



Boehringer
Ingelheim

Workshop

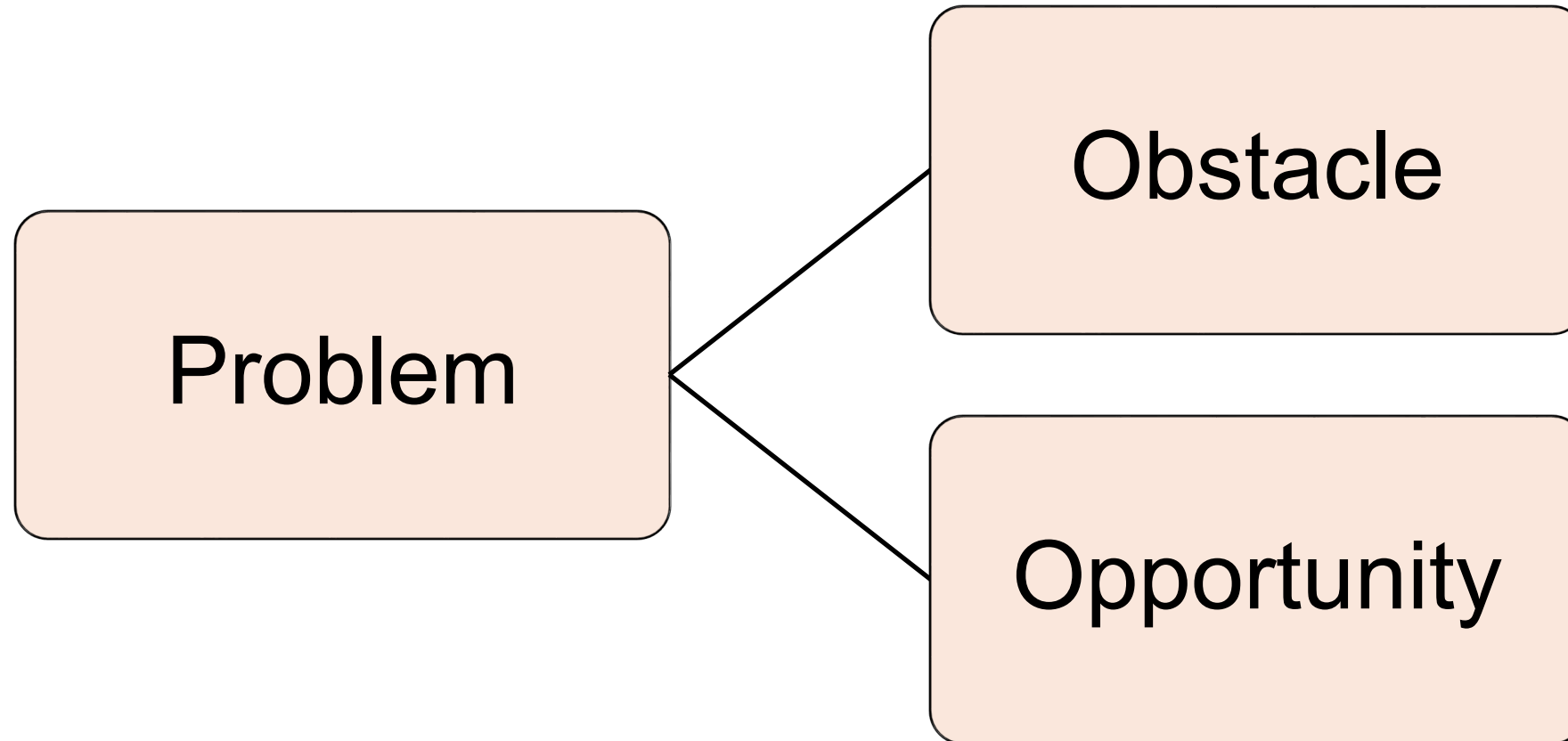
DESIGN THINKING



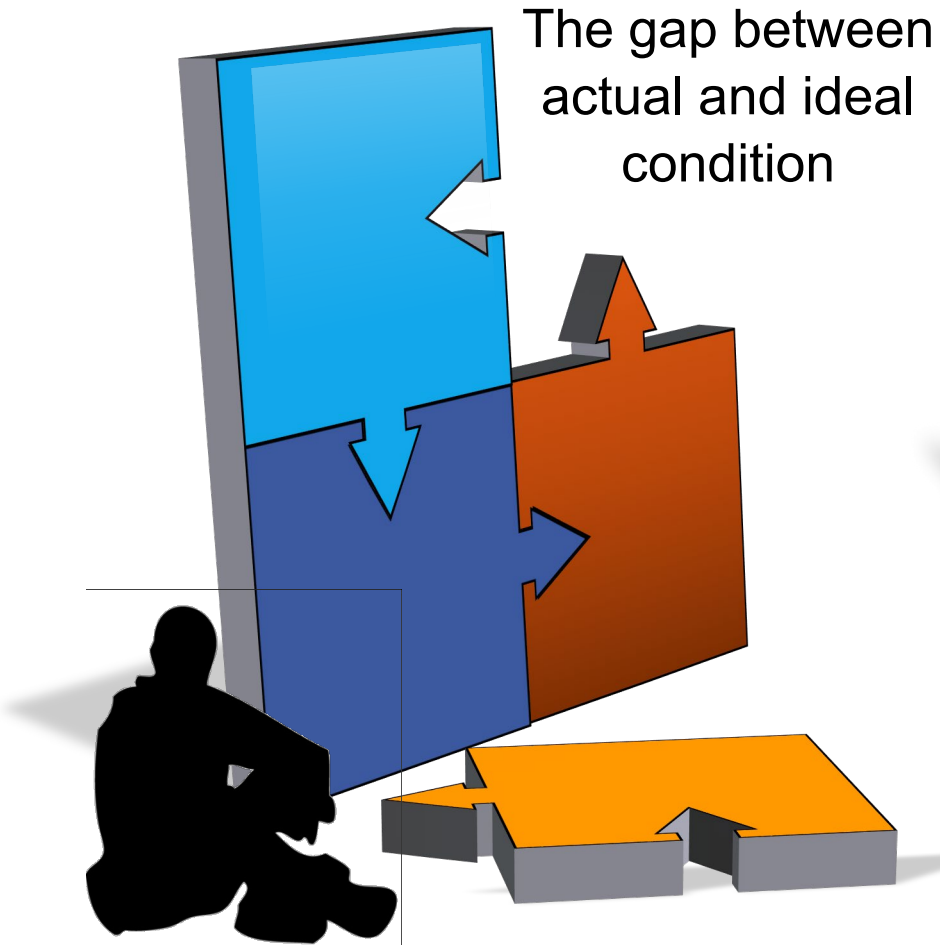
Module 1

Thinking Tools in Problem Solving

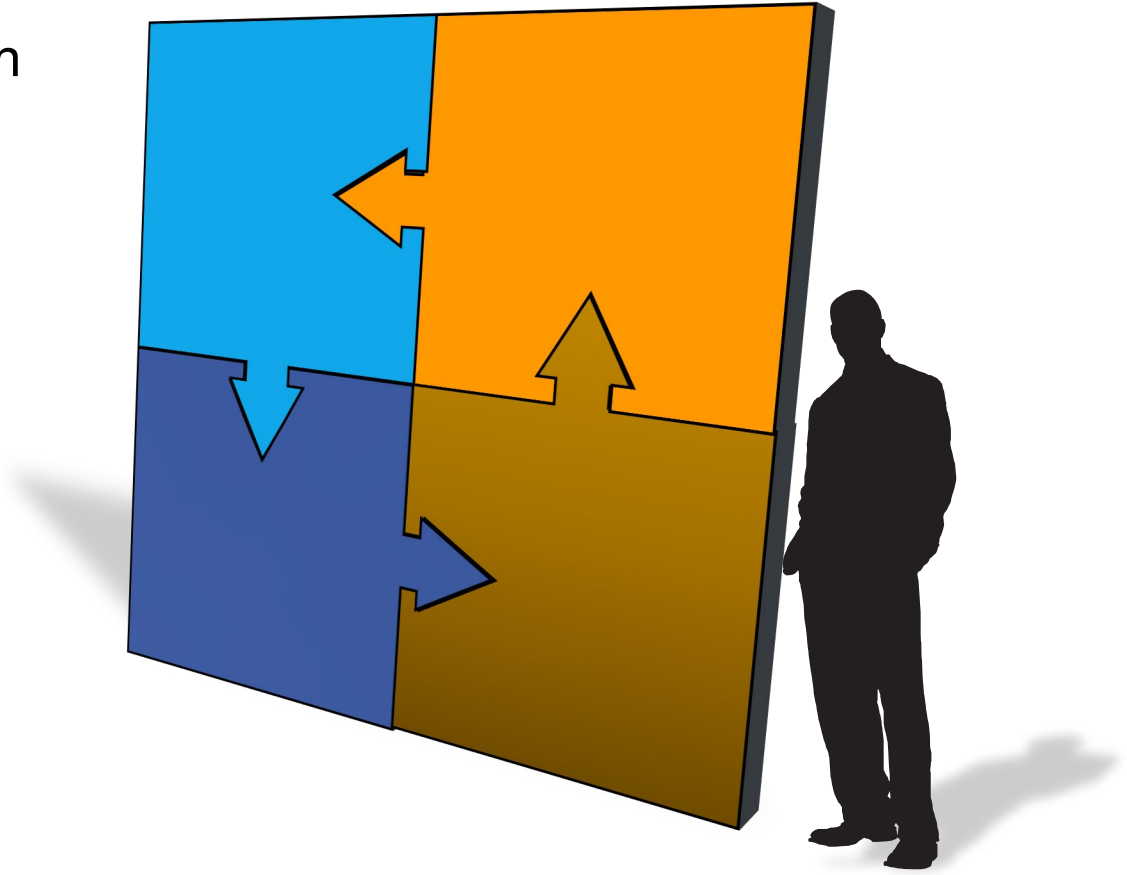
Perspective of a Problem



Definition of problem?

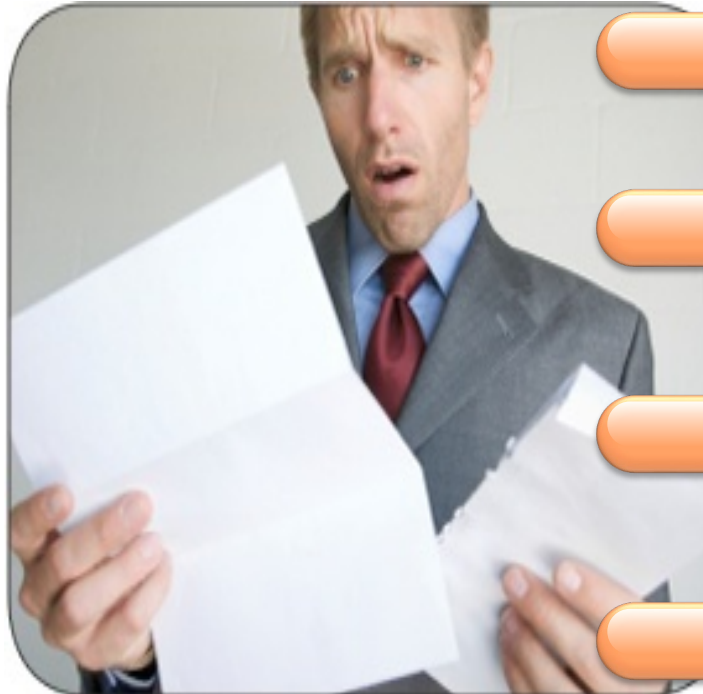


