

Assessing Startup Opportunities in the AI Era



Developed by Co-founder and General Partner, Eva Lau



Agenda

Overview

Investment Thesis

Five Investment Areas

Assessment Framework

Case Studies

Summary

TSF at a Glance

We are a deep tech VC investing in
the next frontier of computing and its applications

We follow the same winning formula as Fund I, II and III with early-stage investing across pre-seed, seed and seed+.

Our Partners are a Team of Full-Cycle Operators

- **Every partner is an engineer and a startup leader** across all areas we invest in.
- **Unparalleled track record:** built, scaled, and led startups, including **a founder-CEO with a massive exit.**
- **Deep expertise across the full cycle**—technology, product, commercialization, and investing—earned through years of building before becoming successful investors.



Eva Lau

GENERAL PARTNER

Scaled Wattpad from tens of thousands to tens of millions of users before leaving in 2013 to start investing. Link to [bio](#).



Brandon Zhao

PARTNER

Wattpad founding data scientist.
Link to [bio](#).



Allen Lau

OPERATING PARTNER

CEO and co-founder of Wattpad – 100M users, US\$120M funding and acquired by Naver for US\$660M in 2021. Link to [bio](#).



Dr. Albert Chan

PARTNER

PhD in Biomedical Engineering,
CTO at robotics company ForceN. Link to [bio](#).



Mikayla Wronko

INVESTMENT ASSOCIATE



Tess Fox

HEAD OF INVESTOR RELATIONS & BUSINESS OPERATIONS



Naomi Lau

LEAD, ECOSYSTEM & PARTNERSHIPS

We are a Thesis Driven Venture Fund

Our Thesis

We invest in the next frontier of computing and its applications, **reshaping large-scale behaviour**, driven by the **collapsing cost of intelligence** and defensible through **tech and data moats**.

Please find our full TSF Thesis 3.0 [here](#).

Behind Our Thesis

Building on the **success of Wattpad** and its early adoption of AI, dating back to 2012, we have long understood the **transformative power of AI**. The formation of our investment thesis is recognizing that AI is a **significant platform shift**. Then, we zoom into the **area of opportunities**, define the **characteristics of these winning startups**, and take **calculated risks**.

We only invest in things we understand and leverage our building, scaling and operating experience to help create successes.

The Three Major Paradigm Shifts in Technology

Like the cost of computing from the 1960s to the 1990s and the cost of connectivity in the internet era, '**the cost of intelligence**' is now rapidly declining, while the value derived from intelligence continues to surge, driving even greater demand.

Collapse in Cost of Computing



1960s – 1990s

Collapse in Cost of Connectivity



1990s – mid 2010s

Collapse in Cost of Intelligence



Late 2010s onwards

Collapse in Cost of Intelligence Drives a New Innovations

AI is disruptive, transformative and pervasive and it touches every aspect of our lives!

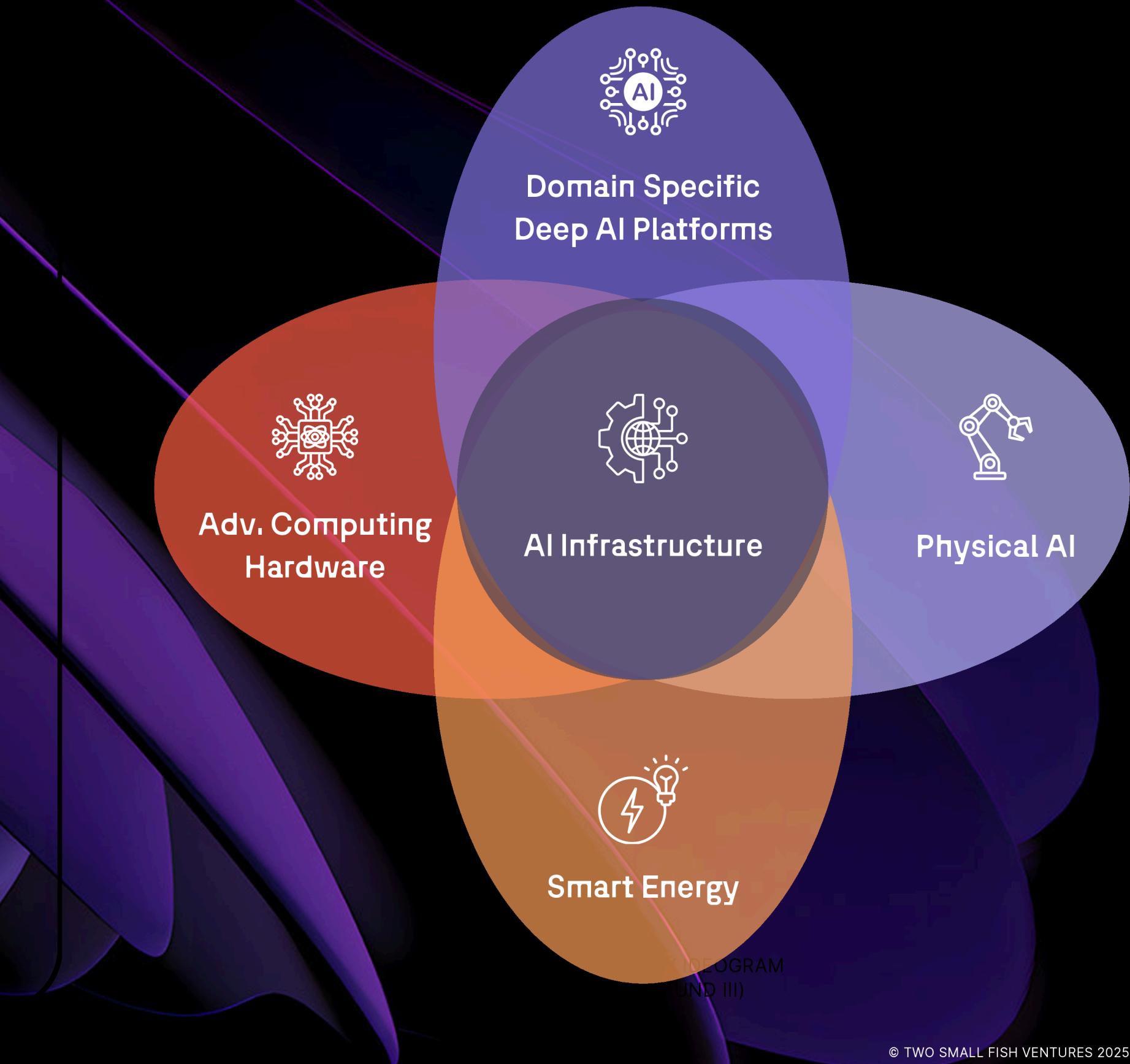
Just like the other platform shifts, **new applications, infrastructure, compute hardware** will be completely changed, driving totally **new user behaviors**



