

Driving Trust and Transparency in the Oil and Lubricants Industry

The Challenge: Combating the Global Surge of Counterfeit Engine Oils

Shell Pakistan, a leader in automotive lubricants, faced a growing threat from counterfeit and refilled products. These imitations, often made from recycled waste oils or contaminated base stocks, posed serious risks:

- Engine performance issues
- Potential warranty voidance
- Road safety hazards
- Brand reputation damage

To protect customers and brand equity, Shell needed a tamper-proof, scalable, and consumer-friendly authentication solution. It had to integrate seamlessly into high-speed manufacturing and be easily accessible both online and offline.



The Solution: A Multi-Layered, Technology-Driven Defense

Shell partnered with Laava and Ultracoat Security Printing to deploy a region-first authentication solution combining digital intelligence, computer vision, and secure print technology.

1.

Laava Smart Fingerprint® Authentication

Each lubricant bottle was uniquely labeled with a Smart Fingerprint®, scannable by any smartphone, to match SKU, variant, and product data & confirm authenticity in real time

2.

Advanced Computer Vision Analysis

Laava's proprietary platform analyzes:

- Color precision
- Shape anomalies
- Label alignment
- Packaging irregularities

3.

Offline and Online Verification

A scratch-to-reveal 12-digit SMS code allowed verification in low-connectivity environments, ensuring inclusivity regardless of internet access or device capability.

4.

Tamper-Evident Physical Labels

Labels spanning the bottle and cap featured aggressive adhesives and tamper nicks to deter refilling and reuse.

5.

End-to-End Supply Chain Transparency

Real-time scan data, including time, location, device, and user behavior, provided deep visibility from production to point of sale.

A National First: Pakistan's Pioneer in Secure Digital Authentication

This deployment marked the first national rollout in Pakistan of secure digital labeling and authentication within the oil and lubricants industry. It set a new standard for supply chain integrity and consumer protection across the region.

Engaging the Market: Cultural Relevance and Consumer Education

To maximize impact, Shell Pakistan launched a nationwide education campaign to raise awareness about counterfeit risks and the importance of product verification.



Shaan Shahid, a leading Pakistani film icon, led the campaign. Shahid appeared in TV commercials explaining the dangers of fake oils and demonstrated how to verify products using Laava Smart Fingerprint®

This initiative successfully embedded product verification into everyday consumer behavior and significantly reduced counterfeit circulation.



Scan to Watch

Key Benefits Delivered to Shell	
Feature	Impact
Computer Vision Technology	Detects anomalies before products hit the shelves
Smart Fingerprint® Authentication	Instant verification with any smartphone
SMS Verification	Accessible in low-connectivity environments
Tamper-Evident Packaging	Prevents refilling and clearly reveals tampering
Supply Chain Analytics	Tracks scans, flags risk zones, enhances traceability
Consumer Engagement Tools	Dynamic landing pages, tailored product info & calls-to-action

Impact Snapshot

- Significant decline in counterfeit lubricant detection in target markets
- First national deployment of secure digital authentication in Pakistan's oil sector
- More than 20 million media impressions from the campaign
- Strengthened consumer trust and improved product recall at retail

Why This Matters: Setting a New Industry Standard

Counterfeit oils are a global problem, threatening vehicle performance, brand integrity, and consumer safety. Traditional solutions like static QR codes or holograms are easily replicated and offer no real-time protection.

Laava's approach offers:

- Dynamic, smartphone-based authentication
- AI-driven label analysis through computer vision
- Tamper-evident, secure labeling
- Actionable data across the supply chain



Shell Pakistan now stands as the benchmark for innovation and integrity in the lubricants industry.