



The World's First Dual Helmet.

Safety doesn't stop at the rider

Telephone

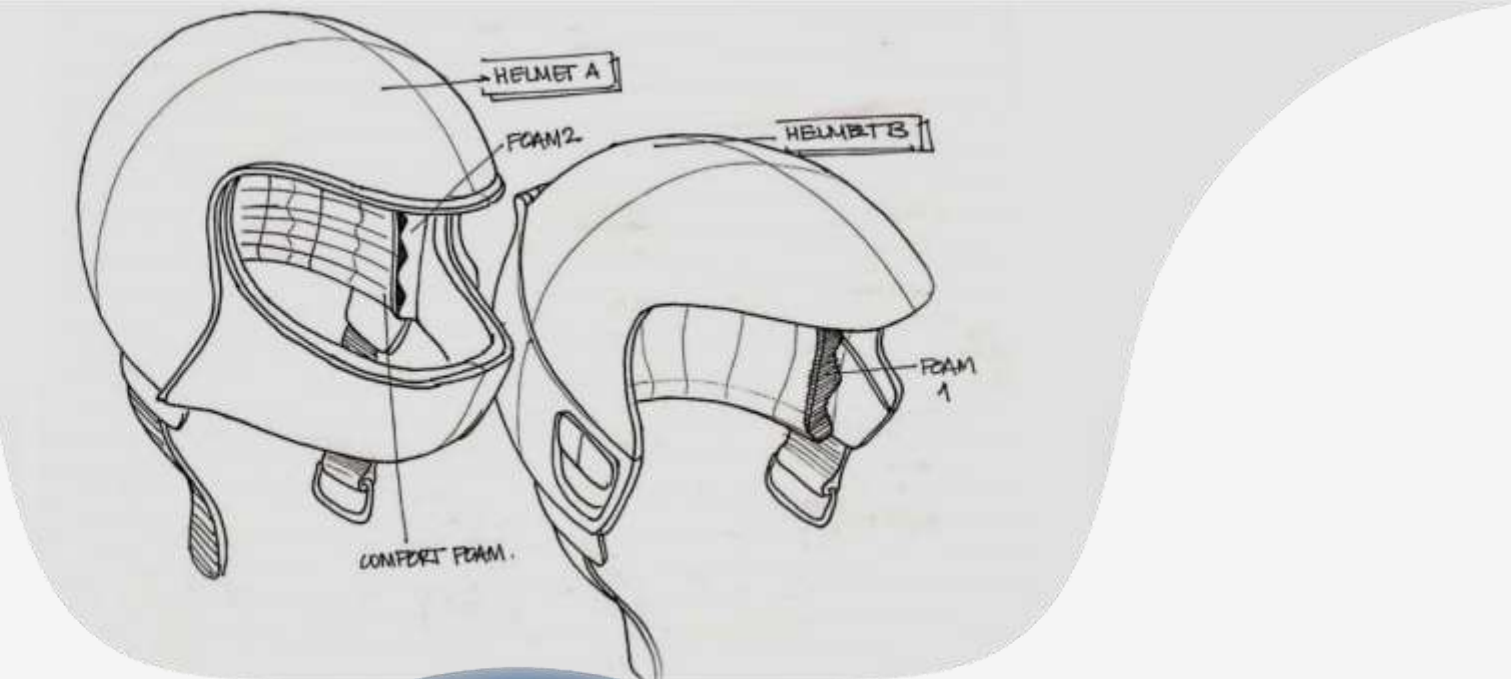
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VISION MISSION



“Safety
doesn’t stop
at the rider.”

Our Vision is to make safety & convenience accessible and affordable for 2-Wheeler riders globally.

Our mission is to establish the largest global presence in the headgear market by 2028, through innovative products with embedded smart features.

The "Silent" Crisis

The Pillion Problem: A 50% Fatality Gap.