Our Five Investment Areas

The plummeting cost of intelligence is unleashing massive demand, creating equally transformative opportunities in these five areas. They form an **interconnected landscape** where advances in one accelerate breakthroughs in the others.

Every era of technology has a set of areas where **breakthroughs cluster**, where **infrastructure**, **capital**, and **talent** converge to create the conditions for **outsized returns**.

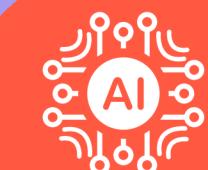


1. Domain Specific AI Platforms

These platforms combine proprietary data, hard-to-replicate models, and orchestration layers designed for **complex and large-scale needs**.

Built on unique datasets, workflows, and algorithms that are difficult to imitate, these platforms create **proprietary intelligence layers** that are increasingly **agentic**. They can actively make decisions, initiate actions, and shape workflows. This makes them both defensible and transformative.

This marks a profound change in how entire sectors operate. They will democratize enterprise workflows, allow people making higher quality decisions.



Domain Specific
Deep AI Platforms

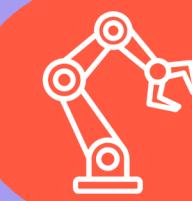
2. Physical AI

Physical AI spans **autonomous devices, robotics, and AI-powered equipment** that can **perceive, act, and adapt in real environments**. From warehouse automation to surgical robots to autonomous mobility, this is where algorithms leave the lab and step into society.

Physical AI will reshape industries that rely on labour-intensive, precision-demanding, or hazardous work. The companies that succeed will combine **world-class AI models with robust hardware integration and build the trust** that humans place in systems operating alongside them every day.



ACRYLIC
ROBOTICS



Physical AI

3. AI Infrastructure

Every transformative technology wave has required **new infrastructure** that is **robust, reliable, and efficient**. For AI, this means going beyond raw compute to ensure systems that are **secure, safe, and trustworthy at scale**.

We need **security, safety, efficiency, and trustworthiness as first-class priorities**. That means building the tools, frameworks, and protocols that make AI more energy efficient, explainable, and interoperable.

The infrastructure layer determines not only who can build AI, but who can trust it. And trust is ultimately what drives adoption.



STORY PROTOCOL



AI Infrastructure

4. Advanced Computing Hardware

Every computing revolution has been powered by a revolution in hardware.

From **custom chips** to **new communication fabrics**, hardware is what makes new classes of AI and computation possible, both in the cloud and on the edge. The winners will also tackle **energy efficiency, latency, and connectivity**, areas that become bottlenecks.

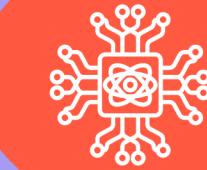
We are entering an age of **architectural innovation** with neuromorphic computing, photonics, quantum computing, and other advances. These architectures will redefine what is computationally possible, and those who can scale it will capture immense value.

HEPZIBAH.AI

Zinute

BLUMIND

abR



Advanced
Computing
Hardware

5. Smart Energy

Every technological leap has demanded a new energy paradigm. Today, AI and computing are demanding unprecedented amounts of energy, and the existing grid cannot sustain this future.

This is why **smart energy is not peripheral, but central to the future**. From **new energy sources** to **intelligent distribution networks**, the way we generate, store, and allocate energy is being reimagined. The idea of programmable energy, where supply and demand adapt dynamically using AI, will become as fundamental. Without resilient and efficient energy, AI progress stalls. With it, the future scales.



Investment Assessment Approach - The IDEA Framework

At the earliest stage, every startup is an experiment in reducing uncertainty. We evaluate opportunities across four fundamental layers — technology, product, market adoption and commercialization — mapped to the founders' ability to **Invent, Design, Engage, and Accelerate**.

I – *Invent* (Technology Risk)

D – *Design* (Product Risk)

E – *Engage* (Market Adoption)

A – *Accelerate* (Commercialization Risk)

