

# PricePal - An E-Commerce Price Comparison Application

## THE TEAM

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## Software Product Management

Group AE – Assignment 1

# PROBLEM STATEMENT

## **Overview: The Price Comparison Dilemma in E-Commerce**

In the bustling world of e-commerce, consumers are constantly on the hunt for the best deals across multiple platforms. Despite the convenience of online shopping, this quest for savings presents significant challenges that impede a seamless shopping experience. Our research highlights the following consumer pain points:

**Time-Consuming Price Comparison Process:** A staggering 80% of online shoppers find the task of comparing prices across different websites to be excessively time-consuming and cumbersome. This inefficiency often leads to missed opportunities for better deals and discounts.

**Desire for Automated Deal Tracking:** Approximately 65% of consumers express a strong preference for an automated system that can track and highlight the best deals, thus simplifying their shopping experience and ensuring they never miss out on savings.

**Reliability Issues with Existing Tools:** While 50% of users rely on browser extensions for price comparison, many find these tools to be inaccurate and unreliable. This inconsistency undermines trust and reduces the overall effectiveness of these extensions.

PricePal aims to address these problems by providing a comprehensive, AI-powered solution that consolidates prices, deals, and availability from multiple e-commerce platforms, thus revolutionizing the way consumers shop online.

## CUSTOMER SEGMENT - WHERE IT WILL BE USED

The Primary Customer Segments for PricePal Include:



**Price-Conscious Shoppers:** Individuals who are keen on saving money and finding the best deals across various e-commerce platforms. They often spend a considerable amount of time searching for discounts and comparing prices but desire a more efficient solution.

**Example:** A college student on a budget who frequently shops online for electronics, books, and accessories. By using PricePal, they can quickly find the best deals without the hassle of manual comparisons.



**Frequent Online Buyers:** Regular online shoppers who want to stay updated with the latest deals, discounts, and price drops across multiple platforms. They demand a reliable solution to keep track of these deals effortlessly.

**Example:** A working professional who regularly purchases groceries, household items, and clothing online. PricePal helps them receive real-time updates on price drops and exclusive deals, saving time and money.



**Small Businesses:** Enterprises looking to purchase products in bulk at competitive prices to manage their operational costs effectively. They need a tool that provides insights into the best wholesale deals and exclusive offers.

**Example:** A small cafe owner who buys kitchen supplies, electronics, and office equipment in bulk. Using PricePal, they can ensure they are getting the best prices, thereby optimizing their expenditure.

# PAIN POINTS

## Key Pain Points Addressed by PricePal:

**Time-Consuming Price Comparison Process:** Online shoppers frequently find themselves spending excessive amounts of time navigating and comparing prices across multiple e-commerce platforms.

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**Lack of Automated Deal Tracking:** Many consumers desire a system that can automatically track and highlight the best deals for them. Without such automation, they risk missing out on savings and discounts that could enhance their shopping experience.

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**Inaccurate and Unreliable Browser Extensions:** While some users rely on browser extensions for price comparison, they often encounter issues with the accuracy and reliability of these tools.

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**Fragmented Shopping Experience Across Platforms:** Users face difficulties in consolidating their shopping experience across various platforms like Amazon, Flipkart, Swiggy Instamart, and OLX. This fragmentation leads to inefficiencies and a less cohesive shopping journey.

# PRODUCT IDEA

The proposed product is an **AI-powered price comparison and deal-tracking app** designed to help users **find the best prices, track discounts, and make cost-effective purchases across multiple e-commerce platforms.**



**Smart Price Comparison:**  
Uses AI to compare prices across platforms like **Amazon, Flipkart, Swiggy Instamart, and OLX** in real-time.



**Multi-Platform Deal Tracking:** Provides a **centralized dashboard** to track price drops, offers, and discounts from multiple online stores.



**AI-Based Price Alerts:**  
Detects price changes and sends **real-time notifications** for the best deals and lowest prices.



**Personalized Cost Optimization:** Uses AI to analyze shopping habits and suggest **cost-saving alternatives**, such as second-hand product listings from OLX.



**Budget Planning & Forecasting:** Helps users set a shopping budget and predicts **future price trends** to maximize savings.

## TARGET MARKET

The target market for **PricePal**, the AI-powered price comparison and deal-tracking app, includes:



**Frequent Online Shoppers:** Consumers who regularly shop online and actively compare prices across multiple e-commerce platforms. They seek an efficient way to find the best deals without the hassle of manual comparisons.

