# Conceptual Models and Methodology to assist Doctoral Design Research – The 4-category Model innovation

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#### FIGURE 1

Design Research Classification Model<sup>©</sup> Authors.

#### FIGURE 2

Design Research Classification Model Map<sup>©</sup> Authors.

After conducting research and workshops on research methodologies with doctoral students in design from different countries and universities over the last six years, the authors have observed that students are often eager to learn more about how to progress from a research interest, typically sparked by a design question, to a methodologically robust and coherent research plan guided by high-quality research questions. The 4-category design research classification model developed by the authors is designed to be open and flexible enough to potentially accommodate any kind of design research by adding a fourth category: research 'from' design (Figure 1). This 4-category classification model intended to aggregate perspectives into an organized and terminologically consensual research 3-category model adding the research "from" design<sup>1</sup> and having achieved international recognition in the field of Design research in leading journals such as Design Studies (vol 78, 2022) and in books as Applied Design Research: A Mosaic of 22 Examples by J. Van den Eijnd, Routledge, 2022; Teaching Research in Design: Guidelines for Integrating Scientific Standards in Design

*Education* by Dittenberg et al., Transcript Verlag, 2023. Aiming to provide another visual representation of the model, we positioned these four categories in a classification model map (Figure 2) organized around 4 layers involved in the design field: Processes, People, Philosophy and Products. We consider three main design processes: Academic Design Research, Higher Design Education and Professional Design Practice and we choose to represent them by a pyramid shape because we see them as personal processes or trajectories that an individual undergoes as a design student, researcher and practitioner. If in our analysis design project assumes a central role, it however, differs on the place where the design project is developed and when the author's reflection and analysis occurs.

### Reference

[1] Clemente, V; Tschimmel, K.& Pombo, F.(2022). "Matching Research Questions with a Research Methodology: Proposal for a Didactic Resource." *The International Journal of Design Education* 16 (1): Design Principles & Practices, (155-171). doi:10.18848/2325-128X/CGP/v16io1/155-171. *ISSN*: 2325-128X (Print). *ISSN*: 2325-1298 (Online).



