AI E-commerce Consultant

Rakathon 2024

Rakuten

Background

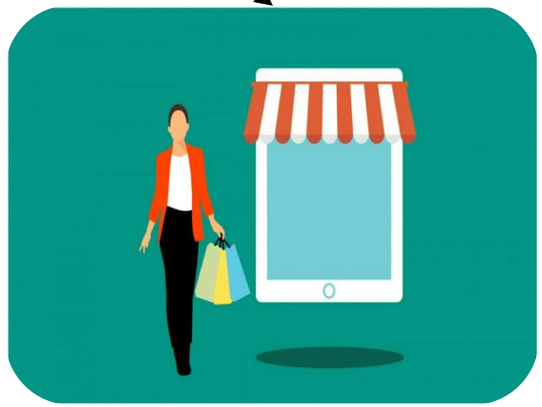
Users of E-commerce Marketplace

E-commerce Marketplace

Sell

Buy

Merchant/Seller



Consumer

Journey of a Merchant

Onboarding

- Business Verification
- Payments
- Shipping

Newcomers

- Set up new items
- Learning the platform
- First sales

Gain experience

- Inventory management
- Optimizing listings
- Gathering reviews

Scaling the business

- Expanding product range
- Marketplace Advertising
- Data driven decision making

Top Seller

- Customer loyalty
- Significant sales volume
- Operational mastery

Marketplace provides extensive support to Merchants to help them Grow

Seller Dashboard

Catalog Management

Advertising Recommendation

Data Analytics

Inventory Management

Shipping & Fulfillment

Many more tools….

E-commerce Merchant

E-commerce Consultant(ECC)

Problem

Potential or New E-commerce Merchant need lot of handholding

Embarking on an e-commerce venture is thrilling but fraught with challenges. New entrepreneurs often face significant barriers due to a knowledge gap and lack of guidance during the crucial initial stages. This absence of foundational support and strategic insight can hinder their ability to navigate the complexities of the e-commerce landscape, ultimately affecting their potential to build a sustainable and profitable business

How to start e-commerce business?

How should I increase my sales?

Which category I should start selling?

Which are the current product gaps which I can fulfill ?

How can I increase the awareness of my products?

Existing Merchants get frustrated because of Information overload and lack of directions

Information Overload

Marketplace tools provided by e-commerce companies often inundate sellers with an overwhelming amount of information, particularly challenging for new sellers to navigate and utilize effectively

Resource and Expertise Limitations

E-commerce sellers, especially those new to the market, face significant challenges due to resource constraints and a lack of specialized expertise. Many sellers do not have access to AI experts or advanced analytical tools, making it difficult to leverage data for strategic decision-making

Marketplace Seller Dashboard/Tool

E-commerce Merchant

E-commerce Consultant(ECC)