First - Understanding the AI Ecosystem

AI Ecosystem Overview

Foundation Layer

Training Data

Data Processing

Feature Engineering

Model Architecture

Application Layer

ML Ops

Prompt Engineering

Prompt Management

Agentic Workflow

Context Injection / RAG

Model Deployment

AI Inference Engine

System Infrastructure and Interfaces

User Feedback

Output of Intelligence


Feedback and Governance Layer

Evaluation and Monitoring

Security and Ethics

Compute Hardware Layer

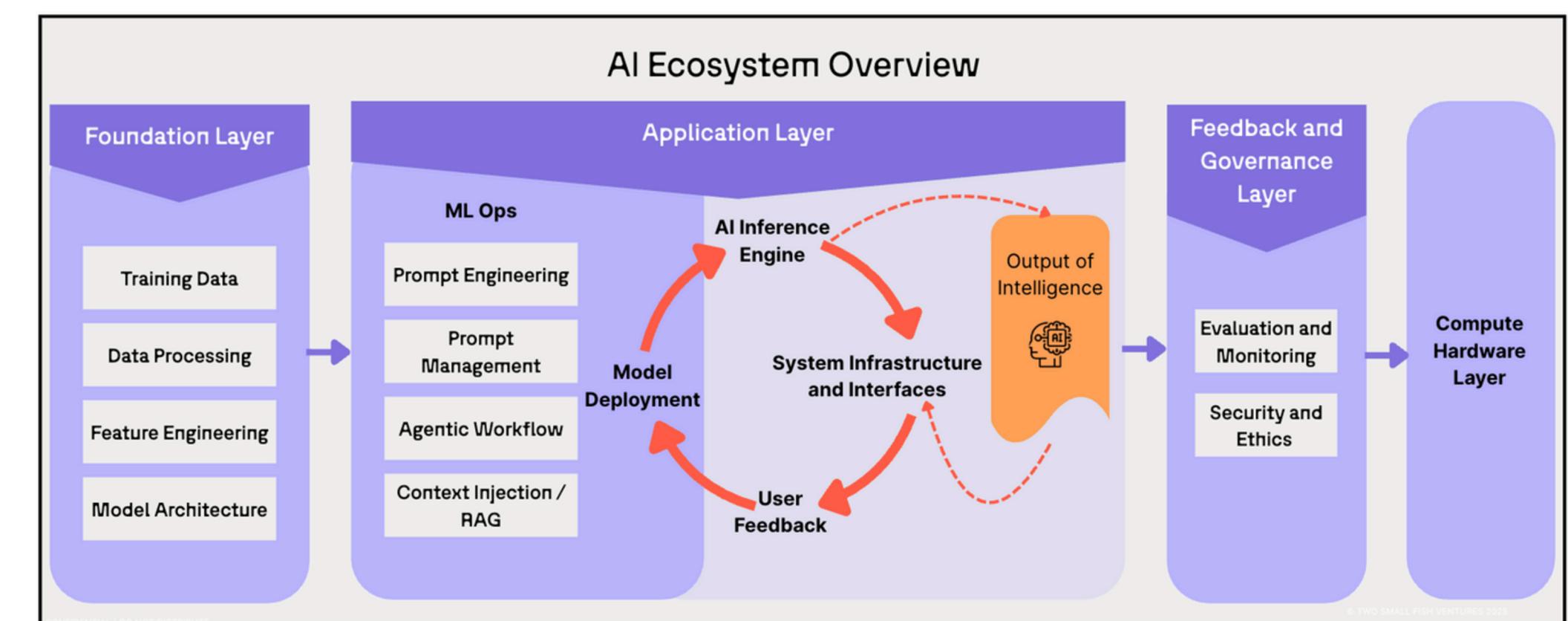
IDEA - Invent - Technology

Key Question:

Can the founders create and validate breakthrough technology in the technology stack?

We assess technical depth, novelty, defensibility, and the team's capability to turn ideas into working innovations.

A **breakthrough technology** represents a **foundational leap** that **overcomes key technical bottlenecks** in AI efficiency, scalability, or integration. It demonstrates deep engineering defensibility and the potential to scale across varied workflows and data environments.



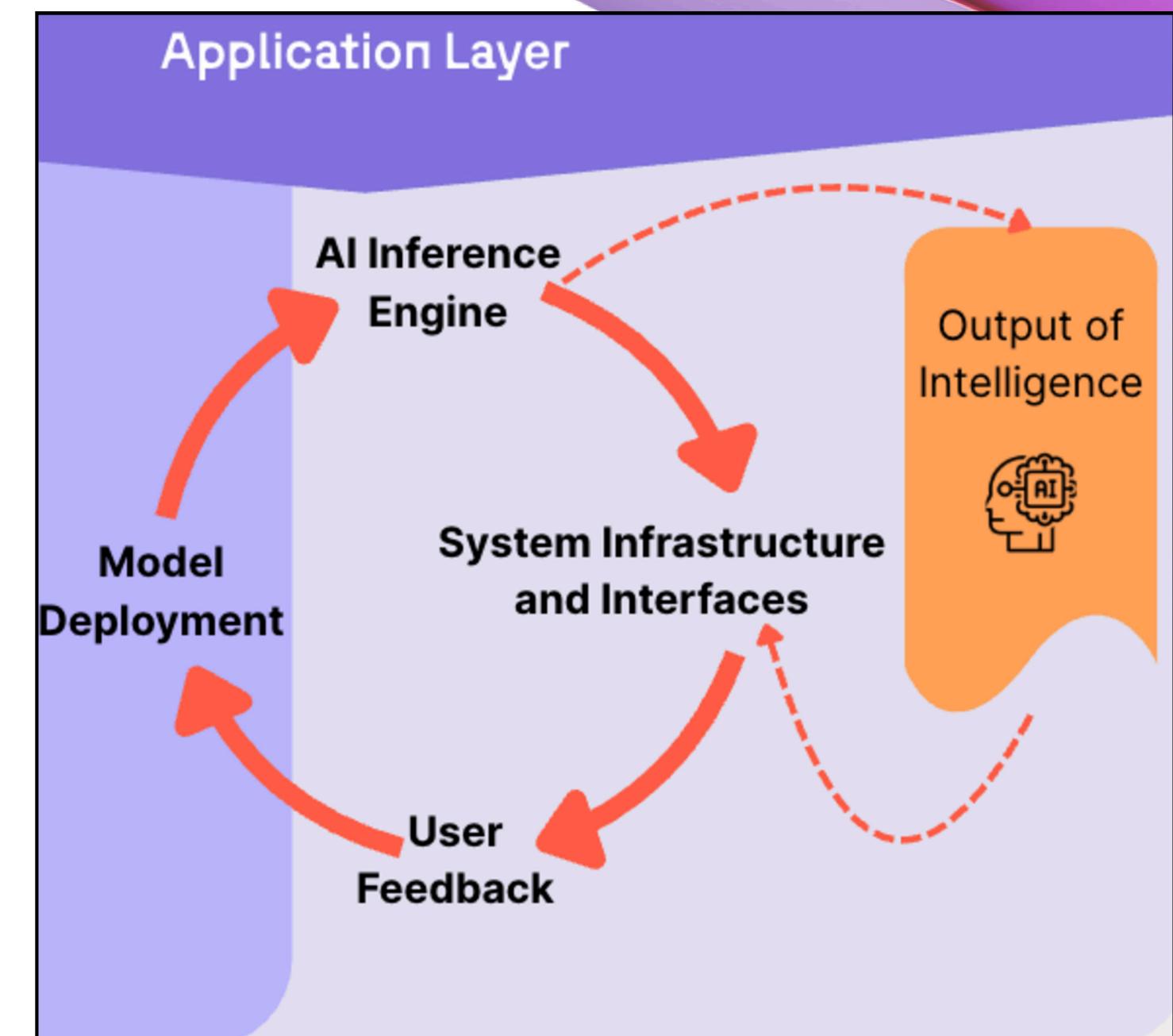
IDEA - Design - Product

Key Question:

Can they build something customers truly love and need?

