

# YVS Warehouse Optimization Solution Proposal



## 1.2. Position of the development and product

### (1) Product position on the development roadmap

YVS Warehouse Optimization Solution is an add-on and advanced solution for current YVS Warehouse Mobility Solution (WMS)

### (2) Position in markets or applications

- **Position:** Flagship product for introducing AI to warehouse operations
- **Synergy:** Designed to integrate with existing YVS WMS
- **Scalability:** Can be extended to adjacent domains like factory operations, inventory planning, or logistics coordination

# 1. Development Concept

## 1.2. Position of the development and product

### (3) Synergy with and/or effects on other products

Product & business	Department responsible	Relationships & effects
Dynamics 365 F&O	YVS Service team	Synergy
YVS WMS Solutions	YVS R&D team	Synergy

### (4) Particularly important and essential management resources and acquisition means

Important management resources	Location	Acquisition means
YVS AI Team	YVS	Internal or hiring
Microsoft Fabric, Power Platform, Copilot Studio	Microsoft	License
Budget	YHQ	Internal
Sale team	YVS	Internal

## 1.2. Position of the development and product

### (5) Past cases related to the product

No past development, sales, or support records are available due to the product being a new initiative

## 1.2. Position of the development and product

### **(6) Production and discontinuation plan for the current product (when the current product is replaced)**

This is a brand-new product with no existing model to be replaced. Therefore, there is no production or discontinuation plan for the current product

### **(7) Merits of releasing new product (when the current product is replaced)**

This is a new product that expands the company's portfolio rather than replacing an existing model. The release is expected to capture demand in new markets and improve competitiveness.

### **(8) Plan for discontinuation of order acceptance and end of support**

**[Refer to DS 106.02 (Management rules for discontinuation of order acceptance and product maintenance) Section 5]**

As this is a newly introduced product, there is currently no plan for order discontinuation or support termination.

# 2. Marketability and Competitiveness

## 2.1. Target market

### (1) Market size and growth potential

(USD)

Target market	FY25	FY26	FY27	FY28	FY29	FY30
ASEAN Warehouse Automation	810,000,000	911,000,000	1,025,000,000	1,154,000,000	1,298,000,000	1,460,000,000

CAGR: 12.51%

Source: [Southeast Asia Warehouse Automation Market - Size, Share & Companies](#)

### (2) Grounds for selecting and segmenting the target market

- These companies already feel the operational pain (cost, error, inefficiency).
- These companies already invested in ERP/D365F&O —YVS can upsell.
- These companies are under pressure to modernize logistics to stay competitive.

### (3) Trends in the target market

- AI-first supply chains: Warehouses want autonomous operations (AI slotting, picking, layout redesign).
- Labor shortages: Pushing interest in automation and AI assistance.
- Rise of low-code AI platforms: Firms now prioritize fast-deployable tools (Copilot, Power Apps).
- E-commerce demand: Drives need for faster throughput, higher inventory accuracy, flexible layouts.

# 2. Marketability and Competitiveness

## 2.2. Market / customer needs

### (1) Major players and their positions in the target market

Name	Position	Basic approach
Blue Yonder	Global Leader	AI-driven supply chain & warehouse execution with advanced slotting and labor optimization. Focus on large enterprises.
Oracle WMS Cloud	Global Leader	Cloud-native WMS with AI for demand prediction and warehouse task automation. Tied deeply with Oracle ERP.
SAP EWM (Extended Warehouse Management)	Global Leader	Deeply embedded in SAP stack; uses ML for slotting and planning, ideal for global enterprises.

### (2) Customers' suggestions

Customer name	Main points
De Heus (Vietnam)	Improve slotting logic to reduce walking time and handling errors; Prefer Power Apps-based WMS extensions instead of replacing core logic
CDSG Myanmar	Need AI-driven slotting engine to: Identify fast-moving items, suggest optimal locations for new stock.
LPI (Philippines)	No current AI model to manage SKU placement logic
Tekom	Better inventory accuracy and warehouse space optimization with less manual involvement.
Wahl	Small item picking requires high bin-level accuracy, slotting logic, and fast turnaround. Copilot Assistant for picker routing, exception handling.