Insufficient Personalized Support

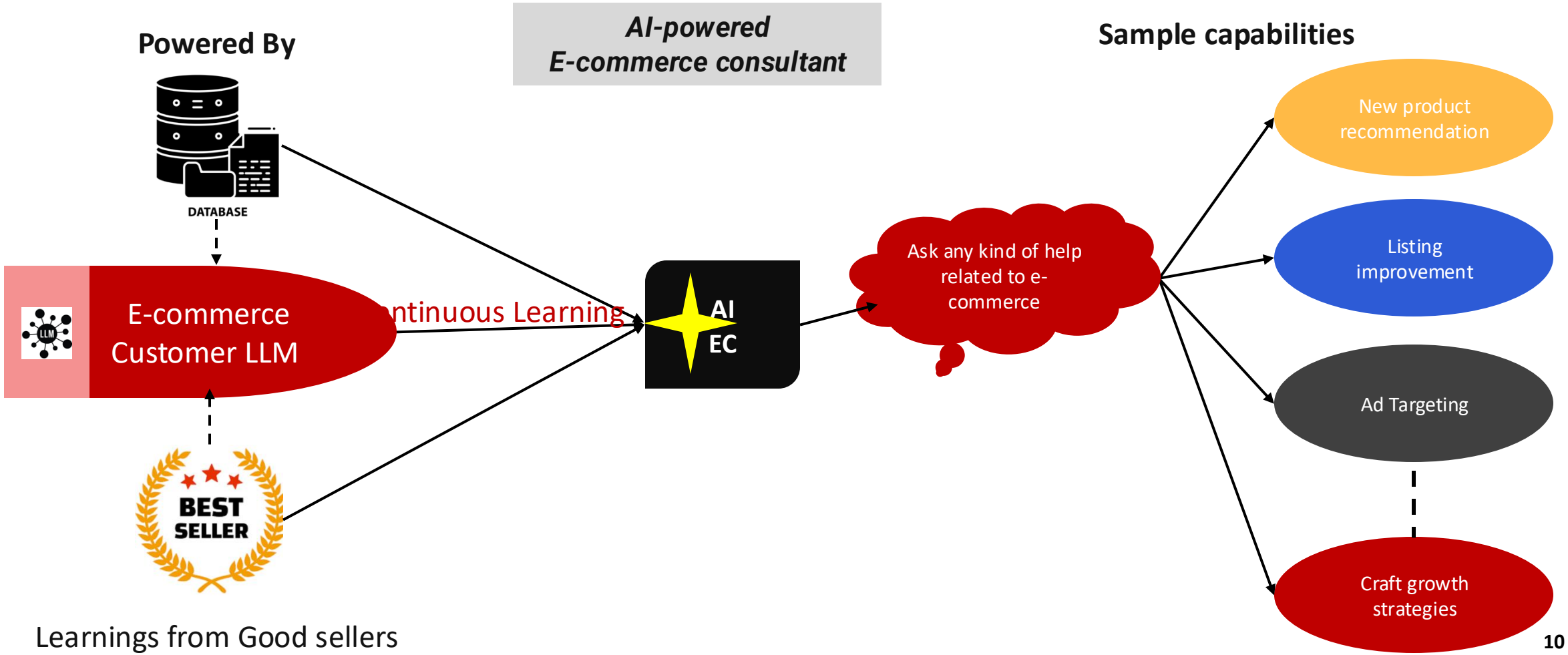
Traditional **e-Commerce consultants**, often mapped to multiple sellers, find it challenging to provide personalized and effective support to each merchant. This results in suboptimal growth strategies and missed opportunities.

