



Persistent

AI-Powered Ad to Shop





Abstract

AI Powered Ad to Shop transforms traditional video advertising by turning passive viewing into interactive, shoppable moments. Instead of relying on viewers to recall products and search them later manually, the experience embeds contextual purchase options directly within streaming content such as product carousels, interactive polls and persistent picture-in-picture CTAs.

These AI-driven elements reduce friction, capture real-time preferences and create seamless pathways from interest to action.

By dynamically analyzing user context, predicted engagement and ad timing signals, the system personalizes what shoppers see and when they see it. This results in higher click-through rates, stronger conversion and increased average order value while preserving an uninterrupted viewing experience. The outcome is a frictionless, future-ready commerce model that helps media platforms and brands monetize attention more effectively.

The Challenge

- **Low Click-Through Rates (CTR):** Users cannot interact with ads in real-time, resulting in missed engagement and conversions opportunities.
- **High Friction:** Requiring viewers to manually search for products after ad breaks disrupts the viewing experience and reduces purchase intent.
- **Passive Viewing:** Ads fail to convert viewer interest into immediate, actionable outcomes.
- **Limited Personalization:** Current Dynamic Ad Insertion (DAI) systems focus on ad placement but lack interactive CTAs (calls-to-action) that drive engagement and action.

The Opportunity

AI-powered Stream-to-Shop redefines the advertising and commerce landscape by transforming passive ad exposure into active, shoppable experiences. Traditional ads often struggle with low engagement and poor conversion because viewers must leave the content to act. Our solution eliminates this friction.

By embedding instant, context-aware calls-to-action (CTAs) directly within video streams, viewers can discover, engage with and purchase products in real-time — without pausing or abandoning their entertainment experience. This seamless integration creates a win-win for every stakeholder.



For Consumers

A personalized, non-intrusive shopping experience that feels natural, intuitive and convenient.



For Brands & Retailers

Higher click-through rates (CTR), improved conversion performance and actionable insights powered by AI-driven recommendations.



For Platforms

Increased monetization opportunities through interactive ad formats and more meaningful audience engagement.

This approach aligns with the rapid growth of shoppable media, positioning us at the intersection of AI, streaming and commerce — a market poised for exponential growth as consumers increasingly demand immediacy, relevance and personalization.



Industry Context and Trends



Rise of shoppable video and live commerce is reshaping digital advertising. Consumers increasingly expect interactive experiences that transform passive viewing into real-time purchasing opportunities, driving higher engagement and conversion.



AI-driven personalization and real-time analytics enable precise targeting. Advanced algorithms instantly analyze viewer behavior and contextual signals to deliver highly relevant product recommendations, maximizing return on investment for brands.



Privacy regulations are accelerating the shift toward contextual, in-content commerce experiences. As third-party data becomes more restricted, embedding commerce directly within content enables privacy-compliant personalization while leveraging first-party insights.

Solution Overview

Key Tenets



Future-Ready Features

Product carousels, polls, quizzes and picture-in-picture (PIP integration). These interactive elements create immersive experiences that drive deeper engagement and encourage repeat visits.



Frictionless User Experience

Eliminates manual search, boosting conversions. Users can act in-stream without switching apps or devices, reducing drop-offs and increasing engagement.



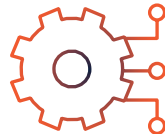
Personalized Engagement

Ads and CTAs tailored to user demographics and context. AI dynamically adapts product recommendations based on real-time behavior and historical preferences.



Advertiser Advantage

Real-time interactivity with measurable outcomes. Brands gain actionable insights through granular analytics, enabling better targeting and improved campaign ROI.



Instant CTA Integration

Seamless 'Shop Now' CTA button appears directly within ads. This ensures immediate purchase intent without disrupting the viewing experience.

Solution Architecture

- **Custom Video Player**

Built with HTML5, React and JavaScript for interactive elements.

- **Agentic AI Ad System**

Evaluates user context and predicts optimal ad timing.

