

Makro Supply Chain, Bogotá Colombia

Research Question

1. How should Makro design the future flow of information between relevant actors and their information systems upon the implementation of a cross-docking center?
2. How should the implementation for the future flow of information be designed?
3. How should the cross-docking center in Bogotá be structured in order to optimally accommodate for the new traffic flow around it?

Makro South-America has been working on improving the operations of their supply chain in the years leading to 2017. Makro has been faced with low efficiency, low service levels and high inventories in their current supply chain, which hindered Makro of fully profiting of their growing market potential. The improvement of the Makro SA supply chain consisted of two innovations. The first innovation was the implementation of new retail management software, which would be used at the stores and head offices to place orders at suppliers, keep track of stocks and keep track of finances. The second innovation was the implementation of a cross-docking center (CDC) operated by a 3PL, which meant the suppliers would not deliver orders to each store individually in the future, but deliver all goods directly to the CDC from where the stores would be supplied. The intended improvement for all South-America Makro stores will be first rolled out in Colombia, where the project will serve as a trial.

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The two innovations in improving the Makro supply chain were being handled by different departments, namely the supply chain department for implementing the CDC and the IT department for implementing the new retail management software. Our task as a team working for Makro, was to bring together both innovations being implemented. A clear step-by-step image of how the new supply chain was going to be was not yet available and also the way in which the new retail management system was going to communicate with the warehouse management system of the 3PL at the CDC was unknown. Also, a clear image of the infrastructure around the CDC and the infrastructural changes at the store were not clear yet. The student team was responsible for drawing out the step-by-step supply chain, with a focus on the communication between Makro stores, Makro head office, supplier and 3PL, and to make recommendations on the infrastructure at the CDC.

The step-by-step supply chain has been drawn out in a so-called Swimlane diagram. The critical communication flows, between Makro, suppliers and 3PL, have been accompanied with requirements in a testing protocol and a scenario protocol, which will help the IT department implement the communication flows. Also, a planning for implementation has been written.

