



**Info-communications Media Development  
Authority (IMDA)**

**Requirements for  
Integrated and Data-Driven Digital Solutions  
for Food Services sector**

## 1. IMPORTANT NOTE

- 1.1 This requirements document must be read in conjunction with the information on Advanced Digital Solutions (ADS) at [www.imda.gov.sg/AdvancedDigitalSolutions](http://www.imda.gov.sg/AdvancedDigitalSolutions).

## 2. CALL FOR PROPOSALS

- 2.1 IMDA and ESG are calling for Participants to submit proposals to help enterprises, 80% of which must be Small and Medium Sized Enterprises (SMEs), in the Food Services Sector attain seamless operations through digitalisation, with the objectives of minimising physical interactions, minimising manual processes and achieving holistic business data analysis. The purpose is to not only to enable the enterprises to sustain their business amid the COVID-19 pandemic, but also prepare them to become more resilient in the long run.

## 3. BACKGROUND

- 3.1 Due to the mandatory COVID-19 safe management measures, customers are either not able to dine-in or are avoiding crowded public places. The enterprises in the Food Services sector are thus resorting to takeaways and deliveries to reach out to customers and delivery platforms to enable fulfilment, which takes a toll on their operations.
- 3.2 As a result, it further aggravates the challenges that are already faced by enterprises in Food Services sector today. They find it increasingly difficult to
  - 3.2.1. Manage manual transcriptions and synchronising of data across multiple sales channels, which include not only dine-in and takeaway, but also delivery from various online marketplaces/platforms and their own e-shops; Labour intensive processes are tedious and prone to human error
  - 3.2.2. Integrate disparate systems which is usually costly or restricted to the same vendor, resulting in lack of flexibility to adopt the most suitable solution
  - 3.2.3. Analyse business data holistically and derive insights to drive sales and productivity
  - 3.2.4. Maintain strong hygiene in their shop fronts amid the handing of cash, cards and receipts
- 3.3 This proposal seeks to call for technology companies to implement integrated digital solutions that would enable seamless operations and data collation/analysis to drive sales and productivity in Food Services enterprises despite the pandemic, as well as reduce physical interactions to avoid spread of virus infection.

- 3.4 IMDA and ESG aim to support technology companies (vendors) or consortiums that are able to deploy **Integrated and Data-Driven Digital Solutions** to help enterprises in Food Services Sector overcome their predicament, in a scalable and cost-effective manner.

#### 4. REQUIREMENTS

- 4.1 The **Integrated and Data-Driven Digital Solutions for Food Services sector** must be able to:

- 4.1.1. **[Mandatory] Enable customer self-ordering and payment**, be it for dine-in, takeaway and delivery, to minimise physical interactions between serving staff and customers. While this could include solutions involving tablets, kiosks, platforms etc, at least QR Ordering and e-Payment must be provided to enable customers to use their own mobile devices to scan QR code, view food menu, place orders, make e-payments and receive e-receipts for dine-in and takeaway;
- 4.1.2. **[Mandatory] Consolidate customer and sales data from all sales channels** (dine-ins, takeaways and deliveries from e-shops) used by enterprises, into the Point of Sale (POS) system. SME's e-shop should be integrated with 3<sup>rd</sup> party logistics provider. At least one of the 3<sup>rd</sup> party food delivery marketplaces/platforms used by the enterprises should be integrated with the POS system;
- 4.1.3. **[Mandatory] Integrate critical operational systems**, be it new, upgraded or legacy, to enable smooth data flow and collation. This must include integrations of Accounting, Customer Relationship Management (CRM), Data Analytics and reporting module and Kitchen Display/Printer solutions with the POS system. CRM should allow a SME to acquire and engage customers through collection of data such as customer profile, preference, allergy, purchase history and track leads, rewards and campaign performances by streamlining multiple campaigns on a single interface. Open Application Programming Interfaces (OpenAPI) must be used for all integrations between different systems; and
- 4.1.4. **[Mandatory] Derive actionable insights** using Data Analytics and reporting module to better understand how to drive sales and productivity, through detailed data analysis regarding business operations, marketing campaigns, and financial analysis & reporting. Data Analytics can be offered as part of the CRM / POS Systems.
- 4.1.5. **[Optional] Leverage 3rd party outreach channel(s)** (e.g. card or wallet loyalty mechanism) to reach out to more customers [optional but strongly recommended].

- 4.2 The following must also be taken into consideration:

- 4.2.1. Accounting system must comply with ACRA / IRAS requirements and adopt PEPPOL e-invoicing standards).
- 4.2.2. POS/CRM should be integrated with a 3<sup>rd</sup> party loyalty mechanism to ease management of enterprise-specific marketing campaigns, if required by the enterprises.
- 4.2.3. POS/Inventory Management system should be integrated with a Procurement system to ensure that the sales is not disrupted from inadequate replenishment of raw food materials, if required by the enterprises.
- 4.2.4. Digital / QR Ordering and CRM Systems should have undergone Vulnerability Assessment by IMDA's Accredited or CREST certified cybersecurity companies.

*[End of Document]*