Problem Solving



Process of eliminating/minimizing gap between actual and ideal result

We acknowledge that there is a problem, based on:



Deviation from past experience



Deviation from the plan

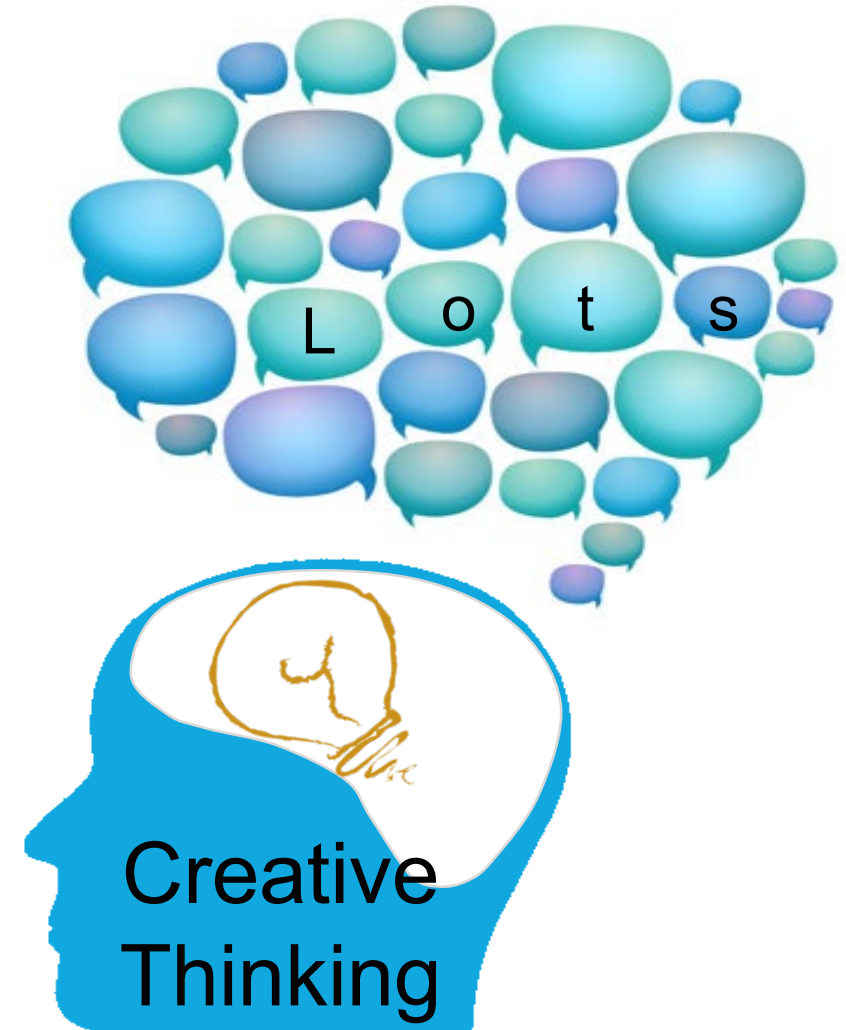
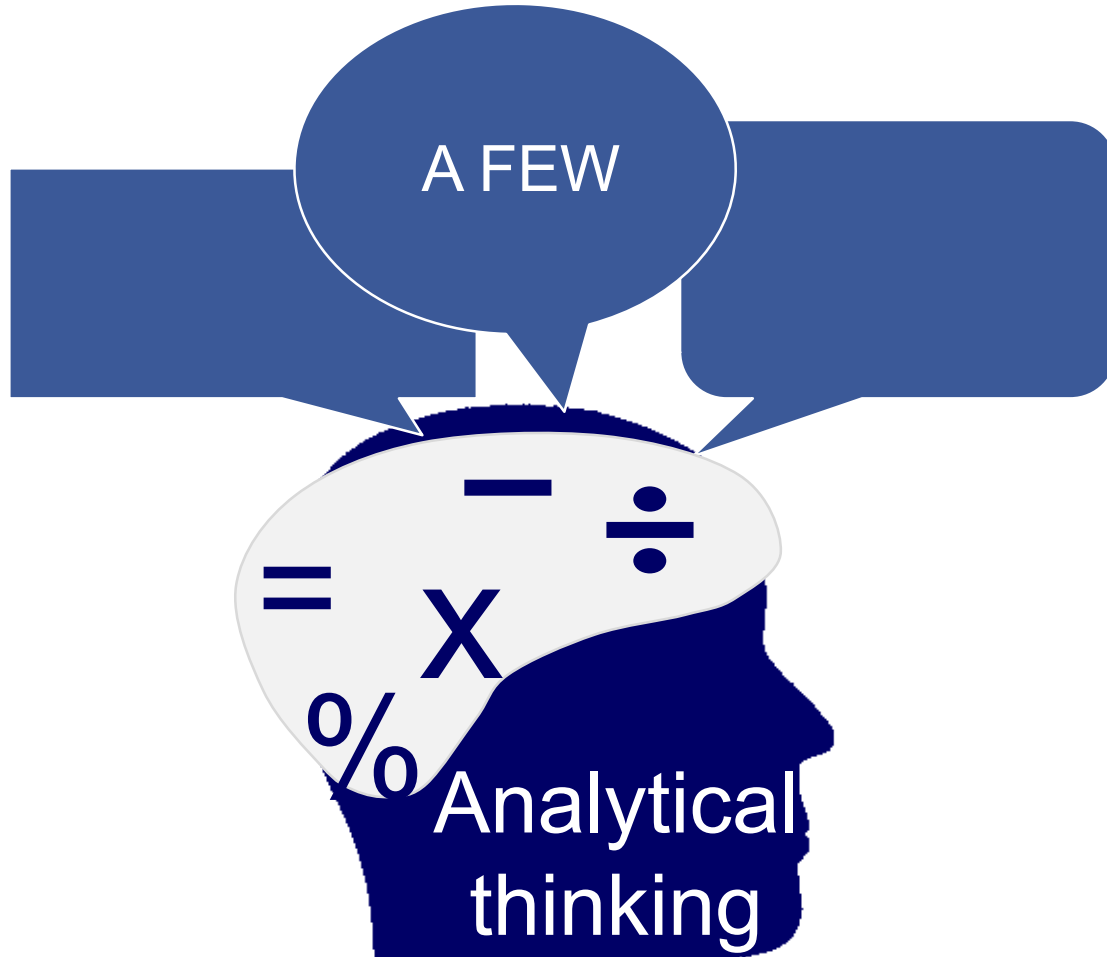


