

# ERP Simulation Game



*powered by ERPsim*

Last Update: July 13, 2021

## LOGISTICS PLATINUM

A Serious Game  
for Learning  
**Enterprise Resource  
Planning Concepts**

Powered by **ERPsim**  
Compatible with **SAP™ ERP ECC and Business Suite on HANA**

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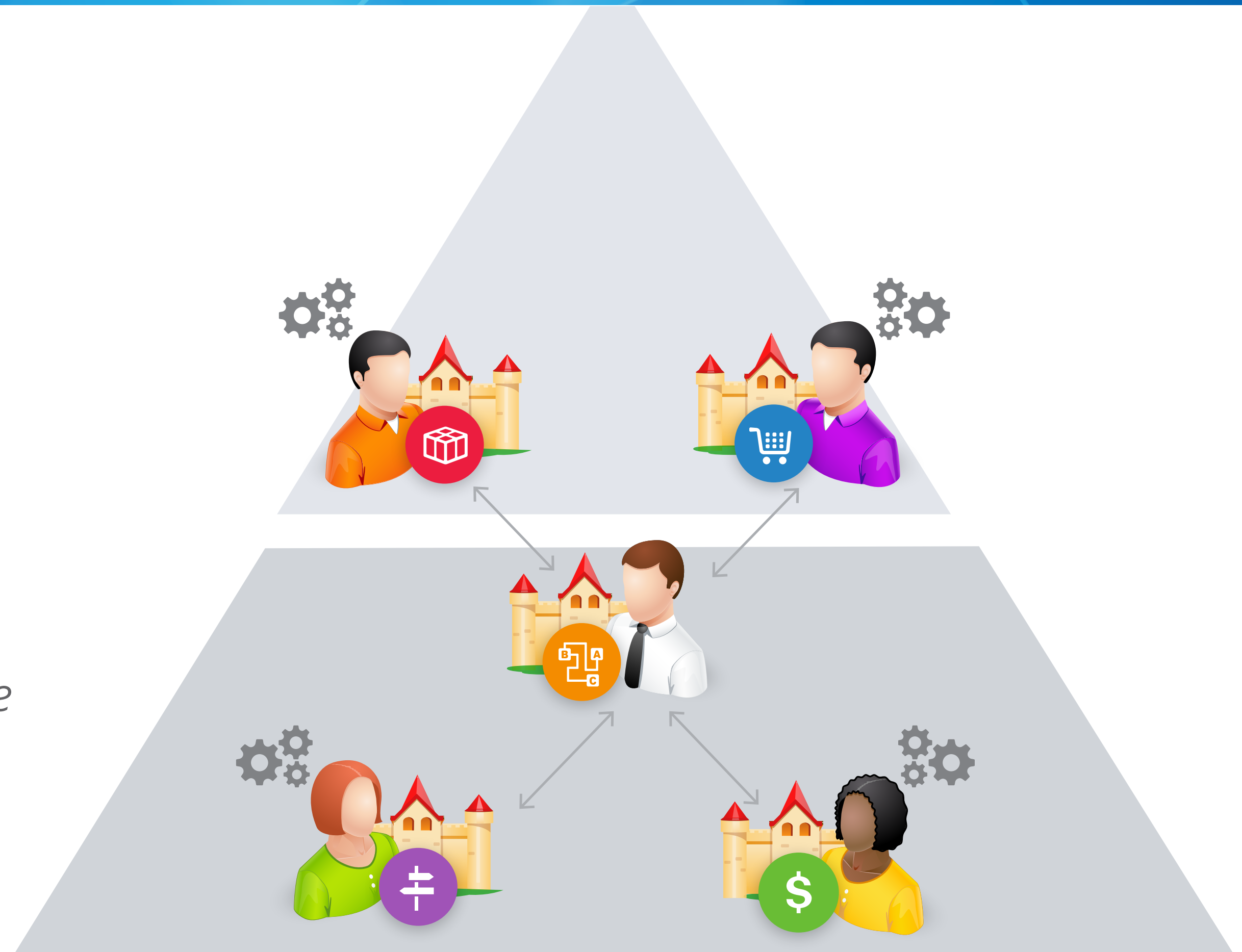
# Communication in Round 1



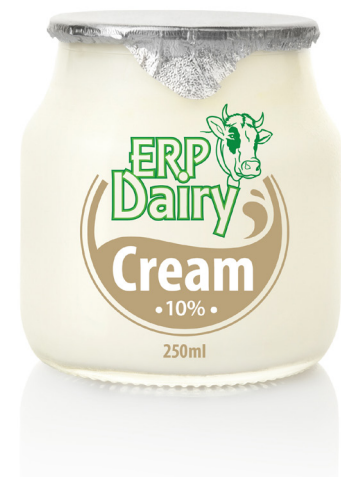
## ROUND 1

*The Planning Manager needs to circulate between team members in order to ensure a good communication.*

*Please note that you should not communicate with your teammates by screen sharing.*



# Cost, Initial Prices, and Initial Inventory



	MILK \$\$-T01	CREAM \$\$-T02	YOGHURT \$\$-T03	CHEESE \$\$-T04	BUTTER \$\$-T05	ICE CREAM \$\$-T06
Product cost	€22.95	€72.07	€25.85	€82.68	€59.88	€43.15
Initial price	€25.25	€79.78	€28.43	€90.95	€65.87	€47.47
Initial stock	950	300	700	350	400	300



Let's play round 1:  
**10 virtual days**

# Debriefing Round 1

- 1 What are your first impressions?

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- 2 How was the communication during Round 1?

---

- 3 What information was exchanged among teammates?