We look for product clarity, feedback-driven iteration, and early evidence of product–market fit.

Great product design turns complex AI intelligence into **intuitive, high-impact user experiences** that seamlessly fit real workflows. It bridges the gap between technical capability and user adoption, ensuring the **output of intelligence truly meets user needs and delivers exponential value**. In this sense, effective design is what ultimately reduces product risk and transforms technical breakthroughs into indispensable products.



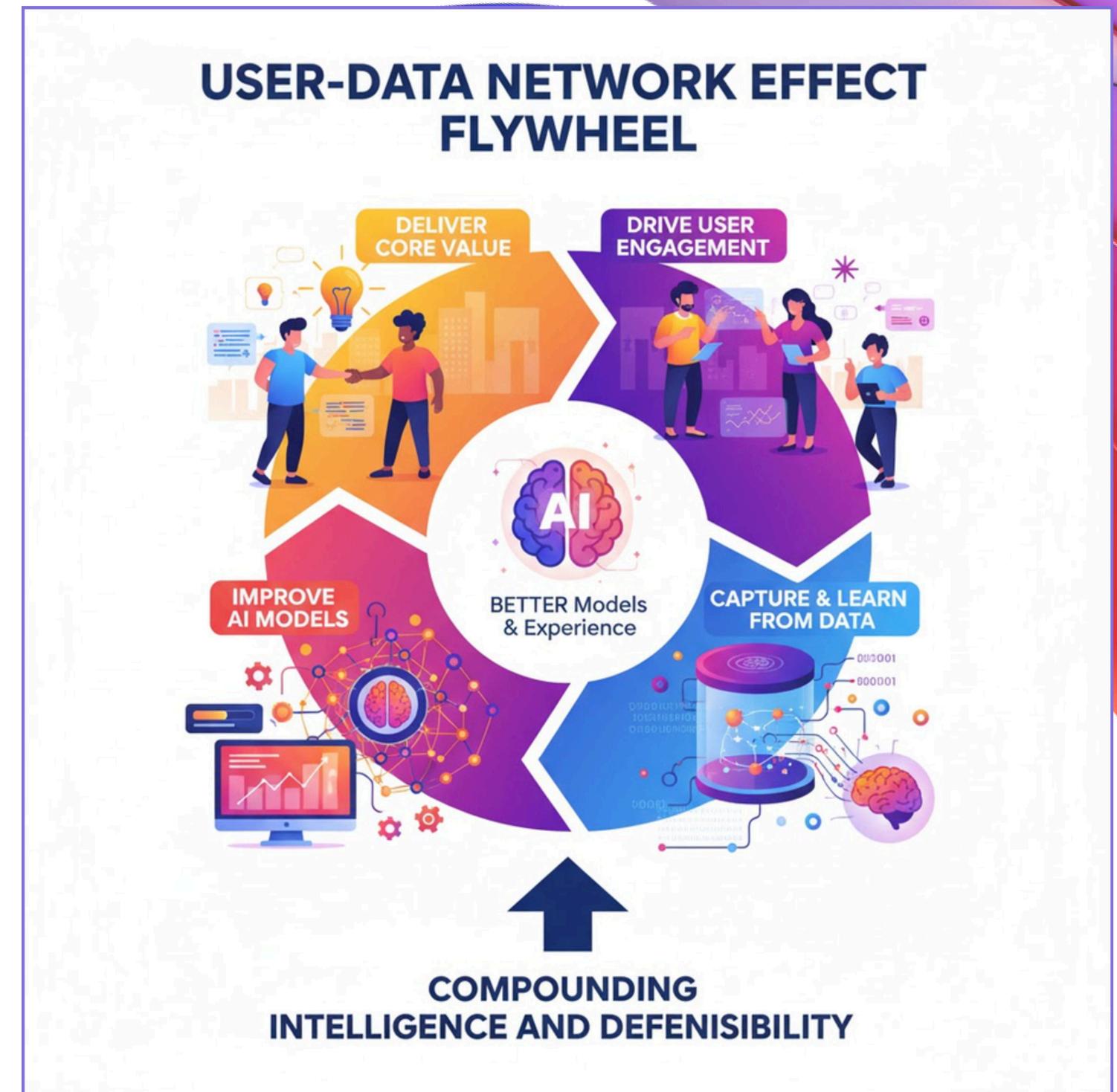
IDEA - Engage - Network Effects

Key Question:

Can they win customer attention and trust?

We evaluate their go-to-market motion, and ability to leverage early users into a network effect flywheel

Product defensibility and moat come from **continuous user engagement** that drives **network effect flywheel** in AI systems. Each interaction feeds data that improves intelligence and personalization, making the product smarter and harder to replicate. Over time, engagement fuels learning, and learning deepens loyalty—creating a self-reinforcing moat that sustains long-term advantage.



