Overview of ERPsim Distribution

**VIDEO 1**

**Introduction to the distribution scenarios**

The following modules reviews the distribution simulation and how to go about facilitating sessions.

**Story**

In our distribution simulation, participants run a wholesale distributor of bottled water in what looks quite similar to a German market.

Each distributor competes with the other wholesalers (teams) to satisfy customer demand and maximize profit. The objective of this simulation is to quickly introduce participants to the basic concepts of SAP navigation in a single session of two to three hours.

The distribution simulation is the shortest and simplest simulation offered.

Distributors, or teams, will be responsible for buying and selling three flavors of bottled water, in both half-litre and 1 litre sizes, making for six distinct products. Teams start with an initial stock of 1000 units for each product or 6000 units in total.

**Difference between scenarios and skins**

There are two distinct scenarios currently available for the distribution simulation, distribution short and distribution standard, the major difference between the two being the amount of time required to complete the simulation. Short, which consists of 10 days per round, takes approximately 45 minutes to play, while standard, which consists of 20 days per round would require approximately 3 hours.

Skins refers to the products and vendors which will be referred to on your bill of materials.

We also have to ability to customize the bill of materials, contact us for more information.

**Products (bottles, snacks)**

We currently have two skins, water bottles and snacks. In the water bottle skin, teams distribute water bottles from water bottle vendors. In the snacks simulation teams distribute healthy snacks, such as protein and granola bars.

**Rules and setup (warehousing costs, marketing %)**

There aren’t many rules for the distribution simulation, but it’s important to relay the following to your participants:

Warehousing costs are incurred when teams keep more that 6000 units in inventory. Though sometimes a strategic decision, it is important to keep in mind that changing your forecast to surpass 6000 units will decrease your overall profit.

Don’t go overboard with marketing. Remember it is a direct cost and will have an impact on your profit. Generally, it is recommended that participants spend no more than 2-3% of their revenue in marketing.

As for setup, the distribution standard simulation consists of:

* 1 minute/virtual day
* 20 days/round
* 3 rounds/game
* 3 regions
* 1 distribution channel
* 6 products to distribute

**Guiders & Help**

Using the Digital Acceleration Solution, we have embedded help directly within the Fiori Launchpad. Right-clicking any tile on the launchpad activates a contextual menu, from which you can my find step-by-step help regarding your role, how to complete transactions and how to interpret analytics.

There’s also an F Right-clicking any tile on the launchpad AQ, here you can find answers to common questions.

In addition, our process flow provides an interactive end-to-end overview which shows how downstream decisions effect upstream outcomes and our notifications highlight key moments when user action is needed.

**1909 Overview Tiles**

With our release of S4/HANA 1909 we have also implemented overview tiles. We review these tiles in detail for each of our respective scenarios (as they are different for each scenario and each role), but in short, they are dashboards which contain all the necessary elements needed to engage with the simulation.

**ADD STATEMENT OVERVIEW TILES**

**VIDEO 2**

**Instructional Tips & Tricks (Distribution)**

* When to Start/Pause, what to say

In this section of the module, we will present a potential agenda for facilitating the distribution simulation as an instructor.

While participants are playing the simulation, it is highly recommended to routinely pause and review major concepts with your participants. Checking-in in such a manner provides an opportunity for you to review the reports found in the game controller (which we will demo later on in the module), speak to the progress of the various teams by reviewing the leaderboard, as well as troubleshoot and answer any pertinent questions that participants may have.

We recommend the following for round 1 since we ask participants to focus on Sales, Marketing and Finance.

Prior to beginning the simulation take some time to review the instructor material with your participants. Provide details on what ERpsim and what they will experience during their time with you.

After your short introduction to the simulation and the business context, provide your participants with a few minutes to assign roles and strategize and then begin the simulation in the game controller. Sit back and let your participants play. For a review of how to configure the game controller, refer to the respective module.

While participants are busy playing, every few minutes, inspect the Inventory reports in the game(more to come regarding reports later on). If all teams are out of stock for 3-4 products, at your discretion, you can decide to pause the game and explain MRP even before the end of round 1 (however, keep in mind that we do not generally allow procurement prior to round 2, theres even a setting for it in the game controller).

* Now, around Day 5 of Round 1, most teams will have made some sales. This is a good time to pause the simulation and introduce the Profit Trend, Leaderboard
* Sales trend and Inventory Trend
* Marketing and Revenue
* Cash Balance, Net Profit/Lost
* And Price Market Report

 Which are found in the participant’s Fiori launchpad. Also, emphasize that reports need to be refreshed manually so they display the current day.

