

Privaly, the Acoustic Hood for Office Workspaces to Reduce Noise and Support the Mental Health of Office Workers.

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Bachelor Thesis

Industrial Design Engineering

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Topic

Designing a product at office workspaces with an environmentally friendly approach to minimize noise distractions, ensure privacy and therefore enhance productivity and contribute positively to the mental health of office workers.

Background information

This project is in collaboration with Ruig & Geroest, a design company that makes handmade sustainable products with a focus on furniture design. Ruig & Geroest is a company that does a lot of business with schools and offices and often gets requests to design furniture for these environments. The company would like to develop a well-thought-out furniture piece that could be applicable to many of his clients. Because health is a popular topic and Sebastiaan believes it's important to stay current with the times, he would like to design a furniture piece that could contribute to the health of employees at offices.

Assignment's objective

Many offices are changed into open-plan offices, where people work together in an open shared space with minimal to no barriers between workstations. This type of office layout aims to promote collaboration, openness and flexibility. However, the open-plan office also comes with its drawbacks.

A major problem with the open-plan office is the excessive noise disturbances and lack of privacy, affecting people's productivity and mental health.

Therefore, this thesis focuses on understanding the problems office workers are facing in today's office, gaining insights into the needs of all stakeholders involved, and proposing a solution that covers those needs and supports the well-being of office workers. The aim of the assignment is to develop a design concept in a sustainable manner for offices to contribute positively to the health of office workers.

Approach

A literature review and empirical research were conducted to gain an understanding of the office context and challenges faced by office workers. These insights were translated into a design direction which could be transformed into the first fundamental

key drivers and requirements. These key drivers and requirements were the driving force behind the ideation and conceptualization phase. In these phases, which included co-design methods, user testing and prototype testing, more insights were gained, creating deeper levels of understanding about the stakeholders' needs as well as the functionality and appearance of the design solution. This resulted in a more detailed requirement list, which was the driving force behind the detailing phase, where the details of the design solution were developed, resulting in a final detailed concept.

Results

Based on this approach and together with the design company Ruig & Geroest, a concept, named Privaly was developed, see Figure 1. Privaly is an adjustable acoustic hood suitable for the users' work desks. It is designed to reduce noise disturbances and create privacy, resulting in more peace and focus in the office space.



Figure 1: Privaly in open (left) and closed (right) position.

By pulling on the strap, users can adjust the hood to meet their preferences and to let the user be in control of how private and enclosed they want to be, see Figure 2.

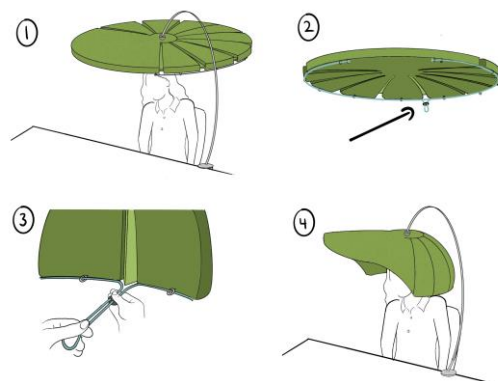


Figure 2: The steps for closing the hood.

Due to the three main positions of Privaly, open, closed and as a divider, the product is multi-functional, enhancing user convenience and value, see Figure 3. Privaly as a

divider offers privacy on both audio and visual levels, increasing the optional privacy of users in several ways.

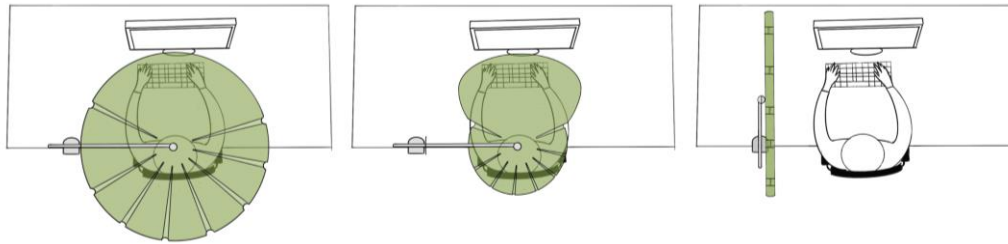


Figure 3: Privaly in open position (left), closed position (middle), and as divider (right).

Conclusions & Recommendations

A design can contribute positively to the health of office workers, by integrating the values of the stakeholders into the design. These values can be defined as design and product features and can be translated into specific and tangible design requirements. This translation into design requirements can help with guiding the design process and the development of a product that meets the values of the stakeholders.

For office workers, the values that can contribute positively to their health, and thereby their work experience and productivity include quietness, focus, social interaction and privacy. But also comfort, flexibility and ease of use are values that can have a positive contribution.

As these values are integrated in Privaly, it can be stated that Privaly is a product that can contribute positively to the health of office workers.

For future work, it is recommended to do more research into factors contributing to acoustic performance to optimize noise minimization.