

Designing a Product-Service System for Ski Goggles for Dutch winter sports company ANIMØ Optics: Trial-to-Buy and Subscription Model.

This thesis researches the applicability of a Product-Service System (PSS) on Ski goggles for ANIMØ Optics, a Dutch ski goggles brand that is invested in fashion and innovation. In response to the growing sharing economy and the demand for flexible and sustainable solutions in the winter sports industry (Yaraghi & Ravi, 2016), ANIMØ Optics is exploring their opportunities on additional revenue models besides the traditional sales. The Product-Service Systems aim at allowing consumers to use a product without gaining ownership over the product. In other words, a PSS consists of 'tangible products and intangible services designed and combined so that they jointly are capable of fulfilling specific customer needs' (Tischner, 2002; Tukker, 2015). ANIMØ Optics recognizes the potential of PSS to offer additional options to their customers while aligning with their own business strategy. Therefore, this thesis investigates flexible and sustainable revenue models and eventually presents final advice on the implementation of the revenue models. The main research question investigated the operational, financial, and logistical aspects of implementation of PSS models and is phrased as follows: *'How can a Product-Service System (PSS) for ski goggles be successfully developed and implemented by ANIMØ Optics to ensure it is sustainable, profitable and appealing to consumers?'*

Through research on several sub objectives, the outcome of this thesis was established: a combination of two propositions. Both literature and market research was conducted for better understanding of the initiative and its sustainable aim, alongside meeting market demands and overcoming market barriers. Additionally, to identify the model's target audience, personas and scenarios were created, eventually resulting in initial design requirements. Subsequently, the design process was initiated through an ideation, conceptualization and finalization phase, in which the application of various circular revenue models was examined and compared, initial concepts were created, subsequently developed and ultimately finalized into final concepts. The outcome of the thesis consists of the conjunction of two propositions: a trial-to-buy period as well as a seasonal subscription model.

On one side, the thesis shows the potential of a trial-to-buy proposition to attract hesitant customers and offer them the chance to try out the ANIMØ ski goggles before committing to a permanent investment. Customers are allowed to experience the style and quality of the ski goggles and can decide whether to keep or return the product after the try-out period of 14 days. The proposition is aimed at occasional skiers and hesitant buyers, providing an opportunity to experience the product without risks for the customer, and is based on a buy-back model, meaning that the customer initially pays for the ski goggles but receives a partial refund upon returning the product in good condition.

On the other hand, implementation advice is given on a seasonal subscription. The seasonal subscription offers customers access to the ski goggles for one entire ski season. Additionally, options for modular replacement of one lens and one strap is offered for every subsequent subscription extension. This enables customization of the ski goggles as well as ensures product longevity through lifespan expansion. This proposition is aimed at

customers who prefer infrequent and/or unlimited use over ownership and desire to benefit from reduced costs compared to permanently investing in a ski goggle.

Crucial for both propositions is the emphasis on sustainability. ANIMØ's modular ski goggles design allows replacement of separate components, which reduces waste and supports lifespan extension of the product. The resource efficiency of the returned goggles to ANIMØ are further improved by means of their residual value. The goggles are either used for rental service in partnership with one or multiple travel agencies or sold on a Sample Sale. This approach ensures that no goggles(components) are wasted, allowing for optimal utilization.

Throughout the design process, the initial design criteria changed significantly. As a result, management of the design criteria became essential and consumed the majority of the effort for this thesis. It became evident that the primary issue was to define the design problem. Eventually, the combination of the previously explained propositions address key considerations of sustainability, profitability and customer appeal. It is an innovative way for ANIMØ Optics to differentiate itself in the winter sports market. Besides this conclusion, a twofold advice on both short- and long-term implementation is provided, including recommendations on further practical validation and investigation. The latter is a critical consideration to ensure the Product-Service System's long-term success. For instance, it is recommended to short-term launch a small-scale version of the trial-to-buy proposition, invest in operational efficiency or even outsourcing the return logistics and provide clear communication to set realistic customer expectations and prevent misuse as much as possible. The complete overview of recommendations on practical validation and further research is elaborated on in the thesis, concluding the business advice to ANIMØ Optics on launching additional models to the company's portfolio.

References:

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