## **ABSTRACT**



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## Abstract

This thesis studies ways for mobile devices to communicate environmental friendliness to consumers. As background for the empirical research, consumer behavior, product semantics and emotional design have been studied. The empirical findings of this thesis are based on interviews and a survey. The interpretation and conclusions of the results from both the interviews and the survey were projected by means of the theoretical framework. The mobile devices were examined by their design elements, such as color, material, design style and technologies.

Consumers do not usually connect ICT-technology with environmental issues. As a finding of the thesis, it can be presented that the analyzed design elements affect the perceived environmental image of the product. The semantic language of environmental friendliness is obviously young. Therefore, in order to successfully communicate environmental friendliness, the product's communicative elements must be clear and distinct, even naïve, and create a connection between the product and the environment.

Based on this study, green, blue and white are colors that have the strongest reference to environmental friendliness, while black and pink are colors that have the least reference to environmental friendliness. Natural materials, such as rock and wood, are perceived most environmentally friendly, plastics and metals are the opposite. Simple and purposeful design style is perceived more environmental friendly than showy or technical looks. Technically simpler and more durable mobile devices were perceived more environmentally friendly than music, video or 3G mobile devices, although evaluation of single features was perceived difficult. Also differences between the perceived greenness of different electronics brands do exist. This thesis concludes the research results in four conceptual suggestions for products that support an environmentally friendly message.

The sampling of the research had a majority of academically educated Finnish citizens and, therefore, the study gives information concerning only the phenomenon itself without studying differences between demographic groups. Reliability of the study was improved by taking multiple approaches, by conducting interviews and an Internet-based survey that was accessible by invitation only. Design elements are mostly analyzed separately even though they exist as combinations in real life.

Previous studies related to the topic are scarce. This thesis suggests that the bilateral impact of design elements and the impact of cultural backgrounds should be further studied. Also the testing of presented product concepts is suggested for future studies. The topic should be expanded and deepened by further studies.

Key words	mobile devices, environmentally friendly products, visual communication, design, semantics
Further information	