

GPT5

What we were missing:

Based on the research corpus you provided—which spans platform architecture, UX case studies, regulatory frameworks, and stakeholder dynamics—I’ve identified several underrepresented areas that are critical for strategic completeness and stakeholder alignment.

Use Case 1: Restaurant Partnership Onboarding

Preconditions:

- Restaurant has internet access
- Documentation and permits available
- Platform supports onboarding workflow

Main Flow:

1. Restaurant visits partner portal and selects “Register”
2. Owner enters business details, menu, hours, and payment info
3. Uploads required licenses and certifications
4. Platform validates documents and approves registration
5. Restaurant gains dashboard access and onboarding guide

Subflows:

- Menu upload and categorization
- Tax and compliance verification
- Marketing package selection

Alternative Flows:

- Missing documentation → prompt re-upload

- Duplicate registration → merge or reject

Scenario/Story Slice:

- A local Thai restaurant registers, uploads licenses, and is approved in 48 hours.
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Use Case 2: Assign and Manage Delivery Partner

Preconditions:

- Delivery partner is registered and active
- Order is ready for pickup

Main Flow:

1. System identifies nearest available partner
2. Sends pickup request with order details
3. Partner accepts and navigates to restaurant
4. System tracks progress and updates ETA

Subflows:

- Route optimization using traffic data
- Partner performance tracking

Alternative Flows:

- Partner rejects → system reassigns
- GPS failure → manual updates

Scenario/Story Slice:

- A courier receives a request, accepts, and ETA is updated in real time.
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Use Case 3: Monitor Platform Performance and Downtime

Preconditions:

- Platform is live and serving requests

Main Flow:

1. System monitors uptime, latency, and errors
2. Alerts triggered for anomalies
3. Admin dashboard shows live metrics
4. Engineers receive incident reports and resolve

Subflows:

- Automated rollback or failover
- Customer disruption notification

Alternative Flows:

- Partial outage → degrade gracefully
- Full outage → redirect to status page

Scenario/Story Slice:

- Latency spikes detected at peak; engineers roll back while users see a status page.
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Use Case 4: Analyze Customer Behavior and Preferences

Preconditions:

- Customer has placed multiple orders
- Analytics module active

Main Flow:

1. System aggregates history, ratings, and browsing
2. Generates recommendations
3. Updates homepage and promotions
4. Provides insights to marketing team

Subflows:

- A/B testing of algorithms
- Loyalty segmentation

Alternative Flows:

- Sparse data → fallback to popular items
- Opt-out → disable personalization

Scenario/Story Slice:

- A vegetarian customer sees Indian food promos based on order history.

Use Case 5: Comply with Health and Tax Regulations**Preconditions:**

- Restaurant is onboarded

- Platform operates in regulated region

Main Flow:

1. System checks health code compliance
2. Validates tax registration and applies rates
3. Generates monthly reports for restaurants
4. Flags non-compliant businesses

Subflows:

- Government API integration
- Automated tax invoice generation

Alternative Flows:

- Missing compliance → suspend listing
- Tax mismatch → notify and correct

Scenario/Story Slice:

- Restaurant tax ID validated, and reports generated automatically.
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Use Case 6: Group Order Coordination**Preconditions:**

- Multiple customers logged in
- Shared link or group session created

Main Flow:

1. One customer starts order and shares link
2. Participants join and add items
3. System aggregates items into single cart
4. Initiator reviews and selects payment option
5. System processes payment and sends order

Subflows:

- Split payment by item or evenly
- Join/finish notifications

Alternative Flows:

- Participant exits → items removed
- Payment failure → initiator resolves

Scenario/Story Slice:

- Office coworkers place a lunch order and split the bill.

Use Case 7: Allergy and Dietary Restriction Filtering

Preconditions:

- Customer profile includes allergies/preferences

Main Flow:

1. Customer selects “Filter by Allergy/Diet”
2. System hides unsafe items

3. Warnings shown if allergens detected
4. Customer proceeds with safe checkout

Subflows:

- Save recurring filters
- Restaurant confirms restrictions

Alternative Flows:

- No safe items → suggest alternatives
- Restaurant cannot guarantee → notify

Scenario/Story Slice:

- A peanut-allergic user only sees safe menu items.
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Use Case 8: Scheduled Order for Later Delivery

Preconditions:

- Customer logged in
- Cart is ready

Main Flow:

1. Customer selects "Schedule Delivery"
2. Chooses time/date slot
3. System verifies restaurant and courier capacity
4. Payment authorized, charged at prep time

