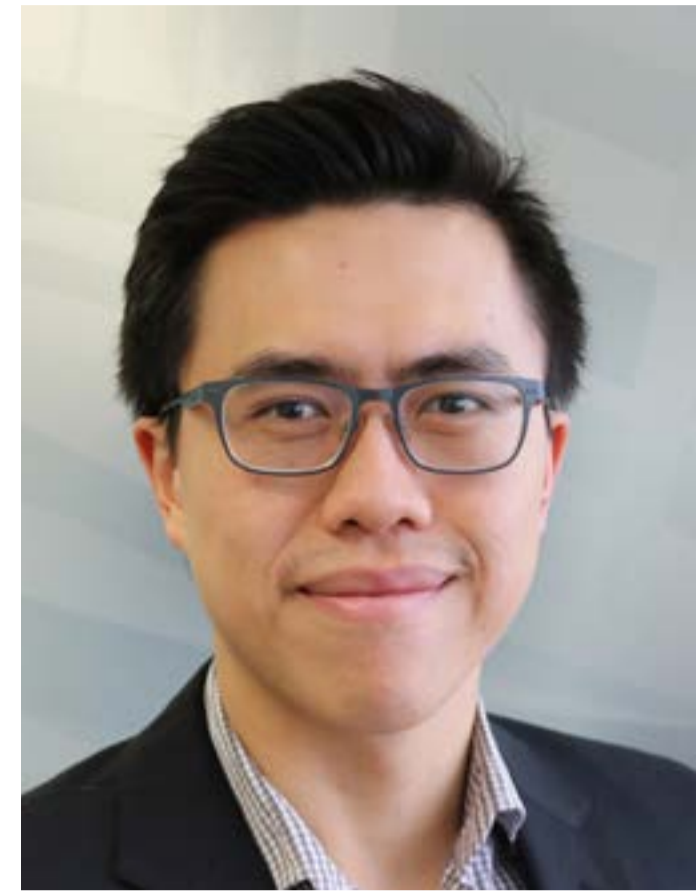


Establishing principles in digital transformation through comparative analysis of frameworks and development strategies in platform/coding development for consulting



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DIGITALISATION IN ENERGY CONSULTING

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DIGITALISATION | THE VALUE-ADD IN CONSULTING

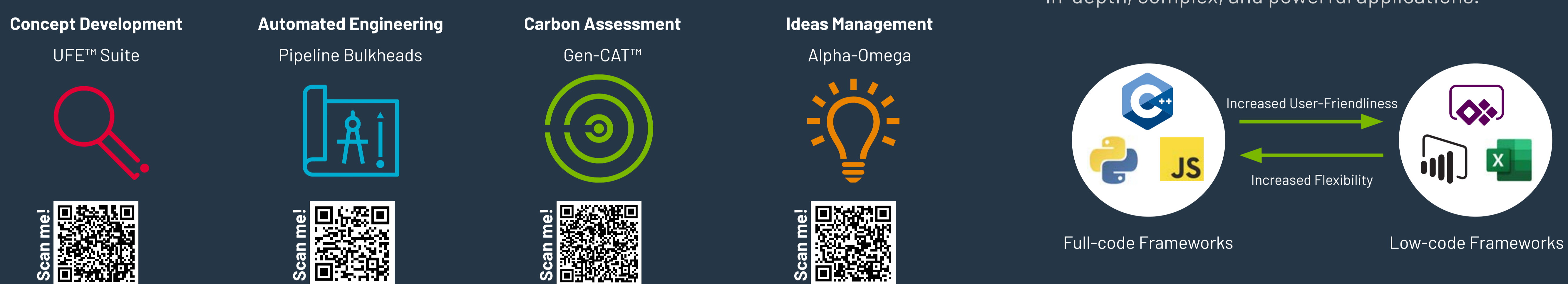
- Front-end consulting enables optimised and lower-risk project execution
- Digital transformation within consulting enables increased value-adding propositions to the energy sector
- Development of small and large-scale applications streamlines workflow and unlocks improved approaches and insights
- Successful digital implementation relies on fit-for-purpose selection of execution strategies and software frameworks
- The above take into account initial scoping of digital functions as well as existing skillsets within organisations
- Clients and end-user focus must drive digital application transformation

THE FRAMEWORK

Software frameworks form the backbone of any digital transformation.