- **Real-Time Analytics**

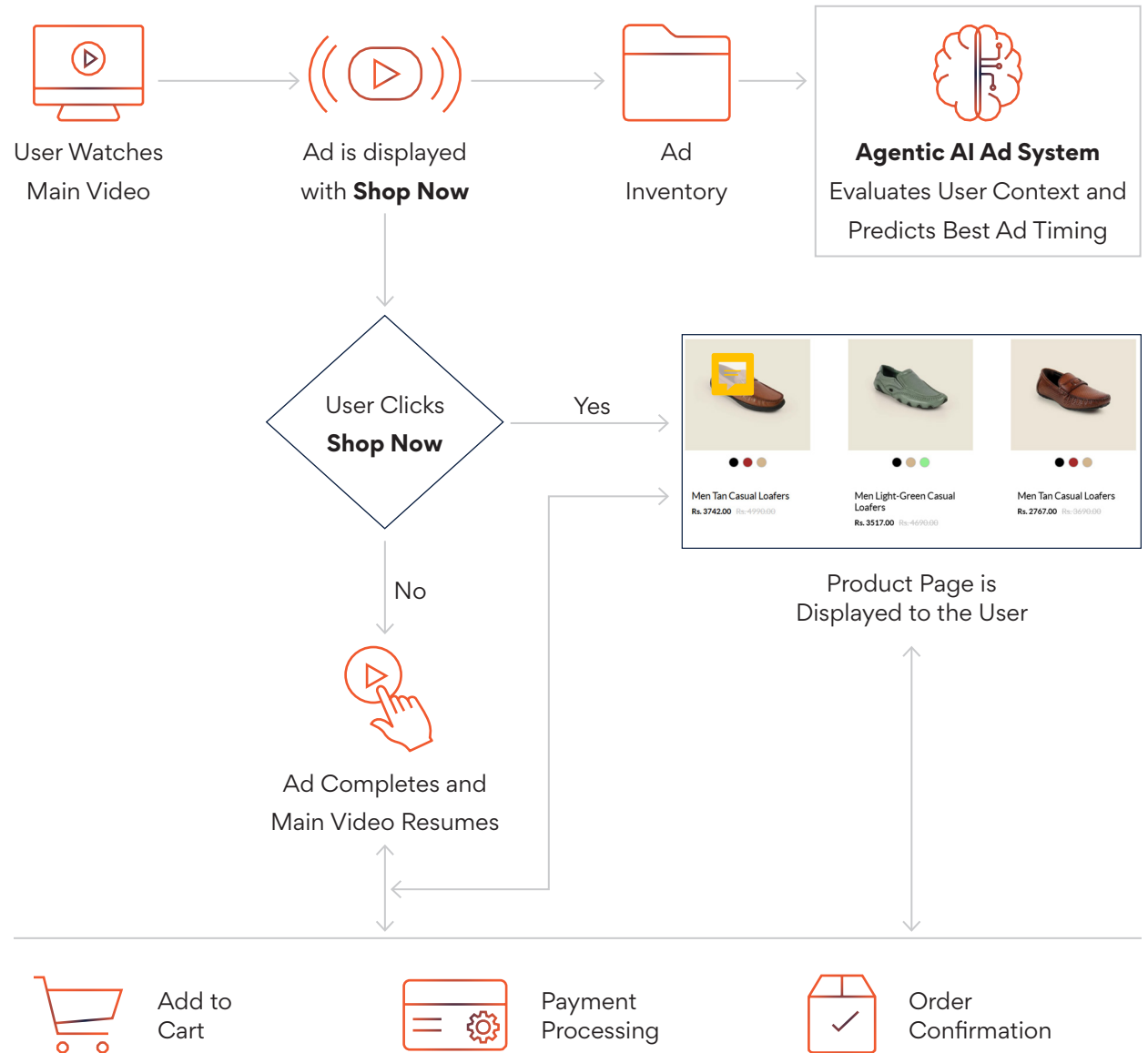
Tracks user interactions and conversions for optimization.

- **E-Commerce Integration**

Directs users to product pages and payment processing.

- **Ad Inventory Management**

Dynamically selects and inserts relevant ads and product links.



Implementation Roadmap

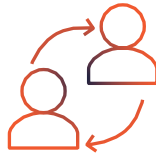
Phase 1



Seamless Viewing

- Users enjoy uninterrupted main video content with embedded ad slots optimized for interaction.
- The system ensures smooth integration, allowing ads to feel native and non-intrusive within the stream.

Phase 2



Interactive Engagement

- Ads appear with an instant, context-aware 'Shop Now' CTA overlay to prompt real-time action.
- When clicked, the video pauses and a product page opens seamlessly, enabling quick purchases without leaving the platform.

Phase 3



Smart Continuity and Insights

- If no interaction occurs, the ad completes and the main video automatically resumes.
- All user interactions are captured for analytics and personalization, powering AI-driven recommendations and performance insights.

Business Benefits

AI-powered Stream-to-Shop delivers measurable value for media platforms and advertisers alike.

Increases Revenue and ROI

Higher click-through rates (CTRs) and conversion rates drive increased ad revenue.

Enhances Viewer Experience

Seamless, non-intrusive shopping interactions keep audiences engaged without disrupting content consumption.

Enables Precision Targeting

AI ensures the right offer reaches the right viewer at the right moment.

Drives Operational Efficiency

Automated workflows reduce friction, minimize manual effort and improve scalability.

Future-Proofs Monetization

Interactive ad formats position platforms to capitalize on evolving commerce and media consumption trends.

By leveraging these benefits, organizations can unlock new monetization opportunities, deepen audience relationships and stay competitive in the rapidly evolving digital commerce landscape.

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About Persistent

Persistent Systems (BSE: 533179 and NSE: PERSISTENT) is a global services and solutions company delivering AI-led, platform driven Digital Engineering and Enterprise Modernization to businesses across industries. With over 26,500 employees located in 18 countries, the Company is committed to innovation and client success. Persistent offers a comprehensive suite of services, including software engineering, product development, data and analytics, CX transformation, cloud computing, and intelligent automation. The Company is part of the MSCI India Index and is included in key indices of the National Stock Exchange of India, including the Nifty Midcap 50, Nifty IT, and Nifty MidCap Liquid 15, as well as several on the BSE such as the S&P BSE 100 and S&P BSE SENSEX Next 50. Persistent is also a constituent of the Dow Jones Sustainability World Index. The Company has achieved carbon neutrality, reinforcing its commitment to sustainability and responsible business practices. Persistent has also been named one of America's Greatest Workplaces for Inclusion & Diversity 2025 by Newsweek and Plant A Insights Group. As a participant of the United Nations Global Compact, the Company is committed to aligning strategies and operations with universal principles on human rights, labor, environment, and anti-corruption, as well as take actions that advance societal goals. With 468% growth in brand value since 2020, Persistent is the fastest-growing IT services brand in 'Brand Finance India 100' 2025 Report.

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