5. Order prepared and delivered at scheduled time

Subflows:

- Reminder notifications

Alternative Flows:

- Slot unavailable → choose another
- Restaurant closed → suggest alternative

Scenario/Story Slice:

- Customer schedules Friday dinner for 7:30 pm.
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Use Case 9: Real-Time Order Modification

Preconditions:

- Customer placed order not yet prepared

Main Flow:

1. Customer requests modification
2. System checks restaurant status
3. If allowed, updates order and payment
4. Restaurant and courier notified

Subflows:

- Partial refunds for removed items
- Address change updates courier route

Alternative Flows:

- Prep started → modification blocked
- Item unavailable → reject change

Scenario/Story Slice:

- Customer removes one dish before prep begins.
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Use Case 10: Multi-Stop Delivery (Bundle Orders)**Preconditions:**

- Multiple orders in same delivery zone

Main Flow:

1. System groups nearby orders
2. Driver picks up multiple orders
3. Route optimized for stops
4. Customers notified with adjusted ETAs

Subflows:

- Discounts for shared route

Alternative Flows:

- One order canceled → route recalculated
- Traffic disruption → ETA updates

Scenario/Story Slice:

- Three neighbors' orders batched into one courier route.
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Use Case 11: Transparent Taxes & Fees

Preconditions:

- Jurisdiction tax rules configured
- Restaurant active

Main Flow:

1. System calculates fees and taxes
2. Displays breakdown before checkout
3. Receipt shows itemized fees
4. Merchant tax reports generated

Subflows:

- Rounding and inclusive tax handling

Alternative Flows:

- Address mismatch → revalidation

Scenario/Story Slice:

- User sees clear breakdown of delivery fee, service fee, and tax.
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Use Case 12: Batching & Multi-Stop Routing

Preconditions:

- Courier online
- Orders in same zone/time window

Main Flow:

1. Dispatcher proposes batch route
2. Courier accepts
3. App sequences pickups/drops
4. Customers receive updated ETAs
5. Courier completes with proof at each stop

Subflows:

- Dynamic re-sequencing

Alternative Flows:

- Courier declines → reassign individually

Scenario/Story Slice:

- Courier handles three stacked orders efficiently.

Use Case 13: Reusable Packaging & Deposits**Preconditions:**

- Restaurant in reuse program
- Customer opts in

Main Flow:

1. Customer selects reusable packaging
2. Deposit fee added
3. Courier scans container IDs
4. Customer returns containers
5. Deposit refunded on scan

Subflows:

- Cleaning cycle logged

Alternative Flows:

- No return → deposit forfeited

Scenario/Story Slice:

- Customer returns containers at kiosk and receives refund.

Use Case 14: Food Safety Chain-of-Custody

Preconditions:

- Restaurant uses safety seals
- Courier app supports scans

Main Flow:

1. Kitchen logs prep temperatures
2. Tamper seal applied and scanned
3. Courier scans on pickup

4. Exceptions flagged
5. Customer views safety log

Subflows:

- Reject-on-breach workflow

Alternative Flows:

- Broken seal → refund/remake

Scenario/Story Slice:

- Sealed bag delivered with prep log visible to customer.
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Use Case 15: SLA Breach Compensation

Preconditions:

- Order ETA and SLA rules configured

Main Flow:

1. System checks promised vs actual ETA
2. Detects SLA breach
3. Auto-applies customer credit
4. Customer notified
5. Merchant/courier payout adjusted

Subflows:

- Compensation scaled by lateness severity

Alternative Flows:

- Fraudulent claim → manual review

Scenario/Story Slice:

- Late order triggers automatic \$5 credit.

CLAUDE

What we were missing

Multi-stakeholder perspectives: The research emphasizes that food delivery systems involve three major stakeholders - app firms, couriers, and customers - but your use cases only focus on the customer side .

Advanced features: Essential features like group orders, voice integration, social media integration, and customizable menus are missing from your use cases

Business operations: The research shows that platforms need sophisticated business model management, including restaurant partnerships, courier coordination, and regulatory compliance .

Safety and support features: Both the Philippine and European studies emphasize safety as a critical factor for all stakeholders, especially couriers

Use Case 16: Voice Order Placement**Preconditions:**

- Customer has voice feature enabled
- Previous order history exists

Main Flow:

1. Customer activates voice assistant
2. Speaks order
3. System confirms details via voice

4. Customer confirms payment
5. System processes order hands-free

Subflows:

- Voice recognition validation
- Accessibility support

Alternative Flows:

- Voice not recognized → manual input
- Restaurant closed → suggest alternative

Scenario/Story Slice:

- Customer reorders “usual pizza” hands-free.