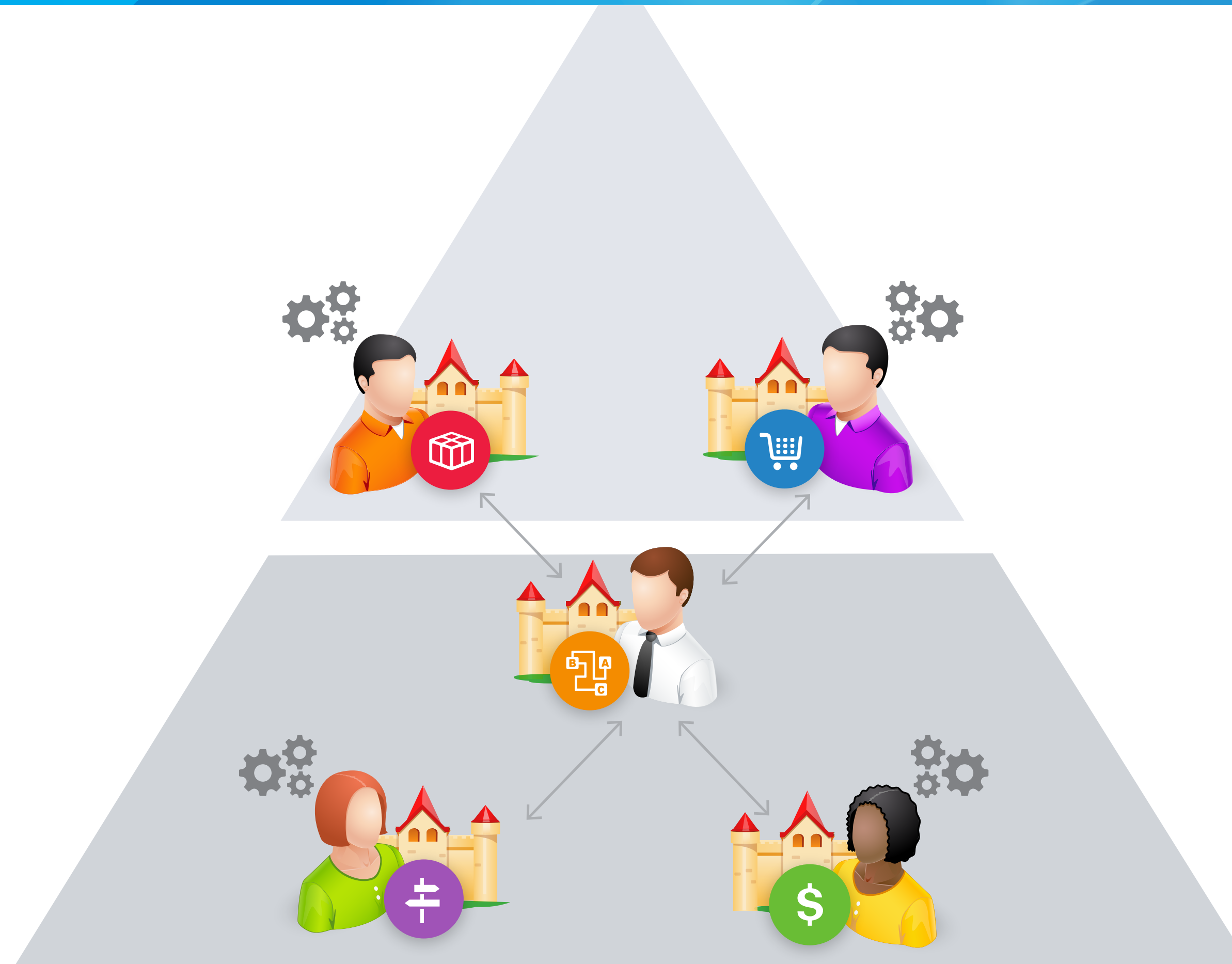
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- 4 Who took the decisions in your team?

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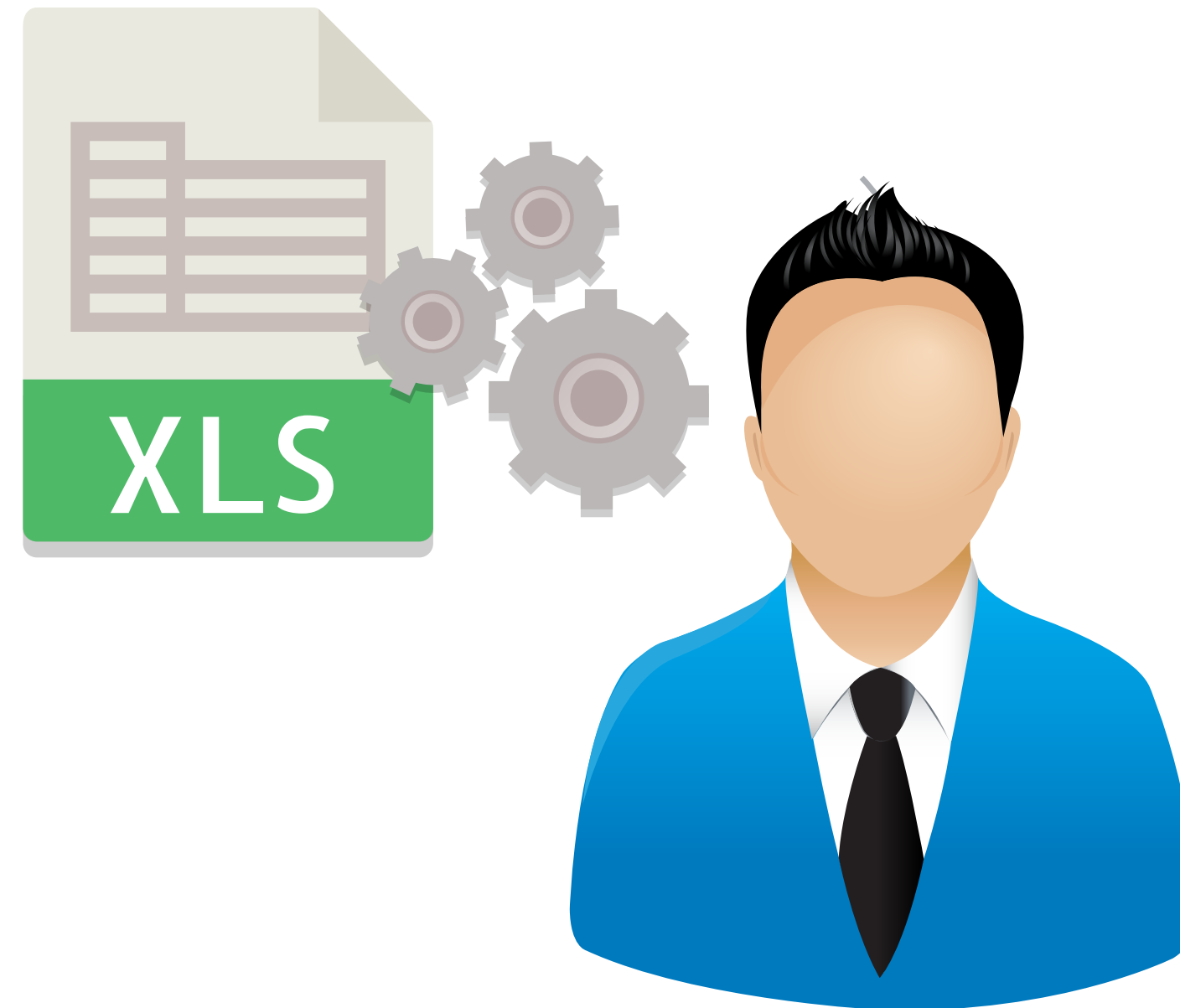
- 5 Were you satisfied with the team organization in your group?