At this point, you can now unpause the simpulation and let your participants continue.

Anytime between days 10 and 20, feel free to pause the simulation and introduce the Geospatial report (2nd row of tiles.) Demonstrate some of the filters that can be applied to the report, however keep in mind that the standard configuration generally provides the most meaningful visual representation.

At this moment, to promote a competitive atmosphere, take the time to also briefly show the leaderboard and the winning team.

At the end of Day 20 (the end of round 1), the simulation will automatically pause. Take this time to show the reports found in the game controller, pay particular attention to the Leaderboard and End-of-Round results. Make sure to compare the cumulative net income and the total sales.

Also, take a look at the Marketing/Sales ratio with your participants and the price marketing report. If you are keen, feel free to ask participants how they are doing and perhaps allow them to share some strategy.

At this point, if you are on time and your schedule allows it, give participants a small break before starting the explanation for round 2

Prior to round 2, you will need to introduce the replenishment process.

The best way to introduce MRP is to use a real life situation, like a normal shopping routine for your home. In this example you have all the elements of the replenishment process: having a replenishment level, taking inventory of existing supplies, making a shopping list, actually shopping, and finally, receiving the goods when you return home.

MRP is a difficult concept to understand for many participants, so don’t hesitate to spend significant time introducing this concept. In order to play and understand the simulation, participants must understand MRP.

In essence, MRP is the first step to replenishing your inventory. The pre-determined forecast is set for 6000 units or 1000 units for each product. When MRP is executed it will calculate the difference between what you already have in stock (of each product) and the forcasted 1000 units of each product. This difference is what will be shown in your manage purchase requistions tile as a purchase requisition for that product. Let’s say you have 100 units of a product. When you execute MRP, if you have kept your forecast to 1000 units, the purchase requisition created will be for 900 units of that product. Let’s say you changed your forecast to 2000 units, then the purchase requisition created for that MRP run would be 1900 units.

Remind participants, if they do make changes to their forecast, they must save their requirements before running MRP.

Take some time to also explain the Requirements. Remind participants that warehouse capacity is 6000 units in total, and they will pay $100/day per additional 1000 units over 6000).

Do a demo of how to change the requirements and then run MRP.

Explain the Manage Purchase Requisitions tile. Show how to convert the Purchase Requisitions to Purchase Orders with a step by step demo. It is best to mention that no parameters (such as vendor) should be changed. Changing parameters could cause the transaction to behave unexpectedly.

Show the Purchase Orders tracking report. Mention that the Purchase order will appear on the report the next virtual day. The delay to receive the products is 2 virtual days.

Explain that participants will receive a confirmation message with the Purchase Order number after the PO has been submitted. This confirms that the PO is in the system and will be delivered in 2 days.

If you are using DAS during your simulation, remind participants to right-click on any of the tiles or to use the FAQ to know how to proceed with a transaction or interpreting a report.

At this point, prior to starting the simulation, give participants a few minutes to strategize Round 2 and assign the newly minted procurement role. Participants should also complete all steps of the replenishment process before round 2 starts (they can do so when the game is paused).

Once you believe your participants are ready, start round 2 (unpause the simulation in the game controller).

After 1 or 2 days, check the purchase order reports in the console to make sure all teams have successfully submitted purchase orders. Initial stock for round 1 will be designated as orders from Round 0- in other words, the stock that was received when you configured the simulation before the start of the game. If a team has no purchase orders for Round 2, confer with them. They have probably made an error.

On Day 10, if you wish, you can pause the simulation and introduce the Competitive Analytics tile. This tile allows participants to view competitive data for all teams. It may be helpful to demonstrate the different filters and views containined within the report and to encourage the participants to play with the report to generate new insights. These reports offer teams a fantastic opportunity to understand the competition, but they are complex. Participants will need additional time to review these reports if they are going to use them in real-time play.

At the end of round 2, you can look at debriefing.

Announce the winning team for the round and compare the results of all teams using the end of rounds results report found in the game controller. Also consider reviewing the leaderboard trend and the price marking report to point out any anomalies.

The debriefing of Round 2 is similar to the debriefing of Round 1. To find more debriefing tips, refer to the debriefing module.

After the debriefing, you can give participants a short break, if your schedule permits.

Remember to introduce the focus of Round 3, which is to help participants improve their strategy by using the different reports and graphs available to them and to perhaps modify their forecast.

As always, it’s recommended to give participants a few minutes to strategize Round 3.

Start Round 3. During this round, unless you have a specific point you need to address, it is probable that you will not need to pause the simulation. At this stage, most participants should have a good understanding of the game.

At the end of round 3, announce the round winner and the game winner.

