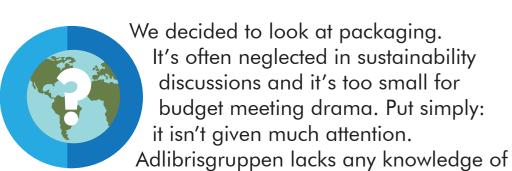


1. THE BASICS

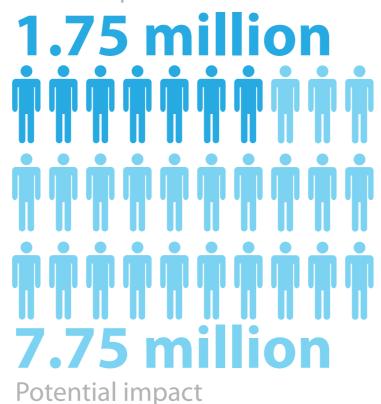
We wanted to have true impact. So we partnered with one of the biggest online retailers in Sweden - Adlibrisgruppen (consisting of Adlibris, Bamba, Kökets Favoriter, Odla.nu, Discshop). This totals to a target audience of 1.75 million customers - a high potential for impact.



how their packaging affects the environment despite research showing that customers increasingly care. And their approach to budgeting the packaging costs is arbitrary at best. It's not uncommon that the budget misses the outcome by up to 40%. Early on, an expert interview indicated that this is a symptom of a problem in the industry. Almost every online retailer faces similar problems.

Therefore we set out to increase the budgeting precision and make sure environmental impacts are being thoroughly tracked. We also decided to think about options to scale up our work to an industry level.

Direct impact



2. THE PROCESS

We knew it would be a difficult and complex task, so to ensure progress we decided to work with a design thinking method.



EMPATHIZE

2.1

We interviewed different stakeholders, went on field trips and dug through tons of data. We needed to understand the problem.

DEFINE

2.2

We sorted the gained knowledge by looking at opportunities, conflicts, priorities and global relevance. We now had an understanding of the problem.

IDEATE

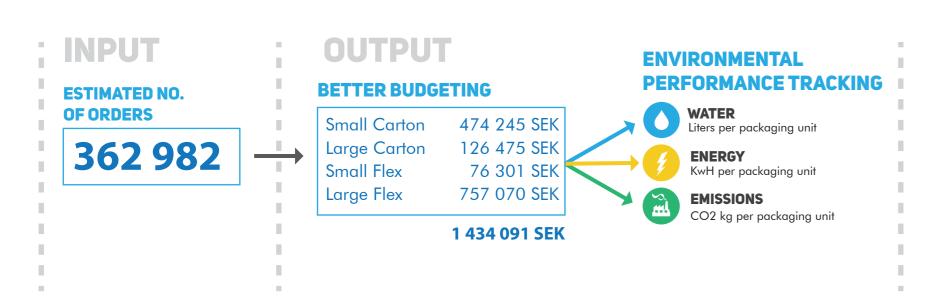
2.3

With usability and simplicity in mind, we developed several "solution tracks" for "how might we..." type questions.

PROTOTYPE / TEST

Through testing and feedback, we developed three different outcomes: a prediction tool, an implementation plan and a roadmap for scaling up.

3. A TOOL FOR PREDICTION



The prediction tool is very straightforward. The user (e.g. a CFO) just needs to enter the projected number of orders for a month. By using previous usage statistics our tool then automatically generates predictions on number of each packaging unit used, their individual and total costs as well as their environmental impact measured through water usage, energy consumption and CO₂ emissions. So when quarterly budgets are set, environmental performance has a guaranteed seat at the table.

It makes sense to look at packaging units such as "large carton" rather than individual components like packaging tape. Only as a unit can the components create value for company and customers, and better reflects the true cost of packaging.

The foundation of our tool is a smooth data collection, which doesn't exist at present. Therefore, we designed two different implementation plans on how to start collecting data on packaging use (see 4).

4. A PLAN FOR DATA GATHERING

The easy way

QR-codes are scanned at the packaging station. Each code is connected to a type of packaging. The scanning links each order to a packaging unit, and tracks how much of each packaging unit is used and how much goes to waste.

This data enables livetracking and follow-up of packaging use, costs and environmental performance.



The hard way

Product dimension variables are integrated to the website. Matching against product weight, an algorithm calculates the best packaging unit.

The spare volume is analyzed and fill-up buying suggestions are generated at checkout iwith an environmental discount. The final order is linked to a packaging unit suggestion sent to the warehouse. Packaging use and volume usage are both tracked with precision.

5. A ROADMAP TO SCALING UP

REBOX.



Bringing our tool online as REBOX makes it possible for any online retailer to improve budgeting and track environmental performance. REBOX will expose suppliers' environmental and cost performance, and put pressure on them to develop better packaging solutions.

We have started wireframing, and estimate that the launch could be in november 2018.

6. TOWARDS 2030

Early on we identified what Global Goals and subgoals our work contributed to. This helped us prioritize the demands from Adlibrisgruppen after how relevant they were to our target goals.

The goals we identified are listed below together with our contribution.

If you want to know more, just ask us - we love to talk about this aspect!

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Helping Adlibrisgruppen and the industry measure environmental impact

Less plastic in packaging means less waste

11.16

13.2

9.4



2 RESPONSIBLE CONSUMPTION AND PRODUCTIO

12.5 + 12.6

handled incorrectly

Better data collection can identify and reduce waste and is integrated in reporting

13 CLIMATE ACTION



Encouraging NGOs and trade agencies to use environmental performance in planning

17 PARTNERSHIPS FOR THE GOALS 17.19



Easier benchmarking of e-commerce growth

to its environmental impact

5. WHAT WE LEARNED

Love the problems

Sometimes the solution to one problem is in fact the identification of another problem. Even if it means you won't reach the outcome you were hoping for, it is incredibly valuable as it increases your contextual understanding.

Process is key

Although the task had a daunting number of questions, working with design thinking as a process really helped us to keep going even in the most confusing stages.

Practice vs Theory

Our financial controlling courses never prepared us for having data that doesn't add up. Reality is often more complex than theory and learning to deal with the uncertainties and error margins will be valuable for us in both thesis writing and our future careers.

2030

6. THE TEAM



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Johan Kleberg, CEO Adlibrisgruppen
Marius Halvorsen, Financial controller Adlibrisgruppen
Katrin Molina-Besch, PhD student at the Packaging
Logistics center at Lund University. Tommy Nilsson, manager at Morgongåva

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