

# Enhancing consumer acceptance of refurbished products by design

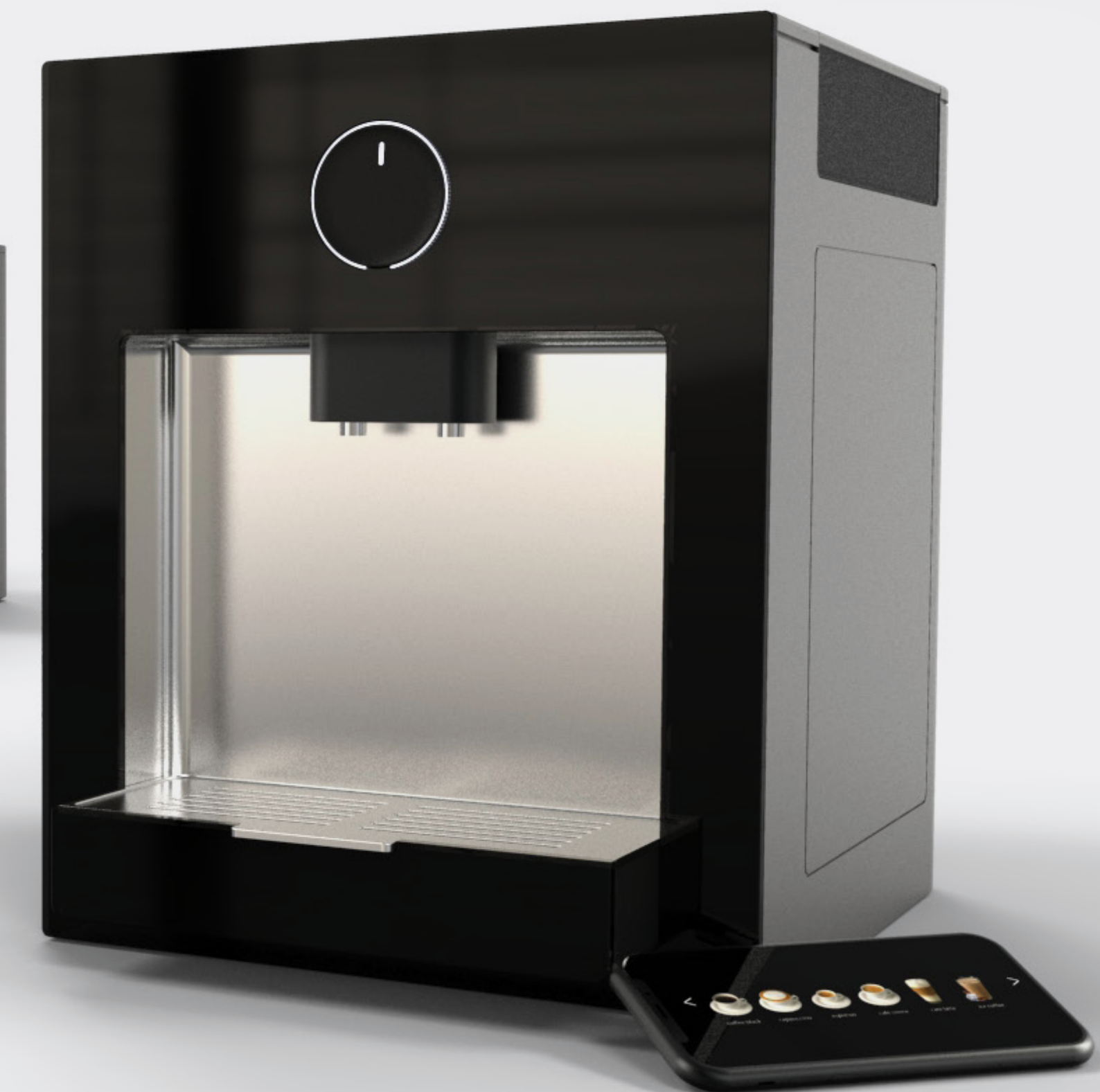
**More than half of all the e-waste that is generated in the Netherlands originates from domestic appliances. One of the strategies of extending the life time of products within the circular economy is refurbishment. To make refurbished domestic appliances a more common user choice refurbishment should be taken into account with the design.**

