

DESIGN-VALUE IN THE PLATFORM APPROACH

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1 BACKGROUND AND IDENTIFICATION OF KNOWLEDGE GAP

Modernist architects sought a unity of the ‘art’ of design and means of production. Efficiency of production and design-flexibility were the primary markers of design-value during this time, rather than seeking integration and mediation of contextual factors and has been identified more recently.

The modernists’ legacy extends beyond the profession of architecture, to inform industrialised house builders’ methods, constraining the realisation of design-value.

Descriptions of industrialised house building platforms are emerging, especially in Sweden, where efficient design and delivery processes have emerged, though these have largely defined design from a technical and production perspective.

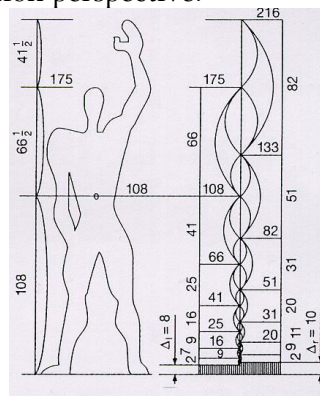


Figure 1: Le Corbusier’s ‘Le Modulor’

2 RESEARCH AIM AND METHODOLOGY

‘Lean’ commonly associates value and waste, seeking a minimisation of waste. A more nuanced understanding of value is required due to its objective, subjective, relative, context dependant and dynamic nature.

Acknowledging the variety of value perspectives that exist within Lean, this paper limits its discussion to focus on design-value as a *soft* factor counter to lean’s often *hard*, technical, cost and efficiency value perspective. Lean theory considers both the product and process layers of product platforms, yet little research has been conducted into the intangible layer, which bears significant impact on design-value, and contributes to a ‘total product’ definition.

This research aims to uncover how new platform-thinking business approaches are delivering intangible design-value, and what lessons may be held for the construction industry.

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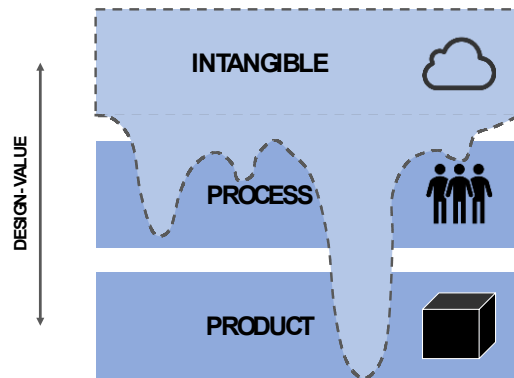


Figure 2: Design-Value from a 'Total product' perspective. Diagram by author after Steiner & Harmon.

3 RESEARCH FINDINGS

- Platform approaches are reliant upon a range of contextual (place) factors and actors' (people) experience, this variability means that it is not enough to transplant one mode of thinking directly from one culture to another. A broad, open and global perspective is required to tackle these differences and leads to the concept of *platform-thinking*.
- Platform-thinking, as a concept, links producers and consumers more directly than traditional businesses, altering how an offering and market are perceived and managed.
- Connecting, sharing and integrating are key concepts for platform-thinking and enable a community of users to create value through new external interactions rather than existing internal business processes, potentially challenging existing understanding of product development platforms.

4 SUMMARY

- The emerging product platform approach being utilised by industrialised house builders has allowed greater design flexibility and efficiency to be realised, responding to the modernist architects' interest. However, the design-value outcomes of industrialised house building remain an open question.
- Investigating the concept of platform-thinking has shown that possibilities exist when design-value is considered with a platform-thinking approach which emphasises connectivity, sharing, and integration of producer and consumer.
- Case studies show platform-thinking to enable collaboration, create new pathways of communication, balance a range of perspectives, and institute innovative knowledge management procedures
- Platform-thinking businesses create an 'ecosystem' of producers and customers, to effectively deliver design-value, and demonstrate the potential of a more holistic, connected industrialised house building industry

