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Developing a Circular Design Approach: Towards Truly Sustainably Stronger Solutions.

A Vepsäläinen, LAB University of Applied Sciences, Finland

Our world is experiencing profound transformations across multiple domains. Conflicts are occurring both locally and globally, climate change presents multifaceted and complex challenges, and cultural and attitudinal shifts are underway. These dynamics impact numerous professions and fields, influencing the evolution of their expertise. The imperative to advance social, environmental, and economic sustainability is subject to modifications in designers' methodologies and the processes by which products and services are conceived. For many, the circular economy is mainly about material-centered design and the development of material-cycle models. Thus, designers must embrace innovative, sustainable approaches that address both environmental and societal needs. The skillset requires deeper understanding of circular models than just lengthening the life cycles and product loops.

This study, conducted as part of a Baltic collaboration project, examines the crucial role of designers in facilitating the green transition and addressing the pressing global challenges posed by climate change and biodiversity loss. The research question is: What specific skills are essential for designers, and what forms of training are necessary to fully harness their potential in creating sustainable solutions and contributing to the emergent paradigm of sustainable and regenerative growth? Apart from that, we also consider whether current methods and tools offer a solution to the mainly creating weaker sustainable design than strong one.

Designers possess the potential to play a pivotal role in the development of sustainable solutions, which frequently require systemic change. The designers' toolkit provides exceptional resources for this purpose. Despite this critical role, numerous designers continue to face challenges in implementing systems thinking and achieving sustainability objectives, often due to clients and companies adhering to traditional linear models or only beginning to transition towards sustainability and circularity. This situation underscores the imperative for specialized training programs that equip designers with the needed skills to integrate circular economy and regenerative principles into their work, thereby generating solutions that genuinely advance sustainability within the business sector. Moreover, the transition towards regenerative growth calls for a fundamental shift in design thinking, moving from merely reducing harm to actively restoring and rethinking both the environment and society. Designers must be equipped with the skills and mindset to create positive, restorative impacts, rather than simply mitigating negative effects.

Our paper explores various sustainable and circular design training tools and methods, assessing their effectiveness in addressing contemporary challenges especially from a design profession point of view. Against this background, the central question that motivates this paper is: What is the significance and relevance of existing design practices and frameworks. Additionally, we present our research findings on the supplementary training required for designers to create sustainable value for businesses, consumers, and the environment simultaneously.