



STEP

# Ignite

STUDENT ENTREPRENEURS' PROGRAMME



# You will need your phone

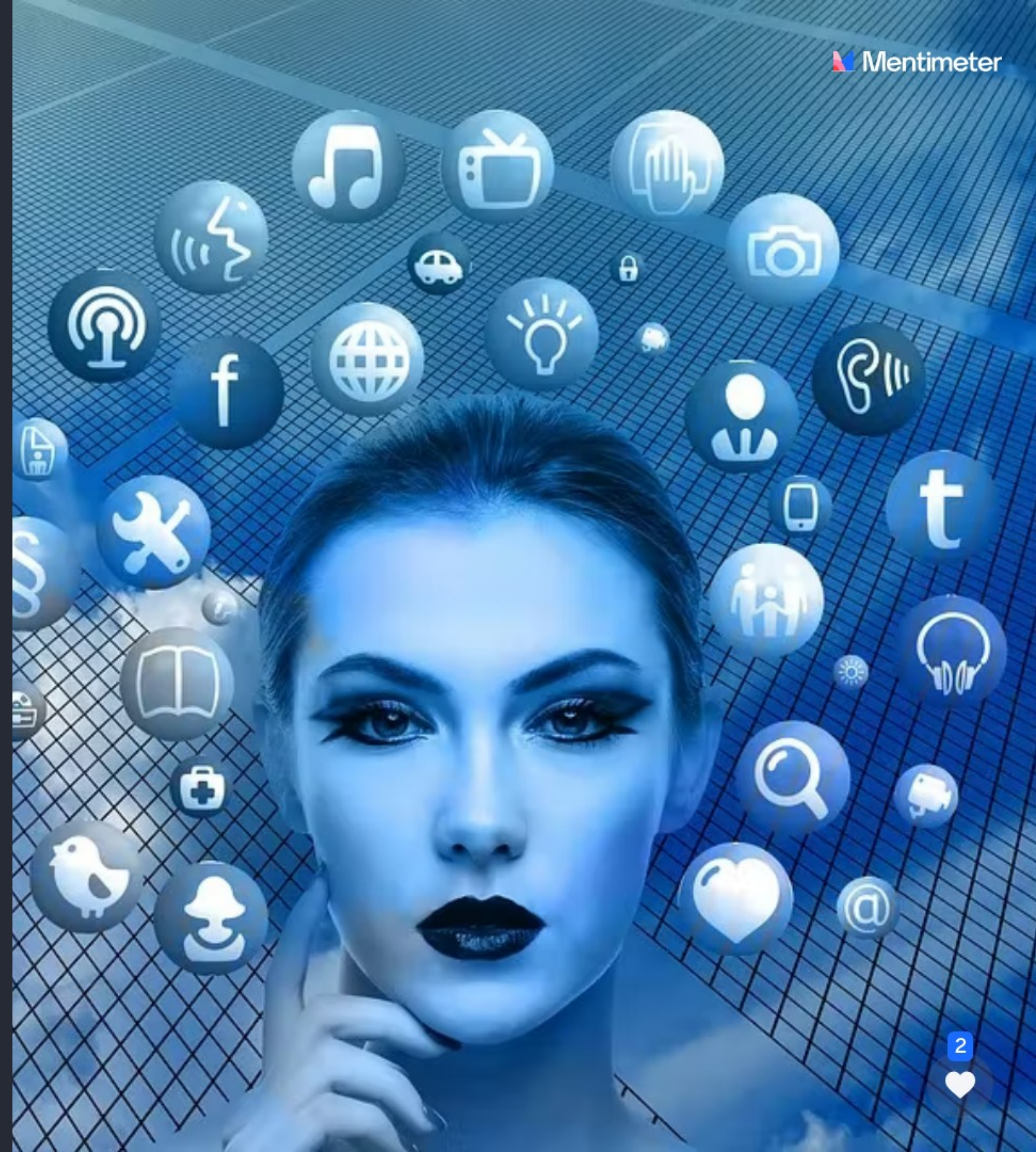
- 1. Go to [www.menti.com](http://www.menti.com)
- 2. Enter code 44004381
- 3. hold your phone in the air when you have done it!