Customer research is translated to a redesign of a fully automatic coffee machine. By enhancing the accessibility of components and to create a modular structure on the inside of the machine in the process of repairing and cleaning becomes more efficient. Three different front designs were created that meet the requirements of the aesthetics that are preferred for refurbishment. By taking the interface out of the coffee machine, the product becomes more resistant to technological innovations.

When the product still looks like new, the customer is more likely to trust the product. The concept 'looking good, feeling good' is based on this statement. The principle is that part of the cover can be replaced or refinished. Therefor the machine looks new while preserving the internal components and 80% of materials used in the cover. The customers can compose their own refurbished product by starting out with a refurbished base and then choose their own new or refurbished cover to create a stronger product attachment.



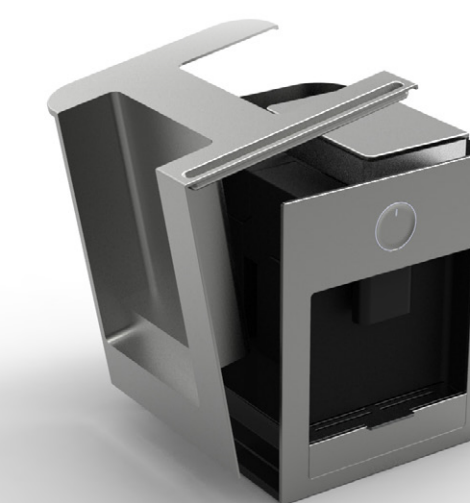
Replaceable cover desings



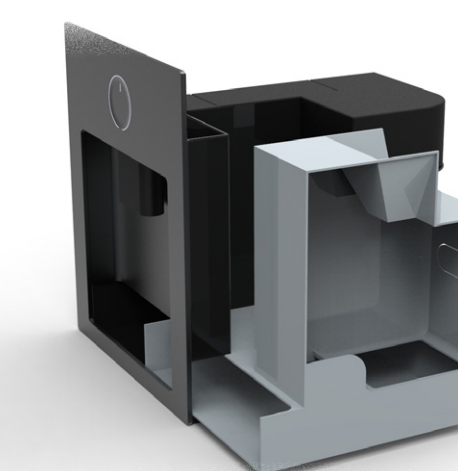
User interface on mobile device



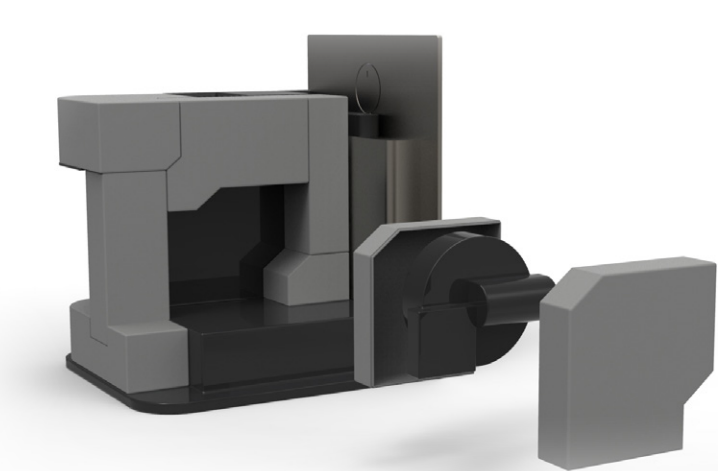
Upgradeable



Accessible



Cleanable



Reparable

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Product optimization for consumer acceptance of  
refurbished domestic appliances  
17-6-2020  
Integrated Product Design

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