ERPsim

10th ERPsim User Group Meeting

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10th ERPsim User Group Meeting
Online | June 7, 2021

ERPsimLab | HEC MONTRÉAL
Serious games to learn enterprise systems and business analytics

Pierre-Majorique Léger, Ph.D.

HEC MONTRÉAL

NSERC-Prompt Industrial Research Chair in User Experience

Director ERPsim Lab
Co-director Tech3Lab

pml@hec.ca

GRADUATE STUDIES

POLYTECHNIQUE MONTRÉAL
WORLD-CLASS ENGINEERING

POST-DOCTORATE

HEC MONTRÉAL

NEW YORK UNIVERSITY NYU STERN LEONARD N. STERN SCHOOL OF BUSINESS

LABORATORIES

UX HEC MONTRÉAL — Chaire de recherche industrielle CRSNG-Prompt en expérience utilisateur

ERPsimLab HEC MONTRÉAL

tech3lab

GUEST PROFESSOR

Tuck School of Business at Dartmouth

The University of Iowa

FINANCIAL SUPPORT

Conseil de recherches en sciences humaines du Canada
Social Sciences and Humanities Research Council of Canada
Canada

INNOVATION.CA
CANADA FOUNDATION FOR INNOVATION | FONDATION CANADIENNE POUR L'INNOVATION

CRSNG NSERC

Enseignement supérieur, Recherche, Science et Technologie
Québec

Fonds de recherche Société et culture
Québec

IRSC CIHR
Instituts de recherche en santé du Canada | Canadian Institutes of Health Research

IVADO
INSTITUT DE VALORISATION DES DONNÉES

ResearchGate
SCIENTIFIC NETWORK

https://www.researchgate.net/profile/Pierre-Majorique_Leger

UX HEC MONTRÉAL | tech3lab | HEC MONTRÉAL

The ERPsim Team

Pierre-Majorique Léger, Ph.D.
Director, Principal Inventor

Gilbert Babin, Ph.D.
Co-Inventor

Jacques Robert, Ph.D.
Co-Inventor

Jean-François Michon, M.Sc.
Administrative / R&D Director

Felix G. Lafontaine, M.Sc.
Senior Business Analyst

Forough Karimi-Alaghehband, Ph.D.
Pedagogical Development Manager

Karl-David Boutin, M.Sc.
IT Project Manager

Sergio De La Cruz, M.Sc., MBA
Business Development Manager

Undergraduate and Graduate students in support and development roles:

- Burak Öz
- Catherine Ip-Can
- David Aguirre-Monroy
- Joel Chrispin
- Mariko Dupuis
- Pierre-Olivier Brière
- Rosetta Chang

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Game-based Learning for ERP

ACADEMIC

16+ years in use
2 000+ faculty trained

In 2020, more than
6 000+ simulations
were played by
45 000+ students
across
280+ universities
from around the world

COMMERCIAL

Many large organizations, such as Boeing, Coca-Cola, 3M, Kraft, Caterpillar, Pfizer and SAP, are using ERPsim to train their end-users on ERP systems.

BÂTON

RESEARCH

Several researchers have started using ERPsim to run experimental protocol in IS.

Visit
http://erpsim.hec.ca/research

WINNER OF THE

2013 Prix de l'innovation pédagogique Cidegef/FNEGE

2007 Majdi Najm Award

2006 HEC Montréal Award for teaching excellence for an assistant professor

2005 HEC Montréal Award for the use of technology in teaching

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Keynote Speakers

Dr. Karina Montilla Edmonds

VP, Global Lead for Academies and University Alliances, SAP SE

Dr. Katharina Schäfer

Global Head of University Alliances, SAP SE

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What is ERPsim?

ERPsim is like a flight simulator experience where you fly in a virtual sky, but you pilot a real plane!

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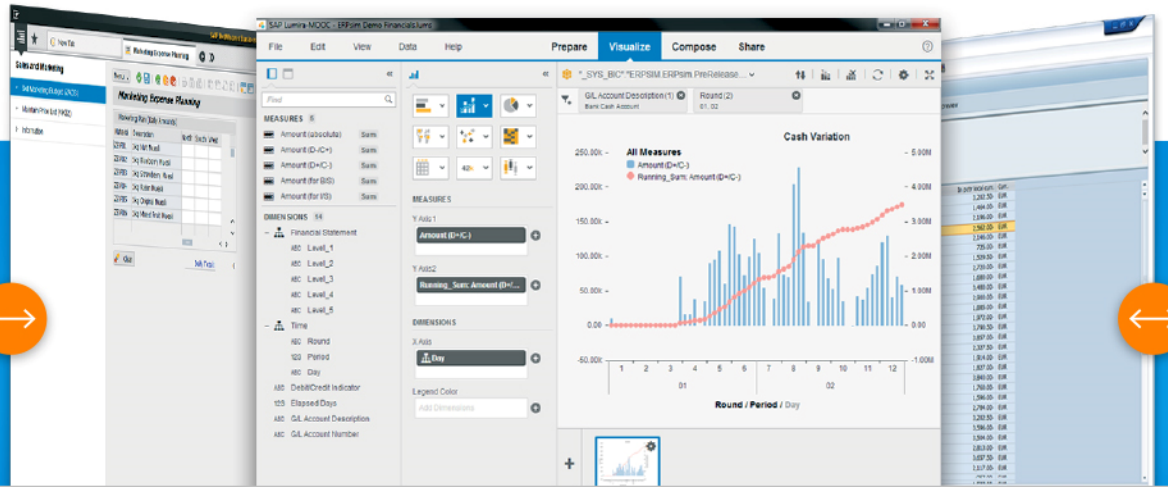
What ERPsim Does

