



Avoiding critical pitfalls on the deep-tech development journey

EIC ACCESS+ Educational Session #5

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Meet the presenter...



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 Patricia Celie

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Principal Consultant



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Patricia Celie

- > 15y in Strategic and Business Consultancy
- Working with **academic groups, spin-outs** and **companies** from seed to Series B in LSH
- **Content specialist** LSH incl. orphan drugs, pharmaceuticals, precision medicine, regenerative medicine, medical devices
- Panel member and speaker at **European Innovation Council (EIC) Bootcamp**
- Expert in **EIC Tech2Market Programme**

European
Innovation
Council



TTOs (NL, EU)

>> 100 Start-ups &
Spin-outs

University/UMC Boards,
Departments, PIs



**Working with early-stage
innovators every day,**

**we see the same patterns
again and again.**



Most deep-tech ventures are not held back by technology,

but having Great Technology simply isn't enough.



Startups are temporary organizations designed to search for a scalable business model.

Modified from Steve Blank – Serial entrepreneur / Lean startup pioneer



1 | **The common pitfalls**

Why they happen

Why many early-stage ventures struggle

Often still operating in an **academic mindset**

Often have a **tech-first bias**

Often trying to do **too much at once**

Often do not know what is coming – **the next steps**

Is any of this true for you?

The consequence

Early missteps create **structural constraints** that are hard to reverse.

- Reduced investability
- Negative effects on collaborations & partnerships
- Limited growth potential
- Stepping into pitfalls early gives constraints on your company/case

And: **issues compound over time** – if not addressed early.

**Mis-steps
emerge early.**

**Mis-steps
emerge early.**

**They often
remain unaddressed.**

**Mis-steps
emerge early.**

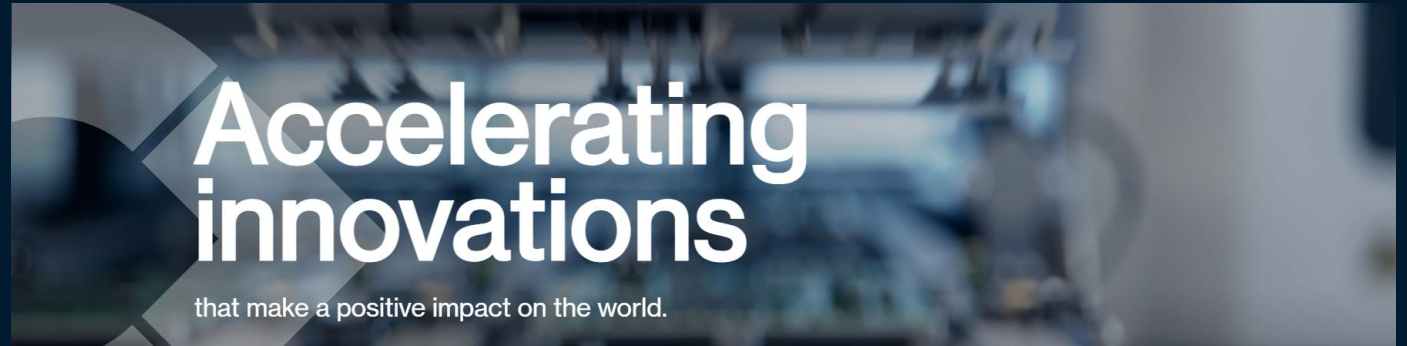
**They often
remain unaddressed.**

**But they shape
long-term outcomes.**

Today, we are building on real-life cases
Let's use them!

Today, we are building on real-life cases

Let's use them!