ECC mapped to multiple merchants

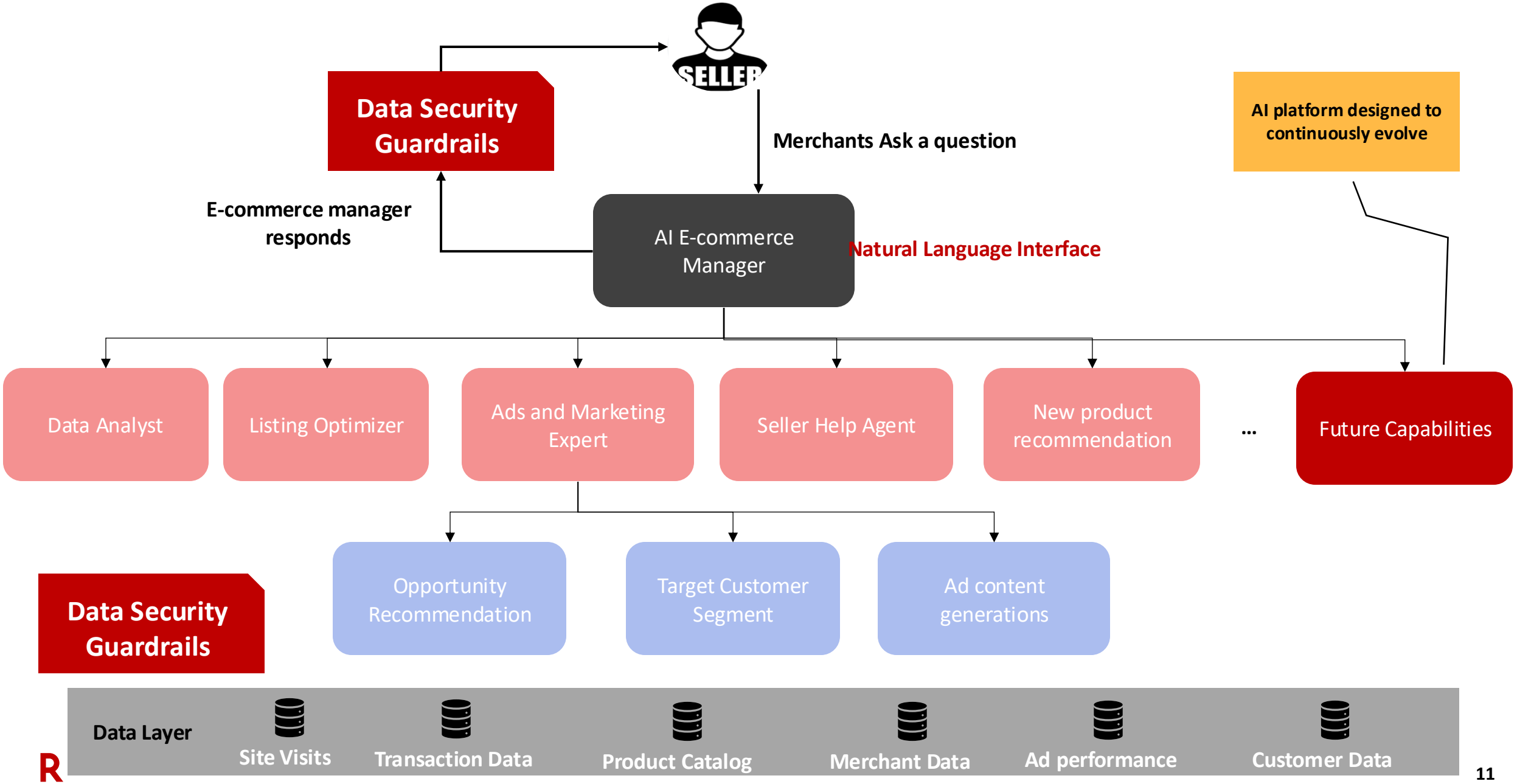
Solution

Solution: AI-Powered E-Commerce Growth Consultant

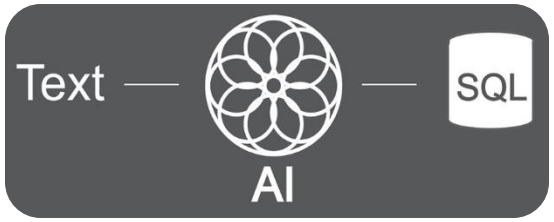
Develop an AI-powered e-commerce consultant that leverages extensive knowledge from site visits and transaction data to provide expert insights. This AI consultant will specialize in uncovering actionable insights, crafting tailored growth strategies, and possessing a deep understanding of each seller's business to drive sustainable success.



Multi-agent Framework to power AI E-commerce Consultant



How are we using LLMs and integrating them to build AI Ecommerce Consultant?



Data Analysis

Banner content generation

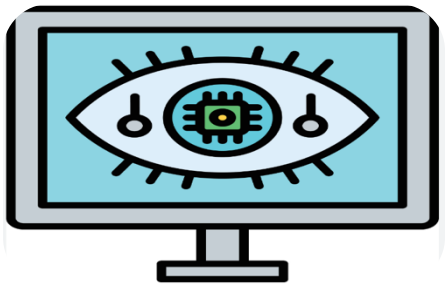
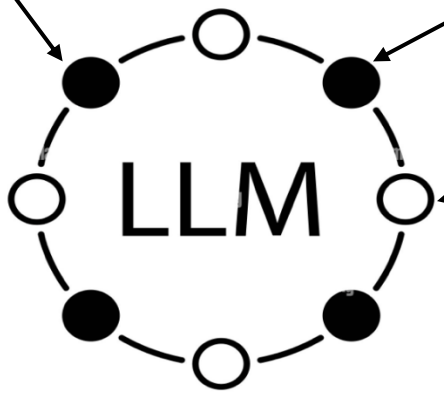


