

Product Platform Rulebook

What is the Rulebook?

The Platform Rulebook aims to accelerate the development and adoption of solutions to deliver our future schools, hospitals and homes in a way that boosts productivity, innovation and quality.

Developed with the Hub's industry partners, the Rulebook addresses the Government's ambitions - set out in the Construction Playbook and TIP Roadmap - for the construction sector to deliver social infrastructure using platform and off-site manufacturing approaches.

Rulebook Offerings

The intent of the Rulebook is to accelerate learning and facilitate a move towards a commonality of process for developing product platforms by:

- Educating
- Empowering and
- Enabling

Rulebook Content

- Fundamentals
- The Rules
- Guidance
- Product Platform Development Framework
- Recommendations and next steps
- Case Studies
- Definitions

Use of product platforms

What is a product platform?

A kit-of-parts, associated production processes, and the knowledge, people and relationships required to deliver all or part of construction projects using a platform approach. A product platform provides a stable core which is configured and combined with complementary components (via defined interfaces) to suit a particular project. A product platform also includes the processes, tools and equipment required for assembly.

Key benefit areas when using product platforms:

- Fewer and more standardised components
- Digital workflows
- Standardised processes
- Economies of scale

Acronyms:

PP = Product Platform
PPP = Product Platform Provider

Different roles involved in product platforms have different motivations and involvement within a project:



Client



Platform Provider



Manufacturer



Project Member



Legislator

The Rules

Determine whether something can be considered a product platform or not.



1. Deployable

Across multiple, non-identical assets - having the ability to be flexible without being inefficient.



2. Configurable

Ability to suit individual requirements across different projects, using common repeatable elements.



3. Common repeatable elements

Including: a kit of parts, production processes, knowledge and people and relationships.



4. Interfaces

There are defined interfaces which can be made available to the designers and suppliers of peripheral or complementary products.



5. Quality

There are documents and procedures in place to define a minimum level of quality to be achieved.



6. Structured information

Structured approach to information including: Product Information, Deployment Information and Organisational Information - enabling an informed use of platforms.



7. Open

Deemed an 'Open Product Platform' if it enables any party to make, use and buy the common, repeatable elements, for legitimate purposes.

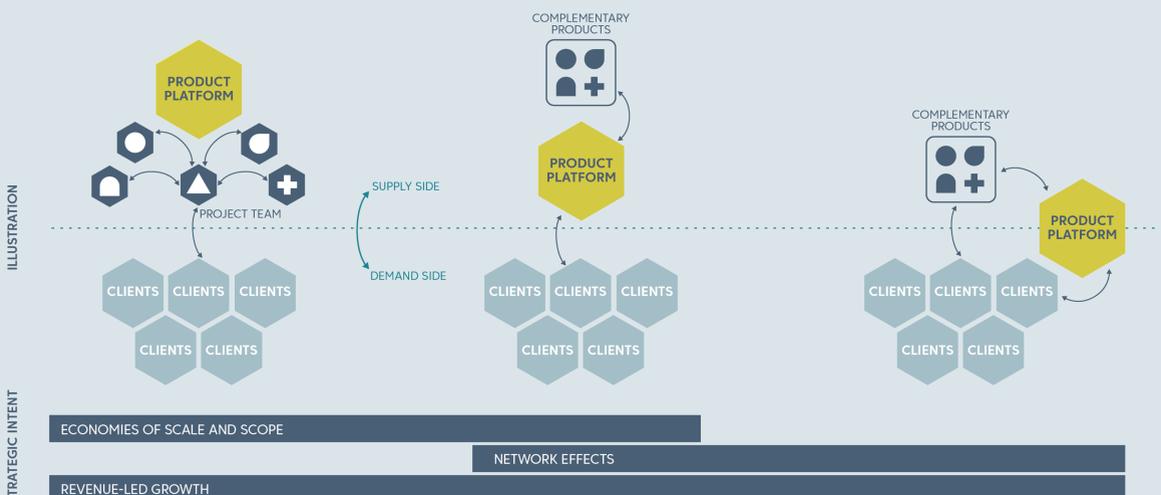
Principles

Determine how advanced a product platform is.

Approaches to Product Platforms

Strategic intent influences a PPP's approach to the rest of the development process.

