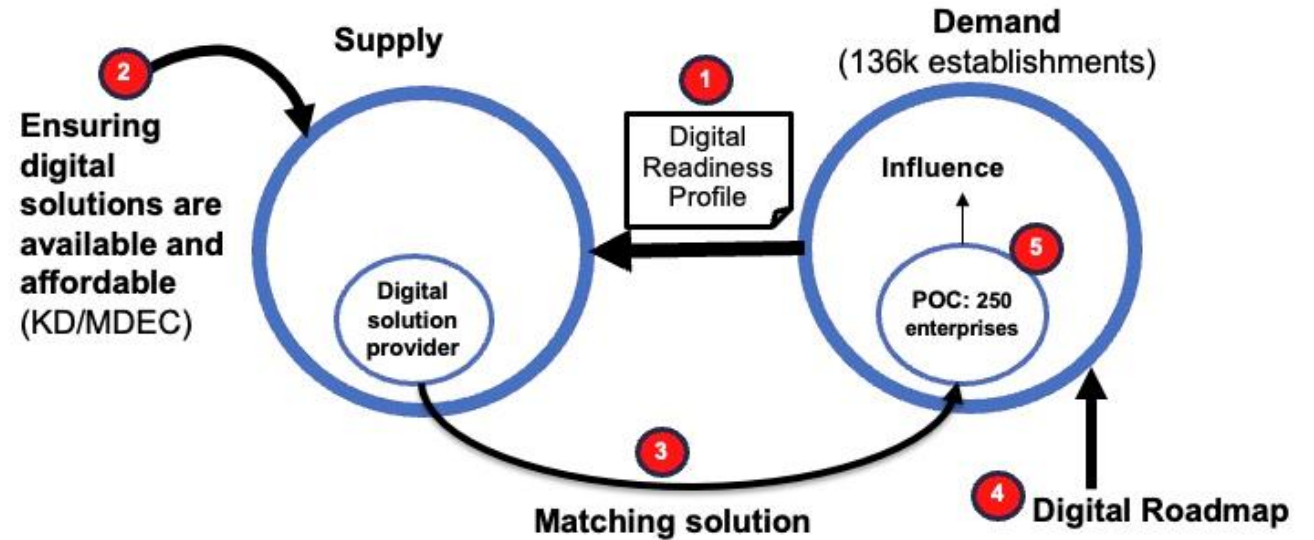
**Step 2** - To address these needs, the availability and affordability of solution providers are assessed and strengthened through key enablers such as MDEC and KD

**Step 3** - Digital solution providers then provide matching digital solutions tailored to industry demands, facilitating effective adoption.

**Step 4** - To drive large-scale implementation, a Digitalization Roadmap is published to provide strategic guidance and best practices

**Step 5** - A proof of concept (POC) involving 250 enterprises is conducted to demonstrate impact and influence broader industry adoption

**Action: Improving the ecosystem to encourage adoption, transformation, and skill enhancement for technology utilization.**



# DIGITAL ADOPTION IN **FOOD & BEVERAGE (F&B)** INDUSTRY (1/4)

This table outlines the progressive stages of digital adoption across various functions in F&B subsector, categorizing them into **Basic, Intermediate, and Advanced** levels to illustrate the industry's transformation journey toward enhanced efficiency, automation, and AI-driven insights.

Category	Functions	Basic	Intermediate	Advanced
Restaurants & Cafés	Order Management	POS system (basic POS with billing, receipt)	Integrated POS + CRM/Inventory	AI order tracking & sales analysis
		<u>Suggested Tools:</u> StoreHub, Slurp!, Moka POS, iReap POS	<u>Suggested Tools:</u> HubSpot CRM, Eats365, BMO with inventory, iPad POS linked to loyalty programs	<u>Suggested Tools:</u> Oracle Symphony, Toast POS
	Payment Processing	E-wallets, QR	Online integrated payment gateways (linked to CRM/POS)	Secure payment + fraud detection
		<u>Suggested Tools:</u> DuitNow, TNG eWallet, Boost, ShopeePay	<u>Suggested Tools:</u> Stripe, PayPal, iPay88	<u>Suggested Tools:</u> Stripe Radar, IBM Trust Payments
	Customer Engagement & Customer Loyalty	Printed materials	Social media marketing	Customer behavior analysis
		<u>Suggested Tools:</u> Trello, Slack	<u>Suggested Tools:</u> Meta Business Suite, Mailchimp	<u>Suggested Tools:</u> Google Looker Studio, Adobe Experience Cloud

