

# PathStone Group



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## Value Added Analysis

# Agenda

1. Value Added Analysis: What is it ?
2. Value Added Analysis purpose and benefits ?
3. Value Added Analysis Approach
4. Takeaways

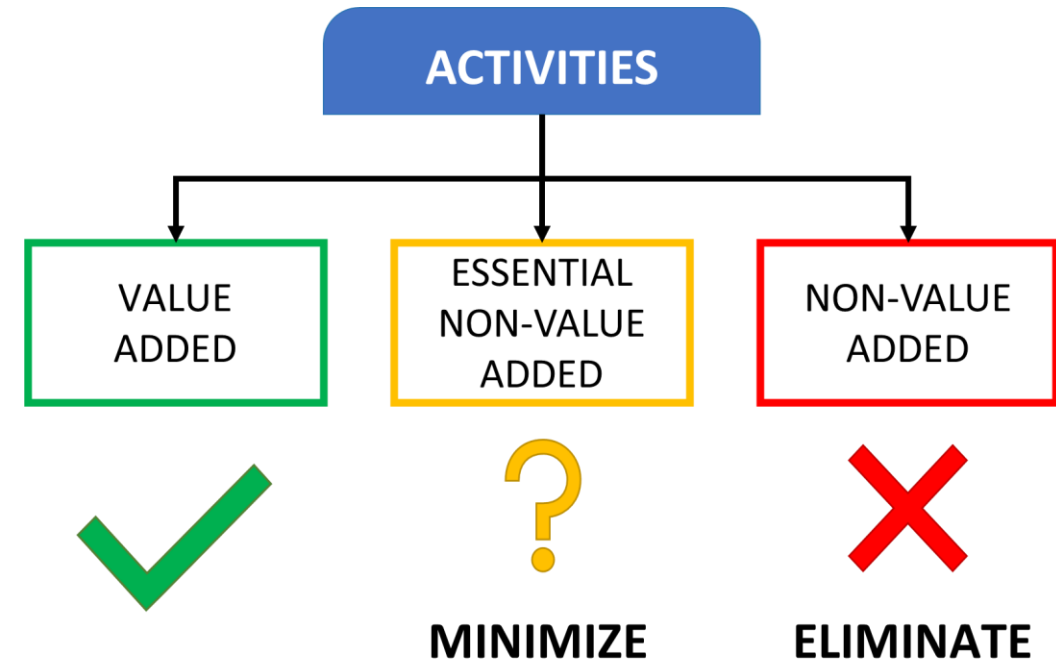


# Introduction

## What is it ?

A vital part of value stream mapping is to **identify what value add is**, and what it means to the process.

When looking at any step in a process, it either adds value, or it does not.

