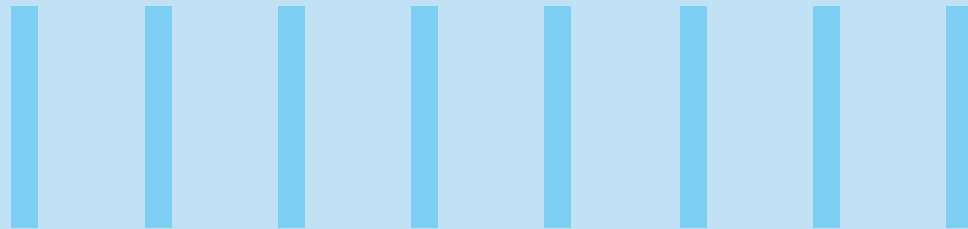




HARNESSING THE POWER OF DYNAMIC PRICING:

How retailers are using AI-driven strategies to maximize revenue, enhance customer value, and navigate pricing complexities



Abstract

Dynamic pricing is transforming retail by enabling real-time price adjustments based on demand, competition, and inventory. Initially used in ecommerce, it's now being adopted by physical stores through various technologies like electronic shelf labels and AI. This PoV explores the mechanics of dynamic pricing, its transformative potential, and the critical considerations for its ethical and effective adoption in retail. This approach boosts revenue, improves inventory management, and enhances customer personalization. However, it also raises ethical concerns and requires careful management to maintain customer trust.

Introduction



The concept of dynamic pricing has evolved from a niche ecommerce strategy to brick and mortar stores, setting through innovations like digital shelf analytics and AI algorithms. Dynamic pricing permits retailers to change prices in real time, based on factors like the current market demand, competitive offerings, inventory levels, and consumer preferences. Unlike static pricing, dynamic pricing

empowers retailers to respond quickly to changing demands and market conditions, making it a powerful tool to maximize top line and stay competitive. Ecommerce platforms such as Amazon, Flipkart, and Alibaba have mastered dynamic pricing, updating prices frequently to maximize sales and market position. Walmart and Target are implementing electronic shelf labels,

which enable quick price updates in stores. This technology boosts revenue as well as enhances operational efficiency and customer experience. Walmart's ambitious plan to roll out electronic shelf labels in thousands of stores by 2026 exemplifies this trend. ([Walmart to use digital price tags: What does it mean for shoppers? - Fast Company](#))

Core areas of dynamic pricing



Demand-based pricing

Prices fluctuate depending on the current level of demand. If demand is high price will be high, and vice versa.



Competitive pricing

Pricing is determined by analyzing how competitors price their products. This requires keeping an eye on competitors pricing trends and modifying your own prices to stay competitive.



Product-level pricing

Prices are changed based on the performance and future availability in the market.



Customer segmentation pricing

Prices are determined for various customer segments based on specific customer traits.



Time-based pricing

Prices change according to the time of the day, week, season, or events. Prices are higher at peak time and low at non-peak time.

Benefits and outcomes



Revenue growth

Dynamic pricing empowers retailers to maximize top line by adjusting prices based on real time factors such as demand, competition, and inventory. For instance, during major events like the Prime Day, prices on Amazon fluctuate based upon the customer response and stock levels.



Improved inventory management

Dynamic pricing helps reduce overstock and stockouts by aligning prices with inventory levels. Retailers can lower prices to clear slow moving items, reducing storage cost and wastage. Conversely, high prices can be attained during high demand to protect stock availability. For example, retailers like Zara use real-time data from stores and online platforms to adjust prices based on Inventory level and inventory performance. Zara has one of the lowest inventory-to-sales ratio in fashion retailing.



Enhanced competitiveness

By monitoring competitors' prices in real time, retailers can adjust their own pricing to stay competitive. As an example, Flipkart's pricing algorithm updates prices every 10 minutes to ensure it offers competitive deals.



Hyper personalized pricing

Dynamic pricing allows businesses to offer tailored discounts or deals based on customer preferences and behaviors. For instance, Kroger uses loyalty card data and mobile app to offer personalized pricing and promotions. Pricing and promotions are customized based on

- Customer shopping frequency
- Basket category
- Past purchase behavior



Better customer segmentation

Retailers use dynamic pricing to segment customers based on willingness to pay, offering varied pricing tiers that cater to different demographics or shopping behaviors. For example, Sephora leverages its beauty insider loyalty program and online behavior data to offer tier-based personalized pricing.



Seasonal and event-based profit maximization

Dynamic pricing allows retailer to capitalize on trends, seasons, or local events by raising prices during peak demand times. Retailer such as Target implement real-time pricing tools to modify their prices during major shopping events like Black Friday, Back to School, or Clearance sales.



Increased customer conversion

Dynamic pricing when aligned with consumer expectations can convert more customers by offering appealing discounts or perceived value during periods of low demand.

