

Khraim Fashion



Order-To-Cash

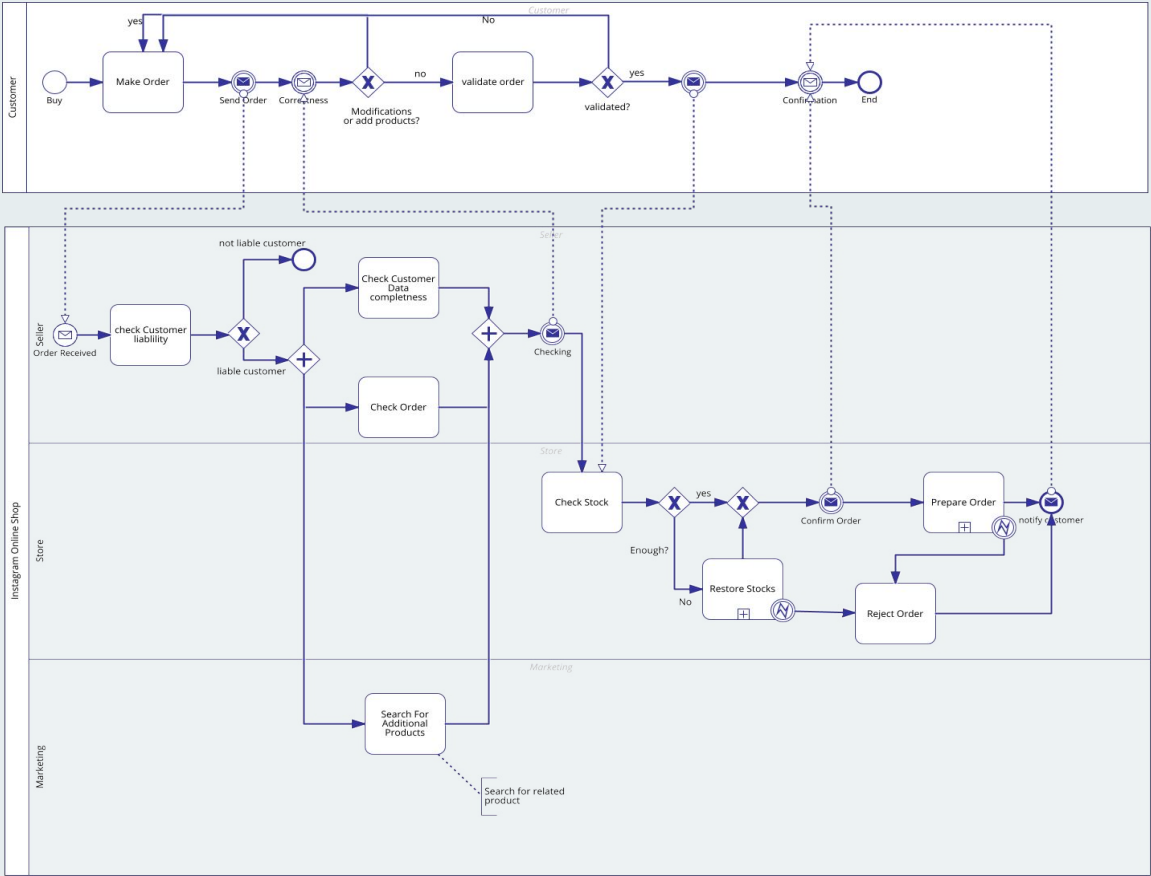


Introduction:

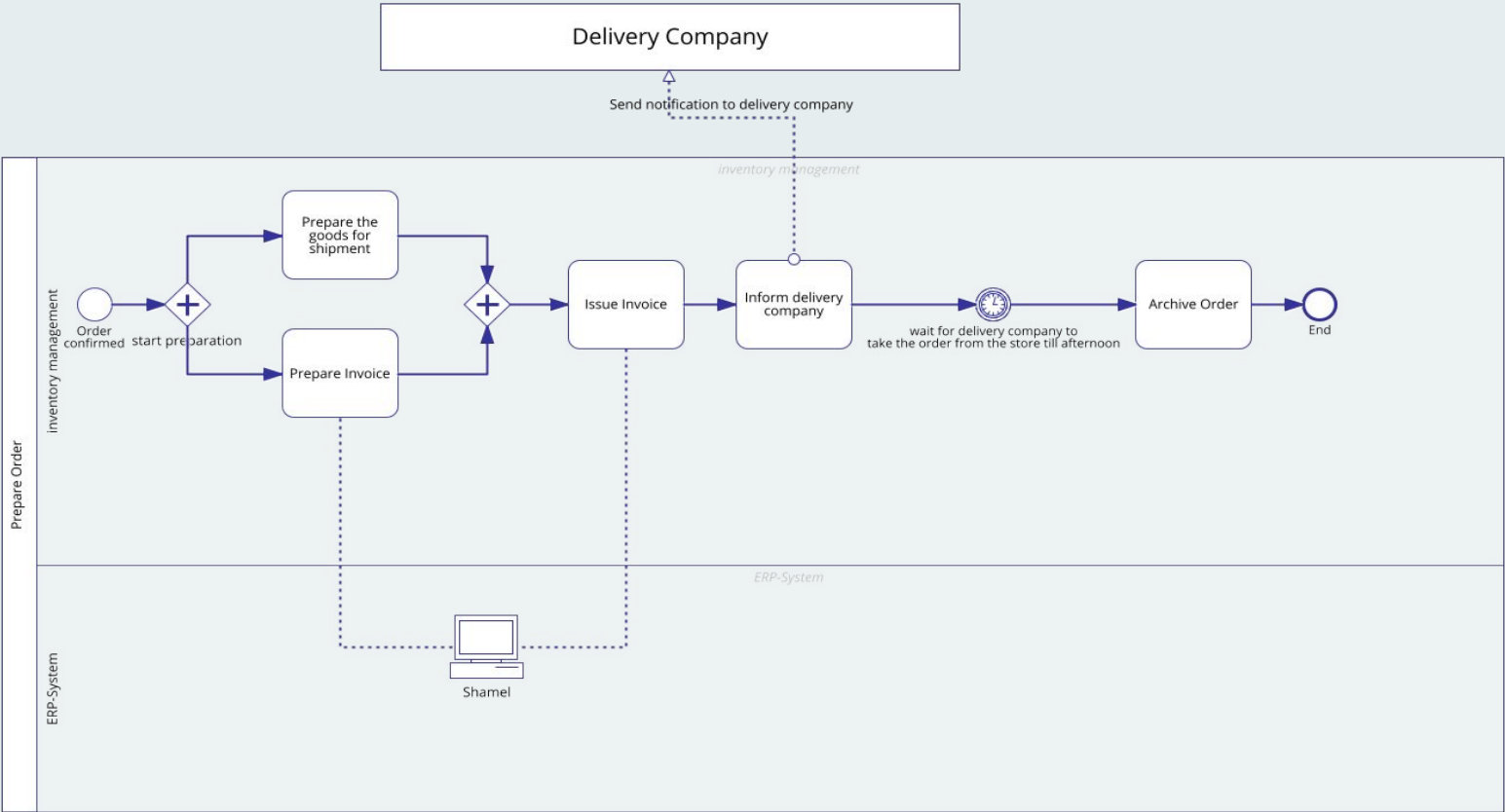
Khraim Fashion specializes in modern clothing and seeks to improve its order-to-cash processes through comprehensive analysis using BPMN.