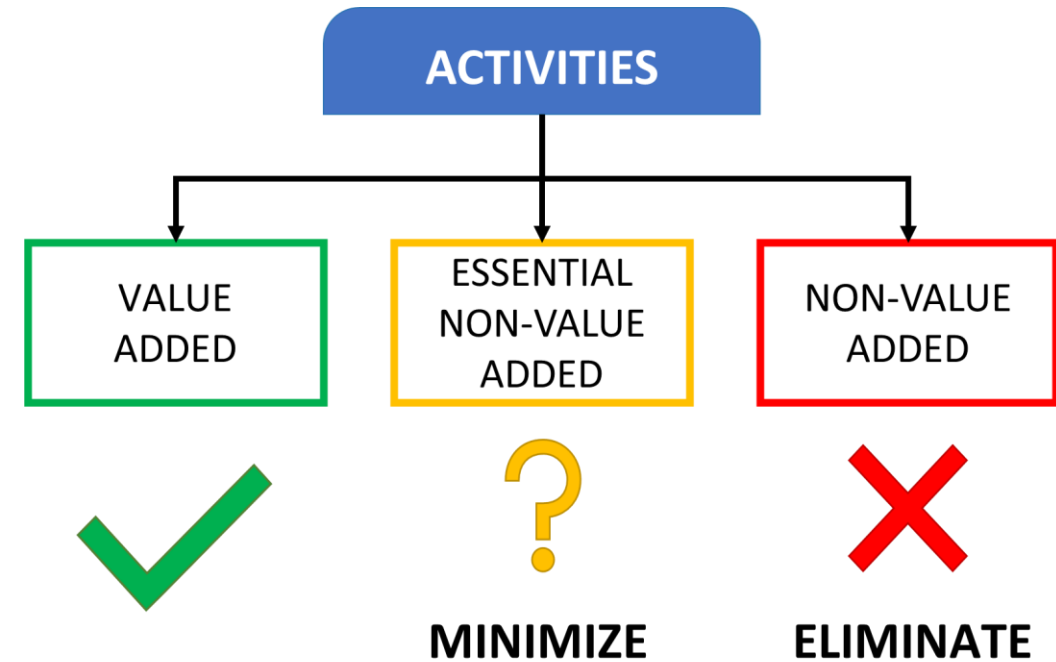


# Introduction

## What is it ?

If we answer yes to the following questions, then the task is value added:

- a) Do customers want to pay for this operation?
- b) Does this operation produce something the customer wants?



# Value Added Analysis

## Purpose and Benefits:

### DENTIST

#### Value added activities:

- Injecting the localized area with anesthetic.
- Drilling and cleaning the tooth from decay.
- Filling the tooth with the composite material.
- And setting the composite.



# Value Added Analysis

## Purpose and Benefits:

### DENTIST

#### Non-Value added activities:

- Preparing for the procedure.
- Cleaning the equipment.
- Loading the client's records.
- Lining up the equipment.
- Mixing the compound.





# Value Added Analysis

## Purpose and Benefits:

### WAREHOUSE

#### Value added activities:

- The action of picking the product off the shelf.
- Packing and labeling the item.



# Value Added Analysis

## Purpose and Benefits:

### WAREHOUSE

#### Non-Value added activities:

- Sorting for pick order.
- Searching and walking to find the right location.
- Printing paperwork.
- Inspecting other people's work.
- Moving the items to packing.





# Value Added Analysis

## Purpose and Benefits:

### MANUFACTURING

#### Value added activities:

- Bending an aluminum part.
- Cutting a wood frame.
- Inserting a label.
- Cooking the product.
- Filling a bottle.



# Value Added Analysis

## Purpose and Benefits:

### MANUFACTURING

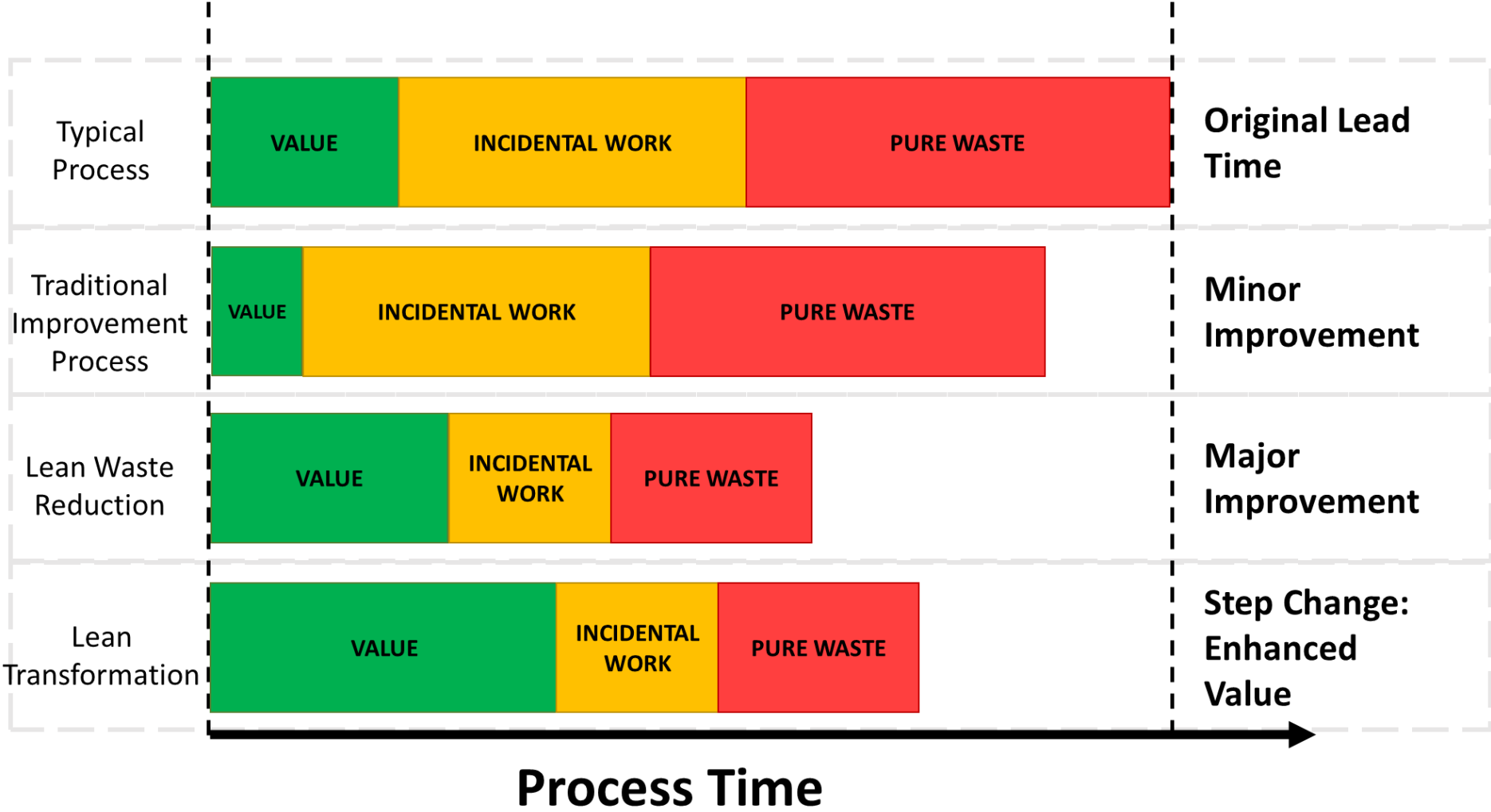
#### Non-Value added activities:

- Setting up.
- Getting material.
- Checking paperwork.
- Inspecting the product.



# Value Added Analysis

## Approach:

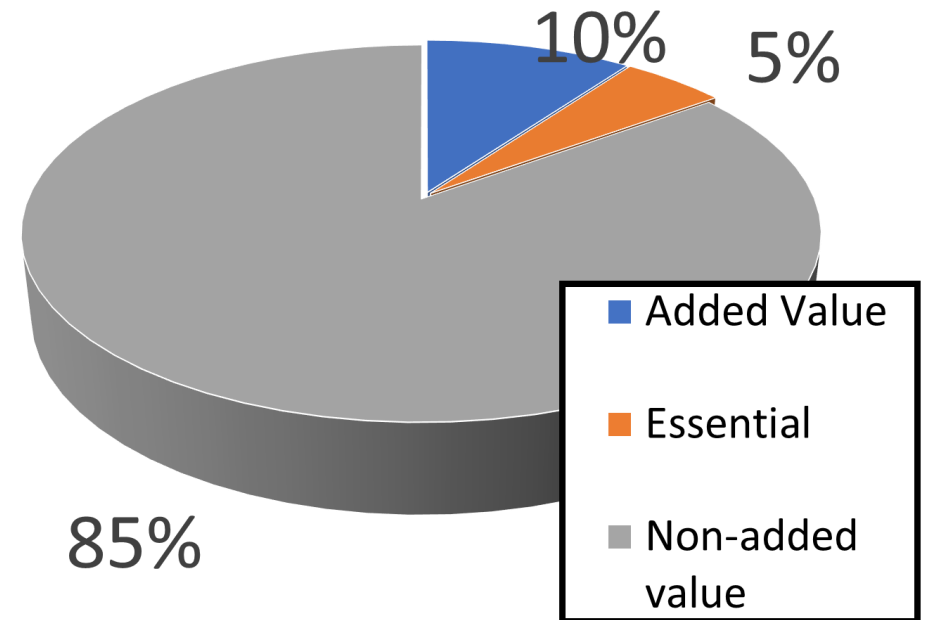


# Value Added Analysis

## Approach:

1. Where there is **pure waste**, remove it from the process. We are now left with essential or business waste and VA.
2. Take the **business waste** and convert as much of this as possible to pure waste.
3. **Repeat step 1.** Remove this pure waste.

The more essential waste that is converted to pure waste, the more efficient the process will be, and the bigger step change we will achieve.



# Value Added Analysis

## Approach:

VA

**Value-added activities** refer to the activities that increase the worth of a product or service from the customer's perspective.

ENVA

**Essential (or Business) non-value-added activities** refer to the activities that add no value and the customer is not willing to pay for them. However, they are necessary for the business because of the current process settings.

