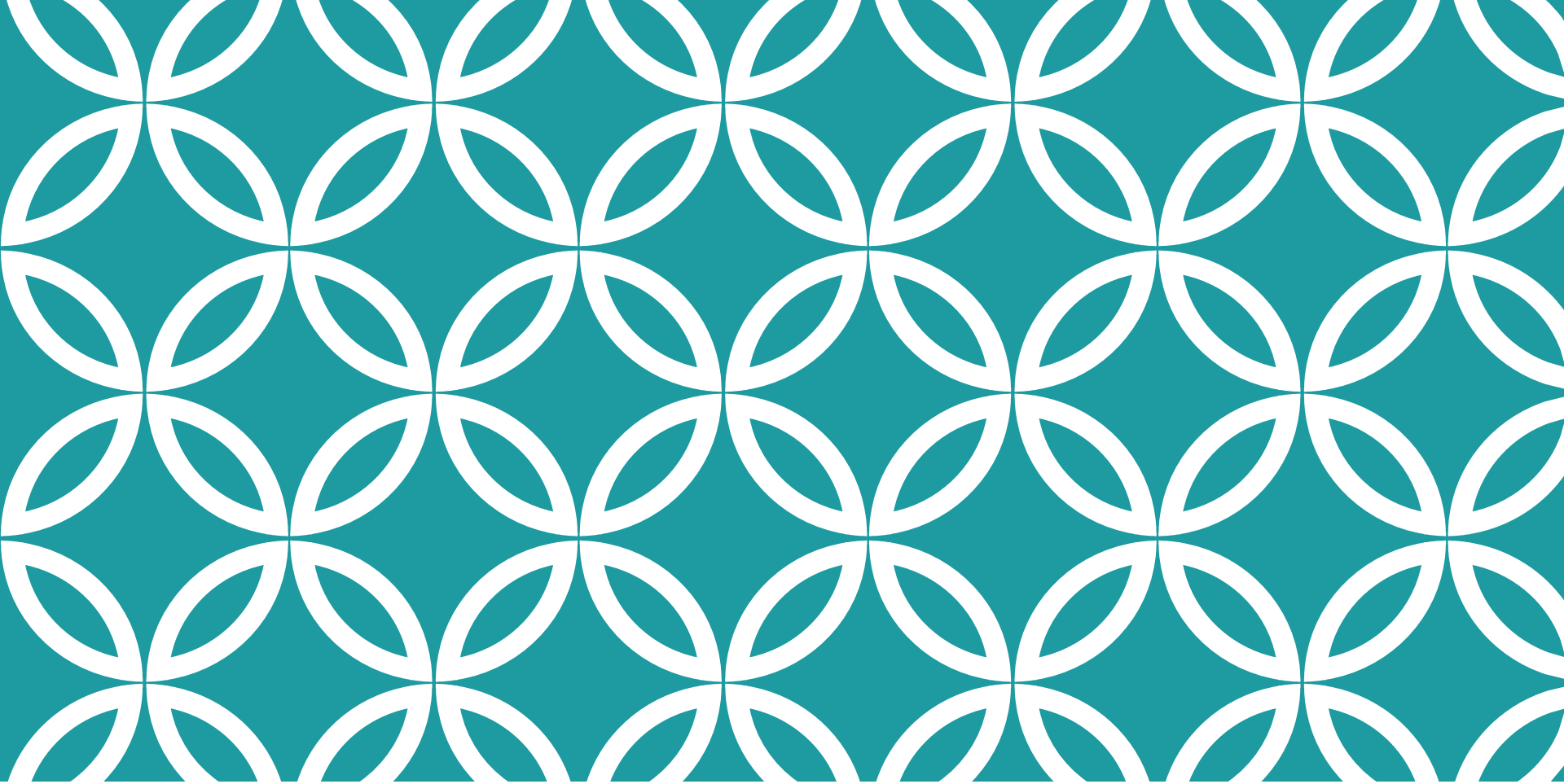


PROGRAM AGENDA

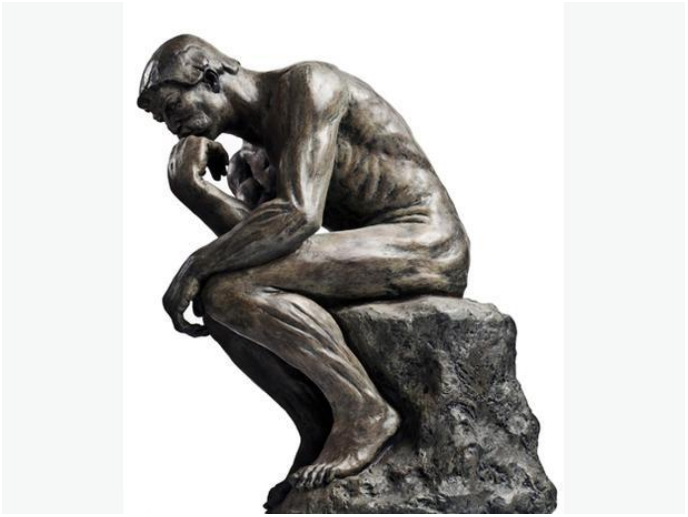
PROGRAM AGENDA

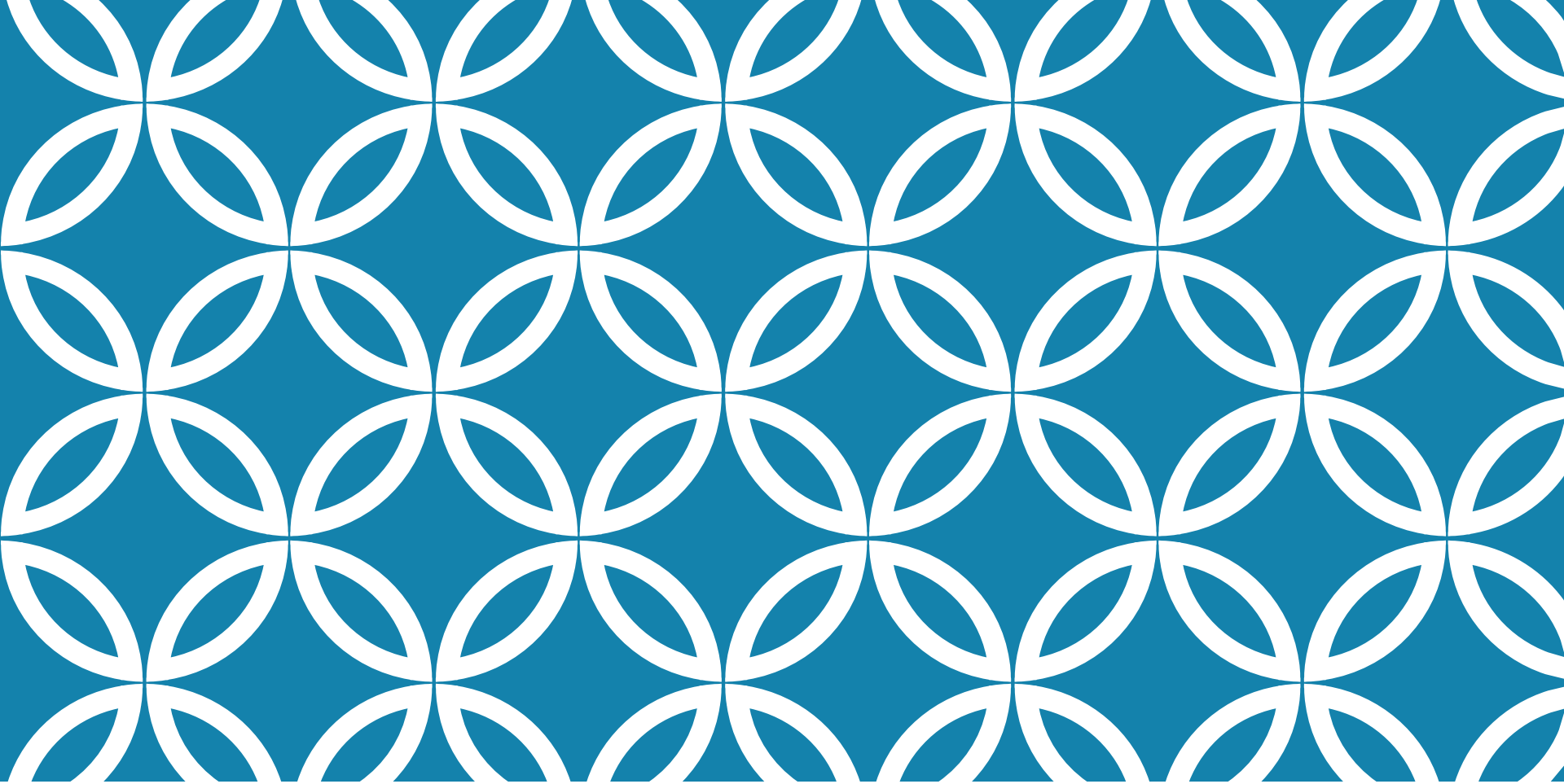
Introduction to **Six Sigma Framework &**

Tools for **Process Improvement** & **General**

Problem Solving

According to Forbes, Problem Solving and Critical Thinking are the most sought after skills by employers

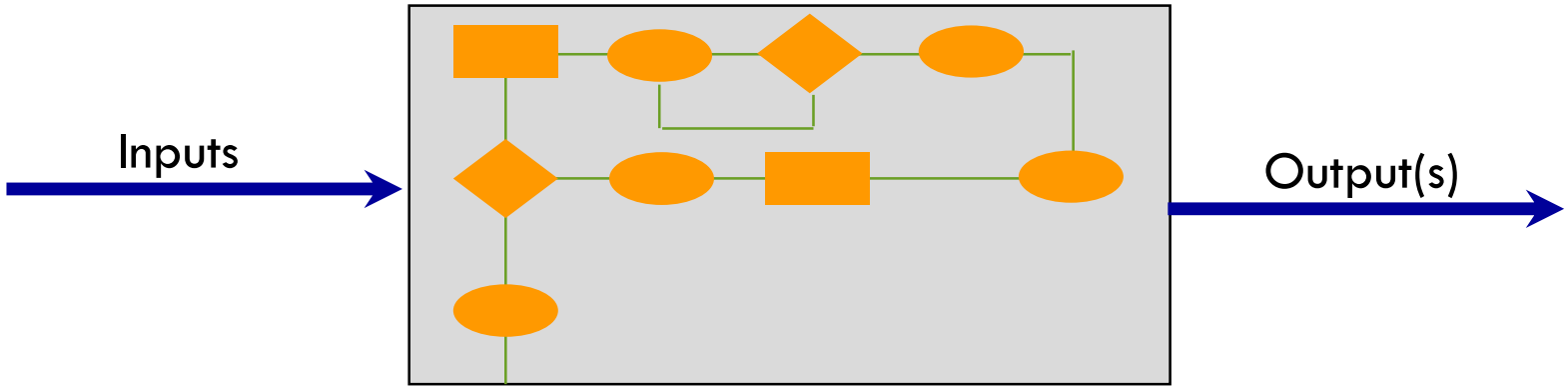




WHAT IS A PROCESS??