# 2. Marketability and Competitiveness

## 2.2. Market / customer needs

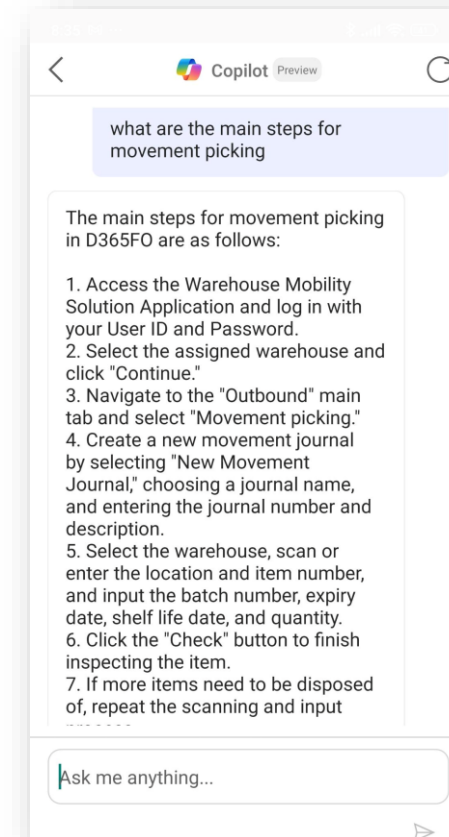
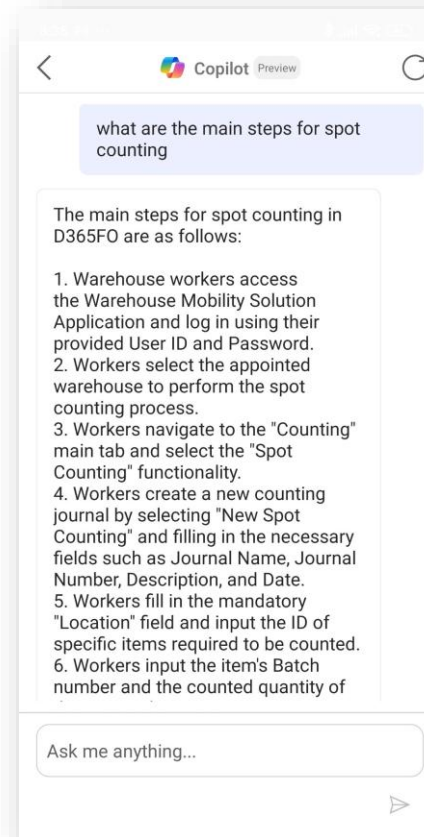
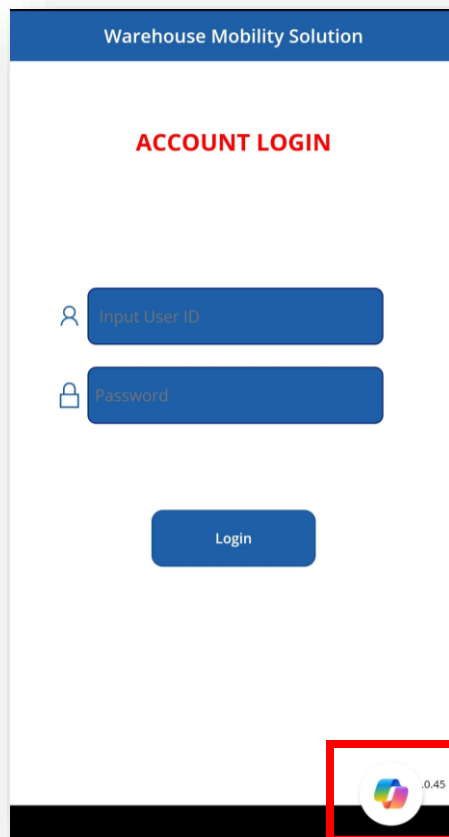
### (3-1) Defining market / customer needs, and their incorporation to the product specifications

	Defined needs	Incorporation into the specifications
Function and service	Smart assistant support	AI Warehouse Copilot (Copilot Studio) to answer questions, guide tasks, flag anomalies
	Better space utilization	AI Smart Slotting using ML & Gen AI, optimize by SKU behavior
	Accurate inventory without manual input	AI Smart Counting using OCR (AI Builder + mobile Power Apps)
	Improve layout efficiency	AI Warehouse Layout Optimizer using ML to simulate configurations
Performance and quality	AI Copilot response time	≤ 3 seconds per query on Power Platform
	OCR recognition for smart counting	≥ 95% accuracy under good lighting and standard labels
	AI Copilot response time	≤ 3 seconds per query on Power Platform
Price	\$20,000-\$50,000/year	
Release time	Phase 1 – Foundation	AI Copilot + Slotting engine, Power Apps interface
Production lead time	12 months	
Release time	Phase 2 – Advanced	Smart Counting (OCR), Layout simulator (Gen AI)
Production lead time	TBU	

## 2.2. Market / customer needs

### (3-2) Main product specifications

– Foundation - AI Assistant – Workers can access Copilot chat on the YVS WMS app and ask related questions about warehouse operations



## 2.2. Market / customer needs

### (3-2) Main product specifications

- Smart Slotting – When doing Receiving procedure, AI will suggest suitable slot for item placement, workers can click on the suggested slot for explanations

002019

Coconut Candy Yummy

D0001

Product Receipt	
Ordered Qty (ea)	12
Registered Qty	0
Receive Now	12
Location	ANNARBO
Suggest SlotID	S0004

Receiving - Item WH: ANNARBO

005494

Kalarlay Special Spice Mix Bot 80Gm

D0001

**Why this slot?**

- Proximity to outbound area: Reduces travel time by 30%.
- Shape & dimensions match: Slot size fits item perfectly with minimal wasted space.
- Weight optimized: Item weight appropriate for shelf level (no overload).
- Compatible neighbors: Nearby items are from the same product family.
- Zone compliance: Slot is in the correct temperature-controlled zone.

