

# ERPsim

## Digital Transformation Curriculum

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SAP Learning Bootcamp  
Online | January 7, 2025

**ERPsimLab**  
**HEC MONTRÉAL**

Serious games to learn enterprise  
systems and business analytics

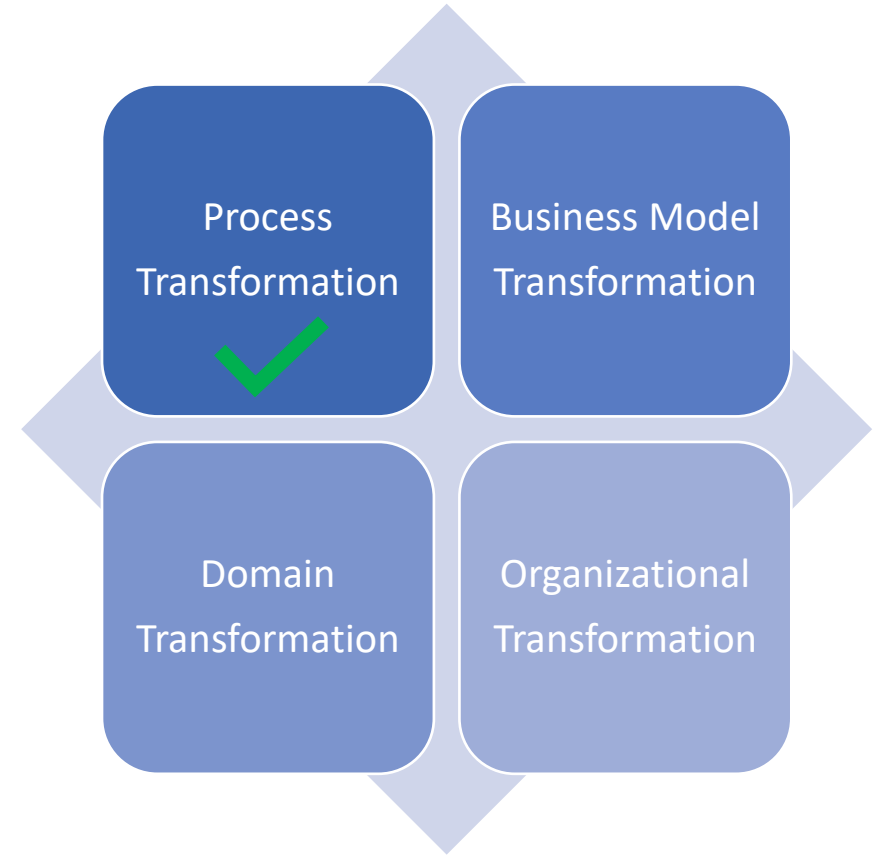
# Agenda

1. Introduction
2. Game Design
3. Questions

# Types of Digital Transformation

## Process Transformation:

- Evaluating and improving processes
- Rethinking current strategies
- Change management due to introduction of new technology



# ERPsim Digital Transformation Experience

- Target Audience:
  - Non-IT executives such as MBA or Executive MBA students
  - Graduate programs in MIS
  - Courses with focus on digital transformation
  - Courses with focus on change management
- In-person, remote, or hybrid
- Around 8 hours of class time
- One full day or in multiple sessions

# Curriculum Objectives

Help non-IT executives learn about the leadership required for a successful digital transformation:

1. Simulate and experience a Digital Transformation journey
2. Not to learn SAP or ERP systems
3. Have a **conversation** with students and create **discussion**
4. Understand that **technology is necessary but not sufficient** to guarantee the success of digital transformation initiatives and that **effective change management** is equally important
5. Learn to **critically reflect on prior experiences** with digital transformation initiatives and on why these initiatives did or did not **deliver value** to the organization

# Teaching Notes

- Outlines the **most comprehensive** game design:
  - Flexible and **customizable**
  - Presents **alternative endings**
- Provides **discussion and debrief** points for every round
- Provides detailed **prep steps** for students and instructors:  
**before/during/after** each round

<https://erpsim.hec.ca/en/node/755>

The ERPsim Digital Transformation Game:  
**Teaching Notes**



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**WITH THE COLLABORATION OF**  
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Felix Gaudet-Lafontaine, M.Sc.  
Karl-David Boutin, M.Sc.