Use Case 17: Courier Safety & Incident Reporting

Preconditions:

- Courier is active on delivery

Main Flow:

1. Courier encounters safety issue
2. Uses emergency button in app
3. System logs incident with GPS
4. Support and emergency services contacted
5. Report stored for analysis

Subflows:

- GPS tracking
- Insurance claims

Alternative Flows:

- False alarm → cancel alert
- App failure → manual contact

Scenario/Story Slice:

- Courier reports harassment; safety team follows up.
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Use Case 18: Dynamic Pricing & Surge Management**Preconditions:**

- High demand detected

Main Flow:

1. System monitors demand vs supply
2. Calculates surge multiplier
3. Shows customers adjusted pricing
4. Couriers notified of incentive
5. Prices return to normal when balanced

Subflows:

- Surge reason notifications

- ETA adjustments

Alternative Flows:

- Customer rejects surge → order queued
- System error → manual override

Scenario/Story Slice:

- Rainstorm triggers surge pricing with courier incentives.
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Use Case 19: Manage Restaurant Inventory**Preconditions:**

- Staff authenticated and logged in
- Restaurant profile exists

Main Flow:

1. Staff navigates to inventory section
2. System shows current levels
3. Staff updates quantities
4. Marks items unavailable if needed
5. System syncs menu in real time

Subflows:

- Bulk updates via CSV
- Low stock alerts

Alternative Flows:

- Invalid quantity → error prompt
- Network error → changes cached

Scenario/Story Slice:

- Staff marks “Fries” as unavailable; instantly removed from menu.
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Use Case 20: Handle Customer Refund Request**Preconditions:**

- Order delivered or cancelled
- Customer support agent authenticated

Main Flow:

1. Customer submits refund request
2. System creates support ticket
3. Agent reviews request
4. Agent approves/denies
5. If approved, refund processed
6. Customer notified
7. Order record updated

Subflows:

- Partial refund option
- Fraud flagging

Alternative Flows:

- Payment error → retry
- Duplicate request → merged

Scenario/Story Slice:

- Customer refunded for missing side dish.

Use Case 21: Optimize Delivery Routes**Preconditions:**

- Multiple orders ready
- Couriers available
- GPS services online

Main Flow:

1. System analyzes pending orders
2. Calculates optimal routes
3. Assigns orders to drivers
4. Drivers receive details
5. Routes monitored and adjusted

Subflows:

- Dynamic adjustment when new orders appear

Alternative Flows:

- No drivers → queue orders
- Traffic jam → recalc routes

Scenario/Story Slice:

- Lunch orders reassigned mid-route after a traffic jam.
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Use Case 22: Generate Business Analytics Report

Preconditions:

- Admin has reporting permissions
- Historical order data available

Main Flow:

1. Admin selects report type and range
2. System validates permissions
3. Queries database and aggregates metrics
4. Generates visualizations and stats
5. Admin reviews and exports
6. Report logged for audit

Subflows:

- KPI calculation (orders, revenue, delivery times)
- Export to multiple formats

Alternative Flows:

- Permissions missing → deny access
- Large dataset → process asynchronously

Scenario/Story Slice:

- Weekly sales report exported as PDF for managers.

Use Case 23: Customer Loyalty & Rewards Program

Preconditions:

- Customer account is active
- Loyalty program enabled

Main Flow:

1. Customer places an order
2. System calculates reward points or cashback
3. Points added to loyalty wallet
4. Customer can redeem rewards on future checkout

Subflows:

- Tiered rewards (silver, gold, platinum)
- Birthday/anniversary bonuses

Alternative Flows:

- Rewards expired → notify customer
- Redemption failure → retry with support

Scenario/Story Slice:

- A customer earns points after each meal and redeems them for free delivery on their 10th order.
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Use Case 24: Customer-to-Courier Chat Support

Preconditions:

- Order is in progress
- Both customer and courier have chat enabled

Main Flow:

1. Customer initiates chat from order tracking screen
2. Courier receives notification
3. Messages exchanged securely
4. Conversation logged for support

Subflows:

- Quick templates (e.g., “I’m outside”, “Be right there”)

Alternative Flows:

- Courier declines chat → customer routed to support
- Inappropriate content → flagged automatically

Scenario/Story Slice:

- Courier messages customer about apartment gate code, ensuring smooth delivery.
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Use Case 25: Customer Self-Service Order Cancellation

Preconditions:

- Order placed but not prepared yet

Main Flow:

1. Customer selects "Cancel Order"
2. System verifies prep status
3. If not started, cancels order and refunds
4. Sends notifications to restaurant and courier

Subflows:

- Partial cancellation (specific items only)

Alternative Flows:

- Prep started → cancellation blocked, support required
- Refund delay → notify customer

Scenario/Story Slice:

- Customer cancels order two minutes after checkout and instantly receives a refund.