# Quick test - are you?



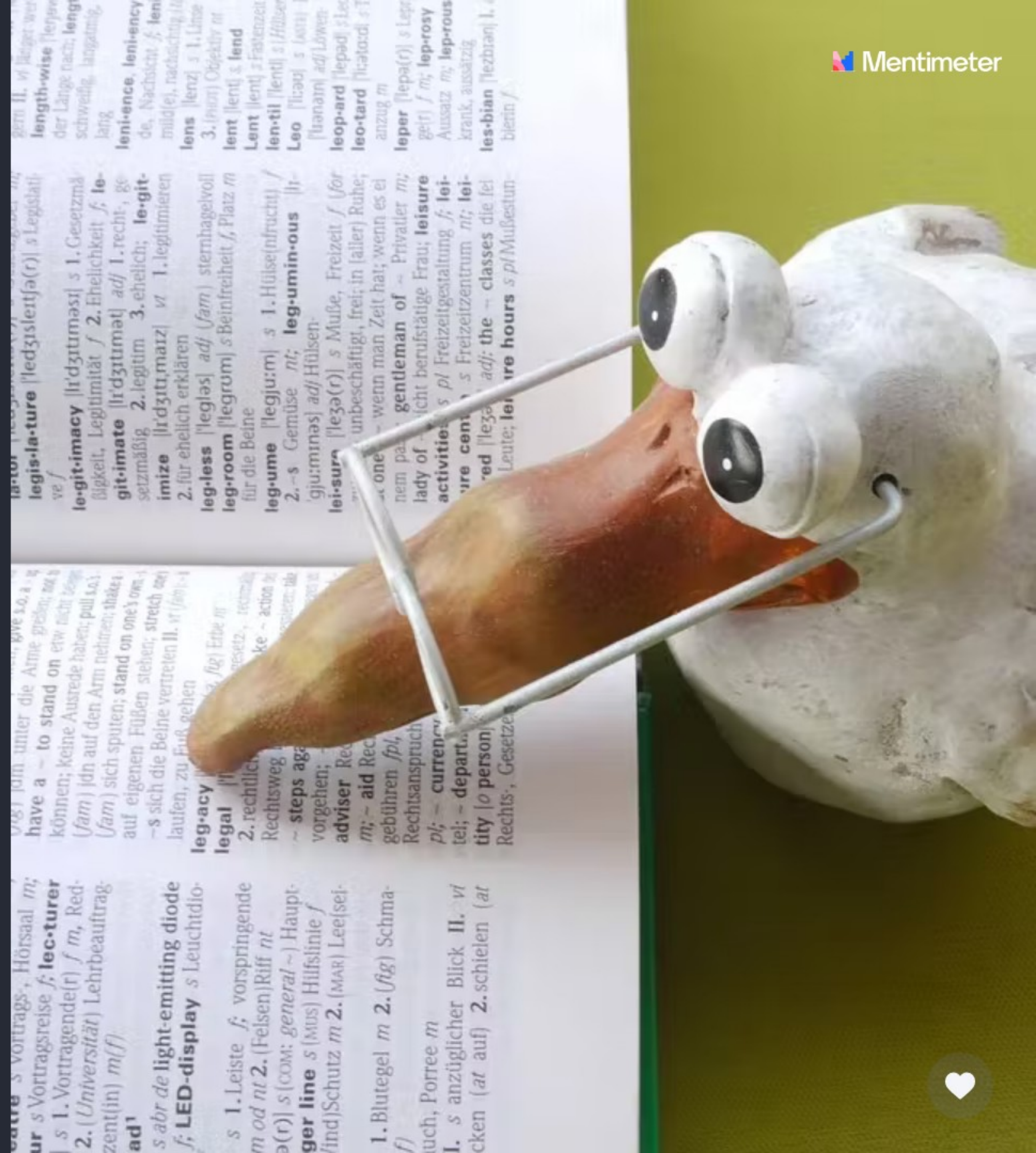
# What are we going to cover?

- ways we connect
- people to connect to
- best route to connection
- tips and tricks

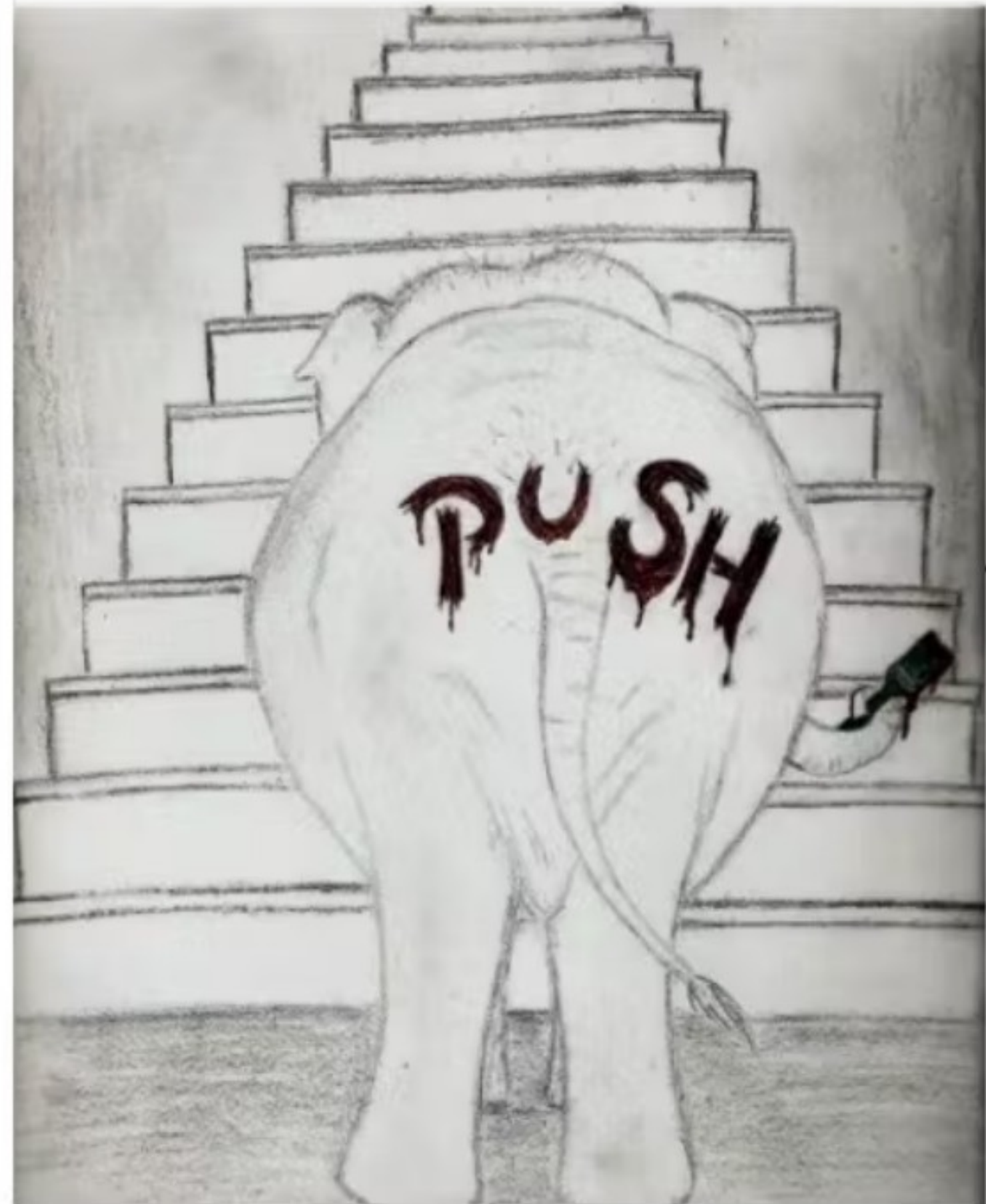


# A couple of terms

- Technology push
- Market pull
- Active vs Passive marketing



# Market pull vs technology push





# Passive vs active



# How many ways can you think of that we could use to share a technical idea from a University with the world?





# Challenge #1 - how to get it 'out there'

# How do we find the right way to get our 'stuff' connected to the right people?

- who will be interested?
- who might have a use for it?
- who will pay for it?