**Example:** A working professional who frequently shops on Amazon, Flipkart, and Myntra but struggles to track price drops and discounts.



**Budget-Conscious Buyers:** Students, families, and bargain hunters who prioritize cost savings and look for the best possible deals on their purchases.

**Example:** A college student looking for the most affordable laptop by comparing prices on Amazon, Croma, and Reliance Digital in real time.



**Tech-Savvy Shoppers & Deal Hunters:** Users who already rely on price comparison tools but are frustrated by their inaccuracy and inconsistency. They prefer a more reliable AI-powered solution to track and receive real-time price alerts.

**Example:** A tech enthusiast using **multiple browser extensions** for tracking gadget prices but facing inconsistent price updates.

# PR ODUCT OPPORTUNITY

## Value proposition

- ▣ **Time Efficiency:** Automates the price comparison process, allowing users to quickly find the best deals without manually checking multiple websites.
- ▣ **Centralized Deal Tracking:** Consolidates prices, discounts, and availability from multiple e-commerce platforms in one dashboard, reducing the hassle of switching between different websites.
- ▣ **AI-Powered Smart Recommendations:** Uses AI to analyze pricing trends and notify users of price drops, flash sales, and personalized deals in real time.
- ▣ **Improved Shopping Experience:** Eliminates the need for unreliable browser extensions by providing a more accurate, seamless, and trustworthy price comparison solution.

# ASSESS THE OPPORTUNITY

We created a Google Form to gather customer insights and engaged with each respondent individually to better understand their pain points and needs. Below are the key takeaways from each user.

**User 1:** "I usually compare prices manually, but hidden costs like shipping and taxes make it difficult to know the real price. I've occasionally missed better deals, so I'd love AI-powered recommendations on the best time to buy. I would definitely use a tool like this."

**User 2:** "I face the same issue with hidden costs. I check multiple websites before purchasing, but I'd really appreciate automatic price drop alerts. It would save me a lot of time, and I'd use it frequently."

**User 3:** "I often miss better deals after purchasing because prices drop unexpectedly. Automatic price drop alerts would be extremely useful for me, and I'd use this tool regularly."

**User 4:** "Comparing prices manually is time-consuming, and I occasionally find out later that I could have saved money. Price drop alerts would make my life easier, and I'd use this tool frequently."

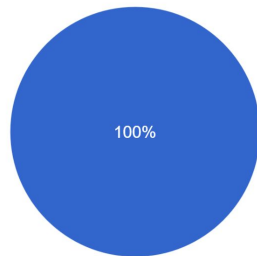
**User 5:** "For me, the biggest challenge is how often prices change. I rarely miss deals because I research a lot, but having price drop alerts would still be a great feature."



# Customer Survey Feedback

How do you currently compare prices when shopping online?

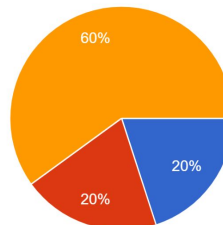
5 responses



- I manually check multiple e-commerce websites before purchasing.
- I use a price comparison website or tool.
- I rely on discounts and deals shared by influencers or social media.
- I usually buy from my preferred store without comparing prices.

What is the biggest challenge you face when trying to find the best deal online?

5 responses

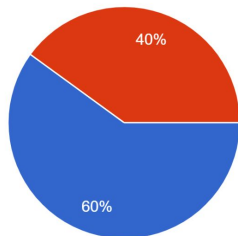


- Prices change frequently, and I miss the best deals.
- It takes too much time to manually compare prices across websites.
- Hidden costs like shipping and taxes make it hard to know the real price.
- I don't get alerts or notifications when prices drop.

# Customer Survey Feedback

What additional feature would be most useful in a price comparison tool?

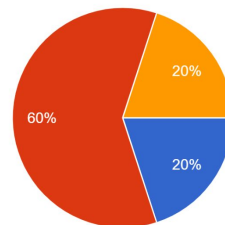
5 responses



- Automatic price drop alerts.
- AI-powered recommendations on the best time to buy.
- Cashback offers and promo codes applied automatically.
- Delivery time comparison across different e-commerce sites.