Use Case 26: Multi-Language & Localization Support**Preconditions:**

- Customer profile has preferred language set

Main Flow:

1. Customer logs in

2. App interface adjusts to selected language
3. Notifications and receipts localized
4. Support interactions routed to language-capable agents

Subflows:

- Automatic translation for restaurant menus

Alternative Flows:

- Unsupported language → fallback to English
- Missing translations → placeholders displayed

Scenario/Story Slice:

- Spanish-speaking customer browses menus and receives notifications in Spanish.

Use Case 27: Marketing Campaign Management

Preconditions:

- Admin has marketing permissions

Main Flow:

1. Admin creates new campaign
2. Selects target customers and promotion type
3. System validates budget and duration
4. Campaign launched and tracked
5. Performance analytics generated

Subflows:

- A/B testing campaigns
- Location-based targeting

Alternative Flows:

- Invalid promotion code → blocked
- Budget exceeded → campaign paused

Scenario/Story Slice:

- Marketing launches a free-delivery weekend promo targeted to new users.
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Use Case 28: Subscription Meal Plans**Preconditions:**

- Customer opts into subscription plan
- Valid payment method available

Main Flow:

1. Customer chooses subscription tier (weekly, monthly)
2. System schedules recurring deliveries
3. Customer allowed to skip or pause cycle
4. Subscription auto-renews unless canceled

Subflows:

- Dynamic menu rotation

- Subscription discounts applied

Alternative Flows:

- Payment failure → grace period
- Customer cancellation → refund pro-rata

Scenario/Story Slice:

- A student subscribes to a weekly lunch plan, skipping during exam week.
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Use Case 29: Courier Earnings Transparency Dashboard**Preconditions:**

- Courier account is active
- Completed deliveries exist

Main Flow:

1. Courier opens earnings dashboard
2. System displays daily/weekly breakdown
3. Bonuses, tips, and adjustments itemized
4. Courier downloads earnings report

Subflows:

- Payout forecasts
- Tax estimation

Alternative Flows:

- Data sync error → fallback to cached totals
- Incorrect payout → raise dispute

Scenario/Story Slice:

- Courier views weekly earnings including tips and mileage bonuses.
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Use Case 30: Customer Issue Escalation to Support

Preconditions:

- Customer has unresolved issue with order

Main Flow:

1. Customer selects “Need Help”
2. System creates support ticket
3. Assigns ticket to appropriate queue (delivery, refund, restaurant issue)
4. Support agent reviews and resolves
5. Customer receives resolution confirmation

Subflows:

- In-app chat with support
- Automated troubleshooting suggestions

Alternative Flows:

- Ticket misrouted → system reassigns
- Duplicate ticket → merged automatically

Scenario/Story Slice:

- Customer escalates missing drink issue, and support resolves with partial refund.

Reflection

Total cost: \$0

We modified the RAG code provided in class to write the context and prompt to a text file, and then manually sent those messages to the agent to avoid the need for a paid API key while still benefitting from intelligent context window selection.

Differences between Claude and GPT-5:

Claude provided a more in-depth breakdown of what areas we might have been missing use cases in and slightly higher quality use cases overall. GPT-5 produced some use cases that are too broad to practically implement as a single use case (like restaurant onboarding, for example), while Claude produced use cases that were more directly tied to features as one would typically develop an app. Overall, the use cases generated were extremely broad- no single system would be built for all of these tasks, especially not all at once. Without further refinement, the scope of the project rapidly increases as use cases are generated.

The improvement in model output quality when using RAG is immediately noticeable and had far more of an effect than which model was used. The use cases generated with the RAG context are much more specific and relevant than otherwise. Even only using the free tier of each model, RAG is clearly very beneficial. Additionally, providing RAG context in the prompt can greatly reduce or even eliminate the need for careful prompting (since it's effectively an automated way to build up that context).