Being told by someone/complain

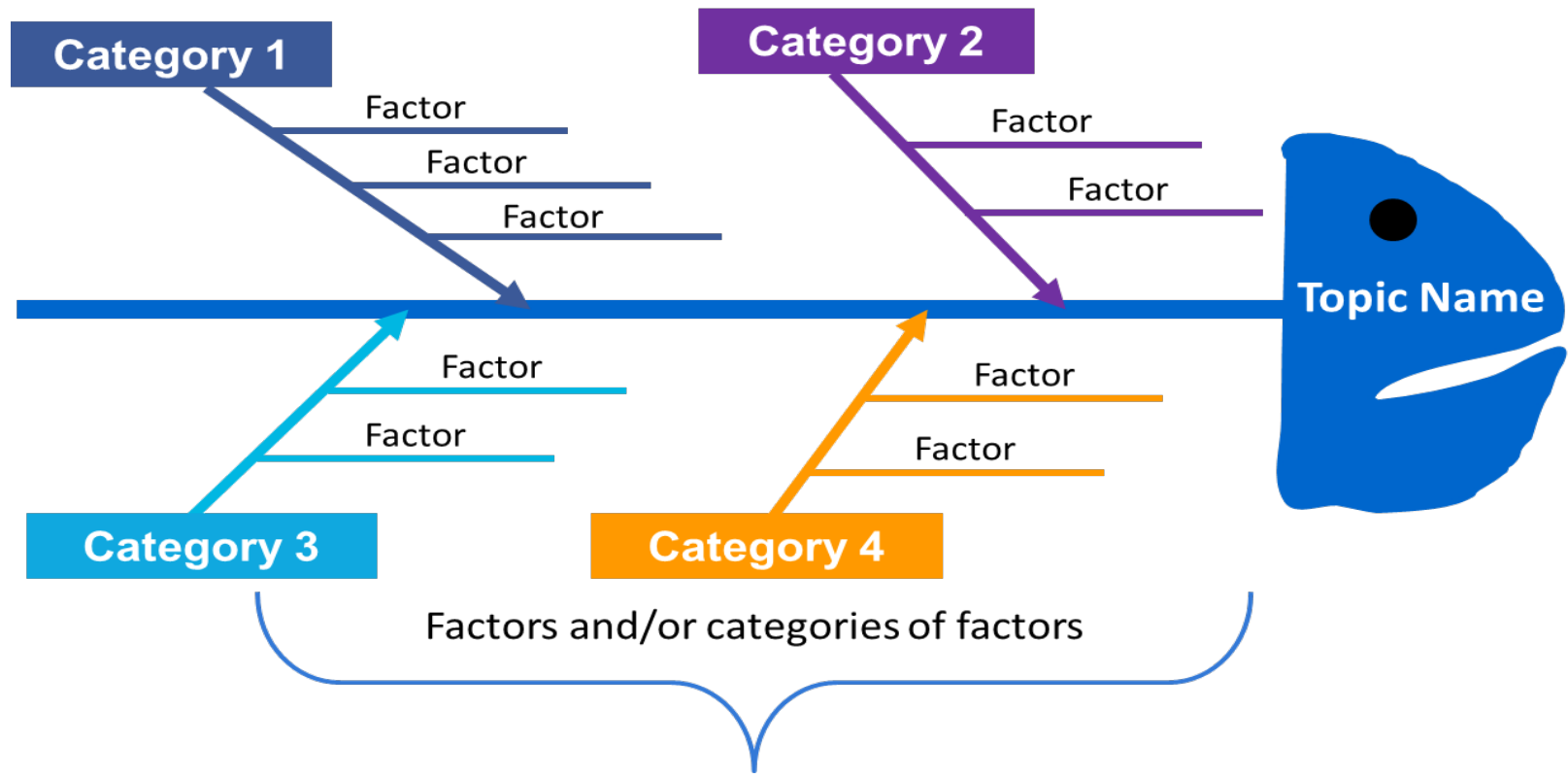


Competitors perform better than us

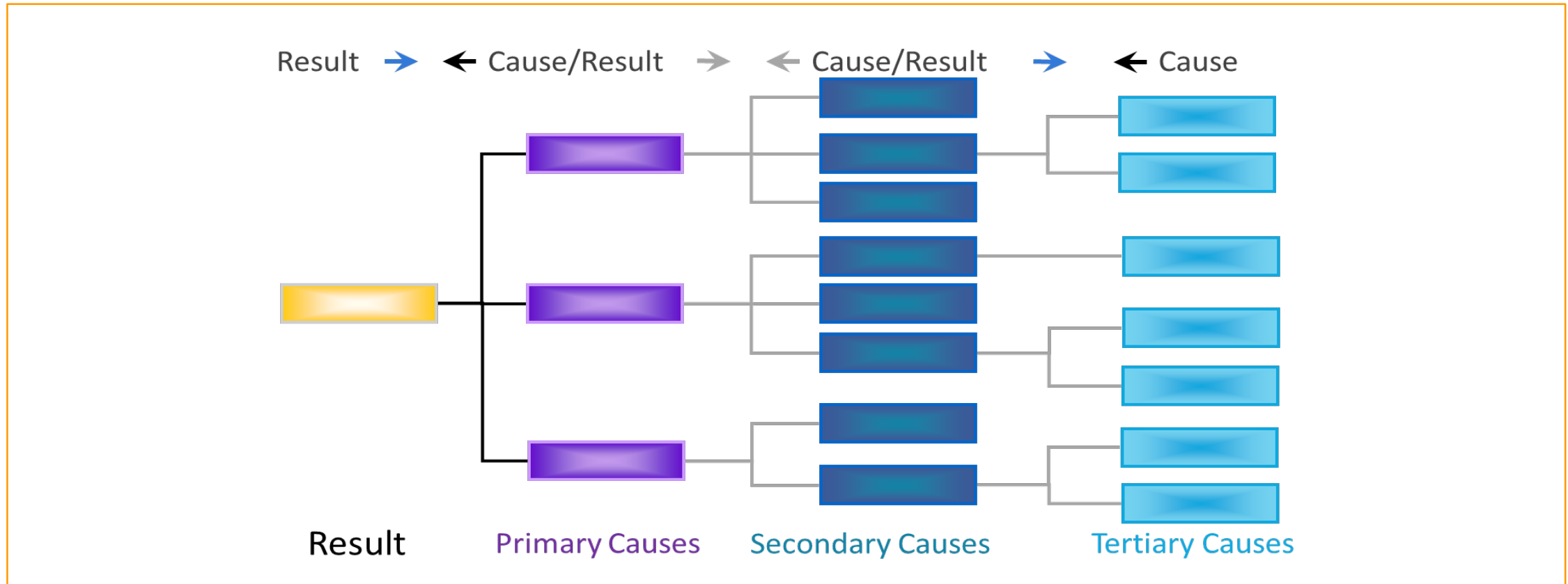
IDENTIFYING SOLUTIONS



Thinking Tools: Fishbone Diagram



Thinking Tools: Logic Tree Diagram



DESIGN THINKING



Empathize

Understanding people



Ideate

Generating your ideas



Define

Figuring out the problem



Test

Refining the product



Prototype

Creation and experimentation



Thinking Tool: Design Thinking

A tool (systematic thinking) that solves problems which can generate innovative customer experience enhancements and ensures customer acceptance of our ideas.

It is not meant to replace existing thinking techniques, but rather to complement them with its ***user-centric systematic thinking***.

Module 2

The Fundamentals of Design Thinking as Thinking Tool

History of Design Thinking

- Design thinking originally is created as a way of **teaching engineers how to approach problems creatively**, like all the designers do.
- In 1959, John E. Arnold, professor of mechanical engineering at Stanford University, wrote about the **four principal areas of design thinking** in his book *“Creative Engineering”*.
- **A design consultancy, IDEO**, in the 90s makes the terms **“design thinking”** became increasingly popular.
- In 2005, Stanford University’s d school (Institute of design) began **teaching design thinking as an approach to technical and social innovation**.

DESIGN THINKING



Empathize

Understanding people



Ideate

Generating your ideas



Define

Figuring out the problem



Test

Refining the product



Prototype

Creation and experimentation



Design Thinking

Empathize: Understand your customers, as you will be designing something for them.

