



FAPS

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Institute for Factory Automation
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Friedrich-Alexander-University Erlangen-Nuremberg



ISCM – Case Study 1: Basic relation between suppliers – OEM – Customer

Template for the solution of case study 1
Beergame

The text box with green background is meant to be filled by student 1 and the one with blue background is reserved for the correcting student.

Student 1:

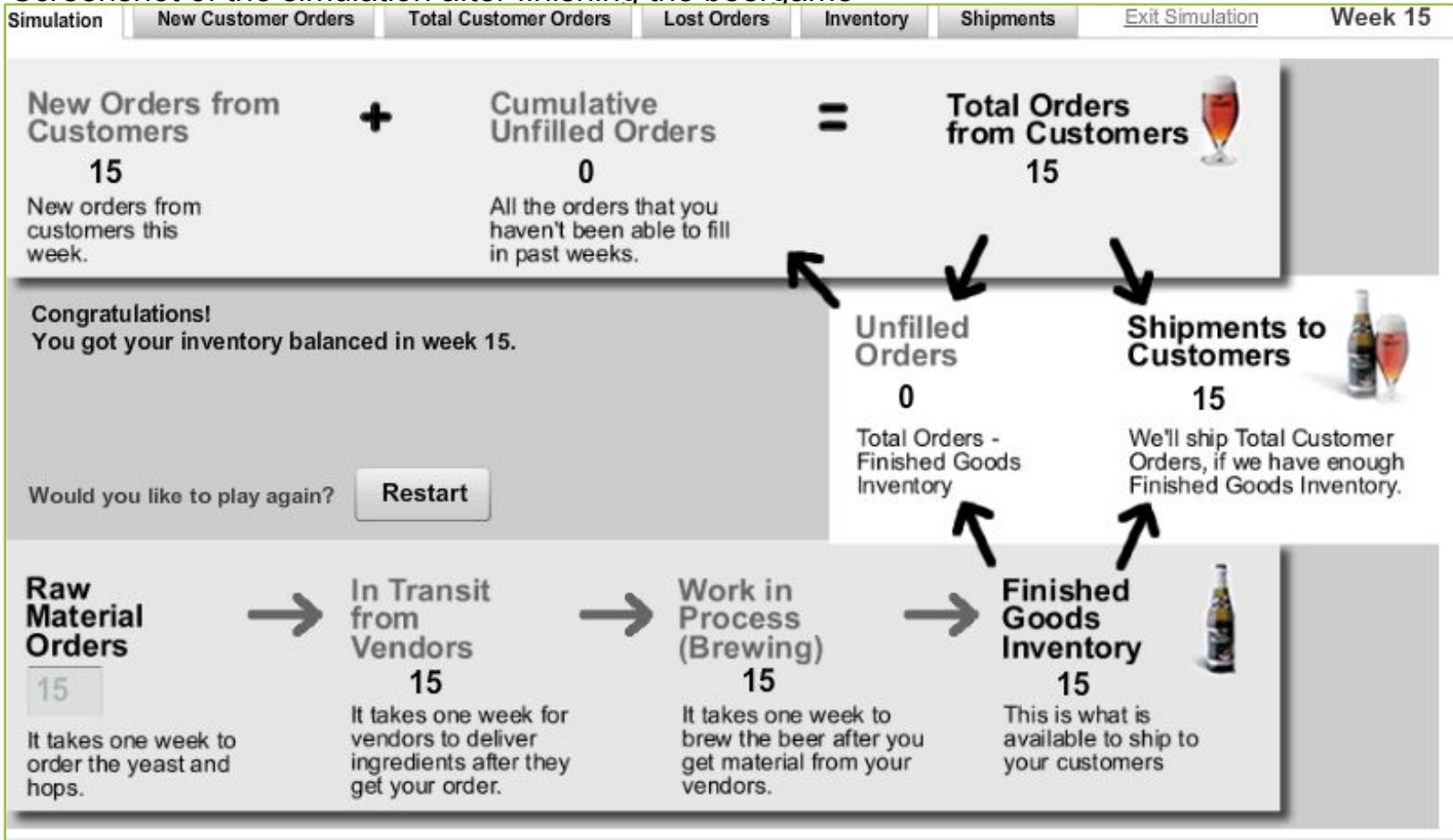
- Please enter your name
- Olexandra Makarenko

Correcting student:

