

Critical and Innovative Thinking



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Draw Your Way



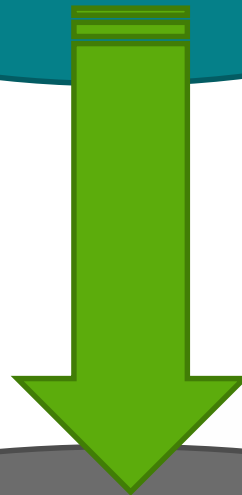


Create Interest

The image features a central teal graphic consisting of a horizontal and a vertical arrow pointing outwards from a central square. The text "Create Interest" is centered within this square. The background is white with a faint image of a fountain pen and a document. At the top, there is a teal horizontal bar with a green diagonal stripe on the left side.

Outcome

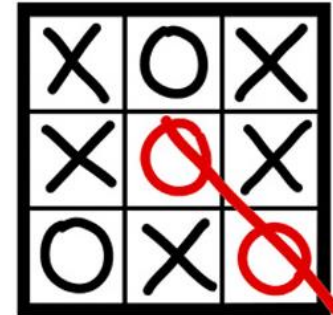
Being Critical



Innovation



**THINK
OUTSIDE
THE BOX**



Are You Ready?

Checklist Before We Check-in:

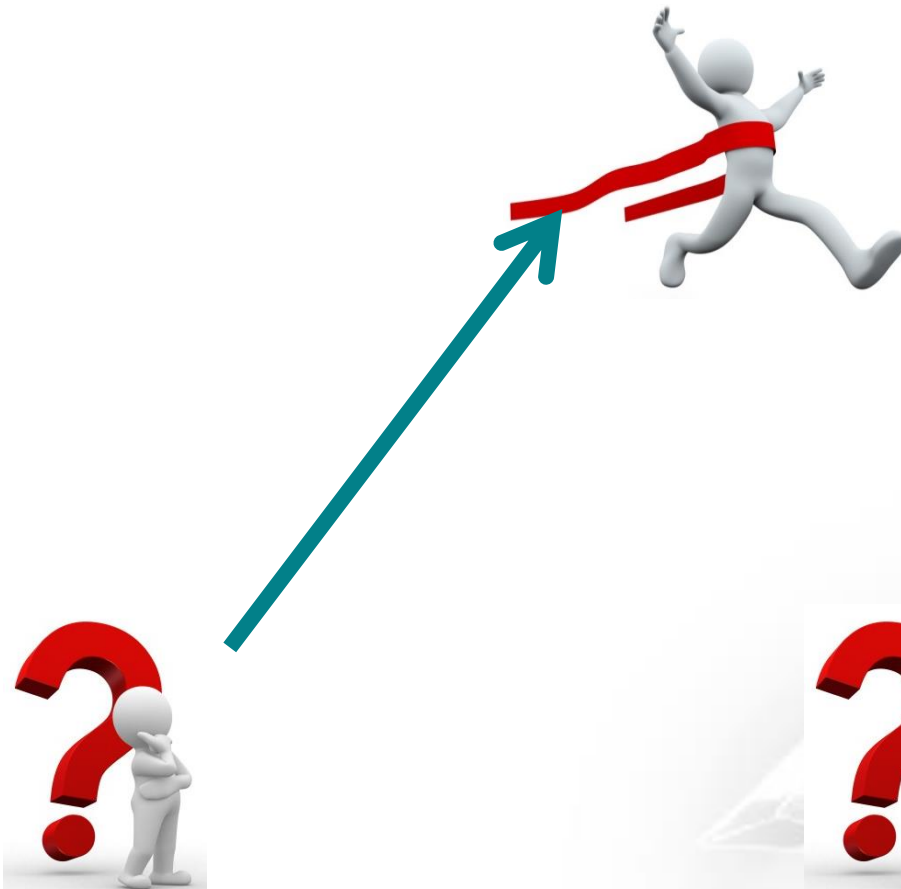
1. Motivated?
2. Right attitude?

Now, let's get
onboard.....

