Business Analysis Portfolio Piece: Smartshop Customer Experience Optimization

A case study on improving checkout flow and customer satisfaction through data-driven insights.

Smartshop is a hypothetical supermarket e-commerce and mobile app that allows customers to purchase goods/products online.

Scenario: The CEO of the supermarket recently noticed that customers often abandon their carts or give low satisfaction ratings after checkout. After reviewing internal reports and customer feedback, the Head of Customer Experience identified recurring issues with delayed delivery updates, unclear payment confirmations, and poor post-purchase communication. According to them, over 45% of users abandon their carts before checking out. Internal data shows inconsistencies in order tracking information between the app, the payment gateway, and the delivery management system.

To address the issue, they have hired me as the Business Analyst to review and improve the customer experience.

The Business Analyst role here includes:

1. Mapping the Current Customer Journey from browsing to post-purchase feedback.
2. Identify the pain points and gaps affecting the shopping experience.
3. Recommend process and system improvements to reduce cart abandonment and improve satisfaction.

Stakeholders and their Power Interest Grid

In this SmartShop customer-experience improvement project, the stakeholder power–interest grid helps identify which individuals and departments have the most influence over the checkout process, payment systems, and order-tracking workflow. It clarifies who needs to be closely involved in the analysis, such as the Product Sponsor and Product Manager, the Customer Support Team, and the Software Developer teams, and who only needs periodic updates, like customer support or delivery partners.

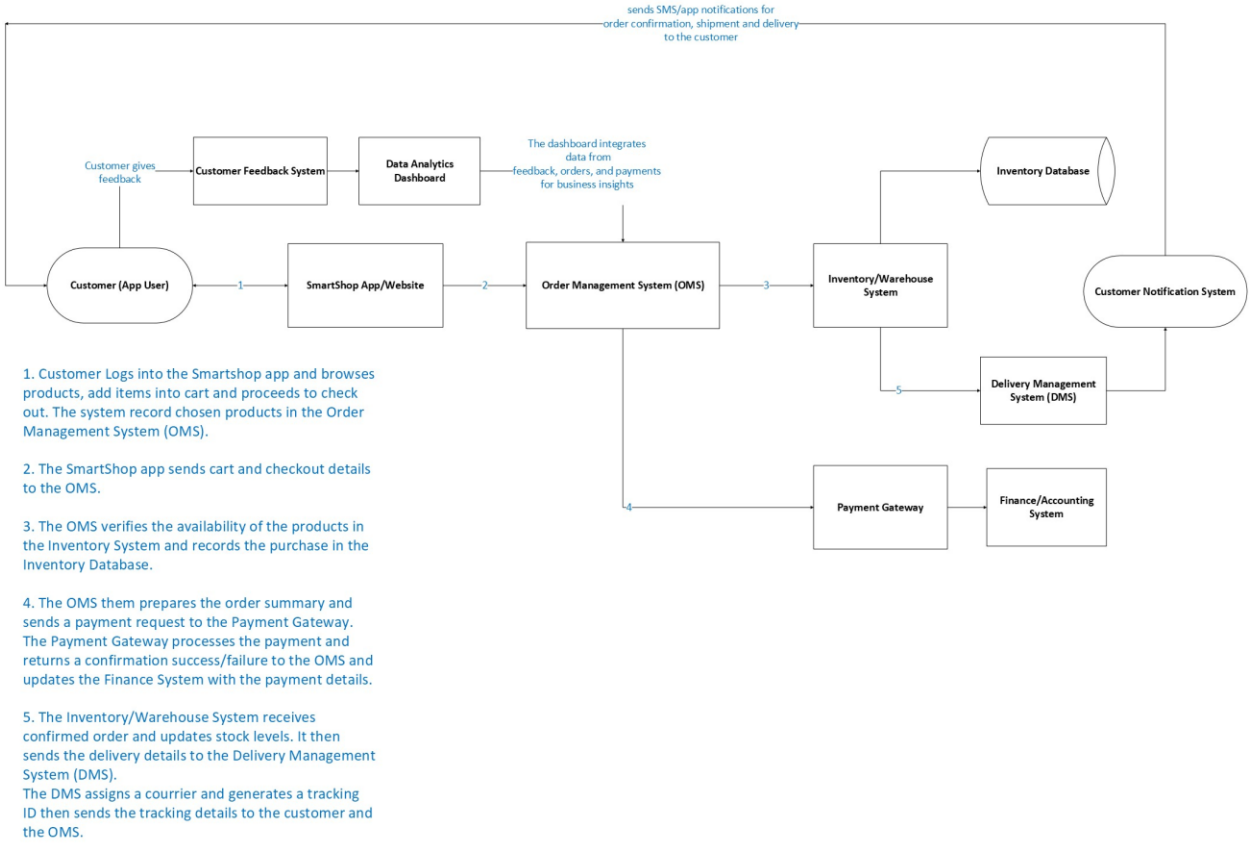
Mapping stakeholders ensures that communication is targeted and effective, preventing delays and helping a Business Analyst focus on the right decision-makers.