PROCESS

Interaction of inputs through sequential steps to produce certain output(s)



PROCESS

"An activity that is done repeatedly in same manner is a process"

MOST OF THE ACTIVITIES WE DO ARE PROCESS

- Manufacturing a product
- Providing a service
- Developing a software
- HR & Accounting

Can you think of something which is not a process?

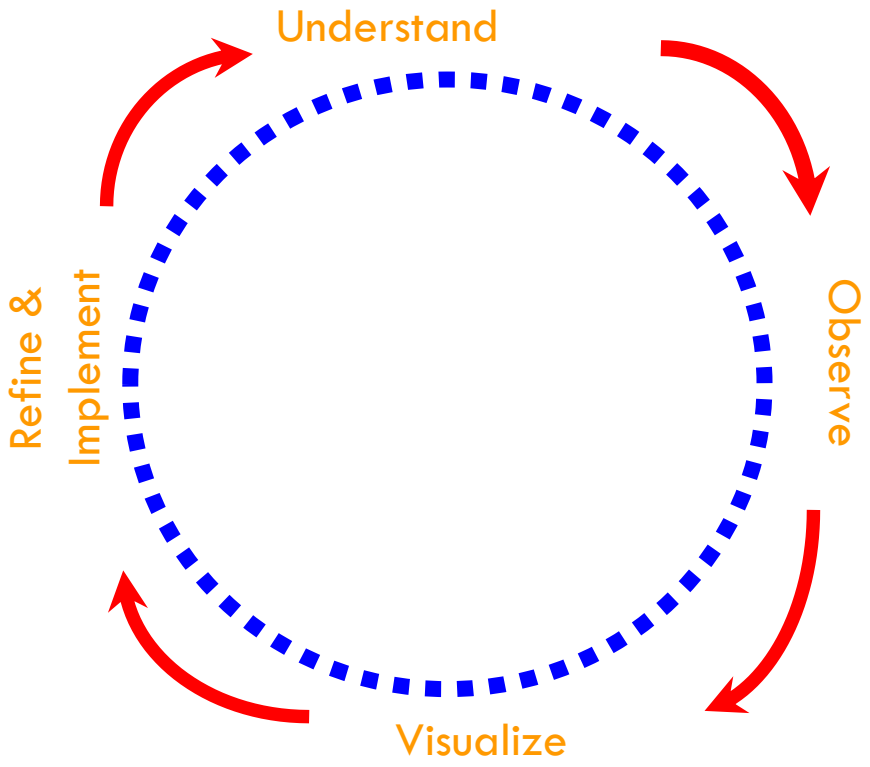
IS INNOVATION A PROCESS??

IDEO

- World's first computer mouse
- World's first note book computer
- Palm V
- Zyliss kitchen tools
- "Keep the change" service for Bank of America
- Defibrillator for heart patients

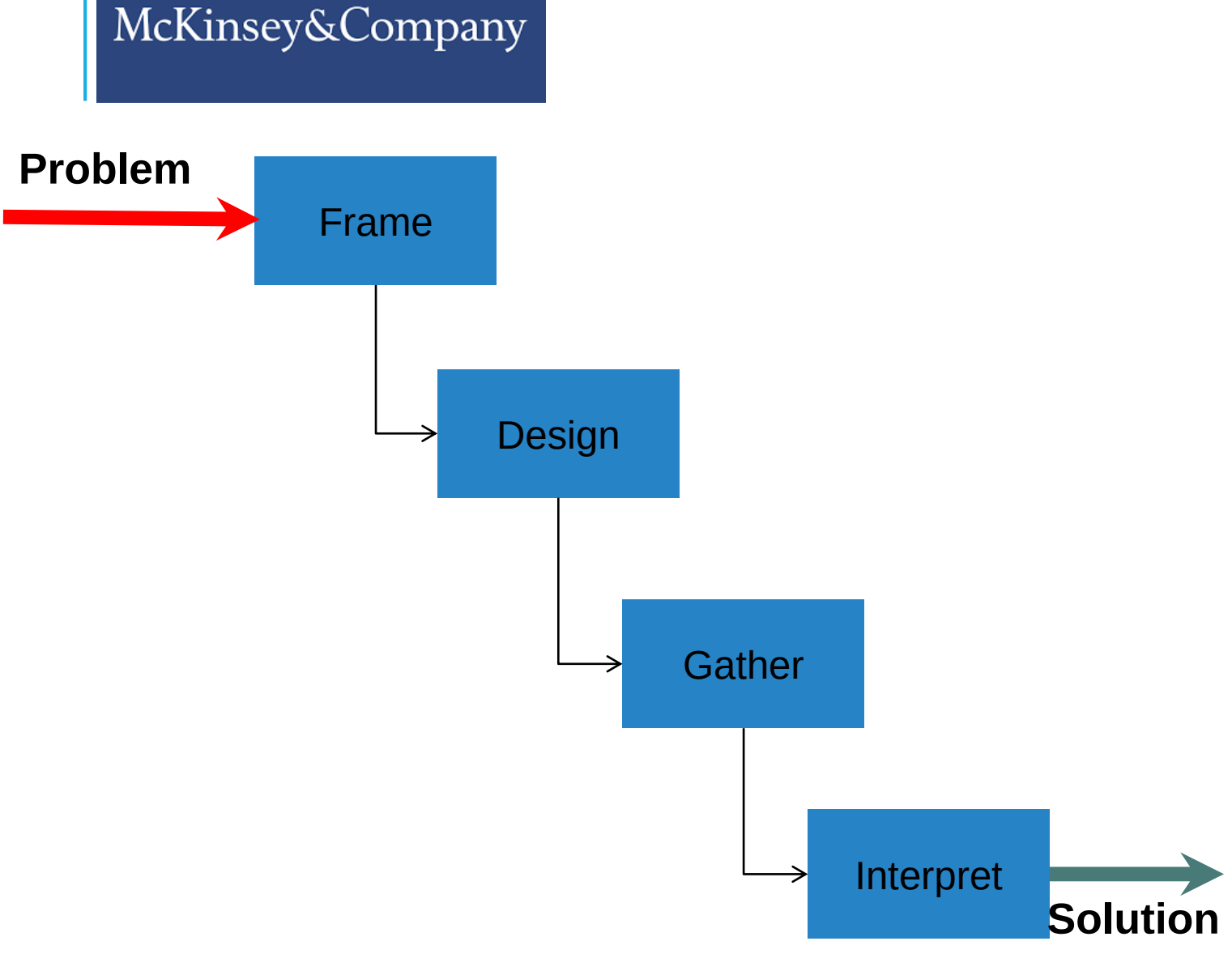
Topped BusinessWeek's list of design award winners for 14 years straight