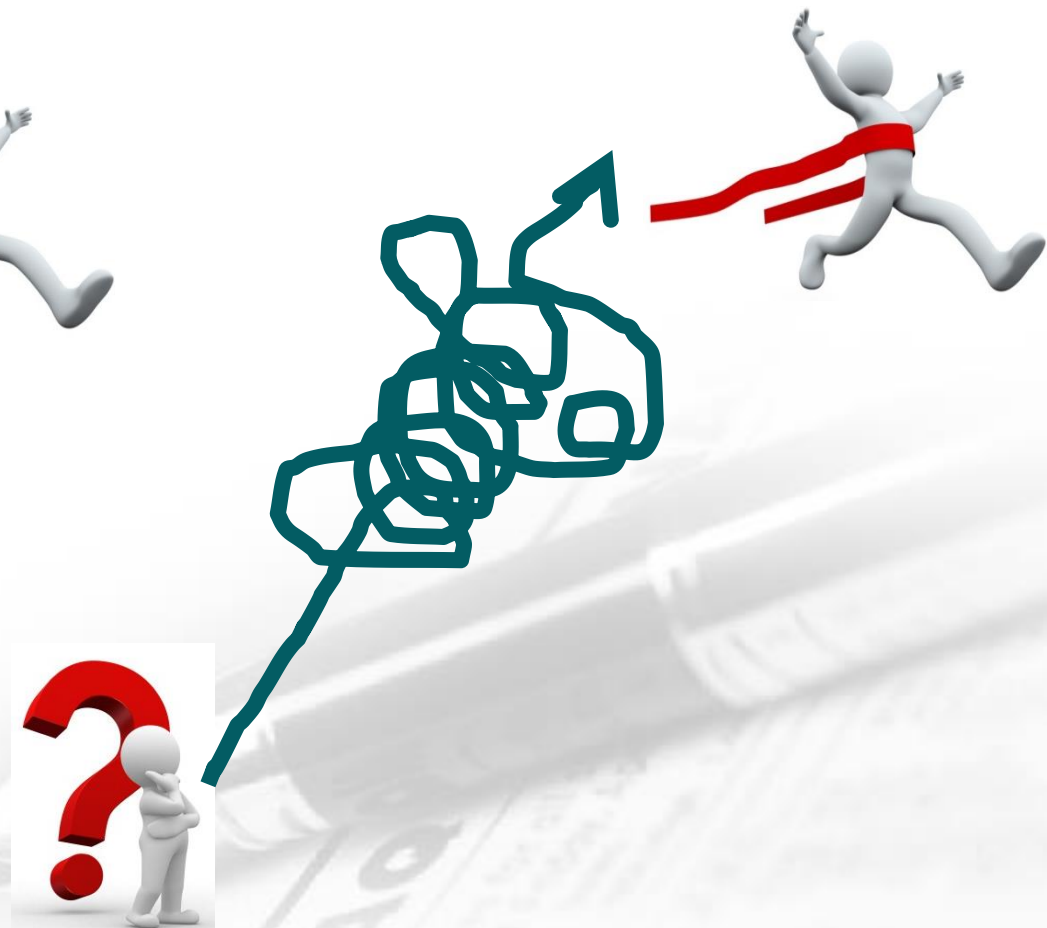


Route to Success

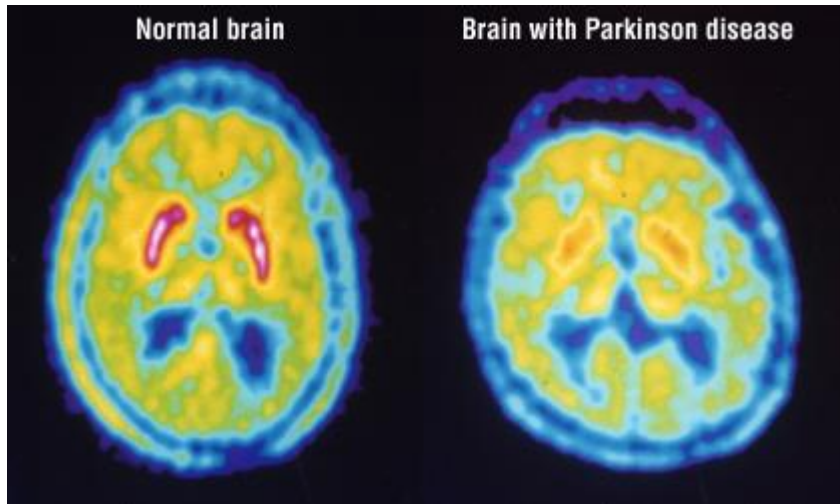
What people think it looks like



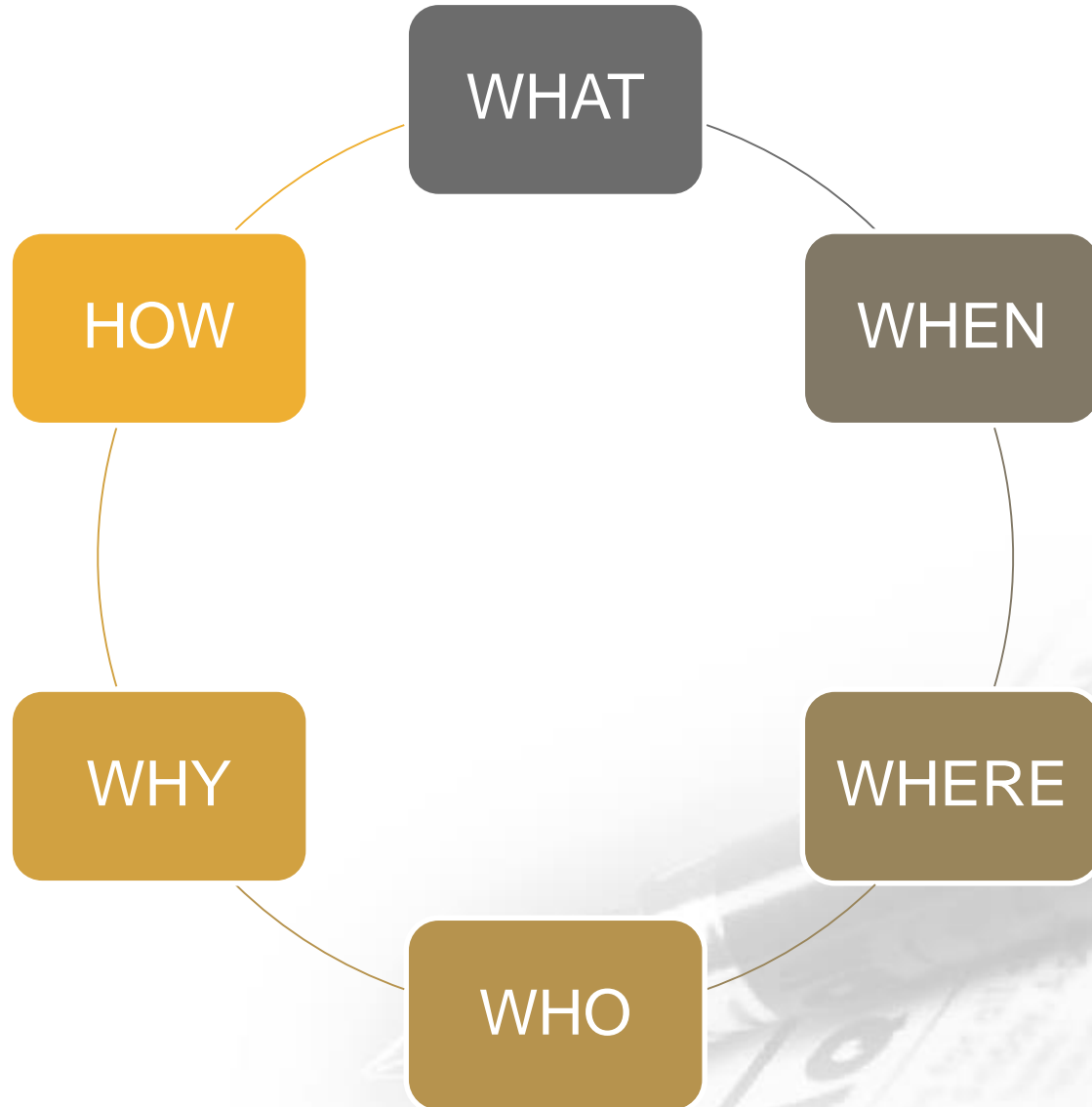
What it really looks like




Crafting Questions



Evaluate Your Questions



Role Play

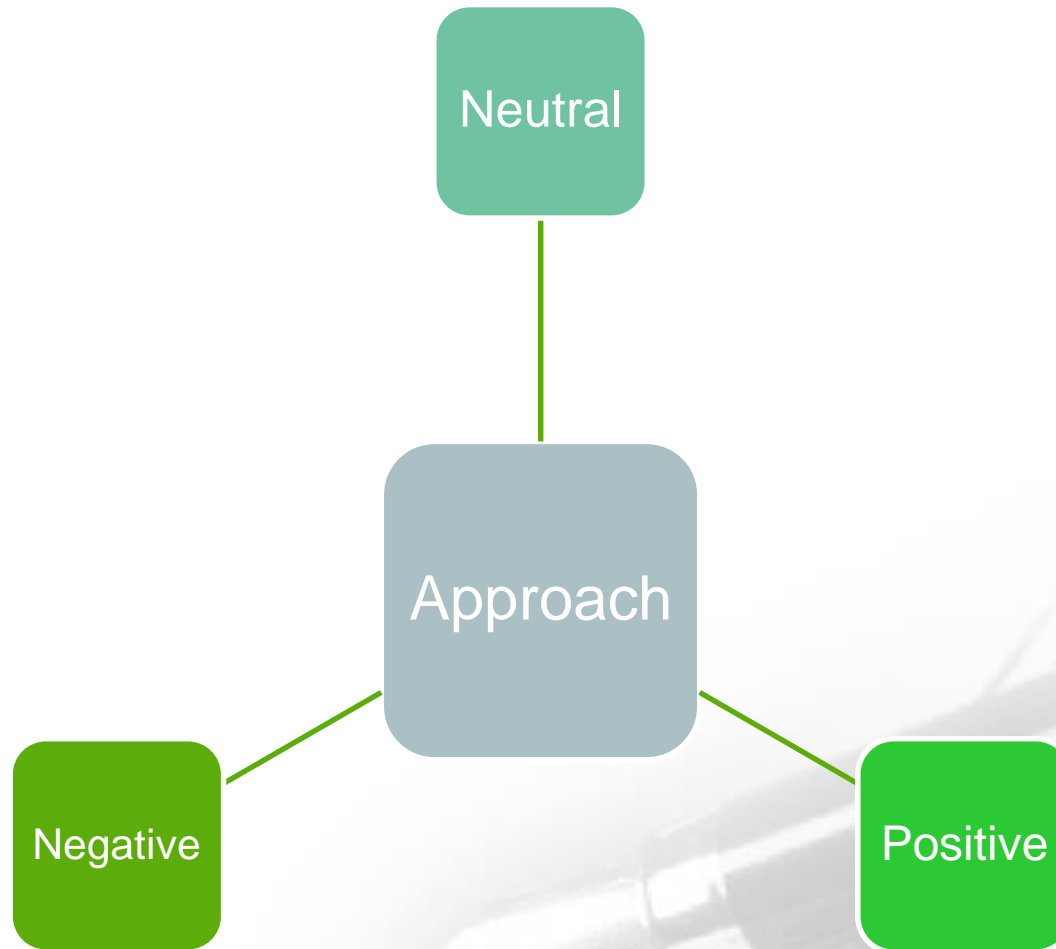
- Objective: To investigate the impact of current economy status
 - You are a journalist
 - Your deskmate is a:
 - Farmer
 - Fisherman
 - Labour
 - Nurse
 - Two rounds (different roles)
- 
- A fountain pen with a silver nib and a dark barrel is lying diagonally across a newspaper. The newspaper has some text visible, including the word "CAG" in large letters. The background is a soft, out-of-focus image of a newspaper page.