# Working in Silos



# Shadow IT

*Have you  
used Excel ?*



Andrew McAfee. (2006). Mastering the Three Worlds of Information Technology. Harvard Business Review, 84(11), 141-149.



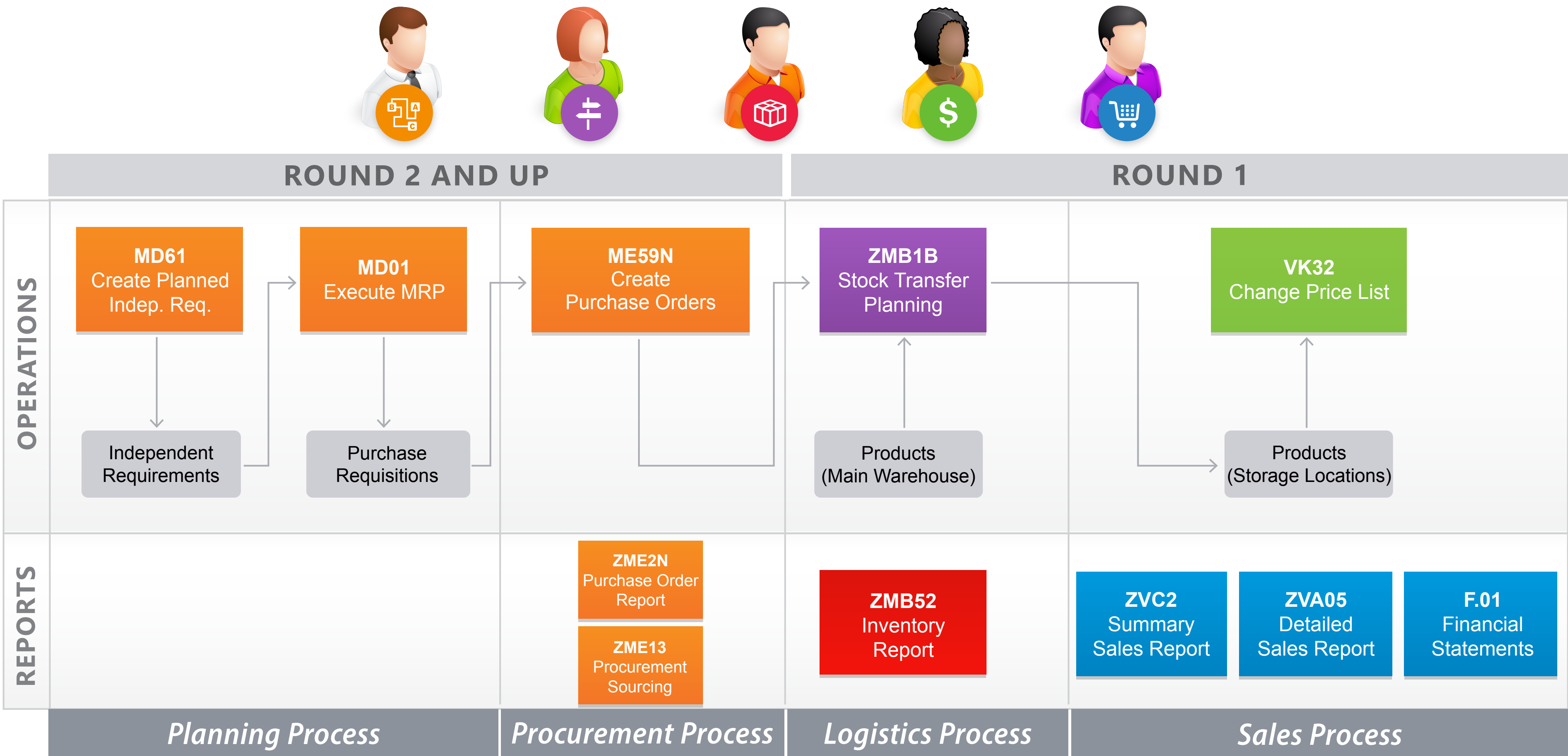
ROUND 2

# Replenishment

- Now you need to replenish your stock.
- In Round 2, you will be able to adjust and change your replenishment levels.
- Replenishment should occur at least every 5 days.

