

A dark blue vertical bar runs down the left side of the page. A blue arrow points to the right from the bar, containing the text 'V0.1'.

V0.1

# Scope Diagram

Bella Italia Preparation & Assembling

Several thin, dark blue wavy lines originate from the left side and curve upwards and to the right.

IT-2B

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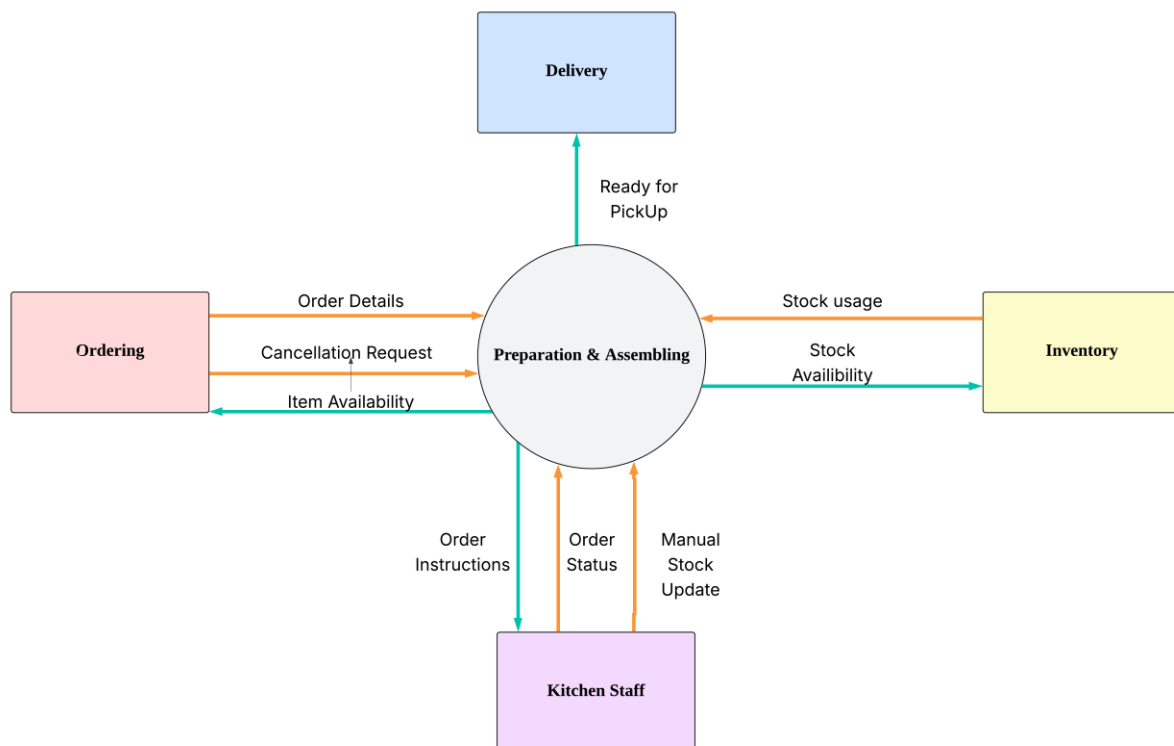
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# 1.Introduction

Bella Italia Currently has some problems in managing their kitchen. The team is currently struggling with a system that relies on a confusing mix of digital screens and old fashioned handwritten paper notes, leading to mistakes and confusion for chefs, delays, and wasted food and unhappy customers. The simple act of managing stock is not being handled properly : the website might promise a customer the last piece of fish, even if the chefs ran out ten minutes ago.

This report sets out to clear up that confusion. Our goal is simple: to create a clear plan for a **Kitchen Management System (KMS)** that finally resolves the confusions. We will start by drawing a **Scope Diagram** to show exactly what this new system needs to control and who it needs to talk to. Then, we will lay out the essential requirements that will put an end to the current inefficiencies, ensuring the Bella Italia team can make reach their goal to have happier customers and more profitable business.

## 2.Scope Diagram



This table outlines the KMS(kitchen management system) and other external entities and flotation of data between them .

### 3.Requirements

REQUIREMENT CATALOGUE ENTRY	
Requirement ID	R001
Priority	High
Functional Requirement	
<b>FR001:</b> The Kitchen Management System must handle all incoming orders (website, phone, and counter) into a <b>single digital display queue</b> , eliminating physical paper tickets and handwritten notes..	
Non-Functional Requirement	
<b>NFR001:</b> The Kitchen Management System shall maintain 99.9% uptime during operational hours (4 PM to 10:00 PM) to ensure uninterrupted order flow.  <b>NFR002:</b> All of the orders (production List) need to be displayed on a monitor in the kitchen visible for the staff.	

REQUIREMENT CATALOGUE ENTRY	
Requirement ID	R002
Priority	High
Functional Requirement	
<b>FR002:</b> The system shall allow kitchen staff to manually <b>toggle an Out-of-Stock status</b> for specific menu items via the kitchen display, which immediately prevents that item from being ordered across all front-end channels.	
Non-Functional Requirement	
<b>NFR003:</b> The system Must update the Out-of-Stock status alerts with a maximum <b>latency of 1 second</b> across all linked channels.	

REQUIREMENT CATALOGUE ENTRY	
Requirement ID	R003
Priority	High
Functional Requirement	
<b>FR003:</b> The system shall provide real-time visual alerts on the kitchen display immediately upon the cancellation or modification of an active order to prevent food wastage.	
Non-Functional Requirement	
<b>NFR004:</b> The system Must update the cancellation or modification status alerts with a maximum <b>latency of 1 second</b> across all linked channels.	

REQUIREMENT CATALOGUE ENTRY	
Requirement ID	R004
Priority	Medium
Functional Requirement	
<b>FR004:</b> The system shall allow kitchen staff to update each order through <b>three simple status stages</b> on the kitchen display: <b>“Waiting”</b> , <b>“In Preparation”</b> and <b>“Ready”</b> . These statuses help staff quickly understand the progress of each order.	
Non-Functional Requirement	
<b>NFR005:</b> Any change to an order’s status must be visible on the kitchen display within <b>1 second</b> , ensuring staff always have an up-to-date overview.	

REQUIREMENT CATALOGUE ENTRY	
Requirement ID	R005
Priority	Medium
Functional Requirement	
<b>FR005:</b> Once an order is fully prepared and assembled, the system shall automatically send a “Ready for Pickup” notification to the Delivery System to allow timely dispatch.	
Non-Functional Requirement	
<b>NFR006:</b> The “Ready for Pickup” signal must be transmitted with a maximum latency of <b>2 seconds</b> to prevent delays in order dispatching.	



## Summary

We've designed a clear game plan for Bella Italia's new **Kitchen Management System (KMS)**.

The proposed solution ends the confusing paper and screen conflicts by putting all orders into one digital queue on a display in the kitchen. And also , it gives chefs real-time control over stock and instantly they can manage the cancellation of orders, to decrease waste and mistakes. By fixing these core problems, the KMS will help the team work faster and deliver a far better experience for their customer.