How often do you miss out on a better deal after making a purchase

5 responses

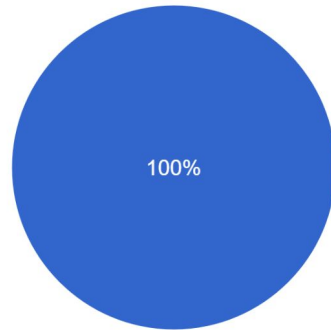


- Frequently – I often find out later that I could have saved money.
- Occasionally – It happens sometimes, but I don't track it closely.
- Rarely – I usually research well before buying.
- Never – I don't care about comparing prices.

# Customer Survey Feedback

If a tool could help you find the lowest price, apply coupons, and track price changes, how likely would you be to use it?

5 responses



- Very likely – I would use it for most of my purchases.
- Somewhat likely – I'd try it for expensive purchases.
- Not sure – I don't compare prices often.
- Unlikely – I prefer to shop without comparison tools.

Google Form Link: <https://forms.gle/6YbJPzEwqXLY6P679>

# ASSESS THE OPPORTUNITY

## Customer Feedback Summary

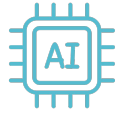
- **Manual Price Comparison is Time-Consuming:** All users manually check multiple e-commerce websites before purchasing. They find it tedious and time-consuming to compare prices across different platforms.
- **Hidden Costs Create Uncertainty:** The majority of users struggle with hidden shipping fees and taxes, making it difficult to determine the actual final cost.
- **Frequent Price Changes Lead to Missed Savings:** Some users have frequently missed out on better deals after making a purchase, realizing later that prices had dropped. Others say it happens occasionally, but they don't actively track price fluctuations.
- **Lack of Price Drop Alerts is a Major Concern:** The most requested feature was automatic price drop alerts, which would notify users whenever a product's price decreases.
- **Need for AI-Powered Buying Recommendations :** Some users expressed interest in AI-driven insights to predict the best time to buy based on price history and trends.
- **High Interest in a Smart Price Comparison Tool:** All users stated they would be "very likely" to use a tool that automatically finds the lowest price, applies coupons, and tracks price changes.

# FINAL PRODUCT



## Real-Time Price Comparison

Instantly compare product prices across multiple e-commerce platforms to find the best deal.



## AI-Powered Deal Recommendations

Smart suggestions based on your shopping habits, price trends, and best time to buy.



## Price Drop Alerts & Notifications

Set up price alerts and receive instant updates when the price of a tracked product drops.



## Seamless Checkout Integration

Redirect users to the best-priced seller with auto-applied promo codes and cashback offers.



## Delivery Time Comparison

Compare shipping times across platforms to choose the fastest and most convenient option.



## Cost Transparency

Get a detailed breakdown of total costs, including shipping, taxes, and hidden fees before checkout.



## User Dashboard & Watchlist

Save favorite products, track price changes, and monitor deal trends.



## Exclusive Cashback & Promo Codes

Unlock additional savings with cashback deals and automatically applied discount codes.



## B2B API Integration

Businesses and e-commerce platforms can integrate PricePal's price tracking and comparison data.

# FINAL VALUE PROPOSITION

**Saves Time & Effort:** No more hopping between multiple ecommerce websites—PricePal instantly compares prices, finds the best deals, and alerts you when prices drop, saving you valuable time and effort.