Being Critical in Your Answers

1. How can UPM help you to become an excellent lecturer?
2. How can you help UPM to increase our ranking?

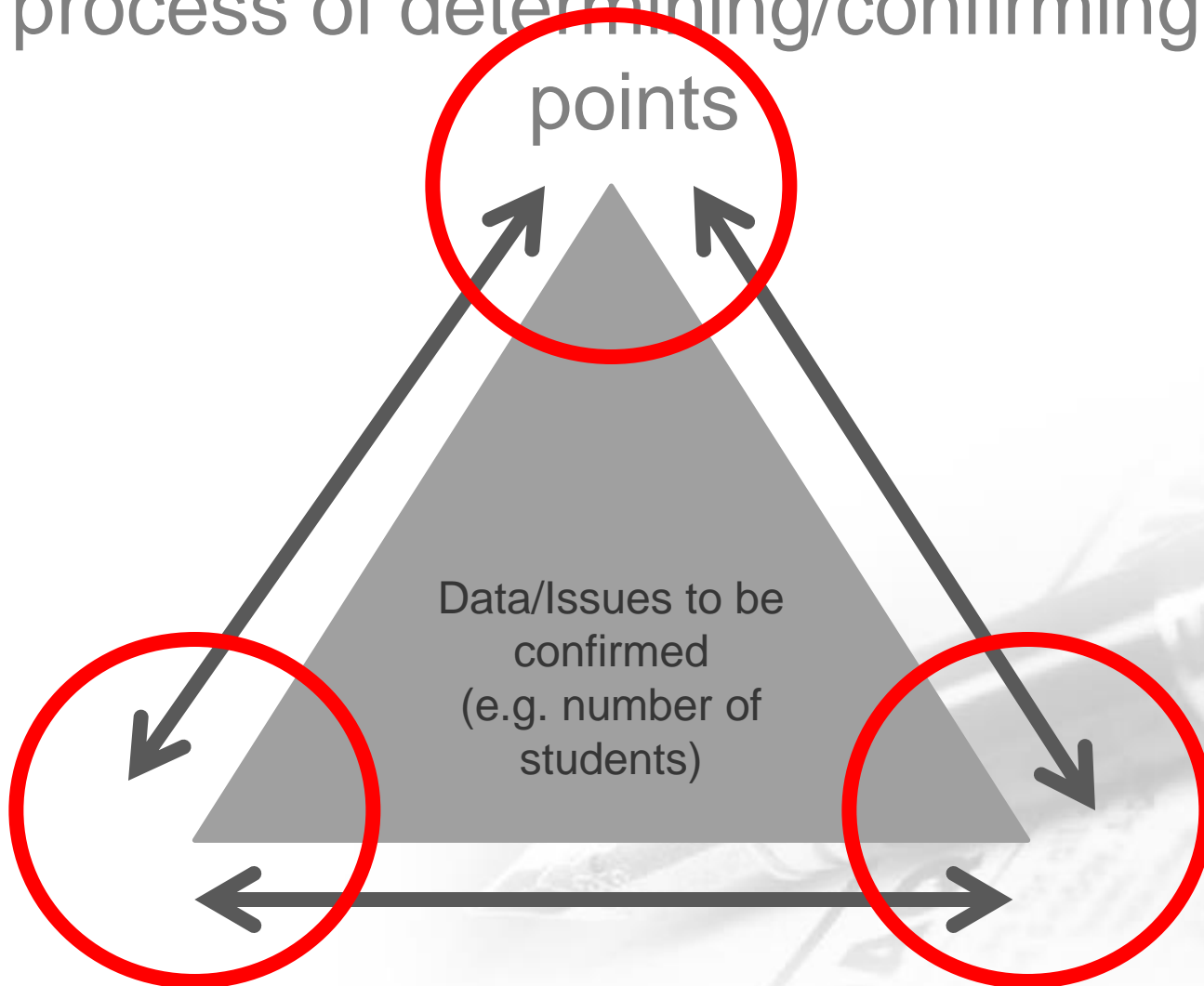


Your Different Approach



Triangulation

A process of determining/confirming the points



Innovation