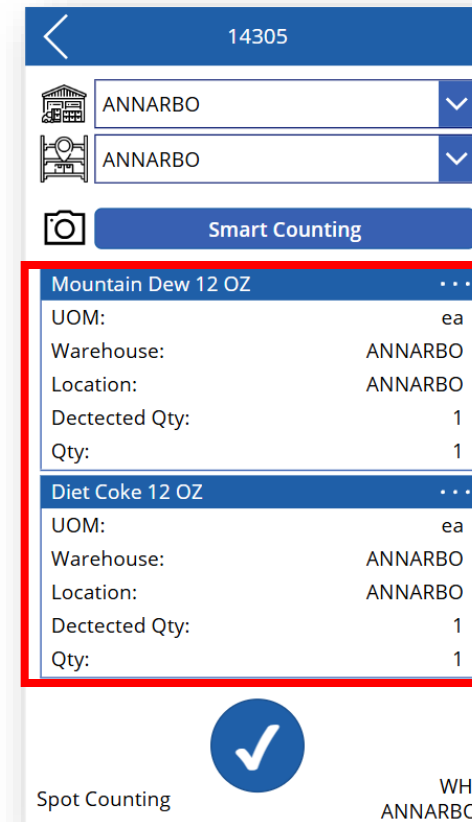
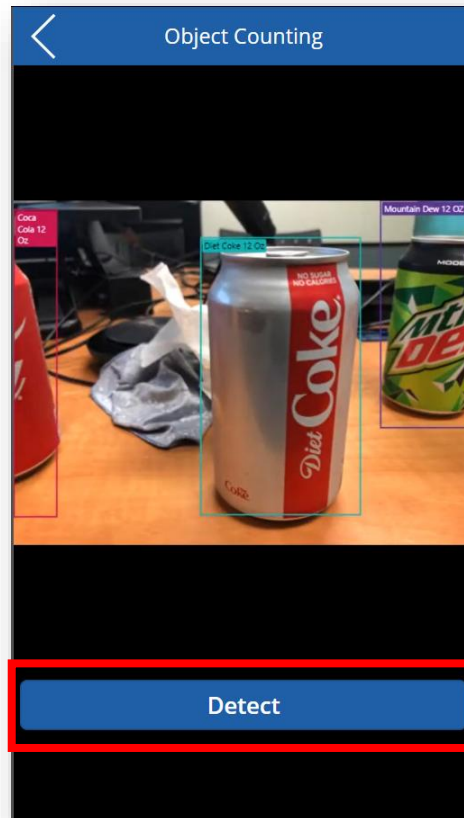
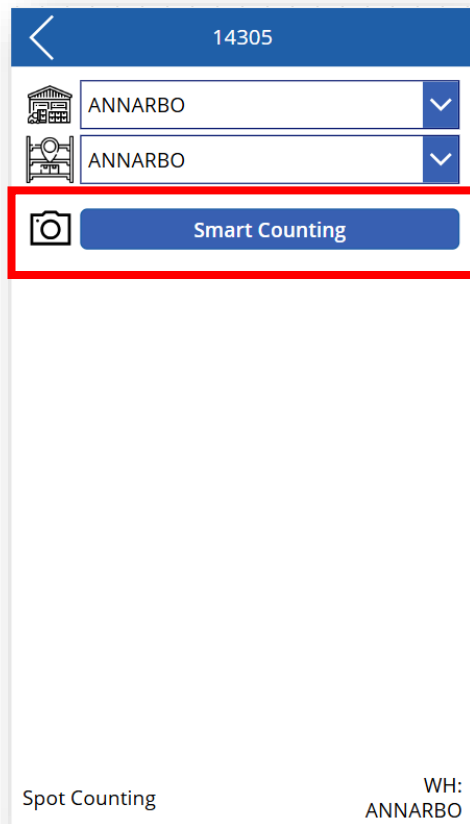
Suggest SlotID S0004