ERPsim



Simulator

1. Automation of administrative tasks
2. Simulation of a market
3. Simulation of the passing of time

ERP System

SAP

Participants

1. Business decisions
2. Business analytics

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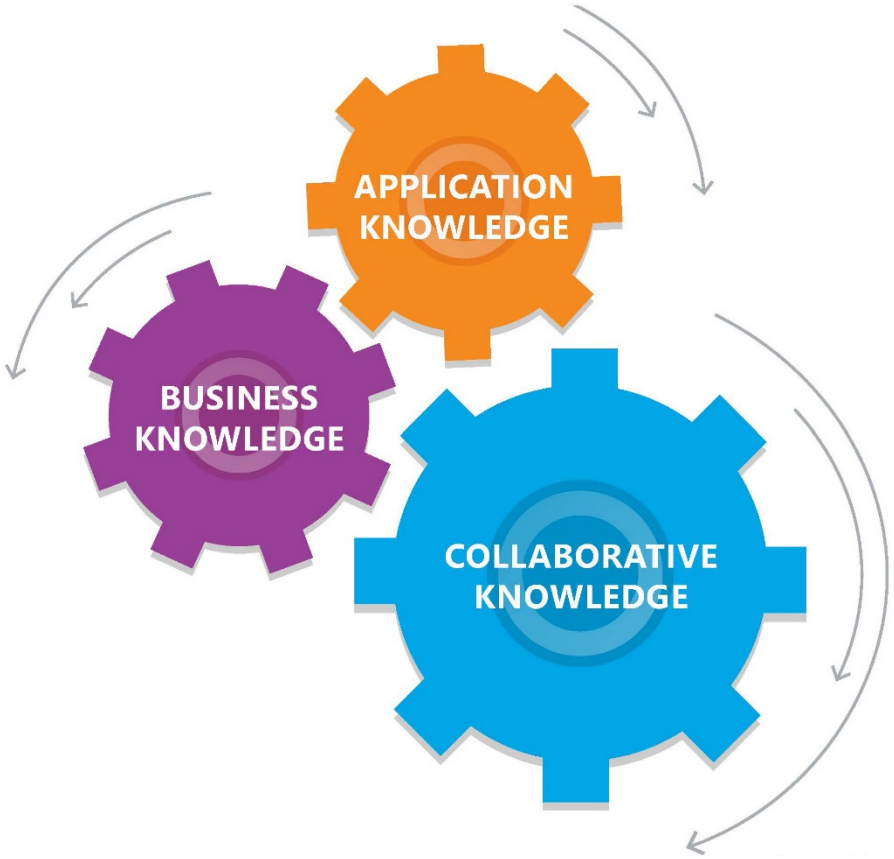
Moving Toward an IT Competency Approach

From a standard approach…

… to a competency approach



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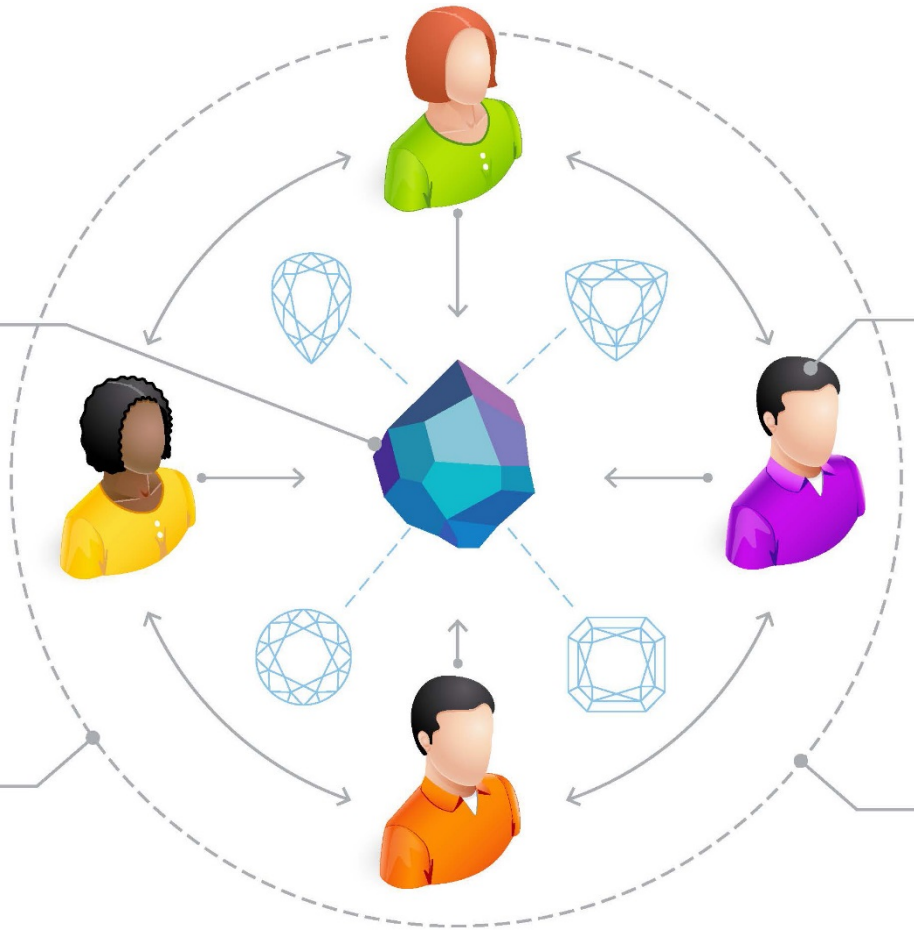
Active Learning of ERP Related Concepts

Problem Based Learning Approach



AUTHENTICITY
Realistic situations

STUDENT CENTERED APPROACH

TEACHER
acts as facilitator or tutor

SMALL GROUP SETTING

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Using ERPsim, students learn

- How to manage a company in a competitive environment
- How to use IT and ERP system to increase their company's performance
- How does SAP and/or ERP systems work
- How to perform and excel in a team
- How to use analytics to stay ahead of competition
- How various third-party business-intelligence software works

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Using ERPsim, you get

- Increased motivation amongst students to learn concepts at play (ERP, business management, and more!)
- Better engagement in the form of participation and discussions
- Higher satisfaction and changed attitude towards the topic
- Better feedback from students

