

BUSINESS PLAN

Next \$20M Road Safety Business
for Two-Wheelers

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Inspired by the Two Wheeler Airbags?

Why stop there? Take it to the next level—\$20M road safety product for two-wheelers, patent it, own it and turn it into a thriving business! Below, you'll find innovative improvements to make it even better. Plus, a full business plan to guide you on your exciting entrepreneurial journey.

Potential Patentable Improvements

Here are some exemplary product ideas for the next \$20M road safety business for two-wheelers. This should help you to structure your thoughts.

1. Auto-Eject Saddle Seat

- A smart seat that uses impact sensors to eject and redirect riders away from high-speed crashes, minimizing head-on or roll-under injuries.

2. DropZone AR Visor

- A helmet-mounted AR system that scans surroundings in real time and highlights emergency landing zones (grassy patches, clear medians, soft shoulders) during a crash to guide riders to a safer fall.

Now it's your turn.

Step 1 - Brainstorm to come up with unique improvements – add new features or modify features listed above.

Step 2 - Claim your free patent strategy call with Patent Yogi Team. Book via this link

<https://calendly.com/patentyogi>

Business Plan:

Executive Summary

ImpactFlight Safety Systems Inc. is a U.S.-based mobility tech startup on a mission to **redefine two-wheeler safety**. While car safety has advanced rapidly, motorcycles, scooters, and e-bikes continue to suffer from disproportionate accident fatality rates. We're changing that.

Our flagship offerings are:

- **Auto-Eject Saddle Seat**– A smart seat that uses impact sensors to **eject and redirect riders away** from high-speed crashes, minimizing head-on or roll-under injuries.
- **DropZone AR Visor**– A helmet-mounted AR system that scans surroundings in real time and **highlights emergency landing zones** (grassy patches, clear medians, soft shoulders) during a crash to guide riders to a safer fall.

Both technologies aim to turn near-certain fatalities into survivable events by giving the rider **split-second biomechanical and visual advantages**.

Company Overview

- **Name:** ImpactFlight Safety Systems Inc.
- **Founded:** 2025
- **Location:** Palo Alto, California
- **Structure:** Delaware C-Corp
- **Mission:** To give two-wheeler riders the tools to survive the crashes they can't avoid
- **Vision:** Become the industry standard for intelligent motorcycle safety systems, starting with aftermarket, then OEM integration

Market Analysis

🎯 Target Segments:

- OEMs: Motorcycle manufacturers (Harley-Davidson, Yamaha, KTM, etc.)
- Aftermarket safety accessories (RevZilla, CycleGear)
- Fleet operators: delivery riders, scooter-sharing services, courier firms
- Insurance firms for bundled safety solutions
- Military/police mobility divisions

📊 Market Size:

- U.S. motorcycle market: \$8B+ (units + accessories)

- Global AR helmet market: **\$1.2B+ by 2030**, growing at 14% CAGR
- Two-wheeler accident protection systems: **Early-stage + highly under-penetrated**

Market Trends

- 📶 Increase in electric bikes and urban motorcycles = higher collision rates
- ☐ Over **5,000 motorcycle deaths/year** in the U.S. alone
- ☐ Growing focus on **neuro-protection + crash prediction**
- ☐ Rider demand for tech-integrated helmets and seats (post-LiveWire era)
- 🔍 Interest from insurance firms in **bundled tech discounts** (like Tesla's safety score model)

Product Description

1. Auto-Eject Saddle Seat™

- Uses **accelerometers, gyroscopes, and impact sensors** to detect unavoidable high-speed crashes
- Quick-jet ejection mechanism launches the saddle **at a 15–30° rearward angle**
- Safely separates rider from bike (especially in front or t-bone collisions)
- Compatible with standard saddle bases (adaptable for sport bikes, cruisers, e-bikes)
- Future feature: connect with airbag backpack vests for coordinated safety response

2. DropZone AR Visor™

- Mounted inside full-face helmets
- Powered by **wide-angle cameras and environmental scanning algorithms**
- Highlights “soft zones” (e.g., grassy areas, curbs, ramps) during a crash
- Real-time visuals change from **green to red** as options diminish
- Built-in haptic alert system (vibrates side of helmet to steer user instinctively)
- Cloud update system for new city terrain + AI learning from past crashes

Marketing & Sales Strategy

📣 Go-to-Market Strategy:

- Launch viral video: *“The Helmet That Helps You Crash Safer”*
- Demo booth at motorcycle expos (AIMExpo, CES, EICMA)
- Collaborate with YouTube reviewers (e.g., FortNine, RevZilla, MotoBob)
- Influencer campaigns with stunt riders and crash test engineers

- Bundle with premium helmets and e-bike retailers

Sales Channels:

- D2C via branded Shopify site
- Amazon & RevZilla listings
- Retail: motorcycle gear stores, electric bike showrooms
- B2B deals with courier/delivery firms
- OEM licensing for premium motorcycle lines

Management and Organization

- **CEO** – [Your Name], former mobility product lead at an automotive tech firm
- **CTO** – Aerospace engineer with crash-dynamics background
- **Head of AI** – AR navigation and real-time terrain detection specialist
- **VP of Partnerships** – Ex-motorcycle dealership strategist
- **Advisory Board** – Motorcycle stunt expert, insurance executive, trauma surgeon

Financial Plan (Year 1)

Category	Cost (USD)
R&D + crash simulation	\$500,000
Prototyping + testing	\$400,000
AR + terrain software dev	\$350,000
Safety certifications	\$200,000
Salaries (core team)	\$650,000
Marketing + launch	\$350,000
Total	\$2.45M

Funding Requirements

- **Total sought: \$3 million seed round**
- **Use of Funds:**
 - Finalize crash-detection and ejection tech
 - Build terrain detection AI model
 - Run urban/rural crash simulations
 - File patent families (hardware + software)
 - Launch pilot with 3 U.S. police departments & 1 food delivery company

Revenue Streams

1. **Direct product sales** (Auto-Eject Seat + AR Visor kits)
 2. **B2B fleet sales** (delivery scooters, patrol bikes)
 3. **Licensing to OEMs** (Kawasaki, Harley, e-bike makers)
 4. **SaaS platform** (DropZone terrain mapping subscriptions)
 5. **Insurance tech bundles** – offer reduced premiums via partnerships
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Revenue Projections

Year	Units Sold	Avg Unit Price	Revenue
Year 1	5,000	\$250	\$1.25M
Year 2	20,000	\$300	\$6.0M
Year 3	50,000	\$350	\$17.5M

Interested in taking your idea further?

[Book a free consultation with our experts](#)