Receiving - Item WH: ANNAPOL

## 2.2. Market / customer needs

### (3-2) Main product specifications

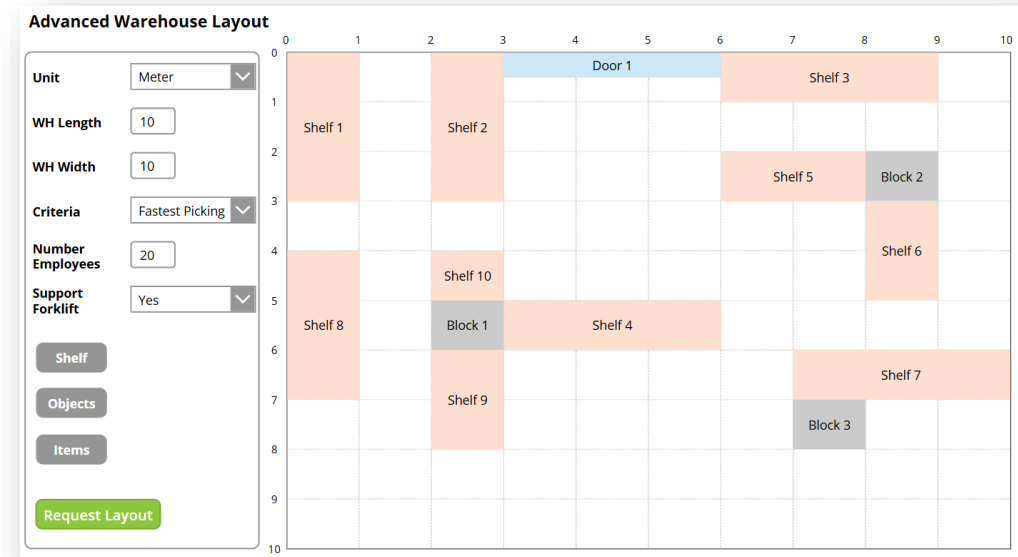
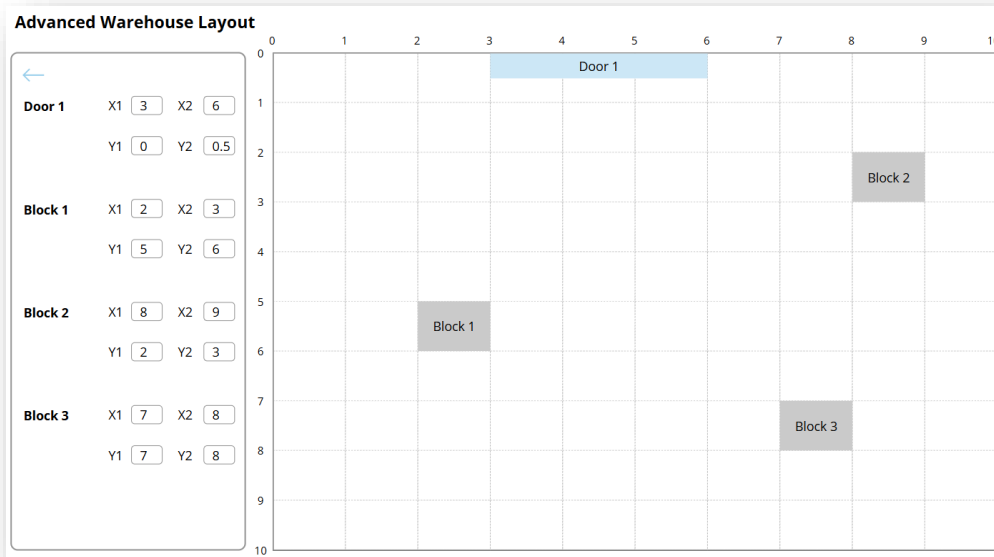
– Advanced - Smart Counting – In Counting process, workers can use Smart Counting to capture an image, AI will identify the items and count the quantity, then automatically create counting records



## 2.2. Market / customer needs

### (3-2) Main product specifications

- **Advanced - Warehouse Layout** – Warehouse managers can define certain stationary objects, select Request Layout and AI can create a new Shelf placements based on the selected criteria (for example: fastest picking layout)



## 2.2. Market / customer needs

### (3-2) Main product specifications

#### – Specifications to realize characteristics (concept)

##### a) Design

Element	Details
Architecture	Modular components using Azure Functions, Dataverse, Power Apps
Platform	Power Platform (Canvas/Model-driven Apps), Copilot Studio, Azure AI/ML, AI Builder
UI/UX	Mobile-first, role-based experience for warehouse staff, supervisors, and planners
Data Integration	Native connectors with D365 SCM, SQL, SharePoint, Azure
Extensibility	Configurable slotting rules, AI model retraining, layout simulation parameters

## 2.2. Market / customer needs

### (3-2) Main product specifications

#### – Specifications to realize characteristics (concept)

#### b) Specifications including until product maintenance

Lifecycle Phase	Specification
Deployment	Power Platform-based deployments via solution packaging, Azure deployment for ML models
Model Training	Slotting & layout AI models retrainable quarterly or on-demand using customer data
Support	Tiered model (Basic, Pro, Enterprise) with SLA-based support and AI monitoring alerts
Updates	Monthly AI model tuning & quarterly product feature updates, integrated via Power Platform
Monitoring	Built-in admin, performance dashboards, and alerting via Power BI and Azure Monitor

## 2.2. Market / customer needs

### (3-2) Main product specifications

– Specifications to realize characteristics (concept)

#### c) Security requirements

Category	Specification
Data Security	Data encryption at rest (Azure SQL, Dataverse), in transit (HTTPS, TLS 1.2+)
Access Control	Role-based security (RLS in Dataverse + D365), Azure AD SSO integration
AI Transparency	Explainable AI where applicable (especially for slotting & layout suggestions)
Audit Logging	Activity logs for Copilot queries, inventory actions, slotting overrides
Environment Isolation	Dev, UAT, and Production environments managed through Azure DevOps pipelines