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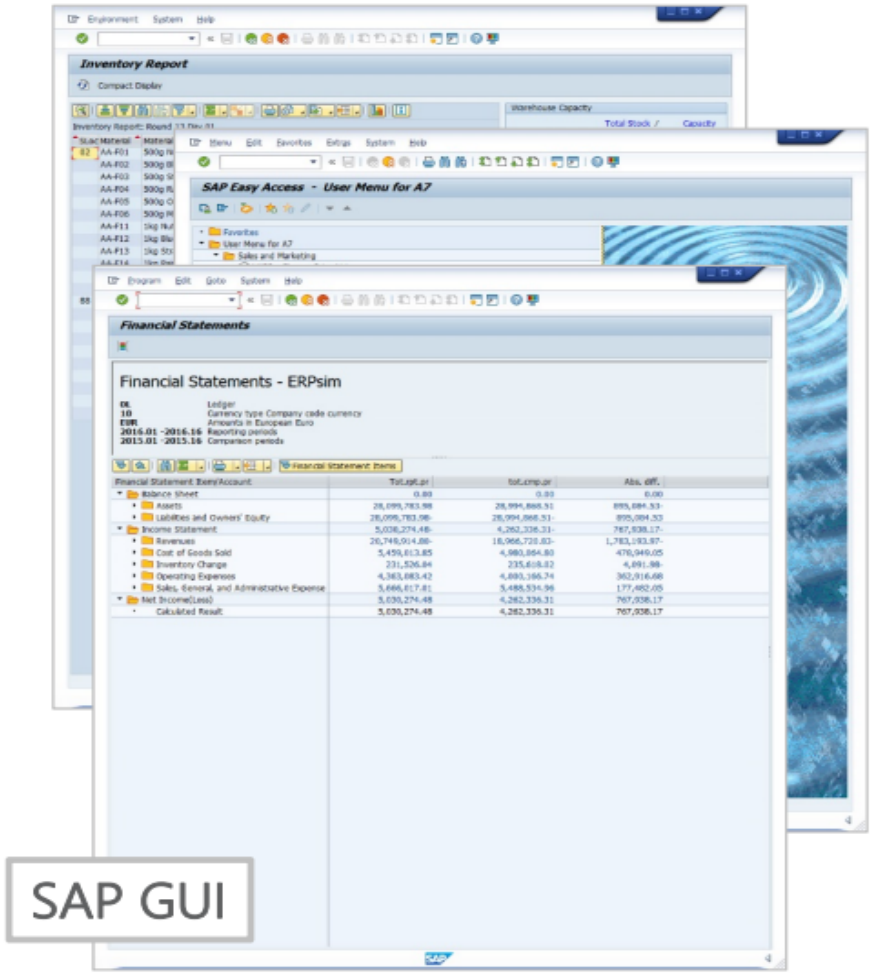
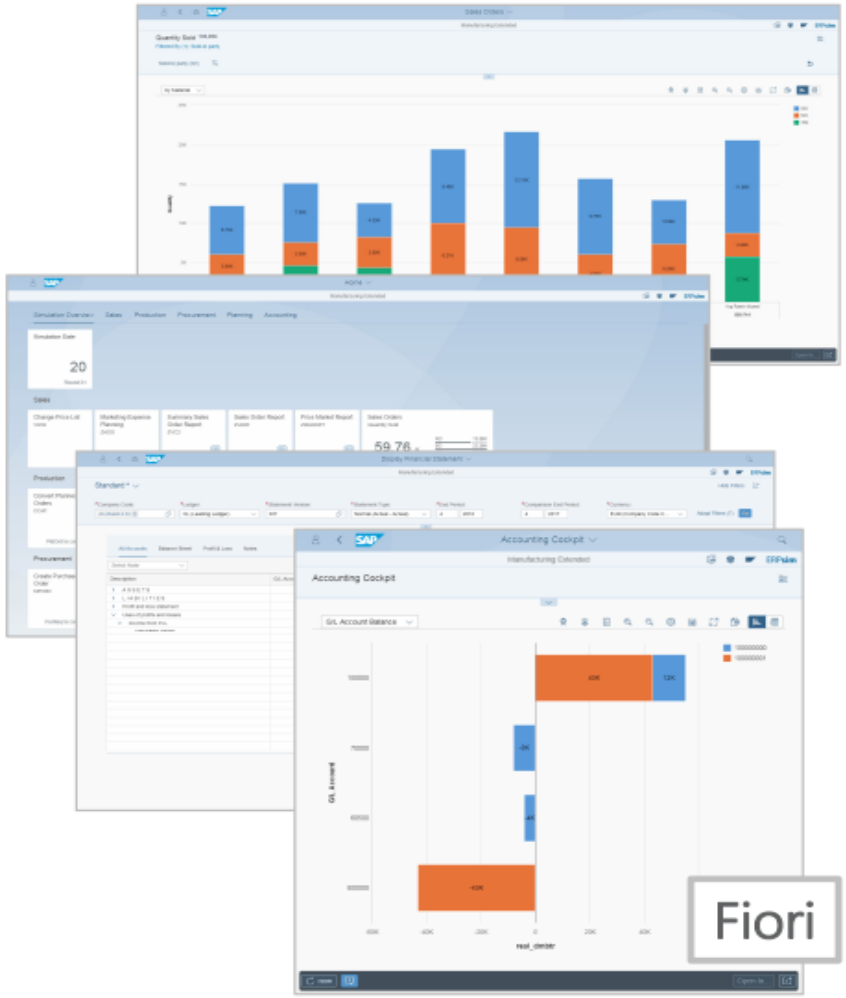
Game Environment





