## Designing Birdhouses for Private Market: Balancing values, aesthetics and producibility

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In the context of rising environmental awareness, the Netherlands introduced the "Legislation Protecting Nature in the Netherlands" [1]. Among other regulations, it aims to protect the house-dwelling species (birds, bats, mammals) from being left without shelter due to construction work by mandating that households/companies provide alternative fauna housing.

Unitura, the client of the following assignment, does business in bio-inclusive construction - by designing and producing fauna facilities and selling them on a B2B basis. However, they are also considering expanding into the private customer market.

The goal of this assignment was to design products for Unitura, fitted for the private market while considering aesthetics, producibility, and company values - "unity between men and nature" [2], Hence, the posed research question was "How can the design of the birdhouses effectively combine values of unity between humans and nature, aesthetics and producibility?"

The main potential customer segments were analyzed, turning out to be people aged above 55 and families with children. Based on the gained insights from the customer groups the aesthetic direction was defined: "Contemporary yet neat, concise shapes. Natural wood/wood-concrete texture is used as a base, giving the natural, ecological appeal. Colorful (pastel, vivid colors) elements, e.g. roof, entrance panel, etc. to create contrast. Functionality and ecological value are embraced. Distinctive element that is used for branding applied to all products".

Then, the requirements were introduced following the ecological guidelines for the Great Tit - the type of bird which was used as the example for this assignment. These requirements included materials, functionality aspects, and dimensions [3]. Following the ecological guidelines was also especially important since it directly reflects the values of unity between humans and nature.

Functional mechanisms were explored based on the existing market solutions and some original ones were introduced.

The extensive ideation process was guided by aesthetic direction, functionality, and ecological guidelines. Two main concepts were chosen for further development - the wooden birdhouse "LoveBirds" and the wood-concrete "MoreNature". The designs were further adjusted accordingly to the production considerations - final concepts are presented in fig.1 and fig.2.





Fig.1 "LoveBirds birdhouse"

Fig.2 "MoreNature birdhouse"

The realism of the suggested production methods (mainly involving woodwork, casting the wood-concrete, assembly, etc.) was tested through prototyping processes, which were meant to resemble the actual processes as closely as possible, with some limitations, of course. The result of the prototyping demonstrated that the suggested production methods are realistic.

The objective of the assignment was achieved to a good extent, resulting in the concrete design proposal for two models of birdhouses, which:

Align with the defined aesthetic direction, which in turn was determined by the insights related to potential customer groups

Incorporate the values of "unity between human and nature" by prioritizing birds' wellbeing in the design development process through ecological guidelines, and by communicating the nature appeal through the visual design elements Are adequately producible, proved through prototyping

For future development, the packaging should be designed, transportation of the products considered, more advanced prototyping performed, more insight should be gained into market positioning, and the product line itself could be expanded, while all products preserve the same identity and common design code and values.

## **Reference List**

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