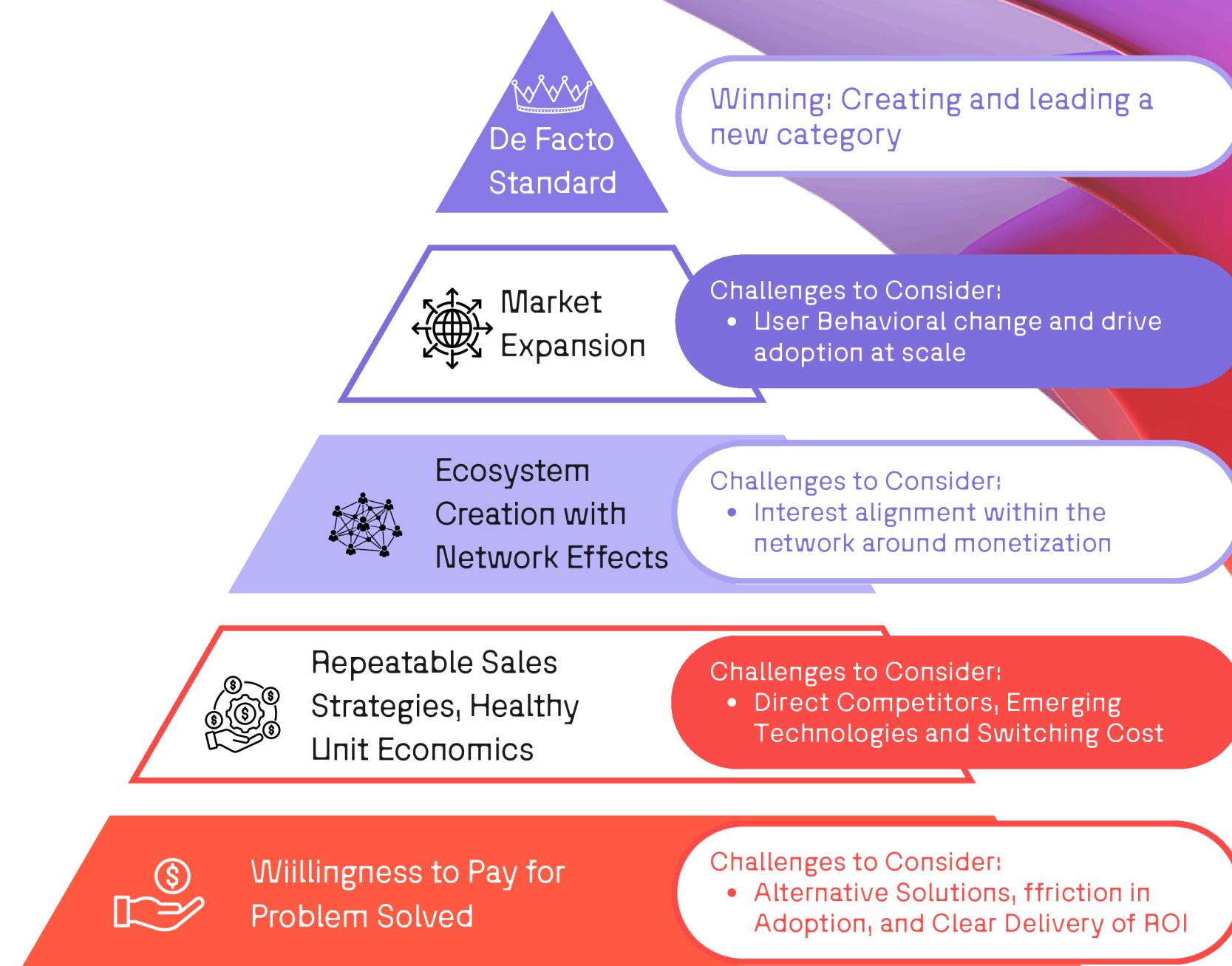
IDEA - Accelerate - Commercialization

Key Question:

Can they become a new technology category?

We assess company vision, business model adaptability, revenue pathways, and long-term market expansion potential to become the de facto standard of a new technology category

The **ultimate** commercialization strategy is to **create and own a new category** by solving a critical user problem, **driving behavioral change at scale**, and expanding participation through network effects that align value across stakeholders—ultimately redefining the market and establishing the technology as the **de facto standard**.



Investment Assessment Approach - The IDEA Framework

I — Invent (Technology Risk) - Demonstration of **Technology Breakthrough**

We assess technical depth, novelty, defensibility, and the team's capability to turn ideas into working innovations.

D — Design (Product Risk) - Validation from Users and Signs of **User Behavioural Changes**

We look for product clarity, feedback-driven iteration, and early evidence of product-market fit.

E — Engage (Market Adoption) - Creation of **Network Effects**, both users and data

We evaluate their go-to-market motion, and ability to leverage early users into a network effect flywheel

A — Accelerate (Commercialization Risk) - Path to Create a **New Category**

We assess company vision, business model adaptability, revenue pathways, and long-term market expansion potential to become the de facto standard of a new technology category

Portfolio Case Studies



dbr

FUTURITM

Case Study #1



What is it?