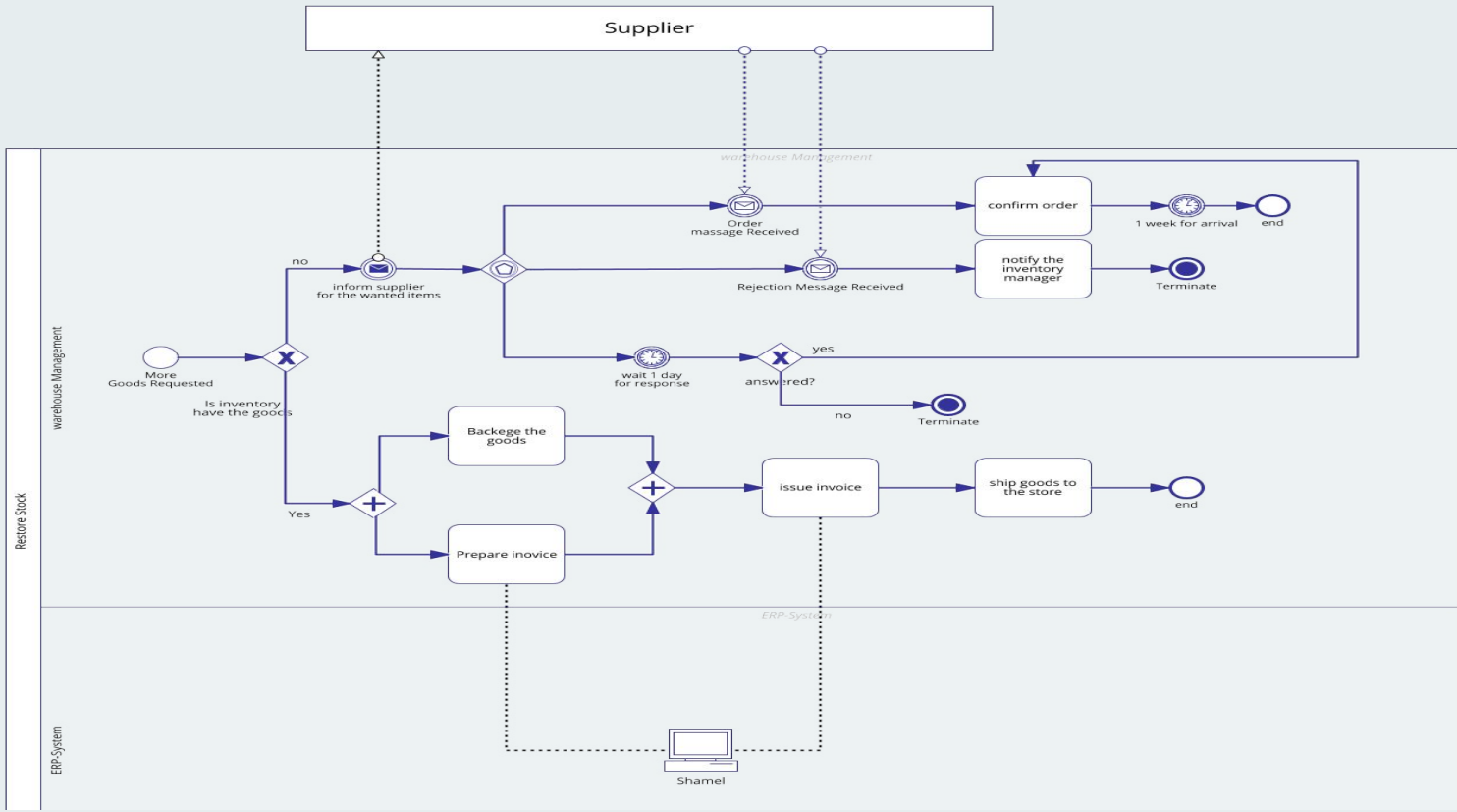
Discovery Process-Khram Fashion Order To Cash As-Is:



Discovery Process-Prepare Order Subprocess As-Is:



Discovery Process-Restore stock Subprocess As-Is (Purchase To Order):



Qualitative Analysis -Value Added



Value Added

Customer Choose Product From The Instagram

Customer send order to the seller
throw instagram message

Allow user to be informed and
alternative to be suggested

Verify product availability

Send order confirmation to the
customer



Business Value-Added

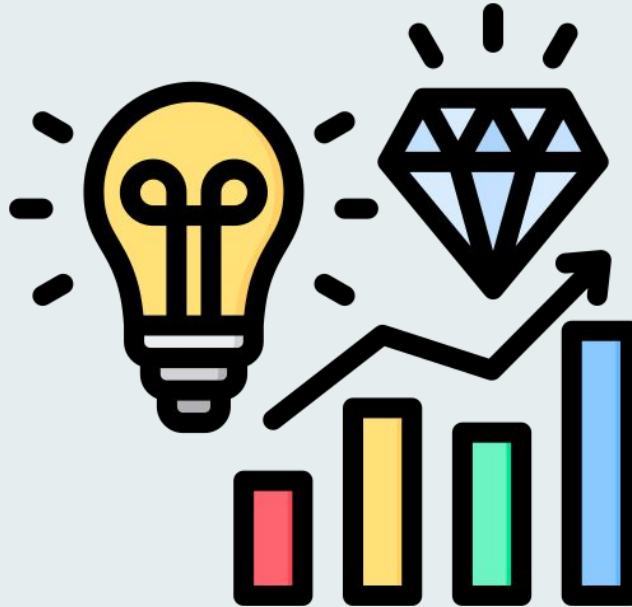
Send order details to
seller team

Retrieve customer history
from the archive

Review order for accuracy

Verify completeness of
customer data

Verify Order Details



Non-Value Added



Qualitative Analysis - Waste Analysis

7 Wastes of Lean



Inventory



Waiting



Defects



Overproduction



Motion



Transportation



Over-processing

Move-Transportation

Sending order details
from the customer
to the seller.



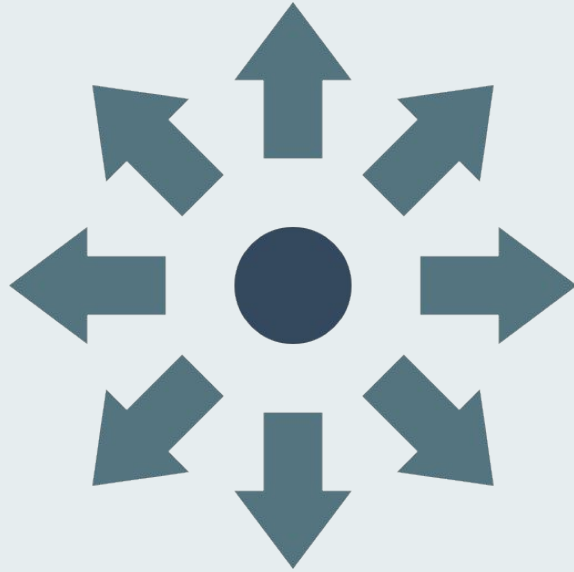
Transferring order details
between
different departments.

Forwarding order
confirmations back to
the customer.

Sending stock request details from
the store to the supplier.

Move-Motion

Employees move between
departments



Physical movement is required to
check stock levels manually.

Hold-Waiting

Waiting for goods to arrive
from the supplier to restock
inventory.

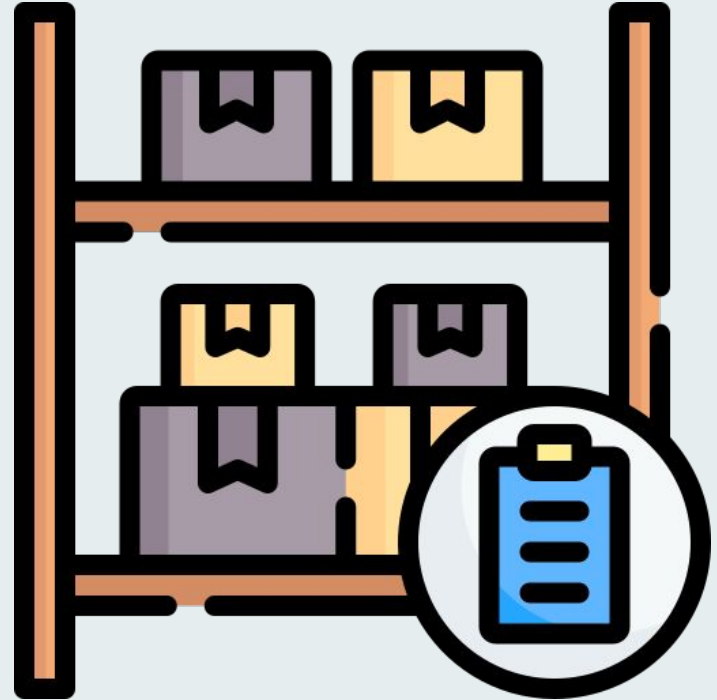
Customer waiting
for order validation and
confirmation.



Waiting for stock
availability before confirming
the order.

Hold-Inventory

Insufficient stock leads to delays and an inability to fulfill orders promptly.



Over-Do: Over-Processing

Double-checking customer data when initial checks were sufficient.