# Game Design

# Logistics (Dairy) Company

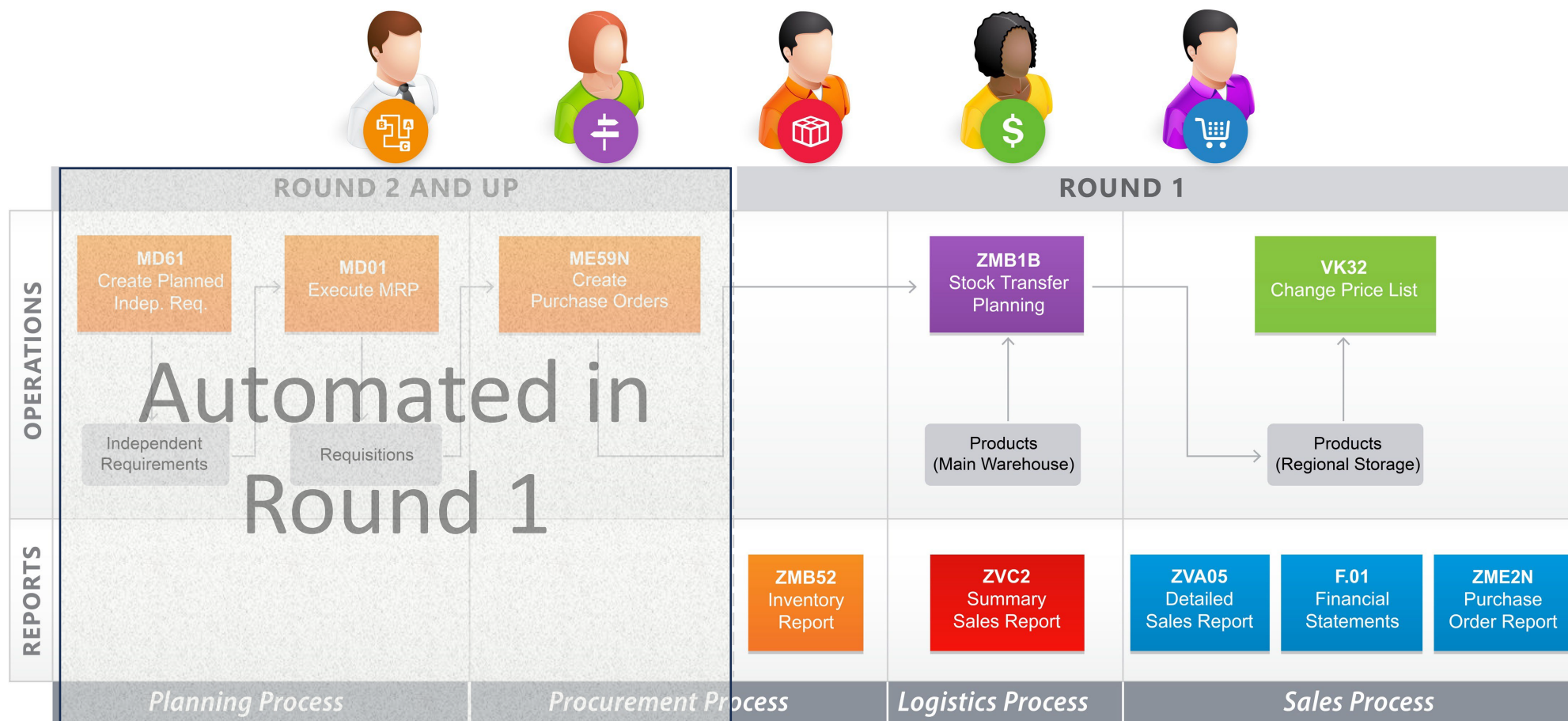




# Game's Scenario: Logistics Platinum

- Each round has 10 virtual days
- Game starts with initial inventory for all 6 products in the main WH
- Auto replenishment of inventory in round 1
- Vendor's lead time of 1-2 virtual days
- Warehousing capacity of 4000 units overall (MW + 3 regions)
- PO cost of 1000 euros (flat cost) per order
- Transport cost of 100 euros (flat cost) per regional transfer

# The Business Processes

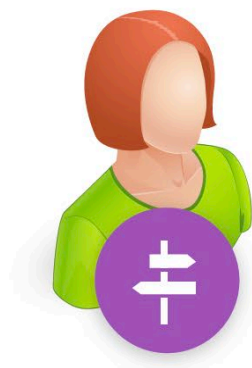


# 5-Player Game



## PLANNING MANAGER

In charge of creating the forecast and procurement processes and tracking the purchases.