A generative AI platform for creative image generation

Sector

Generative AI / Deep AI Platform

Founders

PhDs in Artificial Intelligence, inventor of Transformer

Inventions

Diffusion Models for Text to Image Generation

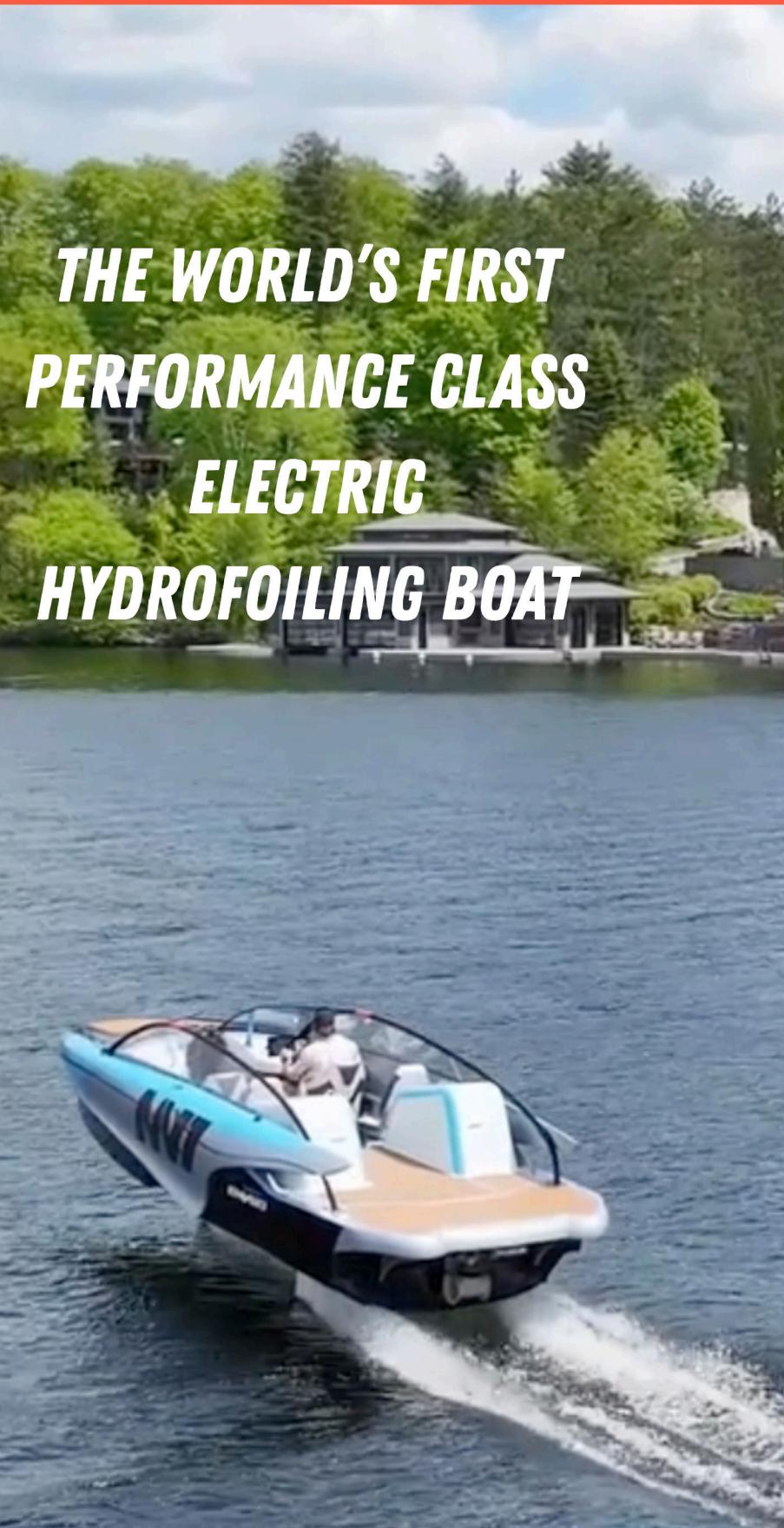
Deal Story

Before launching the company, the founders—renowned GenAI researchers and ex-Googlers—reached out, including one who was a longtime friend of Brandon. We helped shape their fundraise, leading to two VCs co-leading and securing our place in the oversubscribed round.

Vision

Reimagine the designing of graphic and its workflows, making anyone a creator

Case Study #2



What is it?

Zero-emission electric hydrofoiling technology to power boats for the future.

Sector

Marine Technology / Robotics / Physical AI

Founders

Serial Entrepreneurs, PhDs in Engineering, Robotics

Inventions

AI enabled Control System for Autonomous Marine Transportation

Deal Story

Successful serial entrepreneurs from the drone space, the team brought deep expertise to marine tech. We were impressed by their strong tech stack. We led the deal, backing their proven track record and product execution.

Vision

Designed with purpose and powered by innovation, the Envgo NV1 combines aerospace-grade engineering with world-class design to reimagine marine mobility. This is more than a boat, it's a statement about where the future is headed.

Case Study #3



What is it?