Define: Establish a perspective based on customer needs and insights (design direction).

Ideate: Brainstorm and generate creative solutions.

Prototype: Create something that represents an idea to be shown to others.

Test: Return to users and test your ideas to gather feedback.

We need a "Design Thinking Squad" consisting of:

- Design Thinking Master
- Business Owner / Problem Owner
 - Subject Matter Expert
 - Users

In order to be able to design an accurate design direction.

Module 3

Understanding & Developing Persona

Customer Persona

Your journey in Design Thinking starts with the Customer Persona

Customer Persona can include the information about customer's:

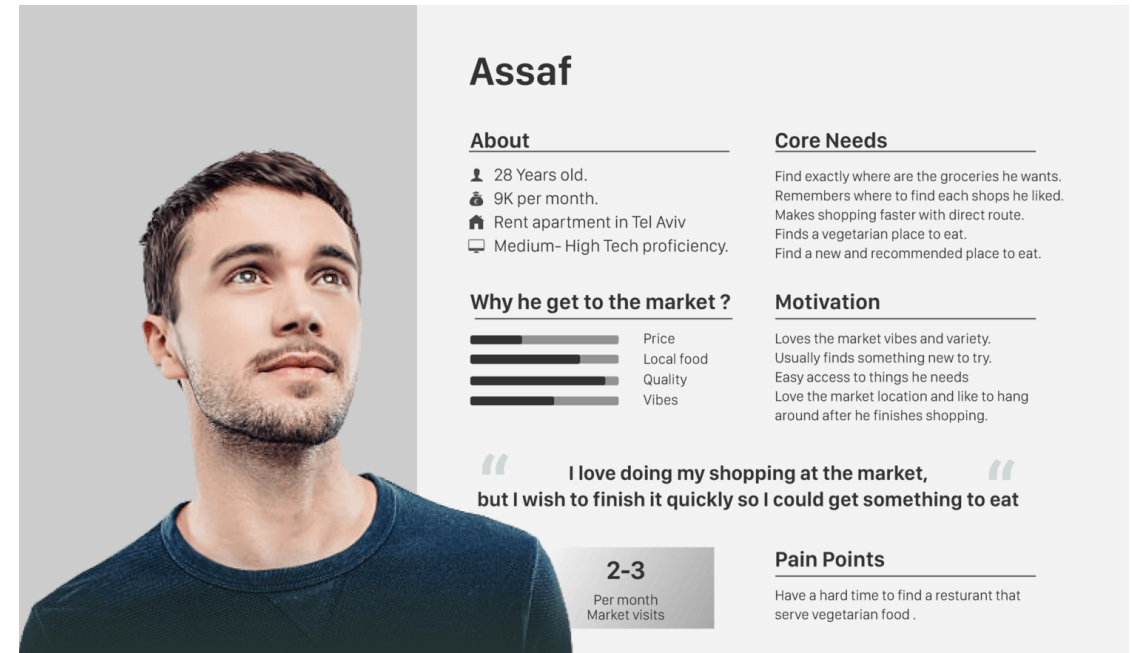
Demographics: location, age, gender

Personality: spontaneous, planner, skeptical

Lifestyle: occupation, where they are

Goals: what do they want?

Challenges: what challenges do they face?



Assaf

About

- 28 Years old.
- 9K per month.
- Rent apartment in Tel Aviv
- Medium- High Tech proficiency.

Why he get to the market ?

- Price
- Local food
- Quality
- Vibes

Core Needs

- Find exactly where are the groceries he wants.
- Remembers where to find each shops he liked.
- Makes shopping faster with direct route.
- Finds a vegetarian place to eat.
- Find a new and recommended place to eat.

Motivation

- Loves the market vibes and variety.
- Usually finds something new to try.
- Easy access to things he needs
- Love the market location and like to hang around after he finishes shopping.

2-3
Per month Market visits

Pain Points

- Have a hard time to find a restaurant that serve vegetarian food.

" I love doing my shopping at the market, but I wish to finish it quickly so I could get something to eat "

Once you have all the data, provide a NAME.

