

From Lab To Market:

How to Turn University Science into Real Business

NTK Summer School, Keynote, Prague, 9/2/25

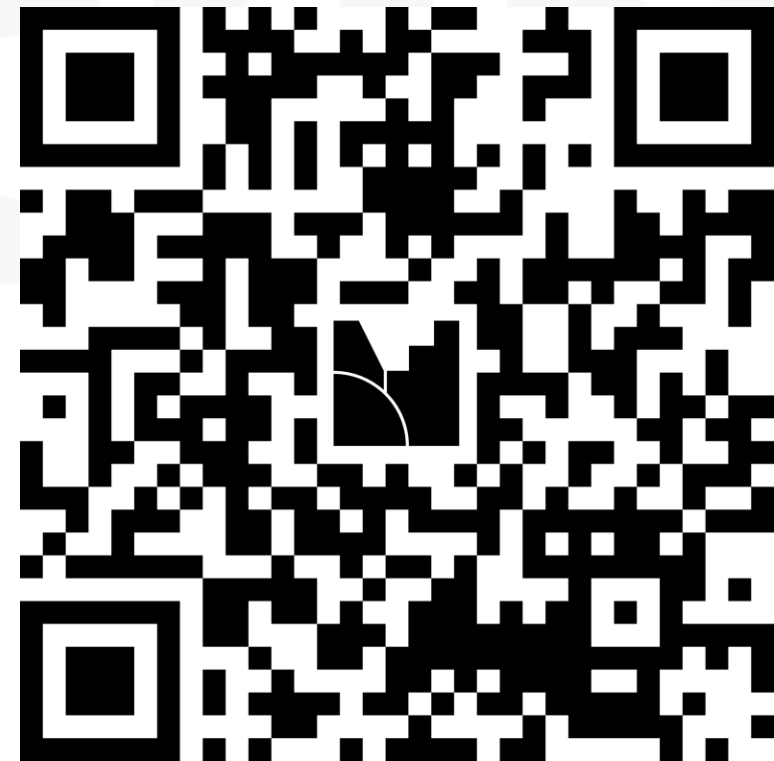
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Let's start with you = quick survey

- On your phone go to www.menti.com & enter the code: 3596 9860
- Or scan the QR code
- We will ask you **5 short questions**. Be honest with yourselves!



Would you agree?

Most researchers dream of impact.

*Yet most end up with unread papers
and unfunded prototypes.*

Act 1: The Hamster Wheel

Why smart research often goes nowhere.

We researched it / built it.

We published it.

Nobody came !?

Turn to your neighbour: can you describe your research in 2 sentences *without using jargon?*



Act 2: The Flip

Start with the problem. Not with the paper.

- ⊘ Idea → Build → Market → **Fail**
- ✓ Problem → Need → Solution → **Scale**

*Nobody buys “research”. People buy **solutions!***

*Business is a **craft**. Neither science, nor art.*



Act 3: The Mindset Shift

You DON'T NEED permission!

*Science trains you to
be perfect.*

*Business rewards you
for **being fast.***

*The opposite of **perfection** isn't
failure. It's **momentum!***

Researcher Brain

- Waits for data
- Seeks perfection
- Fears being wrong
- Writes papers
- Invests in science

Builder Brain

- Talks to people
- Tests fast
- Fears being slow
- Writes emails
- Invests in business

Act 4: The Playbook (lite)

*Not a manual. Just a map to **DRIVE**.*

🔍 D**emand** → 🗣️ R**eality check** → ☐ I**nterest** → 💡 V**aluable asset** → 💰 E**xit**

D	Demand	What real-world need exists?
R	Reality check	Have you talked to actual users? [Your competitors have!]
I	Interest	Who's willing to explore it with you? Proof-of-concept customers.
V	Valued asset	Is your research packaged as value?
E	Exit	What's the path to revenue or adoption? License (someone else scales it) x spin-off (you scale it)

Act 5: Real Stories

From Lab to Market... for real.