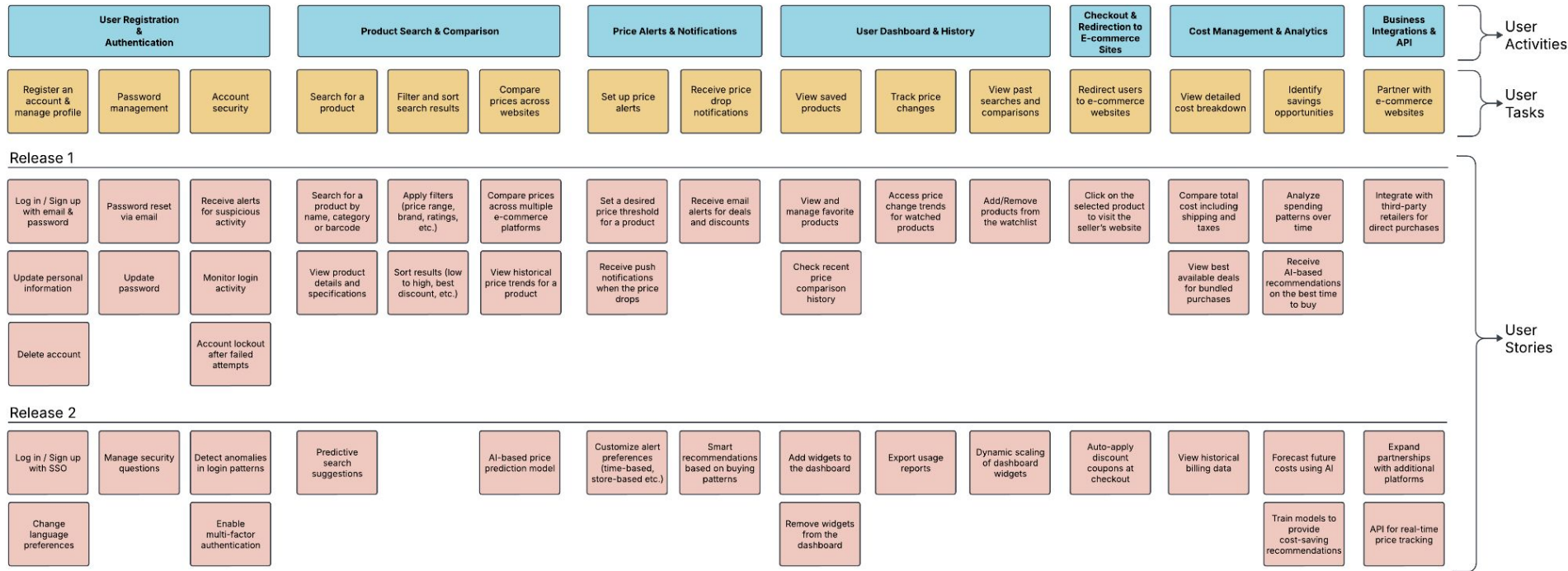
**Personalized Deal Recommendations:** Our AI-powered system learns your shopping preferences and suggests the best products, discounts, and ideal buying times, so you never miss out on a great deal.

**Exclusive Cashback & Deals:** Get access to special cashback offers, promo codes, and exclusive discounts that help you save more every time you shop online.

**Seamless Purchase Integration:** With one-click checkout redirection and auto-applied coupons, PricePal ensures a hassle-free shopping experience, so you can buy with confidence.

**Delivery Time Comparison:** Compare delivery times across different sellers to choose the fastest and most convenient shipping option, helping you get your purchases when you need them.

# STORY MAP



# LEAN CANVAS

<b>Problem</b>  Price Comparison is time-consuming  Inconsistent discount & deals  Multiple platform create confusion  Lack of transparency in discounts, hidden charges, and delivery times	<b>Solution</b>  One-click comparison  Real-time alerts for discounts  AI-driven price aggregation	<b>Value propositions</b>  Saves Time & Effort  Personalized Deal Recommendations  Exclusive Cashback & Deals  Seamless Purchase Integration  Delivery Time Comparison	<b>Unfair Advantages</b>  AI-Powered Predictive Pricing  Multi-Platform Coverage  Smart Recommendation Engine	<b>Customer segments</b>  Price-conscious Shoppers  Resellers & Small Businesses  Frequent Online Buyers  Gamers & Tech Enthusiasts  Parents & Household Shoppers
<b>Existing Alternatives</b>  Browser Extension - Price Comparison Tool  Web Applications - Pricee, Buyhatke	<b>Key Metrics</b>  User Enagement & Retention  Conversion Rate on Recommendations  Deal Tracking Efficiency		<b>Channels</b>  Mobile App(IOS, Android)  Browser Extension  Web Application	
<b>Cost structures</b>  API, AI Development & Maintainece  Marketing & User Acquisition  Cloud Hosting			<b>Revenue streams</b>  Affiliate Commissions  Premium Subscriptions & Ad Revenue  Sponsored deals  Data Analytic Services	



# KEY LEARNINGS – VEMURI KETHAN (2024TM93549)

- **Identifying Customer Pain Points and Needs:** Understanding the specific pain points of online shoppers has been critical in developing features that effectively address their needs.
- **Value of Customer Feedback and Reviews:** Incorporating customer feedback has allowed us to create a product that truly solves user problems and provides significant value.
- **Understanding the E-Commerce Landscape:** Recognizing the complexities of comparing prices across various platforms has enabled us to design a user-friendly and comprehensive solution.
- **Real-Time Data Accuracy and Privacy Concerns:** Ensuring real-time data accuracy and addressing privacy concerns have been essential in building trust and reliability.
- **Opportunities for Collaboration and Teamwork:** Effective collaboration and teamwork have been key to refining and enhancing PricePal through shared insights and efforts.