Output	Integrated Delivery	Affiliated Delivery
<ul style="list-style-type: none"> • Integrates and may configure with other offerings to deliver projects • Creative and offers the opportunity to find the most optimised solution • PP is largely invisible and focused on delivering output • Solution not assigned determined at tender • Potential to be harder to predict and control benefits • Additional work to standardise interfaces 	<ul style="list-style-type: none"> • The platform directly interfaces with other offerings to deliver projects • High degree of control and visibility for PP • Most curated/platform specific • Client seeing best fit turnkey/integrated solution at tender • Pre-defined interfaces by PPP • May drive vertical integration 	<ul style="list-style-type: none"> • External innovators leverage the PP and interface directly with client - providing they affiliate with/or conform to PP • Pre-defined interfaces • Client defined at tender • May reduce resilience • Easy to disaggregate supply chains with the right platforms



Product Platform Development

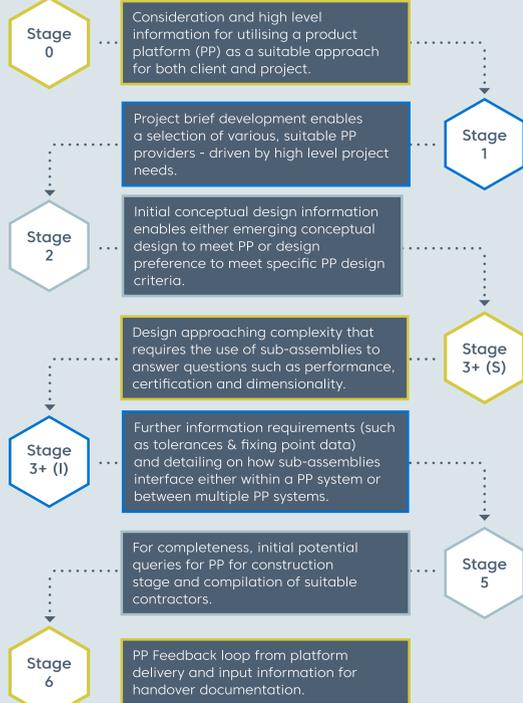
Split across 3 stages (of PP Strategy, Planning and Design), below is a summary of categories and their core activities to be completed:

	Product Platform Strategy				Product Platform Planning				Product Platform Design			
	Setting of strategic intent - is a platform the right approach? If so, identification of where to play and how to win by maximising market leverage from a common technology.				Clearly defining the problem to be addressed by, and approach to, the proposed product platform before commencing design.				Design of platform and production assurance processes (on and off site). Management and deployment of platform project.			
	Strategic Intent	Market Segmentation	Commonality Strategy	Outline Business Case	Design Enterprise Architecture	Benchmark Existing Solutions	Generate Concepts	Output	Design Kit of Parts and Interface Definition	Design Production Process (and Assembly)	Design Assurance Regime	Output
Task Required	Your nature and capabilities	Define and segment the market	Commonality impact	Cost, benefits, investments	Understand information requirements	Dissect and assess existing products	Redesign key areas	Develop platform performance specification	Degrees of freedom	Degrees of freedom	Degrees of freedom	Develop Deployment Manual
	Defining a "product"	Analyse and target segments	Cost structure and financial benefits	Implementation and Roadmap	Design and implement information systems	Identify areas for redesign	Develop commonality plan		Measure Complexity	Measure Complexity	Measure Complexity	
	Advantage sought	Validate segmentation strategy	Variants and volumes	External enablers			Determine Variants		Evaluate Performance	Evaluate Performance	Evaluate Performance	

Deployment Manual

Delivering the information project teams need from PPPs to enable the deployment of PPs.

A directory of information has been created for PPPs to create a deployment manual. This will be utilised by project teams so the PPs can be used on their projects. The steps below have also been mapped across RIBA DfMA work stages.



Case Studies

5 exemplary industrial applications of 'the rules'



What's next?

Establishing clear governance and building in continuous improvement mechanisms will ensure the longevity and success of the Rulebook in accelerating the development and adoption of product platforms.

Development

- Beta version consultation - May/June 2022
- 1st Edition release - Aug/Sept 2022
- Legacy and governance arrangements confirmed - Sept 2022

Roles

Governance arrangements will be put in place to establish a framework for accountability. Three key roles are described for government and industry to fill:

- Owners
- Custodians
- Users

Core Principles

The Rulebook will maintain the core principles of being:

- Open
- Collaborative
- Continuously Improving

Expectations

- Continuous Improvement
- Active feedback mechanisms
- Periodic review
- Utilisation enables progressive harmonisation