Success

Rossum.ai – From AI PhD lab to \$100M Series A
→ Problem-first + deep IP + global ambition = textbook transition from university to global business
MoistureGuard (senzomatic.com)
– Sensors in walls = contracts in hand
→ Founders built a product people actually wanted, not just a prototype

Surprise (pivot)

Post-it® Notes – Failed superglue
→ billion-dollar sticky note
→ Weak IP? Maybe. Strong use case? Definitely.
Slack – Dead game studio → unicorn chat platform
→ Internal tools can be the real gold
Viagra – Failed angina drug → fastest \$1B pharma product
→ “Side effects” matter. Be open to pivot.

Failure

Google Glass – Hype ≠ Adoption
→ Cool tech without real need = rejection
→ Even giants can miss the market
Others – No team, no traction, no customers. Too much science
→ Execution > idea.
Always.

Why commercialize?

Good for you, good for the uni.



Scientists

- Better science \Rightarrow better business
- Ultimate recognition (someone wants it!)
- Real-world impact
- Money = not the goal but way to freedom
- Fun ("escape room for adults")

University

- Happier scientists
- Stronger brand & validation + snowball
- New income streams
- Recurring + long-term revenues
- Public money won't be enough

"Commercialization **isn't selling out.**

It's buying yourself more freedom, relevance, and reach."

What investors look for

No theory – just what gets the job done.

 Disruption

Tech that shifts markets

☐ Core of Industry

Must fit the big picture

☐ Just 2–3 Years Ahead

Not too early, not too late

 A-Team

Builders with grit, not dreamers

 Global Ambition

Solving global problems

 Big Market

Ocean, not pond

☐ Product–Market Fit

Irreplaceable value

☐ Scalability

From one to many easily

 Clear Positioning

Stand out or die trying

Entrepreneurship: Myths vs. Reality*

It's not about being Superman but about showing up.

● Myths

- You need to be a genius
- You need a brilliant idea
- You must be born an entrepreneur
- You must be young
- You need charisma
- You must love risk
- You need money to start
- Odds of success are tiny
- Failure will kill you

✓ Reality

- Simplicity beats complexity
- Execution beats originality
- Mindset and experience come from doing, not DNA.
- Avg. founder age = 45 (in fast-growing US startups)
- Authenticity builds trust
- Great founders manage risk
- Bootstrap + early capital is available
- 70% of startups can be viable if built right
- Failure is just a necessary stop on the way to success

* Adapted from Bill Aulet's MIT playbook.

Who owns your research result?

IP rights in 30 seconds.

If created as part of your job

- You keep authorship.
- University owns the rights.
- You must report inventions.
- If you don't → it can kill future deals.

If you're a student (or external) or if created outside the job

- You own it – unless a contract says otherwise.
- If the university helps develop it → co-ownership agreement.

How a license works

Basic tool of research commercialization

It's a "rental"

You don't sell IP – you lease it

Always written

Signed and published in registry

Clear scope

What, where, and for what purpose

Exclusive or not?

One partner or many?

Time-bound

Time-(un)limited, renewable, cancellable...

You get paid

Flat fee(s), milestone fee(s), revenue share, company share or a mix

Some
"very fine"
reading

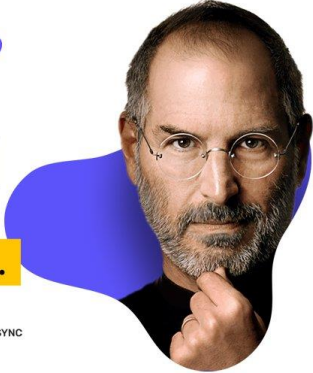


Steve Jobs

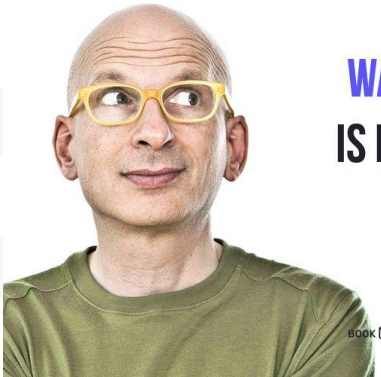
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Ideas
without action
aren't ideas.
They're regrets.