“Finding a Better Way of Doing Something”



Innovation Session 1

What is Innovation?

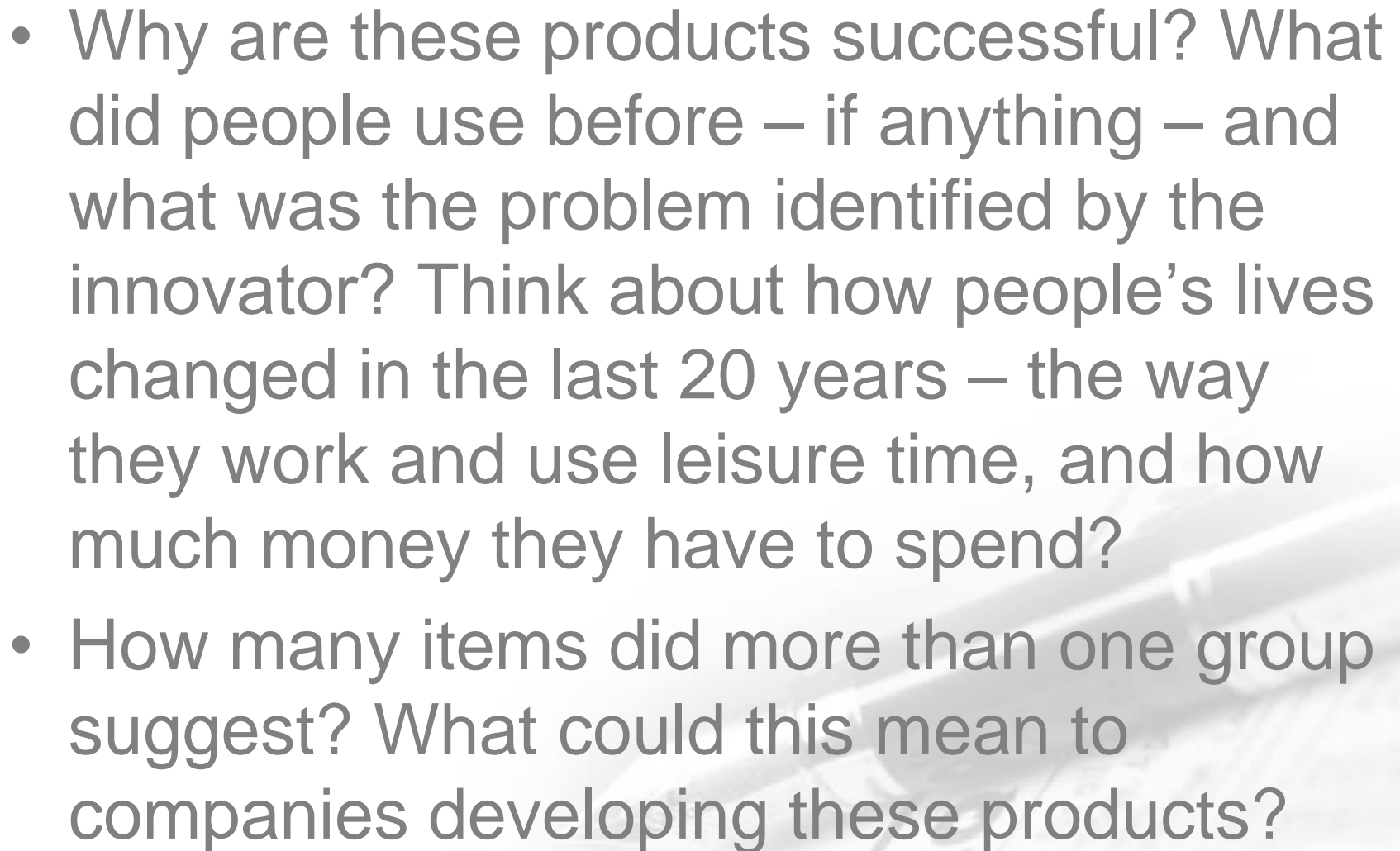
- Work in pairs
- one list of words that mean 'innovation' and another list of products that apply to 'innovation' that did not exist 20 years ago.