Without a customer, you  
don't have a business – all  
you have is a hobby.

Don Peppers

quote fancy



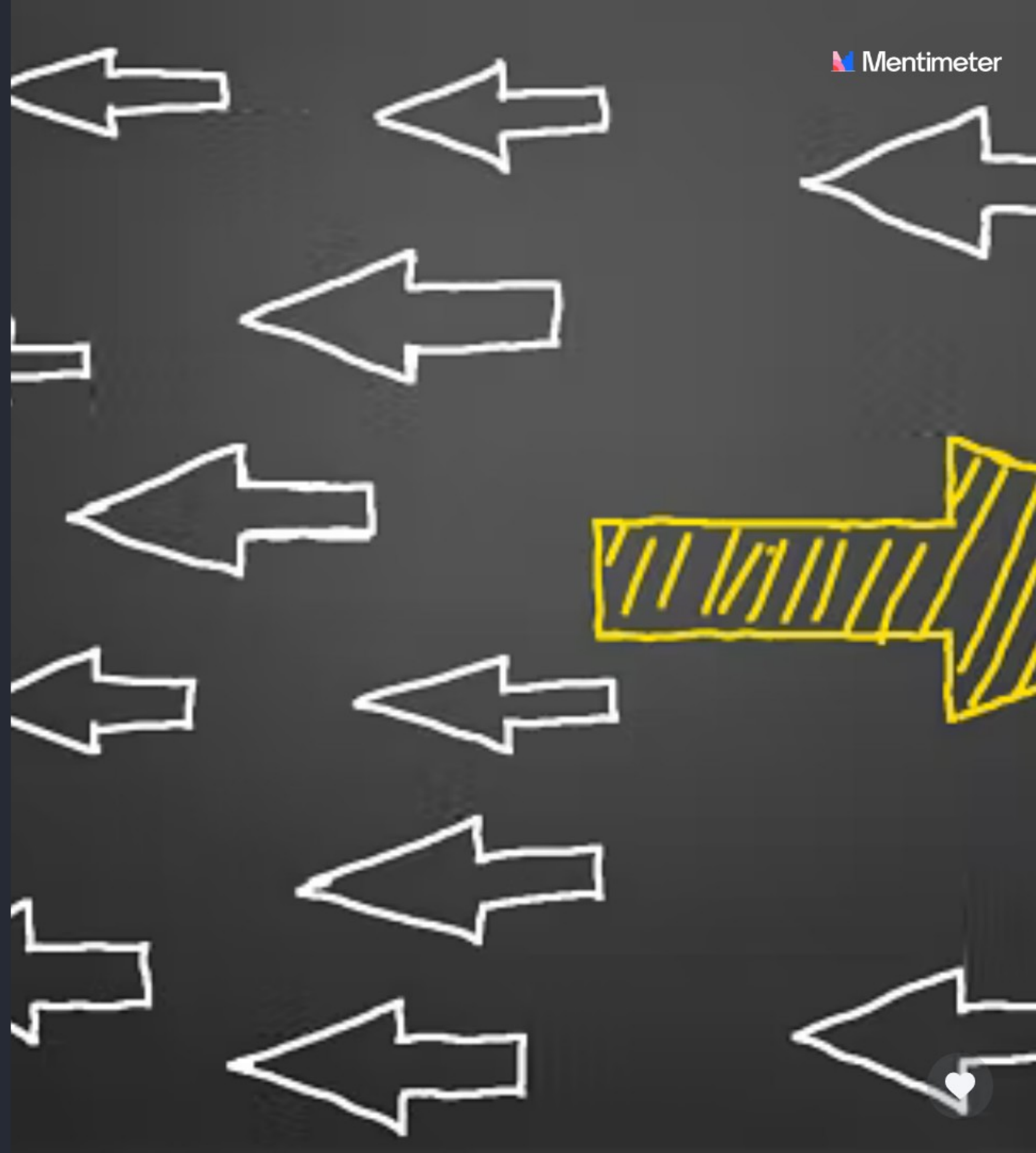
# WHY would anyone want this?

- what can it be used for?
- does it have any synergies with things people are already doing?
- is this a new way to do an old thing?



# What we're doing here is DIFFERENT

- We start with a SOLUTION and
- have to try and find the PROBLEM it might fit



Challenge #2- we're going the other way  
round!



# The 'normal' approach

- Find a problem which enough people have
- Build a solution they tell you they're happy to use
- Sell lots! (well maybe ...)



# Basic tool box

- Lean Canvas  
([www.leanstack.com](http://www.leanstack.com))
- Where to Play  
([www.wheretoplay.co](http://www.wheretoplay.co))
- Pitch Canvas  
([www.best3minutes.com](http://www.best3minutes.com))





## Tip #1

- Don't discard the 'normal' tools!
- (more on this shortly)



# Challenge #3 - making the connections



# DON'T PANIC!

- There are lots of ways to connect your ideas to the world
- Here's some WE use



# Internet portal?

- Brand
- Quality
- Content
- PASSIVE!



# Technology Scout

How do you get  
on their radar?

How do you get  
them to pick you?



