

**EXAMENSARBETE** Visualization of High Load Transactional Data**STUDENTER** Anna Hjalmarsson Flodkvist, David Ravanelli**HANDLEDARE** Joakim Eriksson (LTH), Tobias Friberg (IKEA)**EXAMINATOR** Günter Alce (LTH)

# Visualizing IKEA's order data

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Every IKEA order is handled by multiple systems behind the scenes. These systems produce a lot of order data. A team at IKEA called CO360 is working on a software product that handles this high load data flow. They need a visualization of their product to help explain to other teams what it does, and why they should use it.

Orders at IKEA produce a variety of different data from multiple systems. Many teams at IKEA needs to keep track of all these systems to be able to retrieve the order information they are interested in. The CO360 team is developing a product that ties all these systems together and tracks all the changes of an order. By doing this, teams at IKEA can ask CO360 for the information and get it instantly without needing to go through complex data retrieval. For example, the economic division can ask CO360 if an order has been paid and can get all relevant updates instantly in their system. Since all of this is happening through backend software there is no way of actually seeing and understanding what is happening with the human eye. There is therefore a need to visualize what CO360 does. The purpose of the visualisation is to make it easier to understand what CO360 does and thereby help the CO360 team convince other teams at IKEA to switch to their unified order system.

Initially the main benefits and selling points of CO360 had to be asserted. These were concluded to be: helping teams to handle less complexity, show that other teams only needs to use CO360 and can exclude all the other complicated systems and lastly show that CO360 protects other systems from what is happening behind the scenes. A thorough user centered design process was car-

ried out, where multiple prototypes were created and evaluated before eventually implementing the best one. The result of this can be seen in figure 1. To achieve these results multiple interviews with developers at IKEA were held and different design methods and tools were used at each step. The

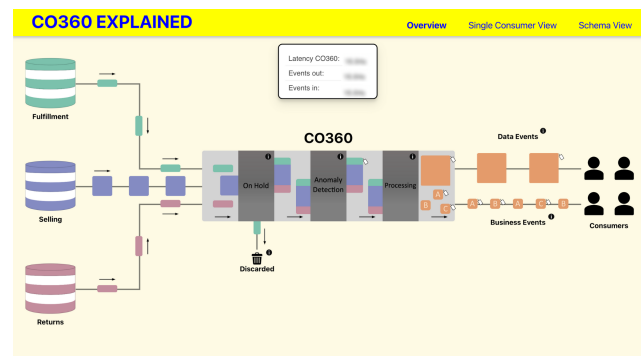


Figure 1: CO360 order flow visualized

implementation will be used by the CO360 team to hold presentation and demos to other teams at IKEA. With these presentations the CO360 team can show it's main selling points and why the listeners should switch to CO360. From the evaluations and the data collected it could be concluded that the visualization was well made and that it showed CO360's benefits.