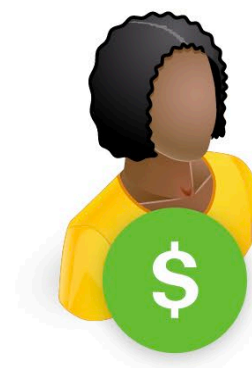
## LOGISTIC MANAGER

In charge of the transfer strategy (planning mode and scheduling) from main warehouse to regional warehouses.



## STOCK MANAGER

In charge of monitoring the inventory report in the main warehouse and regional warehouses.



## PRICING MANAGER

In charge of maintaining/ changing prices for distribution channel 16 for all 6 products



## SALES VICE-PRESIDENT

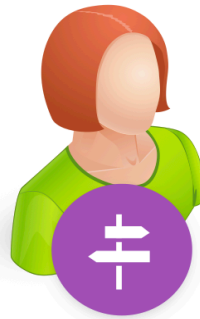
In charge of monitoring summary and detailed sales reports as well as the financial statements.

# SAP Logon and Passwords



**PLANNING  
MANAGER**

Login: **\$\_planning**  
Password: **ERPSIM**



**LOGISTICS  
MANAGER**

Login: **\$\_transfer**  
Password: **ERPSIM**



**STOCK  
MANAGER**

Login: **\$\_stock**  
Password: **ERPSIM**



**PRICING  
MANAGER**

Login: **\$\_pricing**  
Password: **ERPSIM**



**SALES  
VICE-PRESIDENT**

Login: **\$\_sales**  
Password: **ERPSIM**

*\$\_ is your team letter*

# 4-Player Game



## PLANNING MANAGER

In charge of creating the forecast and procurement processes and tracking the purchases.



## LOGISTIC MANAGER

In charge of the transfer strategy (planning mode and scheduling) from main warehouse to regional warehouses.



## PRICING MANAGER

In charge of maintaining/ changing prices for distribution channel 16 for all 6 products



## REPORTS MANAGER

In charge of monitoring summary and detailed sales reports, the financial statements as well as the inventory report

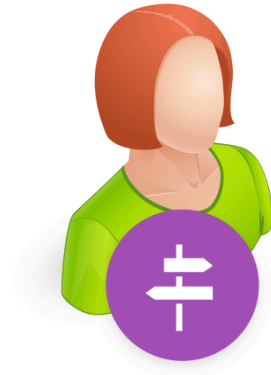
# SAP Logon and Passwords



**PLANNING  
MANAGER**

Login: **\$\_planning**

Password: **ERPSIM**



**LOGISTICS  
MANAGER**

Login: **\$\_transfer**

Password: **ERPSIM**



**PRICING  
MANAGER**

Login: **\$\_pricing**

Password: **ERPSIM**



**REPORTS  
MANAGER**

Login: **\$\_reports**

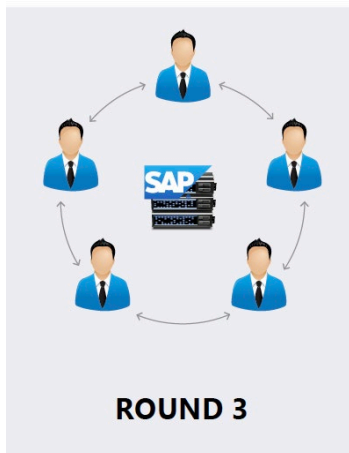
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# The Game Rounds