# 'Dating agencies'



Specialist brokers

- Key knowledge
- good networks

'Speed dating'

- Quick wins
- Low effort

# Importance of academic networks



# Collaboration – new contacts ?

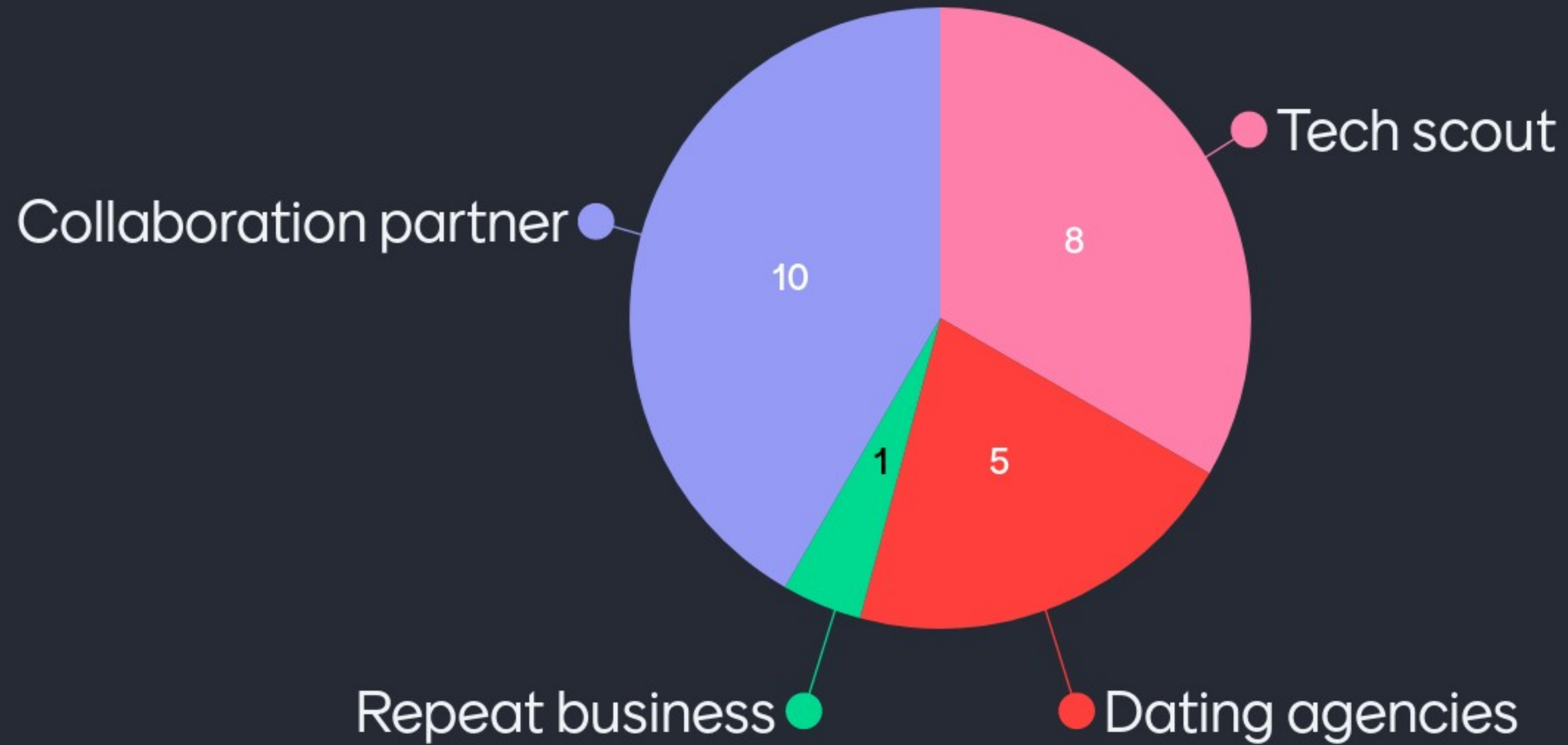
Small part now to  
make contacts ...

