

# Construction of design activity index based on the value of artifact

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**Abstract:** Digital personal fabrication refers to the creation of products using ICT-tools by individuals. In order to support the users of such tools who are untrained in design, it is necessary to develop a support system that makes it possible to use expert knowledge on designing products. For this study, we selected 26 items from the values that are considered important for design (e.g., unique, modern; Inomata et al., 2016), and investigated the design activities for realizing these values. Eighty professionals in design participated in the survey. Many design activities concerning shapes and colors were observed as ways to realize the values. In addition, various activities such as improvements on materials and motifs or advices to satisfy the practical design activity were observed. We created an index of the frequently used activities to realize each value and discussed its potential as an actual design support tool.