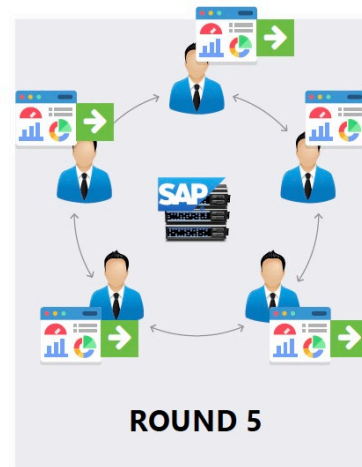
Functional Silos



Integration



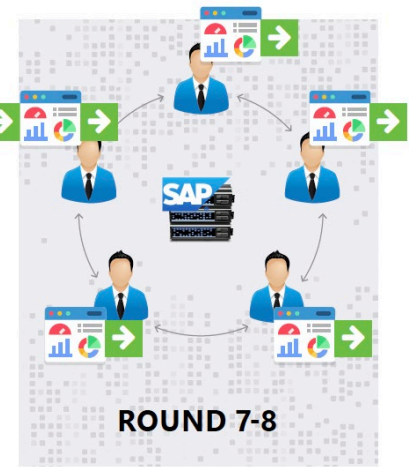
Lagging Analytics



Predictive Analytics



Multi-source Analytics



AI-based Decision Making

# Example: 1-Day Schedule

<b>8h00 - 9h00</b>	Technical help before game	<b>12h45 - 13h00</b>	Plenary session
<b>9h00 - 9h30</b>	Round 1 Plenary session	<b>13h00 - 13h15</b>	Preparation for round 4
<b>9h30 - 9h45</b>	Preparation for Round 1	<b>13h15 - 13h30</b>	Round 4 Debriefing
<b>9h45 - 10h00</b>	Round 1	<b>13h30 - 13h45</b>	Preparation for Round 5
<b>10h00 - 10h15</b>	Round 1 Debriefing	<b>13h45 - 14h00</b>	Round 5 Debriefing
<b>10h15 - 10h30</b>	Preparation for Round 2	<b>14h00 - 14h15</b>	Break (15 minutes)
<b>10h30 - 10h45</b>	BREAK (15 minutes)	<b>14h15 - 14h30</b>	Preparation Round 6+
<b>10h45 - 11h00</b>	Round 2	<b>14h30 - 14h45</b>	Round 6 to 8
<b>11h00 - 11h15</b>	Round 2 Debriefing	<b>14h45 - 15h00</b>	Final
<b>11h15 - 11h30</b>	Preparation for Round 3		debriefing
<b>11h30 - 11h45</b>	Round 3		HARD FINAL DEAD
<b>11h45 - 12h00</b>	Round 3 Debriefing		
<b>12h00 - 12h15</b>	Lunch Break (45 minutes)		
<b>12h15 - 12h30</b>			
<b>12h30 - 12h45</b>			



# Example: 4-Day Schedule

## Day 1

Preparation (1 h)

Round 1 (1h)

Round 2 (1h)

## Day 2

Round 3 (1h30)

Round 4 (1h30)

## Day 3

Round 5 (1h30)

Round 6 (1h30)

## Day 4

Round 7  
(1h30)

Round 8  
(1h30)