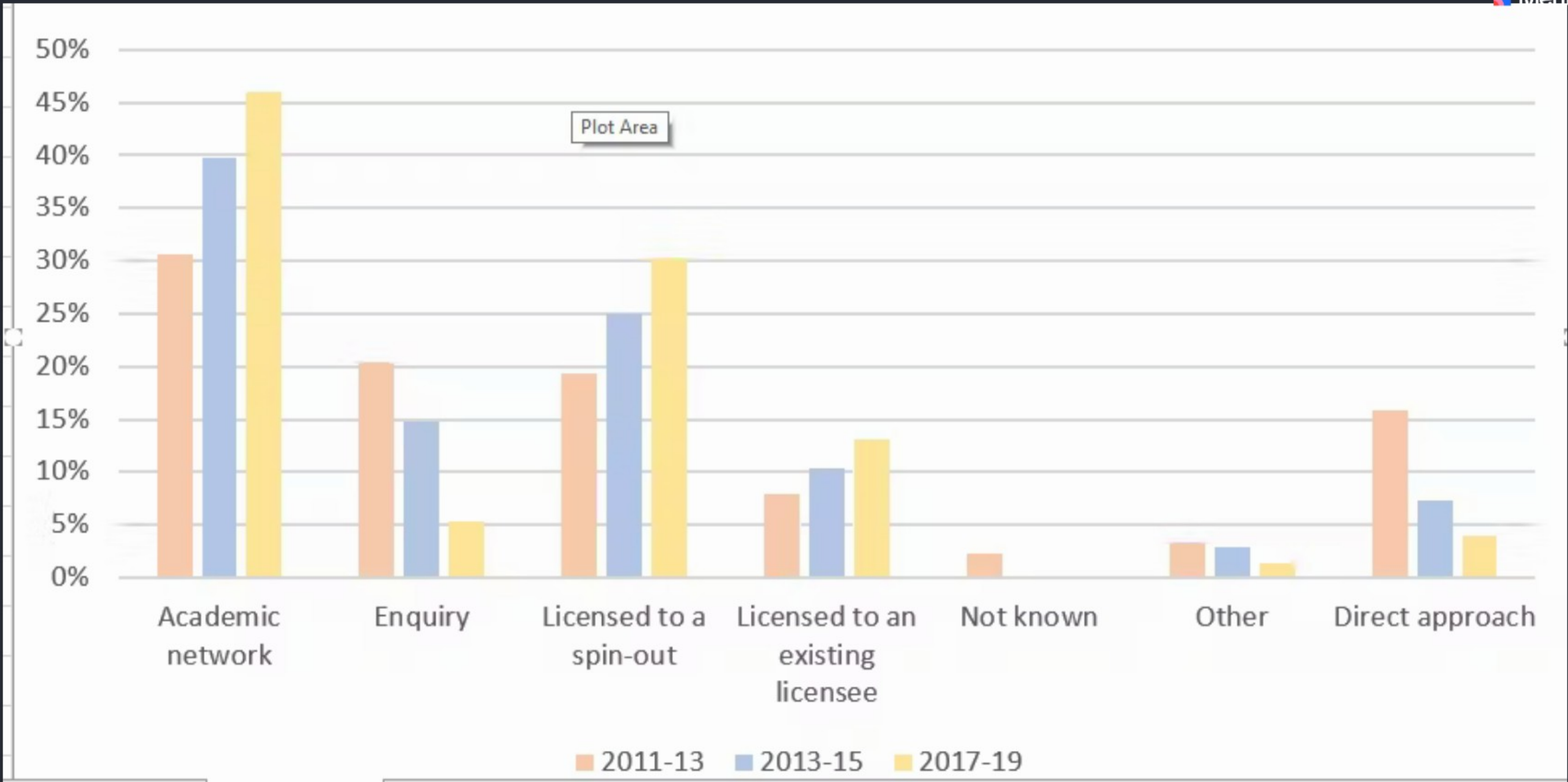


...may lead to a larger  
part later



# Which route do you think is the most successful?





Where do deals come from?



Approx 45% of the deals made in OUI  
are made through existing academic  
networks



AND over 85% come via an existing  
relationship





# Networks are key



HOLD THAT  
THOUGHT



# Challenge #4 - understanding the subject matter



# What is your main subject (I'm a physicist!)

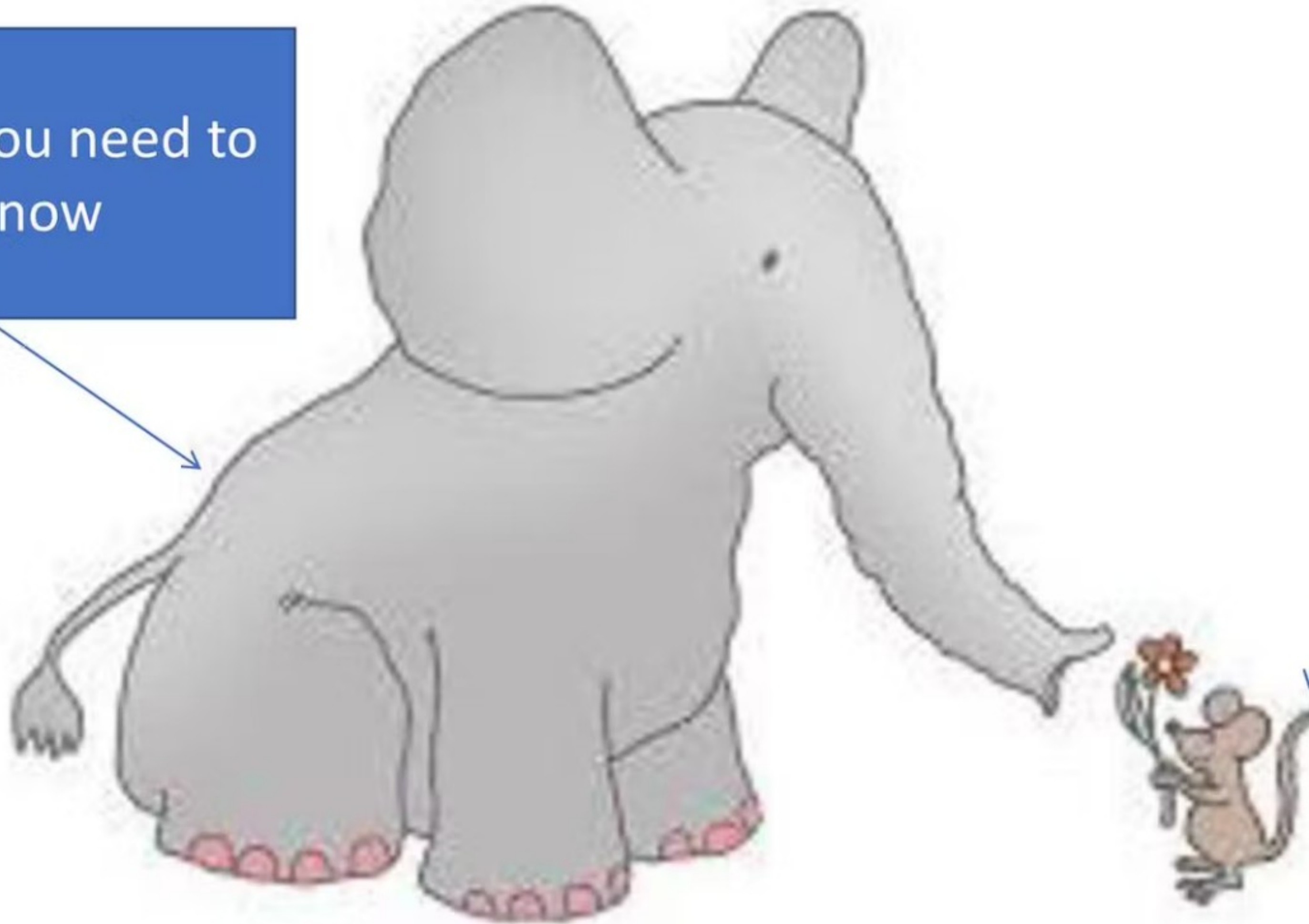




# Life in the TTO



What you need to know



What you REALLY know



# The solution?

Combine your  
efforts with the  
academics

You have  
different skills



# You're going to need some materials to communicate the idea

- Elevator pitch
- Non confidential summary
- Other creative approaches!
- AND your academic/LVM's knowledge

