Home Task - AI Driven E-Commerce Innovation

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For the Role of GenAI Exploration Lead in Zap

Part 1: Ideation

Idea 1: The "AI Buying Advisor"

- **1. Feature Name:** AI Buying Advisor

- **2. Problem it solves (from the user's perspective):** Users are often overwhelmed by technical specifications and a huge number of options when shopping for complex products (e.g., electronics, large appliances). They struggle to find the right product that perfectly fits their specific needs and budget. Additionally, they might have trouble navigating the site's categories, as their desired product may not fit neatly into a single, pre-defined category.

- **3. How it works (AI logic, data, interactivity):** This feature provides a conversational chat interface powered by a Large Language Model (LLM).

  - **User Interaction:** The user starts a conversation in natural language, describing their needs (e.g., "I need a new TV for my living room, but I also want it to be good for gaming").

  - **AI Logic:** The AI assistant uses Natural Language Processing (NLP) to understand the user's intent and preferences. It asks follow-up questions to clarify requirements (e.g., "What's the distance from your sofa to the TV? Do you have a specific budget in mind?").

  - **Data & Recommendations:** The AI then cross-references the user's needs with Zap.co.il's product database. It considers product specifications, prices from different sellers, and user reviews (using sentiment analysis to gauge general satisfaction with certain features).

  - **Personalized Results:** The assistant presents a concise, easy-to-understand summary of the top three or four product recommendations. It explains *why* each product is a good fit, highlighting pros and cons relative to the user's specific criteria.

  - **Store Proximity:** If a user expresses a need to purchase quickly, they can define a specific geographical radius, and the AI will include recommendations for stores within that area that carry the product, if that information is available from the sellers.

- **4. Where it fits on the site or app (UX placement):** A floating chat bubble or a dedicated "Get an AI Recommendation" button would be placed on the home page and on high-level category pages (e.g., "Electronics").

- **5. Expected impact (on user experience, engagement, or business value):**

  - **User:** Increases user confidence and reduces decision-making time. It provides a more personalized and human-like shopping experience.

  - **Business:** Increases conversion rates by guiding users directly to the right products, boosts customer engagement, and potentially reduces the number of product returns due to better-informed purchase decisions.

Idea 2: "Smart Review Summarizer"

- **1. Feature Name:** Smart Review Summarizer

- **2. Problem it solves (from the user's perspective):** Reading through hundreds or even thousands of product reviews is time-consuming and inefficient. Users want to quickly grasp the consensus on a product's strengths and weaknesses without having to manually sift through conflicting or repetitive comments.

- **3. How it works (AI logic, data, interactivity):** This feature uses an LLM and sentiment analysis to process and synthesize all available user reviews for a given product.

  - **Data Analysis:** The AI scrapes and analyzes the text of all product reviews on the Zap.co.il page.

  - **Topic Modeling:** It identifies key themes and topics that are frequently mentioned by reviewers (e.g., "battery life," "camera quality," "build material," "customer service").

  - **Sentiment Synthesis:** The AI performs sentiment analysis on the text related to each theme to determine if the overall feedback is positive or negative.

  - **Summary Generation:** It then generates a structured, easy-to-read summary with two main sections: **"Key Pros"** and **"Key Cons"**. Each point is a concise sentence summarizing the collective opinion on that specific feature.

- **4. Where it fits on the site or app (UX placement):** The summary would be prominently displayed at the top of the "Reviews" section on every product detail page, just above the individual user comments.

- **5. Expected impact (on user experience, engagement, or business value):**

  - **User:** Saves a significant amount of time and helps users make a faster, more objective decision. It builds trust by transparently presenting a synthesized view of all feedback.

  - **Business:** Increases the credibility of the review section and can lead to higher conversion rates as users feel more confident in their choices.

Idea 3: "Visual & Contextual Search"

- **1. Feature Name:** Visual & Contextual Search

- **2. Problem it solves (from the user's perspective):** Users sometimes see a product in the real world (e.g., a friend's new pair of sneakers or a piece of furniture in a magazine) but don't know the name, brand, or model. They struggle to find it using traditional keyword search.

- **3. How it works (AI logic, data, interactivity):** This feature combines a Computer Vision (CV) model with an LLM to enhance product discovery.

  - **Visual Search:** The user uploads an image of the item they're looking for. The CV model analyzes the image to identify the object and its key visual features (color, shape, pattern, texture).

  - **Product Matching:** It then queries Zap.co.il's product catalog to find visually similar items.

  - **Contextual Understanding:** The AI (LLM) understands the context of the image. For instance, if the photo shows a TV in a living room, it might also suggest complementary products like a soundbar, a TV stand, or ambient lighting.

  - **Combined Results:** The system displays a list of the most relevant products from the catalog, ranked by visual similarity and contextual relevance, along with price comparisons from different sellers.

- **4. Where it fits on the site or app (UX placement):** A "Search by Image" icon or button would be integrated directly into the main search bar on the home page and throughout the site.

- **5. Expected impact (on user experience, engagement, or business value):**

  - **User:** Makes the product discovery process more intuitive and convenient. It turns the entire world into a searchable product catalog.

  - **Business:** Drives more traffic to product pages, especially for impulse purchases. It increases user engagement and can lead to a higher average order value through contextual cross-selling.