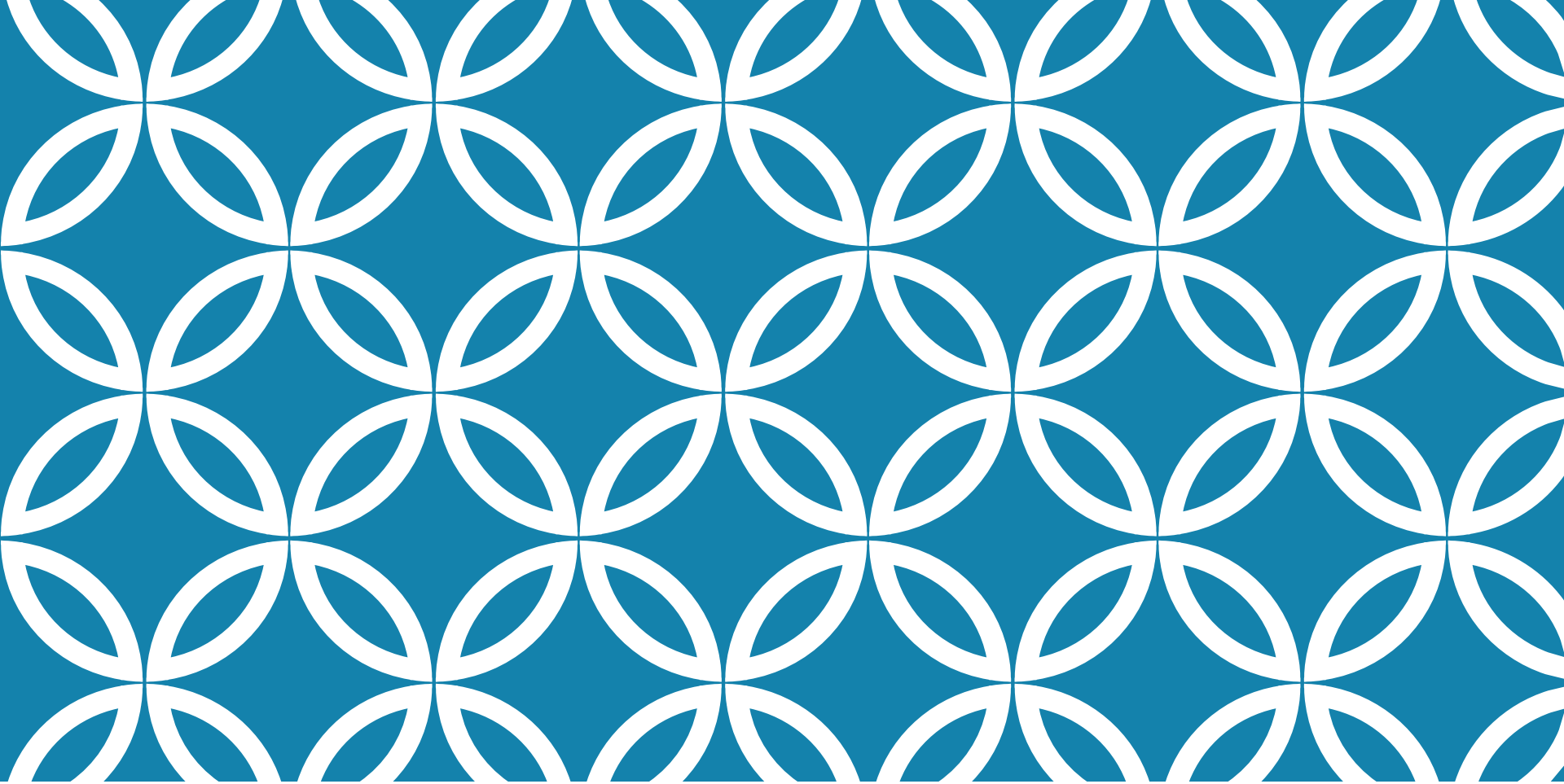
IDEO INNOVATION PROCESS



Develop prototypes and refine it on the basis of learning

McKinsey&Company

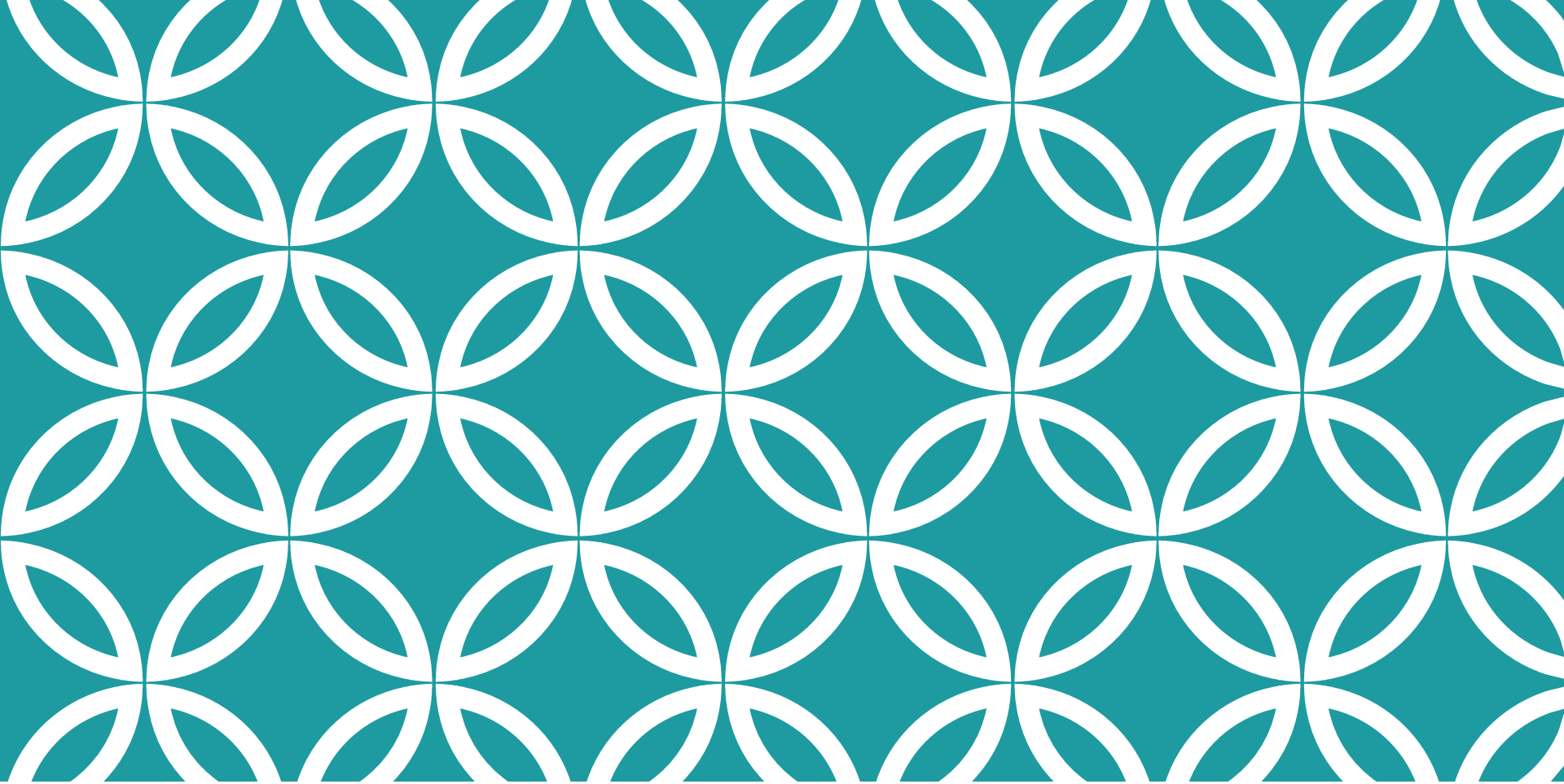




DIFFERENCE BETWEEN PROCESS & OPERATIONS

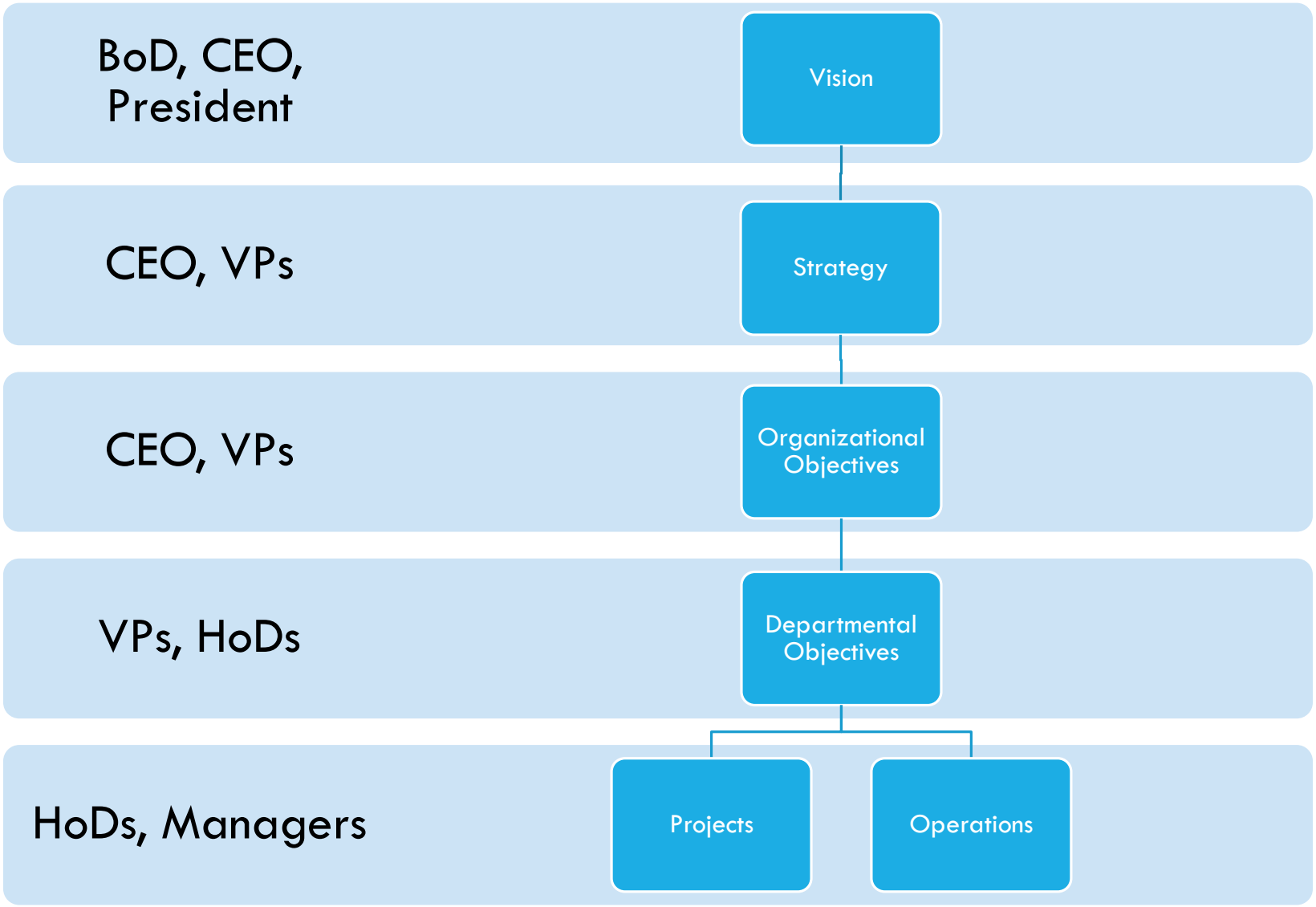
ACTIVITY

- What are major processes of your department?
- What are the major processes you work on?
- 10 minutes