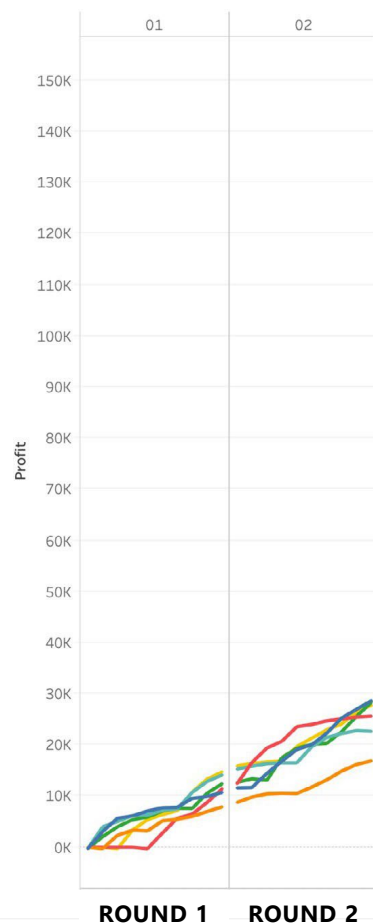
# Results from an MBA Game

## Profit Over Time

Results from simulation game with HEC Montréal MBA students Spring 2020

### Company

- AA
- BB
- CC
- DD
- EE
- FF



Functional silos

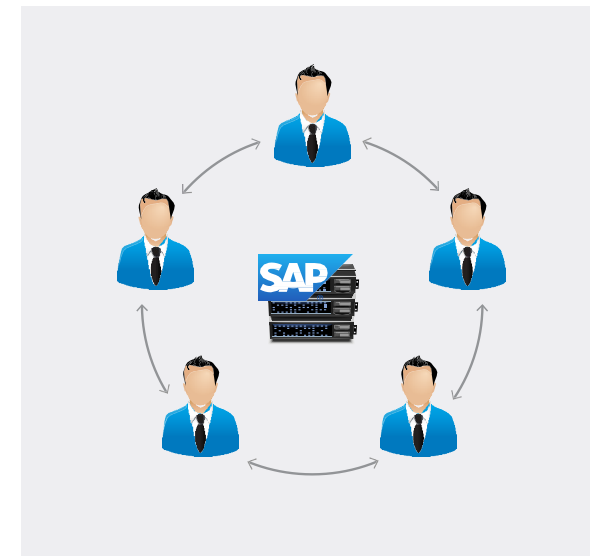
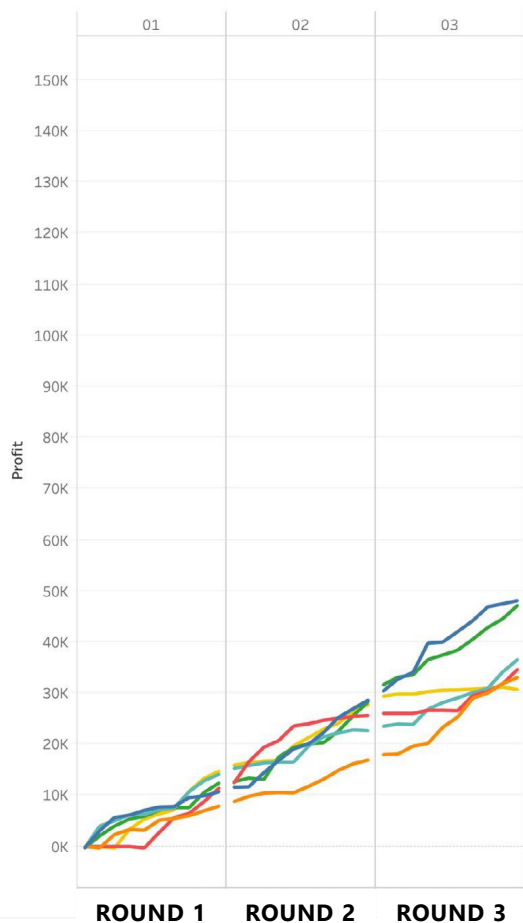
# Results from an MBA Game