**>20 years
experience**





2 | **The common pitfalls**

Real life cases

COMMON PITFALLS

Where things typically go wrong – the common pitfalls



1 Knowing your market & proposition



2 Protecting & positioning your asset



3 Being on top of your financing & investor-readiness



4 (Building) your team

COMMON PITFALLS

1 Pitfall #1: (not) Knowing your market & proposition

What goes wrong: No clear market focus

Early signal: Too many potential applications and target markets

Why it matters: Weak positioning, difficult commercial prioritisation, high costs



COMMON PITFALLS

Real-life case example #1: Strong technology, unclear market

1 Situation:

- Academic spin-out (NL) with antibacterial platform technology
- Strong scientific validation and early (public) funding secured
- Led by visionary CEO, exploring multiple applications

Great technology – everyone agrees on that!

But who is actually going to buy it?

Great to talk!

*Even more ideas come in
Inadequate IP protection*

We can do this, we can do that

Lack of focus

What is the risk?

COMMON PITFALLS

Real-life case example #1: Strong technology, unclear market

2 What went wrong?

The spin-out continued R&D and made its costs

- No clear primary customer segment defined
- Market framed too broadly (“multiple applications”)
- No prioritisation of initial use case

3 The Consequence:

Difficult investor discussions (“Where do you start?”).

Loss of momentum and focus. Very high burn rate while not fast-forwarding one particular product.

- Spin-out (NL) with antibacterial platform technology
- Strong scientific validation and early (public) funding secured
- Led by visionary CEO, exploring multiple applications

COMMON PITFALLS

Real-life case example #1: Strong technology, unclear market

4 So what changed?

The (smart) spin-out team recognized the pitfall.

- Narrowed down to one priority indication
- Started to define clear target customer and use case
- Rebuilt value proposition based on specific need

5 Today:

EIC winner (SME instrument Ph2) + investment rounds closed

Company built with first product on market: one consumer product, one major outlicensing deal

Other applications are targeted in separate (group) entities

- Spin-out (NL) with antibacterial platform technology
- Strong scientific validation and early (public) funding secured
- Led by visionary CEO, exploring multiple applications

2 Pitfall #2: (not) Protecting & positioning your asset

What goes wrong: IP not aligned with future commercial path

Early signal: Unclear ownership / late protection decisions

Why it matters: Limits partnering opportunities and investor confidence



COMMON PITFALLS

Real-life case example #2: Strong technology, weak IP positioning

1 Situation:

- University-based medtech spin-out (EU)
- Strong IP from joint academic projects and collaborations
- Multiple partners involved, early publications and patent filings

Great working together!

But have the proper agreements been made?

Let's secure all relevant IP!

Scatteredness

Our technology will change the world!

But who owns it?

What is the risk?

Real-life case example #2: Strong technology, weak IP positioning

2 What went wrong?

As soon as the projects became less 'scientific' but more 'product-oriented':

- IP ownership fragmented across universities
- No clear IP strategy linked to target market/application
- No agreement made on which is commercialisation party

3 The Consequence:

Complex negotiations between partners. Delays.

Lack of interest of investors. Loss of interest in value of the asset.

- University-based medtech spin-out (EU)
- Strong IP from joint academic projects and collaborations
- Multiple partners involved, early publications and patent filings

COMMON PITFALLS

Real-life case example #2: Strong technology, weak IP positioning

4 So what changed?

The TTO of the (main) university stepped in.

- Consolidated IP ownership and clarified rights between partners
- Aligned IP (future) strategy with priority application and market
- Defined clear positioning of the asset & commercializing party
 - *Spin-out*

5 Today:

Still in early days, EIC project completed

First investment round towards closing

Spin-out is supported by strong academic network

- University-based medtech spin-out (EU)
- Strong IP from joint academic projects and collaborations
- Multiple partners involved, early publications and patent filings

