

# Webster Nestopia project update

## Business workflow / Business modules

- Customer info creation
- Solution design\* (\*product customization)
- Design validation/approval by customer
- Deposit by customer (1st payment by customer)
- Place order\* (\*contract signed)
- Order fulfillment (BOM created and sent to factory)
- Manufacturing
- Validation by Nestopia
- 2nd payment by customer
- Shipping and Delivery
- Installation
- Customer validation/approval
- Final payment (3rd payment)
- Maintenance (per signed contract)
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- Solution project management
- CRM functions (partner, channel management)

More details regarding business workflow can be found from **SOP of the Retractable Sunroom Business** document.

## Data and Document

- Product info including price
- Customer info

- Customer success samples (video, rendering)
- 客户提供的场地信息
  
- Order
- Payment
  
- Contract
  
- 总平面图 (规划)
- 效果图 (空间展示)
- 平面布置图 (客户)
- 产品设计图 (工厂)
- 基础设计图
- 地面铺装图 (指导施工)
  
- 结构计算书 (工程力学)
- 各项认证/Permit (TBD)
  
- 组装说明书 + 视频

## Product roadmap

Roadmap covers major capabilities which are to be built in about one year period. Subjects/Capabilities not listed inside the roadmap do not mean they are not important to the ultimate success of the system. The roadmap is suggested to be reviewed, updated and baselined on quarterly basis. Based on discussion outcome from Dec 2025 meetings, AI based rendering are moved into Phase II, and the focus will be on building the e-commerce site for Nestopia for Phase I.

Phase I	Phase II	Phase III

Nestopia portal	Design tooling (AI based rendering)	Digital marketing
Customer	Customer service (AI/Chatbot)	Finance (Cost)
Product	CRM (partner, channel mgt)	
Pricing	Solution project Mgt	
Order placement		
Payment		

Nestopia portal is the homepage of the company, which is accessed by different roles of users. Typically it should support Sales (from Partners) and Customers.

## AI enablement

AI should be enabled across the system. The initial focus would be focusing on the highly customer interactive scenarios

- Design rendering (text + image => image) to raise conversion rate (leads to order).
- Chatbot experience (ease customer to interact with business / system). The enterprise user (i.e. sales representative) will use this system to sell the solution by chat with end user (consumer).
- More details can be referred from later part (Agent) of this document.

**Use AI to build the system.** Leverage AI tooling to create specification (design, architecture, user manual) and code.

Phase II will start when the company has acquired about 10 customers so that whole system will help scale out and speed up the business execution.

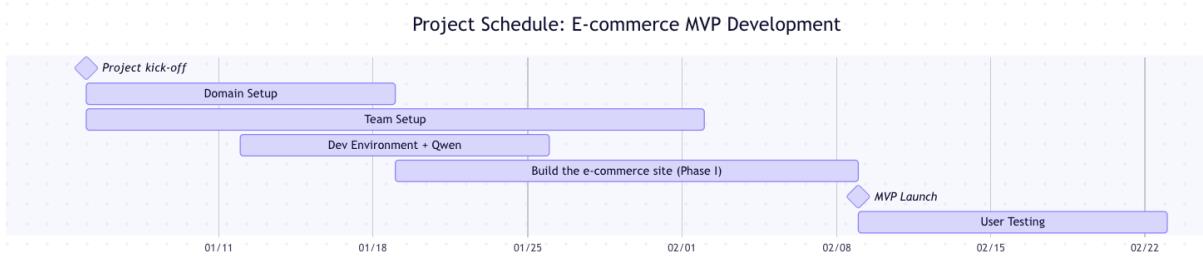
The project planning below will focus on deliverables targeting Phase I.