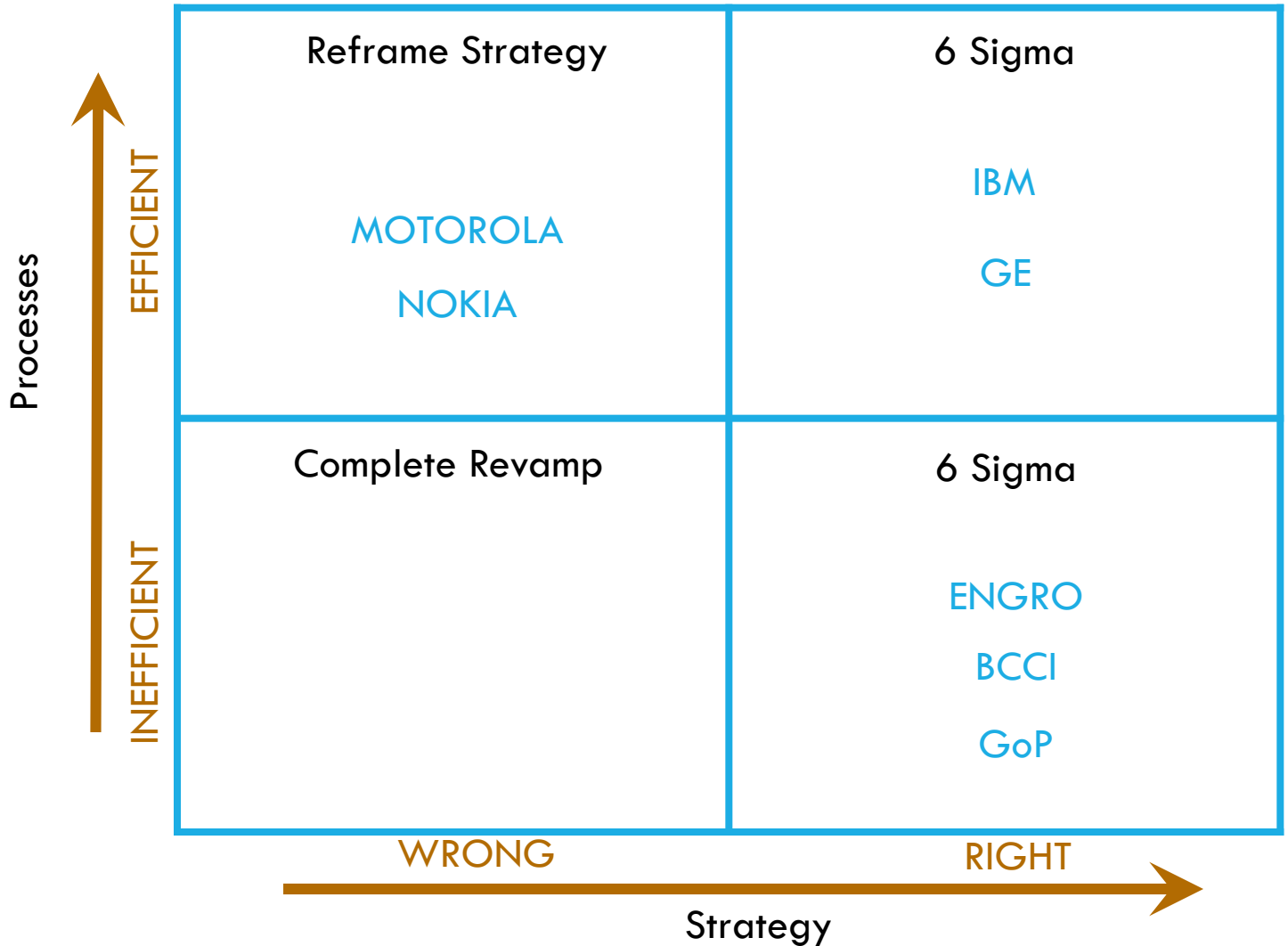


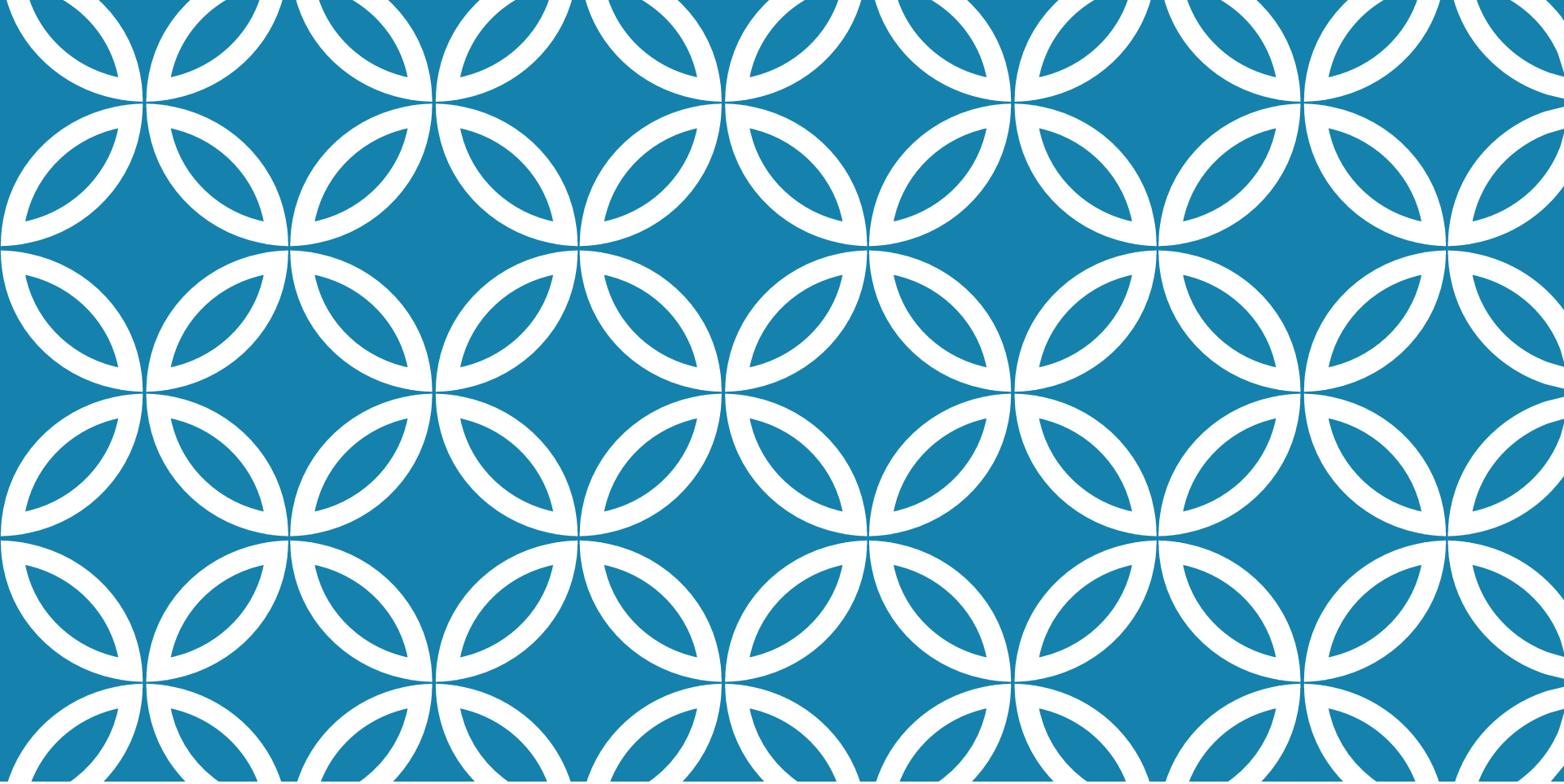
WHAT IS SIX SIGMA?

