



Developing client relationships through systems thinking research



The Industrial Doctorate Centre (IDC) in Systems helped Frazer-Nash Consultancy to apply a suite of systems thinking tools and techniques to develop new service offerings.

Frazer-Nash is a leading systems and engineering technology company. With a network of nine UK and three Australian offices, its consultants apply their expertise and know-how to develop, enhance and protect its clients' critical assets, systems and processes. The company is renowned for its work in the aerospace, transport, nuclear, marine, defence, power and energy sectors and its security, resilience, cyber and information technology expertise.

Frazer-Nash applies its Systems Approach to help it respond to its clients' challenges. The company's experts work with

them to understand the whole range of financial, operational, organisational, people and other issues that surround their technical needs. It uses this understanding to deliver demonstrable business and technical value. Consequently, it was natural that Frazer-Nash became one of the IDC's first strategic partners – but what benefit could systems thinking bring to a company full of systems thinkers?

What the IDC did

For Frazer-Nash, the aim of engaging with the IDC was two-fold: firstly, to enable Frazer-Nash to identify and engage

with past and present clients in new ways; and secondly, to help the company identify and develop new consultancy services. The initial focus of the research was to apply soft systems methodologies and engage with their clients to review activities across their business. The aim was to identify opportunities where hard and soft systems thinking approaches could be applied across Frazer-Nash services to increase their value for clients.

The Research Engineer identified that there was a significant opportunity for the company to provide consultancy services to support pre-revenue technology development companies – through providing comprehensive, independent, evidence-based assessments of projects to determine their viability and investment readiness. The approach presented the risks much more clearly and logically, allowing clients to understand exactly what features are critical to making the investment succeed or fail. Previously, the market has been reliant on the individual opinions of experienced "experts" with no evidence to back up their views. This enabled Frazer-Nash to forge closer relationships with its clients, helping them to prioritise their internal funding and investment.

In 2016, the approximate value of the global due diligence market for early stage investments was estimated to be \$20M/yr. The IDC project has enabled Frazer-Nash to develop a market leading comprehensive due diligence service that applies academically informed, research based approaches – currently, Frazer-Nash is the only consultancy in its field that has adopted this approach.

- The Impact**
- The Engineering Doctorate (EngD) project has helped deliver new systems thinking tools and techniques, enabling Frazer-Nash to develop a new service offering. The knowledge generated has been adopted across the company and has fostered an ongoing relationship with the IDC to deliver to deliver a range of benefits tangible benefits:
- The IDC project has contributed to Frazer-Nash's business – helping to improve business performance whilst enhancing competitive advantage. The techniques developed in partnership with the IDC have been applied time and again with over a dozen new and existing clients.
 - The project's success led to a further six EngD and IDC in Systems providing Frazer-Nash with underlying systems thinking capability in technology commercialisation, innovation management, enterprise design and assessment. Frazer-Nash recruited 4 of the REs into the company.
 - The original research engineer was seconded to launch Frazer-Nash's Australian business. By applying the knowledge and experience gained on the EngD programme he was able to grow a team of 15 systems engineers advising a range of Australian clients from technology developers to defence and civil government.



The Future

Frazer-Nash's strategy for growth and the continuing development of its diverse range of services are central to its business. It continues to invest in new and innovative ways to address its client's greatest challenges and deliver high-quality results, complete reliability, value for money and a clear competitive edge.

Over the next five years, the company will further develop its service portfolio to position itself best to take opportunities in the marketplace. This will involve the continuing development of its due diligence business and the refinement of its systems thinking tools and techniques.

Related publications

- Watson, I. Strachan, P.S. Armstrong, J. (2008), "Strategic Due Diligence: Facilitating Investment in Renewable Energy", *Proc of 10th World Renewable Energy Congress – WREC X, Glasgow, UK.*
- Watson, I. Fulcher, K.H.V. (2010), "Supporting Wave and Tidal Energy in the UK – An Analysis of United Kingdom Policy 2000-2009", *International Journal of Renewable Energy Technology.*