(design) Thinking about Using Bubble to Help Elderlies Open Their Cheese Packaging

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Introduction

A design thinking approach was used in a packaging development project where a novel technology is to be introduced into a current packaging of a staple food in Sweden: cheese. This project was a collaborative study between Lund University and Flextrus AB.

Main Text

PopPack[®] technology has potential to solve the current problem of block cheese packaging that is hard to open. This novel technology involves the addition of a bubble compartment into the packaging. The bubble is to be popped (as reflected in its name, PopPack[®]) and breaks the seal around it as it burst, providing a larger, separated tabs to grip on during opening. Bubble shapes play a crucial part here, but as testing were carried out, the rounder, the better.

Not only was the technology, the approach also new in this project. One may argue on this because design thinking was not just introduced yesterday. But in a food packaging development project, this study is among the firsts to use this approach. The nature of the project was still in exploratory phase, giving the team a wide flexibility in terms of which aspect to be focused on. The lead researcher decided to start from the consumer and do a human-centered project which is the base of design thinking. And as a result, the team has now hauled the desires and experience of consumers related to cheese packaging, meaning that there are a lot of different ways opened for this project to move forward.

This project has been a learning for both company and the researcher, for both the technology and the methodology. To frame the study, one design thinking process was selected. It is the one introduced by Hasso-Plattner-Institut School of Design Thinking, which adopted the process suggested by d.school: Institute of Design at Stanford. This process consists of six stages, namely *understand*, *observe*, *point of view*, *ideate*, *prototype*, and *test*. To be kept in mind, this project is iterative, meaning the team has possibilities to jump from one stage to another, either back- or forward.

During the ideation session, it was decided that this project will be testing different bubble shapes, with a suspect that the shape will matter. And it does, as the prototypes said. Through the scoring test with fifteen respondents on three different bubble shapes, it was proven that bubble shape impacts on the popping sound, aesthetic appearance, and intuitive opening. Popping test was carried out, where 20 of each bubble shape was popped, and bubble with some shapes were failed to burst the seal when it was popped. Different bubble shape apparently also gives different results when the measurements of forces needed to pop and peel were taken.

Performing the best in all of the tests, the bubble that was decided as the best one was the one closest to a circle-shape. This bubble was then improved to give better impact on bursting the seal through the popping. Prototype with improved bubble was shown to the cheese manufacturer (Arla Foods Denmark) who gave a lot of valuable feedback for the continuation of this project.

As mentioned in the title of this article, this study focused on elderly people in Sweden. Ageing population is a common problem shared by western countries, and the baby boomers (born post World War II until 1960s) are now serving a big chunk of the market, whilst being around 50 years old or older now. Making something that actually works for them will be a good move, also with the assumption that they have some physical limitations that will ensure when a packaging is easy to open for them; it will be easy to open for others too. So don't worry, everyone can all have fun with bubble in the cheese packaging!