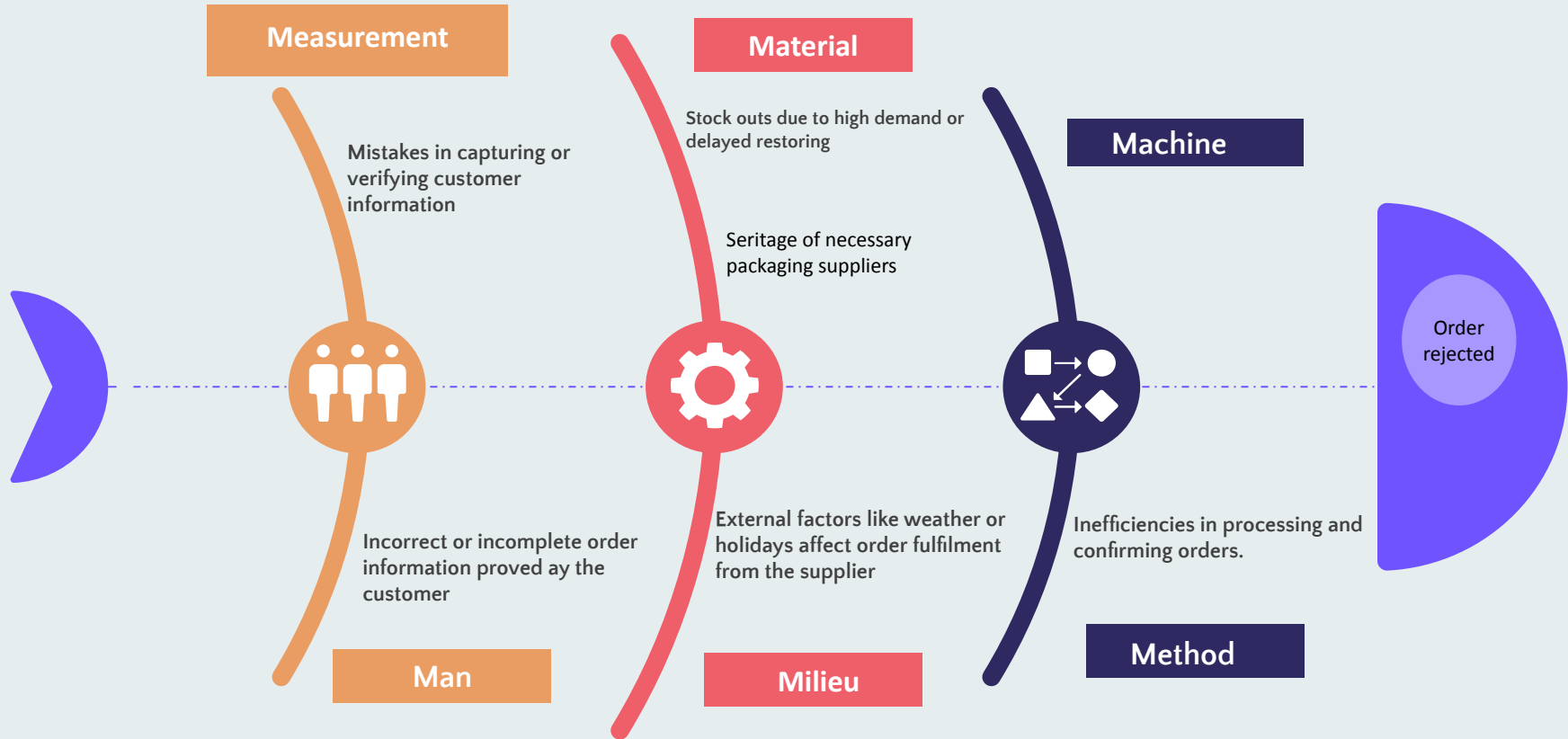


Over-Do: Defect

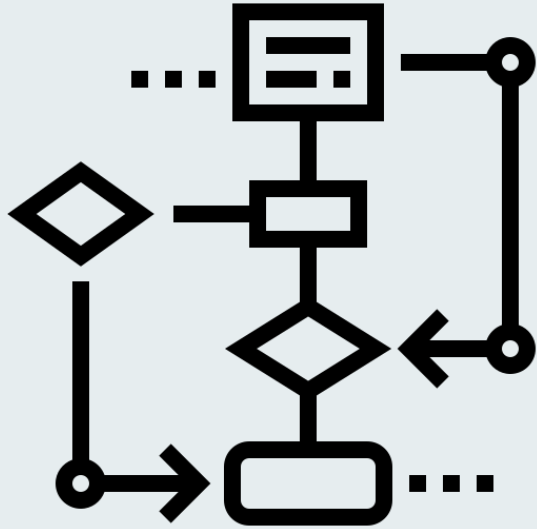
An error may occur when we
prepare an order and in the
restore stock .



Cause-effect (Fishbone) diagram:



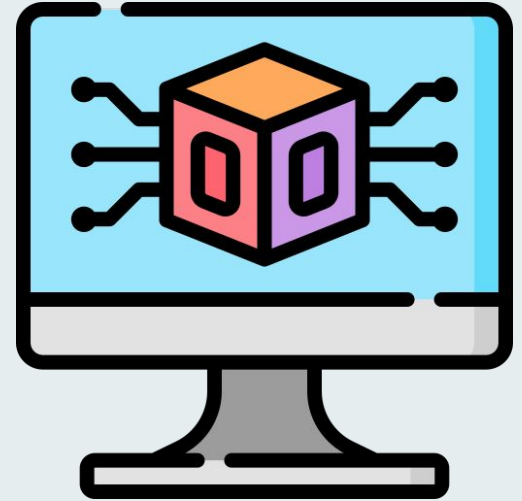
Quantitative Analysis



Flow Analysis

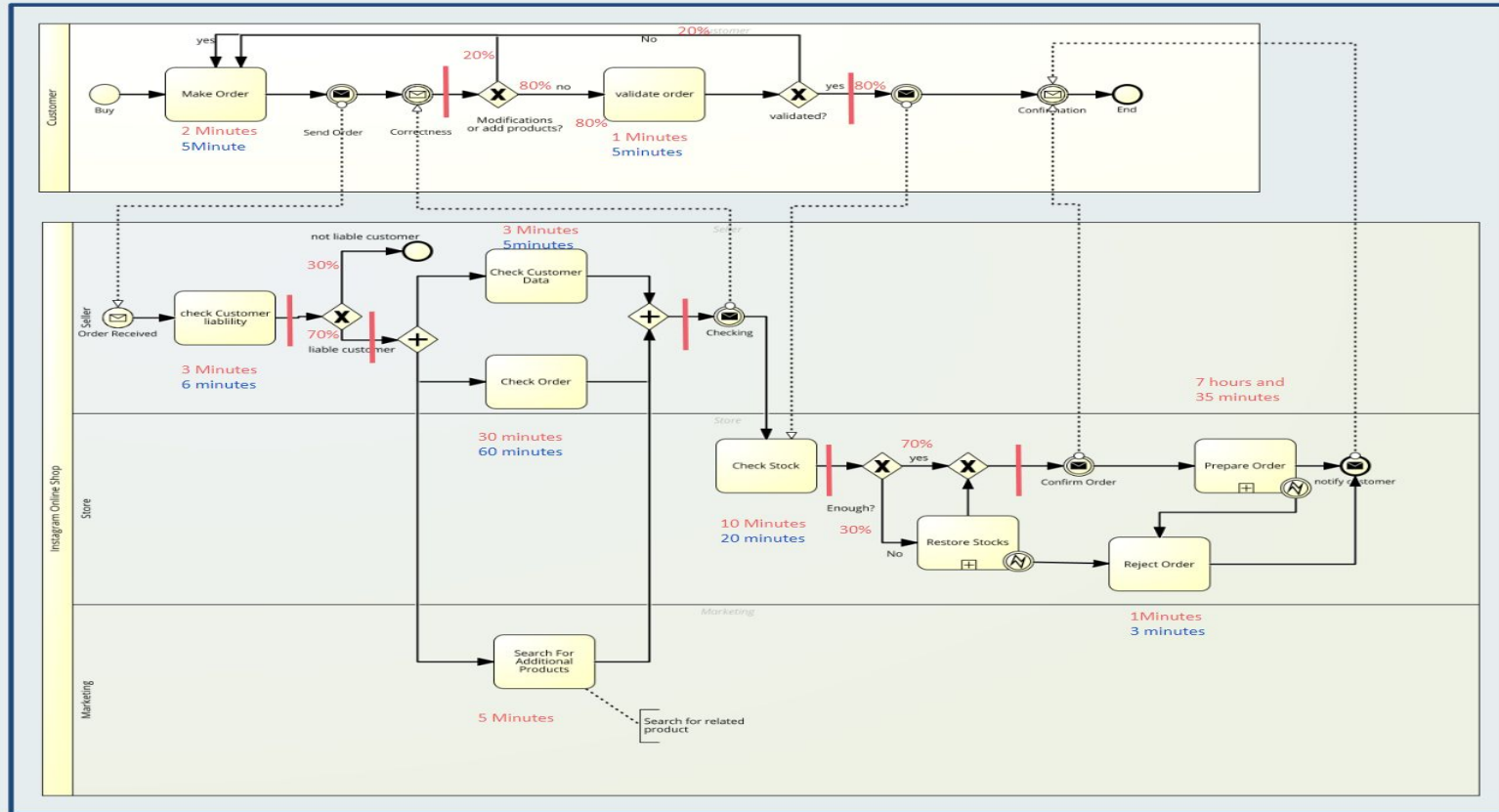


Queueing Analysis



Simulation

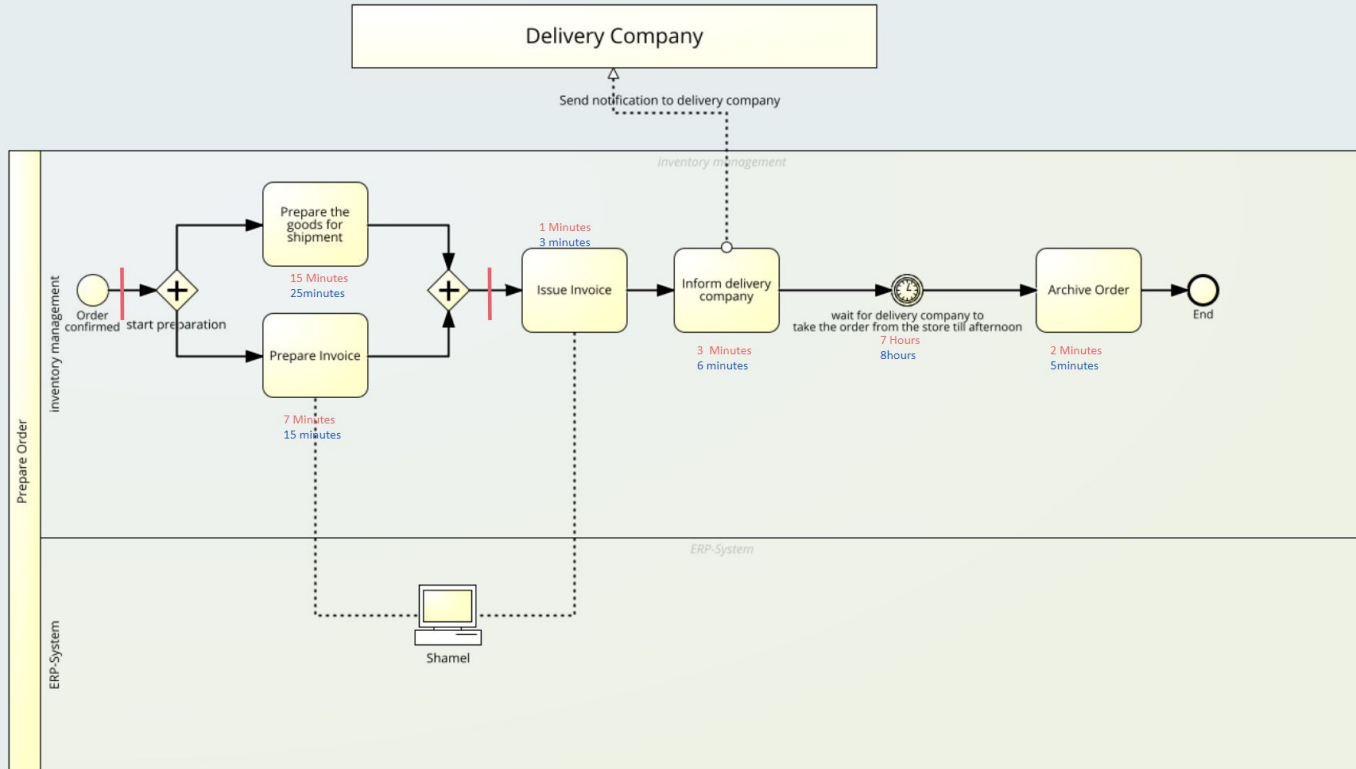
Flow Analysis As-Is modeling



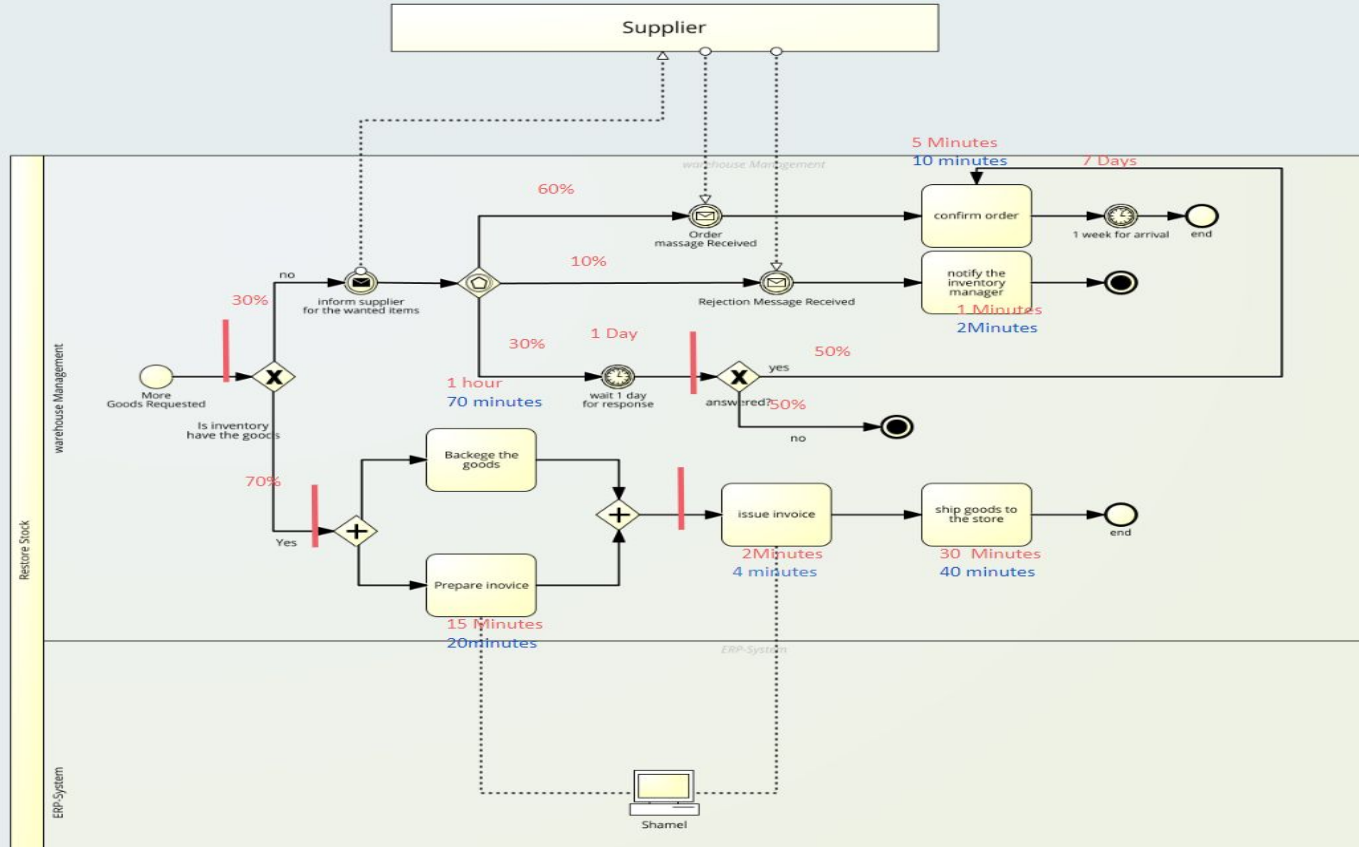
Cycle Time

Process Time

Flow Analysis contd. Prepare Order



Flow Analysis contd. Restore Stock



Flow Analysis Findings

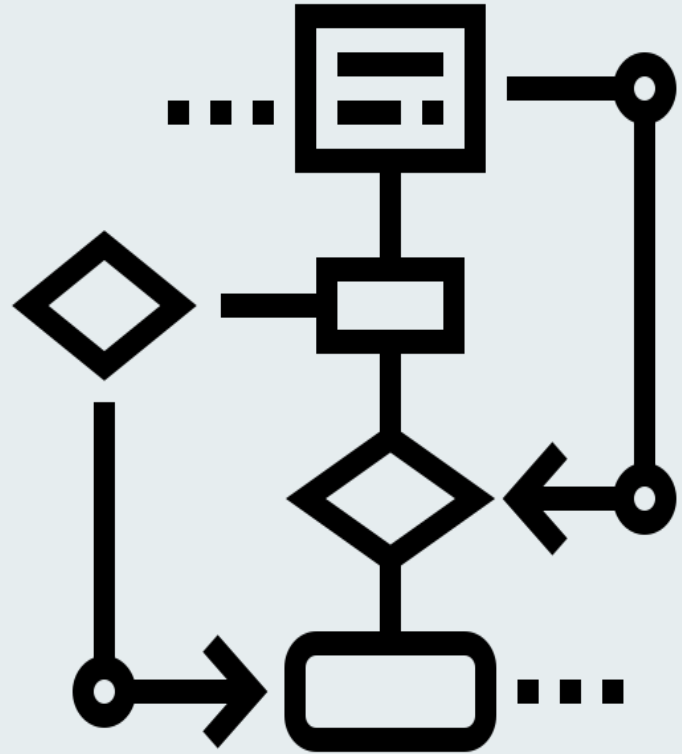
Process Time $PT = 6H$

Cycle Time $CT = \frac{1}{3} \text{ DAY (8H)}$

Cycle Time Efficiency Percentage $CTE = 77.66\%$

