



Adoption of Unconventional Approaches in Construction: The Case of Cross-Laminated Timber

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Summary:

Achieving sustainable development requires the decoupling of economic growth from the use of non-renewable resources. This depends on industry adopting unconventional approaches to production. This research explores the root causes of barriers to the adoption of such approaches in the construction industry, and applies a behavioural model to assess whether companies are hindered by capability, opportunity or motivation.

The long history of lowest-cost tendering in construction has led to a path-dependent lock-in to conventional market-driven objectives of cost and risk reduction; it is suggested that locked-in companies lack the commercial opportunity and hence motivation, rather than the capability, to adopt approaches perceived to increase cost or risk. Such companies will therefore tend to resist unconventional approaches, restricting the physical opportunity for other project participants. This theory is explored in a case study of first adoptions of cross-laminated timber (CLT) in UK projects, using a survey and series of semi-structured interviews.

The case study found that project contexts created market niches. This provided designers, who were motivated to use CLT, the opportunity to promote its use in the project. CLT was seen as key to successful resolution of project constraints, thereby providing motivation to other project participants to adopt the material.

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