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## Integration

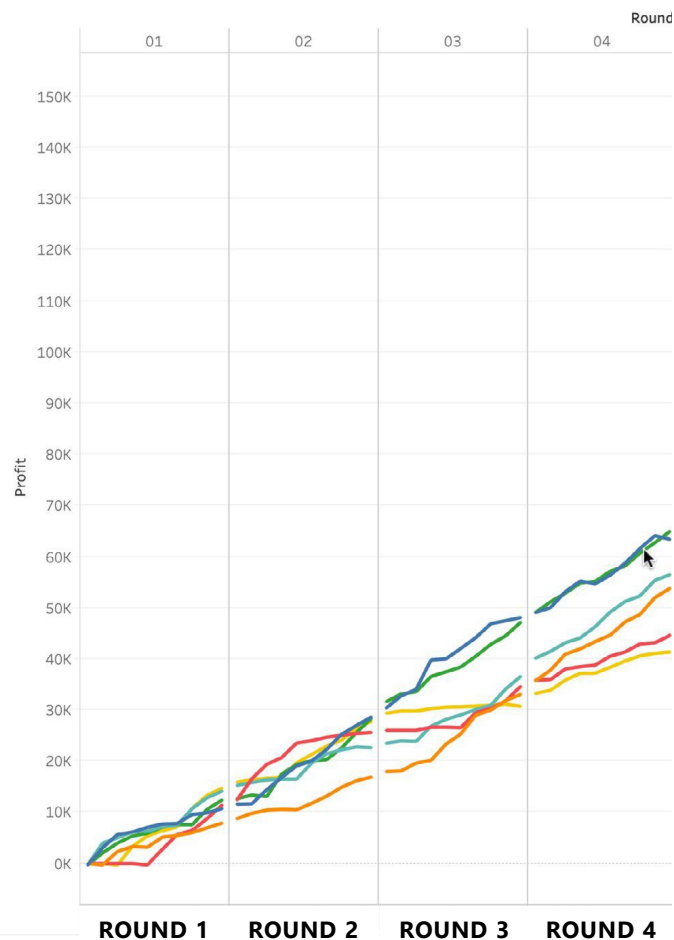
# Results from an MBA Game

## Profit Over Time

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### Company

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## Lagging Analytics

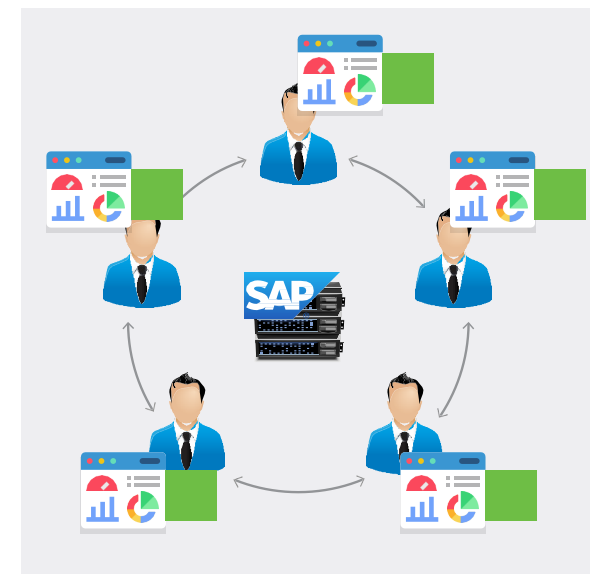
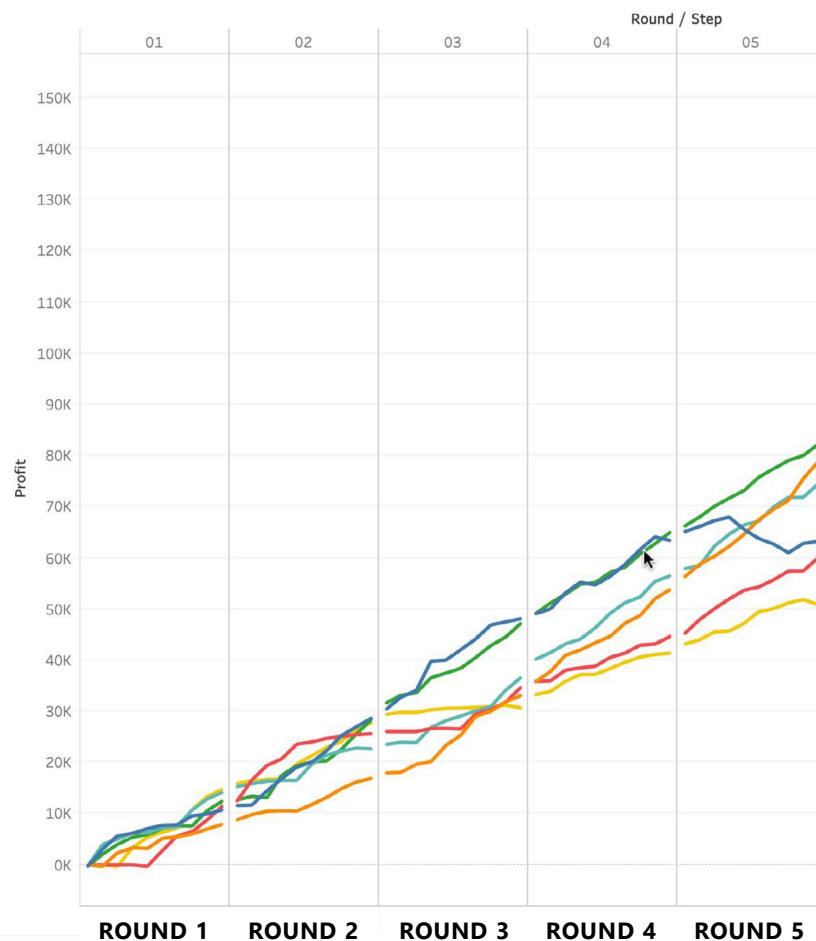
# Results from an MBA Game