SIX SIGMA OVERVIEW

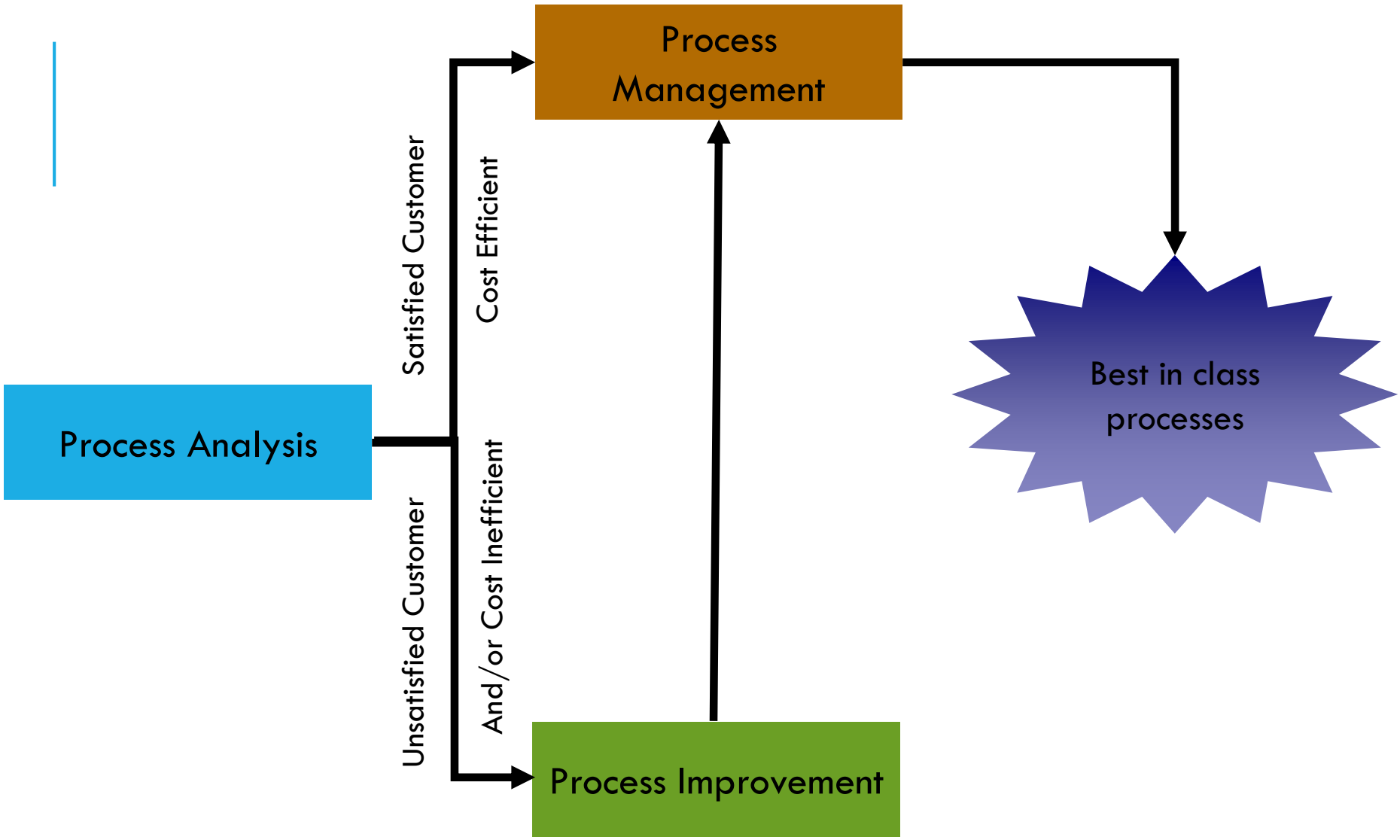


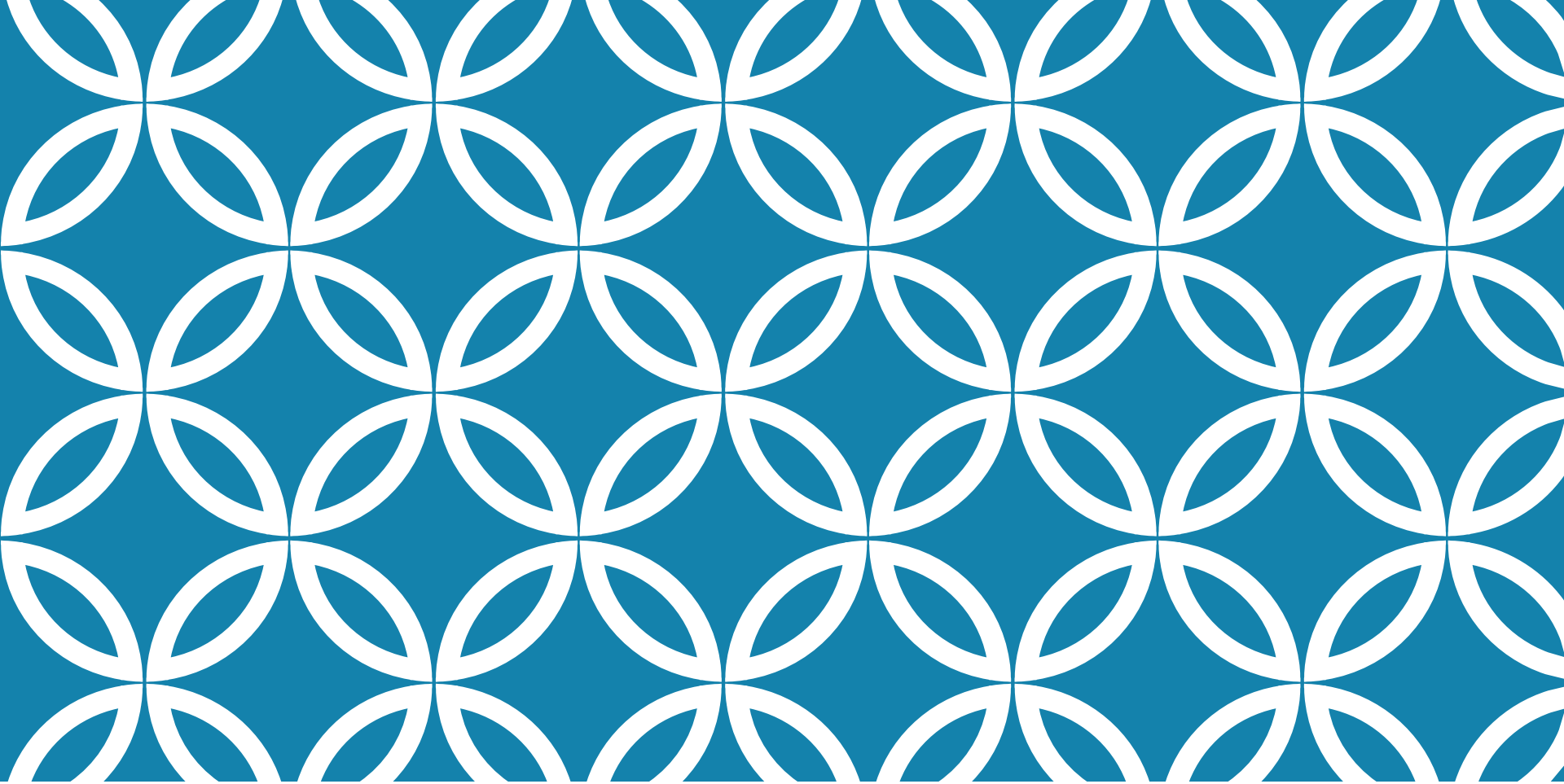
CLASSIFICATION OF ORGANIZATIONS





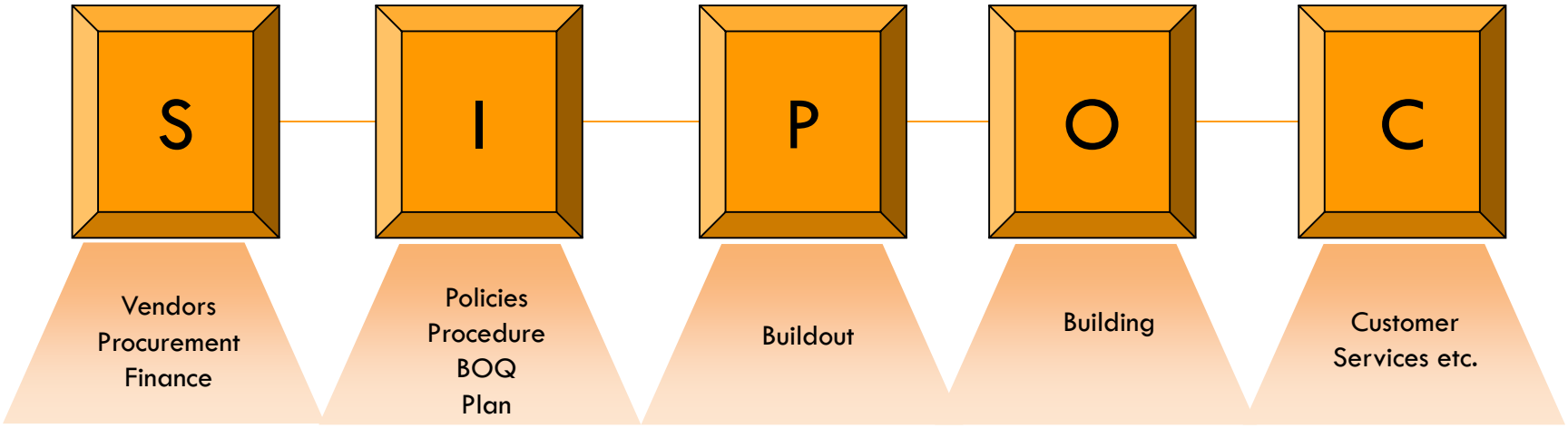
PROCESS OF PROCESS MANAGEMENT


Process Management
Satisfied Customer
Cost Efficient
Process Analysis
Best in class processes
Unsatisfied Customer
And/or Cost Inefficient
Process Improvement



IDENTIFYING INPUTS & OUTPUTS

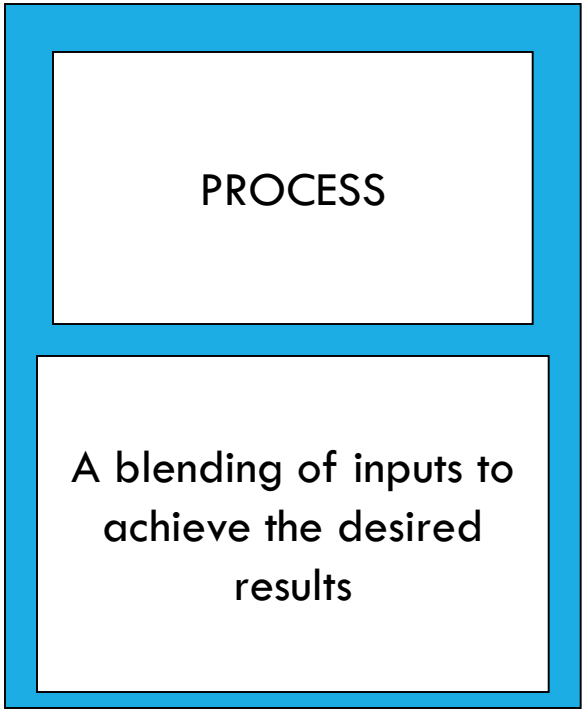
SIPOC


S
I
P
O
C
Vendors
Procurement
Finance
Policies
Procedure
BOQ
Plan
Buildout
Building
Customer
Services etc.

ANATOMY OF A PROCESS

Some examples include:

Purchasing
Accounts Receivable
Accounts Payable
Hiring



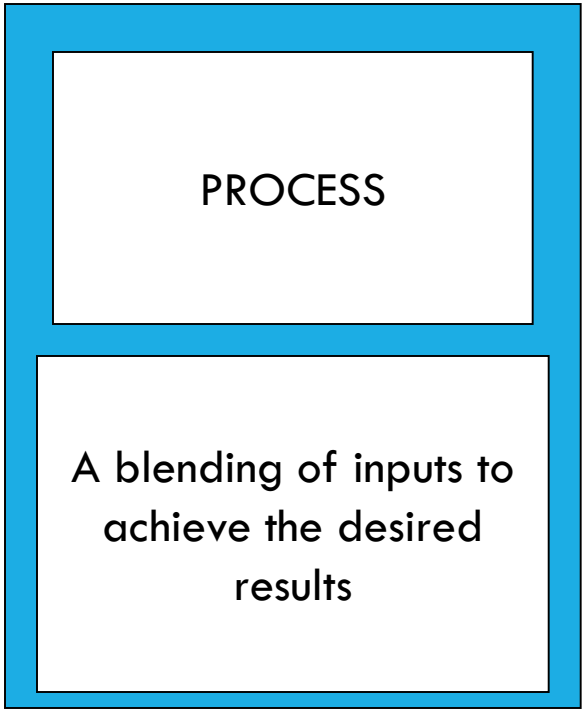
Mission Planning
Software Coding
Fabrication
Building Prospect Funnels

OUTPUTS FROM THE PROCESS

Outputs are measurable outcomes from the process that will help us determine (i.e. measure) if a process is improving.

Some examples include:

% on-time shipments
Time to return calls
Errors per document
Processing Time



OUTPUTS

Perform a Service →

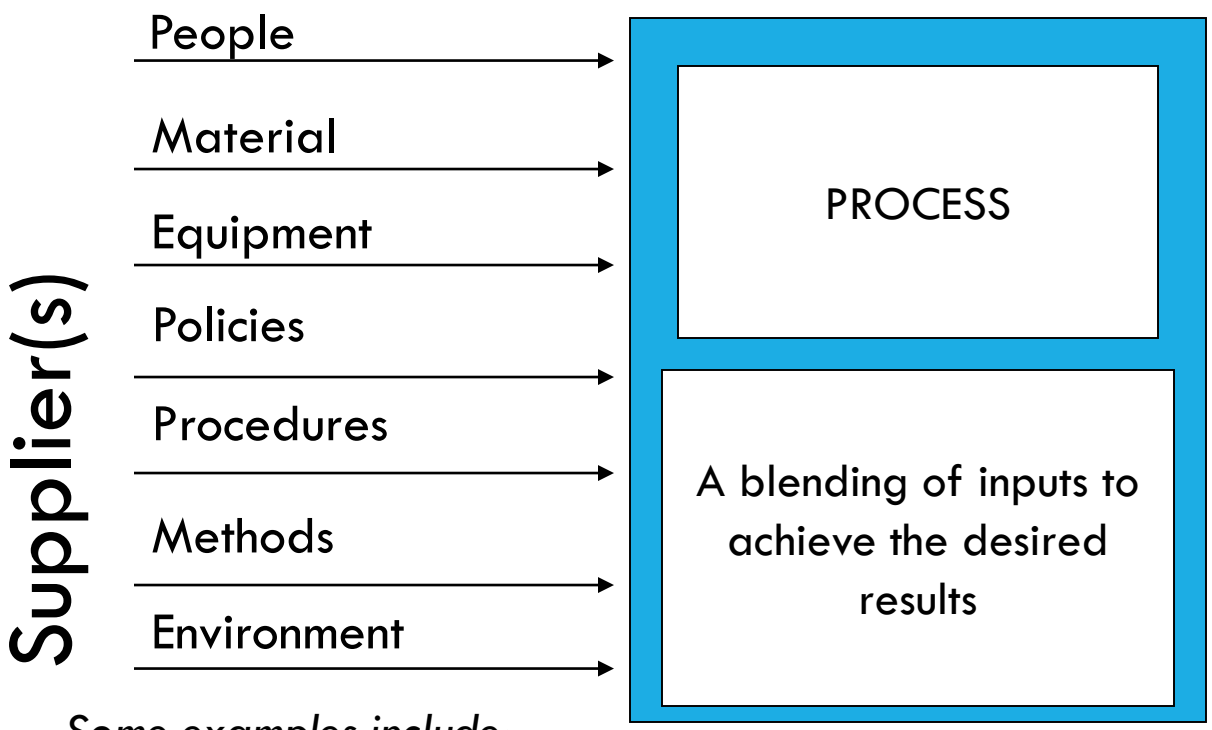
Produce a Product →

Complete a Task →

Customer Wait Time
Machine Downtime
Cost per Employee
$ Saved

Customer(s)

