ROBOTIC PROCESS AUTOMATION EP0705



LESSON 1 INTRODUCTION



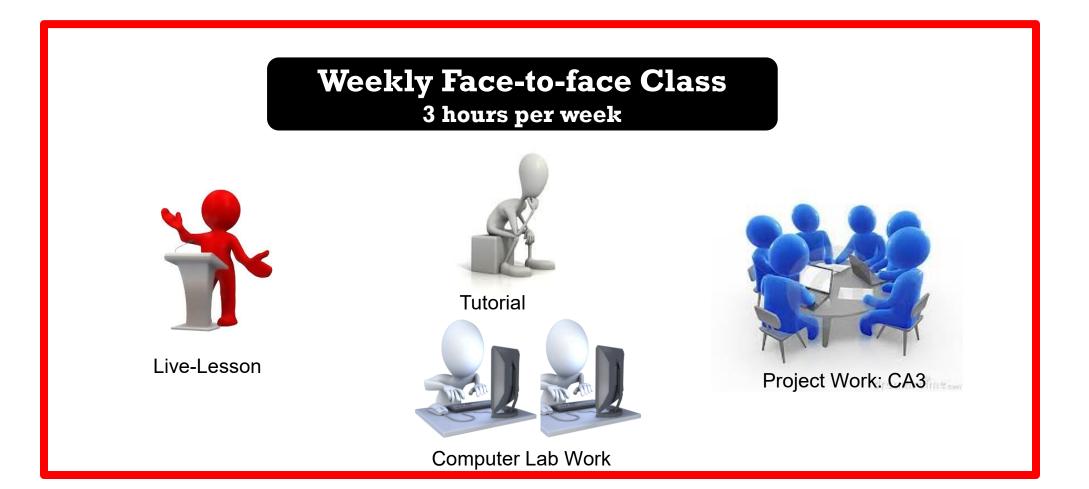


MODULE AIMS

At the conclusion of this module, students will be able to:

- 1) Understand Business Processes and concepts of Robotic Process Automation in order to identify suitable business process for automation improvement.
- 2) Develop RPA automation using the UiPath application software on the identified business process.
- 3) Implement the RPA automation in the UiPath in order to increase process output and efficiency.

LEARNING APPROACH



TERM 1 AND TERM 2 SCHEDULE

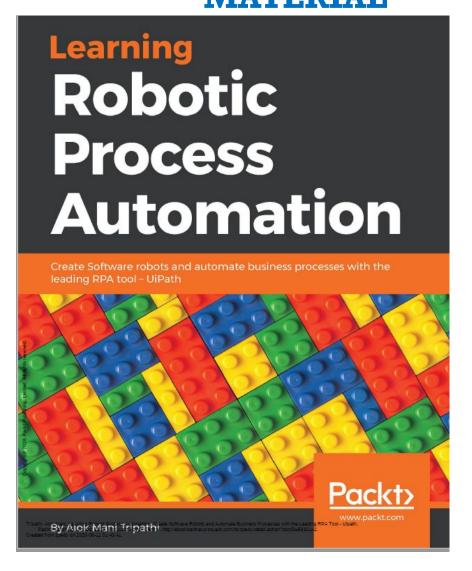
REFER TO MODULE SCHEDULE ON BRIGHTSPACE

ASSESSMENTS

Assessment	Weight.	
MST Written Test	25%	Ind
CA2 Hands-On Assessment	20%	Ind
CA3-NRC Project*	35%	Group
Participation Marks (PM) -HW & Quiz (10%) -Attendance, Engagement, Attitude (10%)	20%	Ind
Total	100%	

^{*}Non-Redistributable Component of Assessment (NRC)

REFERENCE / SUPPLEMENTARY MATERIAL



Tripathi, Alok Mani. Learning Robotic Process Automation: Create Software Robots and Automate Business Processes with the Leading RPA Tool - Uipath,

Packt Publishing, Limited, 2018.

ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/spedu/detail.action?docID=5332142.