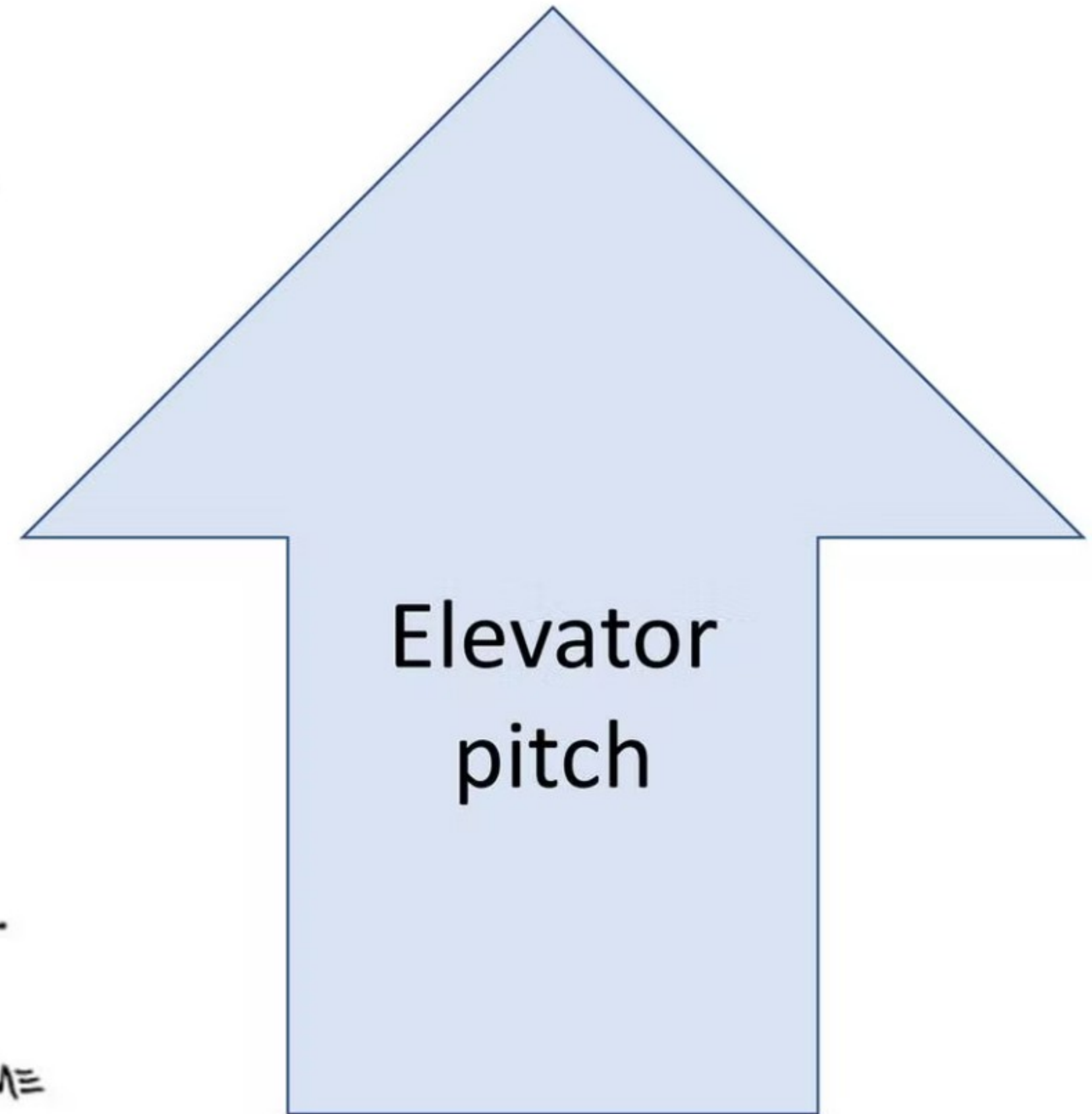




You need ...



"AND YOU THOUGHT IT WAS SO EASY TO JUST IGNORE ME ON THE SUBWAY."



# You need ...



## Carrying science into the sky Enhanced sensors for balloons



Our Current Range



- Optical droplet detector
- Turbulence Sensor
- Energetic Particle Sensor
- Electrostatic charge detector



Thousands of radiosonde launches are made worldwide every day, but most only measure the "traditional" thermodynamic variables of pressure, temperature, relative humidity (RH) and wind. Recent technological advances at the University of Reading now permit a range of further atmospheric quantities to be measured by operational radiosondes, beyond the standard meteorological measurements. The extra sensor data is transmitted to the radiosonde ground station in real time without the need for any additional hardware at the ground station or recovery of the instrument package. These sensors now extend the radiosonde's usefulness to measure turbulence, fog, cloud, hazardous radioactive clouds, solar particles and volcanic ash.

### A wide range of science sensors

Many different low cost, disposable science sensors have been developed at the University of Reading, some of which are described below:

#### Optical Droplet Detector

Accurate measurement of cloud and fog are required for weather and climate forecasting. Optical sensors provide additional details about cloud/fog properties beyond thermodynamic measurements alone.