	\$\$-T01	\$\$-T02	\$\$-T03	\$\$-T04	\$\$-T05	\$\$-T06
Name	Milk	Cream	Yoghurt	Cheese	Butter	Ice Cream
Delay	1	1	1	1	1	1
Initial stock	950	300	700	350	400	300

# Game Layout - Business Processes



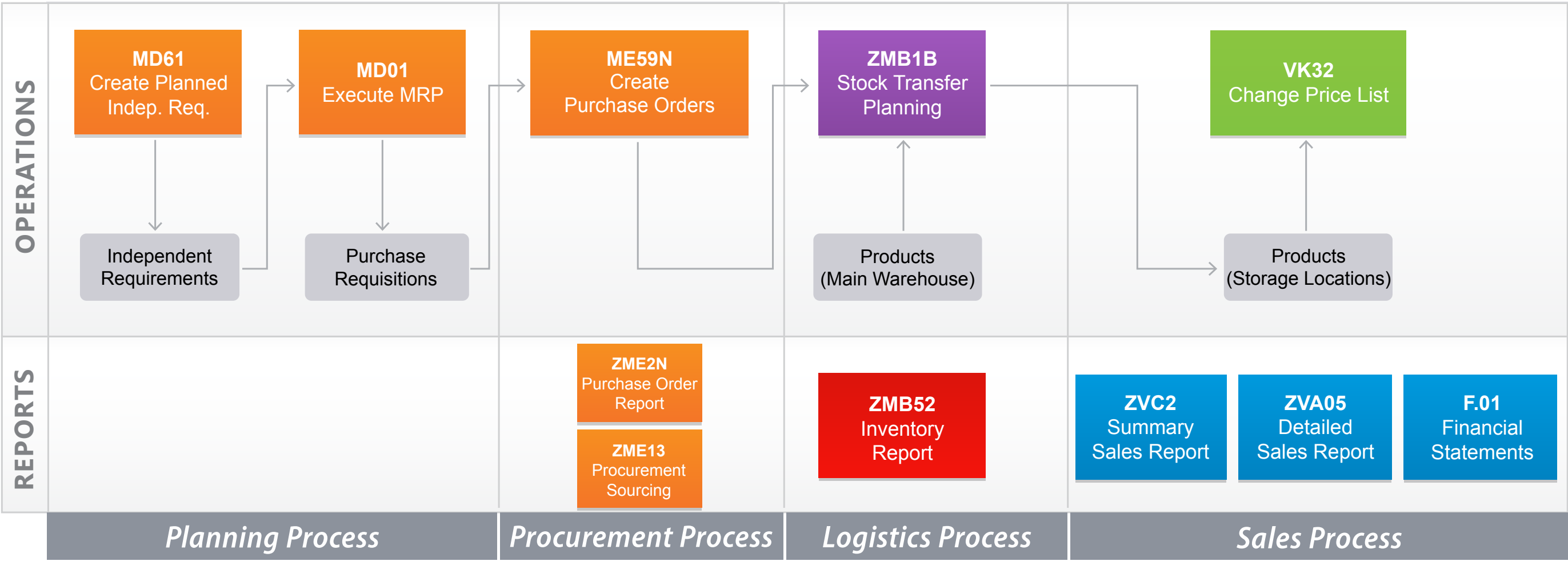
# Planning Manager



## PLANNING MANAGER

Login:

Password:



FORECAST SALES

Create Planned Indep. Req. (MD61)

1

Product group:

2

Continue

3

Enter forecasted quantities in the 2nd date column

4

Save

!

The quantity corresponds to the replenishment level

CALCULATE REQUIREMENTS

MRP Run (MD01)

1

Click on *Enter*

2

Ignore orange warnings

Click two more times on *Enter*

3

In the pop-up window, click

Continue

PURCHASING

Create Purchase Orders (ME59N)

1

Execute

!

Purchase orders are created

!

If no open requisitions :  
No suitable requisitions found.

PROCUREMENT

Purchase Order Tracking (ZME2N)

Shows the details and the status of each purchase order

Shows the dates of expected goods delivery

Procurement Sourcing (ZME13)

Shows the price of each product sold by the vendor

# Forecast Sales

## FORECAST SALES

### Create Planned Indep. Req. (MD61)

1 ☒ Product group: \$\$-T

2 Continue

### 3 Enter forecasted quantities in the 2nd date column

4 Save

- ! The quantity corresponds to the replenishment level

[illegible]

# Execute MRP

## CALCULATE REQUIREMENTS

### MRP Run (MD01)

- 1 Click on *Enter*
- 2 Ignore orange warnings  
Click two more times on *Enter*
- 3 In the pop-up window, click **Continue**

MRP Run

Logistics Platinum

ERPsim

More ▾

Exit

Scope of planning:

Plant: Z5

MRP control parameters

Processing key: NEUPL

Regenerative Planning

Create purchase req.: 1

Purchase requisitions

Schedule lines: 3

Schedule lines

Create MRP list: 1

MRP list

Planning mode: 3

Delete and recreate planning data

Scheduling: 1

Determination of Basic Dates for Planned

Planning date: 2020-05-19

Process control parameters

☐ Parallel processing

☐ Display material list

User exit: select materials for planning

User exit key:

User exit parameter:

MRP Run

Logistics Platinum

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Exit

Statistics

Materials planned	52
Materials with New Exceptions	6
Materials with Termination MRP List	

Parameters

Scope of Planning	
Plnt	Z5
Processing Key	NEUPL
Create Purchase Requisition	1
SA Schedule Line	3
Create MRP List	1
Planning Mode	3
Scheduling	1
MRP Date	2020-05-19

Database Statistics

Purchase requisitions created	6
-------------------------------	---

Runtime Statistics

Start of Planning Run	14:51:33
-----------------------	----------



# Convert Purchase Requisitions to Purchase Orders

PURCHASING

Create Purchase Orders (ME59N)

1

Execute

!

Purchase orders are created

!

If no open requisitions :

- No suitable requisitions found.