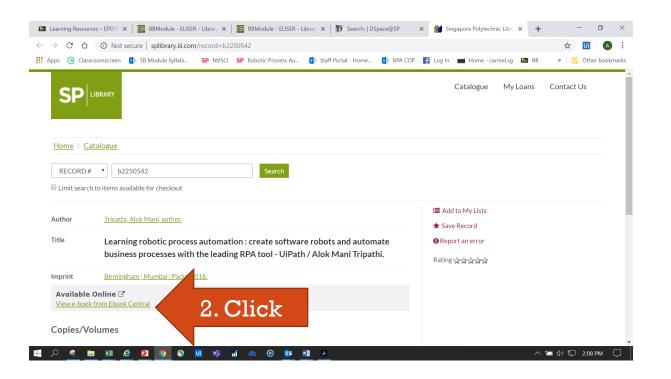
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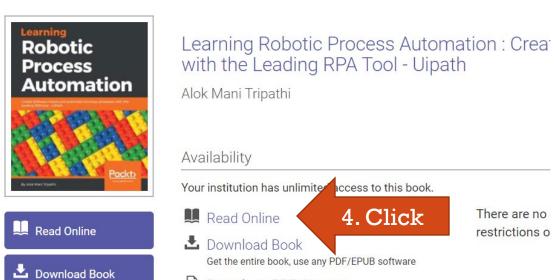


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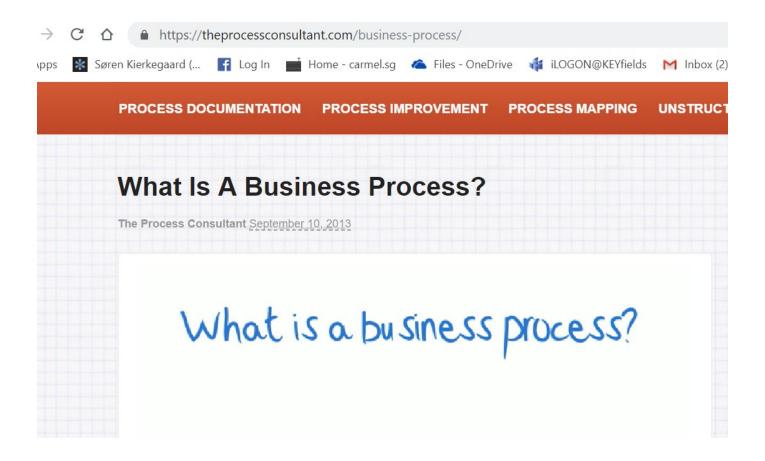
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LESSON 1 BUSINESS PROCESS



Text Reference: Business Driven Information Systems, Fifth Edition, Paige Baltzan (Daniels College of Business, University of Denver)
Chapter 2 Section 2.2 Business Processes pg. 62-80

ACTIVITY #1.1 WATCH THE VIDEO BELOW



https://www.youtube.com/watch?v=NXbGlilFidA



ACTIVITY #1.2 VOLUNTEERS TO GIVE KEYWORD ANSWER TO

What is a business process?





BUSINESS PROCESS

Standardized set of **activities** that **transform**s a set of **inputs** into a set of **outputs** (goods or services) for another person or process

(Business Driven Information Systems, Baltzan)

Any activity or group of activities that takes one or more **inputs**, **transforms** them, and provides one or more **outputs** for its **customers**

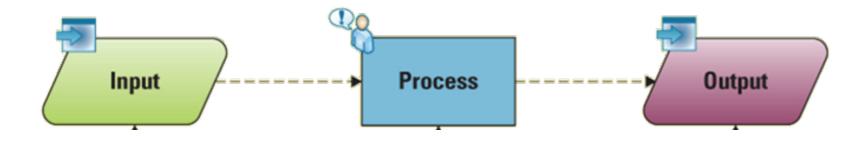
(Principles of Operations Management, Heizer, Render)



LEARNING OUTCOMES

- 1. Understand and Perform business process mapping
- 2. Explain the difference between the As-Is and To-Be maps

BUSINESS PROCESS



Information or

Material

Standardised

activities

by Machine

or

Human

Information

or

Material

e.g.