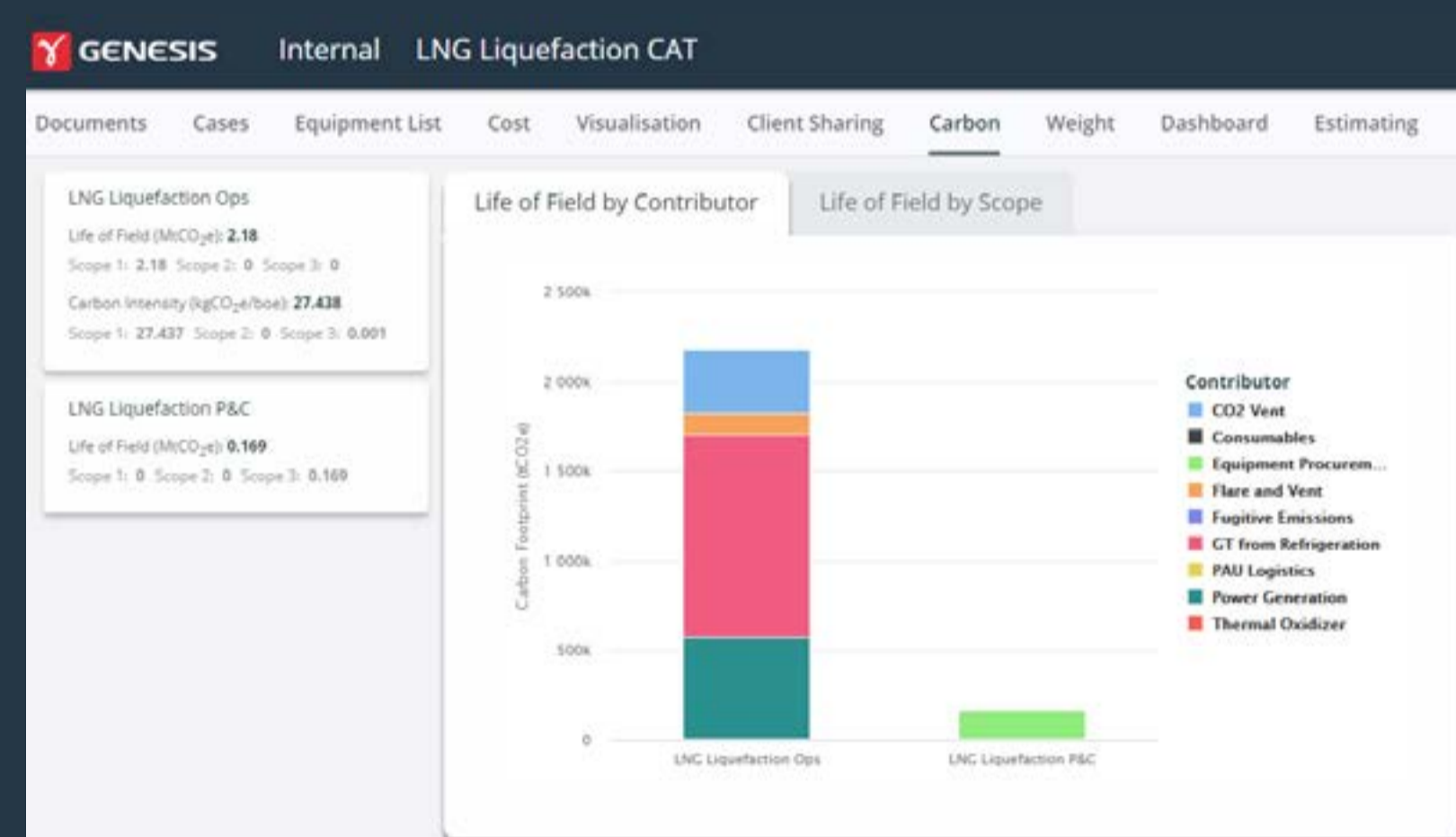
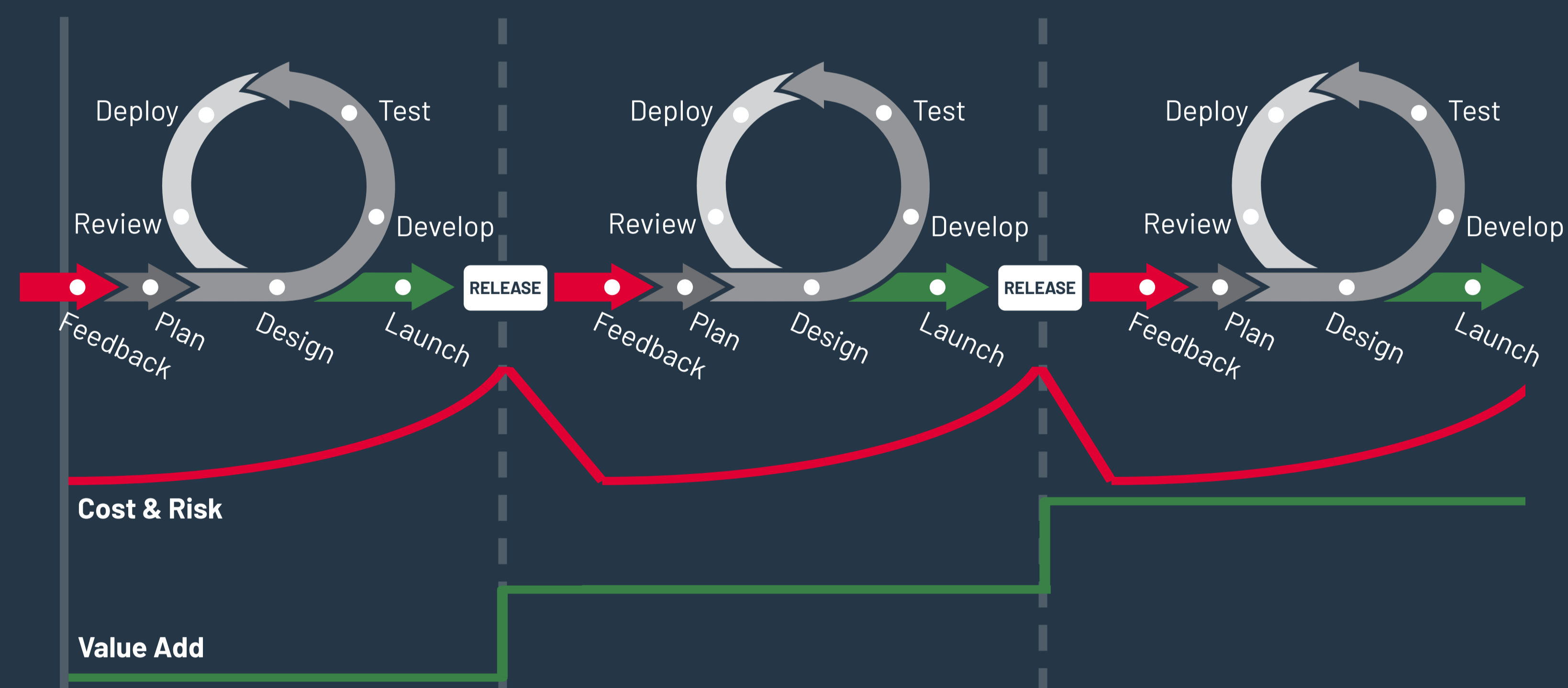
Low-code frameworks provide a streamlined roadmap from development through to distribution while retaining basic coding power and functions.