Arrival Rate $\lambda = 2.18$

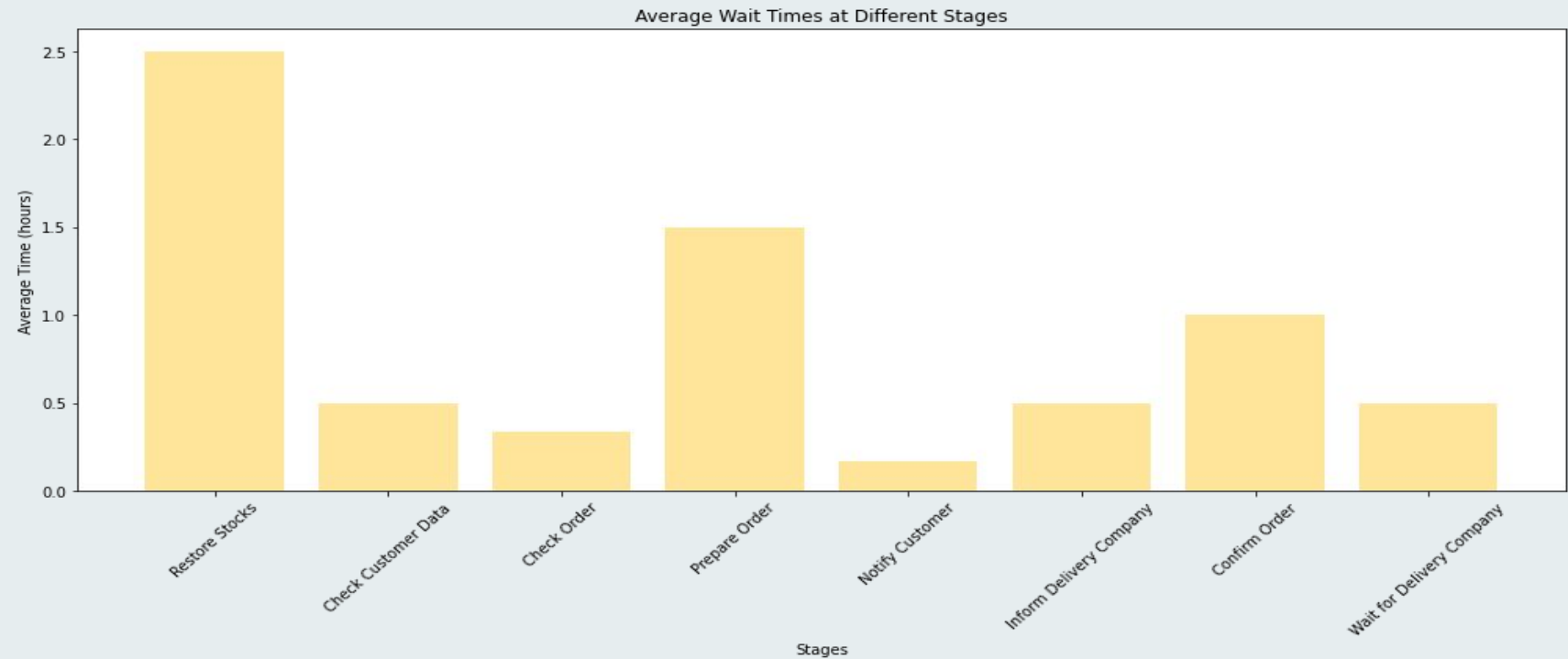
Work In Progress $WIP = 18 \text{ Order}$



Queuing Analysis



Visual Analyzation one

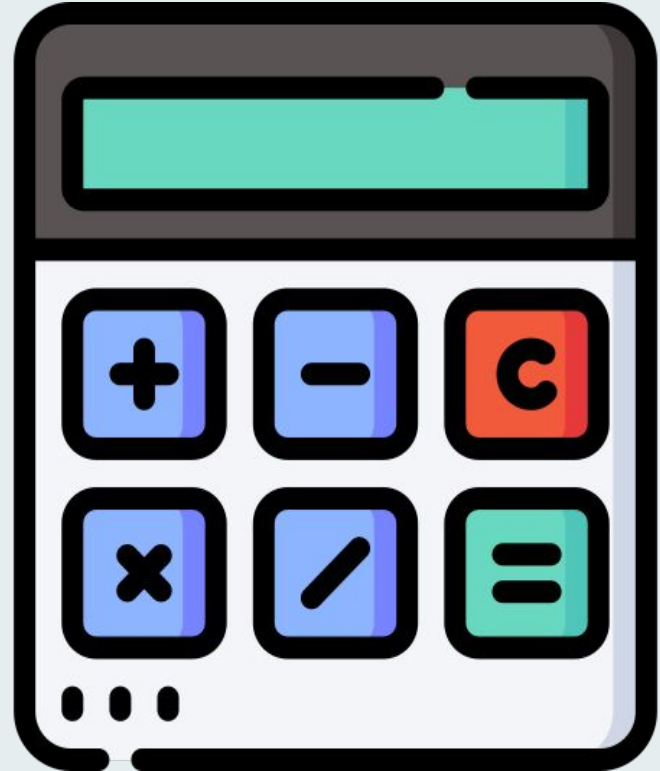


Queueing System Analysis- Using Omni Calculator

Calculating the Arrival Rate (λ) for the Company "Daily Order Arrival Rate": $\lambda = 2.18$

Calculating the Service Rate (μ) mu for the Company: $\mu = 3$

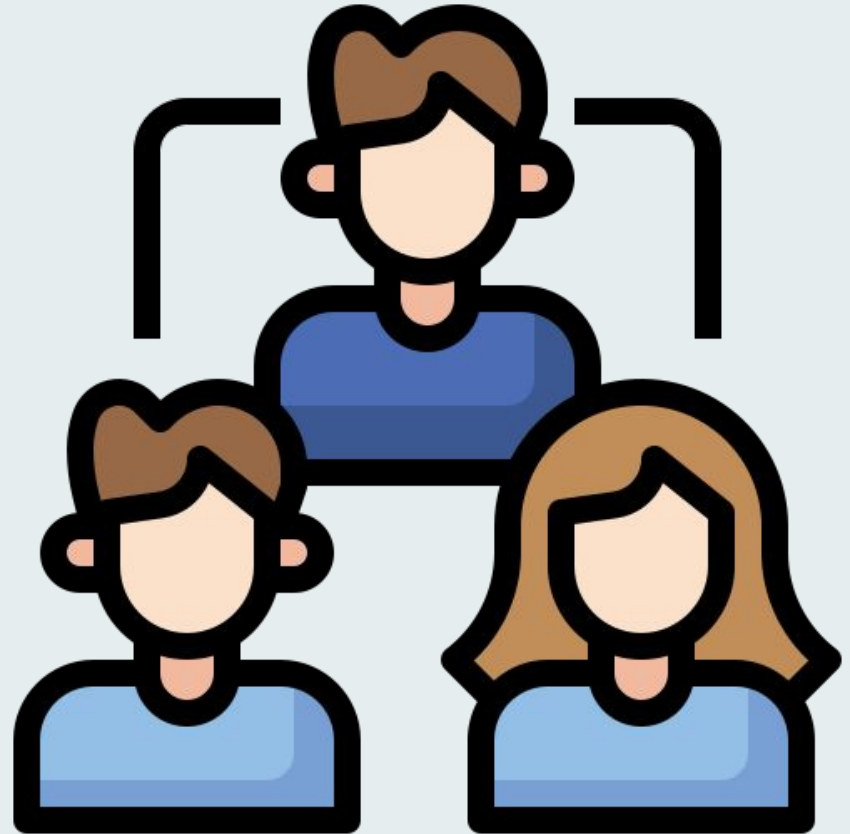
Calculating the Number of Servers (S) in the Company: $S = 1$ or $S = 2$