Image Analysis

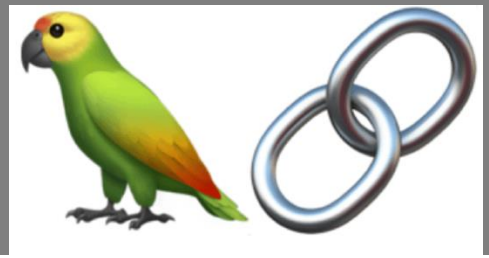
RAG to browse guides and provide relevant answers



OpenAI

Gemini

Agent Frameworks



Data Security Guardrails

Non seller

- **Aggregated Trends:** Provide market trends and forecasts at the category level without disclosing specific seller performance. This helps non-sellers understand the potential without revealing sensitive data.
- **Benchmarking Insights:** Offer non-sellers benchmark data that shows average performance in a category, such as average sales growth or typical product margins, without revealing exact figures.
- **Geographic Aggregation:** Share insights at a regional or national level rather than specific city or store data, maintaining the anonymity of actual sales locations.

Existing Seller

- **Custom Data Filters:** Apply custom filters to backend data, ensuring only relevant data for that specific seller is processed and analyzed by the AI. This prevents any cross-contamination of data between sellers.
- **Seller-Specific Performance Metrics:** Provide detailed insights into metrics like sales volume, conversion rates, and customer feedback specifically for the seller's own products, ensuring confidentiality.
- **Anonymized Competitor Benchmarks:** Share insights on how a seller's performance compares to the category average without revealing which competitors are leading or lagging in specific metrics.
- **Cross-Seller Aggregation:** Present insights based on an aggregated analysis of multiple sellers within a category, ensuring that no single seller's data is distinguishable or identifiable.

Product Vision

Imagine if you had an AI-powered E-commerce consultant that **knew everything about your business** as well as well versed with **Marketplace internal data** to help you grow your business

AI-powered E-commerce consultant

Scale of Impact

Seller count	**2.3 M**	**150 k**	**57 k**

Generally, 1 consultant is assigned to ~15-20 sellers

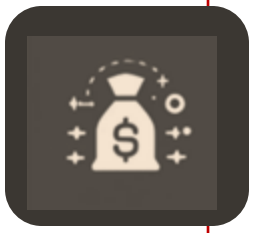
Source
https://www.contimod.com/amazon-seller-statistics/
https://spctek.com/key-statistics-about-walmart-marketplace/
https://www.statista.com/statistics/233445/rakuten-ichiba-merchants/#:~:text=In%20the%20fourth%20quarter%20of,the%20Japanese%20internet%20company%20Rakuten.

Benefits: AI-Powered E-Commerce Growth Consultant serves dual benefits

Marketplace

Enhanced Seller Performance:

By providing sellers with advanced tools and insights, the marketplace can improve overall seller performance, leading to higher sales and customer satisfaction



Scalability & Cost Saving

AI consultant can scale more efficiently than human consultants, allowing the marketplace to support a growing number of sellers without a proportional increase in support staff.

Data Utilization

The AI consultant can leverage vast amounts of marketplace data to generate insights, helping the sellers craft growth strategies

E-commerce Seller

Personalized & Always available consultant

The AI consultant is available round the clock and provides tailored recommendations based on the seller's specific business needs and goals, leading to more effective growth strategies.

Reduced learning curve

New sellers benefit from the AI consultant's guidance, reducing the learning curve and helping them navigate the complexities of e-commerce more effectively.

Time and Resource Efficiency

Automating data analysis and strategy formulation saves sellers time and resources, allowing them to focus on other critical aspects of their business.

Current team to help E-commerce Merchants Grow

Seller Dashboard

- Catalog Management
- Advertising Recommendation
- Data Analytics
- Inventory Management
- Shipping & Fulfillment
- Many more tools….

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Future team to help E-commerce Merchants Grow

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AI EC

AI-powered
E-commerce consultant

Team

Himanshu Chugh

Meetkumar Soni

Mausam Jain

Pratik Marudwar

Rakuten