



Survive & thrive

EIC Insight Report 2019
VOLUME III



Any enquiries should be directed to:

Stuart R Broadley, FEI, Chief Executive

Energy Industries Council (EIC)

89 Albert Embankment

London SE1 7TP

Tel: +44 (0) 207 091 8600

Email: stuart.broadley@the-eic.com

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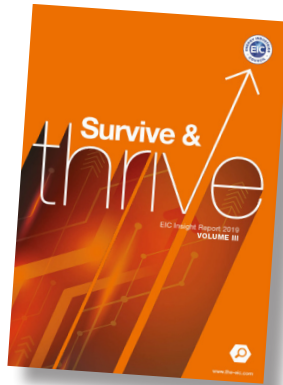
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Executive summary

Survive and Thrive 2019 (Volume III) charts the course that 25 EIC UK member companies have taken to grow against a backdrop of a cautious oil and gas market recovery with very tight margins, competition that remains fierce and Brexit uncertainty, and a growing emphasis and activism around decarbonisation.



The participating organisations have a wide range of strategies, scale, capabilities, products and services and provide a representative cross sample of the UK energy supply chain, with success stories coming from multinational Tier 1 contractors through to family run SMEs, covering all energy sectors.

We revisit the same eight growth strategies identified in the 2018 Report (Volume II) to see if the use of these has risen or fallen (see the comparison table on page 7) as well as putting the spotlight on three areas of vital importance to the UK industry: Brexit, export and scale-up.

The eight strategies being put to good use by the 25 companies are: innovation (the most used strategy at 64%), followed by service and solutions (60%), optimisation (48%), diversification (36%), digital (32%), technology (28%) and export (once again the least used growth strategy at 12%). Collaboration is always used as an enabler to facilitate faster and smarter implementation of another strategy, as seen in all relevant success stories.

An overview of the companies and their Survive and Thrive strategies can be found on pages 8–9. Please do take the time to read each organisation's individual success

story – the work they are doing to grow and flourish in spite of, and in many cases, as a result of the industry downturn makes for remarkable reading.

As well as detailing these individual growth strategies and lessons for the rest of the industry (the most important ones have been highlighted on pages 14–17), this report provides invaluable first-hand information from the

UK supply chain about what it needs from the government to prosper. The key recommendations for government are listed on pages 12–13.

The strategies put in place in this edition of Survive and Thrive have generated a massive £1.8bn in savings and new orders, compared to £357m in 2018 and £550m in 2017.

Of course, these figures are dependent on the companies which take part in each publication, nevertheless, they undoubtedly show, time and again, that developing these step-change business development strategies is well worth the time and effort. As big a return as £1.8bn is, it could have been a lot larger – only 40% of the organisations in this year's study scaled-up their solutions – imagine just how large that number could have been if they had all scaled-up. Then imagine if the whole of the UK supply chain was maximising returns on a successful product or service. The results would be mind-boggling!

It is our hope that these success stories and the remarkable results they highlight will inspire the rest of the industry to give them a go. If you do decide to implement any of the Survive and Thrive strategies detailed in this report, please do contact the EIC to

find out how we can support you on your business growth journey.

Key findings

1. No appetite for new regions

Once again, export is the least used growth strategy, and its uptake has actually dropped from 19% in 2018 to 12% this year.

Given the excellent reputation that the UK supply chain enjoys worldwide and the phenomenal results an export strategy can produce, this is very frustrating, all the more so in the context of Vision 2035 as well as the ongoing confusion around Brexit and the very real possibility that UK suppliers might need to look for new markets very soon.

Survive and Thrive III found that export, specifically the development of new export markets, is too often not considered by business leaders as their go-to business growth strategy due its perceived risk, and it requiring a lot of upfront costs and planning with returns taking time to be seen.

While awareness of the support that is available for exporters such as DIT, SDI and EIC, albeit not as much as we would hope, has risen, there is still a lack of understanding of where the best markets for energy exports around the world are, how to do business abroad and how to choose the right local partner.

In summary, exporting is still seen by far too many business heads as a relatively risky strategy compared to other growth options, with too many barriers and not enough support to make it worth the potential reward.

2. Brexit impact increasing

Survive and Thrive Volume I was published in 2017 and despite the

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endless media coverage Brexit generated no one knew at that time what Brexit would entail and for our participants it did not seem real, with not one of them reporting being impacted by Brexit.

A year later and with Article 50 supposedly less than six months away, the number of companies feeling a Brexit impact had risen to five.

When the majority of interviews for Volume III took place, we had already passed the Article 50 deadline of March 2019, and Brexit impact, both positive and negative, has hit its highest level yet, with eight companies affected.

Those companies that are net exporters have found that the weak sterling has benefitted their businesses: they have received more orders with higher profit margins as a result.

Other companies had implemented no-deal contingency plans only to be frustrated at what seems like a wasted investment.