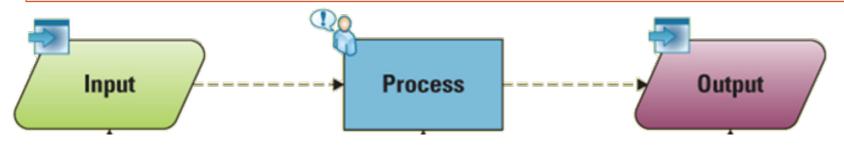
Products

or

Services

BUSINESS PROCESS: CUSTOMER ORDER@ RESTAURANT

SCENARIO: at a Restaurant, a Customer makes an order for a beef steak, a glass of wine. A waiter takes the order and send it to the kitchen via an iPad. Kitchen processes the order and then delivers the food and drink to customer



Information:

Customer orders a beef steak + glass of red wine

<u>Process</u>

Food preparation & cooking in Kitchen

Product:

A beef steak + glass of wine

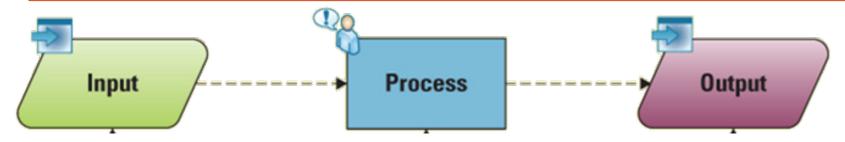
Service:

delivered to the right customer!

Something is incomplete. Guess what?

BUSINESS PROCESS: EXAMPLE

SCENARIO: at a Restaurant, a Customer makes an order for a beef steak, a glass of wine. A waiter takes the order and send it to the kitchen via an iPad. Kitchen processes the order and then delivers the food and drink to customer



<u>Information</u>:

Customer orders a beef steak + glass of red wine

Material supply:

Raw beef
Wine
Etc etc ...

<u>Process</u>

Food preparation & cooking in Kitchen

Product:

A beef steak + glass of wine

Service:

delivered to the right customer!

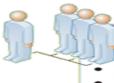


BUSINESS PROCESS: OTHER EXAMPLES



Operations Management

- Ordering inventory
- · Creating production schedules
- Manufacturing goods



Human Resources

- Hiring employees
- Enrolling employees in health care
- Tracking vacation and sick time



Accounting and Finance

- Creating financial statements
- Paying of Accounts Payable
- Collecting of Accounts Receivable



Marketing and Sales

- Promoting of discounts
- Communicating marketing campaigns
- Attracting customers
- Processing sales



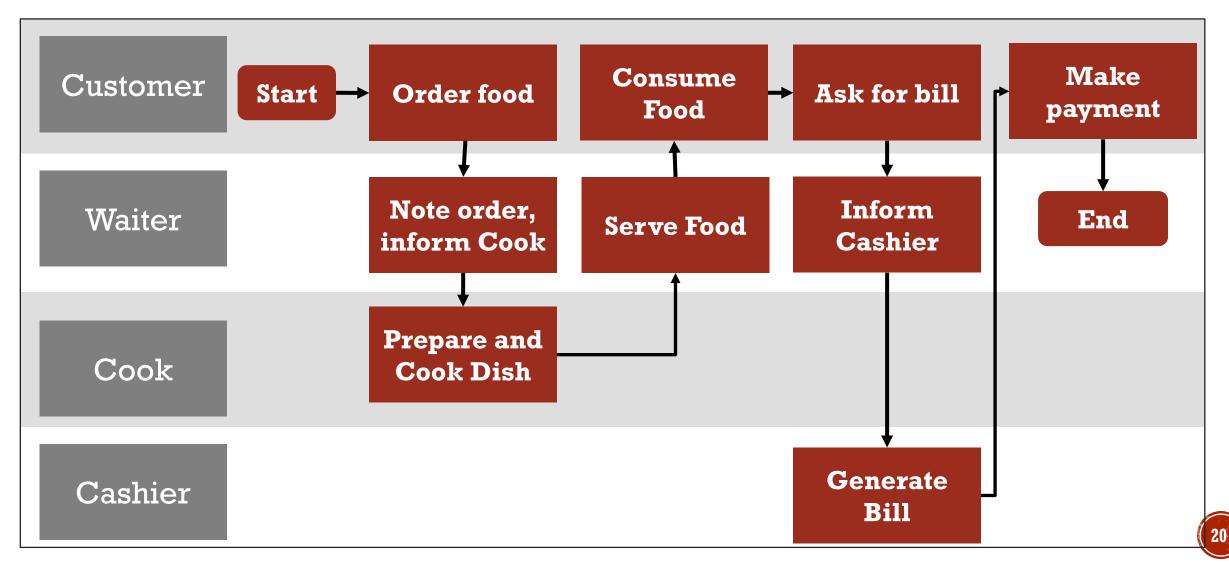
HOW DO WE VISUALIZE A BUSINESS PROCESS?