- Innovation' list might include adaptation, addition, alteration, change, development, discovery, gadget, inspiration, invention, latest idea, latest thing, original, modernisation, novelty...
- Products' list might include camera phones, digital camcorder, DVDs, bagless vacuum cleaner, games consoles, the internet, LCD TV, MP3 players, multitouch screen phones, photo printers, SatNav...

- Are any suggested items more than 20 years old? Are any of these earlier developments of new products?
- Are all or most of the products electrical?



- 
- Why are these products successful? What did people use before – if anything – and what was the problem identified by the innovator? Think about how people's lives changed in the last 20 years – the way they work and use leisure time, and how much money they have to spend?
 - How many items did more than one group suggest? What could this mean to companies developing these products?

Innovation Session 2

Make A Difference

- Think about the products already discussed. How could one of them be improved for the specific needs of a target user group? Or, inspired by an existing product, can you think of a completely new gadget?
- **FACE**



F.A.C.E

Function	What does it do? How does it work?
Aesthetics	What does it look like?
Construction	How is it made? What materials are used?
Economics	How much does it cost? Is it value for money? Who will buy it?



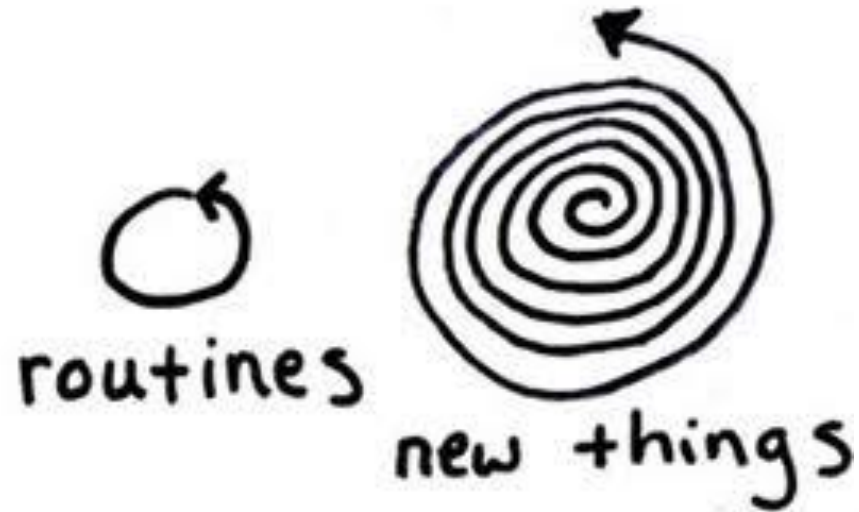
- The Eight Pillars of Innovation
 1. Have a mission that matters
 2. Think big but start small
 3. Strive for continual innovation, not instant perfection
 4. Look for ideas everywhere
 5. Share everything
 6. Spark with imagination, fuel with data
 7. Be a platform
 8. Never fail to fail

Unleash Your Potentials

"Can I Achieve My Goals?"

YES YOU CAN!