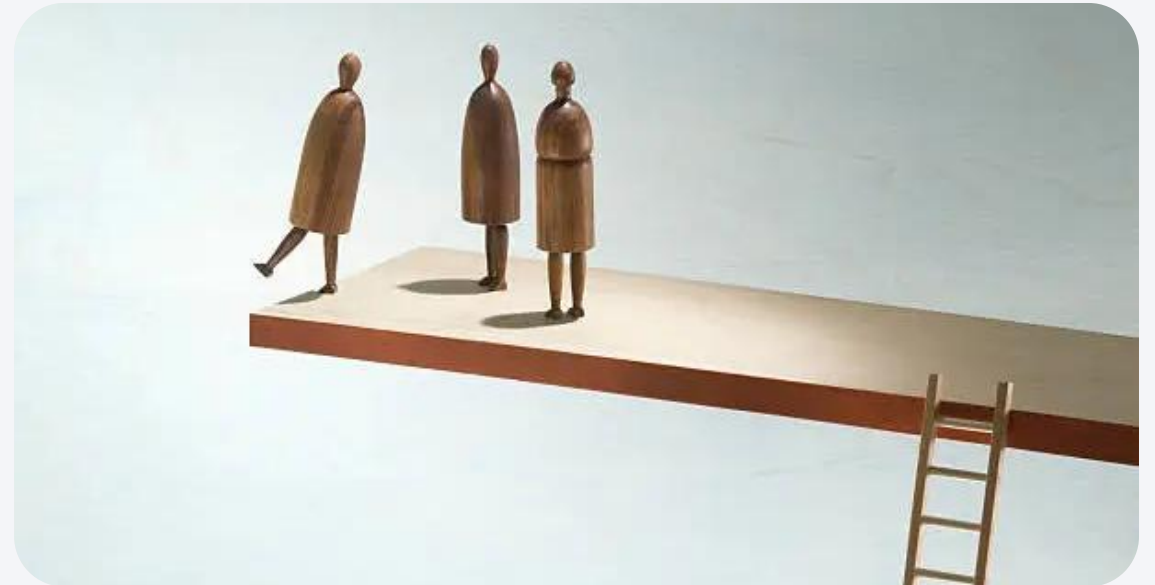
COMMON PITFALLS

3 Pitfall #3: (not) Being on top of your financing & investor readiness

What goes wrong: Not being investment-ready

Early signal: Difficulty translating technology into a credible business case

Why it matters: Delays funding and weakens positioning towards investors



COMMON PITFALLS

Real-life case example #3: Strong technology, weak financing readiness

1 Situation:

- France-based deep-tech start-up with validated technology
- Early public funding secured (grants)
- Small, highly motivated team preparing for first private round

Enthusiasm (also in sales forecasts) and over-assertiveness

Does this close a good deal?

Great technology. End of line.

That story does not convince investors.

Anyone would give their money for this! Right?



What is the risk?

COMMON PITFALLS

Real-life case example #3: Strong technology, weak financing readiness

2 What went wrong?

The company recognized they needed investor financing to further develop their product.

They went ahead and started sending emails.

- No clear funding strategy (timing, milestones, target investors)
- Business case not aligned with investor expectations – different investor types
- Overfocus on technology, limited focus on commercial traction



- France-based deep-tech start-up with validated technology
- Early public funding secured (grants)
- Small, highly motivated team preparing for first private round

COMMON PITFALLS

Real-life case example #3: Strong technology, weak financing readiness

3 The Consequence:

Low interest, let alone commitment.

Difficult and prolonged investor discussions.

Weak negotiation position and risk of unfavourable terms.



- France-based deep-tech start-up with validated technology
- Early public funding secured (grants)
- Small, highly motivated team preparing for first private round

COMMON PITFALLS

Real-life case example #3: Strong technology, weak financing readiness

4 So what changed?

The founding team recognized their limitations and reached out for help.

- Defined clear funding strategy and milestones
- Translated technology into a compelling investment case
- Aligned their own vision with investor expectations and decision criteria

5 Today:

The very visionary team is working with their investors (round closed). Current investors have indicated their interest to be there for the next round. Reaching the milestones is challenging – but the founding team feels incentivised and is committed.