Type	Stakeholder	Power	Interest
Internal	Project Sponsor	High	High
	Product Manager	High	High
	Business Analyst	Low	High
	Software Developer	Low	High
	Operations / Logistics Manager	Low	High
	Customer Support Team	Low	High
	Marketing Manager	Low	Medium
	Data Analyst	Low	High
External	Customers (App Users)	Low	High
	Delivery Service Providers	High	Low
	Payment Service Provider	High	Low
	Suppliers and Vendors	High	Low

Customer Journey Map

The Customer Journey map illustrates the steps and processes a customer follows as they interact with the app, from login to checkout and providing feedback.

The Customer Journey map here is created using Microsoft Visio:



The front-end version of the journey is that *a customer logs in to the Smartshop app, browses products, adds items to the cart, purchases the product, checks out then receives the products.* There are a lot more activities that happen in the background connecting several departments, including *the Warehouse System, Inventory Database, Payment Gateway, the Finance System, and the Delivery Management System* that connect with the frontend side.

Scenario Findings:

After mapping the customer journey and analyzing the system processes, and the Customer and the Head of Customer Experience feedback, the Business Analyst determined some core issues:

1. High Cart abandonment issue:

Caused by a complicated checkout process and payment confirmation delays. Customers are complaining of:

- *Slow payment confirmation:* The payment gateway sometimes times out without taking the customer to the next page, showing a blank page. Sometimes users are unsure if the payment went through or not.
- *Unclear delivery options*: delivery cost is not displayed until the final step. The last-minute surprises discouraged users from completing purchases.

2. Inconsistent order tracking:

Results from weak integration between the Order Management System (OMS), Payment Gateway, and Delivery Management System (DMS), since they do not exchange data smoothly. Customers say they receive conflicting or delayed delivery updates on their orders.

Normally, when a customer places an order, OMS records it. The Payment Gateway confirms payment instantly and sends a confirmation back to OMS. Then OMS updates the DMS to assign a rider and start delivery. The customer then gets a live update on their order with 'your order has been placed – rider assigned – on the way – delivered'.

But due to the weak integration, the OMS does not always receive payment confirmation on time. The order may stay 'pending payment' even though the customer already paid.
That means the DMS does not get the latest order status, meaning it cannot trigger delivery promptly. The customer, hence, gets late updates or conflicting updates on their order.

Scenario Recommendations:

1. Introduce a visible progress indicator, e.g., step 1 of 3, to show customers how close they are to completion.
2. Use API architecture to synchronize data from the OMS, Payment Gateway, and DMS instantly, such that every change should trigger an automatic update across all systems.
3. Smartshop should make delivery fees visible much earlier in the customer journey, immediately after entering a delivery location. This eliminates last-minute surprises and builds transparency and trust.
4. Display clear error messages when a payment fails, e.g., network error, instead of reloading the whole page.
5. Implement automated in-app notifications for key milestones, e.g., order confirmed', rider assigned.
6. Build an internal dashboard for customer service teams to view the real-time order lifecycle from payment to delivery.

Conclusion

Implementing these recommendations will streamline the checkout process, reduce cart abandonment, and improve real-time communication across systems. Strengthening data integration through the recommendations will also enhance transparency, build customer trust, and boost overall user satisfaction.