Automatic Creation of Purchase Orders from Requisitions										
Logistics Platinum										
Choose   Call Up Report...   List Status...   More ▾										
PO	OTyp	POrg	PGr	Agreement	Item	Purch.Req.	Item	D...	St...	Message text
Vendor V04 Dairy Cooperative										
4500000112	NB	Z5	700							
					10000032		10			■ Purchase order successfully created
					10000033		10			■ Requisition successfully converted
					10000034		10			■ Requisition successfully converted
					10000035		10			■ Requisition successfully converted
					10000036		10			■ Requisition successfully converted
					10000037		10			■ Requisition successfully converted



# Track Purchase Orders

## PROCUREMENT

### Purchase Order Tracking (ZME2N)

Shows the details and the status of each purchase order

Shows the dates of expected goods delivery

### Procurement Sourcing (ZME13)

Shows the price of each product sold by the vendor

Purchase Order Tracking									
Logistics Platinum									
Refresh Report Data More Exit									
Purchase Order Tracking: Round 2 Day 09									
Order	Vendor	Material Description	Quantity	Price	Price Unit	Value	Status	Goods	
4500000112	V04	Cream	74	72.07	1	5,333.18	Delivered	2/09	
		Yoghurt	500	25.85	1	12,925.00	Delivered	2/09	
		Cheese	134	82.68	1	11,079.12	Delivered	2/09	
		Milk	601	22.95	1	13,792.95	Delivered	2/09	
		Butter	443	59.88	1	26,526.84	Delivered	2/09	
		Ice Cream	375	43.15	1	16,181.25	Delivered	2/09	
4500000111		Ice Cream	300	43.15	1	12,945.00	Delivered	2/01	
		Butter	400	59.88	1	23,952.00	Delivered	2/01	
		Cheese	350	82.68	1	28,938.00	Delivered	2/01	
		Yoghurt	700	25.85	1	18,095.00	Delivered	2/01	
		Cream	300	72.07	1	21,621.00	Delivered	2/01	
		Milk	950	22.95	1	21,802.50	Delivered	2/01	
4500000110		Ice Cream	300	43.15	1	12,945.00	Delivered	1/06	
		Butter	400	59.88	1	23,952.00	Delivered	1/06	
		Cheese	350	82.68	1	28,938.00	Delivered	1/06	
		Yoghurt	700	25.85	1	18,095.00	Delivered	1/06	
		Cream	300	72.07	1	21,621.00	Delivered	1/06	
		Milk	950	22.95	1	21,802.50	Delivered	1/06	
4500000109		Ice Cream	300	43.15	1	12,945.00	Delivered	N.Sch	
		Butter	400	59.88	1	23,952.00	Delivered	N.Sch	
		Cheese	350	82.68	1	28,938.00	Delivered	N.Sch	
		Yoghurt	700	25.85	1	18,095.00	Delivered	N.Sch	
		Cream	300	72.07	1	21,621.00	Delivered	N.Sch	
		Milk	950	22.95	1	21,802.50	Delivered	N.Sch	



# Procurement Sourcing

## PROCUREMENT

## Purchase Order Tracking (ZME2N)

Shows the details and the status of each purchase order

Shows the dates of expected goods delivery

## Procurement Sourcing (ZME13)

Shows the price of each product sold by the vendor

Procurement Sourcing

Logistics Platinum

ERPsim

Refresh Report Data

More ▾

Exit

Procurement Sourcing: Round 2 Day 09





Let's play round 2:  
**10 virtual days**

# Debriefing Round 2

- 1 How was the communication during Round 2?

---

- 2 What information was exchanged among teammates?

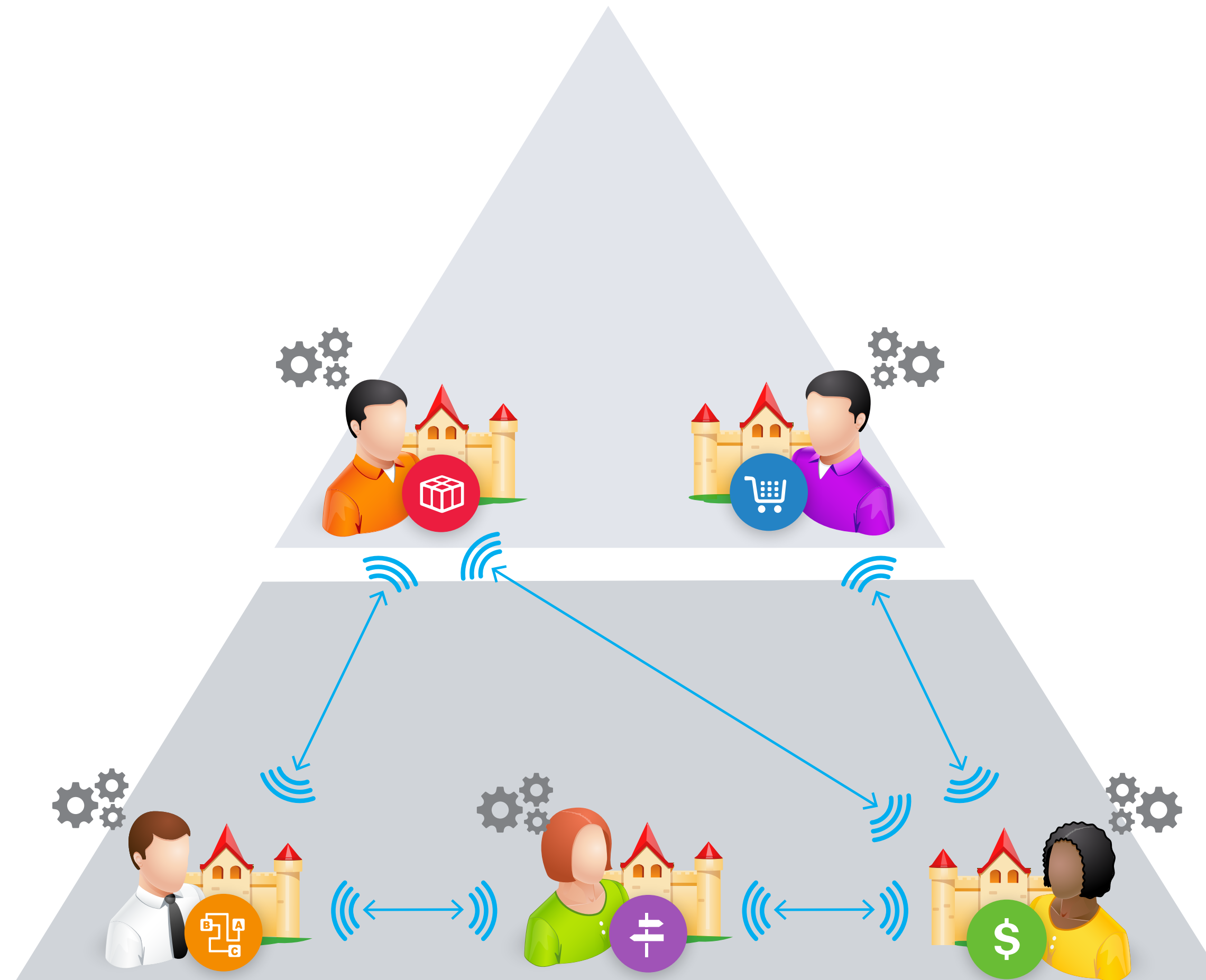
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- 3 Who took the decisions in your team?