- France-based deep-tech start-up with validated technology
- Early public funding secured (grants)
- Small, highly motivated team preparing for first private round

4 Pitfall #4: (not) Building the right team for your next phase

What goes wrong: Lack of focus and unclear roles

Early signal: Trying all to do the same,
Overcomplicating things

Why it matters: Reduces execution capacity
and organisational resilience



COMMON PITFALLS

Real-life case example #4: Strong founders, but what's next?

1 Situation:

- DE-based start-up with highly skilled technical founders
- Highly aligned, science-driven team with similar backgrounds
- Limited (no) exposure to commercial and operational roles

We know it will take years to develop and market such a product, everyone knows that!

But does that mean you do not need commercial experience now?

Great discussions!

But only focussing on the details, right?

Our team is the best!

That is true. But will it develop an actual product? That sells and is used?



What is the risk?

COMMON PITFALLS

Real-life case example #4: Strong founders, but what's next?

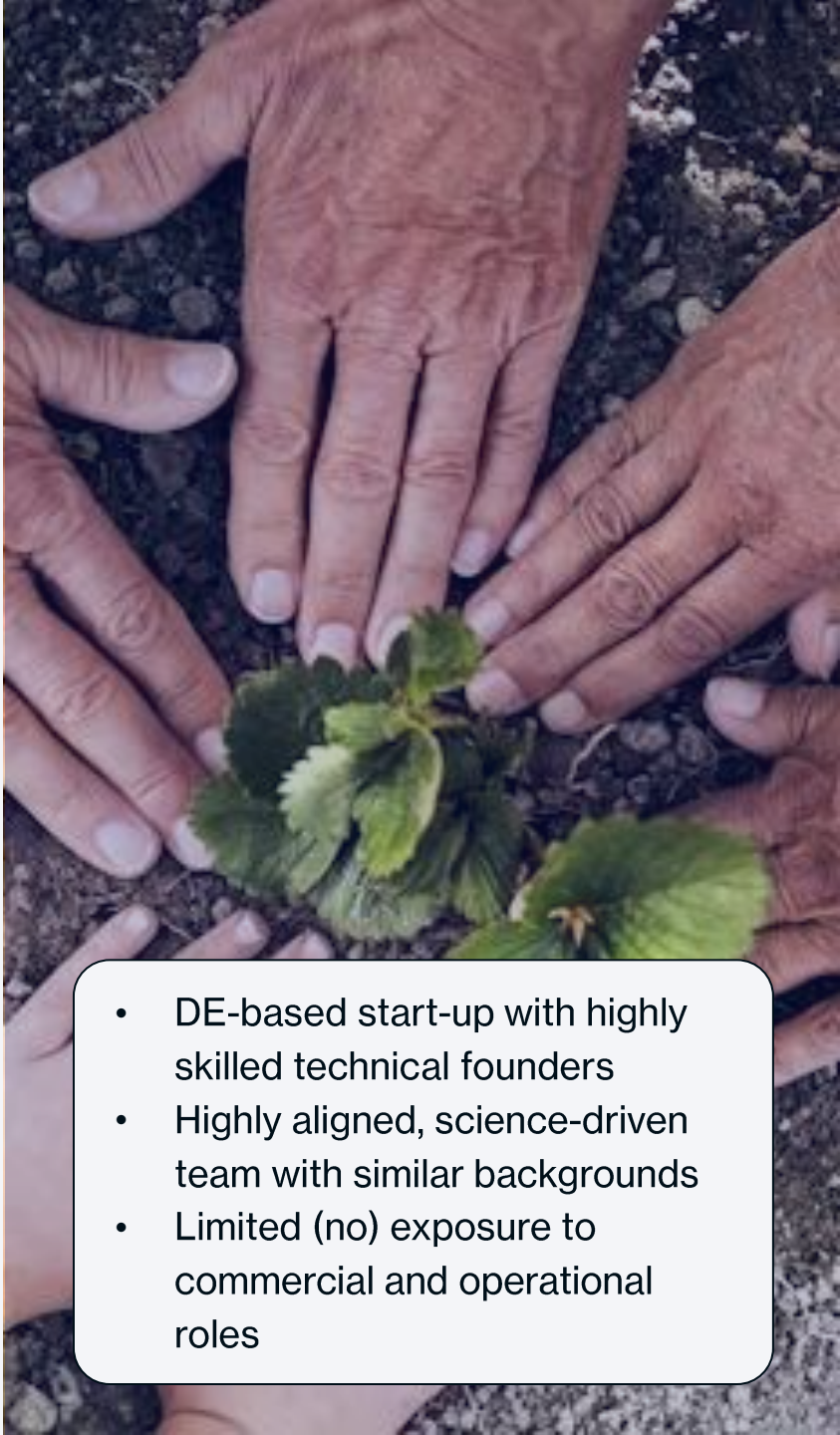
2 What went wrong?