- Measures visibility in cloud/fog layers
- Utilises a high powered LED light source, backscattered from cloud/fog droplets into a photodiode receiver.
- Can operate in daylight conditions due to sensitive signal conditioning circuitry
- Provides simultaneous measurement of background solar radiation and visibility
- Open path device with no pumps (to avoid clogging) or internal chambers
- Disposable, small (11x6x3cm), lightweight (150g) and low power (<10mA at 9V)



These sensors were developed initially for use in research. They have been fully described in international peer reviewed literature.

They have a range of uses in commercial applications as well as research, and can also be used across a range of other measurement platforms as well as balloons.

For more information on any of these sensors or to discuss your particular application please contact the team at the University of Reading



#### Turbulence sensor

Turbulence is an aircraft hazard for which in-situ information is invaluable. The turbulence sensor developed at the University of Reading can detect turbulence associated with a variety of atmospheric conditions including jet-stream turbulence, convective cloud turbulence and clear air turbulence.

- Uses natural motions of the radiosonde to detect atmospheric turbulence
- Employs a 3-axis accelerometer able to measure accelerations up to 5g
- Post processing software package delivers eddy dissipation rate (EDR)

#### Energetic particle sensor

Energetic particles are always present in the atmosphere but these can be enhanced during space weather events, producing a hazard to aircraft crew and passengers. The energetic particle sensor developed at Reading provides information about cosmic rays and solar energetic particles from space weather events, as well as information on airborne radioactivity.

- Also responds to natural radioactivity near Earth's surface
- Employs two small Geiger tubes to detect MeV and GeV particles
- Lightweight (<150g) and low power (<10mA at 9V)

#### Electrostatic charge detector

Charge is everywhere in the atmosphere, as well as present in thunderstorms, and can be used as a detector in a variety of situations including cloud, fog, and boundary layer detection, as well as aerosol layers (e.g. volcanic ash and Saharan dust).

- Employs a small electrode connected to a sensitive current measuring electrometer
- Measures currents down to a few fA ( $10^{-15}$ A) and is self-calibrating

#### University of Reading

The University of Reading is ranked in the top 1% of universities internationally. We are a global University that enjoys a world-class reputation for teaching, research and enterprise that produces useful applied research on issues affecting society both in the present and in the future. We enjoy great success in bidding for research funding and in the past financial year we won £35 million of new research grants and contracts.

The University works with businesses, providing support for research and development, as well as access to expertise and equipment and IP through licensing arrangements.

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Prof Giles Harrison  
Toll: +44 (0) 118 378 5555 giles.harrison@reading.ac.uk

# Non-confidential summary

## Tip #2

→ it's all about Teamwork



<p><i>How might it be used?</i></p> <p>2. Add a list of possible uses</p> <ul style="list-style-type: none"> <li>- Be creative!!</li> <li>- Think of things outside the current field if you can</li> <li>- Think of how it might be used in conjunction with something else</li> <li>- Think of how your new method might speed up something in industry or in the health service, for example.</li> </ul>	<p><i>My Research is</i></p> <p>1. Fill in a summary of you research here</p> <p><i>This should be at the level you can share on a train with the person sitting next to you</i></p> <p><i>Assume they are the same level of intelligence as you BUT work in a completely different field</i></p>	<p><i>Who might want to use it?</i></p> <p>3. Make a list of the companies/charities/public bodies who might want it</p> <p><i>Again be creative</i></p> <p><i>Write down the organisations who definitely would as well as those that might and those you think ought to consider it alongside what they currently do</i></p> <p><i>An initial list can be expanded by doing some desk research about the field and seeing who is talking about things in their vision statements and their press releases.</i></p>
<p><i>What else?</i></p> <p>4. Pass the paper around the workshop group</p> <p><i>They should</i></p> <ul style="list-style-type: none"> <li>- Read your research summary (they may provide useful feedback)</li> <li>- Add any possible uses to the list (2) above in this box</li> </ul> <p>Now go to box 5</p>	<p><i>My preferences</i></p> <p>5. What is your preferred use or uses</p> <ul style="list-style-type: none"> <li>- focus on the top two or three</li> <li>- Highlight them in yellow</li> </ul> <hr/> <p><i>My Existing contacts</i></p> <p>7. Have you got any contacts in the companies suggested (list 3)?</p> <ul style="list-style-type: none"> <li>- Highlight them in yellow</li> <li>- it does not matter what level they are at in the company!</li> </ul> <hr/> <p><i>Their Existing contacts</i></p> <p>8. Have others in the group got any contacts in the companies suggested (list 3)?</p> <ul style="list-style-type: none"> <li>- Ask them to highlight them in a different colour and initial them so you can follow up with them</li> </ul> <hr/> <p style="text-align: center;"><b>ACTION</b></p> <hr/> <p><i>if the contact in the preferred field is is someone you know</i></p> <ul style="list-style-type: none"> <li>- Phone them</li> <li>- Ask them for help in finding someone in the company who would be interested in hearing about your work</li> <li>- There are LOTS of ways of doing this such as offering to deliver a lunchtime seminar, for example</li> </ul> <p><i>if the contact is someone else's</i></p> <ul style="list-style-type: none"> <li>- Ask them to email their contact and introduce you</li> <li>- Then follow up as above</li> </ul>	<p><i>Who else?</i></p> <p>5. Pass the paper around the workshop group</p> <p><i>They should</i></p> <ul style="list-style-type: none"> <li>- Read the suggested uses in list (2)</li> <li>- Add any possible companies to list (3)</li> <li>- They may need to add a note/post-it with an explanation of why they think this</li> </ul>

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# Network building for academics



# My research is

## **Task 1: summarise your research**

*This should be at the level you can share on a train with the person sitting next to you*

*Assume they are the same level of intelligence as you BUT work in a completely different field*





# How might it be used?

## Task 2: Add a list of possible uses

*Be creative!!*

*Think of things outside the current field if you can*

*Think of how it might be used in conjunction with something else*

*Think of how your new method might speed up something in industry or in the health service, for example.*