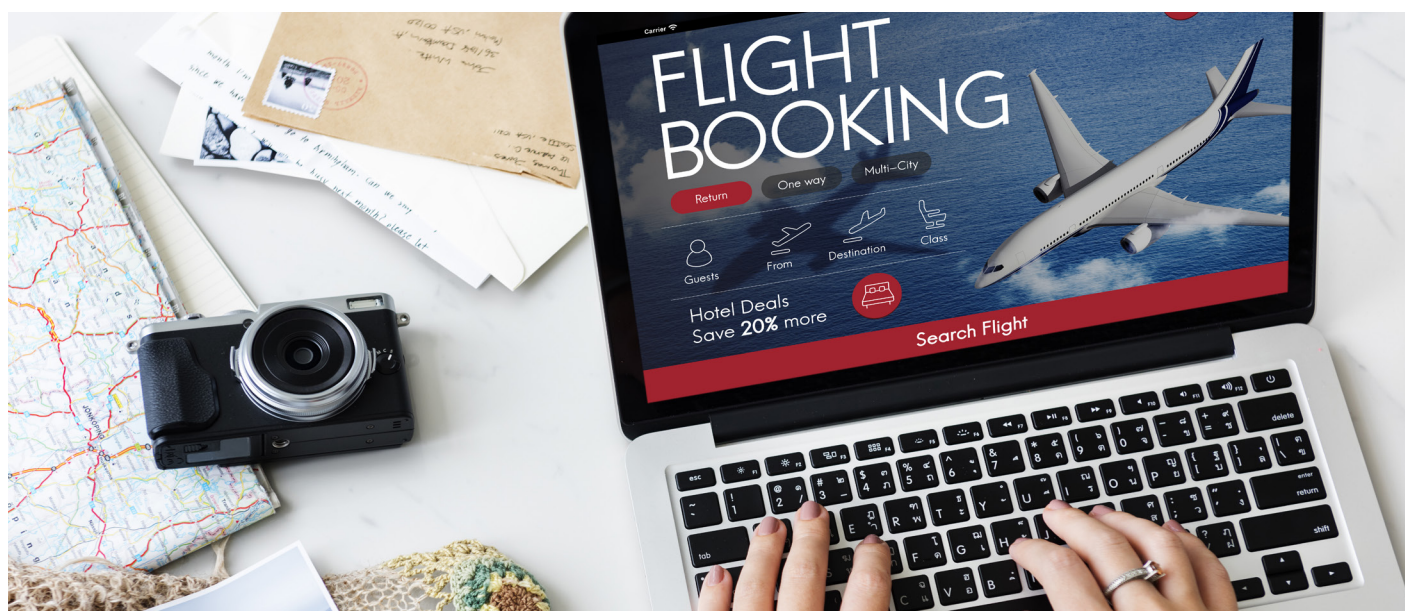


Potential Outcomes

 ~15 % Improvement in revenue	 ~30 % Reduction in stock out	 ~15 % Forecasting accuracy
 ~30 % Improvement in margins	 ~10 % Improvement in on shelf availability	 Better customer engagement

Challenges and risks in dynamic outcomes

While dynamic pricing empowers retailers and gives competitive edge, it comes with some associated risks related to customer trust, fairness, and operational complexity.



Price discrimination concerns

Dynamic pricing can feel unfair if customers are charged different prices for the same product based on factors like location or past shopping behavior. Such practices may negatively impact customer perception towards brand and could potentially trigger disloyalty.

Increased price pressure

If dynamic pricing is not executed well, constant repricing to stay ahead of competition can reduce overall margins. Continuous downward pressure on prices may erode profit margins and harm overall profitability.

Complexity in implementation

Smaller retailers may struggle to compete with larger players who can afford advanced pricing tools as it requires significant investment in technology, data analytics and AI capabilities.

Key take aways

While the benefits of dynamic pricing are immense, its success hinges on accurate implementation, transparency, and ensuring that customers trust is not compromised. Dynamic pricing will continue to be a powerful tool in retail, evolving through AI-driven personalization, real-time analytics and integration to sustainability. However, its success depends on balancing profitability with fairness and customer trust. Retailers who use careful and clear strategies will succeed in a dynamic retail market.

Authors



Sudhakar Pola

Senior Service Head - Client Operations

Sudhakar is a senior service head for client operation at Infosys BPM, leading retail sector delivery for key retail customers. With over 2 decades of experience in retail operations, he brings deep expertise in capability building, business transformation and client relationship management.

Sudhakar has a strong track record of driving outcome in project transitions, retail audit and financial process improvement. His work has helped clients enhance cash flow, working capital, and operational efficiency through tech solutions and standardize processes. He holds certifications from IIMB, The Great Manager Institute, and the Jack Welch training program



Anu Maria Arok

Lead Consultant - Retail Solution Design, Infosys BPM

Anu is a Senior Consultant for retail industry solutions at Infosys BPM. She is a seasoned retail expert with over 15 years of experience, helping retailers navigate the ever-changing retail landscape. Anu has a deep understanding of various retail functions, from merchandising and assortment planning to store operations, marketing, e-commerce, and even loss prevention. She leverages best practices from different segments of retail to drive tangible results and help businesses not only adapt to changes but become pioneers in the evolving market. Anu holds a bachelor's degree in fashion design and a master's in management, showcasing her well-rounded knowledge in both the creative and business sides of retail. She is a certified Six Sigma Green Belt expert.

For more information, contact infosysbpm@infosys.com



© 2025 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.