**In 2024 81,780 two-wheeler riders die on roads every year.
And 54,122 were not wearing helmets.**

Barriers:

- **Two helmets**
do not fit in a standard 2-wheeler boot.
- **Harsh exposure**
damages helmet integrity
- **Hygiene issues**
(sweat, hair damage, odor) deter usage

Behavioural Barrier: Carrying/Maintaining a second helmet is cumbersome

The Result: A "chalta hai" attitude driven by Penalty-driven compliance, not safety mindset



The "Aha!" Moment

One Unit. Two Helmets. Ten Seconds.

Engineering away the barriers to 100% compliance.

Split-Design:

A single unit that separates into two fully functional helmets without tools.

Boot-Fit:

Engineered to slot into existing storage with zero modifications.

Smart Safety:

Embedded IoT (not bolted on) featuring Bluetooth, GPS, and SOS alerts.



 **DUALSAFE**



DUALSAFE

A New Category in Global Safety

From One to Two in Under 10 Seconds

DualSafe is the **world's first patented "split-architecture" helmet** system solving the fundamental logistics of pillion safety.



Effortless Transition: One integrated unit separates into two fully BIS-certified helmets in just 10 seconds—no tools or fuss required.



The Compliance Solution: By making the second helmet part of the first, we eliminate the compliance and convenience gap that traditional brands ignore.



Intelligence by Design: Unlike single-helmet manufacturers like Vega, Steelbird, or Studds, DualSafe integrates patented mechanical design with embedded Smart IoT.



Beyond Incremental: This is not a better helmet; it is a smarter way to ensure every rider and pillion is protected, every time.



 **DUALSAFE**

The Differentiation



Technology & Innovation:

- Entirely indigenous, patented tech
- Advanced IoT integration (Bluetooth, RF, NFC)
- Anti-theft, retention, and weather-resistant mechanisms
- Simulation testing complete; BIS certification initiated



Product Differentiation:

- Only product globally with embedded dual-helmet + IoT functions
- Storage + safety in one unit; fits in standard boot space
- No comparable offering from leading brands (Vega, Steelbird, Studds)



Manufacturing Strategy:

- Core components via injection molding and CNC machining
- In-house assembly and QA at Bangalore
- Supply chain structured to enable scale production and cost efficiency



Statutory Compliance:

- No pending legal or environmental clearances
- Simulation tests are completed with positive results. BIS certification process has been initiated. Quality assurance includes drop tests, retention system analysis, humidity/temperature resistance, and ISI compliance mapping.



A Regulatory Revolution: The Mandate for Safety

The Perfect Market Alignment: Every Bike, Two Helmets

The definitive answer to India's evolving road safety landscape as government policy shifts to protect both the rider and the pillion.

- **National Mandate:** Union Minister Nitin Gadkari has announced that all two-wheelers must now be sold with two ISI-certified helmets.
- **The Safety Gap:** India witnesses over 69,000 two-wheeler fatalities annually, with 50% attributed directly to the absence of a helmet.
- **Expert Endorsement:** Road safety experts from organizations like IRF-India Chapter, CADD advocate for manufacturers to provide two standard-quality helmets, a move that aligns perfectly with DualSafe's core mission.
- **Engineered Compliance:** DualSafe provides a two-in-one integrated unit that separates into two helmets, ensuring safety is always on board without the logistical nightmare of carrying separate gear.
- **National Need:** This regulatory shift is recognized by the industry as a vital step toward reducing road deaths and cracking down on substandard protective gear.