1. Empathize

Identify Your Users (usually 6-8 people)

There are 4 types of Users:

- **Primary**
- **Secondary**
- **Experts**
- **Outliers**

Example: Mattress Vacuum Cleaner

Primary: Young mothers and domestic helpers

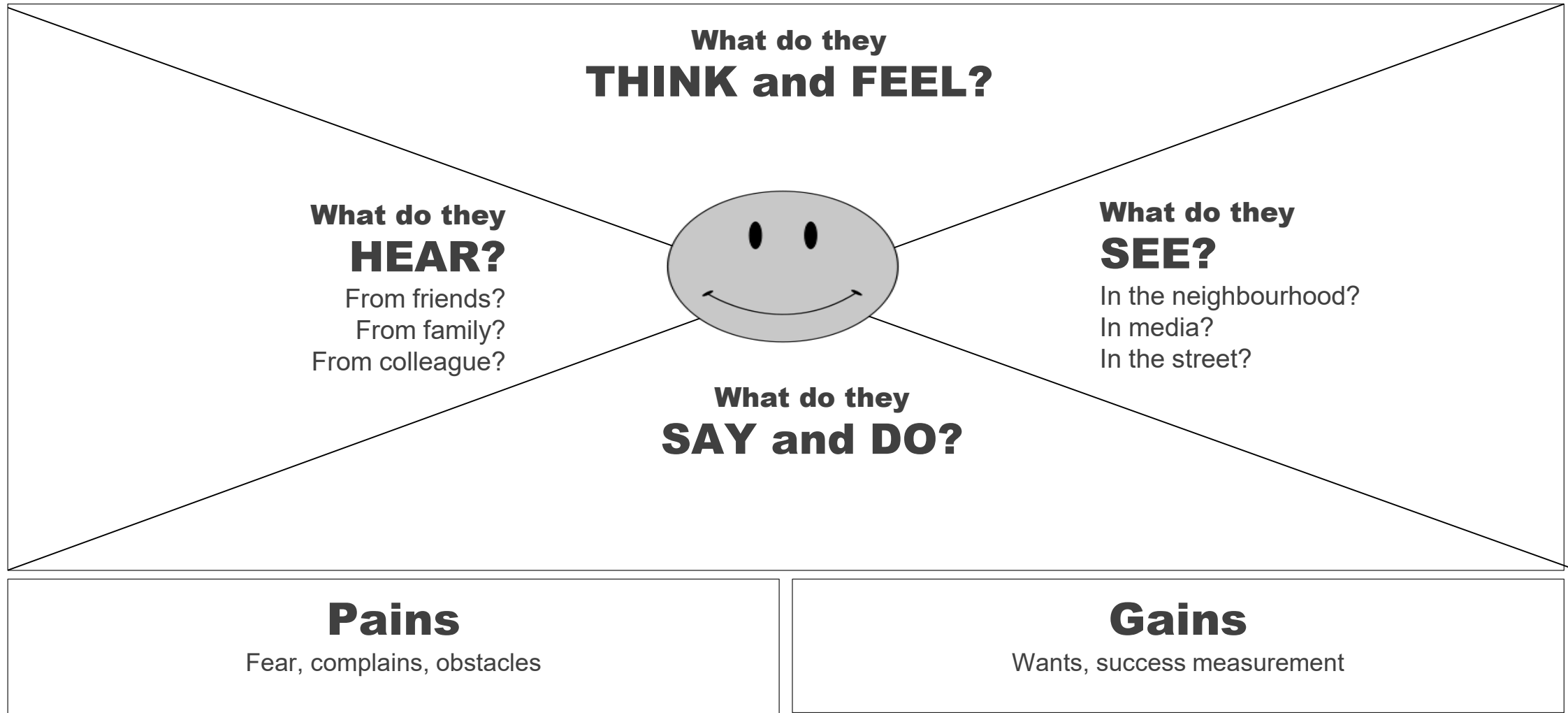
Secondary: Husbands

Experts: Mattress cleaning services, salespersons, dermatologists

Outliers: In-laws, children



Empathy Map



2 Questioning Techniques

Open Question

Who?
What?
Why?
When?
Where?
How?

Closed Question

Are you...?
Will you...?
Can you...?
Can we...?
Have you...?



Module 4

Defining The Problems or Opportunities

2. Define

Job-to-be-Done?

- Functional: Helps me to complete tasks.
- Social: Helps me to look good, to gain social acceptance.
- Emotional: Makes me feel good/comfortable.

How Might We (HMW)

Insight

- A deep understanding of the reasons our customers make decisions/take actions:
- Needs
- Pain points
- Sources of delight

Problem

- Barriers/tensions within the environment/organization causing difficulties to arise.

How Might We
How can we eliminate these barriers?

Insight

- Peter wants to go home on time for a family dinner, but it's not possible due to having to work overtime because of the high volume of files at the end of the workday.

Problem

- The high volume of files at the end of the workday is caused by a manual process, forcing Peter to work overtime.

How Might We

We will design for Peter to be able to go home on time by reducing/automating the workload files.

Customer Journey

	Search	Visit	Purchase	Obtain	Own
Action					
Question					
Happy moment/Gain					
Problem/Pain					
How Might We (HMW)?					

Module 5

Ideating & Generating Alternative Solution

3. Ideate

Creative Thinking Tools



- Brainstorming
- Mind Mapping
- **SCAMPER**

Brainstorming

Brainstorming Rules

1 | Don't
Evaluate

Quantity
Needed | **2**

3 | Keep
Building

Wild Ideas
Wanted | **4**



There are no other rules!

SCAMPER

Substitute.

- Change one or more components

Combine.

- Put it together/mix it with other things

Adapt.

- Adapt it from other situation, ideas, etc

Modify.

- Modify it to smaller or bigger in size

Put to another use.

- Use it for other purposes

Eliminate.

- Simplification

Reverse.

- Reverse or rearrange things or process

COST

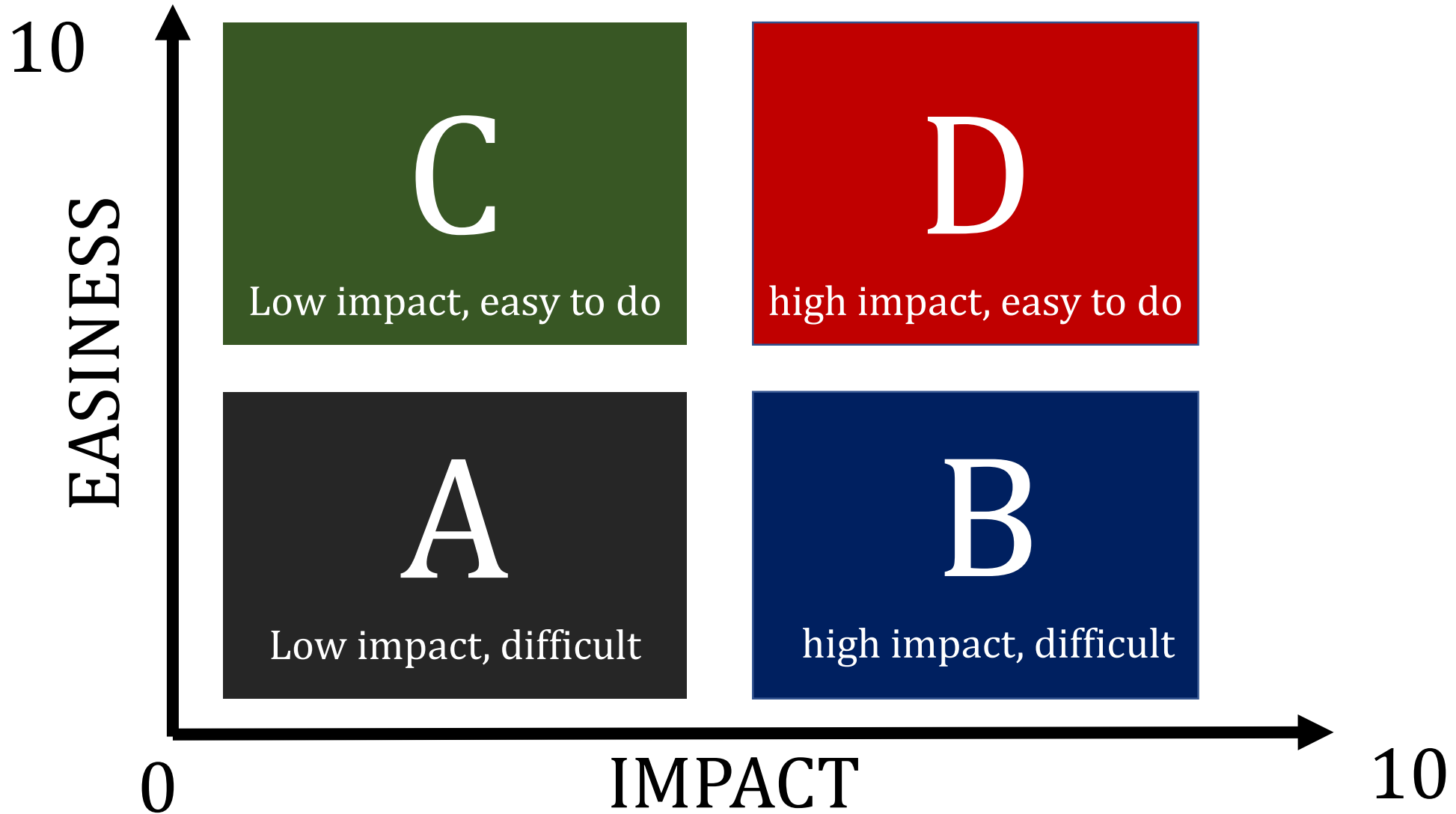
- Investment: Money, time, energy
- Negative impact
- Potential losses
- Missed opportunities