INPUTS TO THE PROCESS



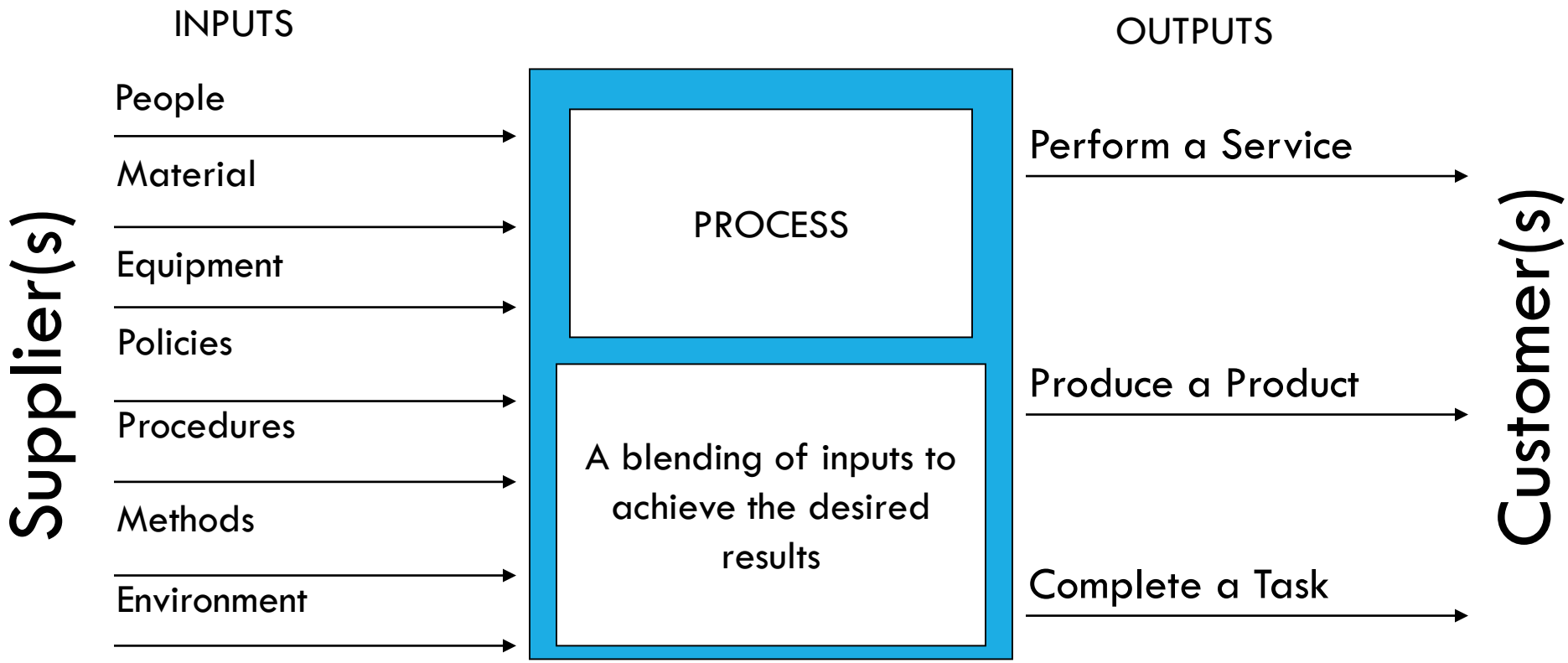
Inputs are items that affect the outcome of the process. You may or may not have control over these items.

Some examples include:

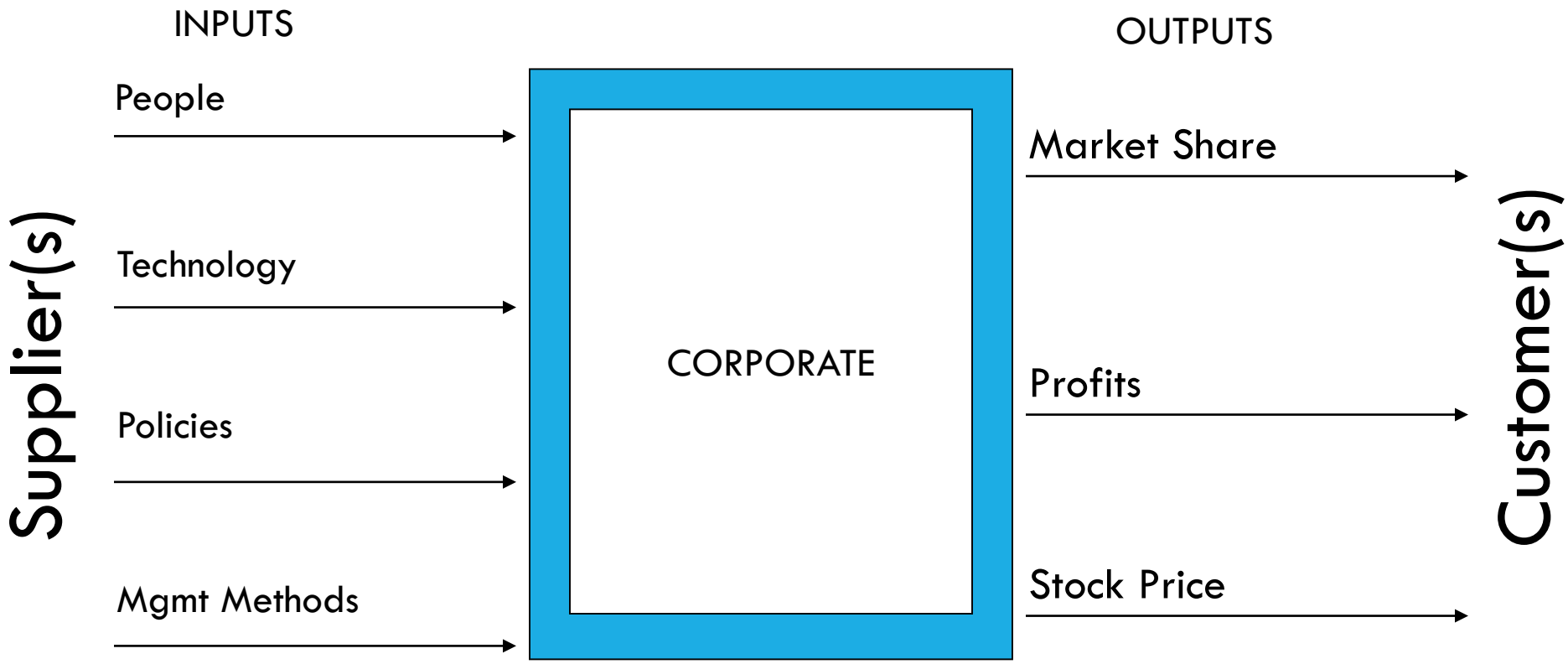
items
Payment method
days training
of phone calls