DualSafe – Social and Economic Sustainability



Socio-Economic Impact

- Organizations or individuals promoting/using helmets have cheaper and all-time safety device availability
- Assurance against tickets/challans for not having a helmet; 3-5 challans saved get your cost of helmets back in pocket
- **Drives helmet adoption by reducing cost and inconvenience, helping lower road fatalities and injuries; can disturb Socio-Economic structure of any household**
- Promotes indigenous manufacturing, job creation, and technology-led growth in road safety

DualSafe is a SUSTAINABLE Two-in-One helmet solution

- **Social sustainability**
 - Improves helmet compliance and rider safety
 - Could help reduce road fatalities/injuries
 - Benefits riders, pillions, fleets, and enforcement agencies
- **Economic sustainability**
 - Supports indigenous manufacturing in India
 - Creates IP-led value, jobs, and ecosystem growth
 - Offers OEM/fleet scalability
- **Environmental sustainability**
 - Dual-use design will reduce the need for separate helmet ownership/storage solutions
 - Secure storage extends helmet life by protecting from sun, rain, and dust, reducing replacement frequency

DualSafe is a socially and economically sustainable mobility safety innovation, with potential environmental sustainability benefits through longer helmet life and improved utilization.





Market Opportunity & Regulatory Tailwinds

A Mandated Market Explosion.

Policy alignment with the MoRTH 2-helmet mandate.

The Directive:

All 2-wheelers must now be sold with two ISI-certified helmets.



The Market:

260 million users in India (USD 1.2B TAM) and 1.6 billion globally (USD 7.0B TAM).



The Wedge:

Initial focus on Automotive OEMs, followed by high-noise industries (Mining, Oil & Gas).



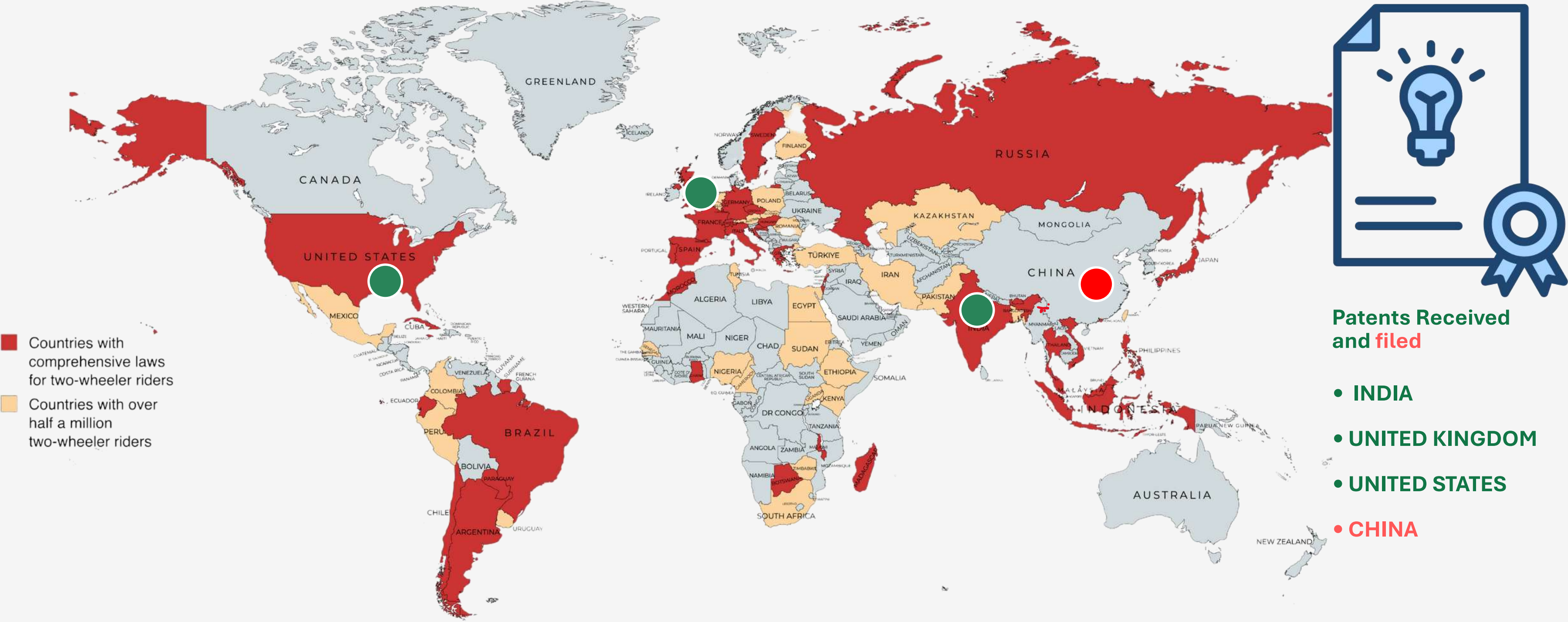
A Mandated Market Explosion.