## Project (Phase I)

### scope

- Company portal
  - Authentication
  - Authorization
  - Design tooling (AI based rendering) (moved to later phase, and specific timeline is TBD)
  - Customer info
  - Product catalog
  - Pricing
  - Documents generated from solution design (Documents details can be referred from Data and Document section)
  - Order placement (including related documents)
  - Payment fulfillment
  - AI/Chatbot
- 
- **Development resources**
  - 1 PM (equivalent effort)
  - 1 engineer (equivalent effort) need be invested from project kick-off
  - A flexible staffing model would be preferred. Initially it could be jointly contributed by WZ, Dr. Zhan. Potentially one more contractor need be added, and this will be charged based on staffing days bound with specific project goals.
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- **Deliverable with Timeline and Cadence**
  - Development use agile method, and each sprint will have 2 weeks span.

- Project use monthly release cadence. This stands for one release every 2 sprints.
- More details can be found from Project Schedule and Milestones file.



- Sprint 1 start from Jan 5th, 2026.
- By middle of Sprint 2, target to finish building the product development environment using Qwen based tooling and eco system.
- By the end of Sprint 2, target to have the initial e-commerce site built with following
- Official domain name
- Walking skeleton (basic capabilities) as outlined in the product roadmap Phase I excluding Payment
- The user testing start from end of Sprint 2.

- **Dependencies**

- AliCloud and Qwen based development account and infra plan subscribed
- Domain name registered

- **The e-commerce site**

Leverage the experience gained from the initial prototyping on Trickle

Leverage the template offered by AliCloud

- Kick start the design of Payment solution

## AI Designer

Step 1 Sun-room design (CAD based model)

Look into possible sources - GLD for sketch based

Step 2 Need refine the technical approach (AI based image generation) - this need be kicked off during Phase I

## Agent topic exploration

What

Relationship with the business flow (Design+Customer Insight to Action)

Granularity => agent collaboration (MCP??)

How

Data

Integration especially for the UI part

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# Contents below are notes from project meetings and discussions.

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## Meeting on Jan 30

### Agenda

- Development environment building [Product Development \(Cloud Native + AI Native\) Environment Exploration and Setup](#)
  - Infrastructure resource subscription
  - CI / CD pipeline
- Development resource (人) - Risk is rising
  - My thoughts and few options
- Designer Agent
  - Update from meeting with UNRE [上海青燕和示](#)

## Meeting on Jan 27

### Action

- AI native based S/W engineering capacity => need a JD (WZ)
  - Engagement
  - Commitment (schedule sensitive)
  - Cost
- AI native based S/W development environment building - [Product Development Environment](#)
  - Need a quick setup (~2 weeks)

### Agenda

- Review the action items made on Jan 20
- Status update by Webster

- AI agent ([AI Agent - Designer](#))
- Resource (S/W development)
- Software Configuration Mgt - Git setup (with earlier prototype project)
- Discussion on SaaS (continuing from the thread over wechat)
  - Biz model (Subscription)
  - Hosting model (vs On-Prem)
  - Operation model (DevOps)
  - Development (Cloud Native+ AI Native (Vibe Coding))
- Side topic: AI and Non-AI

## Topics to be discussed during the coming meeting(s)

### 1. IT- 企业办公自动化 (OA)

邮箱/文档

**Let's ALL try Lark** (refer to earlier made assessment)

Domain application

-company address need / dependency

### 1. IT - 开发环境

IaaS Decision - Ali based or non-Ali (AWS, GCP, Azure)

	权重	AliCloud	AWS	GCP	Azure
	<b>20%</b>	3	5	5	5

可信度 (美国)					
AI	Qwen	Gemini	ChatGPT		
LLM (开源)	30%	4	2	2	2
LLM能力	10%	4	3	5	5
LLM运维	10%	5	2	2	2
开发生态	10%	5	3	4	4
Non AI					
Cloud Native	10%	5	5	5	5
价格/费用	10%	4	3	3	3
评估 (总计)	100%	4.1	3.2	3.5	3.5

基于公司成员共识，将重点研究基于阿里云的IaaS解决方案。

## 1. 开发人员

Dr Zhan

One more needed (part time for now)

### 1. Agent

Why?