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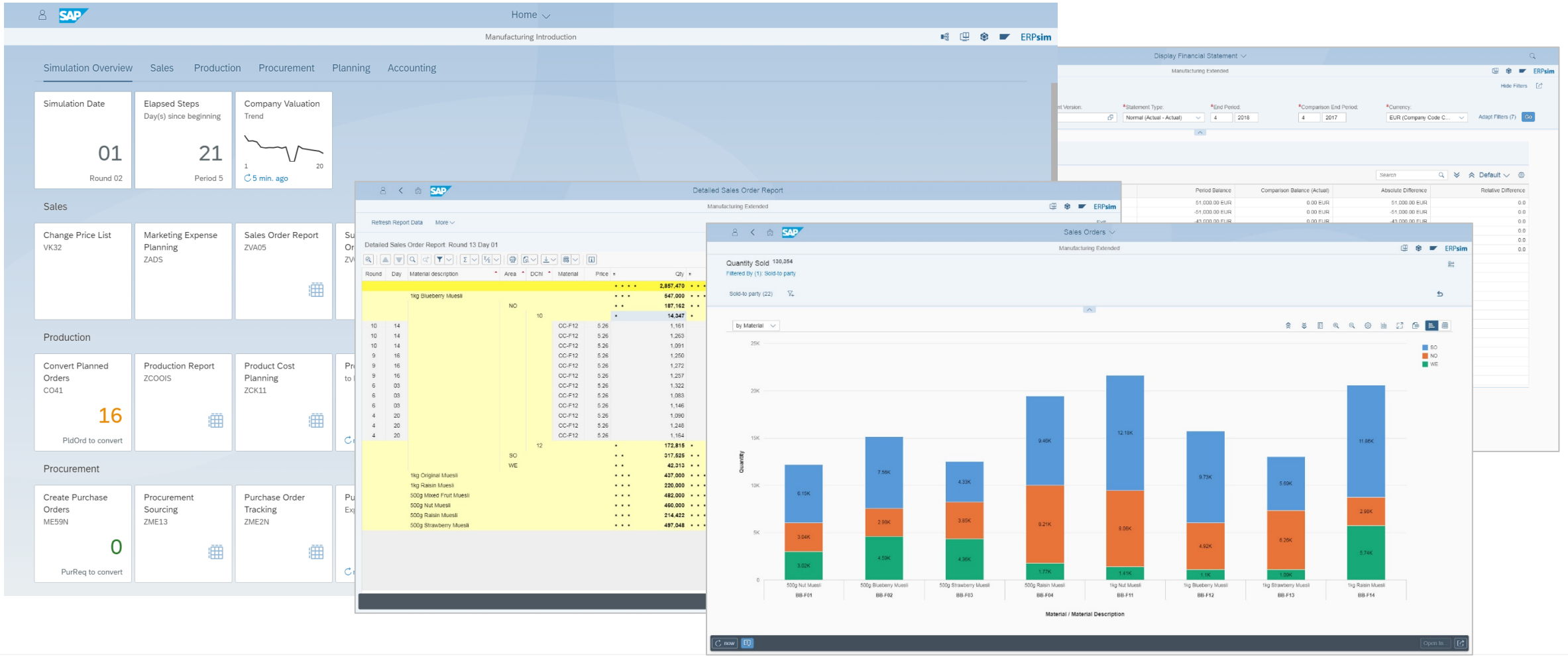
ERPsim for S/4HANA 1809



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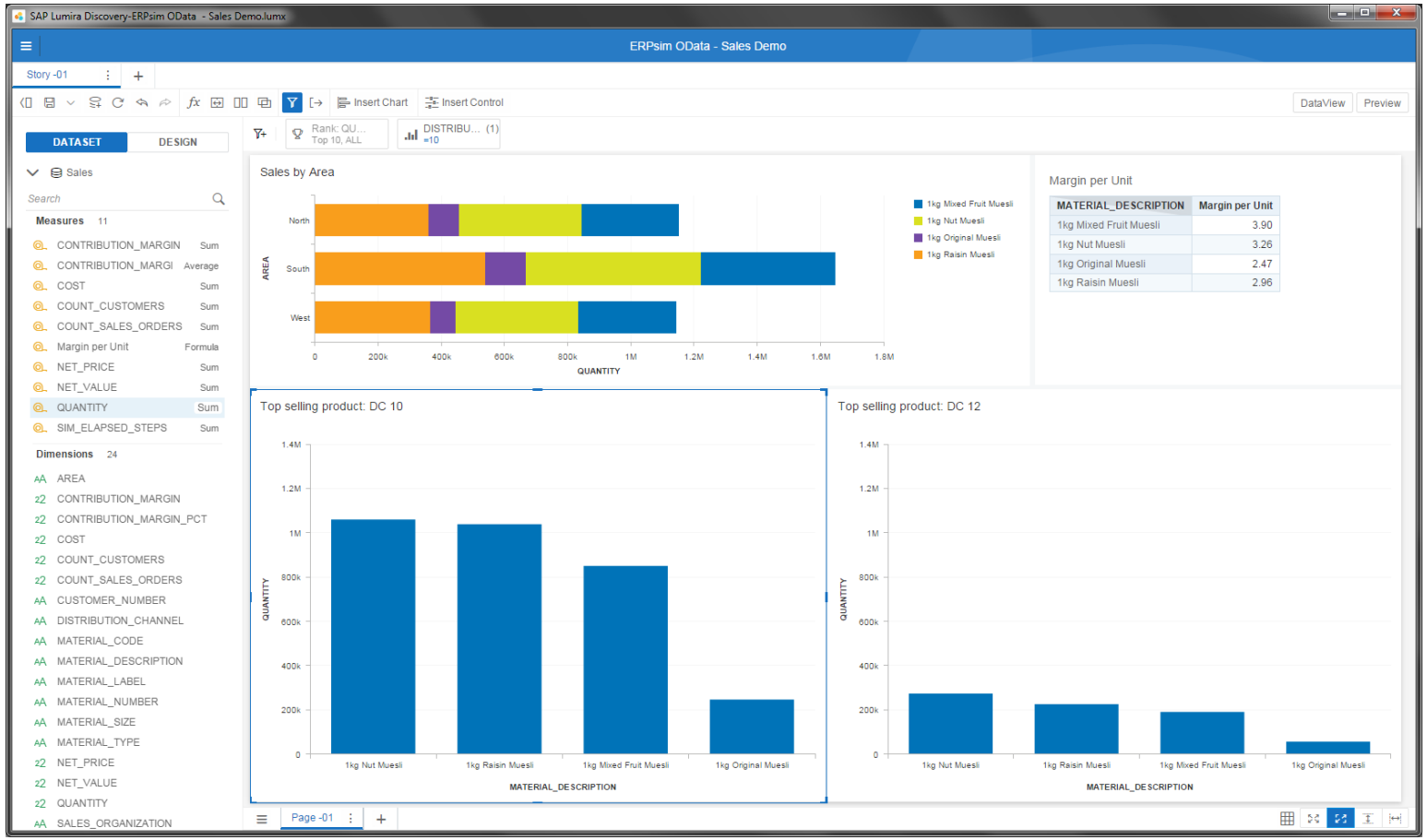
Support for self-service BI tools