- Please enter your name

Here you can see the results of student 1 simulation result

Screenshot of the simulation after finishing the beer game

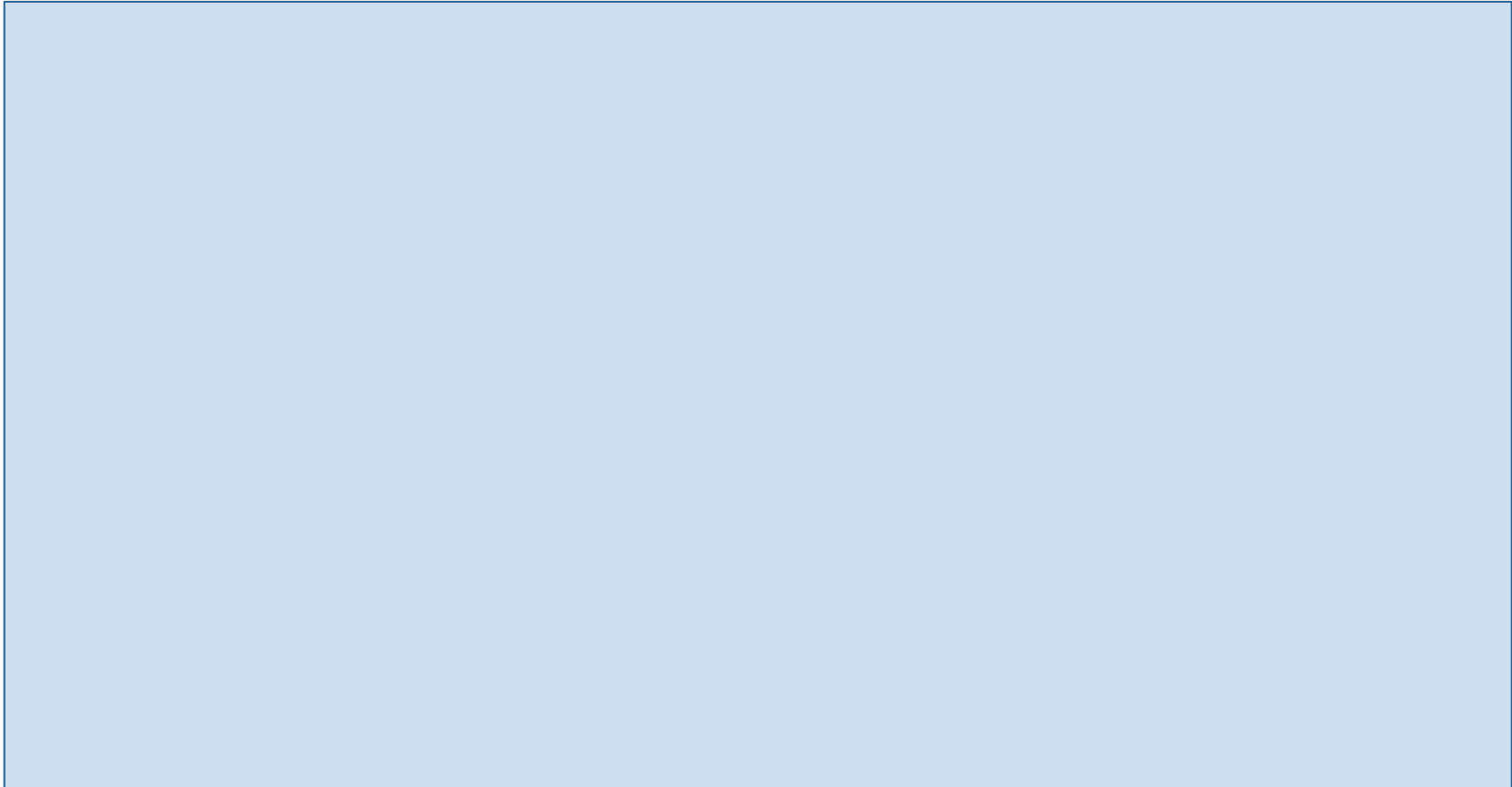


In how many weeks did you balance the supply chain?