Full-code frameworks, while requiring specialist skillsets, provide limitless scope to create applications. The advent of large-scale user coding bases to provide package libraries allows for building in-depth, complex, and powerful applications.



AGILE EXECUTION | FAIL FAST, LEARN FAST

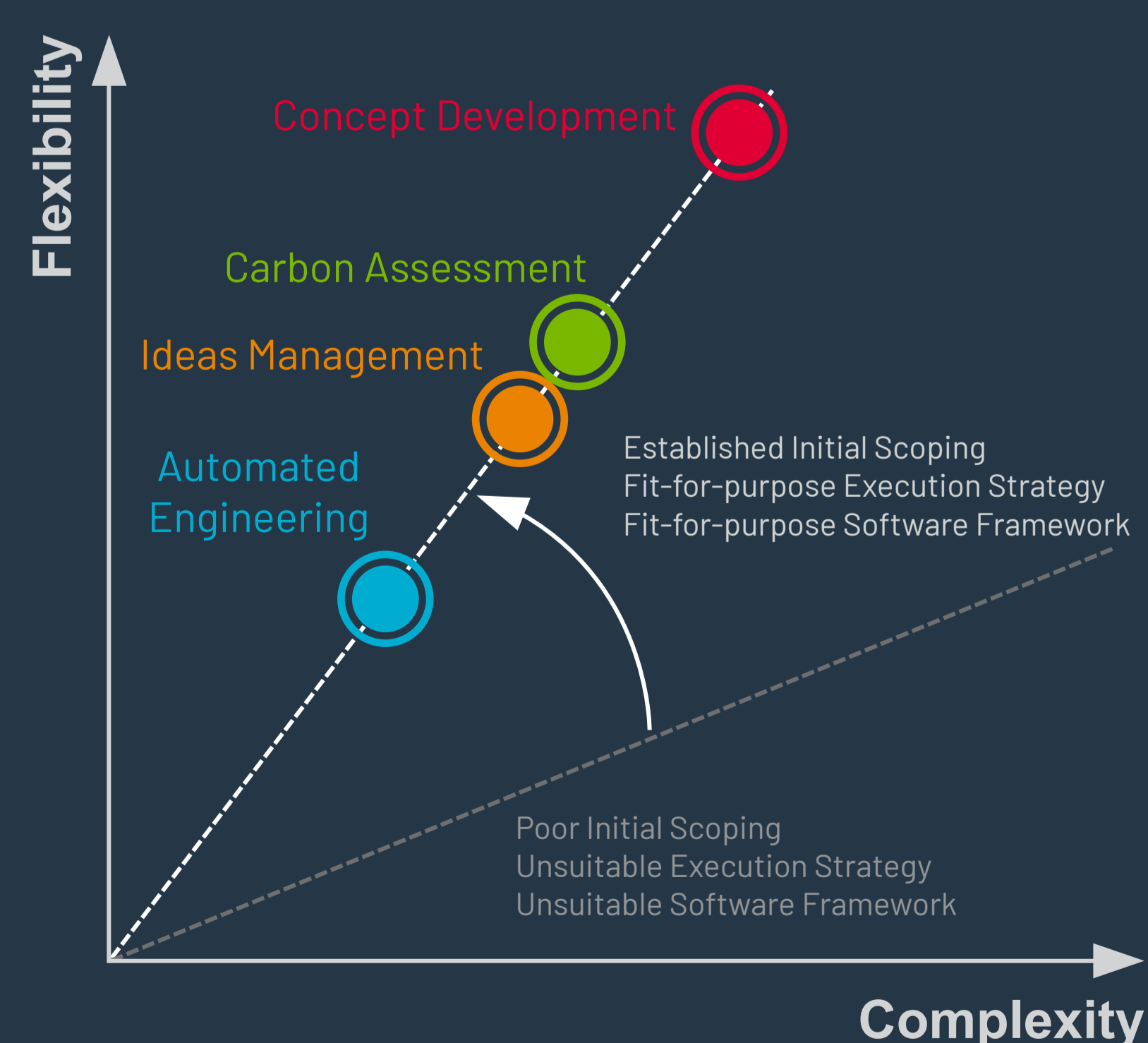
- Agile execution provides key success factors to digital execution
- Maintains client and end-user focus throughout development
- Accelerated development to a minimum viable product
- Clear path to adoption by client and/or end user due to consistent release and engagement
- Low risk execution due to rapid return on investment and value-add
- Applicable to small on-project applications to larger digital solutions



CASE STUDIES | PROVEN DIGITAL SUCCESS

Flexibility vs complexity provides a comparative guideline to digital developments. High flexibility is generally correlated with higher complexity, cost, and man-power investment.

Successful digital developments such as those in the case studies maximised the ratio of flexibility to complexity.



CASE STUDY

	Concept Development UFE™ Suite	Automated Engineering Pipeline Bulkheads	Carbon Assessment Gen-CAT™	Ideas Management Alpha-Omega
Size	Full external development team < 1 year development Professional software development standard	Two developers Project-focused solution Developed on-project	Internal development 3 months to MVP	Solo developer 3 months development (+ ongoing maintenance) Integrated as part of company process
Execution Strategy	Conventional Separate Software development	On-Project Development	Conventional Separate Software development	Conventional Separate Software development
Digital Framework	Full-code	Full-code	Low-code >> Full Code	Low-code
Development Team	Specialist Teams	General Personnel	Specialist Teams	General Personnel
Initial Scoping	Client-Based	Project-Based	Market-Based	Client-Based

DIGITALISATION | philosophical as much as a technical change

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