# 2. Marketability and Competitiveness

## 2.3. Competitive edges over competitors

### (1) Comparison of competitive products

Aspect	YVS Product	Blue Yonder	SAP EWM / Oracle WMS
Function & Service	AI Copilot, Smart Slotting, Layout Optimization, OCR Smart Count, all integrated into Microsoft Power Platform	Advanced optimization, labor management, robotics integration	Full-suite warehouse control with ERP depth
Performance & Quality	High for Microsoft ecosystem; customizable ML models; OCR via Power Apps	High-end enterprise; robotics-ready	Enterprise-grade, tightly integrated with ERP
Price	Mid-range, subscription-based, affordable for SMEs and D365 customers	Premium pricing	High cost, long implementation
Release Time	Foundation complete in 2025	Already available	Already available
Production Lead Time	Agile rollout (3–6 months/site), low-code platform accelerates customization	Long (6–12 months)	Long (12+ months)

# 2. Marketability and Competitiveness

## 2.3. Competitive edges over competitors

### (2) Characteristics determining competitiveness

Characteristic	YVS Advantage
Microsoft-native integration	Works natively with D365 SCM, Power Platform, Azure AI—seamless for existing customers
Low-code deployment	Quick implementation, adaptable for local warehouse needs, supports continuous improvement
Modular AI design	Customers can adopt what they need (e.g., just Smart Counting or Copilot first)
Localized support	YVS provides domain expertise and local implementation in ASEAN markets
Cost-to-value ratio	Delivers high ROI with affordable setup cost compared to global Tier-1 competitors

# 2. Marketability and Competitiveness

## 2.3. Competitive edges over competitors

### (3) Strategy for attaining competitive edge

Strategy	Action Points
Microsoft-first AI stack	Build everything using Copilot Studio, Azure AI, Power Apps—leverage credibility, security, and performance
MVP → Scale-up roadmap	Deliver a lean MVP by Q4 2025. Build customer feedback loop after PR2 when we have PoC solution.
Target underserved markets	Focus on mid-sized businesses in ASEAN, Japan, who cannot afford or manage heavy Tier-1 WMS
Use YVS project base	Pilot with existing YVS customers (De Heus, CDSG, LPI, Tekcom, Wahl) to prove real-world value
Upsell existing WMS base	Offer the AI enhancement suite as an “add-on” to existing YVS WMS implementations
AI consulting bundle	Combine product with AI-readiness consulting to accelerate value realization

## 2.4. Strategy for entering the market

### (1) Target position in the market

Dimension	Target Position
Market Tier	Mid-to-Upper Tier (Companies with ERP, basic WMS, but not yet AI-optimized)
Customer Profile	Medium to large enterprises in FMCG, Retail, Manufacturing, and 3PL
Geographic Focus	Southeast Asia first (Vietnam, Philippines, Myanmar, Thailand) → expand to Japan, APAC and EMEA
Strategic Angle	First-mover in Microsoft AI WMS suite in emerging markets (where traditional WMS AI is too costly or complex)

# 2. Marketability and Competitiveness

## 2.4. Strategy for entering the market

### (2) Conditions for entering the market

Condition	Detail & Strategy to Achieve
1. Product Readiness (Foundation)	Finalize Foundation end of Q4 2025
2. Internal AI Capability	Build core internal AI + low-code product team (Copilot, AI Builder, Azure ML).
3. Reference Customers	Secure pilot success with 1–3 current customers (e.g., De Heus Vietnam, CDSG). Use these for case studies & PR.
4. Pricing Model Definition	Launch with a modular subscription model that lowers entry barriers: per user, per warehouse/month + implementation fee.
5. Marketing Materials	Develop brochures, demo videos, comparison tables vs. traditional WMS solutions. Localize for SEA markets.
6. Sales Training	Equip sales and pre-sales teams with solution pitch, objection handling, and AI-readiness discovery checklist.
7. Post-Go-Live Support Model	Offer bundled AI monitoring, slotting model retraining, and Power Apps maintenance plan (monthly retainer).

# 3. Technical Challenges and Development System

## 3.1. Required technologies

### (1) Locations of main required technologies and acquisition means

Required technologies	Location	Acquisition means
Microsoft Fabric	Microsoft	License
Copilot Studio	Microsoft	License
Power Platform	Microsoft	License
Azure AI Service	Microsoft	License

## 3.2. Development manpower

### (1) Required development manpower

(Man power/month)

Category	FY25	FY26	Up to FD	FY	FY	FY	FY
Product Manager	1						
Solution Architect	1						
AI/ML Engineer	2						
Power Platform Developer	2						
Copilot Developer (Copilot Studio)	2						
UI/UX Designer	2						
BA & Tester	4						

# 3. Technical Challenges and Development System

## 3.3. Equipment investment

### (1) Equipment investment plan for development

(M)

Equipment	FY25	FY26	Up to FD	FY	FY	FY	FY
Power Apps Development	2						
Fabric Trial Capacity	1						
Copilot Studio License	2						
Power Apps Premium	4						
Azure Service	2						

(M)