# Who might want to use it?

**Task 3: Make a list of the companies/charities/public bodies who might want it**

*Again be creative*

*Write down the organisations who definitely would as well as those that might and those you think ought to consider it alongside what they currently do*

*An initial list can be expanded by doing some desk research about the field and seeing who is talking about things in their vision statements and their press releases.*



# What else?

## **Task 4: Pass the paper around the workshop group**

*They should*

*Read your research summary (they may provide useful feedback)*

*Add any possible uses to the list (2) above in this box*



# Who else?

## **Task 5: Pass the paper around the workshop group**

*They should*

*Read the suggested uses in list (2)*

*Add any possible companies to list (3)*

*They may need to add a note/post-it with an explanation of why they think this*



# My preferences

**Task 6: What is your preferred use or uses**

*Focus on the top two or three*

*Highlight them in yellow*



# My existing contacts

**Task 7: Have you got any contacts in the companies suggested (list 3)?**

*Highlight them in yellow*

*It does not matter what level they are at in the company!*



# Their existing contacts

**Task 8: Have others in the group got any contacts in the companies suggested (list 3)?**

*Ask them to highlight them in a different colour and initial them so you can follow up with them*



# ACTION

**If the contact in the preferred field is someone you know**

*Phone them*

*Ask them for help in finding someone in the company who would be interested in hearing about your work*

*There are LOTS of ways of doing this such as offering to deliver a lunchtime seminar, for example*





# ACTION

## **If the contact is someone else's**

*Ask them to email their contact and introduce you*

*Then follow up as above*



# What if you don't know anyone?

- **LinkedIn** **groups** (<https://www.linkedin.com/groups/>) useful for finding folks from specific professions
- **Advisory boards** of similar/ competitor companies
- **University business development teams** – MPLS industry partnerships / MedSci business development
- **LinkedIn** – **TOP TIP**: search “Claire Smith GSK LinkedIn” or “Business development manager Mercedes linkedin” via google – prevents linkedin capping the # searches you do



# What if you don't know anyone?

- **Business school students** (particularly at SBS)
- **(Oxford) academics** – particularly early career researchers
- Company websites: **About Us / Annual Report sections**
- **Conference agendas/ presentations**



# Industry specific info

- **Linkedin groups** – again, good for industry specific questions/ contacts
- **Trades bodies / institutes** with accredited members e.g. B-Corporations, IMarEST
- **Companies** (<https://beta.companieshouse.gov.uk/search>)- directors, financials, shareholders
- **Financial Times** for financials on listed companies
- **Investor relations section** on a website - can provide annual reports, market trends, possibly email addresses
- **Partnering page** on a website e.g. search “GSK partnering” to find BD teams/ approaches to partnerships

**House**  
for



# Tech landscape

- For patents: **new Espacenet search tool:**  
<https://worldwide.espacenet.com/patent>
- **Google scholar, google patents, SOLO**
- **UK trademark search** inc category search  
(<https://www.gov.uk/search-for-trademark>)
- **Market segment reports** – **TOP TIP:** use keywords like CAGR / landscape/ segment/ executive summary – often gives info on industry growth, big players, sometimes a sample of the report (e.g. marketwatch)
- **Conferences, seminars, tradeshows** (attendees and sponsors), careers fairs, sponsored research



# Tech landscape

- **Newspapers/ online magazines** (e.g. Wired, <https://www.med-technews.com/>)
- **Regulatory bodies** e.g. MHRA
- **“the state of....” reports** e.g. robotics/ spin outs in the UK – e.g. from Deloitte/ Beauhurst/ newspapers
- **Similar companies:** **TOP TIP:** Search for companies that tried to do what you’re doing, and find out why/how they succeeded/ exited/ failed (news articles, date of wind-up, financials etc)



# Other

- **Logic** – many search databases use logic  
<https://websitebuilders.com/how-to/learn-to-search/advanced-web-search/>
- **Keywords** - Broaden your search terms - look at other companies' websites for thoughts
- **Google scholar chrome extension** for reference structure
- Google a company: then “**people also searched for**” **function** can show other similar companies
- **Small companies** - info@ email more likely to get read. **TOP TIP**: pick up the phone!
- **FT & Harvard Business Review** through University - can provide info on listed company financials, acquisitions



# GDPR & friends

- Be careful. Ask if in doubt and err on the side of caution.
- For company contacts lists: make a table (ask for a template) and **take note of why you're talking to this company**. This is ESSENTIAL to prove that you have a legitimate business interest in talking to them.
- N.B. if a company asks that your team doesn't contact them again, **make a note and respect their request**





# Keep filling this in ...

- Ask your LVM
- Ask our support crew here
- Ask the academic team (if you get to meet them)
- Ask the other teams here
- Just ASK!!!



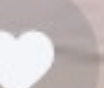
# Networking building for us

- LinkedIn - are we connected?
- Conferences (including online equivalents)
- the electronic business card!
- Google smarts



# The basics: Sales 101

- People only part with money to solve a problem
- Your solution needs to find a problem that is
- BIG enough and
- PAINFUL enough



# So - look for 'customer' the PAIN points

- Explore what they're doing
- How they're getting round it NOW
- Listen for their NEEDS



Use 'normal methods' to help answer questions e.g.

- which market is easiest to access
- which one will make money

# WHERE TO PLAY

3 STEPS FOR DISCOVERING YOUR MOST VALUABLE MARKET OPPORTUNITIES



**Marc Gruber and Sharon Tal**

*'Enjoy discovering highly practical worksheets, maps and dashboards of tremendous interest to better identify, evaluate and strategise market opportunities.'*



## Tip #3

- Don't 'sell' - listen
- Time spent building networks is NEVER wasted





There are NO guarantees  
that you can 'sell' the idea



BUT a good strategy will give  
you the best chance.

# Questions?