Sector

Founders

Inventions

Deal Story

Vision

Identity-based verification solution that is peer-to-peer, and transparent

AI Trustworthiness / Digital Identity Verification

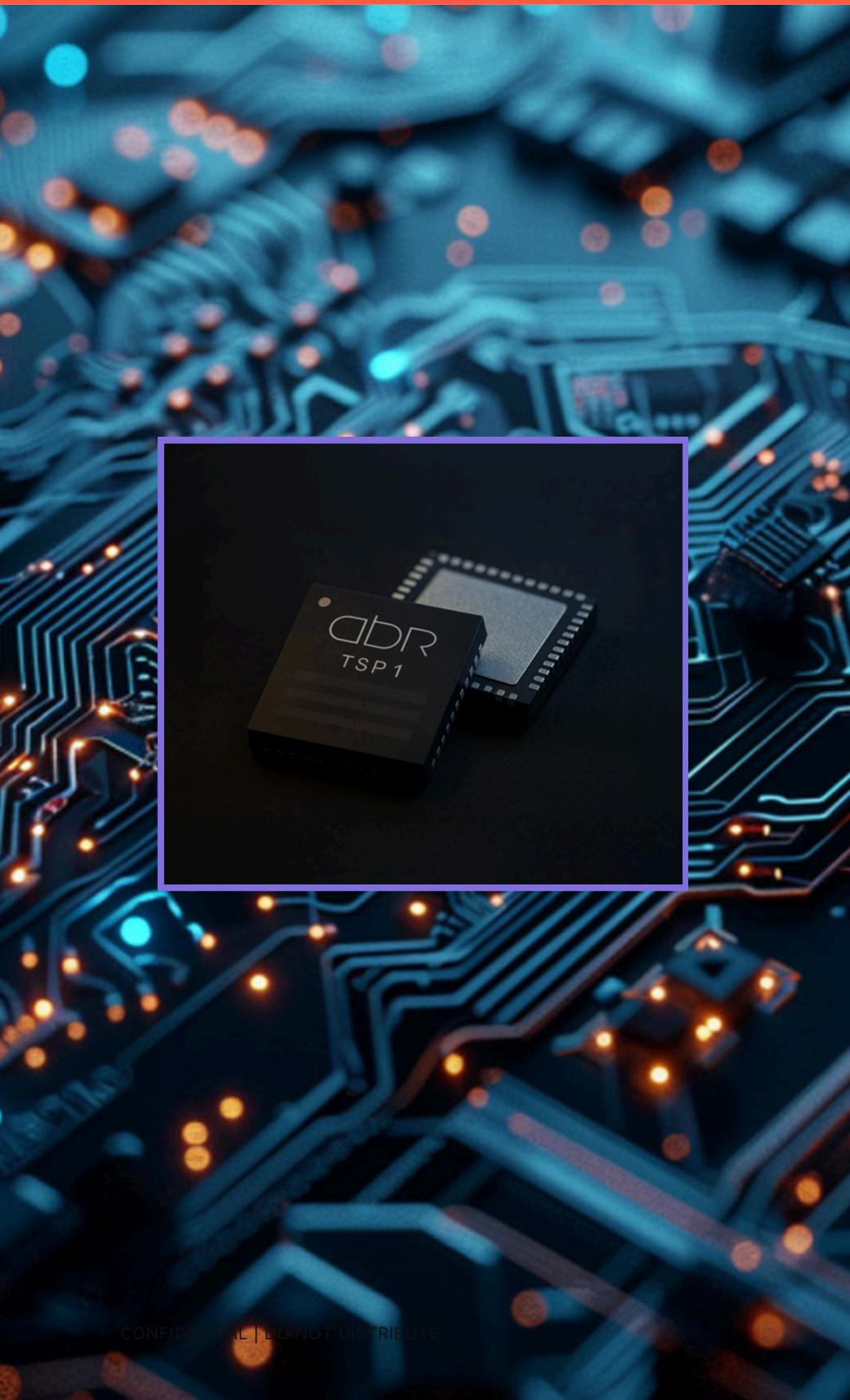
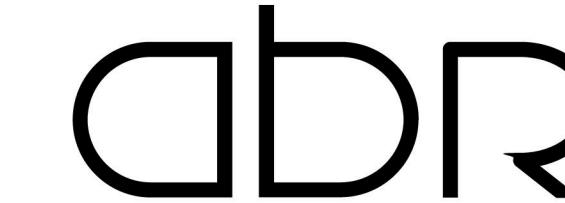
Inventors of Blockchain, PhDs in Physics and Comp Sci

Decentralized and Distributions of encrypted identity keys

TSF was the first institutional investor of the company, personally invited to the round from the founders, who were the co-inventors of Blockchain.

A SureMark Credential stops AI-driven fraud at the source—protecting every conversation, across every channel.

Case Study #4



What is it?

Advanced SSM models and compilers enable highly power-efficient, next-generation computational performance.

Sector

Semiconductors / Edge AI / Advanced Computing

Founders

Professor in Neuroscience, Serial Entrepreneurs

Inventions

Legendre Memory Unit (LMU), a revolutionary class of SSMs

Deal Story

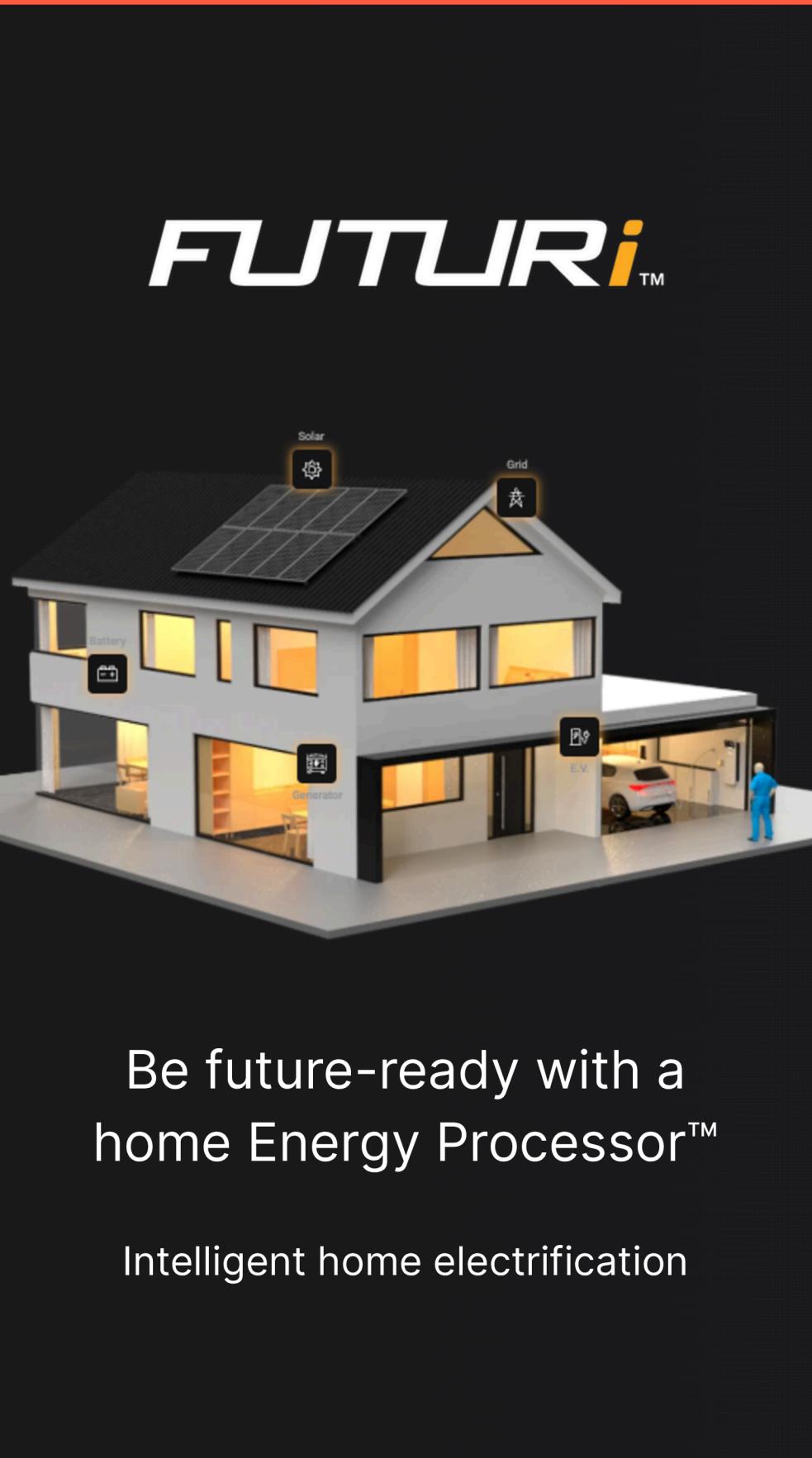
Met through common connections, TSF was very impressed with the inventions. Already validated with consulting contracts, their strategy to bring the technology in different format is a game-changer

