

Continuous Accessible Protection

Unlocking High-Volume Personal Hygiene & Vector Defense in High-Density Emerging Markets

EXECUTIVE THESIS

Topical barrier protection—whether for hand sanitization or vector-borne disease defense—fails at the point of reapplication, not initial formulation. WearSpray addresses this global compliance gap through patented, low-cost wearable dispensing hardware paired with localized high-margin bulk consumable refills. Engineered for extreme unit economics (\$0.94 hardware COGS at scale) and localized point-of-deployment manufacturing, the platform enables tier-1 retail conglomerates and health FMCG leaders to build highly profitable, sustainable razor-and-blade protection ecosystems.

~\$0.94	65%+	100%	Dual-Action
HARDWARE UNIT COGS (@ 100K SCALE)	RECURRING REFILL GROSS MARGIN	REFILLABLE & ZERO- SINGLE-USE WASTE	PATENTED METERED SPRAY VALVE

1. THE PUBLIC HEALTH & BEHAVIORAL BARRIER IN INDIA

In high-density emerging markets such as India, public health efforts face persistent compliance hurdles across two primary verticals:

- Vector-Borne Disease Exposure (Malaria, Dengue, Chikungunya):** Traditional protection relies heavily on home vaporizers or coils. However, day-biting vectors like *Aedes Aegypti* strike during daily transit, outdoor labor, and school hours. Topical repellents exist, but compliance collapses because users rarely carry bulky bottles or reapply every few hours.
- Continuous Hand Hygiene & Pathogen Barrier:** Post-pandemic awareness created high demand for sanitization, yet carrying liquid bottles in crowded transit systems or market settings remains inconvenient, leading to low adherence at the exact moment of surface contact.

2. PLATFORM HARDWARE ARCHITECTURE & SCALABILITY

WearSpray shifts protection from static bottles to dynamic, on-body access. The core utility centers on patented dual-action valve technology and a refillable reservoir architecture:

- SAFE BAND PRO** **Wearable Form Factor:** A durable, refillable wristband providing low-profile, metered misting on demand. Formulations can be swapped season-by-season (sanitizer, botanical insect repellent, sunscreen).
- ECOSYSTEM IP** **Extended Form Factors:** Continuation-in-Part (CIP) patent filings cover dual-reservoir mobile device attachments (delivering sanitizer from Reservoir A and repellent from Reservoir B) as well as integrated smartwatch clip-ons.
- LOCAL MANUFACTURING** **Localized Point-of-Deployment Production:** Designed for high-speed, automated injection molding, bringing hardware COGS down to ~\$0.94 per unit at 100,000 units, with further cost compression past 1M+ units. In-region manufacturing eliminates global supply chain friction and import tariffs.

3. HIGH-MARGIN CONSUMABLE ECONOMICS ("RAZOR & BLADE")

By decoupling the dispensing hardware from single-use liquid packaging, WearSpray transforms one-time hardware sales into continuous, recurring FMCG revenue streams for retail and brand partners:

ECONOMIC METRIC	HARDWARE UNIT (SAFE BAND PRO)	250ML BULK REFILL POUCH (~12 REFILLS)
Target Retail MRP (India)	₹199 – ₹299 (~\$2.40 – \$3.60)	₹79 – ₹99 (~\$0.95 – \$1.20)

ECONOMIC METRIC	HARDWARE UNIT (SAFE BAND PRO)	250ML BULK REFILL POUCH (~12 REFILLS)
Manufacturing / COGS	₹75 (~\$0.94)	₹15 (~\$0.18)
Partner Wholesale Price	₹140 (~\$1.68)	₹48 (~\$0.58)
Partner Gross Margin (%)	46.4% Margin	68.7% Margin

4. ENTERPRISE DISTRIBUTION & MARKET ALIGNMENT MODEL

The platform is specifically structured to plug into large-scale, vertically integrated retail conglomerates (such as nationwide pan-India retail networks and FMCG giants):

- 1. Consumable Lock-In:** Hardware is distributed at near-cost or via subsidized promotional bundles, creating long-term consumer demand for branded bulk liquid refill pouches sold across thousands of supermarket doors and digital quick-commerce channels.
- 2. In-Store Refill Infrastructure:** Retail hypermarkets can host branded, bulk direct-refill stations, driving high-frequency foot traffic into stores while reinforcing corporate ESG and plastic-reduction goals.
- 3. Enterprise / Occupational Deployments:** Substantial institutional market opportunities exist in equipping healthcare workers, logistics workforces, transit personnel, and municipal teams with continuous protection.