NVA

**Non-value-added activities** refer to the activities that add no value to the product or service and are not required for business operational reasons.

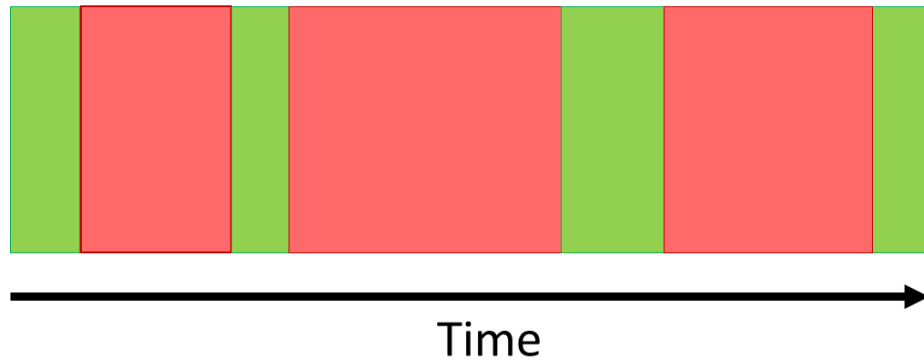


# Value Added Analysis

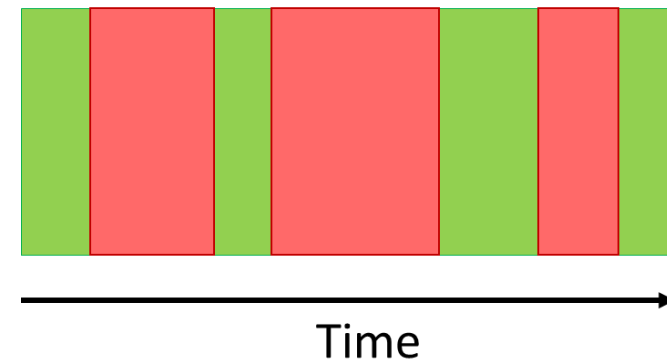
- Non Value-added Activity
- Value-added Activity

## Approach:

Before Improvement



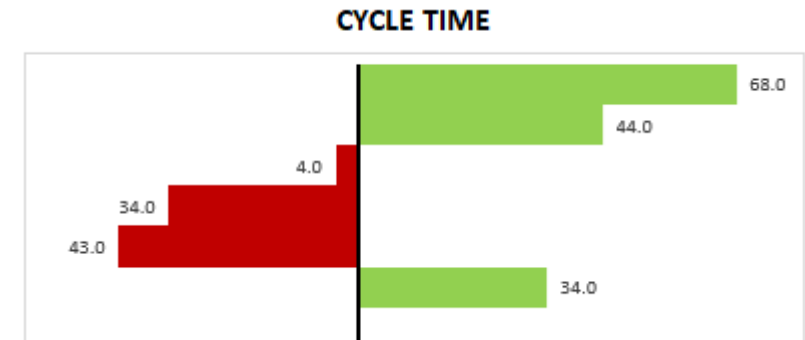
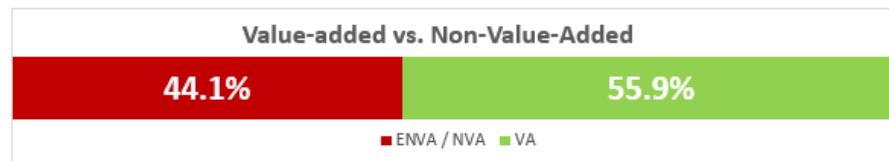
After Improvement



