



A High AI-QTM
Company



Scalable AI-Powered Styling Platform for a Global Fashion Retailer

Driving e-commerce conversions and social media expansion through a microservices-based styling engine that empowers influencers and store staff.

Overview

We developed an end-to-end styling ecosystem using a microservices architecture to handle millions of daily API calls and media requests.

- Integrated an AI-driven OCR and tagging pipeline, allowing creators to seamlessly tag products in photos and videos for direct purchase.
- Achieved a significant boost in sales conversions and social media followers by channelizing revenue through trackable influencer URLs and performance analytics.



Client Profile

This retail giant is a cornerstone of the global fashion industry. With a massive physical footprint and a digital presence serving over 20 million users, the client focuses on delivering trend-setting apparel through a seamless blend of in-store expertise and online convenience.

Challenges: Scaling Creativity and Tracking Performance

The client faced technical hurdles in bridging the gap between social styling and e-commerce transactions:

- **Massive Traffic Demands:** The platform had to serve millions of image and video requests daily without latency.
- **Content Moderation:** Managing a diverse stream of content from thousands of store staff and influencers required a centralized, high-capacity admin portal.
- **Incentive Tracking:** Lack of a structured way to attribute sales to specific social posts or stylists hindered the growth of their influencer network.

- **Media Fragmentation:** The need to deliver high-quality video and image content across various devices required automated, multi-resolution processing.

QBurst Solution: Microservices and Media Automation

We engineered a robust platform built on open-source technologies and a microservices architecture. The solution empowers creators via native iOS and Android apps to capture "styling posts"—multimedia content tagged with specific product metadata.

The technical strategy focused on automation and scalability.

- **Media Processing Engine:** We utilized AWS Lambda with the Sharp library for on-the-fly image conversion and AWS Elemental MediaConvert for automated video transcoding into multiple resolutions.
- **AI-Driven Tagging:** Implemented a custom OCR pipeline and deep learning models (Transformer-based) for invoice parsing and product identification, ensuring high accuracy in product tagging.
- **High-Performance API Layer:** A Python-based microservices backend designed to handle sudden traffic spikes and millions of daily calls from the main e-commerce site.
- **Intelligent Ranking:** Developed a custom ranking service that utilizes page views and order volume to surface the most influential styles and creators.

Key Features and Technical Highlights

- **Creator Mobile App:** Enables staff and influencers to create posts, tag products, and generate trackable URLs for social media sharing.
- **Performance Analytics Dashboard:** Provides real-time data on likes, followers, pageviews, and—most importantly—direct sales generated per post.
- **Internal Admin Command Center:** A high-capacity dashboard for content moderation, hashtag management, and deep-dive reporting.

- **Automated Image Conversion:** Serves optimized media based on the user's device and connection speed, reducing bandwidth costs.
- **Influencer Incentive Engine:** Automatically tracks sales through unique URLs, enabling a "shop-the-look" experience that rewards creators.

Impact

- **Higher Sales Conversions:** Customers made purchase decisions after viewing styled combinations rather than isolated product listings.
- **Operational Cost Savings:** By building a custom, all-in-one solution, the client avoided the high recurring costs of multiple third-party SaaS platforms.
- **Social Media Growth:** The ease of content creation led to over 60% increase in the client's social media follower base and significantly boosted referral traffic from external platforms.
- **Improved Strategic Insights:** Detailed sales analytics and parameter-based ranking provided the marketing team with clear insights on which styles and influencers drive the most ROI.
- **Enhanced Customer Experience:** 20 million active users now have access to a rich repository of styling inspiration, helping them make more confident purchase decisions.