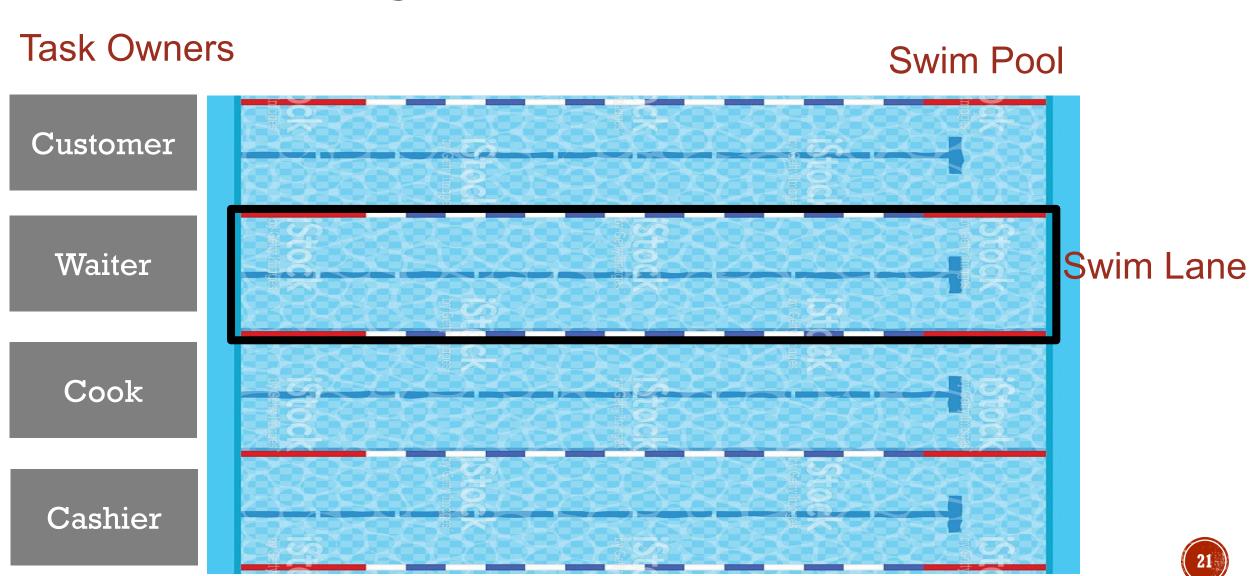
BUSINESS PROCESS MAP!

- A simple visual representation of what and who are involved in a process in order to achieve an outcome
- Map shows tasks in sequence from start to end
- Always starts from left to right

Business Process Mapping: Dining at a Restaurant (Scenario 1)