# Value Added Analysis

## Approach:

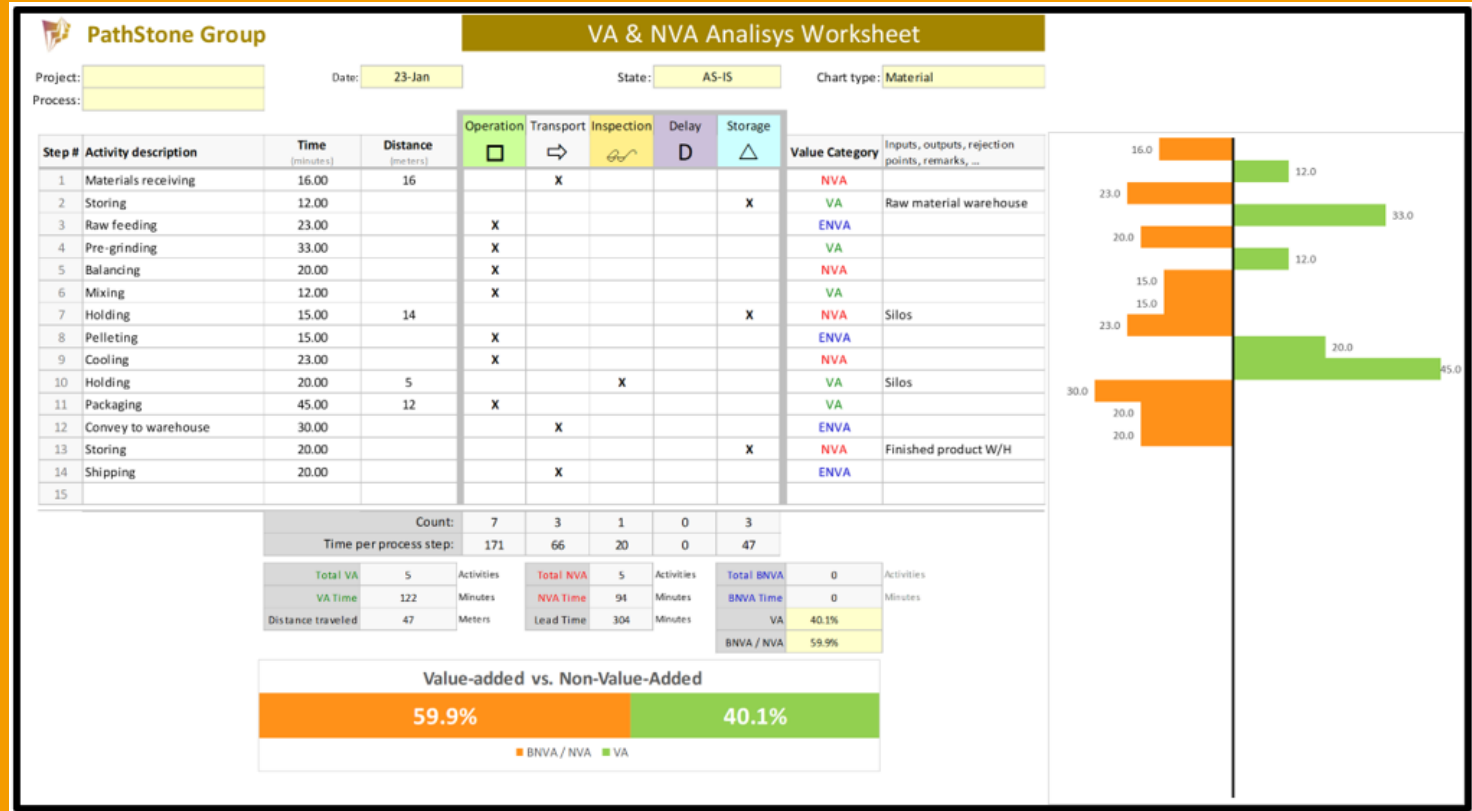
Step #	Activity description	Time (minutes)	Distance (meters)	Operation □	Transport ⇨	Inspection 🔍	Delay D	Storage △	Value Category
1	Enter clinic, reception desk	0.50	3		X				ENVA
2	Inform arrival	1.00		X					ENVA
3	Wait for file to open in system	1.50					X		NVA
4	Register patient	3.00		X					ENVA
5	Wait in the waiting room	6.00	4				X		NVA
6	Get and record patient vitals	3.00				X			VA
7	Wait for doctor to arrive	1.00	3				X		NVA
8	Get examined by the doctor	9.00				X			VA
9	Arrange next appointment	2.50		X					ENVA
10	Exit clinic	0.50	6		X				ENVA
11									
Count:				1	1	1	2	1	
Time per process step:				68	4	34	87	34	
Total VA	3	Activities	Total NVA	1	Activities	Total ENVA	2	Activities	
VA Time	146	Minutes	NVA Time	43	Minutes	ENVA Time	38	Minutes	
Distance traveled	5	Meters	Lead Time	261	Minutes	VA	55.9%		
						ENVA / NVA	44.1%		



