Deep Innovation: An Innovation Feasibility Assessment & Launch Roadmap Dossier (Lava Leap Labs)

Product Vision & Value Proposition

Vision: To evolve the simple 'Floor is Lava' concept into a sophisticated, high-fidelity, collaborative athletic challenge that demands simultaneous physical execution and strategic planning.

The **Lava Leap Course** is a premium, lifestyle-forward physical entertainment system, featuring climbing structures, elevated platforms, and floating elements (as per the concept sketch), all modularly designed to fit various indoor/outdoor environments.

The Unique Selling Proposition (USP): Dynamic Challenge Generation. Unlike static rope courses, Lava Leap Labs uses integrated digital controls to introduce real-time variables—like timing limits, resource constraints (movable planks or 'safe zone' tokens), and shifting objective points—forcing teams to communicate under extreme duress.

This innovation enhances **quality of life** by providing a thrilling, active outlet and enhances **efficiency** in corporate settings by offering verifiable, intense training in leadership, crisis management, and trust building. It is designed to feel aspirational and inevitable.

Consumer & Market Impact

Persona 1: The HR Director (Corporate Client)

Pain Point Solved: Lack of effective, measurable, and engaging team-building activities.

"We saw our team dynamics shift in real-time under pressure. It’s effective crisis management training disguised as pure, exhilarating fun."

Persona 2: The Thrill-Seeking Family (FEC Guest)

Pain Point Solved: Seeking novel, socially shareable experiences that involve the entire group across multiple age ranges.

"Better than any escape room or rope course we’ve ever tried. It felt cooperative and competitive at the same time!"

Persona 3: The Urban Ninja Athlete (Non-Obvious Use Case)

Pain Point Solved: Need for highly dynamic, modular indoor facilities that specifically test multi-person cooperation, agility, and rapid decision-making under high physical stress.

"This modular setup allows for incredibly versatile agility drills that static courses can't offer; it's a game-changer for movement scientists and trainers."

Sectors Benefitting Early On: Corporate offsites (high-value B2B), specialized adventure parks, and high-end family entertainment centers (FECs).

Feasibility Assessment

NASA Technological Readiness Level (TRL): TRL 7 – System Prototype Demonstration in an Operational Environment.

Context: TRL measures how ready the underlying technology is.

Explanation: The necessary physical structures, modular rigging systems, structural safety features, and digital scoring hardware are mature. A functional prototype combining these established technologies has been successfully integrated and demonstrated in a controlled, non-commercial testing environment.

Next Stage (TRL 8): Actual system completed and qualified through test and demonstration (i.e., achieving full safety certification and successful operation in a pilot commercial setting).

KTH Innovation Business Readiness Level (BRL): BRL 3 – First Feasibility & Initial Proof of Concept.

Context: BRL measures how ready the supporting commercial strategy is.

Explanation: The target market segments have been clearly identified (FECs, Corporate), and initial conceptual pricing models (e.g., licensing vs. outright sale) have been sketched out. However, no formal pilot sales, comprehensive customer acquisition strategy, or secured investment are finalized.

Next Stage (BRL 4): Validated market segment and customer value, demonstrating a basic validated business model (e.g., securing a Letter of Intent or firm partnership for the first commercial pilot installation).

Prototyping & Testing Roadmap

Phase 1: Alpha Development & Safety Certification (0–4 Months)

MVP Development: Finalize Computer-Aided Design (CAD) specifications for all core modular connection points and refine the integrated digital scoring API for reliability and user experience.

Safety Audit: Achieve preliminary regulatory compliance and structural safety certifications necessary for commercial installation in target regions.

Phase 2: Targeted Field Trials & Iteration (4–8 Months)

Pilot Launch: Install a closed-beta MVP at a strategic partner facility, focusing exclusively on gathering operational data (e.g., durability, maintenance needs, participant throughput).

Iterative Refinements: Implement key changes based on early adopter feedback, particularly concerning challenge difficulty scaling and minimizing operational downtime for cleaning/resetting.

Phase 3: Parallel Business Model Validation (Ongoing)

Develop detailed B2B operational manuals, staff training curricula, and maintenance protocols, which are critical for enterprise adoption.

Validate tiered pricing models by simulating sales pitches to potential buyers (corporate versus pure entertainment venues).

Strategic Launch & Market Integration

Go-to-Market Strategy: Focus initially on **B2B Licensing and Installation**, selling the complete modular system to large entertainment park chains and established corporate retreat centers, which have existing infrastructure and clientele.

Strategic Partnerships: Secure a partnership with a national event management or HR consulting firm that specializes in team resilience training to certify and promote the course as a core offering.

Pilot Programs: Offer a highly visible, loss-leader installation to a flagship FEC in a high-density urban center. This will generate crucial buzz, high-quality promotional content, and necessary consumer data.

Macrotrend Alignment: The innovation capitalizes on the massive shift toward the **Experience Economy**, offering premium, memorable, group-based physical challenges. Furthermore, it integrates with the growing corporate focus on **Dynamic Leadership and Psychological Safety** in team structures by forcing immediate, high-stakes cooperation.

The creation of proprietary 'Lava Leap League' competitive events will ensure sustained consumer momentum and drive facility utilization.

Next Step

Define the minimum viable product (MVP) module set and secure structural engineering consultation to lock down final safety and manufacturing specifications for Phase 1 production.