BOOK SYNC



Q&A time



WAITING FOR PERFECT
IS NEVER AS SMART AS
MAKING PROGRESS.

SETH GODIN

BOOK SYNC

If you should remember just 3 things...

💡 **Start with the problem, not the paper.**

→ No pain = no market.

🚀 **You don't need to be brilliant. Just start.**

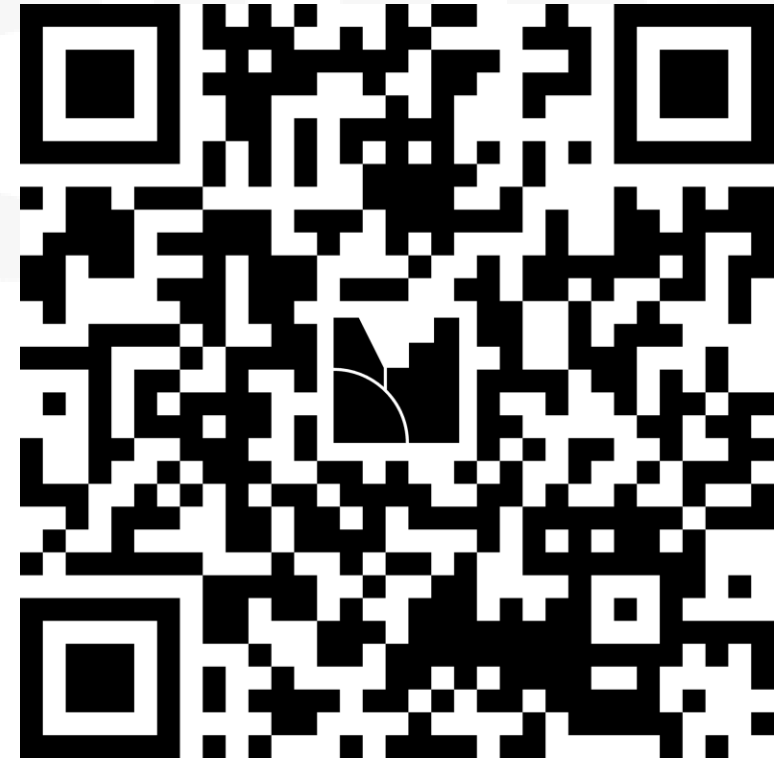
→ Commercialization is a craft, not magic.

💰 **If no one's paying, it's not working.**

→ Impact = adoption = value.

Let's end with you = quick survey

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- 4 more short questions. Be honest with yourselves!



Akademie transferu znalostí NTK

Proměňte výsledky svého výzkumu v inovace s reálným dopadem

👉 Co se naučíte:

- Jak přemýšlet jako zakladatel start-upu
- Kdy chránit a kdy publikovat (strategie IP)
- Jak validovat trh a připravit proof-of-concept
- Jak číst smlouvy a jednat s investory
- Jak efektivně odprezentovat svůj projekt

📍 **Místo:** NTK, Praha

📅 **Říjen 2025 – červen 2026**

📝 **Registrace do 22. 9. 2025**





Launching CTU Spin-off Academy

For sciencepreneurs wannabes

🎯 What it is: A hands-on training & mentoring program to help researchers turn their ideas into real companies – CTU spin-offs.

📖 What you'll learn:

- How to turn research into a business opportunity
- How to validate, protect, and package your idea
- How to pitch to investors and win them over
- What it's really like to be a founder – from someone who's done it

☐ How it works:

- 6 practical workshops (half- or full-day)
- Weekly rhythm with time to work on your idea
- Final Pitch Night with investors & mentors
- Access to follow-up mentoring & possible investment