### (2) Equipment investment plan for production

Equipment	FY25	FY26	Up to FD	FY	FY	FY	FY
Power Apps Development	2						
Fabric Capacity F4	1						
Copilot Studio License	2						
Power Apps Premium	4						
Azure Service	2						

# 3. Technical Challenges and Development System

## 3.4 Risk Management sheet

Type	Item	Assumed risk	Probability	Influence	Measures (in advance and after)
Marketability and Competitiveness	Set target market	Over-narrowing the market segment, leading to low adoption	1	1	<ul style="list-style-type: none"> <li>- Advance: Conduct market research, Pilot with existing customers</li> <li>- After: Segment customers based on actual data</li> </ul>
	Market / customer needs	Building features that are need to enhance	2	2	<ul style="list-style-type: none"> <li>- Advance: Conduct customer surveys, interviews</li> <li>- After: Pivot feature priorities post-launch</li> </ul>
	Competitive edges	Underestimating competitors' speed or overvaluing YVS uniqueness	1	1	<ul style="list-style-type: none"> <li>- Advance: Competitive benchmarking (Blue Yonder, SAP EWM)</li> <li>- After: Accelerate product roadmap if needed</li> </ul>
	Market access strategy	SI partner alignment, or slow early adoption	2	1	<ul style="list-style-type: none"> <li>- Advance: Direct sales</li> <li>- After: Onboard top SI partners in region</li> </ul>
Technical challenges and development systems	Required technologies	AI Technology rapidly change	2	2	<ul style="list-style-type: none"> <li>- Advance: Build small-scale MVP to test core functionality early</li> <li>- After: Simplify real-time requirements to match available technologies</li> </ul>
	Development manpower	Development deadlines due to limited development team size	1	2	<ul style="list-style-type: none"> <li>- Advance: Allocate buffer time in schedule</li> <li>- After: Request emergency support or external dev resources</li> </ul>
	Equipment investment	Insufficient investment in high-performance hardware required for AI model training	2	1	<ul style="list-style-type: none"> <li>- Advance: Build MVP early</li> <li>- After: Request contingency funding for critical upgrades</li> </ul>

# 3. Technical Challenges and Development System

## 3.4 Risk Management sheet

Type	Item	Assumed risk	Probability	Influence	Measures (in advance and after)
Sales and Production	Sales plan	Sales volume projections may be impact by external market or economy situation	2	1	<ul style="list-style-type: none"> <li>- Advanced: Base forecast on pilot customer interest and SEA market data</li> <li>- After: Adjust pricing model or bundles based on real sales</li> </ul>
	Sales strategy	Channels underperform due to weak enablement or misaligned efforts	1	1	<ul style="list-style-type: none"> <li>- Advanced: Train internal and partner presales team</li> <li>- After: Shift to direct sales focus for top markets</li> </ul>
	Production strategy	Delays or cost overruns due to technical complexity or AI technology change	1	2	<ul style="list-style-type: none"> <li>- Advanced: Use agile development with MVP-first approach</li> <li>- After: Scale down or phase features with highest cost or delay</li> </ul>
	Profitability plan	Margins decline due to underpricing or rising AI usage costs	2	2	<ul style="list-style-type: none"> <li>- Advanced: Monitor Azure consumption and usage-based pricing</li> <li>- After: Adjust subscription pricing or implement usage-based tiers</li> </ul>
Compliance	Business compliance	Unintentional non-compliance with data handling, AI transparency, or employee data processing requirements	2	2	<ul style="list-style-type: none"> <li>- Advanced: Review with internal legal and data protection team</li> <li>- After: Apply corrective policies or user access controls</li> </ul>
	Statute and standards	Obtain compliance certifications or regulatory alignment (e.g., data security)	1	1	<ul style="list-style-type: none"> <li>- Advanced: Use Microsoft Azure, Power Platform compliance as baseline</li> <li>- After: Obtain third-party audits or certifications</li> </ul>
Alliance	Alliance	Partnerships underperform or misalign with product roadmap or sales targets	2	2	<ul style="list-style-type: none"> <li>- Advanced: Start with pilots before full rollout</li> <li>- After: Establish clear success metrics and performance</li> </ul>
Others	Others	N/A			

# 4. Sales and Profitability Plans

## 4.1. Sales plan

### (1) Sales by categories

(USD)

	FY25	FY26	FY27	FY28	FY29	FY30
Market size	810,000,000	911,000,000	1,025,000,000	1,154,000,000	1,298,000,000	1,460,000,000
Market share (%)	N/A	0.05%	0.06%	0.08%	0.10%	0.10%
Total sales: S	N/A	450,000	625,000	955,000	1,250,000	1,495,000

# 4. Sales and Profitability Plans

## 4.1. Sales plan

### (2) Estimated pricing (sales price)

(USD)

Product	FY25	FY26	FY27	FY28	FY29	FY30
Warehouse Optimization Foundation Solution	N/A	License: 15,000 Service: 35,000	License: 15,000 Service: 35,000	License: 15,000 Service: 35,000	License: 15,000 Service: 35,000	License: 15,000 Service: 35,000
	N/A					
	N/A					
	N/A					

