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Subset 4

The success of the SmartMerch system depends on delivering accurate, real-time inventory visibility, minimizing wait times, and ensuring customers can quickly locate and purchase merchandise without the frustration traditionally associated with festival merch booths. Critical success factors include precise forecasting of demand, efficient inventory replenishment, seamless communication between staff roles, and a consistently smooth ordering and pickup process for attendees. The system must also adapt to rapidly shifting patterns in sales and customer behavior, ensuring merchandise remains available, accessible, and properly distributed throughout the festival grounds.

The large language model serves as the intelligent interface that connects customers, staff, and inventory systems into a unified, responsive experience. The LLM interprets user questions, recommends alternatives when items run out, and guides customers through purchase or pickup actions. At the operational level, it streamlines communication by detecting low-stock patterns, supporting restock decisions, and providing actionable insights derived from live data and AI forecasting. SmartMerch system should enhance responsiveness and efficiency required to improve sales, reduce operational friction, and elevate the festival merchandise experience.

Link to the product:

<https://notebooklm.google.com/notebook/4468697e-e816-4754-b1a9-2dcacc69bdf?authuser=2>

Optimizing Festival Merchandising with App Technology

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Optimizing Festival Merchandising with App Technology

4 sources

The sources outline the proposal and development of **SmartMerch**, a prototype mobile application designed to overhaul the inefficient merchandise purchasing experience at large music festivals like Coachella. The initial analysis identifies problems such as long wait times and stock unavailability, proposing a solution that incorporates **AI-driven forecasting and real-time inventory** integrated into a festival app. Subsequent documents provide the **organizational structure, workflow diagrams (BPMN and Activity Diagrams), and UX/UI mockups** for the app, detailing the customer journey from browsing and pre-ordering to receiving real-time pickup notifications. The developed prototype, built with Google Firebase, demonstrates key features such as **secure payment, AI recommendations, live support, and clear tracking** of order status and booth locations to significantly boost sales and customer satisfaction. The overall objective is to establish a seamless, hybrid in-app and in-person system for festival merchandise sales.

Through Notebook LLM, SmartMerch explains the purpose of the app, the problems it solves, and the technologies involved, including forecasting, real-time inventory, and workflow diagrams. This highlights the model's ability to understand multiple sources and present the overall system in a professional and easy-to-read way.

Chat ⓘ



What is the cost of an Aura Tee?

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Based on the sources, the cost of an **Aura Tee** is **\$35.00** ¹ ².

The SmartMerch prototype screen captures show the Aura Tee, described as a "vibrant tee that changes color with your mood," priced at **\$35.00** ¹ ². This price is consistent in both the general "Festival Gear" merchandise view and the item-specific "Aura Tee" product page ¹ ².

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Who is the CEO?

Which item is \$60.00?

What is the Sunset Hoodie status?

This screenshot demonstrates how the SmartMerch LLM retrieves product pricing from uploaded festival merchandise data. When the user asks for the cost of an Aura Tee, the model correctly identifies and returns the item price.

i'm 25 female what merchandise do you recommend

That is an excellent question! I can certainly help you find the perfect festival fit. Based on your age group (Gen Z) and general consumer trends we monitor, I can provide personalized recommendations that align with your style preferences for quality, value, and design. This is part of my **AI Recommendations** feature, which uses collected demographic data to suggest ideal merchandise 1

Here are the items I recommend, focusing on style, function, and value:

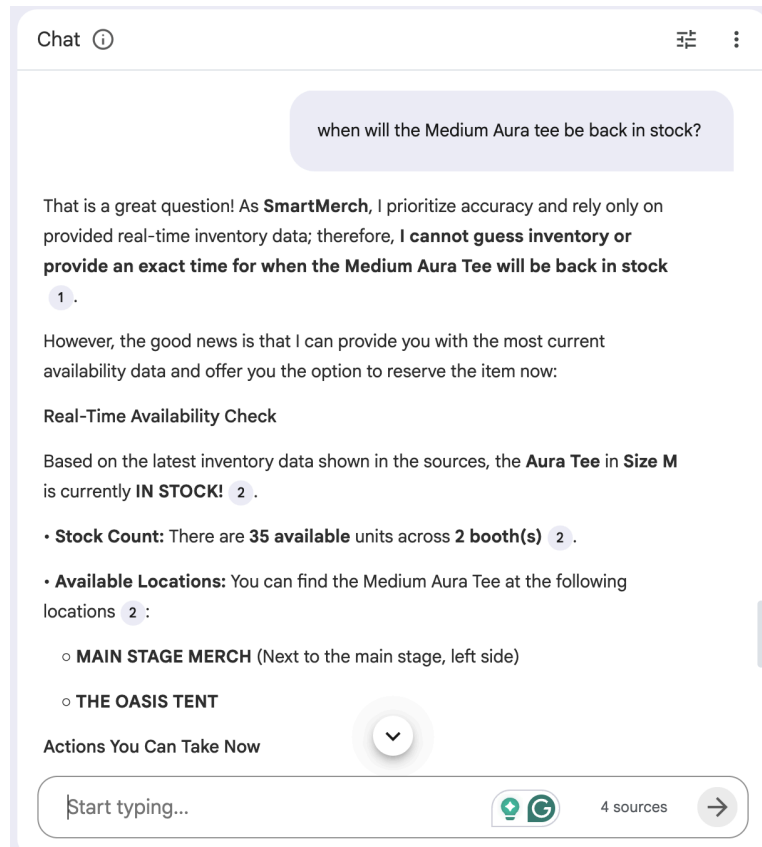
Apparel Recommendation: The Aura Tee (\$35.00)

The **Aura Tee** is likely to align best with your preferences for fashionable apparel 4 .

• **Design & Style:** As a vibrant tee that changes color with your mood, it appeals to the Gen Z preference for **fashionableness**, trend-following, and items that allow for self-expression 5 6 . Although some Gen Z consumers show loyalty to established global brands, they are also highly driven by unique design and style 4 7 .

• **Aesthetic & Value:** Research shows that consumers in your demographic often prefer **simple, minimalist T-shirt designs** 8 9 . At **\$35.00**, the Aura Tee also falls within a strong value price point, which satisfies the priority for **price/value consciousness** shared by both Gen Z and Millennials 5

Here, a source collecting demographic data and trend insights was added to generate personalized merchandise recommendations. The LLM identifies the Aura Tee as a strong match based on style preferences associated with Gen Z consumers, emphasizing design, self-expression, and price sensitivity. This interaction showcases how SmartMerch can act as a personalized shopping assistant through targeted recommendations.



Improvements that will need to be adjusted are the real-time stock updates when the product is live. On the back-end staff will need to input this information first, but it is essential in order for the consumer to have a seamless experience. However, you can see the LLM describes where the merchandise is located.