*Smart and Normal Market Size till 2030

Countries Identified for Global Markets

with Comprehensive Laws





Business Model

High Margins, Low Friction.

A hybrid revenue model for rapid penetration.

1. B2B (Primary)

We've already started conversations with big players in the two-wheeler manufacturing & rental services.

2. B2B2C

Through dealers of major brands, we'll expand our reach.

**Once DualSafe® sells more than 1.25 lakh helmet sets in a year,
Plans in place to switch to B2C & D2C**

Ideal Customer Profile:



Age: 27-35 and 36+

Income:

Upper-middle class (₹>100K monthly household income or professionals)

Occupation:

Daily commuters, professionals, entrepreneurs, and enthusiasts

Geography:

Urban centers, especially metros and tier-1 cities

Pain points:

- Storage inconvenience
- Remembering to carry helmets
- Discomfort on long rides
- safety concerns



Unit Economics & Pricing

DualSafe® Price range – Two half Masks & One half/Second full Mask combos with & without IoT features

India

Average PRICE PER SET - \$48

(₹2,300 - ₹6,250)

AT 60% GROSS MARGIN

Global

Average PRICE PER SET - \$149

(₹6,700 - ₹23,500)

AT 70% GROSS MARGIN

- Ideal price premium for DualSafe: \$25 - \$65 extra above the cost of two standard helmets.
- Total price of DualSafe helmets (two-in-one) ideally positioned around \$75–\$260 to attract premium segment buyers.



Revenue Projections

Core Product:

Dual Helmets (Full Mask and Half Mask without and with IoT features)

Key Revenue Streams:

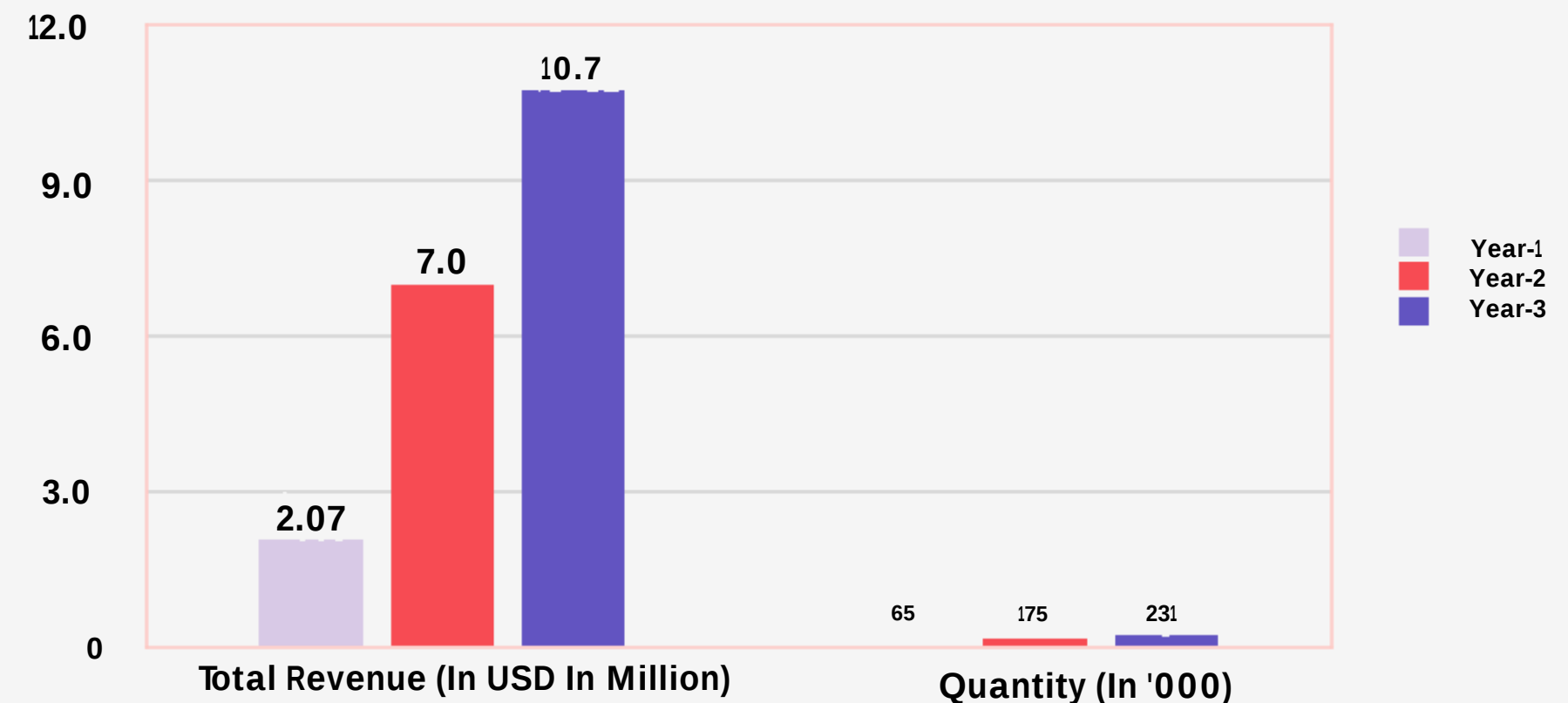
Initial Sales: One-time revenue from helmet sales – Domestic and Exports.