Move to the debriefing portion of the simulation. To learn more about debriefing, refer to the respective module.

**Fiori Reports**

**Game Controller (repeat, starting/stopping)**

Let’s review how to start and stop the simulation using the game controller.

*(I will cut and paste the relevant game controller video here).*

**Game Controller Reports (useful information)**

There’s a lot of useful information in the game controller. The following reports will help you interpret how the simulation is progressing and also provide details regarding team performance.

**Leaderboard Trend:** The Leaderboard trend shows the evolution of the teams’ ranking based on their cumulative profit.

**End of Round Results:** This report is updated only at the end of the last day of each round. It presents the metrics used to evaluate the performance of the teams and their ranking based on their profitability. The dropdown allows you to check the results for previous rounds. Unless the column’s name contains “round”, the values you see are cumulative for all previous rounds.

**Profit and Loss:** This report presents the revenues and spending of each team. Given that the ranking is based on Net income, this report allows you to monitor how the teams are doing. You will also be able to review their expenses, including the warehousing costs and the marketing spent. You can either see the report for the current round or have a cumulative view for all previous rounds.

**Balance Sheet:** The simulation requires a number of financial transactions to be posted before the simulation begins: initial capitalization of the firm through both equity and liability and the acquisition of assets (land, building and equipment). These transactions are executed through postings to balance sheet accounts. Typically, you do not need to monitor this report during gameplay.

**Inventory:** This report shows you the inventory on hand for each product and each team. Monitor this report closely to ensure your participants are not selling out too fast and that most of your teams still have inventory. If most teams are out of stock, you can think about pausing the game to show them how to replenish. This report will also display the raw material inventory, if relevant to the scenario you are playing.

**Price and Marketing:** This report is very useful during the game as it will show you the current set prices for each team for each of their products. You can easily monitor the prices to make sure teams are not selling under cost. The report also shows the current daily marketing spent, as well as the cumulative marketing spent for each product in each region (and for each distribution channel, if applicable). Keep in mind, we recommend participants spend no more than 2-3% of their revenue in marketing. Through this report, you can easily get an idea of their current spending. You can switch teams at the top of the report as you can only see one team at the time.

**Purchase Report:** Through this report, you can track purchases being completed by the teams. This is a very important report to monitor as it indicates when a team is struggling to complete the procurement process. For example, if this is the case, you will not see any orders from them.

Use the columns “Creation Date” and “Good Receipt Date” to track when the team should expect to receive their new inventory. The dates used in those columns are the “real dates”, which are visible on many views, including the Game Controller status, the Viewer and on the first tile of the participants’ launchpad.

**VIDEO 3**

**Roles & Gameplay (can be mini-videos for each role)**

* Pricing Role, in-Fiori Example

The individual responsible for pricing will continually adjust product prices in response to demand and supply.

This critical decision affects all aspects of your enterprise. By lowering the price of the products, sales will speed up, and profit per sale will decrease. Your may deplete inventories rapidly. Choosing a high pricing strategy, will result in higher margins but sales may stagnate.

In order to help you determine price points for your products, three pieces of information are provided: the product costs, the current stock level of your products and the approximate number of days before stock out (zero inventory).

* Marketing Role, in-Fiori Example

The individual who occupies the marketing role will input marketing and measure its effectiveness as a ratio of profit.

* Procurement Role, in-Fiori Example

Another key role is procurement. This person must execute the mrp forecast and convert purchase requisitions to purchase orders.

* Financial Role, in-Fiori Example

The accountant of the group of the financial role, will be responsible for monitoring profit and loss and balance sheet statement to ensure the team remains competitive and profitable.

**Round 1 Fiori Gameplay, Processes & Transactions**

**Storyline**

In Round one, companies sell their initial stock by adjusting their selling price and marketing strategies.

**Fiori Apps**

**Sales**

* Prices and Inventory

“Prices and Inventory” facilitates changing price and viewing current stock levels. This critical decision affects all aspects of your enterprise. By lowering the price of the products, sales will speed up, and profit per sale will decrease. Your may deplete inventories rapidly. Choosing a high pricing strategy, will result in higher margins but sales may stagnate.

In order to help you determine price points for your products, three pieces of information are provided: the product costs, the current stock level of your products and the approximate number of days before stock out (zero inventory).

* Sales Trend

The sales trend tile shows sales revenues earned by day and round for your team only. With this report, you can analyze your daily revenues and make better decision about your business.

The full graphic report represents an overview of the daily sales. Based on historical targets, your sales performance will appear in the red area if it’s too low, in the orange area if it’s average and in the green area if you are above average.