---

- 4 Were you satisfied with the team organization in your group?

# Lack of Integration: Non-value Added Activities



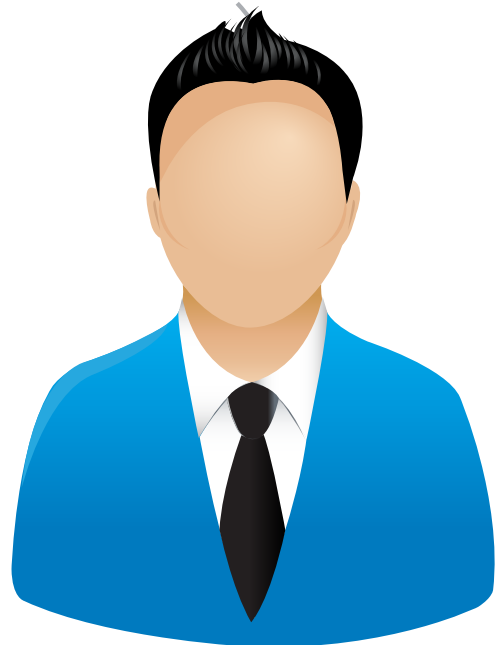


**ROUND 3**

# New Logins

Login: **\$\_1** to **\$\_5**  
Password: **ERPSIM**

---



---

Login: **\$\_1**  
Password: **ERPSIM**

---



---

Login: **\$\_2**  
Password: **ERPSIM**

---



---

Login: **\$\_3**  
Password: **ERPSIM**

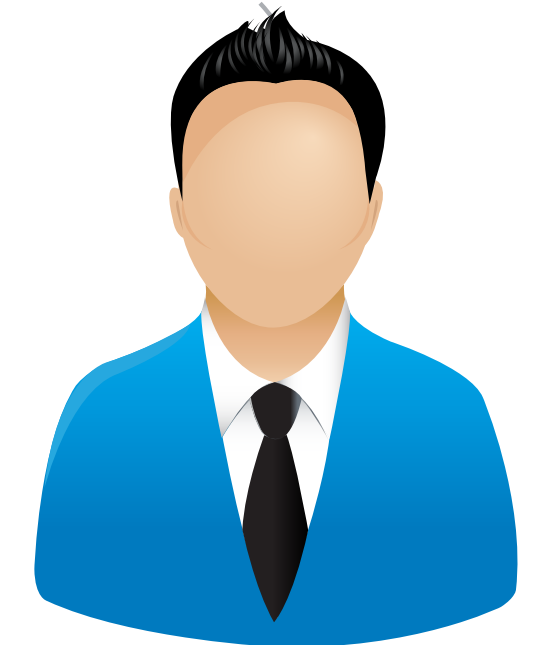
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---