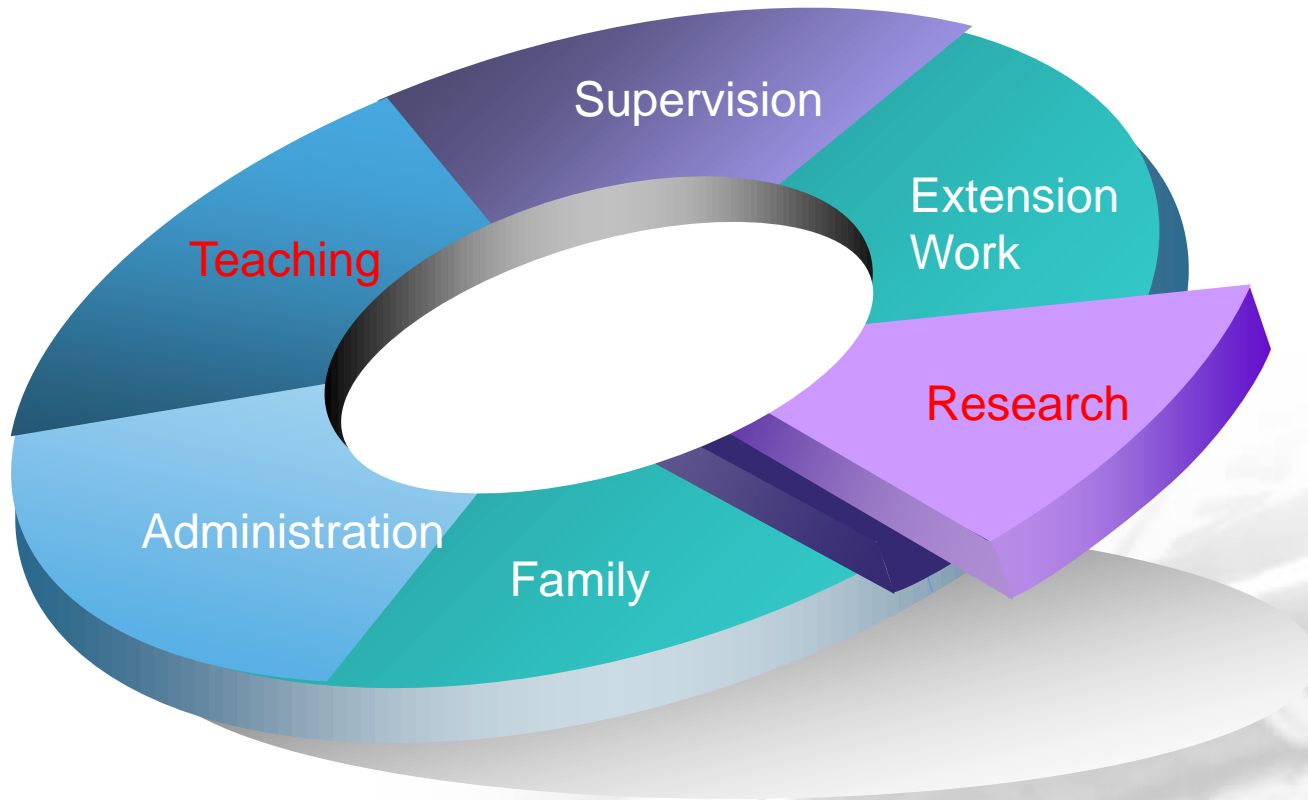




***WHAT IS YOUR WORK
ROUTINE?***



How to Balance?





WHAT IS OUR TARGET IN RESEARCH?

How to Prioritize?

An Excellent Researcher

Publis
Nature/S
Jou

Journals

Commerci
Product

Products

RM XX Milli
International

Grants

RM XX Millions
Pocket Money

Consultancy

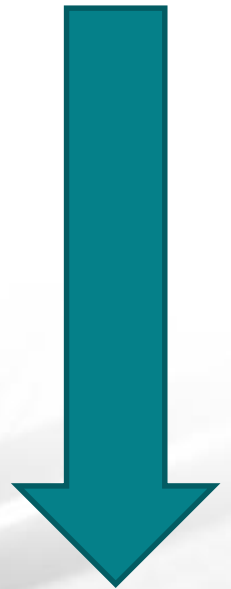
My Prioritization

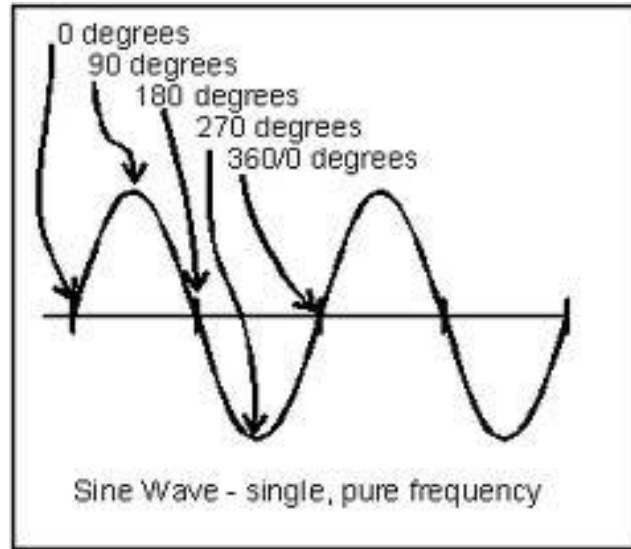
1. Journals

2. Grants

3. Consultancies

4. Products





***WHAT HAVE YOU
EXPERIENCED SO FAR?***

Progress Diagram

Phase 1

Finding
Identity and
Establish
niche area

Phase 2

Networking

YOUNGSCIENTISTS
NETWORK
MALAYSIA

Phase 3

Recognition

Journals

More Prestigious

Refereed

CIJ -
Scopus

CIJ - ISI

IF - Q3,
Q4

IF - Q1,
Q2

More Difficult

Targeting Which Journal

1. Check which journal is suitable in your area
 - Check the reference list from the related papers
 - Check Subject Area in Scopus/ISI/JCR
2. Check the cycle of publication
 - Check previous published papers
3. Check the quality of the journals
 - Citation Index
 - Impact Factor