# KEY LEARNINGS – GONUGUNTA PRIYATHAM BRAHMA (2024TM93581)

- Customer interviews are a key aspect of product management as they give us a new perspective of the needs and requirements
- Validating product ideas through direct user feedback helps refine features and ensures that the product truly addresses user pain points
- User research highlighted that hidden costs, price fluctuations, and time-consuming comparisons are major concerns, emphasizing the need for automation and transparency in pricing.
- Prioritizing features based on user demand, such as AI-driven price predictions and automated price drop alerts, increases the likelihood of product adoption and success.

# KEY LEARNING- AMRUTA PARWATIKAR (2024TM93540)

- Understanding customer pain points and cloud cost challenges has been essential in developing an AI-powered cost management solution.
- Incorporating user insights helped refine the product, ensuring it effectively addresses cloud cost optimization and resource management.
- Gaining knowledge about handling multiple cloud service providers and optimizing costs across different platforms.
- Working in a dynamic team environment enhanced problem-solving skills and improved overall product development efficiency.

# KEY LEARNINGS – MANAN PARMAR(2024TM93030)

## **Customer-Centric Approach**

I realized the importance of segmenting the customer base (Enterprises, IT departments, MSPs) to design features that cater to their specific needs. Analyzing real-world examples like Netflix and Adobe helped me understand the complexities these companies face in managing cloud costs.

## **Harnessing the Power of AI**

Integrating AI for real-time cost monitoring, anomaly detection, and resource management was a game-changer. Additionally, using predictive analytics for budgeting and forecasting taught me how valuable historical data can be in anticipating future costs.

## **Addressing Core Pain Points**

I focused on solving key issues such as over-provisioning and unpredictable cloud costs. Developing tools for cost optimization and centralized control across multiple cloud platforms was crucial in providing value to users.

## **Strategic Market Focus**

Understanding that the product needed to be scalable was essential, especially to cater to both large enterprises and SMEs. Learning from companies like GE and Slack, I ensured the product could adapt and grow with customer needs.

# KEY LEARNINGS – UDYAGIRI VENKATAGURU PRASAD (2022MT93653)

- Learned how to clearly define a business plan along with determining the business's problems, identifying its target market, and creating a unique value proposition that makes it sustainable and different.
- Gathering customer feedback helped me understand their needs and helped me to identify pain points and areas for improvement in our product and services.
- The story map exercise helped to clarify the different features and components of the product and how they fit together to solve customer pain points.
- Importance of the Startup Canvas which helps in summarizing the entire Business plan and its key features and can also help in getting funding from investors.

**THANK YOU**

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## CUSTOMER SEGMENT - WHERE IT WILL BE USED

The Primary Customer Segments for PricePal Include:



### **Users Seeking Real-Time Discounts and Cashback**

**Offers:** Shoppers who focus on maximizing their savings through cashback offers and real-time discounts. They need a solution that alerts them about these offers instantly.

**Example:** A tech-savvy individual who is always on the lookout for cashback offers on gadgets and accessories. PricePal provides notifications about such offers, helping them make informed purchase decisions.



### **Individuals Looking for Second-Hand Products:**

Consumers interested in buying quality second-hand products from platforms like OLX. They require a tool that aggregates listings and highlights the best deals.

**Example:** A young professional moving to a new city who needs to furnish their apartment cost-effectively. PricePal assists them in finding the best deals on second-hand furniture and appliances.



### **Patients Seeking Affordable Medicine Options:**

Individuals searching for cost-effective options for medicines and healthcare products available on e-commerce platforms. They need a system that can compare prices and availability efficiently.

**Example:** A senior citizen managing chronic health conditions who needs to purchase medicines and health supplements online. PricePal helps them find the most affordable options on various platforms.

# PAIN POINTS

## Key Pain Points Addressed by PricePal:

**Challenges in Tracking Real-Time Discounts and Cashback Offers:** Shoppers need timely updates on discounts and cashback offers to maximize their savings. However, without an efficient alert system, they might miss critical opportunities to save money on their purchases.

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**Difficulty in Finding Second-Hand Products:** Individuals seeking second-hand products, such as those listed on OLX, often struggle to find the best deals due to the lack of a centralized comparison tool. This challenge can result in missed opportunities for cost-effective purchases.

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**Concerns Over Data Privacy:** Many users are wary of using price comparison tools due to concerns about data privacy. Ensuring secure and anonymized data collection is crucial to gaining their trust and encouraging widespread adoption of the app.