Royalties: Licensing our patented designs and technologies to partners, ensuring sustained income.

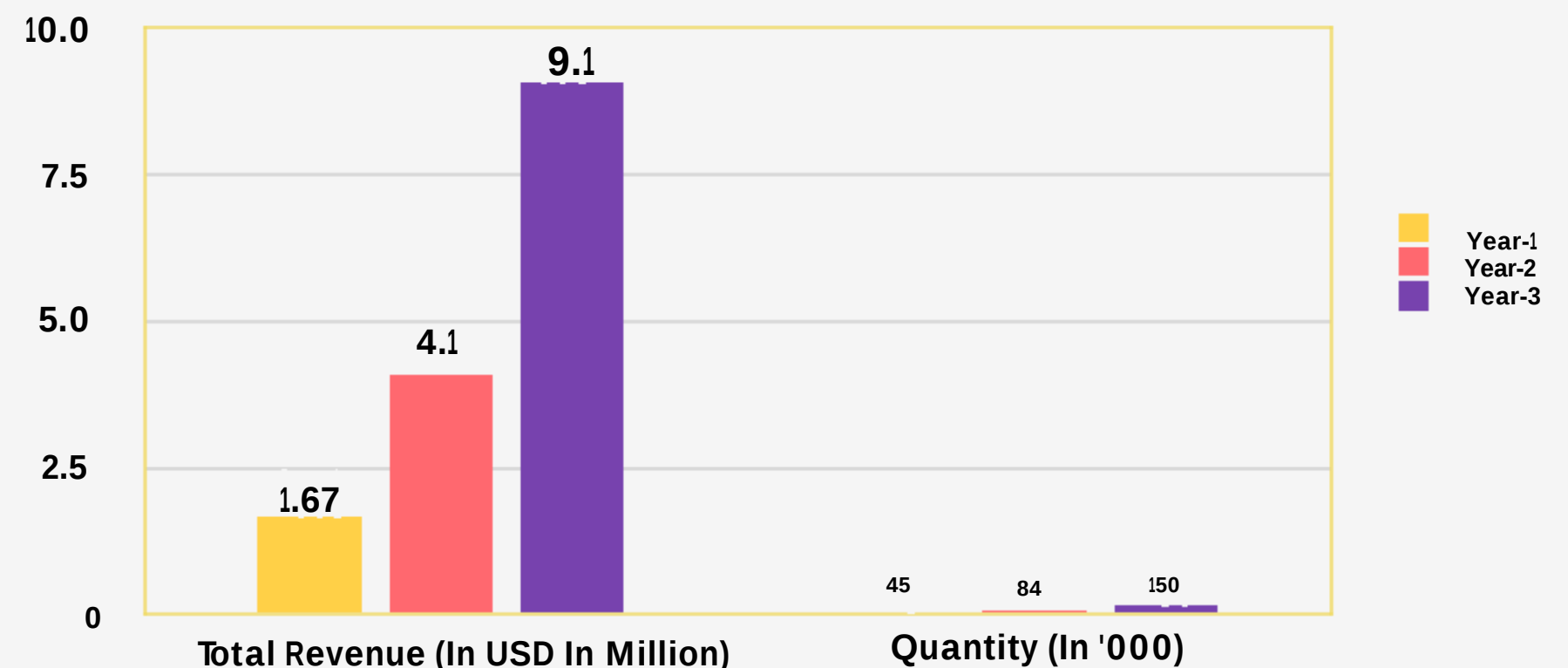
Strategic Focus:

While helmet sales drive initial market penetration, royalty income will create long-term, scalable revenue growth.

Projected Domestic Sales (Gross Margin 60%)



Projected Export Sales (Gross Margin 70%)



Trusted by Industry Giants.

From Shark Tank to OEM boardrooms.

OEM Engagement:

NDA's executed with **TVS Motors** and **Hero MotoCorp**; discussions with Honda and Oben Electric.

Proof of Concept:

Paid PoC delivered and MVP showcased to senior management.

Accolades:

SiliconIndia Top 10 Wearable Startups (2023) and Eureka 2025 Runner-up (IIT Bombay).

Recognized by road safety experts and aligned with recommendations from them.

SharkTank India (Season 1) Finalist



Grants & Funding

- Pre-Seed money from Department of Science and Technology under CPS-SSS via **IIT Mandi** Catalyst; DualSafe incubated with IIT Mandi catalyst.
- Grant under **SISFS** via GINSERV; DualSafe incubated with them.



FUELLING THE NEXT LEVEL OF SAFETY.

Seeking USD 650,000 to dominate the new safety category.

Immediate Milestone:

Final molds for OEM-scale production and BIS certification.

Market Launch:

Assembling 1000 sets for expert feedback and gig-worker pilots.

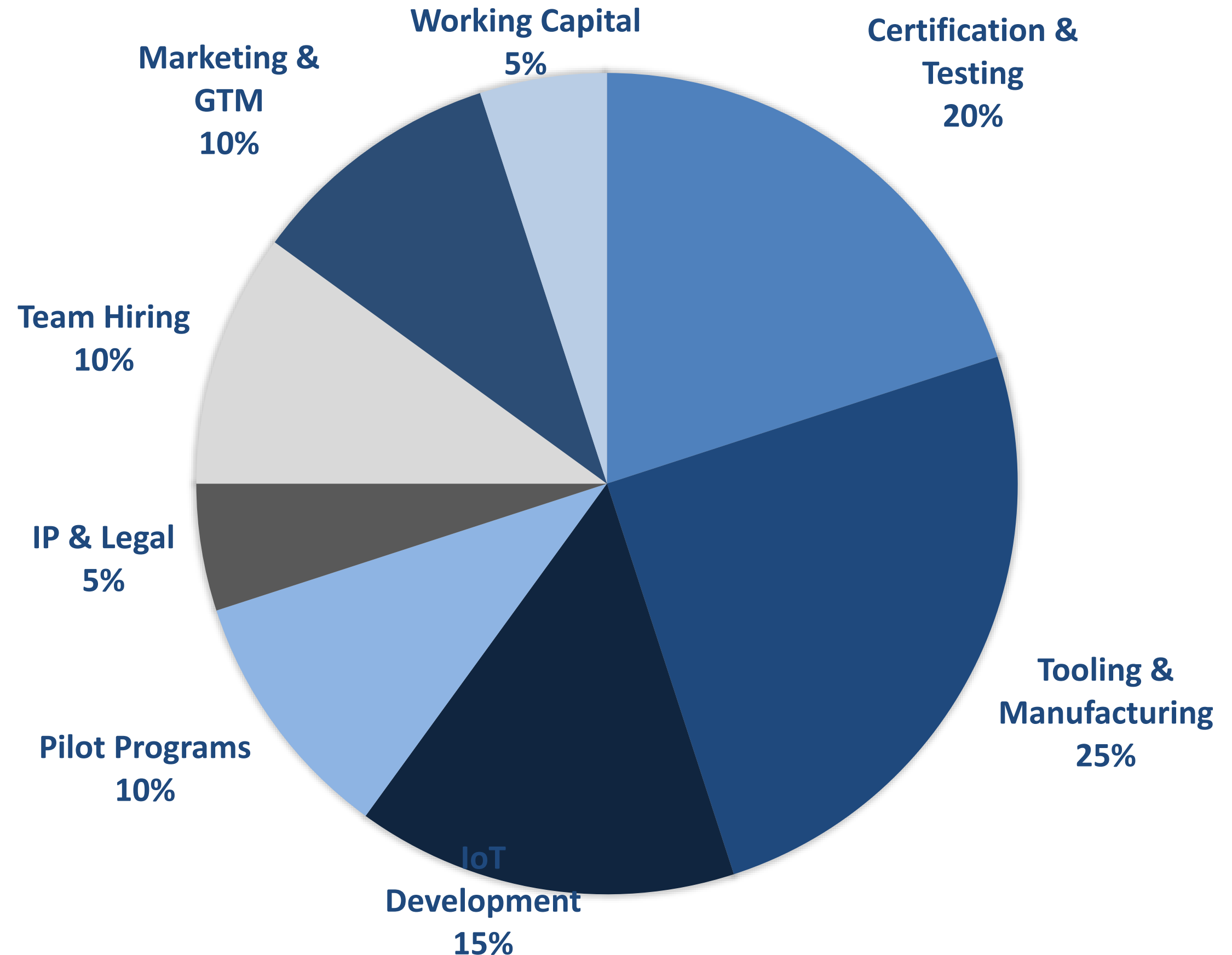
Team:

Led by Arvind Sethi (30+ years global experience) and a crew of fractional experts from Intel, Amex, and IIT.



Utilisation of Funds for the Next 12 Months →