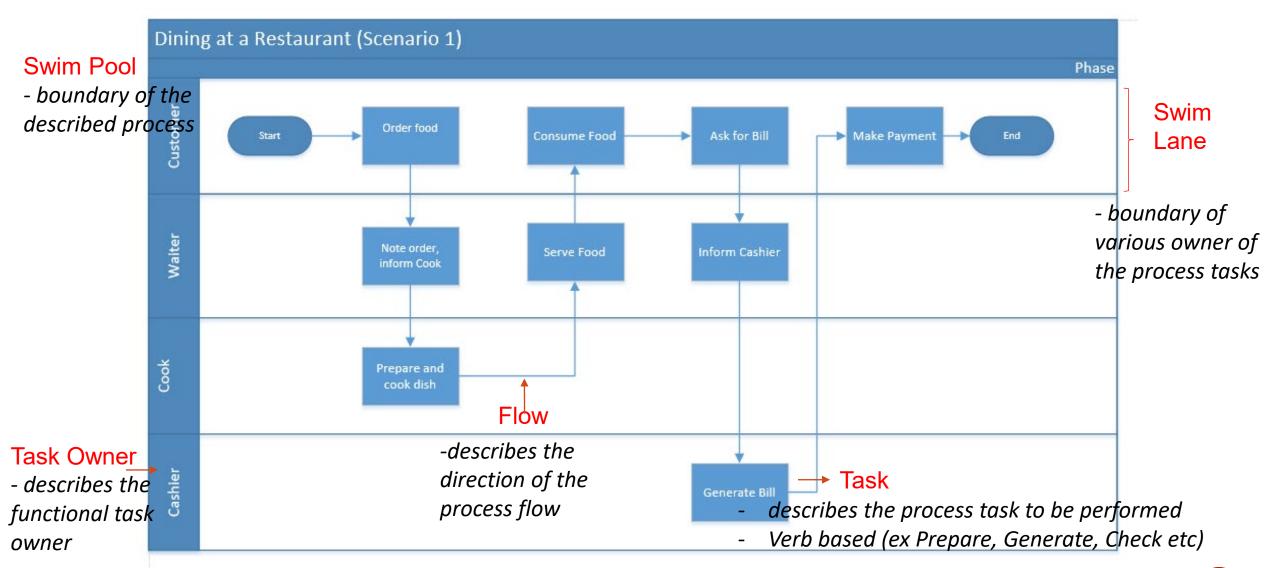


The layout of a Process Map

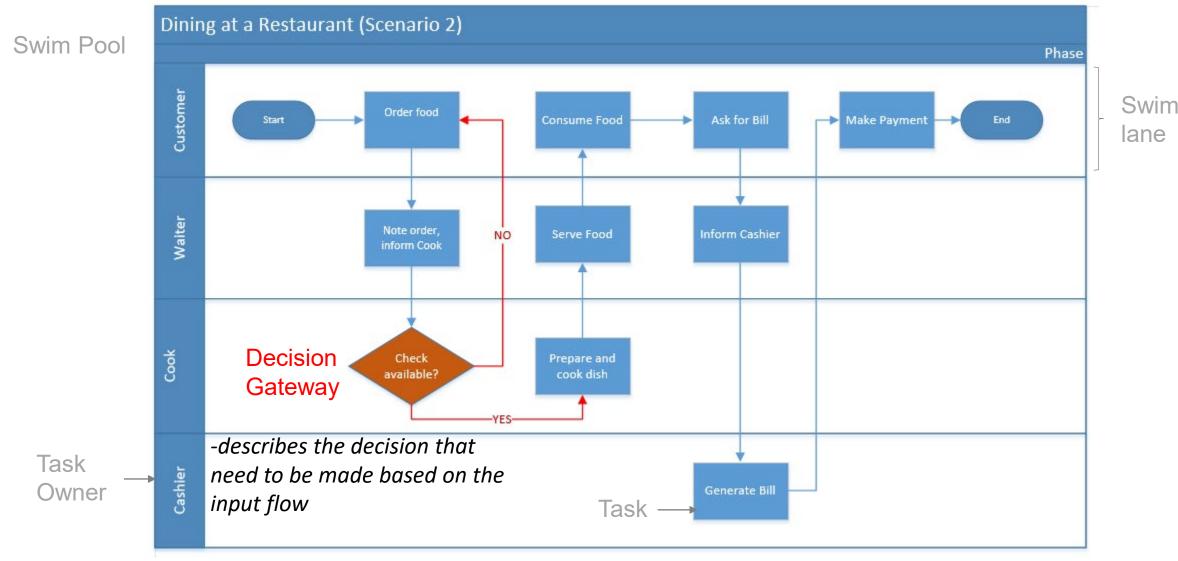




Elements of a Process Map (part 1)

