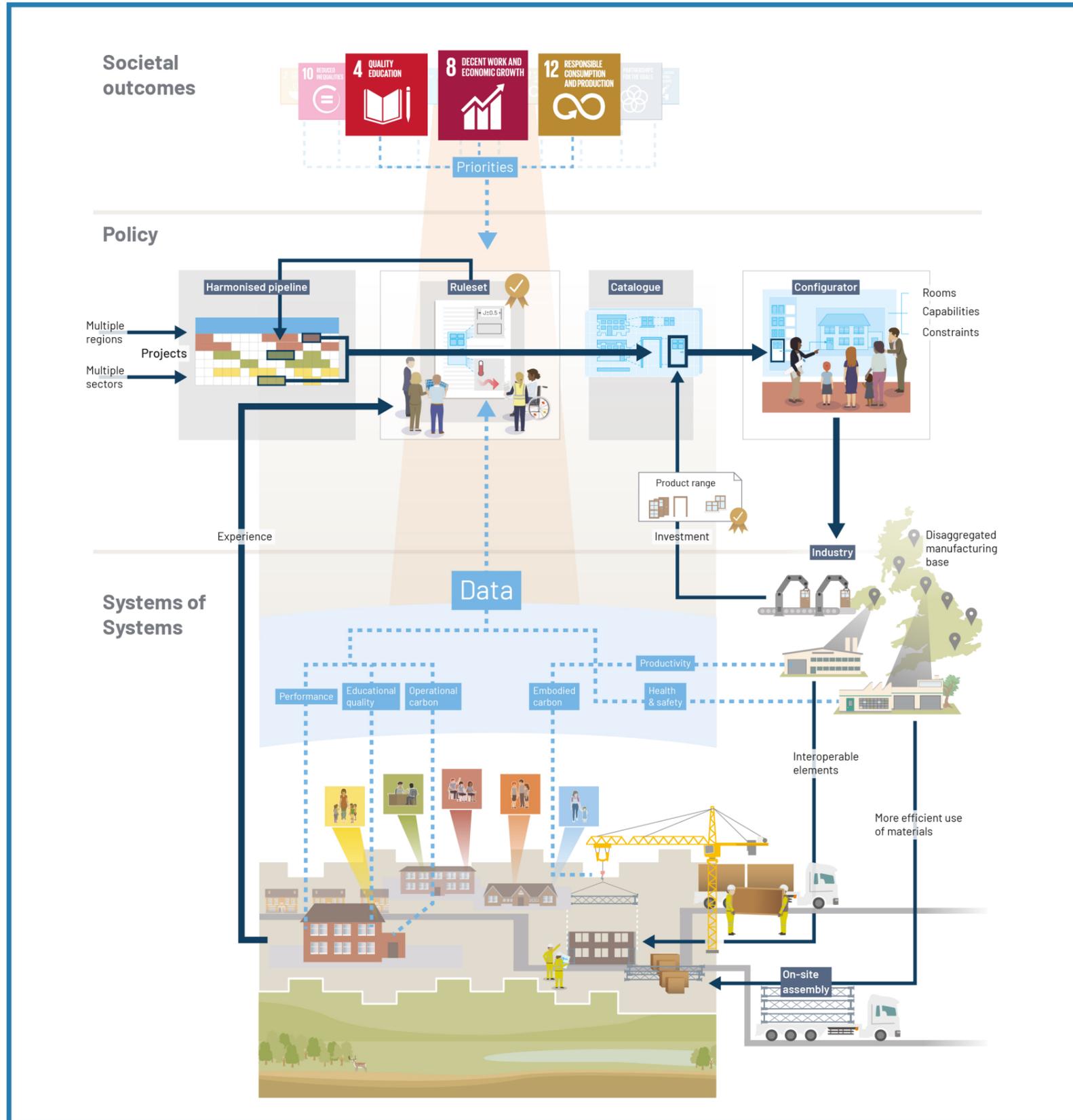


Addressing the need for social infrastructure using a platform approach



The Problem

The way that we deliver our buildings is inefficient and too often based on delivery of bespoke outputs in sector and project silos. Missed opportunities to leverage scale through the use of standardised, interoperable elements leads to inefficiency in design, production, logistics and assembly. Further, these missed opportunities hinder the creation of a disaggregated manufacturing base and associated stable employment, continuous improvement, and the ability to reliably deliver high quality, high performing, energy efficient buildings at scale.

The Vision

There would be a common supplier agnostic ruleset through which we would harmonise and filter repeatable elements of the built environment to provide visible demand. The products to address this demand would be manufactured by a disaggregated supply chain, creating stable and inclusive forms of employment. Products would be offered via machine readable catalogue, with product competition based on a range of performance considerations.

Automation through the use of configurators would enable a greater focus on value led elements of the design process, and assembly would employ digital workflows, machinery and robotics. Digital models and twins would enable assurance and feedback throughout delivery and use.

The Benefits

- Structural industry benefits. Platforms can open the construction industry to productivity and efficiency akin to the manufacturing industry, creating productive capacity and enabling the creation of inclusive stable manufacturing employment.
- Factory conditions in construction. Delivery via repeatable productive activities enables predictability and automation to improve health and safety, reduce waste, increase productivity and speed of assembly, and address the skills gap.
- Feedback loops. Currently operational data from an asset only provides insight on that specific asset. Platforms can enable data to inform the whole ecosystem, from rules to product catalogue.