Material type
Machine Speed
Flow Rate
Years experience

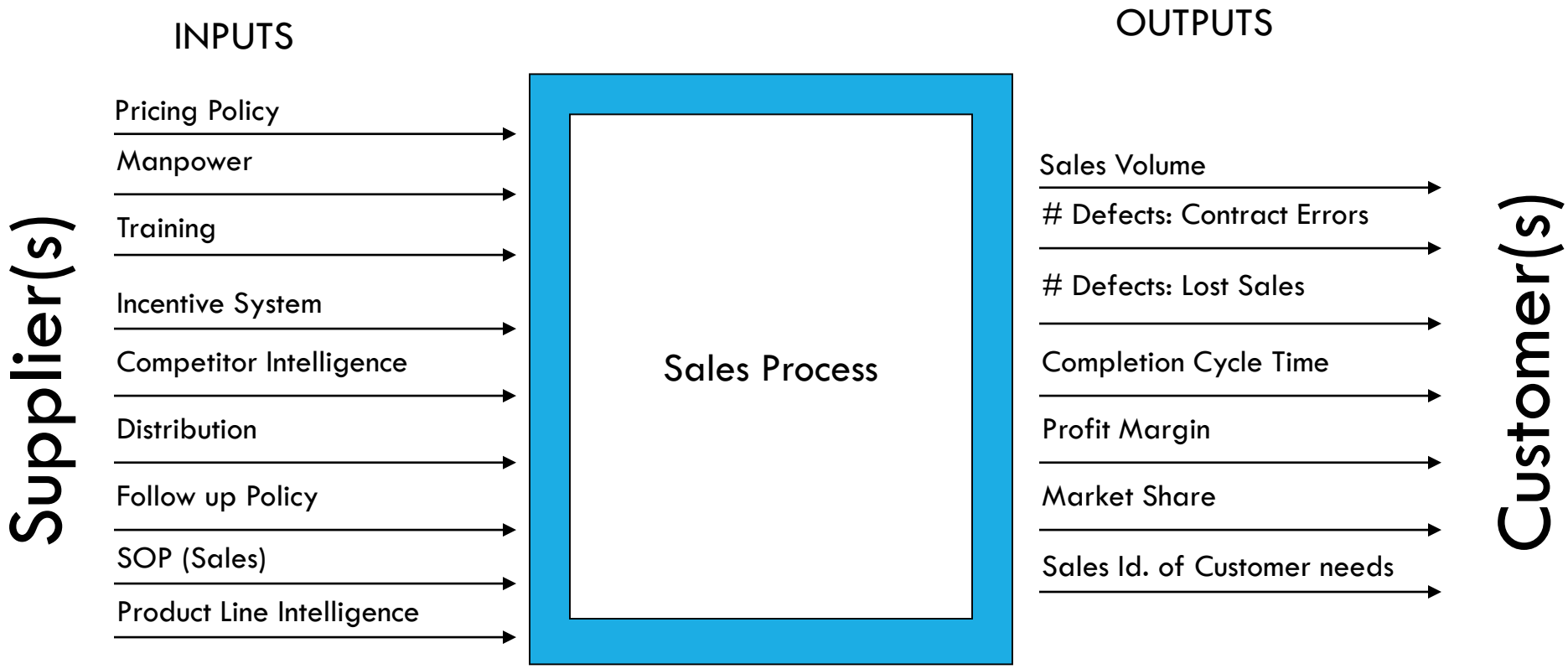
INPUTS, PROCESS & OUTPUTS



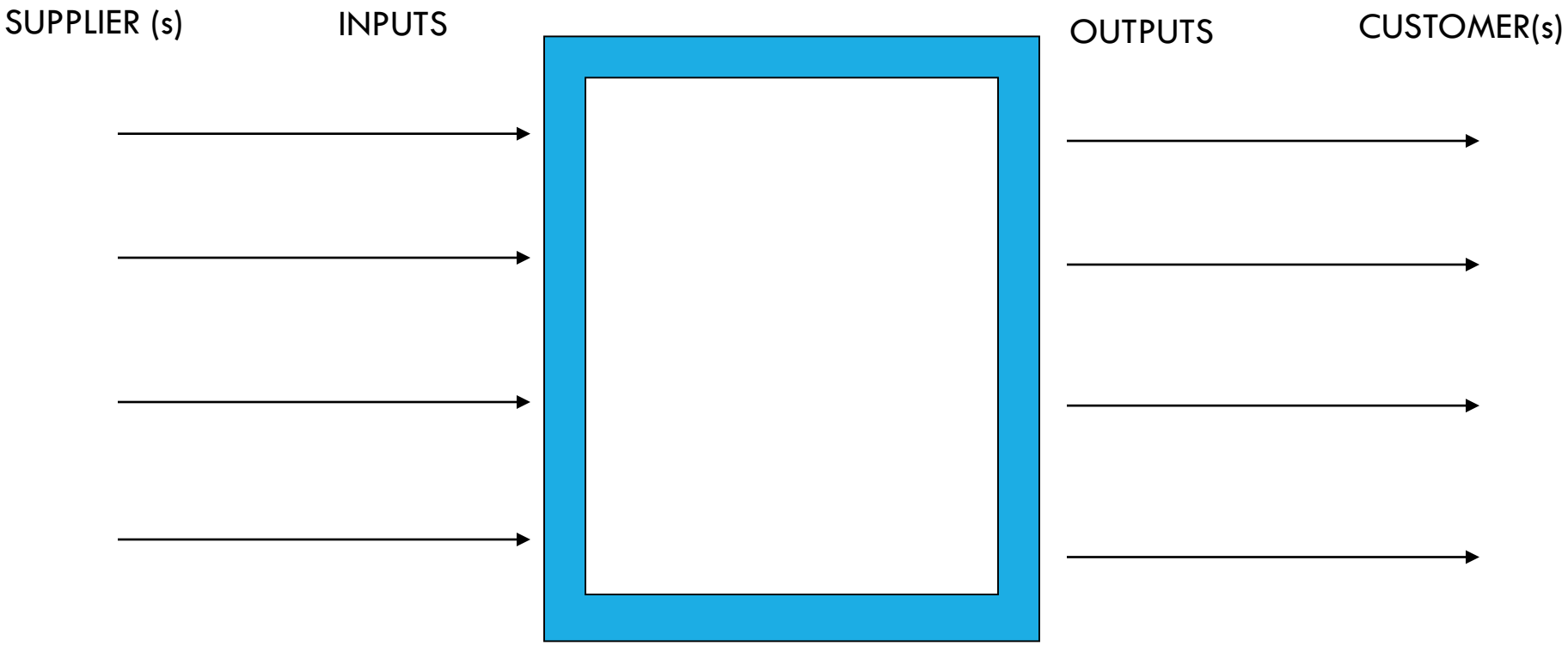
SATELLITE VIEW



EXAMPLE: SALES PROCESS



ACTIVITY – DEVELOP "SIPOC" OF YOUR PROCESS

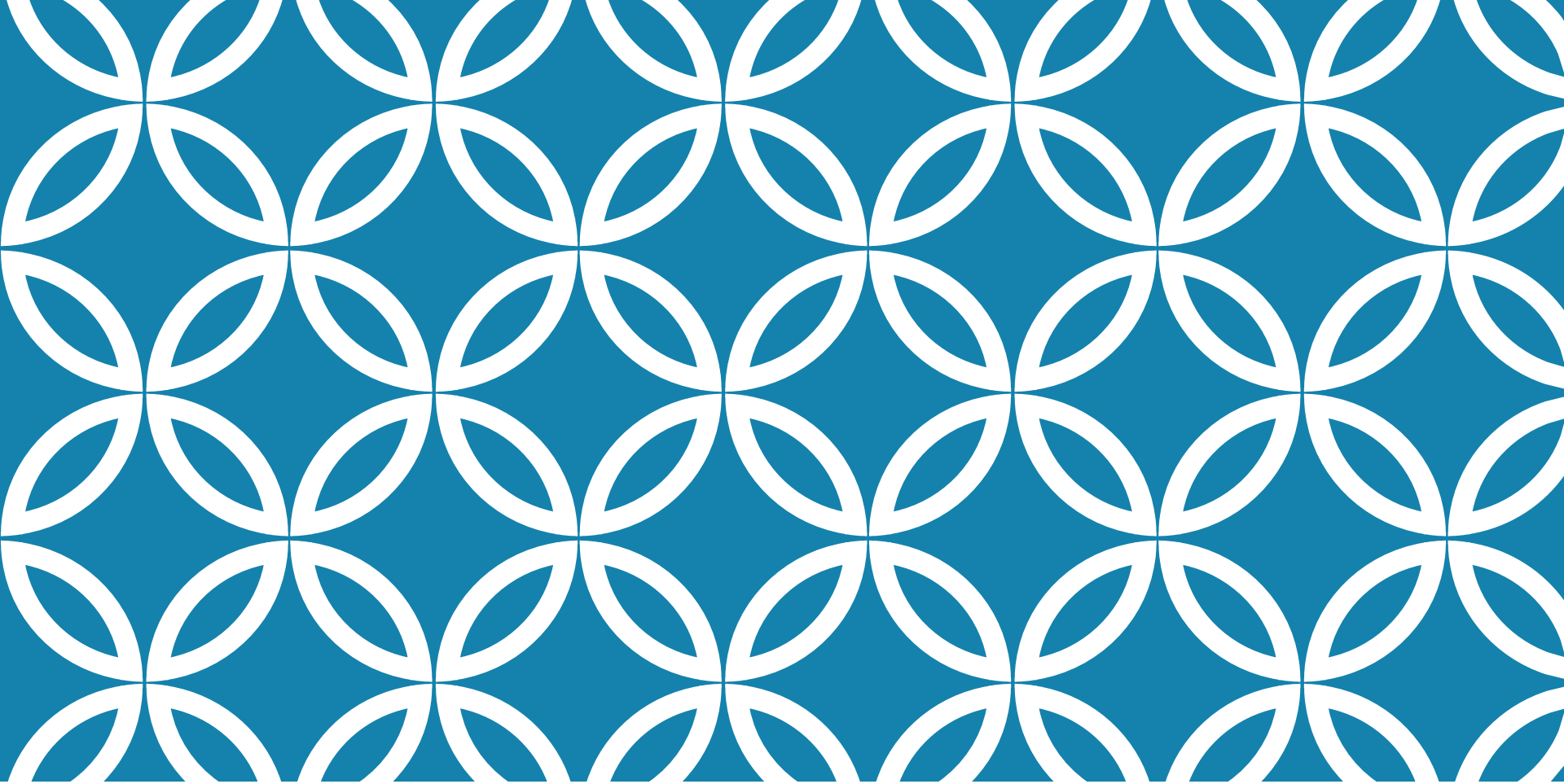


STEPS TO ANALYZE A PROCESS

1. What are the inputs & outputs of the process?

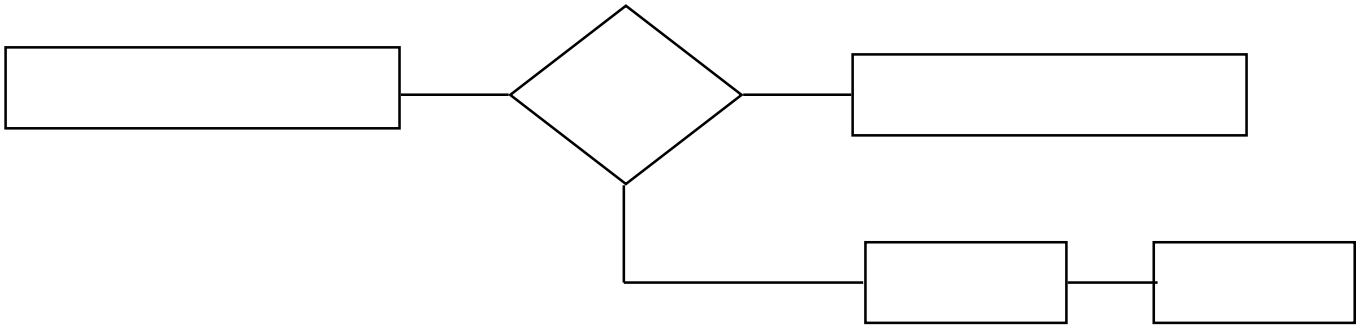
2. What is the process (interaction of inputs through sequential steps)?

3. What is the performance of output(s)?



IDENTIFYING THE PROCESS

PROCESS FLOW DIAGRAM

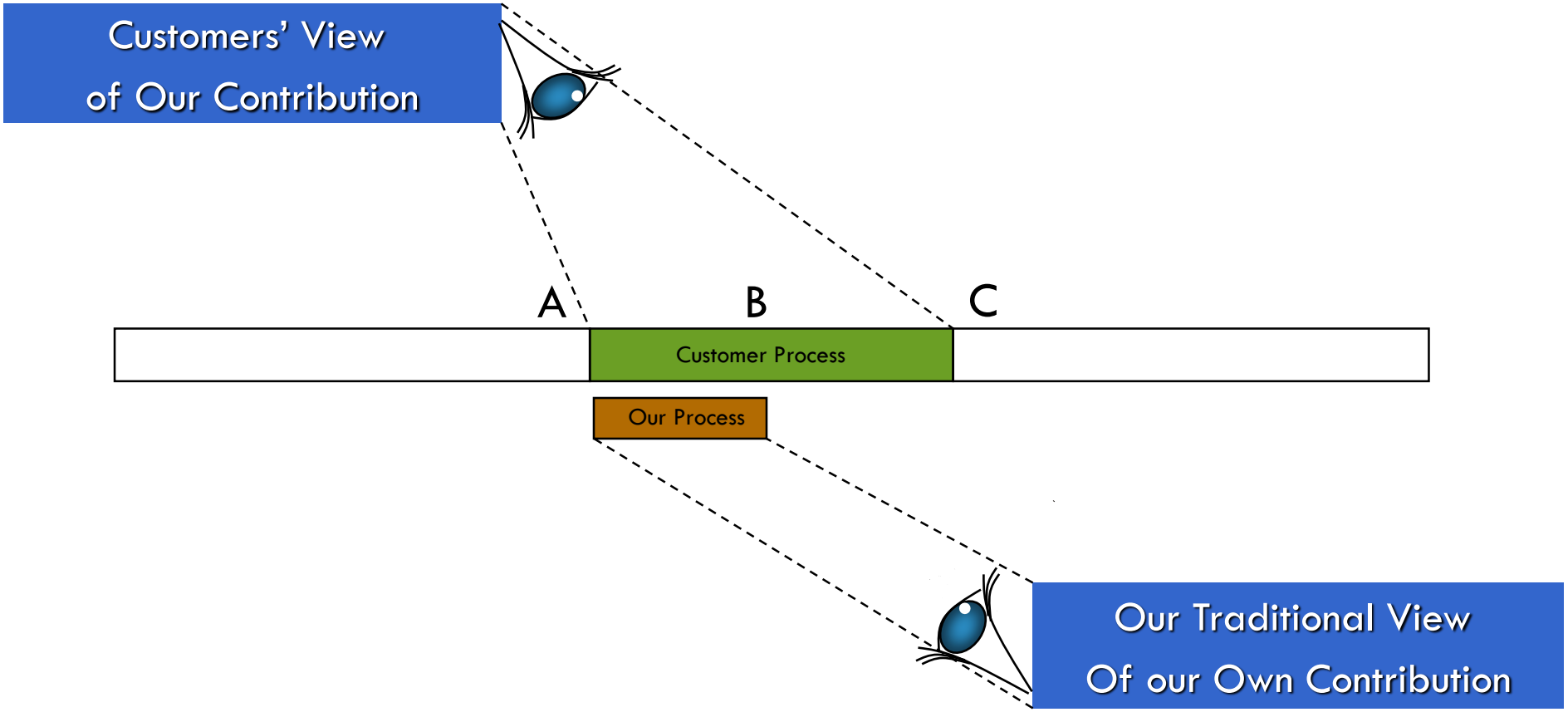


Benefits

- Provides visual foundation for current situation and analysis
- Enables the team to compare the actual against the ideal
- Aids in identifying bottlenecks, redundancies and waste
- Helps identify Non-Value-Adding steps
- Helps classify Variables (Control and Noise)
- Gives everyone a common view of the process