BENEFIT

- Potential Revenue: Money, time, energy
- Positive impact
- Potential savings
- Opportunities gained

Low Cost - High Benefit

Map the ideas into this matrix

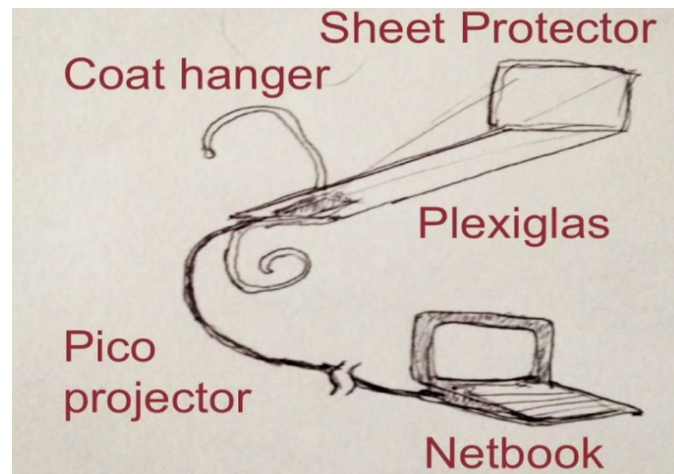


Module 6

Prototyping and Fine Tuning the Solution

4. Prototype

Prototyping could help people to visualize their ideas and thinking process into something concrete and “looks real”



Prototype

Why prototyping?

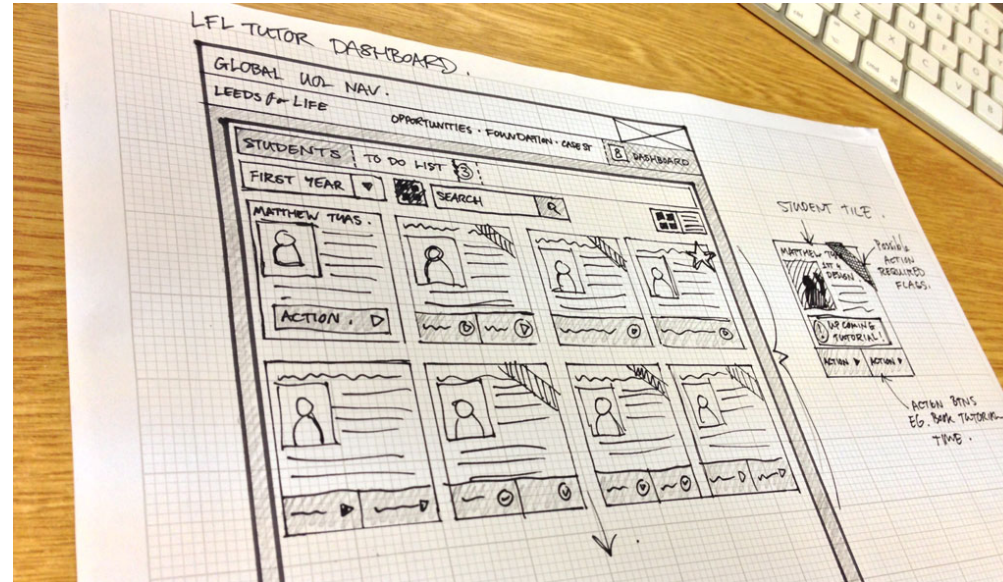
- Prototyping will explain more
- Asking for valuable feedback from others
- It is cheap and quick