Numerical Analysis and Results

We have two scenarios for analysis:

- Scenario with one employee
- Scenario with two employees



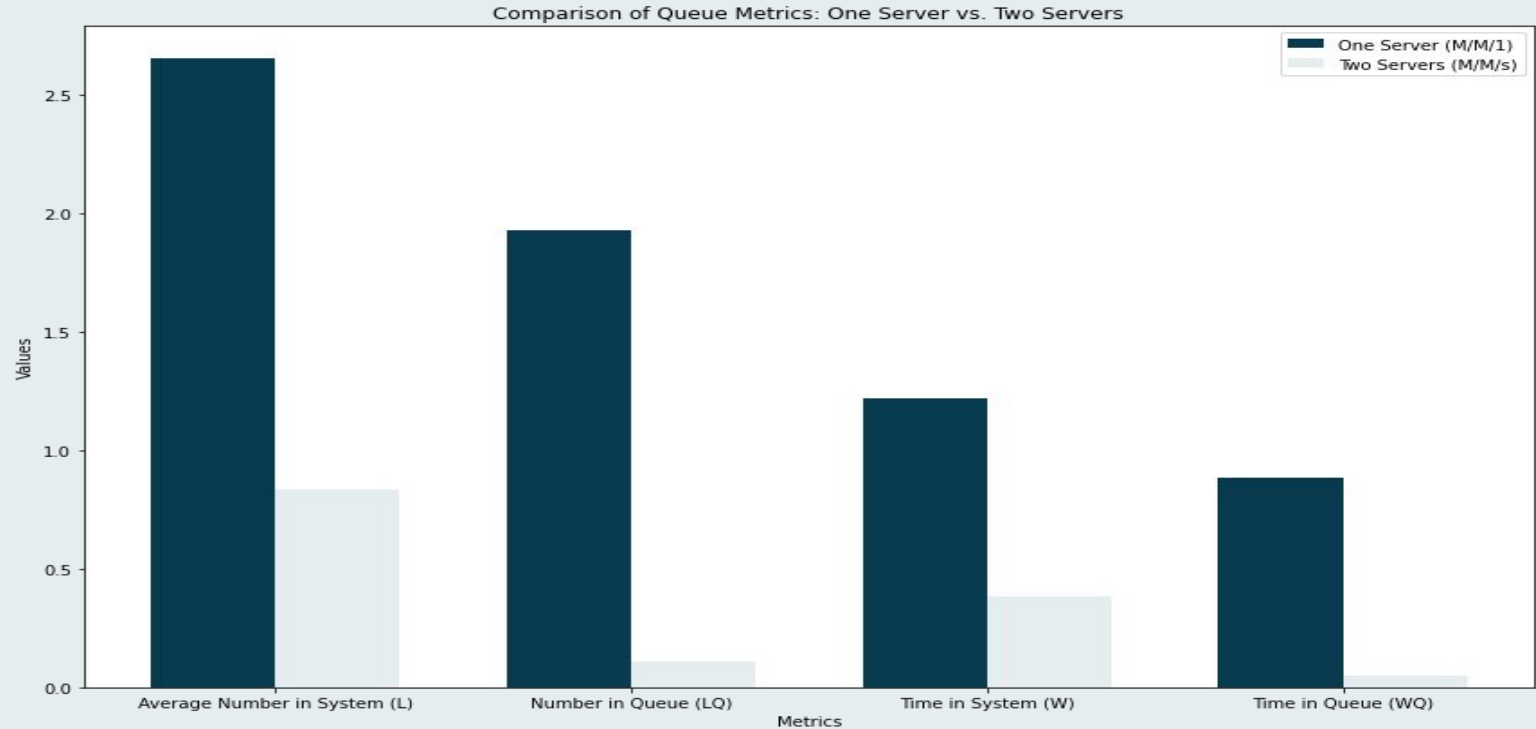
Scenario 1: With 1 employee (S=1)

Type of queue	M/M/1
M/M/1	
Arrival rate (λ)	2.18
Service rate (μ)	3
Traffic intensity (ρ)	0.7267
Average number of customers (L)	2.6585
Number of customers in the queue (LQ)	1.932
Average time spent in the system (W)	1.2195
Time spent in the queue (WQ)	0.8862
Probability of no customers in the queue (p_0)	27.333 %
The probability of a queue with	customers...
...is p_n	%

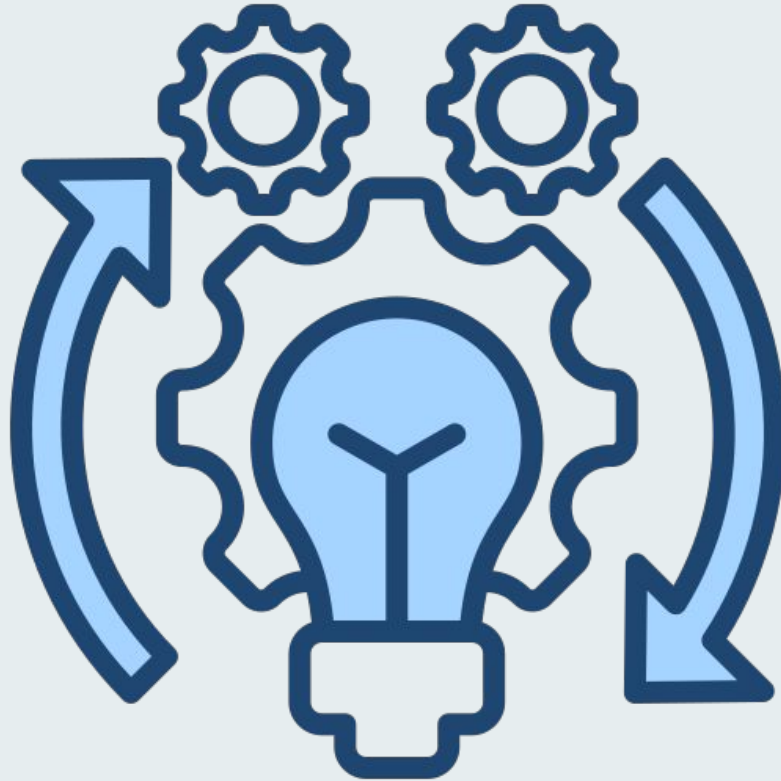
Scenario 2: With 2 employees (S=2)

Type of queue	M/M/s
M/M/s	
Arrival rate (λ)	2.18
Service rate (μ)	3
Traffic intensity (ρ)	0.3633
Number of the servers (s)	2
Server utilization (α)	0.7267
Average number of customers (L)	0.8372
Number of customers in the queue (LQ)	0.11052
Average time spent in the system (W)	0.384
Time spent in the queue (WQ)	0.0507
Probability of no customers in the queue (p_0)	46.7 %
The probability of a queue with	customers...
is p_n	%