Dynamic Environment
Relevant Data

OData Compatible with BI tools

SAP® Analytics Cloud

SAP Lumira

Excel

+ableau

Power BI

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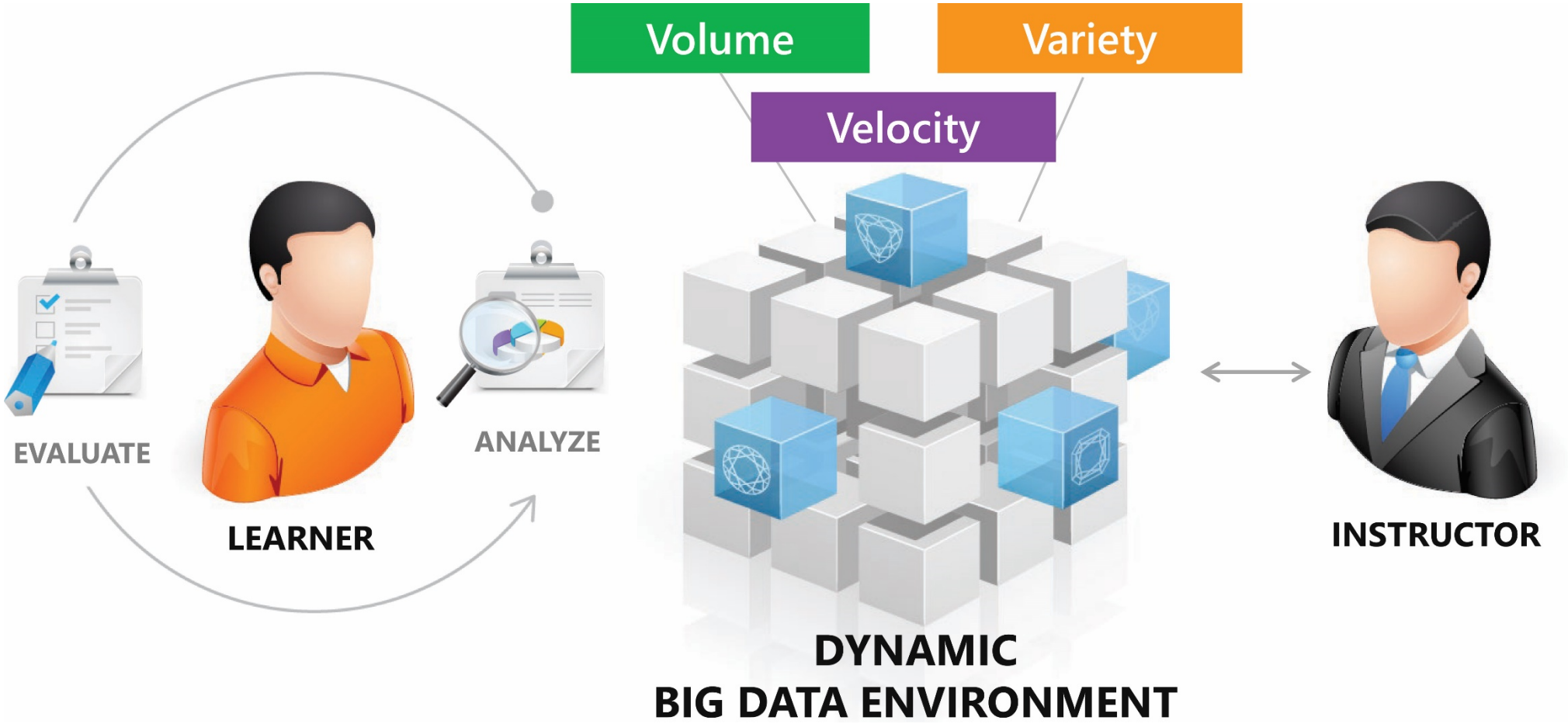
Analytics in a Dynamic Environment



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A Complete Solution

Simulator

Four distinct scenarios, with a focus on operational excellence and business intelligence, that allow for use at all university levels.

Instructional Assets

Ensures that students have a quick start and minimizes the preparation time required by the professor.

Support

We accompany you by providing technical and pedagogical support for a seamless journey!

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Where to use ERPsim?

Target Audience

- Graduate program: EMBA, MBA, MSc, MAIS, MIS
- Undergraduate programs: BBA, BSCM, BID, BAcc, BCom
- Entrepreneurship programs
- Students preparing for TS410 Certification

Courses

- Management Information Systems
- Supply Chain Management
- Accounting and Finance
- ERP Integration and Configuration
- Business Analytics
- Entrepreneurship Management

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Multiple Scenarios Available

HEC MONTRÉAL ERP SIMULATION GAME *Manufacturing Game* powered by ERPsim

MANUFACTURING

INTRODUCTION | ADVANCED | EXTENDED

HEC MONTRÉAL ERP SIMULATION GAME *Logistics Game* powered by ERPsim

LOGISTICS

INTRODUCTION | PLATINUM | EXTENDED

HEC MONTRÉAL ERP SIMULATION GAME *Retail Game* powered by ERPsim

RETAIL

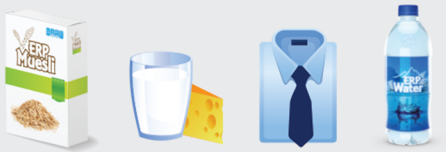
INTRODUCTION | EXTENDED

HEC MONTRÉAL ERP SIMULATION GAME *Distribution Game* powered by ERPsim

DISTRIBUTION

STANDARD

Game Features



Real-time business decisions	✓	✓	✓	✓
Adaptable difficulty scenarios	✓	✓	✓	
Operational excellence	✓	✓		✓
Business analytics and data visualisation	✓	✓	✓	
SAP Fiori UI	✓	✓	✓	✓
ERP configuration & master data	✓			

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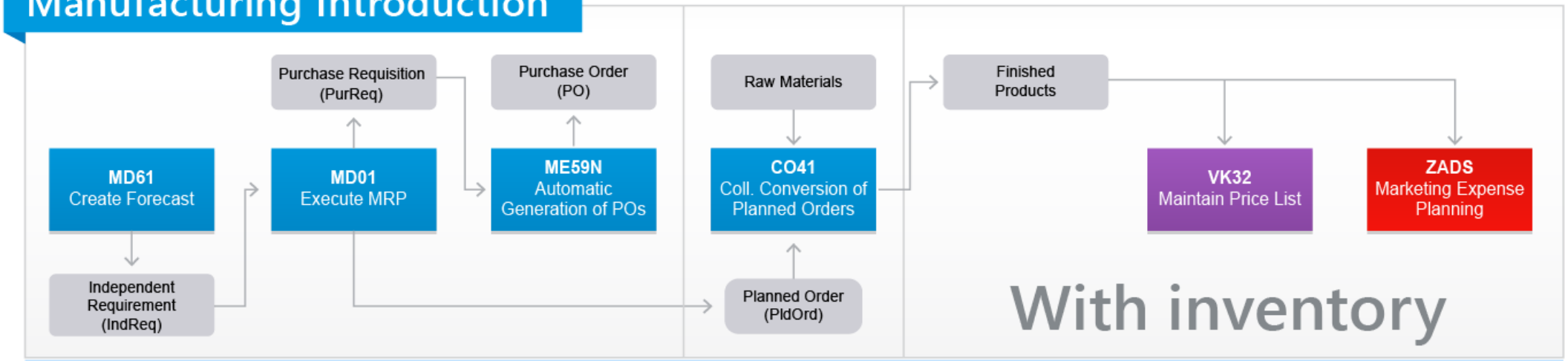
Manufacturing Introduction and Extended