ROAD MAP TO CUSTOMER IMPACT

The Eye Of The Beholder



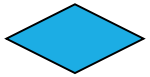
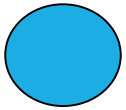
1. We Fully Met Our Contractual Obligations (AB)
2. Customer's View Determined By Our Process Performance (AC)

BUILDING A MAP

1. Determine the scope
   - How complex and detailed a map do you need to give you what you want?
2. Determine the steps in the process
   - Don't worry about order
   - Don't worry about priorities
   - Just list them!
3. Arrange the steps in order
4. Assign symbol

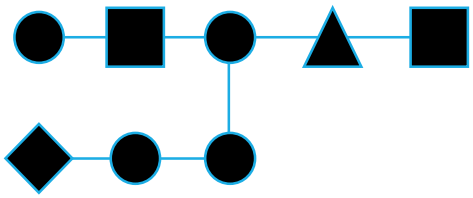
UML

Five standard symbols

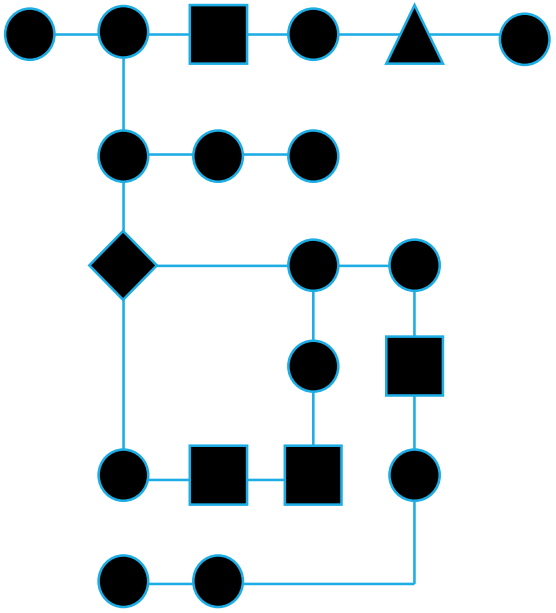
Symbol	Represents
	Start/Stop
	**Decision point**
	Activity
	**Connector**
	Direction of flow

PERCEPTIONS OF A PROCESS

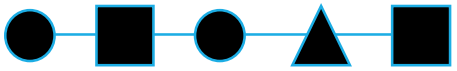
What we think it looks like:



What it actually looks like:



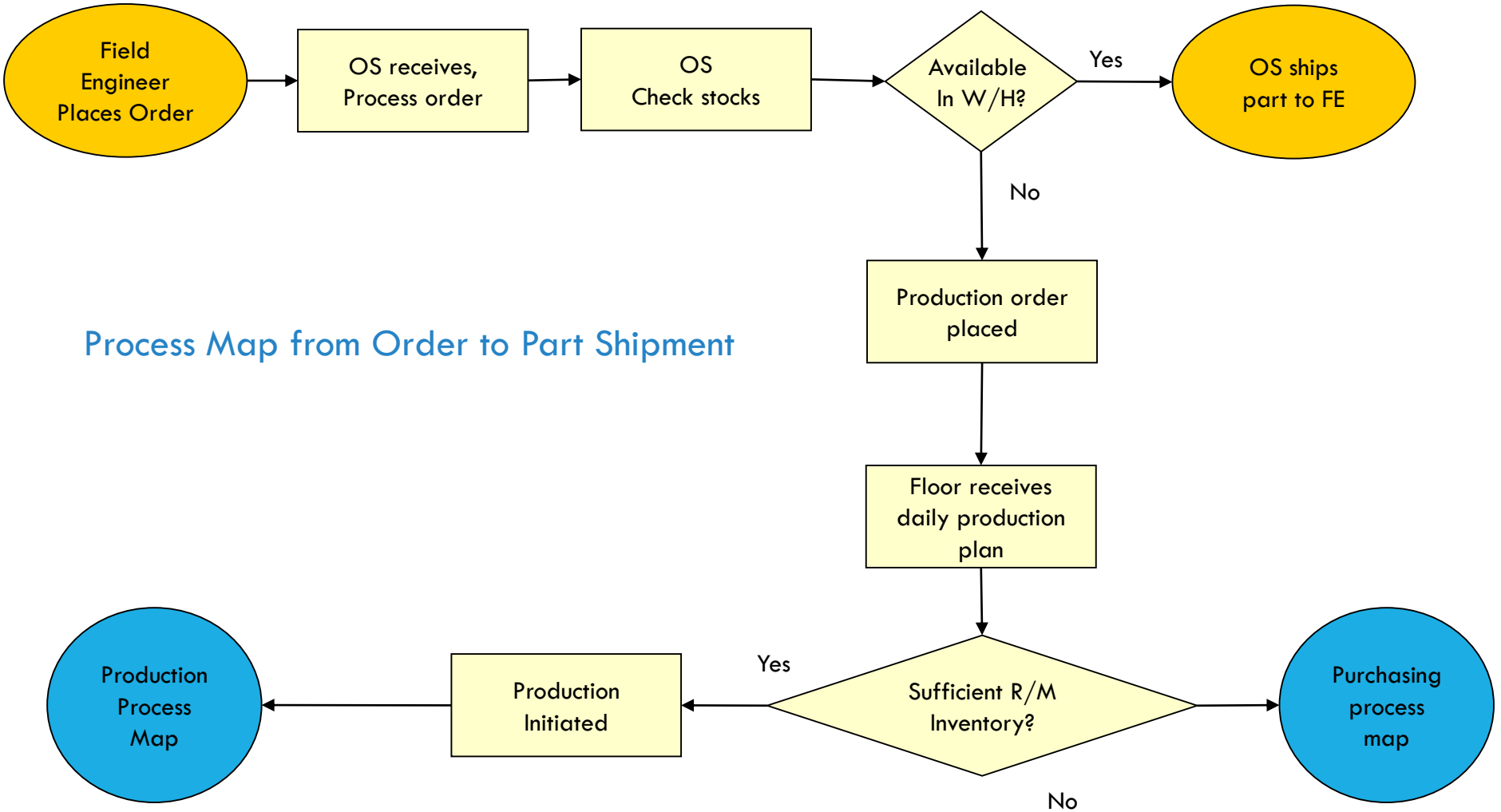
What we wish it would look like:



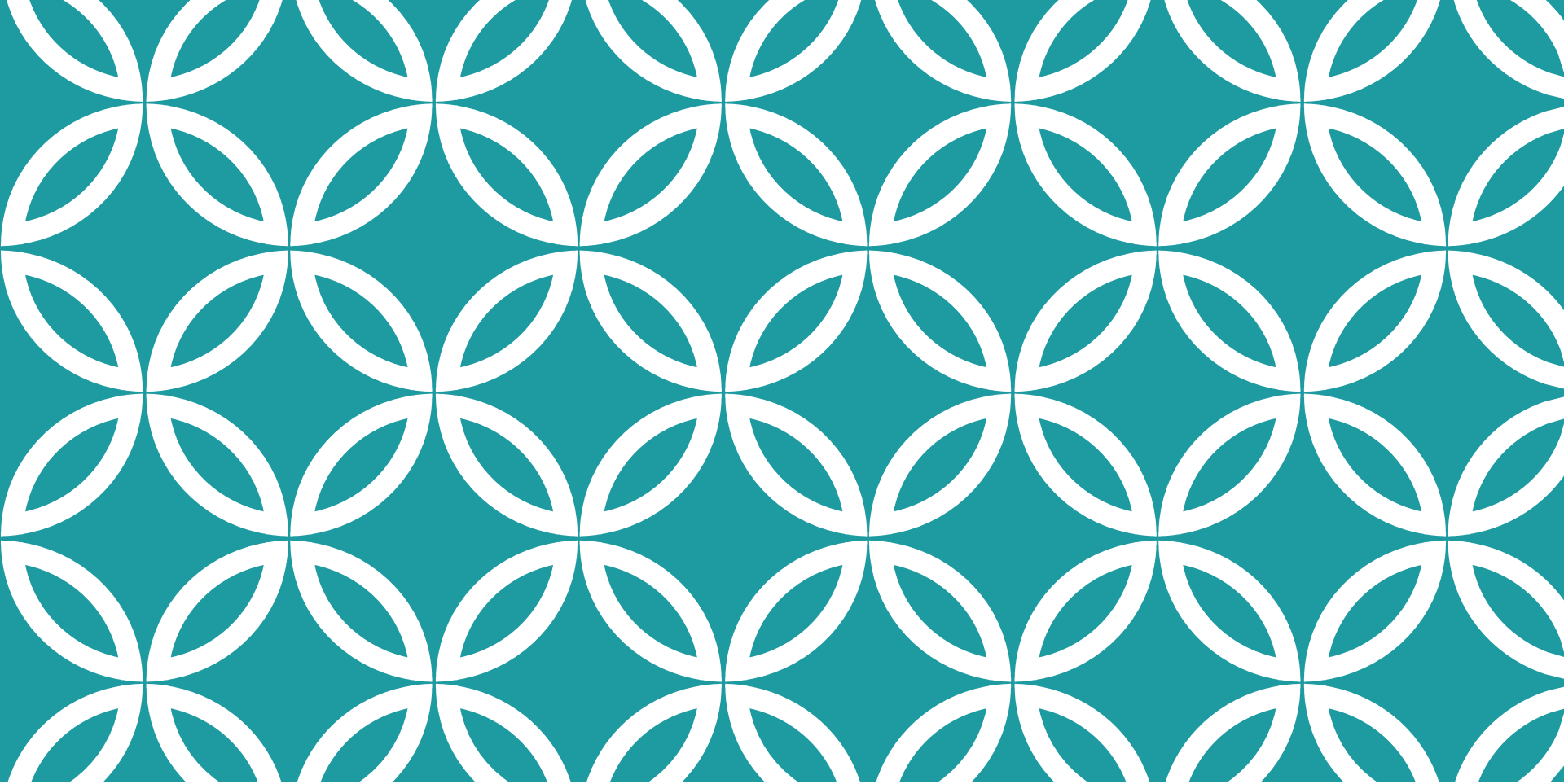
There are usually three versions of every process

Do not jump to "What we wish it would look like"

PARTS ORDER TO DELIVERY PROCESS MAP



Process Map from Order to Part Shipment



THANK YOU