## Profit Over Time

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### Company

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## Predictive Analytics

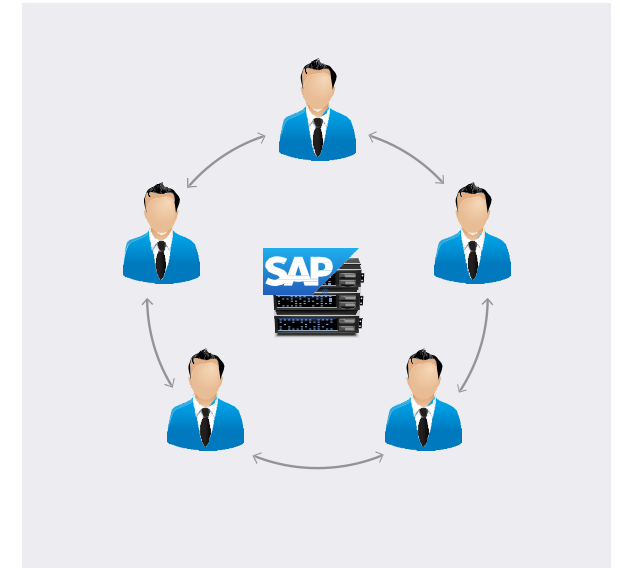
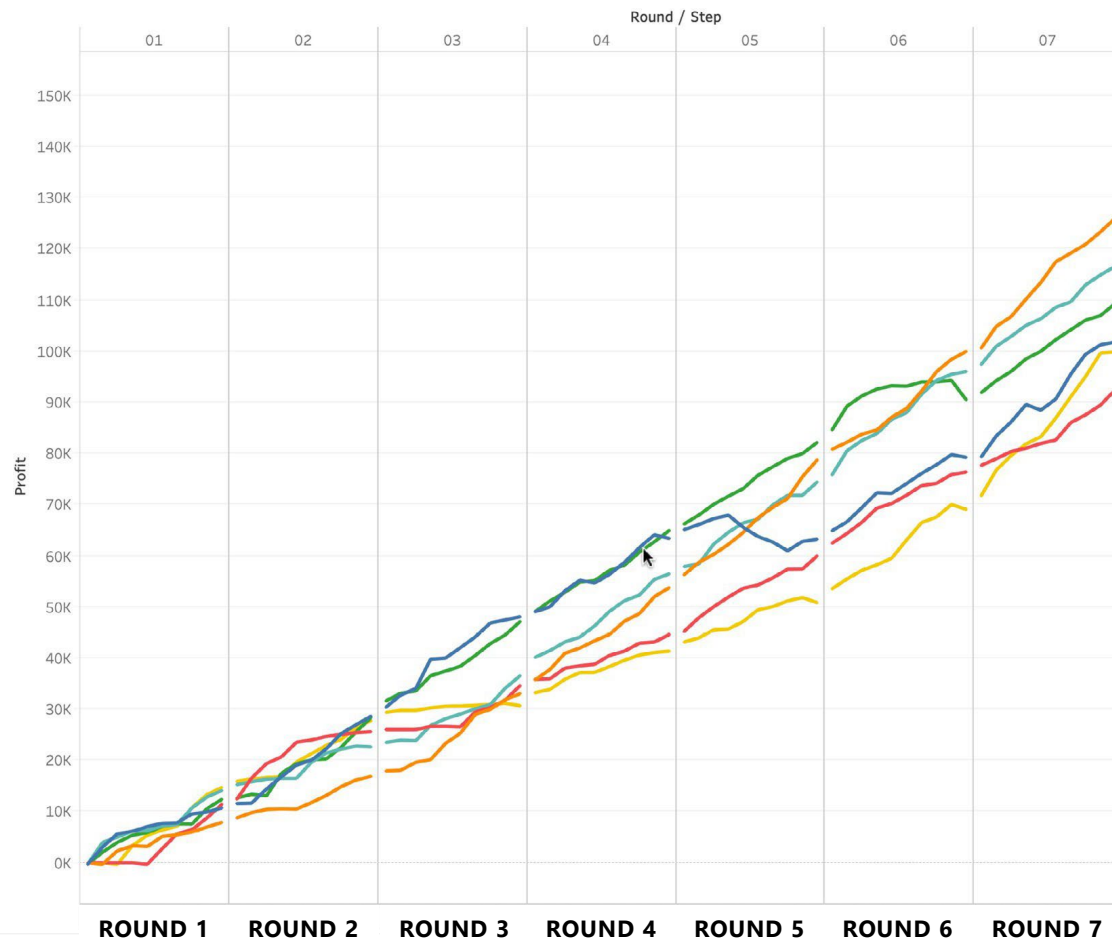
# Results from an MBA Game