For more info on the digitalisation tools, go here <https://www.mpc.gov.my/digitalplatformnetwork>

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# DIGITAL ADOPTION IN **FOOD & BEVERAGE (F&B)** INDUSTRY (2/4)

This table outlines the progressive stages of digital adoption across various functions in F&B subsector, categorizing them into **Basic, Intermediate, and Advanced** levels to illustrate the industry's transformation journey toward enhanced efficiency, automation, and AI-driven insights.

F&B Category	Function	Basic	Intermediate	Advanced
QSR & Fast Food	Order Management	POS system (basic POS with billing, receipt)	Integrated POS + CRM/Inventory	AI-powered automation
		<u>Suggested Tools:</u> StoreHub, Slurp!, Moka POS, iReap POS	<u>Suggested Tools:</u> HubSpot CRM, Eats365, BMO with inventory, iPad POS linked to loyalty programs	<u>Suggested Tools:</u> Oracle Symphony, AI-Powered POS with predictive ordering, voice-based ordering systems
	Kitchen Operations	Manual cooking	Semi-automated kitchen	Automated cooking + kitchen insights
		<u>Suggested Tools:</u> Manual Stoves	<u>Suggested Tools:</u> Smart Ovens, Automated Grills	<u>Suggested Tools:</u> Miso Robotics (Flippy)
	Delivery & Logistics	Manual dispatch	3rd-party delivery	Route planning + delivery performance
		<u>Suggested Tools:</u> Phone-based Orders	<u>Suggested Tools:</u> GrabFood, FoodPanda API	<u>Suggested Tools:</u> OptimoRoute, Routific

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# DIGITAL ADOPTION IN **FOOD & BEVERAGE (F&B)** INDUSTRY (3/4)

This table outlines the progressive stages of digital adoption across various functions in F&B subsector, categorizing them into **Basic, Intermediate, and Advanced** levels to illustrate the industry's transformation journey toward enhanced efficiency, automation, and AI-driven insights.

F&B Category	Function	Basic	Intermediate	Advanced
Food Delivery & Cloud Kitchens	Order Processing	Online ordering via GrabFood, FoodPanda, Beep QR, WhatsApp	Integrated ordering with CRM/inventory/loyalty	Predictive ordering & batching
		<u>Suggested Tools:</u> Shopify (Basic), Beep, Google Forms	<u>Suggested Tools:</u> Revel, DeliverEat, Eat App	<u>Suggested Tools:</u> Foodetective.io
	Delivery & Logistics	Manual rider management	Tracking system	Optimized delivery routes & drones
		<u>Suggested Tools:</u> Phone Calls	<u>Suggested Tools:</u> Onfleet, Locus Dispatch	<u>Suggested Tools:</u> Locus AI Dispatch, DroneDeploy

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# DIGITAL ADOPTION IN **FOOD & BEVERAGE (F&B)** INDUSTRY (4/4)

This table outlines the progressive stages of digital adoption across various functions in F&B subsector, categorizing them into **Basic, Intermediate, and Advanced** levels to illustrate the industry's transformation journey toward enhanced efficiency, automation, and AI-driven insights.

F&B Category	Function	Basic	Intermediate	Advanced
Catering & Banquet	Booking Management	Online booking forms / calendars	Integrated booking platforms with CRM	Reservation trends + customer profiling
		<u>Suggested Tools:</u> Google Calendar, Calendly	<u>Suggested Tools:</u> TableApp, OpenTable, Eventbrite	<u>Suggested Tools:</u> Zonal AI, OpenTable Insights
Beverage Services	Order Processing	POS system for order capture	POS system for order capture	Self-service + sales analytics
		<u>Suggested Tools:</u> POS system for order capture	<u>Suggested Tools:</u> Clover POS, Square	<u>Suggested Tools:</u> Square AI POS, Clover Insights