Login: **\$\_4**  
Password: **ERPSIM**

---



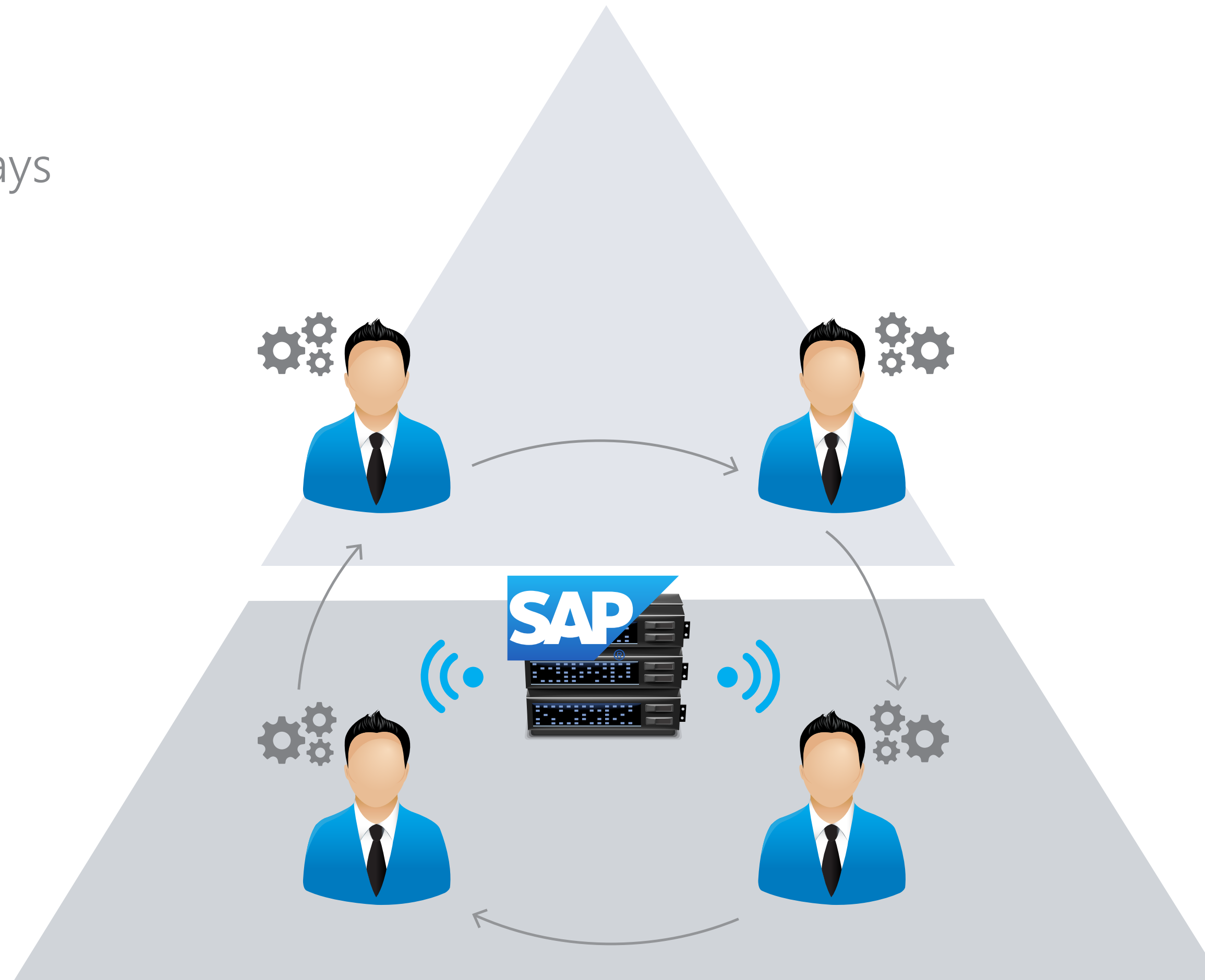
---

Login: **\$\_5**  
Password: **ERPSIM**

---

# Integration in Round 3

10 min =  = 10 days  
**ROUND 3**



# Login Information

The image shows the SAP login interface. It features a blue background with a large pink flower in the lower half. The login form is on the left, with fields for User, Password, Language, and Client. Below the form are 'Log On' and 'Change Password' buttons. The SAP logo is in the bottom left corner, and a copyright notice is in the bottom right corner of the interface.

User |

Password

Language EN - English ▼

Client 000

Log On

Change Password

SAP

Copyright © 2018 SAP SE. All rights reserved.

**User : \$\_1 to \$\_9**  
*Where \$ is your team letter*

**Password: ERPSIM**

**Client** will be provided by the instructor

# Job Aid Distributed to Participants

HEC MONTRÉAL

ERP SIMULATION GAME

Logistics Game

# Logistics

## Platinum

User: **\$\_1 to \$\_9**

Initial password: **ERPSIM**

Adapted for Fiori and for SAP GUI with Fiori Visual Theme Activated

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Last Update: June 30, 2021

OPERATIONS

REPORTS

MD61  
Create Planned  
Indep. Req.

MD01  
MRP Run

ME59N  
Create  
Purchase Orders

ZMB1B  
Stock Transfer  
Planning

VK32  
Change Price List

Independent  
Requirements

Purchase  
Requisitions

Products  
(Main Warehouse)

Products  
(Storage Locations)

ZME2N  
Purchase Order  
Tracking

ZME13  
Procurement  
Sourcing

ZMB52  
Inventory Report

ZVC2  
Summary  
Sales Report

ZVA05  
Detailed  
Sales Report

F.01  
Financial  
Statements

Planning Process

Procurement Process

Logistics Process

Sales Process

FORECAST SALES

Create Planned Indep. Req. (MD61)

1 Product group: **\$\$-T**

2 **Continue**

3 Enter forecasted quantities in the 2nd date column

4 **Save**

The quantity corresponds to the replenishment level

MAINTAIN PRICES

Change Price List (VK32)

1 Open the Prices folder and double click on **Price List**

2 Verify Distribution Channel is 16

3 **Execute**

4 Modify your prices

5 **Save**

CALCULATE REQUIREMENTS

MRP Run (MD01)

1 Click on **Enter**

2 Ignore orange warnings

Click two more times on **Enter**

3 In the pop-up window, click **Continue**

FINANCIAL STATEMENTS

Financial Statements (F.01)

1 In **Company Code**, enter your <company code>\*

GUI step Select ALV Tree Control

2 **Fiori** step In **Statement Version**, enter SIM1

GUI step **Execute**

3 **Fiori** step **Go**

ORDER MATERIALS

Create Purchase Orders (ME59N)

1 **Execute**

Purchase orders are created

If no open requisitions :  
No suitable requisitions found.

STOCK LEVELS

Inventory Report (ZMB52)

Shows the stock levels for all the products in the main warehouse and the three regional storage locations

**SALES DATA**

Summary Sales Report (ZVC2)

Shows aggregate daily sales by product

Detailed Sales Report (ZVA05)

Shows sales related info such as sales revenue by region

PLAN STOCK TRANSFER

Stock Transfer Planning (ZMB1B)

1 Select between a Push or Pull stock allocation approach

2 In **Scheduling**, enter your delivery frequency

3 Enter the amount of each product you wish to send/maintain in each region

4 **Save**

PROCUREMENT TRACKING

Purchase Order Tracking (ZME2N)

Shows the details and the status of each purchase order

Shows the dates of expected goods delivery

Procurement Sourcing (ZME13)

Shows the price of each product sold by the vendor

\*To find your company code, refer to transaction ZORG (Organizational Structure)

1/2

HEC MONTRÉAL

ERP SIMULATION GAME

Logistics Game

# Logistics

## Platinum


User: **\$\_1 to \$\_9**

Initial password: **ERPSIM**

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**\$\$-T01**

Milk

UNIT COST

**€22.95**




**\$\$-T04**

Cheese

UNIT COST

**€82.68**




**\$\$-T02**

Cream

UNIT COST

**€72.07**




**\$\$-T05**

Butter

UNIT COST

**€59.88**




**\$\$-T03**

Yoghurt

UNIT COST

**€25.85**



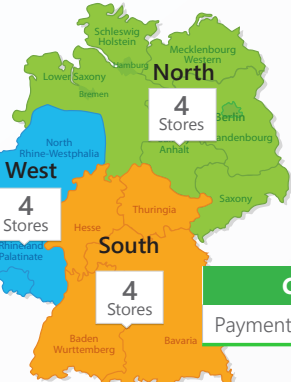
**\$\$-T06**

Ice Cream

UNIT COST

**€43.15**

German Market



**CUSTOMERS**

Payment time (days) 4

**SUPPLIER**

Payment Time 5 days

Lead Time 1-2 days

General Information

Days/Round 10

Distribution Channel DC16: Retail stores

**TRANSPORTATION FEES**

Purchasing Cost (from supplier to main warehouse) €1 000

Main Warehouse to Regional Storage Location €100

**WAREHOUSING COSTS**

Base Capacity (maximum capacity without additional fees) 4,000 units

Extra daily fee for each additional 1 000 boxes €50

Total Market Size

Approx. €12 000 per company per day

2/2

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HEC MONTRÉAL

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Commercial version  
powered by