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### Company

- AA
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- FF



## Multisource Analytics

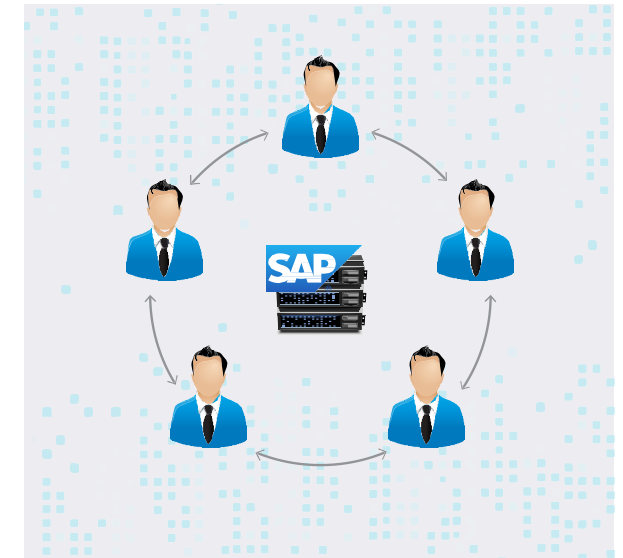
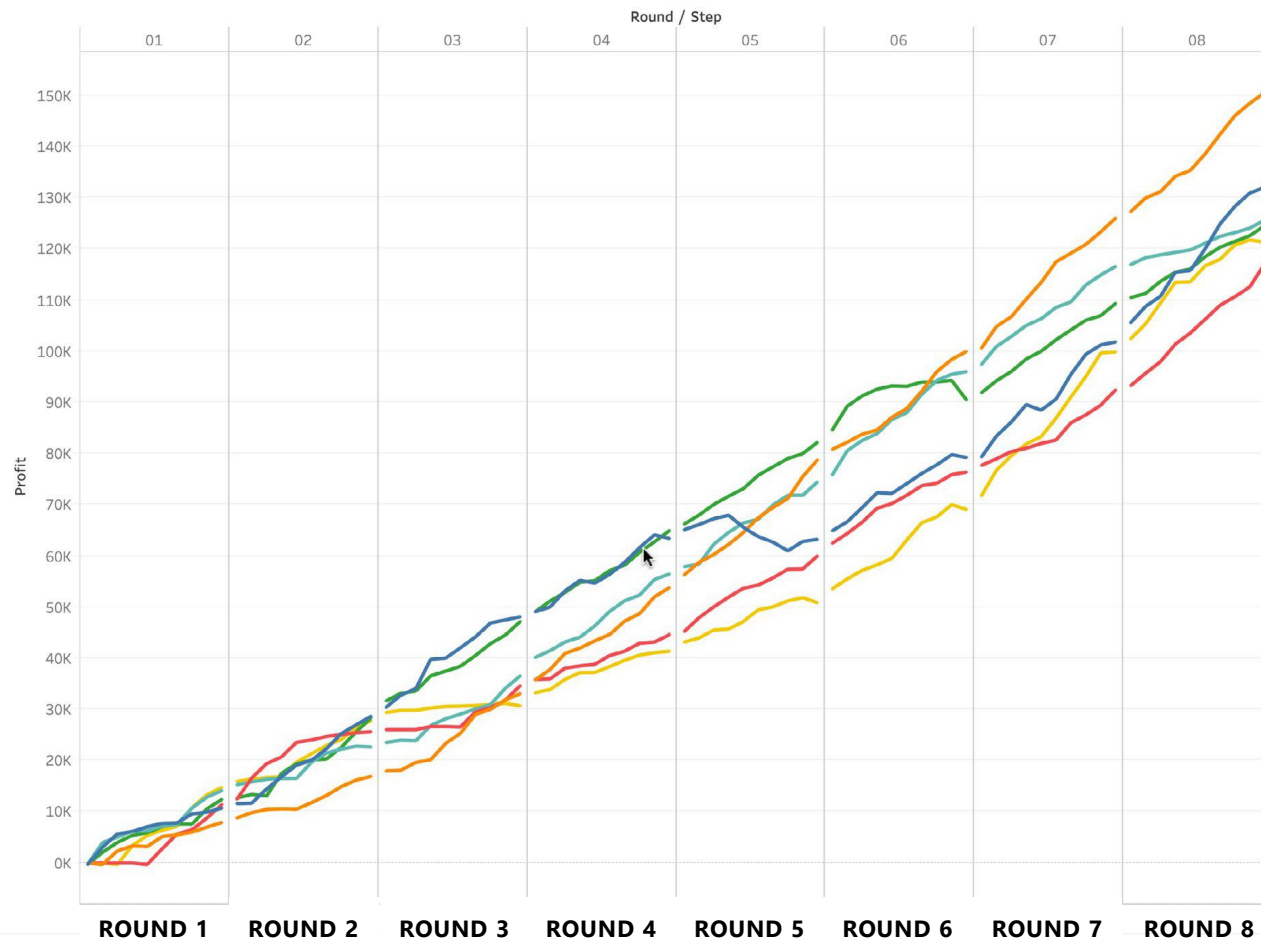
# Results from an MBA Game

## Profit Over Time

Results from simulation game with HEC Montréal MBA students Spring 2020

### Company

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- CC
- DD
- EE
- FF



## AI-Based Decision Making

# FAQ

- Can I play this game asynchronously?
- What if my MBA students have SAP experience? Does this give them advantage?
- Can I customize the game? play less rounds? Or skip some of the technologies (e.g., AI tool)?
- I am new to ERPsim. Can I use this curriculum in my class?
- Can we use role-based log-ins in other games (e.g., Manufacturing, Maple)?
- Can we teach the same curriculum with another scenario?
- How do we assess students?



# Questions

# Thank You!

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