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# IMPROVING CUSTOMER EXPERIENCE WITH DIGITAL TRANSFORMATION

## Order Management



### Basic

Self-service kiosks with  
POS



### Intermediate

Integrated POS + CRM/Inventory



### Advanced

AI order tracking & sales analysis



Less human intervention, improving overall efficiency

# DIGITAL TRANSFORMATION USE CASES: ENHANCING OPERATIONAL EFFICIENCY

Samhani Legacy Enterprise is a small business that makes custom cakes and baked goods for retail and events. The company used to rely on manual processes, which caused delays, mistakes in inventory, and slow customer service. To solve these problems, Samhani adopted a Point of Sale (POS) system with inventory and order management features. This helped automate operations, speed up transactions, and keep stock records accurate. As a result, the company saved costs, worked more efficiently, and improved customer satisfaction. This shows how digital tools can help small F&B businesses grow and stay competitive.



## Problem

- Manual sales recording & inventory tracking caused inefficiencies
- Long processing time (6 days) for stock and sales recording.
- High risk of human errors due to manual data entry.

## Value creation

Samhani Legacy Enterprise achieved RM20,000 in value creation by streamlining sales and inventory management, reducing processing time from 6 days to 1 day.

This resulted in significant cost savings, improved stock accuracy, and operational efficiency, ultimately enhancing customer satisfaction through faster transactions and seamless inventory tracking.

## Solution

1. Adoption of a POS System
2. Digital Inventory Management

Productivity Metric	Before	After
Time for recording sales & inventory	6 days	1 day <small>14</small>

# HOW TO START?

Scan the QR code and sign the pledge  
**DIGITAL PLEDGE**

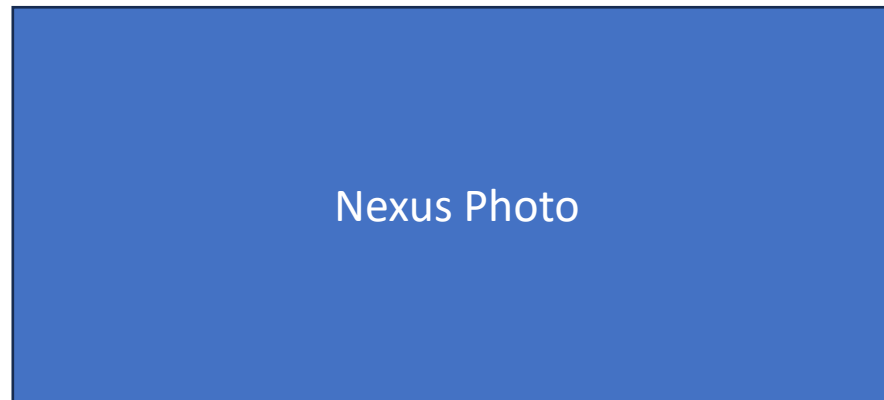
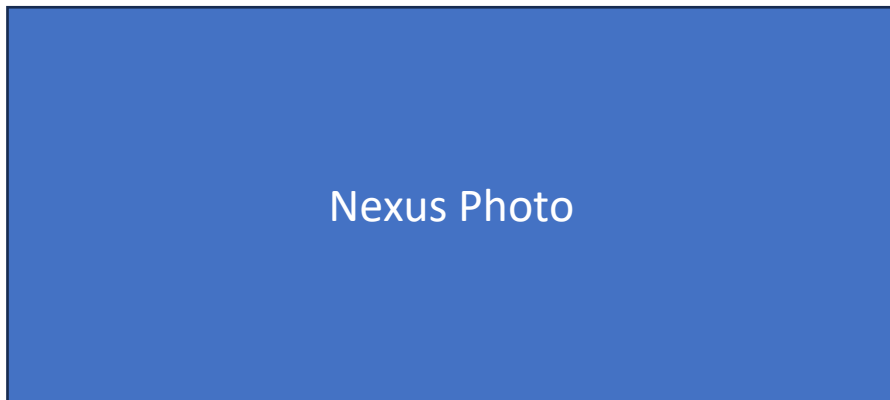


For more info

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**THANK YOU**