- Molds to get parts to assemble Dual Helmets with ancillary units & traders to procure parts (\$250K)
- Get product line **certified by authorities**
- **Assemble 1000 sets** and sell to experts, Daily users, Gig workers (SOFT LAUNCH)
- Get feedback within 1-2 weeks' time and see if any major fault to be **worked upon quickly**
- Go for **full launch** with next tranche (\$750K)



Meet The Crew



Arvind Sethi

Founder & CEO



Anupama Sethi

Director



Sanandan (Sandy) Sudhir

CTO, President & CEO,
InventIndia



Gurmeet Singh Chawla

CFO,
Co-Founder, TiE Chandigarh



Anuj Sethi

Marketing & Branding specialist



Saurabh Mittal

Founder – QYON
Advisor, Speaker, Entrepreneurship
Evangelist

Thank You.

If you want to join us in transforming rider safety globally, then:

Contact Us:

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Why is helmet adoption so poor in India?

Behavioral Issues

- **Poor Awareness:** Across income brackets, professions, and geographies (Tier I/II/III cities, villages).
- **Low Compliance:** Rules and penalties exist, yet enforcement remains weak.
- **Careless Attitude:** A “chalta hai” mindset still dominates.
- **Limited Education:** Lack of structured road safety training (self, pillion, and traffic).
- **Personal Concerns:** Misconceptions like fear of baldness due to sweat discourage use.