All were fond of each other but (only) spoke the same language

- No clear role definition within founding team
- Missing commercial leadership and business development capabilities – opportunities were not spotted
- Founders remained focused on R&D – overcomplicating the product

3 The Consequence:

Slow decision-making and lack of strategic direction. Limited traction. Perception of execution risk.

- 
- DE-based start-up with highly skilled technical founders
 - Highly aligned, science-driven team with similar backgrounds
 - Limited (no) exposure to commercial and operational roles

COMMON PITFALLS

Real-life case example #4: Strong founders, but what's next?

4 So what changed?

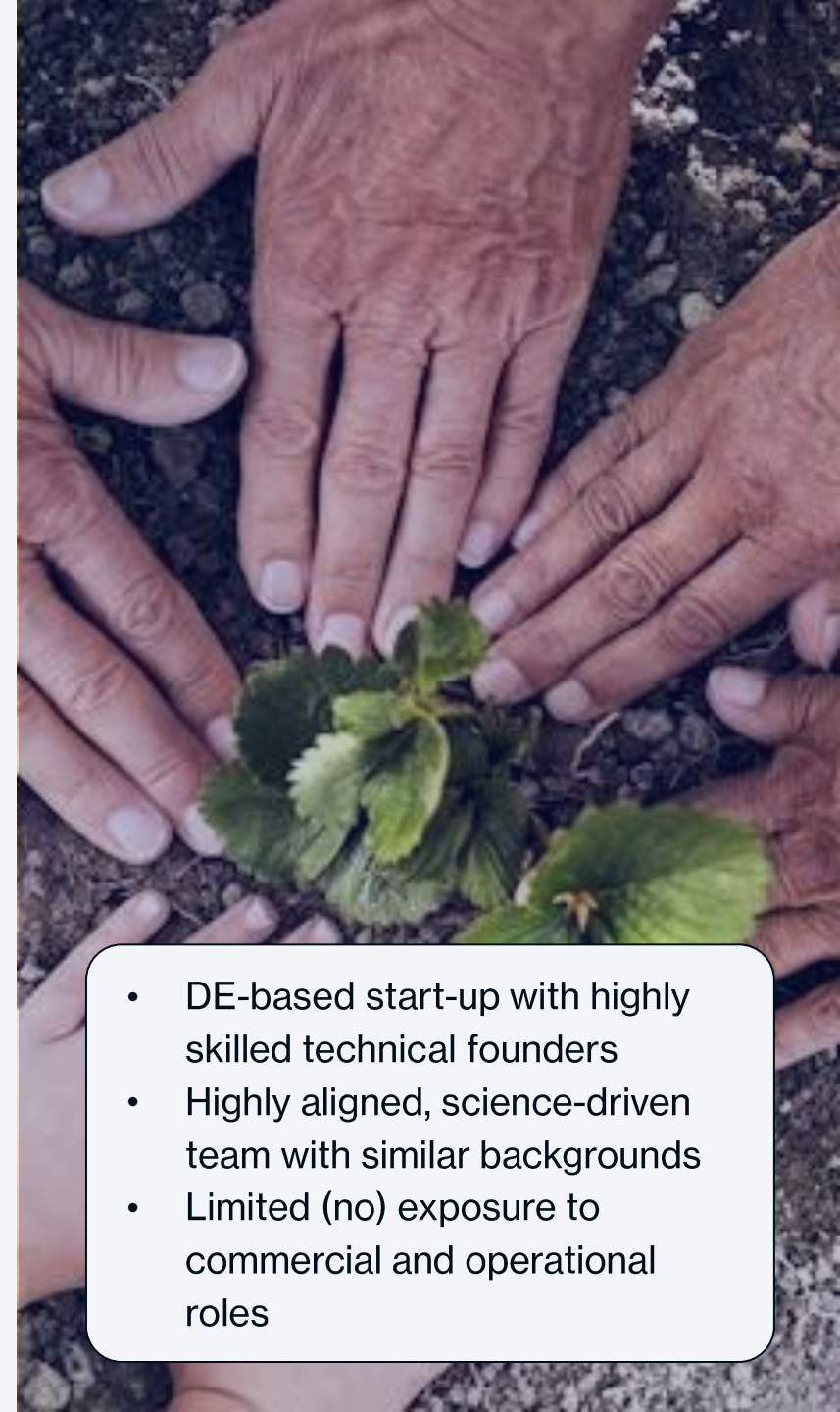
A grant triggered them to 'focus on the business-side of the story'