What?

- Agent inside our company (Sales, Marketing, Design (e.g. rendering), Supply Chain (e.g. sourcing), Customer Software Product/Platform Production, Customer Support)
- Agent inside our Product/Platform (Designer, Customer Support including Sales)

SPP (Software Production Production)

- Vibe Coding across whole SPP including specification generation
- Guided peer programming (experienced engineer + AI coding assistant)

## Meeting / Actions Summary (01/20)

- AI based rendering strategy
  - 单体
  - 单体 + 外部环境
- Meeting with GLD to explore 平面图/结构设计/平面布置/结构计算书高效生成 (LZ, WZ, SS) (week of Jan 26th)
- Meeting with Dr Zhan and team for AI based rendering (单体, 图+图融生) (LZ, WZ, SS) (week of Jan 26th)
- Phase I scope (refer to contents above)
  - Chatbot needed
  - Payment excluded
  - Marketing info (LZ/CG/SS)
    - Structure (end of Jan)

- Content (Video, Product info/catalog) (end of 1st week of Feb)
- Set up weekly meeting for N-Platform development (WZ)
  - 9:30am Tue morning
- Company registration
  - CN
    - Tax (具有tax refunding from Hainan) - target head of Feb
  - SIN , US, Kaiman
    - US soft landing
    - US (合资)
    - SIN (合资)
    - SIN holding
- OA
  - Digital Name Cards Template (SS) (1/23)
  - Customer Support mailbox (WZ) (01/22)
    - Send to RW and LZ considering front end sales nature for the time being
  - Administrative Expense logging template (WZ) (end of Jan)

## Meeting with Dr Zhan (01/12)

Agenda

-Status update

Colloq

Micro-services

\*Account creation (**WZ**)

\*Gemini, GPT, Qwen => Qwen based

AWS based deployment + Local trained Qwen

AWS based deployment + remote API (to AliCloud QWen)

-whether we need proxy due to data

AliCloud in Singapore

### **Need assessment (WZ)**

\*IDE

**Vibe coding Env (Tongyi Lingma) exploration (Dr)**

**Alibaba Cloud DevOps exploration (Dr)**

Ali Coder 3 => need more exploration

Cursor plug-in

Code repository consideration

Runnable / Executable Deployment process (pipeline) details

# Meeting with Dr Zhan (01/05)

## Agenda

- Status update (Dev Env Setup)
- Next step

<http://6eca43c9.r20.cpolar.top/>

1 staff-day

Front end

VUE based

Mobile adaptation

Next step

AliCloud + Qwen based development infra/Env (Bill Z.)

Authentication (WZ)

UX design => leverage vibe coding based AI tooling

English language focus

# Meeting with Dr Zhan (12/24)

## Agenda

Project scope

prototype URL <https://btfdmg95152cb.trickle.host/>

Engineering process

Agile

Sprint

Dev Env Setup

Walk through my doc

Next step

Meeting on Jan 5th

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## Action Plan

- *Phase I scope confirmation/approval including workflow and data points (documents) (whole team)*
- Data model (WZ, CG, SS, LZ)
- Data (master, transaction)
- Document (set of documents may be manually created or loaded into system in project phase 1, and details need be discussed and confirmed)
- Payment solution options (RW, LZ, WZ)
- Instant payment solution exploration
- Cost estimate based on the agreed scope (WZ, SS, LZ)

- Eat our own doggy food / champagne (whole team)
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## 12/21 group meeting

Take-away (Actions)

- Timeline/Roadmap

E-commerce site build-up will be the first step

- Email address (Nestopia) setup

- 公司文档管理

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“Document ownership misalignment” isn’t paperwork—it’s a hidden process fracture that can derail delivery, inflate costs, and damage reputation.

By explicitly assigning ownership now, Nestopia ensures that when Phase I goes live, every document flows smoothly from design → factory → customer—without finger-pointing or last-minute scrambles.