**TOOLBOX**



Value-Added Analysis Worksheet



**LEARNING HUB**



Sammy's Restaurant

Who?	What?	Time	Value
Cook	Asks: "Who's next?"	5	●
All	There is confusion about who is next	10	●
Client	Decides he is next	2	●
Client	Approaches counter and attempts to read 'wall menu'	15	●
Client	"Is the ....bun....eh.....chokotas....gluten free?"	10	●
Cook	"You mean bun chota....yes it is."	5	●
Client	"Okay....what about the....hope I am pronouncing it right this time.....the bun caluan?"	10	●
Cook	"It's gluten free!!!!"	5	●
Client	"Then I have one of those."	5	●
Cook	"Which size?"	5	●
Client	"Gosh....I do not know....What do you have? Can I see?"	5	●
Cook	Grabs three sizes from below counter and shows.	15	●
Client	"I guess the middle one looks kind of OK."	5	●
Cook	Charges and gets paid \$5.	15	●
Cook	Walks from register to pan + ingredients.	5	●
Cook	Cooks	60	●
Cook	Takes food towards cash register.	10	●
Cook	Grabs chopsticks from below register and presents food + chopsticks to client.	5	●
Cook	Cleans floor so there is no danger of slipping.	30	●

117      60      45      222

# Takeaways

- It is important to understand the ultimate customers' expectations clearly and know exactly what they are willing to pay for.
- Value added activities are typically less than 10 percent of the total process lead time.
- Traditional approach to process improvement is to focus on reducing the time to perform the value added work (normally through capital investment), the Lean approach however focuses on eliminating the root causes of the 90 percent of the non-value added activities.
- Complement the Non-Value added analysis with the 8 Wastes, Process Walks and Process Mapping.





Thank You



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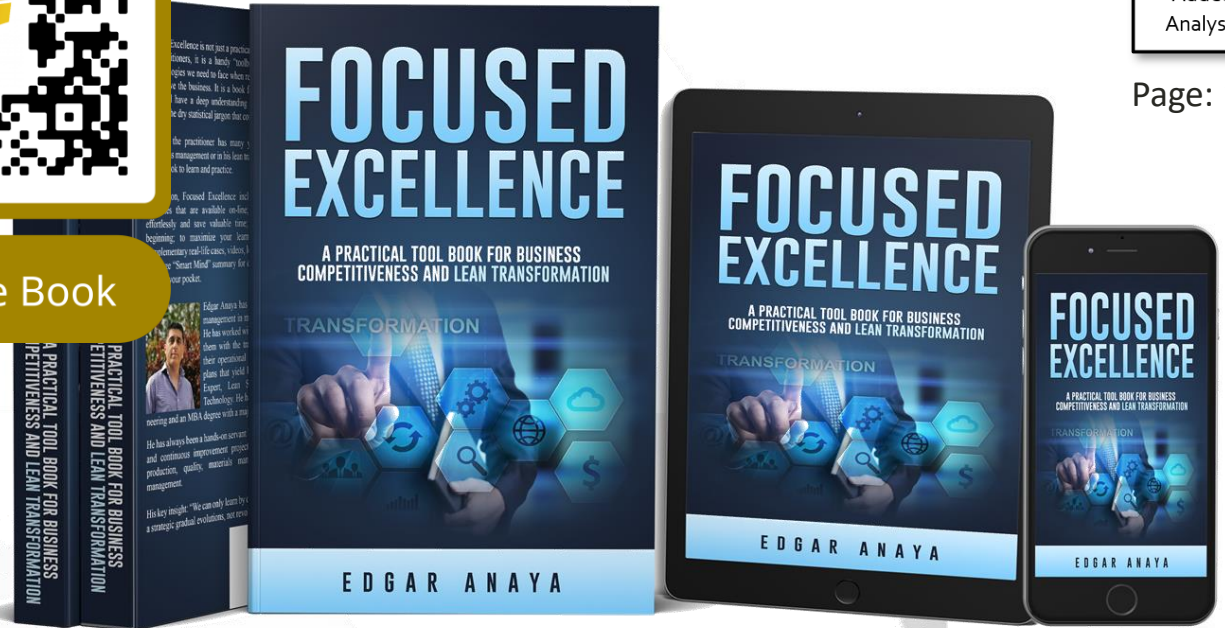
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TOPIC



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**Reference:** Focused Excellence  
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