HEC MONTRÉAL ERP SIMULATION GAME
Manufacturing Game
powered by ERPsim

Manufacturing Introduction

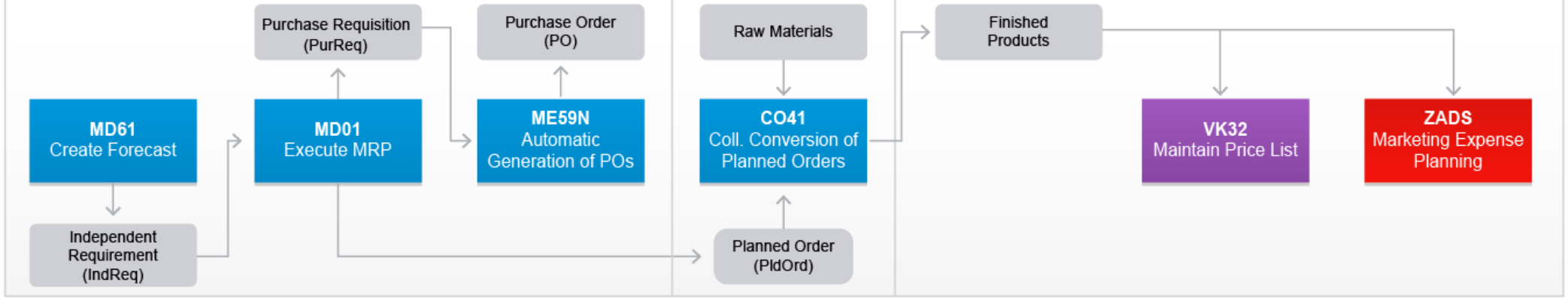


Planning, Purchasing, Production, and Sales and Distribution **ROUND 3**

Production, Sales and Distribution **ROUND 2**

Sales and Distribution Only **ROUND 1**

Manufacturing Extended



Manufacturing Game Job-Aid

HEC MONTRÉAL ERP SIMULATION GAME Manufacturing Game powered by ERPsim

Manufacturing Introduction Game

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: May 11, 2020

Nut	
$$-F01 $$-F11	500g 1kg
Starting Inventory	30 000 units each
35% wheat 35% oat 30% nut 1 box / 1 bag	

Blueberry	
$$-F02 $$-F12	500g 1kg
Starting Inventory	30 000 units each
35% wheat 35% oat 30% blueberry 1 box / 1 bag	

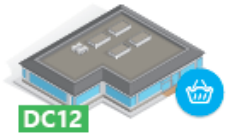
Strawberry	
$$-F03 $$-F13	500g 1kg
Starting Inventory	30 000 units each
35% wheat 35% oat 30% strawberry 1 box / 1 bag	

Raisin	
$$-F04 $$-F14	500g 1kg
Starting Inventory	30 000 units each
35% wheat 35% oat 30% raisins 1 box / 1 bag	

Original	
$$-F05 $$-F15	500g 1kg
Starting Inventory	None
50% wheat 50% oat 1 box / 1 bag	

Mixed	
$$-F06 $$-F16	500g 1kg
Starting Inventory	None
30% wheat 30% oat 40% fruits & nuts 1 box / 1 bag	

CUSTOMERS



DC 12: Grocery Chains
Payment Time: 10-20 days

Approximate Market Size
€220 000 per team per week

SUPPLIERS

Lead time (days)	1-5
Payment time (days)	20

PRODUCTION CONSTRAINTS

Capacity (units/day)	16 000
Setup time (hours)	8

STORAGE CAPACITY AND COSTS

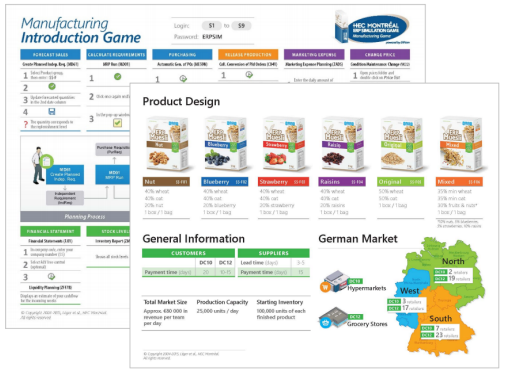
Product type	Current space	Cost per additional 50 000 units*
Finished products	250 000 boxes	€500/day
Raw materials	250 000 kg	€1 000/day
Packaging (bags and boxes)	750 000 units	€100/day

FIXED COSTS (€ paid each 5 days)*

Direct labor	10 000
Manufacturing overhead	7 500
S, G & A	20 000
Depreciation (Building)	1 250
Depreciation (Equipment)	33 333