# 4. Sales and Profitability Plans

## 4.2. Sales strategy

### (1) Sales channel structure plan

Channel Type	Description	Purpose
Direct Sales (YVS Core Sales Team)	In-house BDMs and Account Managers targeting current and past ERP/WMS customers	Fastest path to pilot projects, high-margin control
Implementation Partners (SI Channel)	Strategic alliances with other D365 partners or SI firms in SEA who lack WMS/AI capabilities	Extend reach into new countries and industries
Industry Events / Webinars	AI warehouse showcase via Microsoft and local supply chain events	Demand generation and thought leadership
Online Channels	Product Microsoft AppSource, LinkedIn lead ads, solution demo videos	Self-qualified inbound interest and early education

# 4. Sales and Profitability Plans

## 4.2. Sales strategy

### (2) Required SI and sales techniques/skills, locations and acquisition means

Required technology & skills	Location	Acquisition means
Business Apps Consultation	Vietnam, Thailand, ASEAN, Japan	Partnerships
Synergy with other LCO	LCO	Synergy

# 4. Sales and Profitability Plans

## 4.2. Sales strategy

### (3) Service strategy

Service Element	Strategy
Implementation & Support	Bundle product with Power Apps configuration, ML setup, OCR testing, and post-go-live support
Training	Role-based training
AI Success Services	Optional subscription add-on: quarterly ML model tuning, retraining, Copilot refresh, layout simulation service
Documentation & Helpdesk	Central online portal + Copilot-accessible help content embedded in-app
Localization	Translate Copilot intents and slotting rules to fit local language/logic (Vietnamese, Thai, etc.)

# 4. Sales and Profitability Plans

## 4.3. Production strategy

### (1) Production location

Viet Nam

### (2) Country of origin <sup>(2)</sup>

Viet Nam

### (3) Production capabilities (N/A)

	Theme	Solution
Production quantities		
Production delivery date		
Production / manufacturing engineering		

**Note** (2) For decision flow of county of origin, refer to **DS 102.02 -3G\_01** (Supplementary explanation of decision of county of origin, available only in Japanese).  
For decision details, refer for **MW-C21** (Manufacturing manual for determination of country of origin ).

# 4. Sales and Profitability Plans

## 4.3. Production strategy (N/A)

### (7) KAIHAI of parts

Timing of the next design change:

Timing of first KAIHAI for the adopted part:

Total amount of KAIHAI / lifetime inventory\*:

\* Simple calculation for parts planned to be purchased for KAIHAI / lifetime inventory.

Parts that are expected of kaihAI by the next design change

Part number	Timing of KAIHAI	Unit price	Handling at the time of KAIHAI	Quantities of KAIHAI / lifetime inventory	Amount of KAIHAI / lifetime inventory

# 4. Sales and Profitability Plans

## 4.4. Profitability plan

	<b>FY26</b>	<b>FY27</b>	<b>FY28</b>	<b>FY29</b>	<b>FY30</b>
Number of Leads	300	367	567	733	867
Lead Qualified Rate	10%	10%	10%	10%	10%
Qualified Opportunities	30	37	57	73	87
Winning rate	30%	30%	30%	30%	30%
Number of New customer	9	11	17	22	26

**Note:** Leads will come from YVS's customers, Synergy with YEA, Online and offline driving by YVS marketing, Microsoft direct and from App sources, YVS Partner network, etc.

# 4. Sales and Profitability Plans

## 4.4. Profitability plan

(USD)

	FY26	FY27	FY28	FY29	FY30
License Subscription	15,000	15,000	15,000	15,000	15,000
Service Implementation	35,000	35,000	35,000	35,000	35,000
Number of New customer	9	11	17	22	26
Retention Rate		60%	60%	60%	60%
Number of Retention Customer		5	7	10	13
<b>Total Sale</b>	<b>450,000</b>	<b>625,000</b>	<b>955,000</b>	<b>1,250,000</b>	<b>1,495,000</b>

# 4. Sales and Profitability Plans

## 4.4. Profitability plan

(USD)

	Up to FD	FY26	FY27	FY28	FY29	FY30
Total sales: S		450,000	625,000	955,000	1,250,000	1,495,000
License Sale Amount: LSA		135,000	187,500	286,500	375,000	448,500
License LSA/S (%)		30%	30%	30%	30%	30%
License Operating profit: P		101,250	140,625	214,875	281,250	336,375
License P/LSA (%)		75%	75%	75%	75%	75%
Service Sale Amount: SSA		315,000	437,500	668,500	875,000	1,046,500
Service SSA/S (%)		70%	70%	70%	70%	70%
Service Operating profit: P'		31,500	43,750	66,850	87,500	102,200
Service P'/SSA (%)		10%	10%	10%	10%	10%
Annual Operating profit		132,750	184,375	281,725	368,750	438,575
<b>Accumulated Operating profit</b>		<b>132,750</b>	<b>317,125</b>	<b>598,850</b>	<b>967,600</b>	<b>1,406,175</b>
Total cumulative development investment amount	<b>580,000</b>					