For every document in the list, define:

Creator (Who generates it?)

Approver (Who validates it?)

Consumer (Who uses it next?)

Format & Standard (PDF? DXF? Video codec?)

Trigger (What event starts its creation?)

Example:

Document	Creator	Approver	Consumer	Trigger

Product Design Drawing	AI + Design Tool	Lead Engineer	Factory	Customer payment (deposit)
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## Map Documents to Workflow Steps

Embed this matrix directly into the business workflow diagram (the one referenced from Stephan Sun). Every arrow should show which documents are produced/consumed.

## Validate with the Factory Early

Ask: “What exact files do you need to start production?” Don’t assume your BOM format matches their ERP input requirements.

If we try to **reverse-engineer production drawings from a rendered image**, we’ll fail—because a photo doesn’t contain geometric or manufacturing data.

But—if both the **rendering** and the **production drawing** come from the **same underlying digital model**, then they stay perfectly aligned.

Rendering = “This is your dream.”

Production drawing = “This is how we make it real.”

For Nestopia’s workflow, ensuring these two are **derived from the same digital model** is the key to scaling custom sunrooms reliably.

## 12/4 meeting

F/U action

- meeting the doctor from Fudan (WZ/SS)
- visit the company based in Jin Qiao (SS/WZ)
- payment solution (RW/WZ)

# 12/1 meeting

Take-away and thoughts based off the meeting.

## Project Scope

What's the MVP scope based on SOP of The Retractable Sunroom Business-V1

## Data, data, data, and AI

Data mapping

Product

Customer

Price

Order

Payment

## Business workflow (**how vertical AI agent is fit here**)

UX design

How AI is used here in a more fundamental way ? Chatbot? Or ?

Design focus (rendering) to raise conversion ratio

Customer insight

Tech architecture

Data

Service

Leverage external components (in a quicker, smooth and cost efficient way)

## Timeline

MVP Scope (Biz use cases <=> architecture)

Development infrastructure and process

## 11/25 meeting

### \*Action plan

- More usage / trial of the system
- Further review the product scope (initial focus) (LZ/SS/WZ)
- Switch to Qwen

### \*Chatbot vs Agent

More insight

And actions

Agent vertically built into use case

Major workflow review (document offered from Stephan Sun)

Shall we show our system to US partners?

- Yes
- It's in the early stage. We can say it's a prototype (design)

Align the effort with product strategy and focus

Need migrate the system to QWen based

- open source based
- backend capability
- backend based DB
- explore on training and fine tune
- text to image
- need be open to other major LLM and niche capabilities (e.g. nano banana)

\*AI capability gap for building the AI

- backend vs front end
  - document (pdf, ppt, dox) processing (not just pure text)
  - visual capability (need verify nano banana )
- 

## 2025/11/10 meeting (GC, LZ, SS, WZ)

- Build Chatbot into the system to capture insight from interaction with customer. So that the insight can be used to create the follow-up action(s) with focus and prioritization. (WZ)
- Define detailed steps inside the business workflows (activity, input, output) (SS)
- Refine the homepage with images associated with the product catalog (WZ, SS)

2025年11月10日会议纪要及行动项（参会人：GC、LZ、SS、WZ）

- 在系统中嵌入聊天机器人，捕捉与客户互动过程中的关键洞察。这些洞察将用于制定目标明确、优先级清晰的后续行动以提高转化率及缩短转换周期（负责人：WZ）
- 明确业务工作流中的详细步骤，包括具体活动、输入内容及输出结果（负责人：SS）
- 优化首页设计，添加与产品目录相关联的产品图片（负责人：WZ、SS）

Below are review comments gained from **2025/10/27 meeting with LZ, GC, SS and RW**

*Portal*

-*Partner view*

-*Customer view*

*When to start Phase II <= 10 customers gained*

*Project mgt/status tracking*

*Integration with mail service (out-bound), CRM*