Prototype Example



Prototype Example



Prototype Example



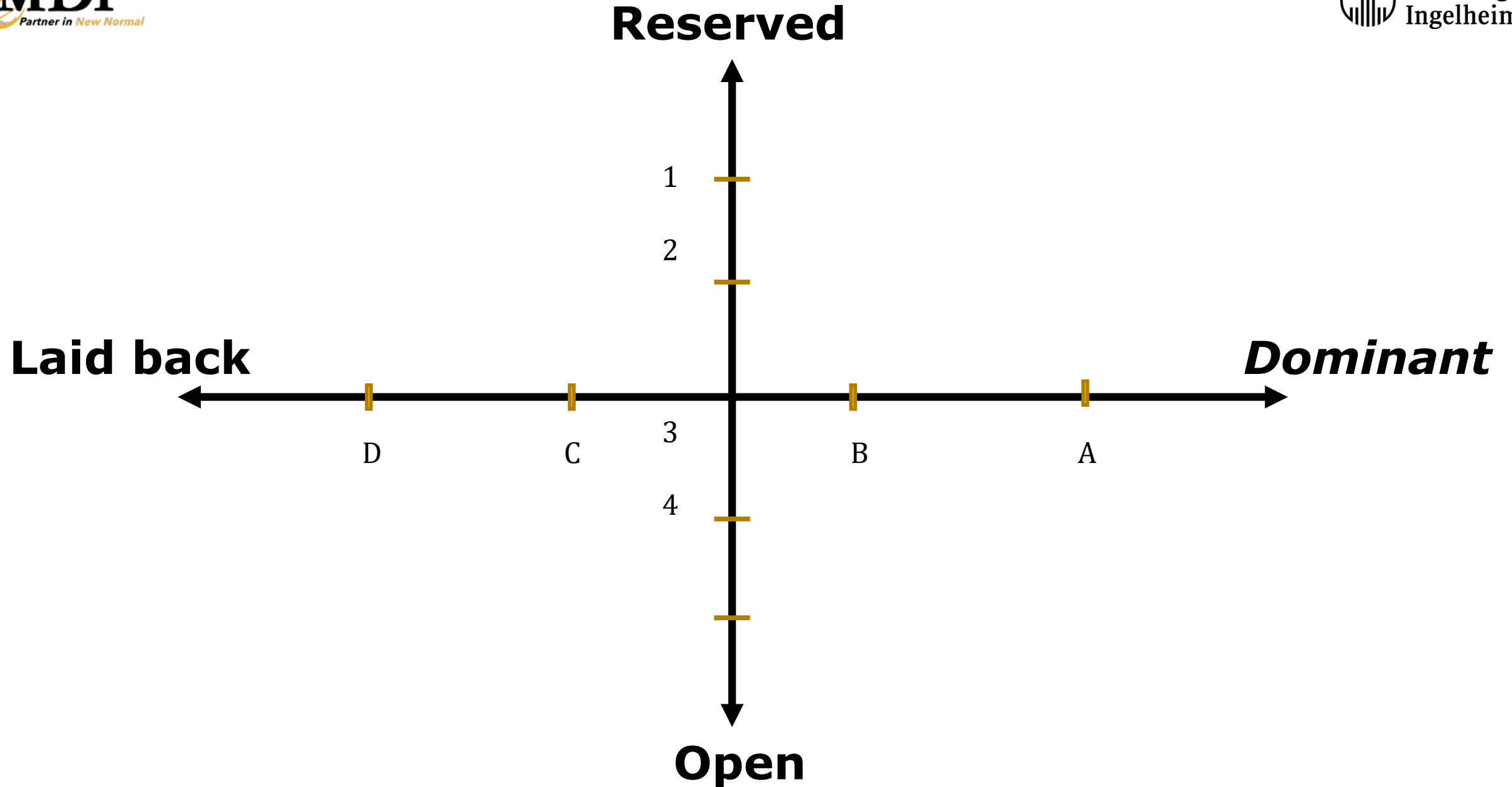
Module 7

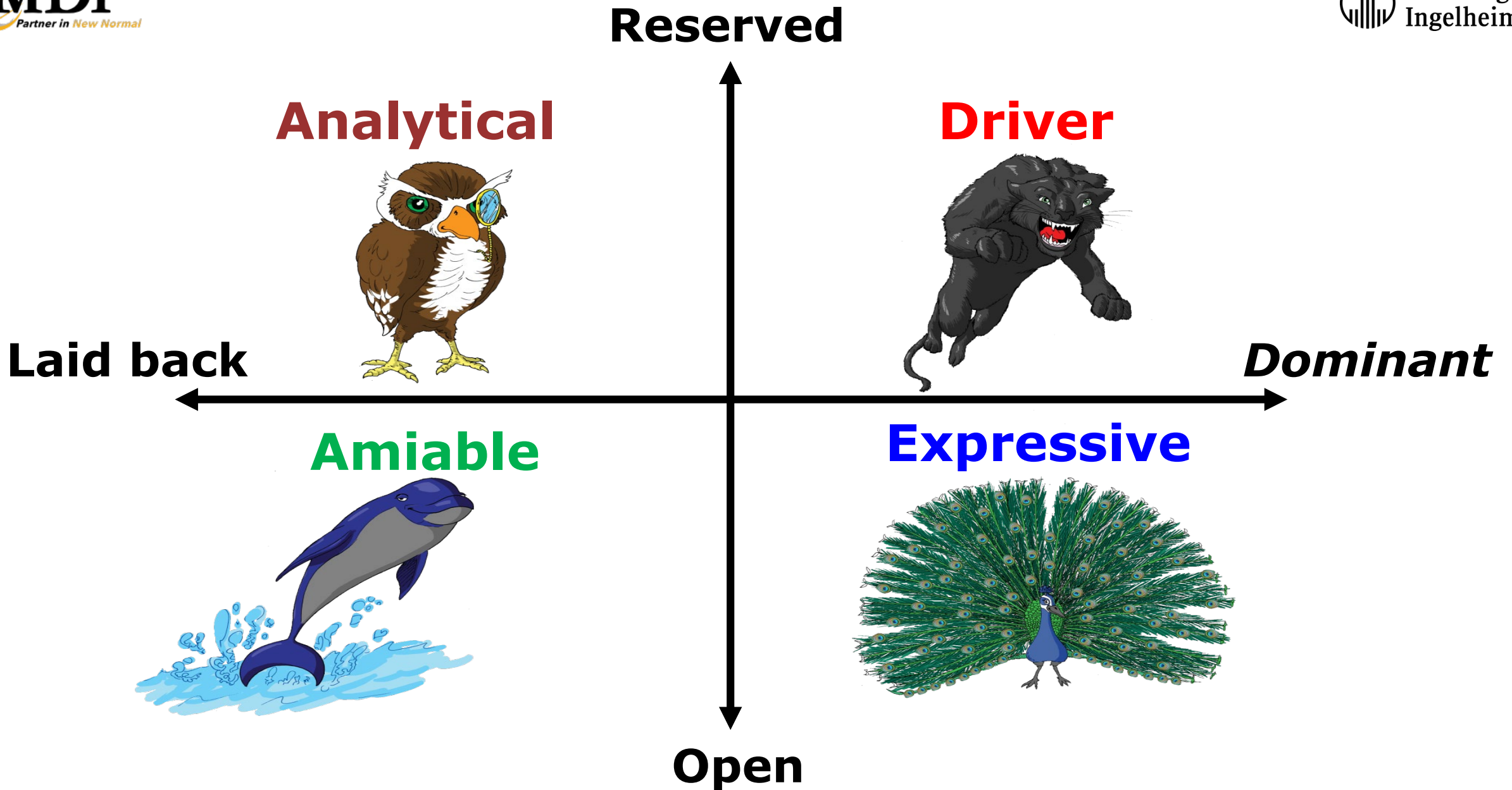
Presenting to Different Interpersonal Style



Profiling our *user/customer* would help us gaining insight on how to influence them.

Once a good rapport has been built, we could provide solutions and **influence our diverse customers much better**





DRIVER



- Make things happen, they can make a decision when others can't
- Hardworking, competitive and risk taker
- Able to deal with difficult subjects/situation
- Accept changes as personal challenge
- Result oriented and quickly
- They are demanding
- Tend to 'tell' rather than suggest
- Controlling
- No patient with low tolerance level

You could be more effective, if you try to:

- ✓ Be more patient
- ✓ Not too blunt with your words
- ✓ Practice your approach – control your body language and invite people to participate more in a conversation

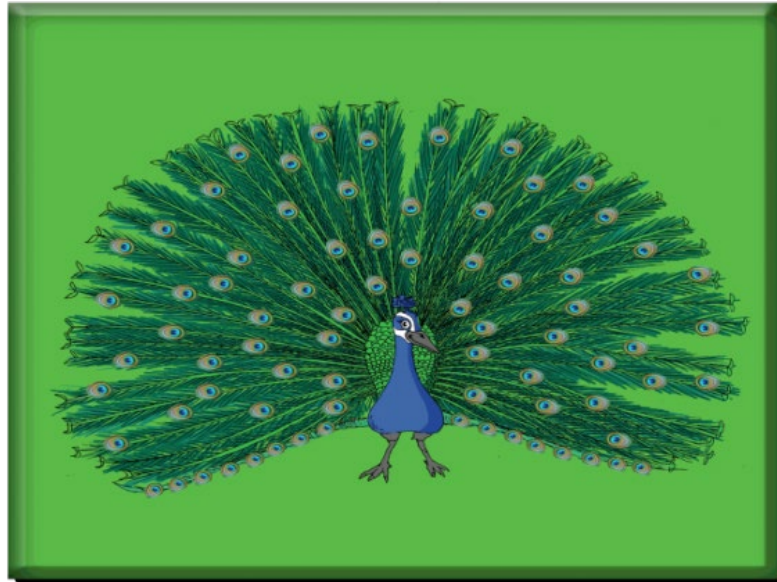
MODIFIED BEHAVIOR TO BETTER COMMUNICATE WITH DRIVER

- Do things quickly
- Be straight to business
- Show them how to achieve their goals
- Be confident and efficient

Strategies for doing business with a **Driver**

Do	Don't
Be brief and to the point when you present information.	Ramble or waste their time.
Use only a brief introduction: don't waste time with chit-chat.	Socialise on company time.
Include objectives and support material in a well-organised format.	Be disorganised or messy; be confusing or distracting.
Include alternatives and options so they can make the decision.	Ask rhetorical questions.
If you disagree, deal with facts, not people.	Give a guarantee that you can't uphold or make wild speculations.
If you agree, support results, not the person.	Order them or tell them what to do.
Present arguments in terms of objectives and results.	Try to persuade by means of personal trust rather than facts.
Leave quickly after the business is concluded.	Be afraid to take a risk.