- Defined clear roles and responsibilities within the team
- Added complementary expertise (commercial / BD / CEO)
- Strengthened governance and decision-making structure

5 Today:

The team occasionally needs to re-align based on complementary experience – but together they are stronger. They less easily 'get stuck' in the technical details and jointly force decisions to move on.

- DE-based start-up with highly skilled technical founders
- Highly aligned, science-driven team with similar backgrounds
- Limited (no) exposure to commercial and operational roles





In complex systems, problems are rarely isolated – they are interconnected.

Peter Senge – Systems thinker, MIT professor



3 | **Cross-cutting insights**

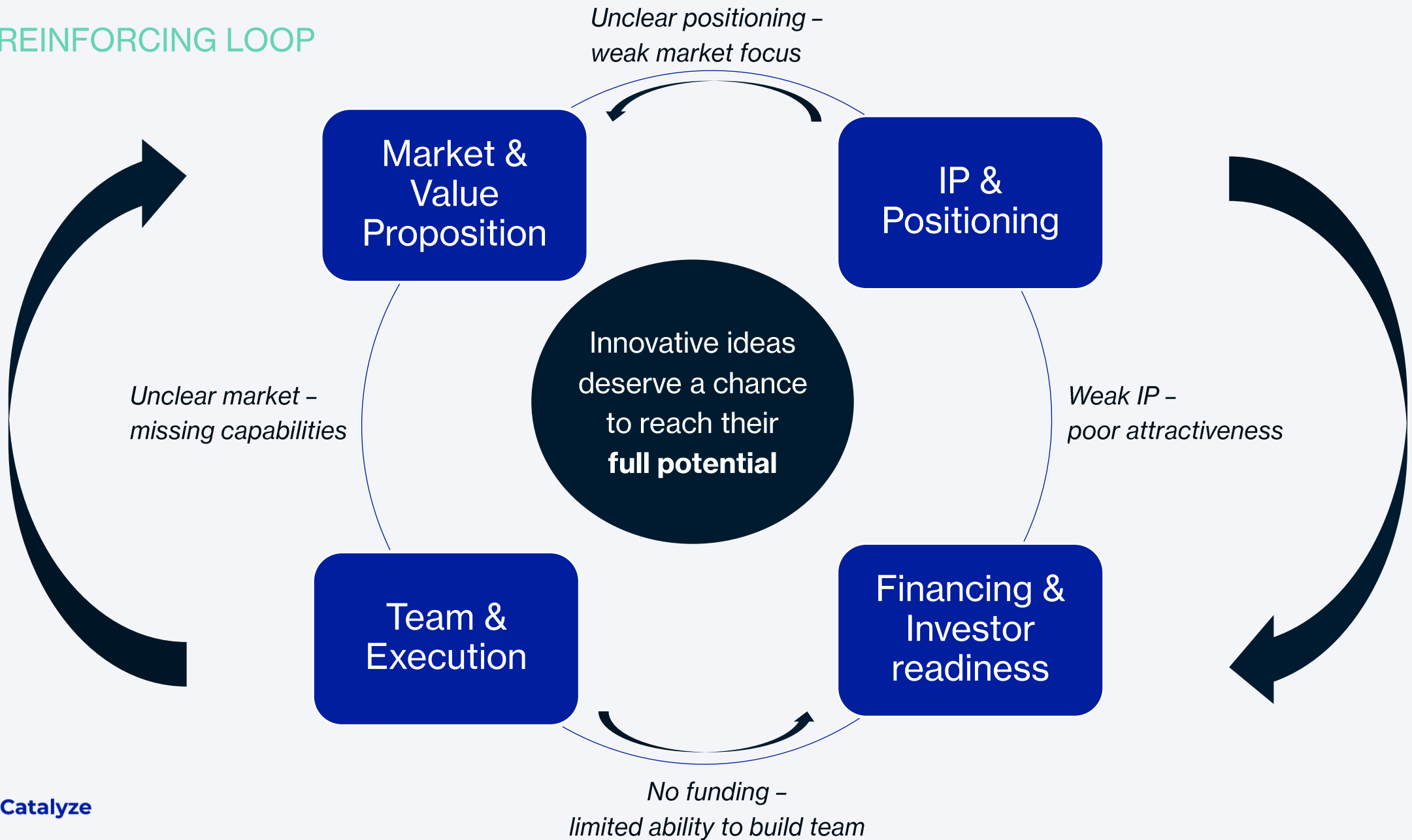
A systems-level view

So, these are not isolated issues...

So, these are not isolated issues...

**the pitfalls reinforce each other,
limit the potential,
create risk**

THE REINFORCING LOOP

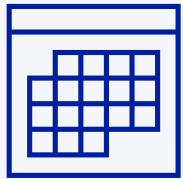




4 | **Practical take-aways**

Building a diagnostic mindset

What to do next



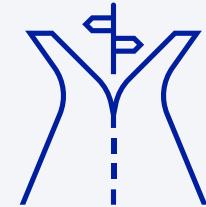
Start
early



Begin with the
end in mind



Build an
investor mindset



Don't postpone key
strategic decisions

Building the diagnostic mindset



Making risk-assessment a **very important part of life**

- Every week/month/half-year/year identify: **where am I at risk?**

E.g.

- Is your IP aligned with your commercial path?
- Do you truly understand your market?
- Do you have a clear financing strategy?
- Are roles and focus clearly defined?



It's not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change.

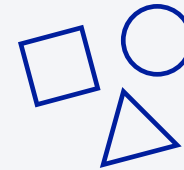
Charles Darwin – Scientist (evolution theory)

Final message



You don't need to solve everything.

At least not at once.



Just avoid getting the fundamentals wrong.

And see the pitfalls coming (or get help).



You don't have to get it right, you just have to get it going.

Mike Maples Jr. – Venture capitalist, investor

What is the one pitfall upcoming for you?



Business Strategy & Analytics

Markets, value proposition and go-to-market strategy



Equity Fundraising & Investor Readiness

Funding strategy and building a compelling investment case



Communication & Dissemination

Positioning innovation across stakeholders and partners

Thank you for listening!



Are you triggered?

Feel free to get in touch for further insights or hands-on advice

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