15

Here you can see the results of the correcting student simulation result

Screenshot of the simulation after finishing the beergame



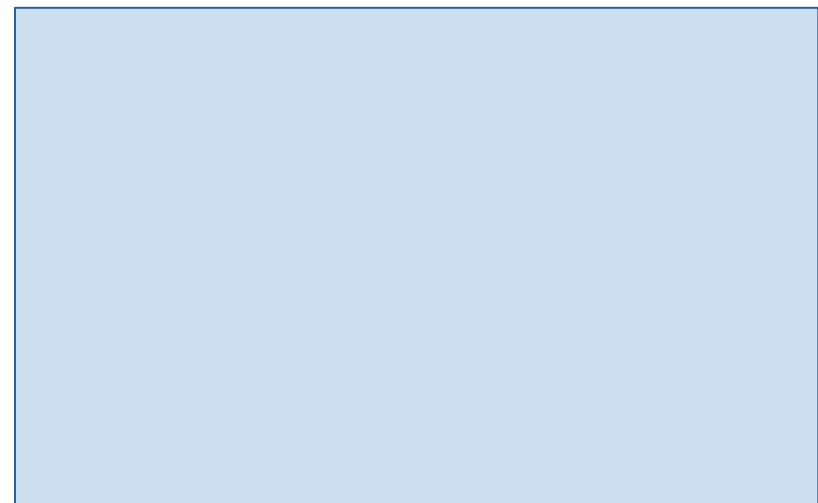
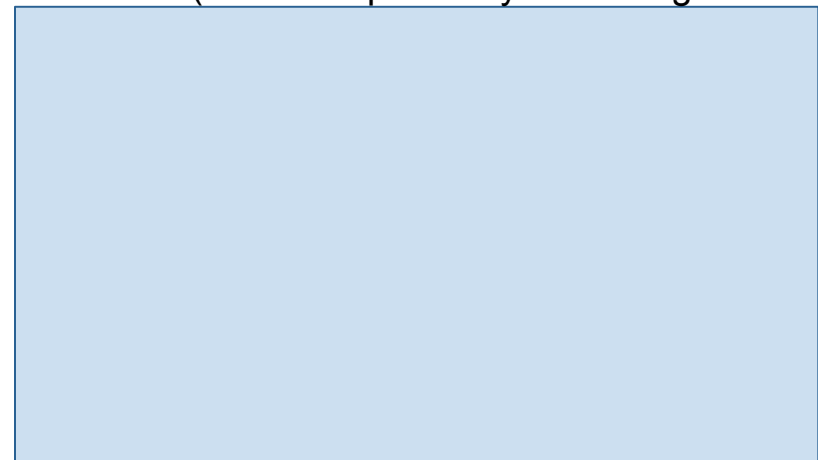
In how many weeks did you balance the supply chain?

Here you can see the results of both, the first and the optimized beergame strategy!

Resulting graph of the first beergame of student 1.



Results after implementing recommended measures (to be completed by correcting student).