* Sales Analysis

The Sales Analysis tile will help you assess your sales quantity and revenues for each product in every region and visualize the impact of your pricing on those sales. An overview of the data is displayed on the tile and shows the top 3 products that you are selling by revenue.

* Product Profitability

The Product Profitability trend tile is a report showing the profit and sales revenues earned by day, round, and product for your team only. With this report, you can determine which of your products is the most profitable.

The full graphic report represents an overview of the daily product profitability. Based on historical targets, your profitability will appear in the red area if it’s too low, in the orange area if it’s average and in the green area if you are doing good.

* Inventory Trend

The “Inventory Trend” tile is an extremely powerful report to monitor the stock level of all your goods throughout the simulation. It gives you historical data about your inventory by product from the beginning of the game until the current date.

The full gaphic report represents an overview of the overall stock level. Based on historical targets, your level of inventory will appear in the red area if it’s too low, in the orange area if it’s average and in the green area if you have sufficient inventory.

* Geospatial Analysis

The Geospatial Analytics tile is a sales report on Germany’s geographical information, allowing you to pinpoint your revenues by area, city and customer on the German map.

**Marketing**

* Marketing Expenses

The Marketing Expenses plan facilitates marketing expenditure by product and region. Marketing may expand price elasticity for some buyers, allowing teams to make sales at a higher price.

Just as in real life, there could be little or no impact on sales. Tips on marketing:

* + - Investing in all products at the same time is not recommended. If you were to invest in many products in the same region, those products would be competing against each other and would therefore nullify the effect of marketing.
		- Check inventory levels before promoting the item. Don’t invest in products that you do not have in stock
		- Teams should be instructed to invest no more than 2-3% of your revenues in marketing as marketing is a direct cost
		- Monitor your sales and marketing expenses of each product
		- Marketing and Revenues

The “Marketing and Revenues” report is a 5 days analysis of revenues and marketing expenses for each of your products in the 3 regions. An overview of the data is displayed on the tile and shows the top 3 products that you are selling for the last 5 days of simulation.

**Financials**

* Financial Statements

The financial statements tile is a transaction that gives you data on your company’s balance sheet and profit and loss statement. You will get information about each of your accounts (assets, liabilities, revenues, expenses etc.) only at the moment of the request.

How to use this tile:

1. In company code, enter your team’s letter twice. If you are team A, enter ‘’AA’’.
2. In Financial Statement Version, enter ‘’SIM1’’ for the financial statement of the ERPsim simulations.
3. In End Period, check the current month of the simulation on the ‘’Simulation Overview’’ tile and enter it here. If the simulation has reached the month of October for example, enter ‘’10’’.
4. Click on Go to generate the report.

**Round 2 Fiori Gameplay**

**Difference with Round 1**

In Round two, companies learn how to replenish their stock to the initial set up of 1000 units per product.

**Fiori Apps**

In addition to the above sales, marketing and financial apps used in round 1, in round 2 there is the added role of procurement and therefore a few extra tasks to complete.

**Procurement**

Requirements and MRP

The “Requirements and MRP” tile is a transaction for planning and procurement. As part of the replenishment process, you will have to define your independent requirements and run MRP.

The independent requirements roughlyequates to the sales forecast for a planning period. The amount you decide to plan is the one you wish to have right after the replenishment is successful.

MRP is a pwerful transaction which will generate planned orders (only in the Manufacturing games) and purchase requisitions for the products which require replenishment. It calculates the quantity of products you need to meet your requirements based on your current stock levels.

Manage Purchase Requisitions

The “Manage Purchase Requisitions” transaction is part of the procurement process. It converts the purchase requisitions created by the MRP into purchase orders.

How to use this tile:

* + - In the first screen, you see all the purchase requisitions created by the MRP Run.
		- Check the top box to select all the purchase requisitions.
		- Click on “Create Purchase Order” to convert the purchase requisitions into purchase orders.
		- On the next screen, select all of your created purchase orders and click “Submit”.

Purchase Order Tracking

The “Purchase Order Tracking” tile is a report that gives the status of your orders. An overview of the data is displayed on the tile and it always shows 3 products. If the numbers associated with them are zero, those are the last 3 products you received from the vendor and therefore there is none in progress.

However, if the numbers associated with the products are different than zero and the products are underlined by a green line, it means that those products haven’t been delivered yet. The numbers represent the remaining quantity to be received.

**Round 3 Fiori Gameplay**

**Difference with Round 2**

In Round three, companies learn how to change their forecast above or below 1000 units.