Many larger contractors have already opted to invest in mainland Europe with our smaller companies recognising that they may start losing these existing clients to their European counterparts.

Overall, there is a lot of frustration at the lack of clarity from government on Brexit, meaning the UK supply chain cannot develop their own long-term plans, and are not prepared to gamble on an unknown route out of Europe. Certainty and stability are needed for investment in any sector.

3. Service and solutions on the rise

Since the first edition of Survive and Thrive the energy market has bounced back somewhat, however, the volume of new CAPEX projects is still not enough to go around, meaning

Survive and Thrive Volume III strategies at a glance

Collaboration

Working with partners to enable another Survive and Thrive strategy

Digital

The application of digital systems, analytics and technology to innovate

Diversification

Expanding existing capabilities into similar sectors, such as oil and gas to offshore wind

Export

The development of new business by focusing on international growth in new countries/ regions

Innovation

Enhanced products, services, strategies and culture to meet specific client needs and build differentiation

Optimisation

The focus on improving internal decision making, costs, processes, agility, flexibility, structures and enhancing competitiveness

Service and solutions

The focus on adding value to customers in their OPEX and O&M value chain, and the specific broadening of scope of work to provide a one-stop-shop or customer-centric approach

Technology

Refers to the specific use of technology to solve clients' problems

competition remains fierce, and many projects are still delayed.

It is therefore no surprise that with very little new build taking place companies have looked to keep their existing customers happy by adding value wherever they can with a particular focus on switching to consultative selling and solution selling, meaning that companies are adapting their products and services to meet the specific needs of each key customer. Although this process is time consuming, it leads to better 'stickiness' and more aligned risk sharing contract models.

Another consequence of the lack of greenfield work is that our companies

have, by necessity perhaps, moved into the O&M and service market. In these tight times they are no doubt seeing the value of the long-term contracts and reliability which this sector offers as opposed to the unpredictable, year-by-year revenues provided by project work.

4. Diversification slows as oil price rises

While the market can hardly be said to have gone from bust to boom, it has started to recover, which has already started to dull the industry's appetite to diversify.

Diversification is not only an important safety net in case of future downturns,

it can prove to be very lucrative. At the EIC we have seen numerous companies diversify successfully, notably from oil and gas to offshore wind where in many projects they can add real value due to their transferable skills and expertise.

The problem seems to be that most O&G companies are reluctant to look at the renewable energy market, commenting that the profit margins are too tight, and that the competition is too tough, with most awards going to European suppliers. There is also a lack of understanding of just how much overlap there is between different energy sectors and how their products can fit on renewable energy projects. The government and industry bodies must work more closely with major renewable energy developers to promote the opportunities on offer with them.

5. Digital is coming to life

We are living through the beginning of Industry 4.0. Owners, operators and large EPCs are quickly moving from theory to practice, becoming increasingly digitalised. Some suppliers are now starting to recognise that the world is becoming digital and if they want to work with changing customer demands then they have to offer digital products and services which can help drive down costs and enhance efficiencies.

This is a very exciting and important time, with no one yet dominating the digital energy space but many starting to invest heavily to try to be first to offer high-value, low-risk digital and disruptive innovation to their clients. Watch this space over the coming one-two years as the EIC believes we are about to move permanently into digital-ready solutions and digital-expectant customer demand.

6. Help needed with scale-up now

The costs and savings across the

series of Survive and Thrive success stories are always remarkable – but always raise the prospect of just how much more revenue these solutions could raise if they were scaled-up faster.

There is still no government funding or support mechanisms in place for companies that do wish to scale-up their operations for UK markets.

In conjunction with Robert Gordon University and Opportunity North East, we have launched Fit4Energy. This modular course equips participants with the knowledge, networks and best practice examples to successfully plan for and implement growth. It supports organisations to scale-up, innovate and internationalise.

7. The gap is closing on innovation














For a third year in a row innovation remains the most used Survive and Thrive strategy. It is still seen as the best way to retain existing clients. However, as the energy landscape changes, its uptake is steadily falling year-on-year, as more and more suppliers are taking to digital, service and solution-based strategies.

Innovation is key to holding onto current customers, however, digital and service and solutions (especially in the sense that for many suppliers it offers diversification from CAPEX to O&M work) are increasingly seen as vital strategies to win new clients.

