

Circular Design: Systemic Innovation

Key Learnings

Design Product Systems With Their Ecosystems

Companies say design should integrate with business models from the beginning, yet in practice they design separately. Cars can serve cities through bidirectional charging and data provision beyond serving drivers. Framework laptops publish interfaces so external developers create compatible products. **Thinking about the product system with its business model from day one** rather than the physical product alone **unlocks ecosystem participation and new value creation.**



Translate Business Models Into Product Requirements

Business model experts identify strategic needs while product architects determine implementation, yet these insights remain disconnected. Making repairability economically feasible requires translating this into architecture decisions like modular design. **Teams need translators who convert business model insights into product requirements** because **strategic value only materializes when product architecture enables it.**

Integrate Cross-Functional Experts Early Despite Friction

Life cycle assessment and recycling experts typically work at the back end, analyzing what designers already created. Bringing them to the front creates friction because different fields speak different languages. However, the knowledge exists separately and integrating it creates something better. **The more a project rethinks rather than optimizes, the more ambiguity tolerance teams need** because **early integration produces superior outcomes to late-stage analysis.**

Use Constraints As Creative Opportunities

Product development involves constant trade-offs between costs, aesthetics, sustainability, and functionality that appear as limitations. However, disassembly requirements also make assembly easier and cheaper, while reversible joining serves both end-of-life needs and in-use customization. **Cherishing boundaries and trade-offs rather than resenting them** enables designers to **find solutions that resolve multiple requirements simultaneously.**

Listen to the full episode here:

<https://circularity.fm/circular-design-systemic-innovation/>