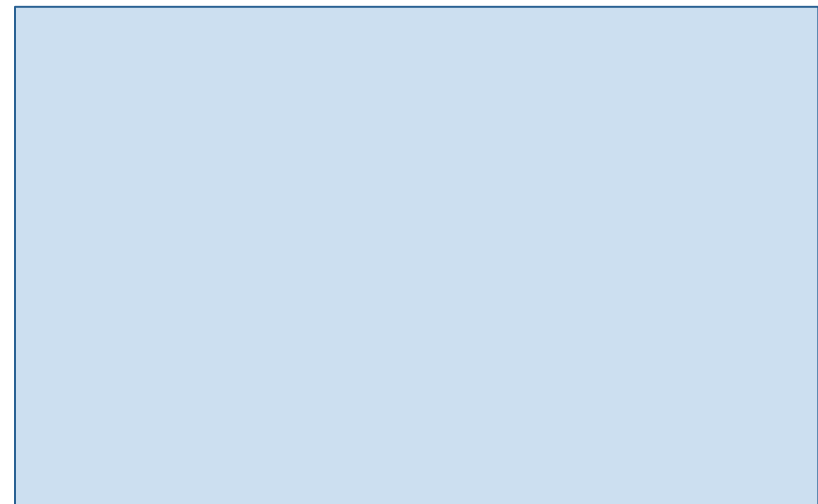
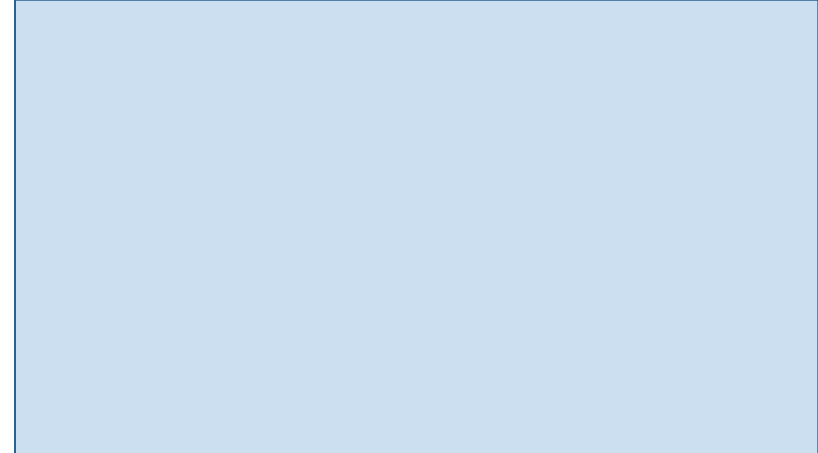
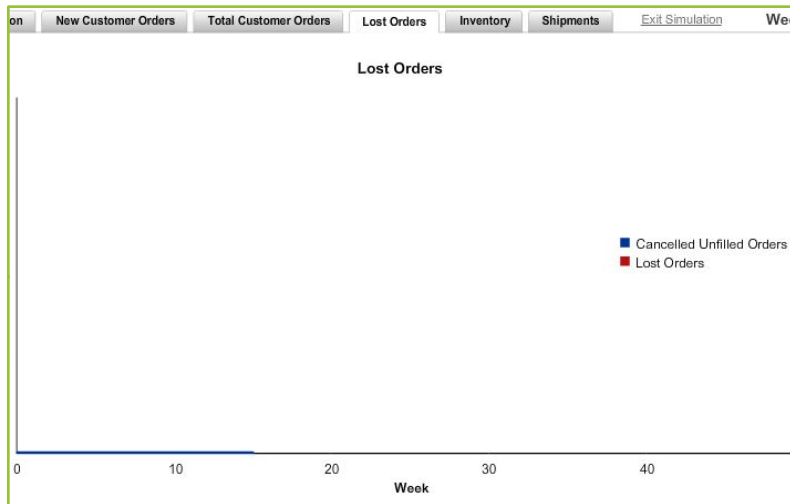


Here you can see the results of both, the first and the optimized beergame strategy!

Resulting graph of the first beergame of student 1.



Results after implementing recommended measures (to be completed by correcting student).



What possible measures could be performed to optimize your first beergame results?

Recommendations of student 1:

- What did you experience by playing the game:
- - **Information about your customers and orders is very important.**
- - **Important to keep track on time.**
- - **The main component is to make a forecast.**

- What effects can it have on a company:
- **We could achieve our inventory balance much faster**
- **Optimization of the process in the company**
- **Increasing superfluity of money**

- Research and emphasize countermeasures and please mention your sources:
- Analysis of the situation (what we have. Our recourses).
- To set your target.
- Take into consider history of the distribution.

In addition to cycle time reductions throughout the supply chain, Hau Lee, V. Padmanabhan, and Seungjin Whang recommend the following actions to reduce the supply chain management bullwhip effect:

- Focus on end-user demand through point-of-sale (POS) data collection, electronic data interchange (EDI), and vendor-managed inventories (VMI) to reduce distortions in downstream communication.
- Work with vendors to create smaller order increments and reduce order batching. Order batching exacerbates demand fluctuations.
- Maintain stable prices for products. Price fluctuations encourage customers to over-purchase when prices are low and cut back on orders when prices are high, leading to large demand fluctuations.
- Allocate demand among customers based on past orders, not present orders, to reduce hoarding behavior when shortages occur.

Please rethink and evaluate your final results!

Assessment of correcting student:

■ Which measures of student 1 do you think were appropriate and why:

■ Which measures of student 1 could not be used easily and why:

■ What are your results after implementing all the measures:

Review Question

Why are there order, production and shipping delays in a Supply Chain?

		Suggestions of student 1:	Review of correcting student:
		Delays	Order
Production	Production was launched in a wrong time. So, It's important to follow your time and count it. Organizing you technologies. Just in time logistic.		
Shipping	You can do nothing here. It moustly depends on two previous sections. Use good equipment. New technologies. Have a fullback.		



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Thank you