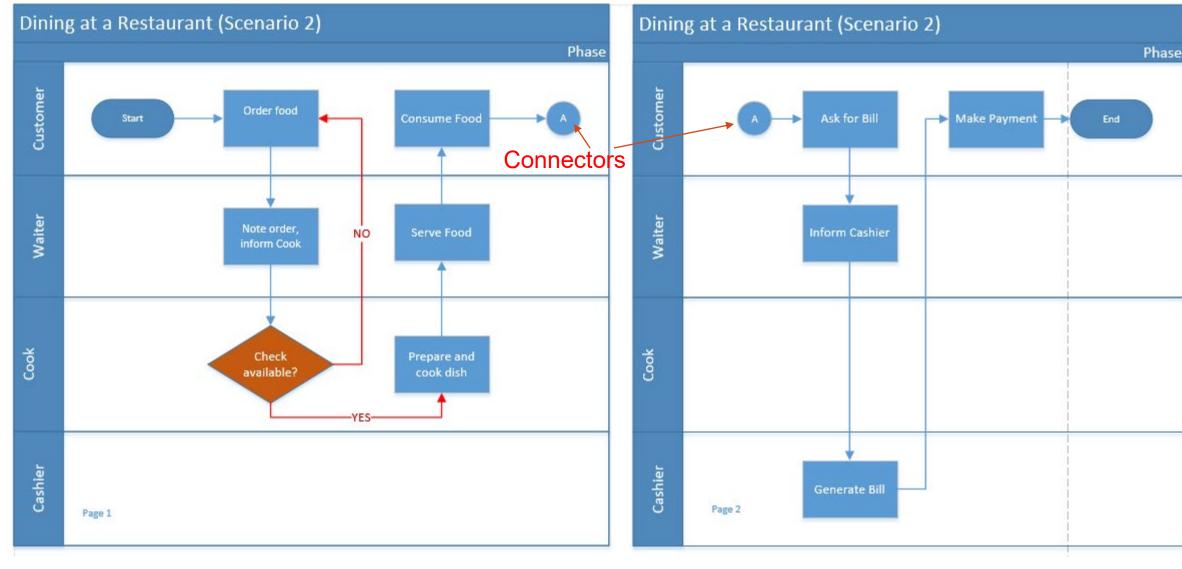


Elements of a Process Map (part 2)





Elements of a Process Map (part 3)



DESCRIPTION OF PROCESS WAP ELEMENTS

Symbol

Name

Description



Task

Shows action or task operation that needs to be done. (most frequently used flowchart shape).

Use verb to describe the task (ex: 'Create quotation' and not 'Creation of quotation')



Indicates the direction in which the flowchart should be read (usually from the top to the bottom and/or the left to the right).



Decision Gateway The point at which a decision needs to be made. The arrows flowing from the decision shape are usually labelled with yes/no or true/false.



PROCESS MAPPING SYMBOLS

Symbol

Name

Description



Terminator

Represents the entry and exit points of your flowchart. Usually a flowchart has only one starting point but can have several ending points. (optional)



Connector

In order to connect to a different page or section of the chart (you can't draw a line), you can use a circle labelled with a letter. Put another circle with the same letter where the flow continues.



BUSINESS PROCESS MAP: WHY?

- A simple visual representation of what and who are involved in a process in order to achieve an outcome
- It is a tool to understand and communicate the process for the purpose of problem solving, **process improvement** and documentation for training and standardization.
- It can reveal redundancies/inefficiencies and broken process.



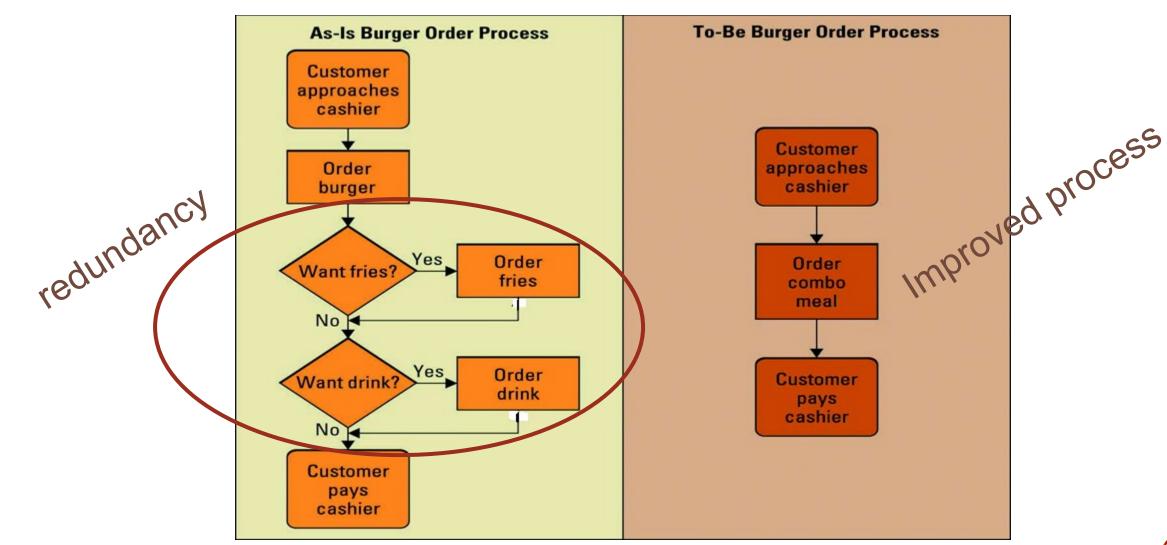
AS-IS AND TO-BE PROCESS MODEL

As-Is process model	To-Be process model
the current state of operation, without any specific improvements or changes to existing processes	shows the new process after improvements have been incorporated into the affected process
Reveals possible weaknesses e.g. redundancy and broken process	Showcase where the improvement have been implemented
TODAY	TOMORROW

Both represent the entire process from end-to-end.