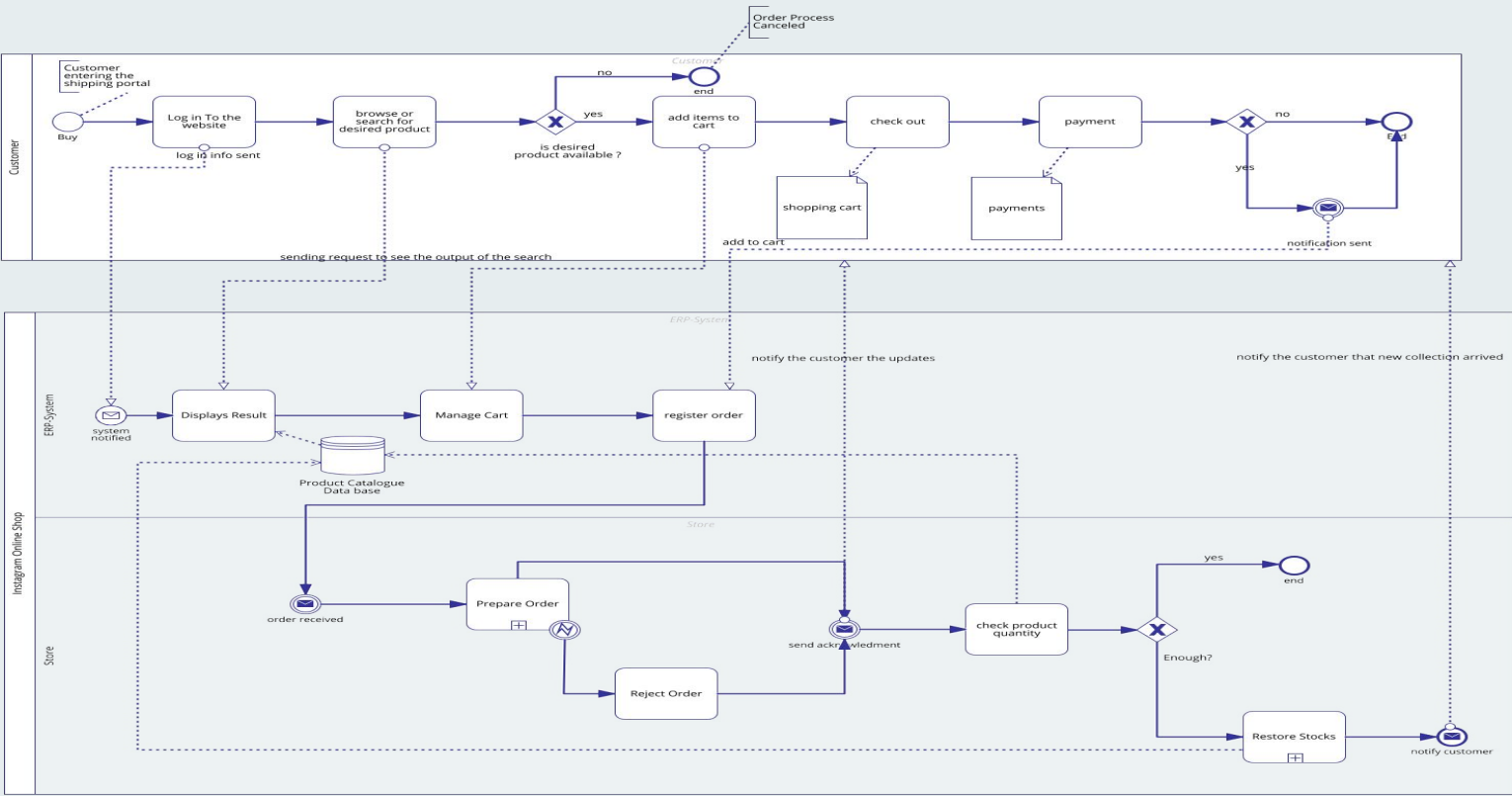
Visual Analyzation Two



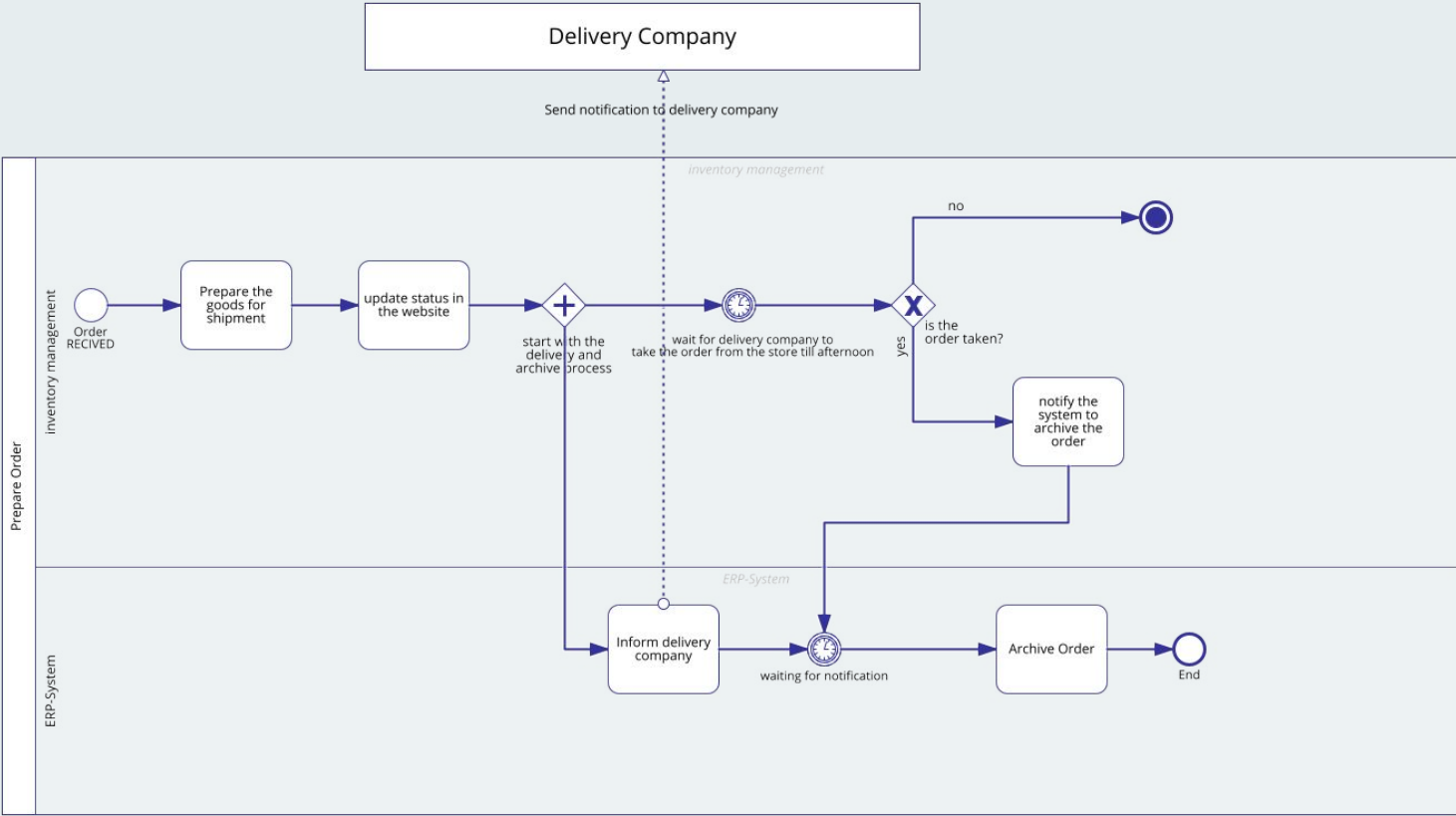
Transformational Redesign Process To-Be



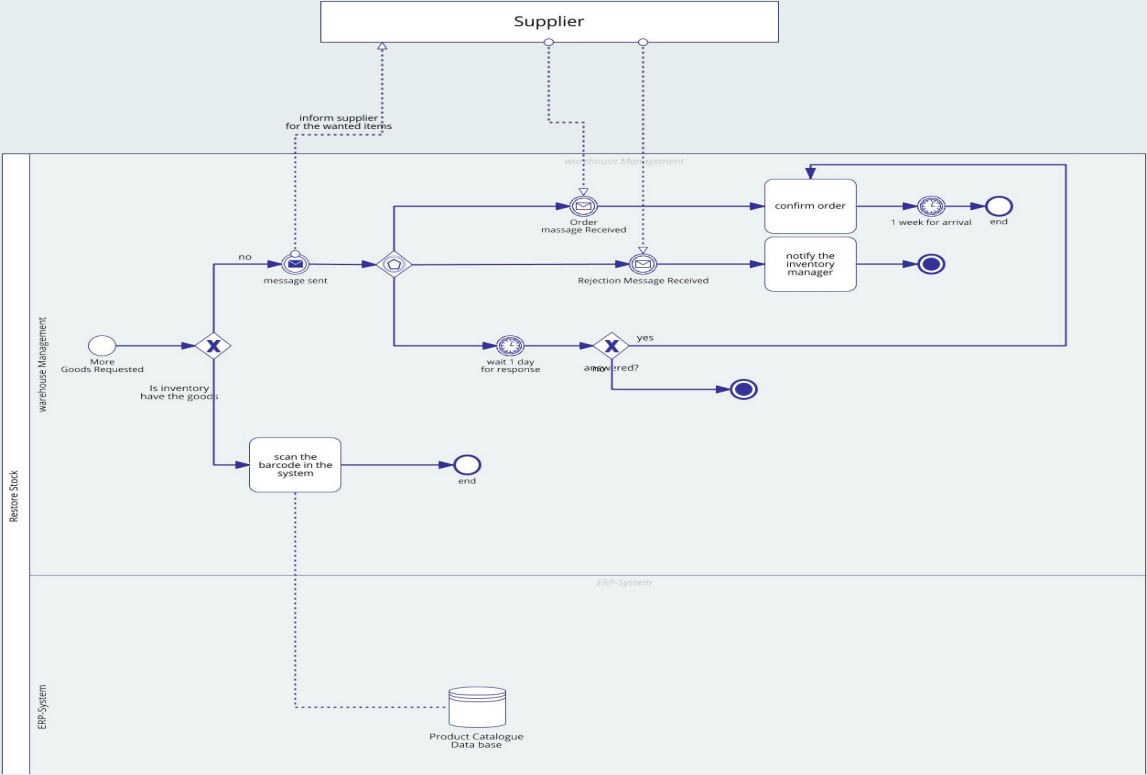
Redesign Process-Khram Fashion Order To Cash To-be:



Redesign Process-Prepare Order Subprocess To-Be:



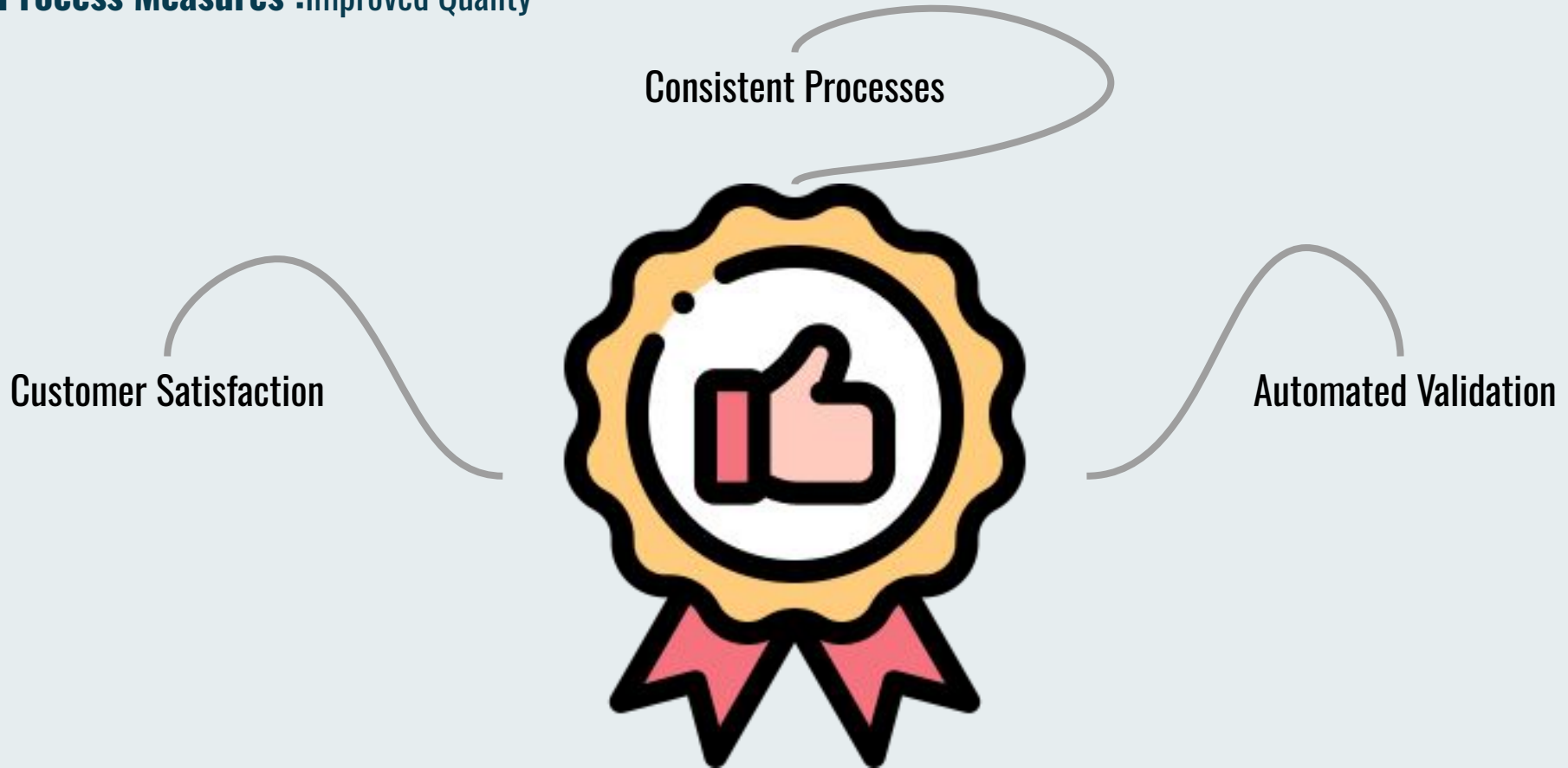
Redesign Process-Restore stock Subprocess To-be (Purchase To Order):



Process Measures : Reduced Cost



Process Measures :Improved Quality



Process Measures :Reduced Cycle Time

Task Elimination

Parallel Processing

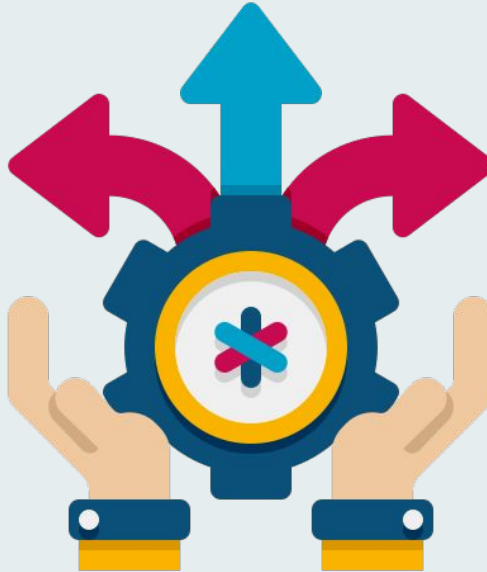


Task Composition

Process Measures : Increased Flexibility

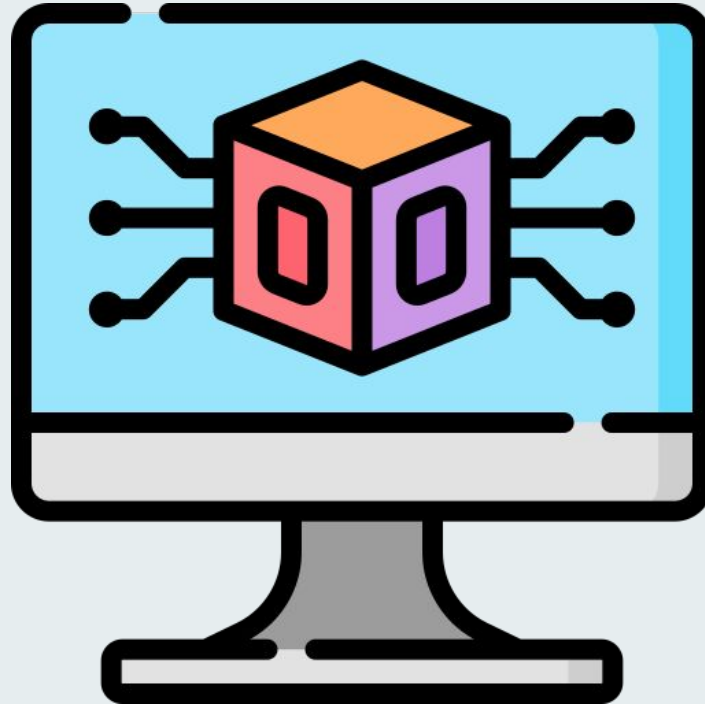
Automated Systems

Reduced Human
Dependency



Integrated
Systems

Simulation





**Any further
Information
Needed?**

Sama Khraim

Marah Saadeh

Mosab Khraim

Noor Kalboneh



Tama Awaisa

For More Information About the Company