BATON

72

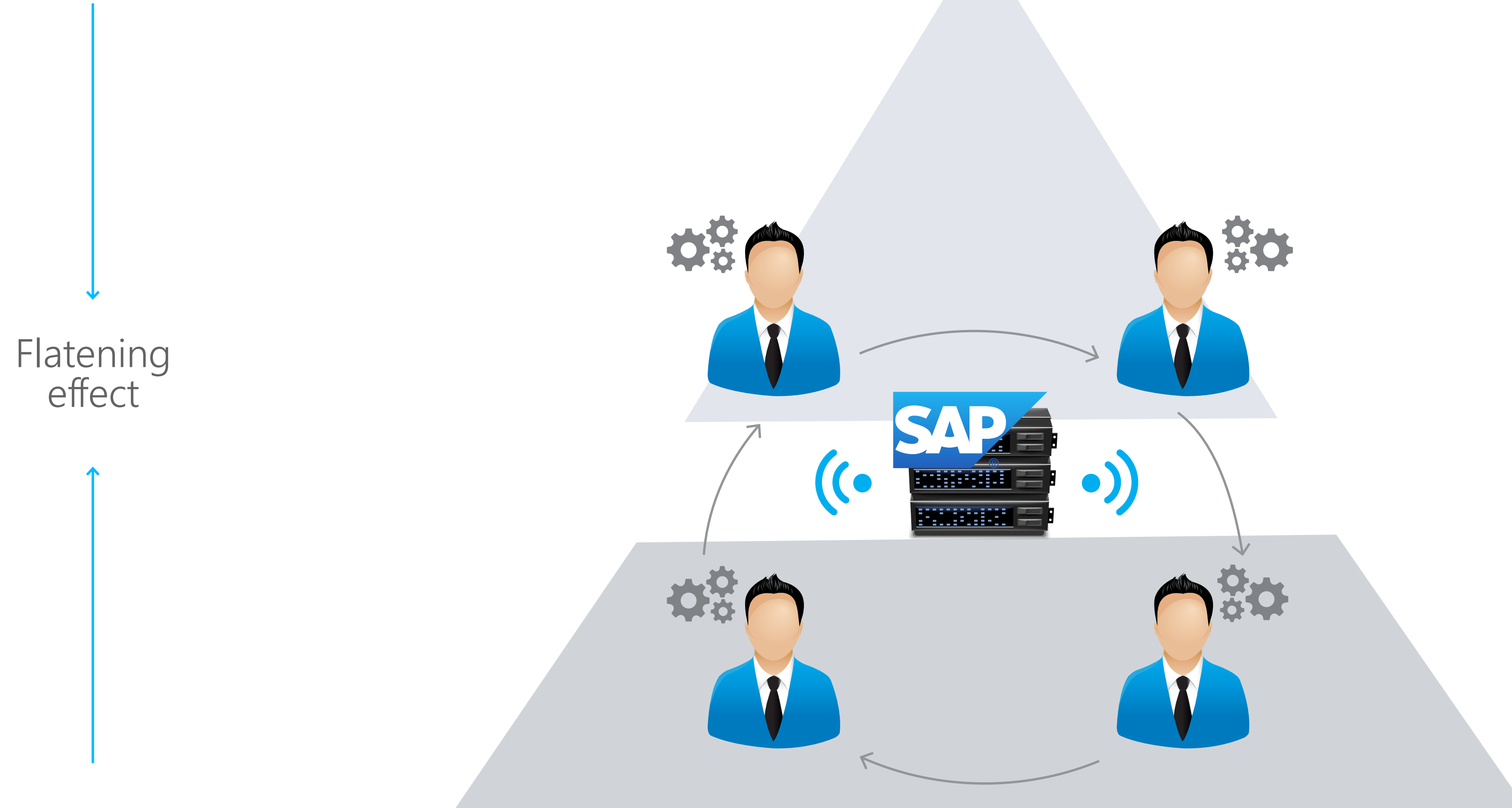


Let's play round 3:  
**10 virtual days**

# Debriefing Round 3

- 1 What are your impressions of an ERP?
- 2 Did your role and relevance within your team change from Round 2 to Round 3?
- 3 How were the decisions made?
- 4 Have you used your email to exchange information? If so, what for, and how often?
- 5 Based on your experience, what is an enterprise system?
- 6 How can an enterprise system transform an organization?

# 3 Worlds of IT



Andrew McAfee. (2006). Mastering the Three Worlds of Information Technology. Harvard Business Review, 84(11), 141-149.

# Final Debriefing

- 1 What are your impressions of an ERP?

---

- 2 Did your role and relevance within your team change from Round 2 to Round 3?

---

- 3 How were the decisions made?

---

- 4 Based on your experience, what is an enterprise system?

---

- 5 How can an enterprise system transform an organization?

# Definition of an ERP

*Enterprise systems are commercial **software packages** that enable the **integration of transaction-oriented data** and **business processes** throughout an **organization** (and perhaps eventually throughout an entire **interorganizational supply chain**).*

Markus and Tanis (2000)

# Why Should We Acquire an ERP?

## For Information:

- Quality and Accuracy
- Simplicity (one entry)
- Consistency (database)
- Speed / Real Time
- Accessibility and Stability
- Links Between Documents  
(from purchase order to payment)
- Analysis Tools and Monitoring  
Business Performance

## Additional Benefits:

- Process Standardization
- Support from the Publisher
- Easy Media Access
- Evolution of Products  
(new applications and  
new features)

# ERP Simulation Game



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