**VIDEO 4**

**Debriefing Distribution**

While ERPsim participants “play” the game, they are deeply engaged in a series of highly charged tasks. Their full attention is devoted taking actions, observing results, interacting with team members. The charged competitive environment almost forces engagement and rapid mastery of the game, the transactions, reports, etc.

The charged environment that is perfect for moving participants toward engaged learning actually blocks the possibility of reflection on behavior (personal and team) and higher level learning. Participants are actually so fully engaged in the playing of the game, that there is little or no bandwidth for reflection on what is actually happening.

A structured debrief at the end of the game allows time and space to “sit back” and have a look at what really went on- to begin to reflect on the value of the experience. The debrief also leads participants to make connections between what went on in the game environment and what goes on in the real work world, and begin to draw conclusions about what is required to fully utilize SAP.

The debrief is essential. Without it, participants may miss some of the most valuable parts of the learning experience. They will leave the event “stuck” in the content, and reflecting very concretely on the game itself (“we should have charged more, we ordered the wrong product, etc.)

Shifting from “playing the game” to reflecting on higher level learning is a big cognitive leap. You can expect resistance which will emerge in several forms. In the early stages of the debrief, participants’ may look disengaged, even bored. There may be long silences before anyone will share a reflection to your questions. Some people may actually try to leave, assuming that this part has no value for them.

You should also be aware that these participant reactions are likely to have an effect on you, the instructor. You may find yourself uncomfortable, wanting to get this part over- so there may be tendency to rush or even skip the debrief.

A few suggestions:

* Leave at least 30 minutes for the debrief. You may be tempted to “let them play” until the end of the session time.
* Give participants a short break after the final results. Say something like: “Ok let’s take a 5-minute break, but come back for what may be the MOST important part of the day!”
* Debrief your debrief! It is not uncommon for new instructors to say, the game went great, but the debrief was horrible. “They just didn’t get it.” It is important for you to give yourself sometime after the students leave to think about the debriefing process: where you uncomfortable? What forms of resistance did the participants exhibit (long silences, simple answers, no answers)? What did you like about the way you handled the debrief? What might you do differently next time?
* At least for your first few debriefs, follow the suggested steps below. Feel free to alter the content of the steps and the actual questions- but cover all the steps and give them time- even if it requires enduring a bit of silence. This does work, and it is important.

**STAGES OF THE DEBRIEF AND SUGGESTED ACTIVITIES**

The following debrief strategy has been effective for our instructors in the past:

* Transition: Immediately after finishing the game, participants generally want to talk about only one thing- why they won, or how they could have won. Ask each team to give a brief description of their strategy: “How did you folks do so well? What did you do? Or What decisions did you make that may have ended up hurting performance. It is good to get some feedback from each team.
* Teamwork: Shift the focus away from the game and onto the team itself. A few suggestions for this:
	+ - Spend a few minutes talking as a team about how you worked together.
		- Do you think you took full advantage of all the “brains and hands” you had available?
		- Did you have a team leader? How did you decide who your leader would be?
		- Describe how your team made decisions.
		- Were there ever any emotions- positive/negative? How did you handle these?
		- How would you improve in these areas if you were to play the game again (NOTE: this question may yield very good information about what teams will have to do in the company)
		- Once the team has had some time to discuss, have each team report
* Connection:
	+ Ask the following: “How was this like real life here at XYZ Company?” Best to do this with the large group. This can be a difficult question for some people and requires that the participants generalize and make some abstraction. There may be some delay before they answer. If necessary, re-phrase the question: “What kinds of things went on the game, what kinds of behaviors, reactions, decisions did you see at your table that you can now recognize as things that you see at work?” Example: “we over reacted to problems”
	+ Learning: Have the groups discuss the following: “If you were to play the game again right now, what would your team do differently?” Stress that you are not looking for “we’d price higher!” What would you do to win? You are trying to describe the activities of world class team using SAP to run a business…
	+ Going Forward: Give each team the following challenge: “You are committee that has been formed to advise the CEO of XYZ Company on making sure that we get the best possible value from SAP. We want to make sure that our people use SAP to the fullest extent and that the vale that we get is absolutely world class. You can make only 3 recommendations.”

There are a lot of ways you can have the team report their recommendations, easiest being just to have a delegate stand up and report. This can also be bit more creative if you want.

At the end, offer positive feedback and ask one last question: “Those are great suggestions. What do we do with them?” Or “What next?”, “What needs to be done?”

You might also ask, what do you need to learn now that you have a great picture of how this all works?

**Differentiators: ERPsim vs. other Demos**

**SUMMARY AND NEXT STEPS**

**VIDEO 5**

**Tips & Tricks Distribution**