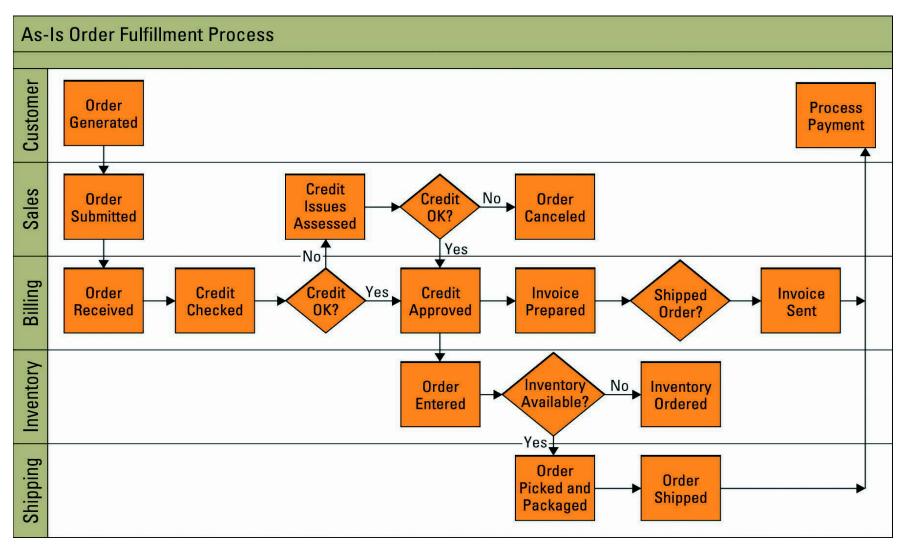


EXAMPLE: AS-IS AND TO-BE MODELS





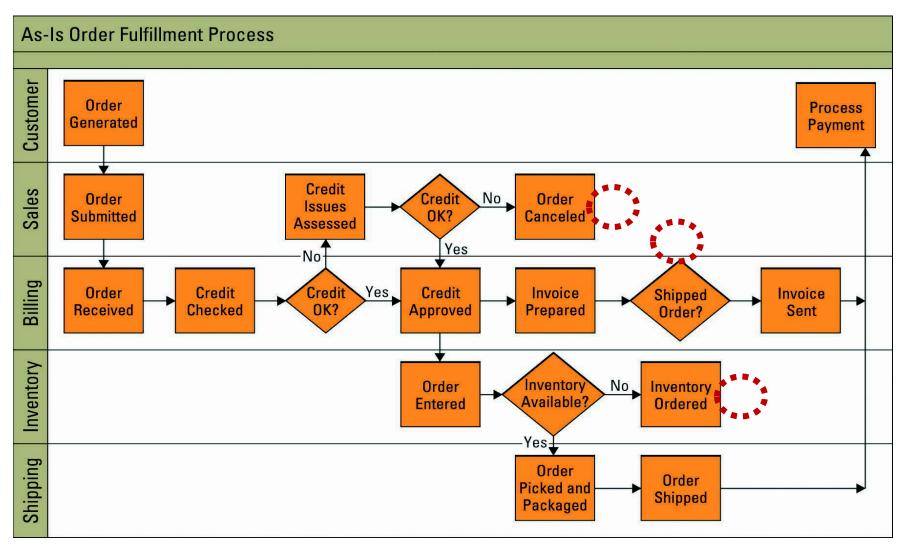
ACTIVITY # 2 CAN YOU SPOT BROKEN PROCESSES?





ACTIVITY # 2 ANSWER:

Broken processes



KAHOOT

 https://create.kahoot.it/my-library/kahoots/ca8ea724-ce14-4fc1-bfb4-68aa7764d08f

TUTORIAL

Please download Tutorial 1 from Brightspace and complete the Tutorial exercises per Tutor's instruction

SUMMARY: YOU HAVE LEARNED TO

- Define "business process."
 Standardized set of activities that transforms a set of inputs into a set of outputs (goods or services) for another person or process
- Identify the Inputs and Outputs of the "Customer Order @ Restaurant" scenario?
- How do we visualize a business process.
- Differentiate between AS-IS and TO-BE process flow chart.



END OF LESSON