Practical Issues

- **Limited Storage:** Two helmets don't fit in the boot.
- **Unsafe Mobile Use:** Riders rely on phones for GPS, music, and calls.
- **Often Forgotten:** Pillion Helmets Left at Home → Challans and Higher Accident Risk.
- **Theft & Damage:** Helmets left on vehicles are often stolen or damaged by the weather.
- **Cumbersome to Carry:** Hand-carrying leads to scratches, drops, and inconvenience.
- **Poor Communication:** Wind and traffic noise block rider–pillion conversation.

Q - Are **Practical** issues leading to **Behavioral** or Behavioral ones leading to Practical?

A – Our study suggests its **Practical** leading to **Behavioral** issues with couple of exceptions

Why DualSafe Exists



"Arvind Sethi, Founder & CEO, noticed that pillion riders almost always skipped helmets — not out of negligence, but because carrying two separate helmets was impractical. He set out to engineer the problem away."

2020

Concept born; SharkTank India Season 1 Finalist

2021

First prototype. Grant under SISFS & Pre-seed money from DST-CPS

2022-23

Patents granted — India, USA, UK. SiliconIndia Top 10 Wearable Startup

2024-25

NDAAs with couple OEMs
Runner-up position at Eureka 2025, event held at IIT Bombay

DualSafe:

Engineered to Remove Every Barrier.



Patented in India · USA · UK · Australia · China (filed) · EU & ASEAN (filed)

1

Split in 10 Seconds

2-in-1 Design

One integrated unit separates into two fully BIS-certified helmets. No tools. No fuss. 10 seconds flat.

2

Fits the Standard Boot

Boot-Fit Storage

Dual helmet engineered to slot into the existing storage compartment — zero modification required.

3

Smart by Design

Smart IoT Built-in

Bluetooth, GPS tracker, rider-pillion communication, lock-strip alert, and SOS — all embedded, not bolted on.

Unlike Vega, Steelbird, or Studds — DualSafe is the only helmet with a patented 2-in-1 architecture + embedded IoT. A new category, not an incremental improvement.

Policy Alignment



Transformational Directive by Hon'ble Union Minister of MoRTH, **Sh. Nitin Gadkari Ji** –

- From January 1, 2026: Every two-wheeler must include two BIS-certified helmets
- Stricter enforcement and higher fines for non-compliance
- Emphasis on supporting “Made in India” innovations in road safety

The mandate to sell two ISI-certified helmets with every two-wheeler reinforces what DualSafe stands for – prioritizing rider and pillion safety.

With thousands of fatalities linked to the absence of helmets, this is a necessary step toward safer roads.



All 2-wheelers to be mandatorily sold with 2 ISI-certified helmets: Gadkari

Union Road Transport and Highways Minister Nitin Gadkari announced that all two-wheelers will now be mandatorily sold with two ISI-certified helmets. "This is not just a regulation, it's a national need," said Two-wheeler Helmet Manufacturers Association (THMA) President Rajeev Kapur. Notably, India witnesses over 69,000 two-wheeler fatalities each year, with 50% being due to absence of helmets.



Market Size

of the Global Smart Helmet

Within India, with 260M two-wheelers our market translates (TAM) to around USD 1.2BN; Considering 15% to be SOM for Dual HeadGear to be around USD 36M.

Global Market (excluding Americas, South Africa and China), with around 1.6BN two-wheelers that translates (TAM) to USD 4.7BN; Considering 20% to be SOM for Dual HeadGear to be around USD 320M.

2025

\$ 7.0 Billion

CAGR of 12.0% during 2025-2028

2028

\$ 9.9 Billion



Source:

<https://www.marketresearchfuture.com/reports/bike-helmet-market-8022>

<https://dataintel.com/report/helmet-market/>

2025-2028