Billed automatically

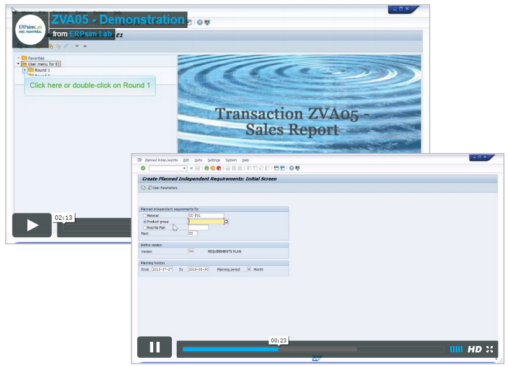
Instructional Assets and Support



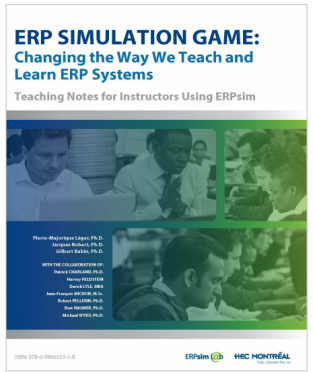
Job Aids

Slide Decks

Participant's Guide



Instructional Videos



Material for Instructors

Technical and Pedagogical Support

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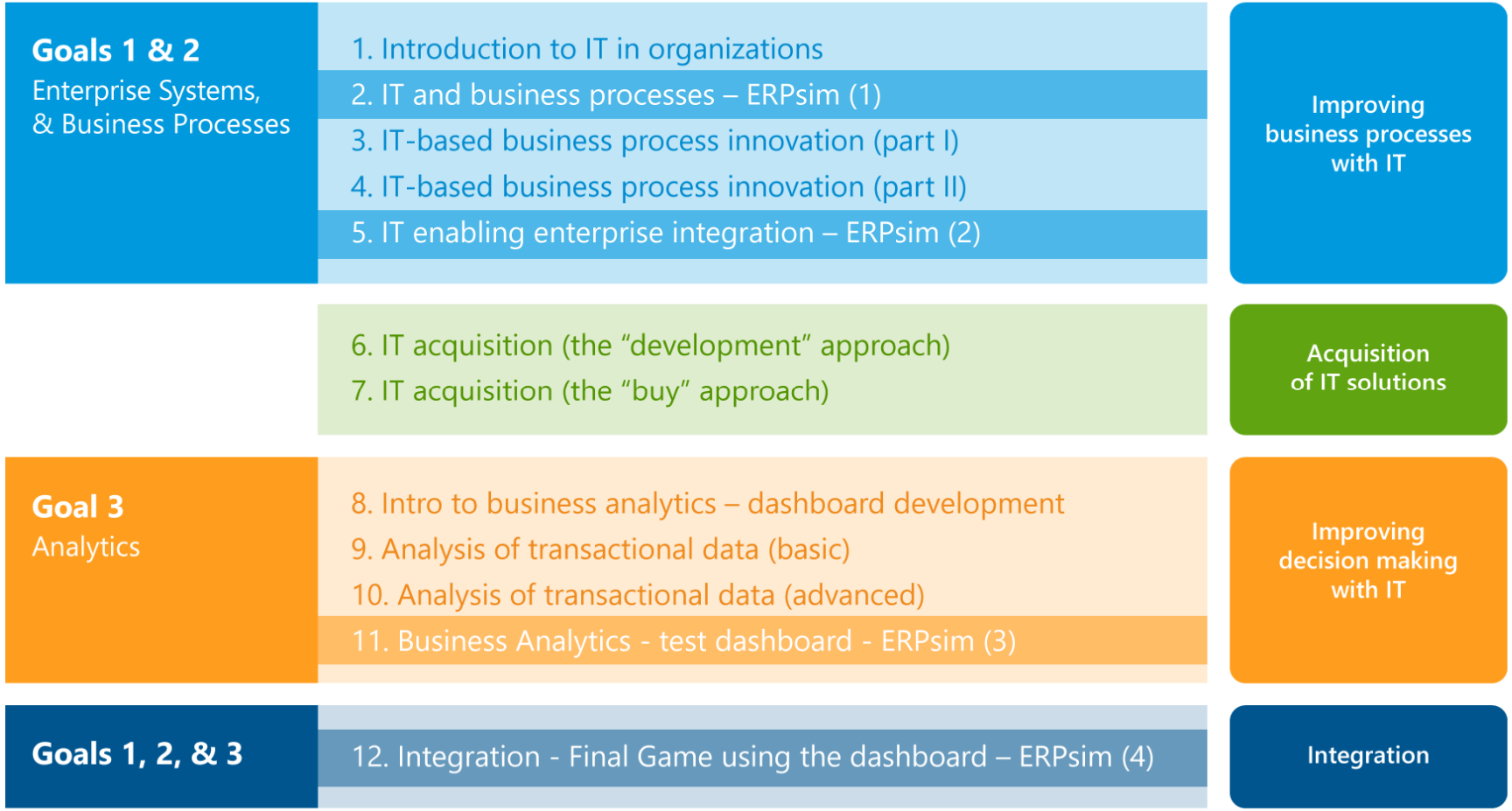
Course and Curricula Example



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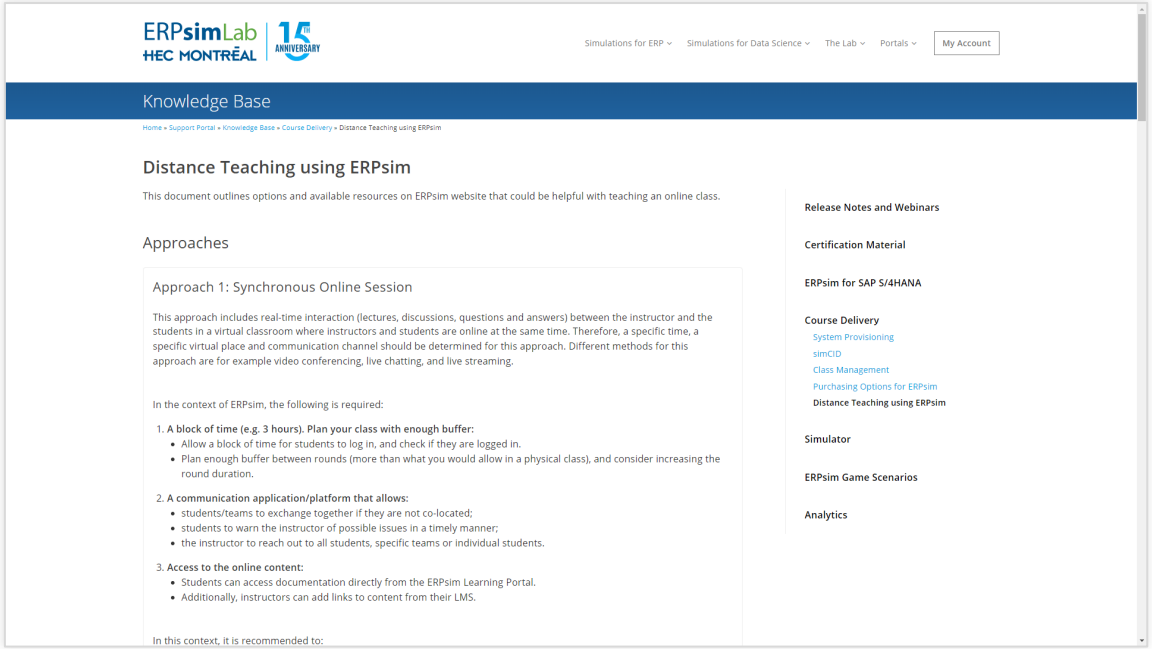
Distance Teaching

