The Product design process

Evaluation

Investigating and defining

Planning and production

Design and development (conceptualisation)

1. Identify client, user, need, problem or opportunity

2. Design brief
Outline of the context, constraints and considerations

3. Design option criteria and product evaluation criteria
Development of criteria to evaluate how well the design, planning and the final product satisfies the design brief

4. Research
Research into factors related to the design brief: materials and process investigations

5. Visualisations
Concept sketches and drawings of whole or part of potential ideas to meet the requirements of the brief

6. Design options (presentation drawings), selection and justification of preferred option
A series of potential solutions evaluated to determine which best suits the requirements of the brief

7. Working drawings and pattern drafting
Drawings including technical drawings, showing product specifications (i.e. sizes and construction methods) needed for production planning

8. Production plan
Sequential plan and timeline, listing tools, equipment and machine with risk assessment and a materials list

9. Production
Scale model, prototype and/or product and production record. Refinements and modifications may be made throughout production

10. Product evaluation
Evaluation of prototype/product quality using product evaluation criteria. Recommend improvements

11. Production planning and process evaluation
Evaluation of the efficiency and effectiveness of production processes

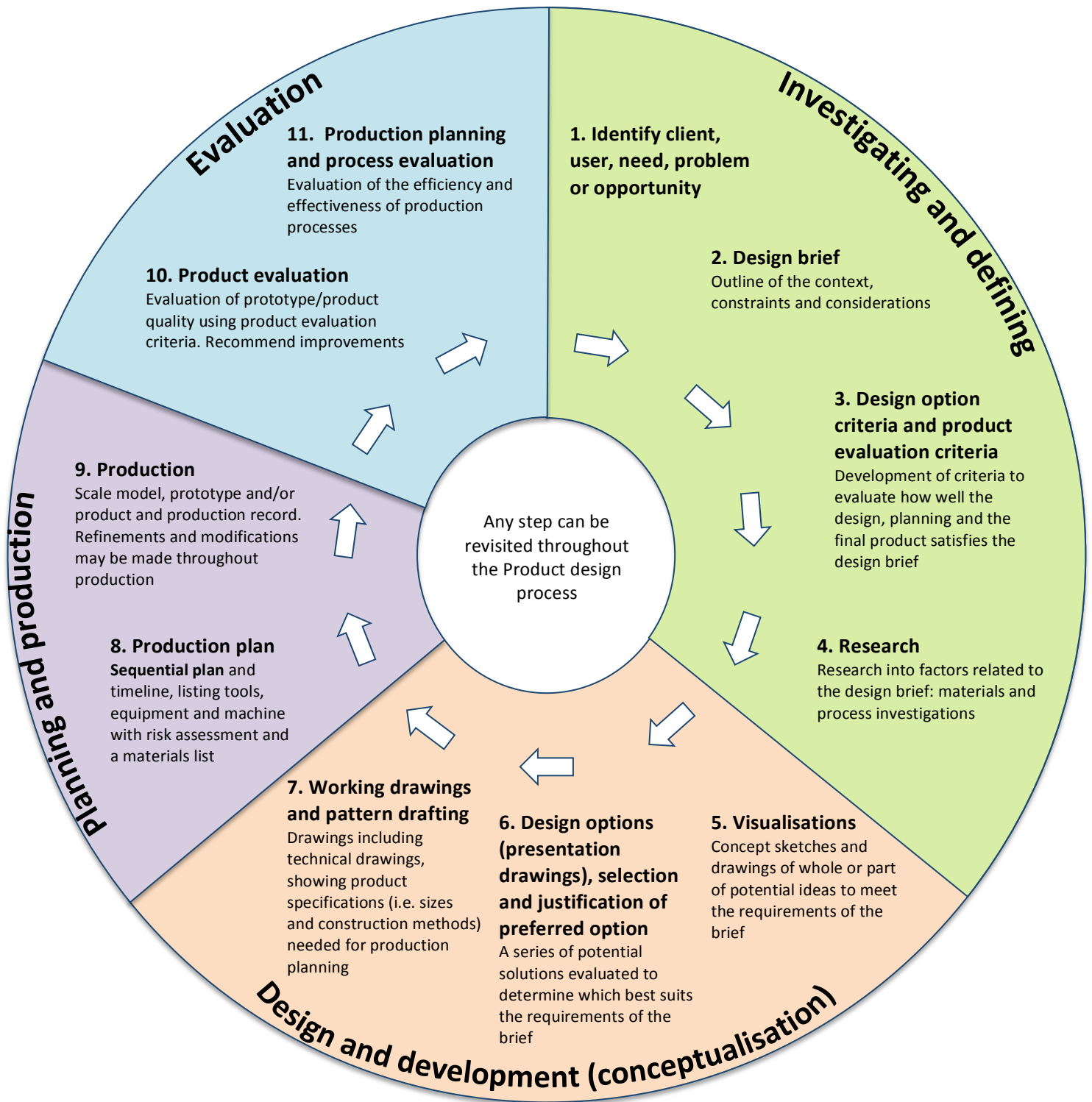Any step can be revisited throughout the Product design process

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