Vision

ABR envisions a world where advanced, efficient AI runs seamlessly on edge devices, bringing intelligent computing closer to every interaction.

Case Study #4

FUTURI™



Be future-ready with a
home Energy Processor™

Intelligent home electrification

What is it?

The world's first home Energy Processor for intelligent power management

Sector

Smart Energy / CleanTech

Founders

Professor in Electrical Engineering, teams of PhDs

Invention

Smart electrical panel enabling intelligent, flexible home energy management.

Deal Story

We met the founder, who is a UBC professor, and were impressed by the research-backed tech stack, strong team execution, user-ready product, and a unique approach to distribution and commercialization.

Vision

Be the intelligent energy brain connecting, optimizing, and orchestrating all homes and buildings in an electrified future.

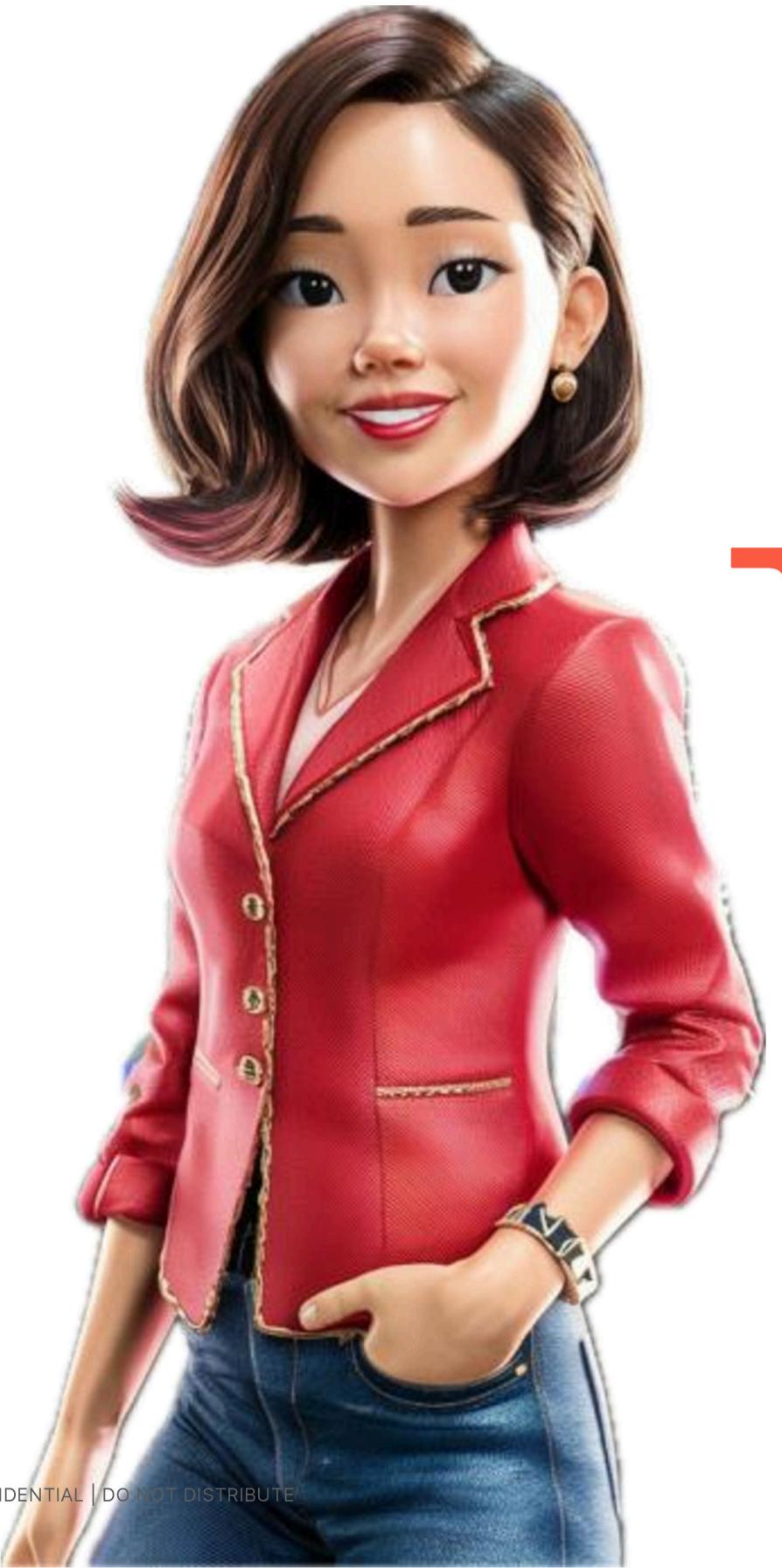
Summary

We are **Thesis Driven** -

We invest in the **next frontier** of computing and its applications, reshaping large-scale behaviour, driven by the **collapsing cost of intelligence** and defensible through **tech and data moats**.

We use the **IDEA Framework** to assess opportunities -

We evaluate opportunities across four fundamental layers — **technology, product, market adoption and commercialization** — mapped to the founders' ability to Invent, Design, Engage, and Accelerate.



Thank You!