# 4. Sales and Profitability Plans

## 4.5. Capital Investment plan

(USD)

Role	Rate USD/month	July		August		September		October		November		December		January		February		March		FY25 Investment
		FTE	Amount \$	FTE	Amount \$	FTE	Amount \$	FTE	Amount \$	FTE	Amount \$	FTE	Amount \$	FTE	Amount \$	FTE	Amount \$	FTE	Amount \$	Total Amount \$
Solution Architect & Product manager	6,270	2	12,540	2	2,540	2	12,540	2	12,540	2	12,540	2	12,540	1.2	7,211	1	6,270	1	6,270	94,991
FC	5,500	6	33,000	6	33,000	6	33,000	6	33,000	6	33,000	6	33,000	4	22,000	4	22,000	4	22,000	264,000
TC	4,703	6	28,215	6	28,215	6	28,215	6	28,215	6	28,215	6	28,215	4	8,810	4	18,810	3	14,100	221,018
<b>Total</b>		<b>14</b>	<b>73,755</b>	<b>14</b>	<b>73,755</b>	<b>14</b>	<b>73,755</b>	<b>14</b>	<b>73,755</b>	<b>14</b>	<b>73,755</b>	<b>14</b>	<b>73,755</b>	<b>9.2</b>	<b>48,021</b>	<b>9</b>	<b>47,080</b>	<b>8</b>	<b>42,370</b>	<b>580,000</b>

Phase	Total Investment	Timeline
Phase 3 (PR3)	442,530	Jul - Dec 2025
Phase 4 (PR4)	137,470	Jan - Mar 2026
<b>Total</b>	<b>580,000</b>	

# 4. Sales and Profitability Plans

## 4.4. Profitability Plan (Supplement: Return Factor Calculation Form) (N/A)

Double click the table to turn it into an Excel form with calculation formulas.

The white cells are fields for entering figures.

		Up to the first delivery (FD)	1st year	2nd year	3rd year	4th year	5th year		
Profitability items	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">                     ☆ Operating profit = Sales-COGS-SGA                 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">                     ☆ Gross profit = Sales-COGS                 </div> <div style="border: 1px solid black; padding: 5px;">                     ☆ Selling, general and administrative expenses (SGA=DRD+DAD+SC+MK+FL+CRD+CAD)                 </div> </div>	(Company) Sales Sales and etc.	Sales S-etc	450,000	625,000	955,000	1,250,000	1,495,000	
		☆ S-total = Sales + Sales-etc		total «Total»	450,000	625,000	955,000	1,250,000	1,495,000
		Manufacturing cost	Factory line cost	Material cost	M				
				Import charge	FI				
				Purchase surcharge	PM				
				◆ Manufacturing Dept. cost	RH				
				LC=M+FI+ C «Total»					
				Manufacturing indirect cost		PI			
				MC=LC+					
				PI					
				IC (Total)					
				◇ Cost and etc.		C-etc			
		☆ Cost of goods sold (COGS=LC+PI+C-etc) «Total»							
		Calculation items	◆ Divisional R&D expenses		DRD				
			Divisional general administrative expenses Sales cost ([division cost] + [Other division cost])		DAD				
◆ Marketing expenses (PMK[division cost])			SC						
Delivery cost			MK						
Head office R&D expenses			FL						
Head office expenses			CRD						
Head office expenses			CAD						
GA «Total»									
Total cost (=COGS+SGA)									
Total recovery amount [= Sales (S-total) - Total cost (COGS+SGA) ]									
Total development investment amount[(before FD : Total amount up to putting on sale) (afterFD : Total amount in the fiscal year )]									
[Cash flow = (S-total) - (Total cost - total development investment amount) ]									
Total cumulative recovery amount									
Total cumulative development investment amount									
Cumulative cash flow									
R F [=Cumulative cash flow divided by total cumulative development investment amount]									

◆ indicates items calculated as Total development investment amount

- \*1. Sales (S) are assumed to be calculated including royalty from consolidated affiliated companies to facilitate the use of data from the company-wide system “Brio”, that was put into service in FY 2006. Customization is possible depending on the sales conditions of the product
- \*2. At the planning phase, it is difficult to individually calculate other departments costs (interdepartmental commission fees [Jm] and delivery costs [FL]) and head office costs (OH) that are not associated with development investment, so enter an approximate overall figure for this item.

## 5.1. Compliance to statute and standards (N/A)

- (1) Were statute and standards required for planned products checked and confirmed?
  
- (2) Were extraterrestrial application of legislations and standards on the planned product such as U.S. EAR checked and confirmed?
  
- (3) Is it possible to obtain approval and compliance-certificate for standards required for planned products by the time of first release?
  
- (5) If the product to be developed involves processing of personal data, has a privacy impact assessment been conducted?

## 6.1. Alliance strategy (N/A)

(1) Objectives, merits, and necessity of the alliance

(2) Grounds for selecting the alliance partner

(3) Schedule

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