A collection of tips and tricks on how to run ERPsim in a distance teaching context:

- Synchronous and Asynchronous approaches
- Efficient communications with participants
- Technical considerations
- A list of available resources

Teaching notes, resources, tips and trips
https://erpsim.hec.ca/en/node/606



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Pricing and Support

ERPsim License

$55 CAD per student, valid for one course (max. 6 months)

Effective price from August 1st 2021 to August 1st 2022.
May change at anytime.
Visit https://erpsim.hec.ca/buy for conditions.

In the event of a disparity between the price presented on this slide and the one on https://erpsim.hec.ca/buy, the latter shall prevail.

The license includes

- For the student:
  i. Access to the simulation game
  ii. Access to the pedagogical material (job aids, participant's guide, slides, self-training videos, etc.)

- For the professor:
  i. Ability to start and manage any of the game scenarios, unlimited for the duration of the course.
  ii. Access to technical and pedagogical support from HEC Montréal.

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Become a Certified ERPsim User

For New ERPsim Users

This certification provides you all the necessary knowledge to run an ERPsim simulation game in a classroom setting, and is required to be able to use any of the simulation games provided by the Lab.

Learn more at
erpsim.hec.ca/certification

Online Course

Complete the Online Course in self-study mode

+

Session with our team

Register for a one-on-one session with our team. We'll answer all your questions!

=

Receive your simCID and start using ERPsim immediately!

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Advanced ERPsim and Certified Trainer

For Experienced Users **Available July 2021**

For experienced users who are interested in becoming ERPsim trainers and certify other faculty members

Learn more at
erpsim.hec.ca/certification

Online Course: Advanced topics

Complete the Online Course in self-study mode

+

For TTT: Write a short exam

This is a short essay where you explain your plan and objectives for training other faculty!

=

You will be able to train other faculty and certify them as Level 1 instructors

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Experience ERPsim!

- Demo and hands-on experience:
  - Tuesday Morning
  - Tuesday Afternoon

- Join via the same Zoom link that you have received

MANUFACTURING

LOGISTICS

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Features

Learn more about the 2021 edition on Wed June 9th

SAP System

SAP S/4HANA 2020

UI

SAP Fiori

SAP GUI

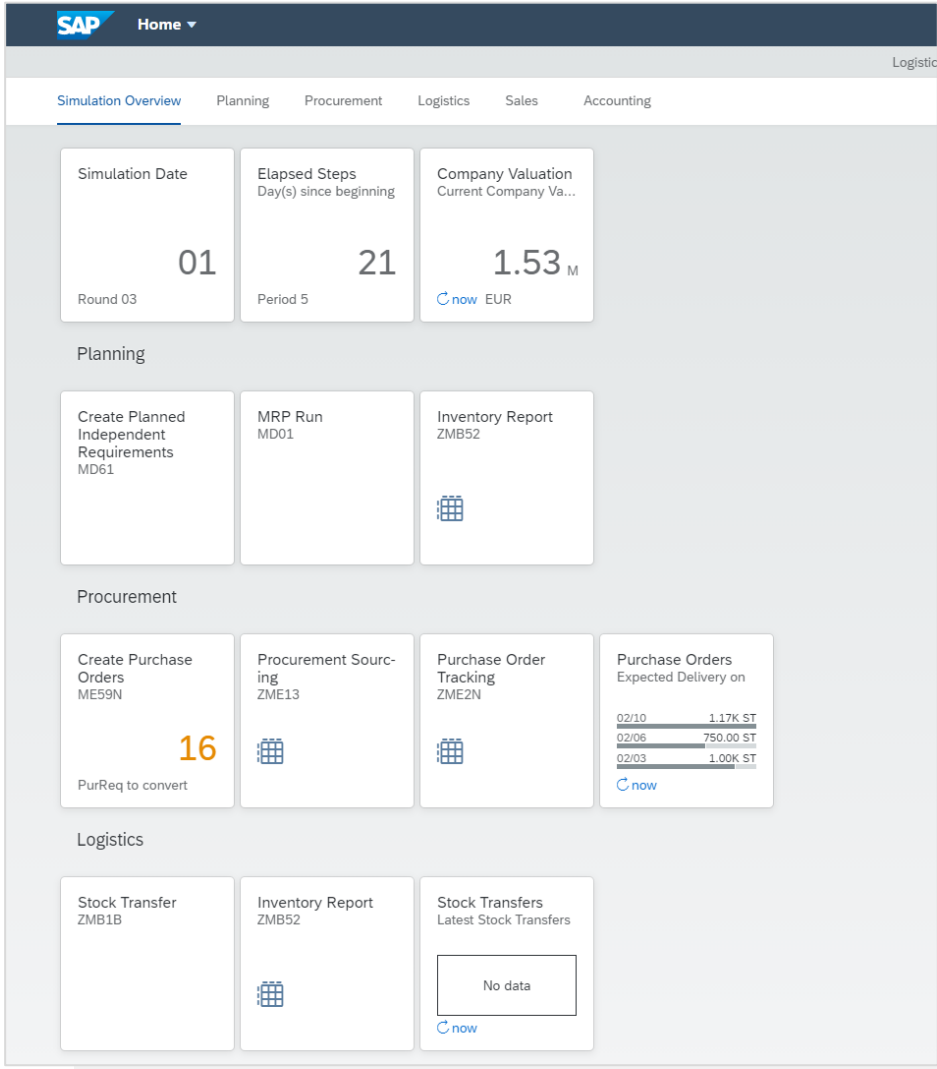
Analytics

SAP GUI reports

Smart Business*

OData Service 2.0*

* Logistics, Manufacturing and Retail games only



SAP Fiori Launchpad configured for the Logistics Extended game

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Thank you!

erpsim.hec.ca erpsim@hec.ca

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