EXPRESSIVE



- Creative
- Fun, charming, persuasive
- Ambitious
- Outspoken, spontaneous
- Humorous
- Share enthusiasm and positive attitude to others
- Easy to provide positive feedback
- Gain recognition
- Unorganized
- Impatient
- Less meticulous

You could be more effective, if you try to:

- ✓ Be more attentive towards others' needs
- ✓ Be more organized
- ✓ Pay attention to details

MODIFIED BEHAVIOR TO BETTER COMMUNICATE WITH EXPRESSIVE

- Make it faster
- Get to know personally
- Give visible recognition
- Be fun and energetic

Strategies for doing business with an **Expressive**

Do	Don't
Support their vision and be willing to brainstorm ideas.	Assume a new idea is a finished product.
Include time for socialising.	Cut off other's ideas or withhold our own ideas.
Talk about people and their goals.	Leave decisions 'hanging'.
Give overviews of what you plan to do; put details in writing as back up.	Be impersonal or judgmental.
Be enthusiastic and stimulating in your discussions.	Kid too much or stick to the agenda too much.
Take time for fun.	Talk down to them.
Use testimonials from people they respect.	Say we have tried that before and it didn't work.
Include incentives as rewards for taking risks.	Be too opinionated or dictatorial.

AMIABLE



- Friendly, warm
- Easily trust others
- Emphatic and sensitive to others' needs
- Supportive
- Excellent team player
- Good listener
- People oriented
- Difficult in making decision
- Less frank
- Resisting to change
- Avoid risk, avoid conflicts

You could be more effective, if you try to:

- ✓ Be more assertive and straightforward with your intention and needs
- ✓ Be more tolerant with sudden change
- ✓ Not involve yourself too far in people's problems

MODIFIED BEHAVIOR TO BETTER COMMUNICATE WITH

AMIABLE

- Slow down
- Get to know personally
- Invite other people to be involved
- Be warm and friendly

Strategies for doing business with an **Amiable**

Do	Don't
Start with a personal comment to demonstrate your interest in them as a person.	Rush into business and treat them impersonally.
Be candid and open; find areas of common involvement.	Force them to respond too quickly to your own objectives.
Listen and be responsive.	Be domineering and demanding.
Present your case in a non-threatening manner which considers the impact on people.	Debate about facts and figures without considering the impact on people.
Watch carefully for areas of disagreement.	Bully them into agreement or box them into a corner - they may not fight back.
Ask 'how' questions to draw out their opinions.	Be abrupt, move too rapidly, or appear uncaring.
If you disagree, look for hurt feelings.	Be too vague as little will be accomplished.
Provide personal assurance that minimise risks.	Leave them without support as they prefer to work with others.

ANALYTICAL



- Objective
- Based on fact
- Details
- Accurate
- Task oriented
- Impersonal
- Serious
- Closed, like being alone
- Minimize risk
- Blocking other people creativity by following rules and regulations

You could be more effective, if you try to:

- ✓ Be more open in accepting change
- ✓ Be more social and communicate your needs with others

MODIFIED BEHAVIOR TO BETTER COMMUNICATE WITH

ANALYTICAL

- Slow down
- Go straight to business
- Be punctual & bring facts
- Communicate with structure
- Be detail

Strategies for doing business with an **Analytical**


Do	Don't
Be sure to prepare your case in advance.	Be unorganised or sloppy in your approach.
Be straight forward and direct in your approach to business.	Appear overly enthusiastic or invade their space.
Include data supporting your ideas; be prepared to address both pros and cons of an issue.	Pressure them into quick decisions; prepare them with setting clear expectations.
Be organised and present specific examples.	Present new information without reference to previous examples or procedures.
Allow sufficient time to present information; be thorough in your approach.	Leave things to chance.
Present action steps in a careful, step by step format.	Be haphazard in your approach or rely on hearsay or hunches.
Present clear, accurate, and precise information on your views.	Be manipulative or disingenuous versus using supporting facts.
Reference past procedures and examples.	Set unrealistic deadlines or expectations.

Summary of style elements


Style	Driver	Amiable	Expressive	Analytical
Basic orientation	Action	Relationships	Intuition	Thinking
Use of time	Immediate	Present	Future	Historical
Relating to others	Task first	Key priority	Likes an audience	Cautious actions
Tasks	Primary importance	Relationships most important	Must be exciting	Process takes priority
Decision making	Quick, goal oriented	Slow, people oriented	Fast, intuition oriented	Slow, process oriented
Action planning questions	What?	Why?	Who?	How?

Summary of style elements

Style	Driver	Amiable	Expressive	Analytical
Maximum effort toward others	Control	Relationships	Involvement	Process
First priority	Achievement	Teamwork	Leadership	Planning
Uncomfortable with or a source of tension	Inaction	Conflict	Isolation	Involvement
Major strength	Decisive	Supportive	Enthusiastic	Thorough
Major weakness	Tends to be Insensitive to others' feelings	Tends to avoid confrontation	Tends to act impulsively	May be reluctant to improvise
Fall-back behaviour	Autocratic	Acquiesce	Attack	Avoid

 **Aware** be aware of your and others personality type

 **Accept** your and others personality type

 **Adapt** with others personality type to build effective communication, relationship and to influence them

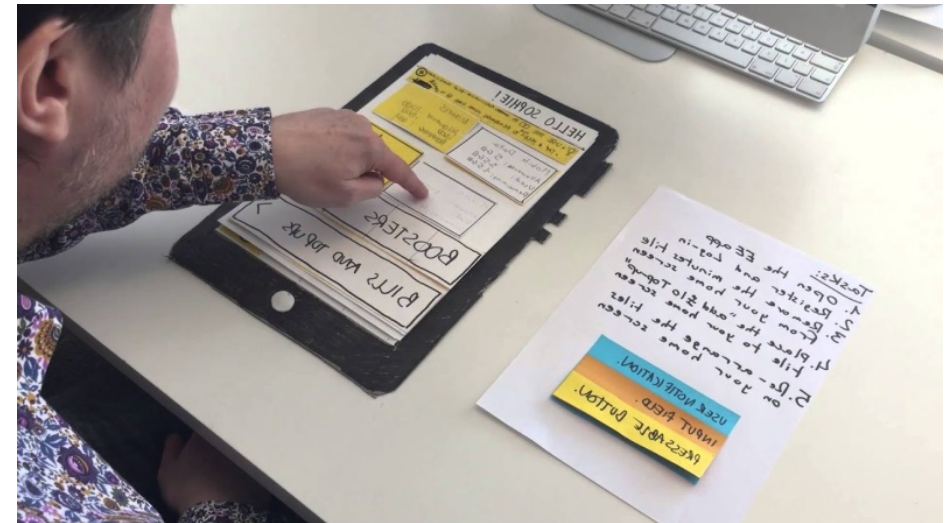
Module 8

Testing for Feedback

5. Test

Why is testing necessary?

- Communicating outcomes to end users.
- Validating the generated output.
- Alignment with the end user expectations.
 - Gathering feedback.



5 Testing Steps

1. Defining the project's objectives.
2. Inviting users, stakeholders, and vendors.
3. Conducting tests.
4. Analyzing and suggesting recommendations.
5. Presenting the test results.

Evaluation Criteria for Prototype Testing:

- Functionality
- Benefits
- User engagement
- Cost
- Recommended price
- Etc...