Grants

1. Work in a group – multi disciplinary/multi institutional
2. Identify the niche areas
3. Read a few successful proposals



Consultancy

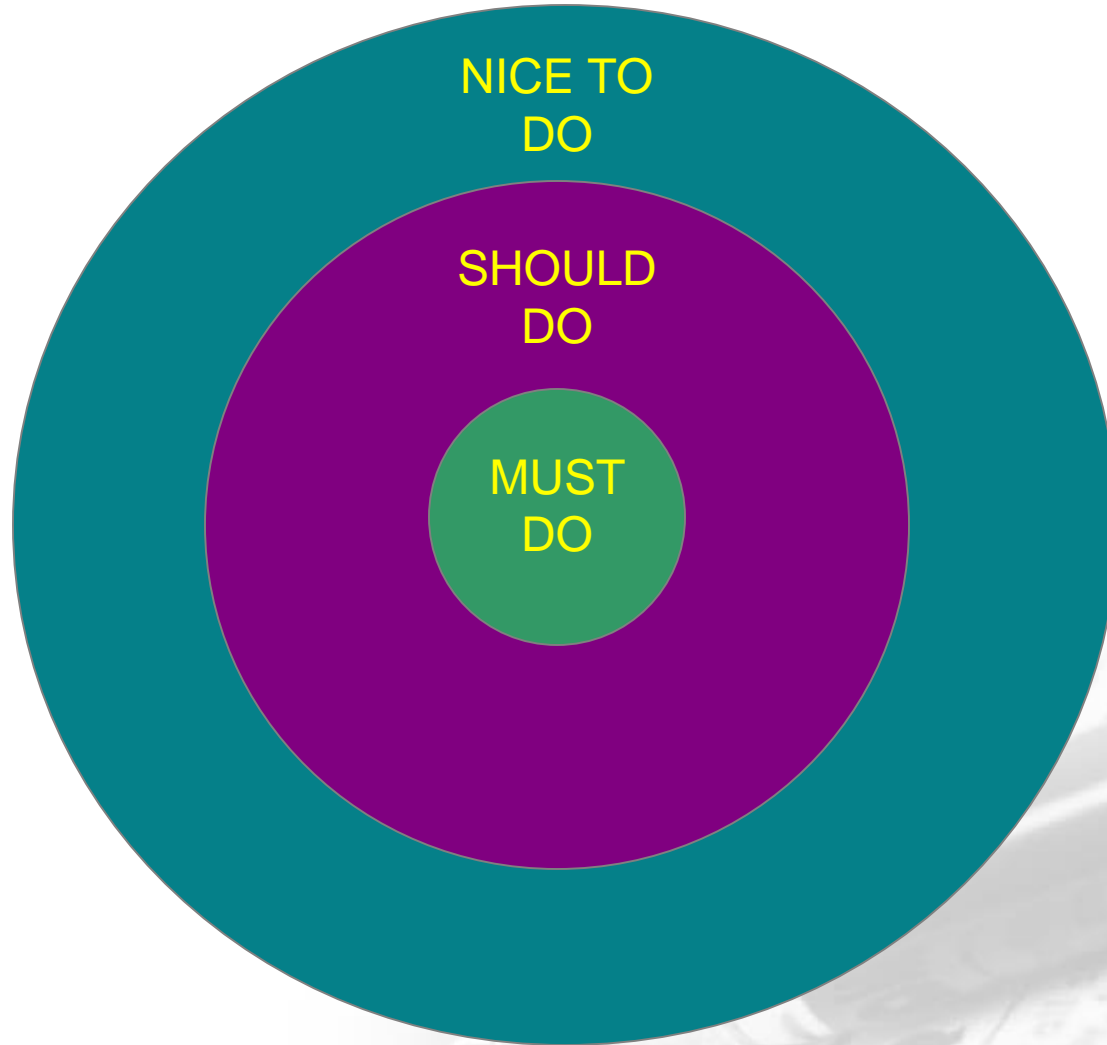
1. Is a form of recognition
2. Indicator that you have reached a certain knowledge level
3. Opportunity to test the theories in a practical environment
4. “MUST DELIVER” and “DEADLINES”
5. Join other projects as members first – receive less allowance

Products

1. How many products do you need?
2. Generate IPs – patent, TM, copyright
3. Opportunity to join exhibition – new experience
4. Impact to the society



Prioritization



Intellectual Properties (IP)

- Patent
- Copyright
- Trademarks
- Industrial Designs



Conclusions

Right Environment

Right People

Right Time

With Unlimited Doa (Prayer)

Smart Work

Long Hours

Motivated

Success as Lecturer



Thank You

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 IQBAL MIQ