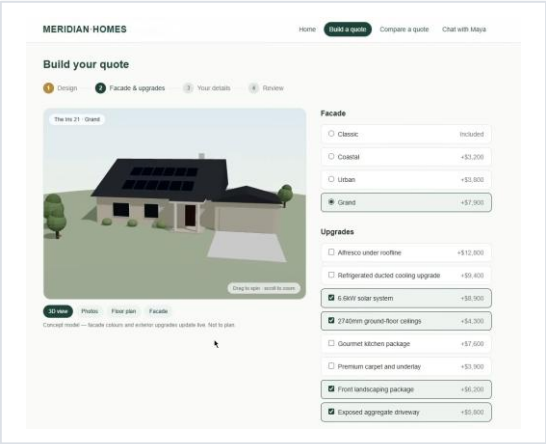
GENERATIVE AI | ACCELERATOR

Homebuilder Quotation Accelerator

Generative AI that guides homebuyers from design to priced quote, and keeps chat and wizard in lock-step.

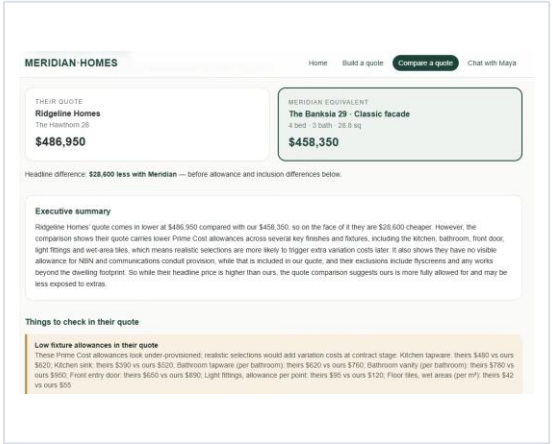
Azure AI Foundry
Hosted agents & models

Microsoft Agent Framework
Conversational tool-use



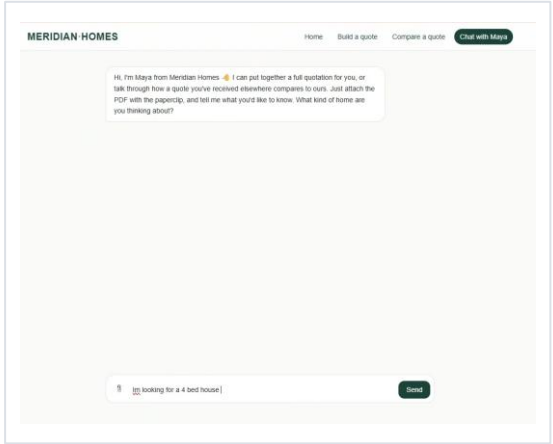
BUILD THE QUOTE

Guided wizard: design, facade and options priced as you go.



COMPARE THE QUOTE

Competitor document in, grounded side-by-side comparison out.



CHAT WITH MAYA

Conversational agent reaching the same quote in dialogue.

PURPOSE

Guided quoting intelligence that lets homebuyers design, price and compare builds in one place.

PROBLEM

Manual quoting is slow and inconsistent - buyers wait days for pricing that should take minutes.

IMPACT

Faster quotes, fewer pricing errors, and one consistent experience across web and chat.

PLATFORM

Azure AI Foundry · Azure Container Apps · Azure OpenAI

CAPABILITIES

- Guided Quote Wizard
- Deterministic Pricing
- Competitor Comparison
- Conversational Agent
- Branded Document Delivery

INDUSTRIES

- Residential Construction
- Land & Property Development
- Building Products & Materials
- Architecture & Design
- Real Estate

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Solution architecture

01 EXPERIENCE
Web application

Build a quotation
Guided selection of design, facade and options

Compare a quotation
Competitor document in, grounded comparison out

Consult with Maya
Conversational agent on the same capabilities

02 APPLICATION
Azure Container Apps

Backend for frontend

Serves the SPA and brokers every agent call. System-assigned managed identity. Scale-to-zero.

Quotation and compare

Invocations protocol

Conversational chat

Responses protocol, streamed

03 INTELLIGENCE
Azure AI Foundry

Hosted agent

Bring-your-own-code container. One process, both Foundry protocols, isolated per session, scale-to-zero.

Responses | Invocations

gpt-5.4-mini
Foundry model deployment for conversation, extraction and narrative

The BFF never calls the model. The agent is the only intelligence plane.

Azure Container Registry

Images for the web app and the hosted agent

Azure Communication Services

Quotation and comparison reports by email

Application Insights

Traces across agent runs, turns and tools

Microsoft Entra ID

Managed identity on the app; Entra on the agent

Two front doors, one brain

INVOCATIONS

Structured workflows

The wizard and compare flows call typed operations. Session affinity keeps a conversation on one agent instance.

Catalogue	Designs, facades, options
Generate quotation	Selections to a priced document
Compare quotation	Competitor document to deltas

RESPONSES

Conversational agent

Maya, on Microsoft Agent Framework, gathers the same facts in dialogue and calls the same capabilities as tools.

Discover designs	Grounded in the catalogue
Create quotation	Same engine as the wizard
Send documents	Email the quotation or report

HOSTED AGENT

Dual-protocol host

Both protocols in one process. A quotation from chat and a quotation from the wizard are the same artefact.

Deterministic pricing
The model never sets a price

Shared business logic
Catalogue, extract, compare, documents

Session working state
In-flight quotations and comparisons

SHARED CAPABILITIES

Same outcomes, both doors

Product catalogue
Designs, facades, options and allowances

Quote engine
Deterministic pricing. The model never prices.

Extraction
Competitor document to structured fields

Comparison
Calculated deltas and risk flags. Model writes the narrative.

Documents
Branded quotation and comparison PDFs

Delivery
Email through Azure Communication Services

Narrow model boundary

Conversation, document extraction and narrative. Pricing is code.

Identity at the platform edge

Managed identity from the BFF. Entra on the Foundry gateway.

Documents as a first-class output

Quotations and reports are generated in-session and emailed through ACS.