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Comparison table

	2017	2018	2019
 Number of success stories	26	26	26
 Per year savings and new orders	£550m	£357m	£1.8bn
 Companies using collaboration as an enabler for other strategies	100%	100%	100%
 Companies using more than one strategy	65%	85%	88%
 Companies using innovation (including digital and technology)	73%	69%	64%
 Service and solutions strategy	N/A	42%	60%
 Optimisation strategy	23%	27%	48%
 Diversification strategy	27%	38%	36%
 Digital strategy	N/A	19%	32%
 Export strategy	8%	19%	12%
 Companies impacted by Brexit	0	19%	32%
 Companies scaling-up	N/A	42%	40%
 Companies receiving government support	27%	69%	68%

Overview of companies and strategies

Company	Employees	Sector(s) served	Collaboration	Digital	Diversification	Export	Innovation	Optimisation	Service/Solutions	Technology	Culture change	Scale-up
A&P	800	Defence, marine, renewables (offshore wind) and civil engineering and infrastructure			X		X	X		X		
Amodil	47	Oil and gas, power, industrial, construction and automotive	X				X	X				X
Balmoral Offshore Engineering	331	Oil and gas and offshore wind	X			X		X		X		
Booth Welsh	250	Pharmaceuticals, oil and gas, power, nuclear and food and beverage		X		X	X	X				
Brainwave	14	Mining, oil and gas and social housing	X	X			X			X		
Calash	20	Oil and gas			X	X						
Cargostore	26	Oil and gas, wind and stability & aid					X	X		X	X	X
Comeca	1,200	Oil and gas, nuclear and industrial			X		X	X				X
Crandall	50	Oil and gas				X				X		
Emerson	87,500	Oil and gas, petrochemicals and life sciences	X	X			X	X			X	
EnerMech	3,600	Oil and gas		X	X		X		X	X		X
Glacier	200	Oil and gas and renewables			X		X				X	
HKA	900	Construction, power, utilities, infrastructure, oil and gas and industrial		X			X				X	
Hughes Safety Showers	80	Industrial, processing, oil and gas and power	X				X			X	X	
KBR	34,000	Oil and gas and renewables			X		X		X		X	X
Lloyd's Register	6,000	Oil and gas and other energy sectors						X				
MES	100	Oil and gas and renewables		X	X		X	X	X		X	X
PIH	193	Oil and gas			X	X	X				X	X
Powertherm	170	Renewables, power and oil and gas					X					
Proserv	1,300	Oil and gas and renewables		X		X	X	X			X	
Raytec	80	Hazardous industrial and oil and gas					X		X	X		X
Samuel Knight International (SKI)	52	Power, rail and renewables							X		X	X
Transcar	40	Oil and gas, power, renewables, process, petrochemicals and civils					X	X	X		X	X
Wood (Pipeline Services)	60,000	Oil and gas, nuclear, power, industrial, environment, infrastructure, minerals, processing and automation		X			X	X		X	X	
Wood (Nuclear)			X		X		X	X	X			
Yokogawa	20,000	Oil and gas					X			X	X	
Total	216,953		6	8	9	3	15	12	15	7	15	10
			24%	32%	36%	12%	60%*	48%*	60%	28%	60%	40%

* Innovation and optimisation is counted once even though it occurs in both Wood success stories.

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Brexit impact Government support for survive and thrive initiative?		Oil & Gas	Power, nuclear and renewables	Others (non-energy)
Yes - positive	Yes - R&D tax credits, Apprenticeship Levy and support to join UK pavilion abroad	0%	20%	80%
Yes - positive		40%	30%	30%
Yes - negative	Yes - Scottish Enterprise, R&D tax credits and Patent Box tax relief	90%	10%	0%
	Yes - SDI, Apprenticeship Levy and R&D tax credits	20%	20%	60%
Yes - negative	Yes - SDI and Scottish Enterprise	30%	0%	70%
		70%	0%	30%
Yes - negative	Yes - Apprenticeship Levy	N/D		
		70%	15%	15%
	Yes - Scottish Enterprise, grants and R&D tax credits	100%	0%	0%
	Yes - R&D tax credits	75%	0%	25%
	Yes - Apprenticeship Levy and R&D tax credits	80%	0%	20%
Yes - negative	Yes - Apprenticeship Levy and Scottish Enterprise	70%	30%	0%
		13%	20%	67%
	Yes - R&D tax credits	38%	2%	60%
	Yes - Apprenticeship Levy	70%	30%	0%
	Yes - Apprenticeship Levy and R&D tax credits	95%	5%	0%
Yes - positive		95%	5%	0%
Yes - positive and negative	Yes - trade delegations, R&D tax credits and Apprenticeship Levy	100%	0%	0%
	Yes - Apprenticeship Levy, grants and R&D tax credits	10%	80%	10%
		90%	10%	0%
	Yes - Apprenticeship Levy and R&D tax credits	35%	0%	65%
		7%	63%	30%
		50%	25%	25%
	Yes - trade delegations, R&D tax credits, grants and Apprenticeship Levy	47%	32%	21%
	Yes - Innovation Norway and R&D tax credits	100%	0%	0%

Key statistics



25

the number of companies which took part in EIC Survive and Thrive Volume III

£

1.8bn

per year **savings** and **new orders** (case study specific – imagine if this were scaled-up)



32%

of companies impacted by **Brexit**



40%

of companies **scaled-up** their solution



Only

12%

of companies **Exported** their way out of the crisis



64%

of companies used **innovation** (including **technology** and **digital**)



32%

Used a **digital** solution



36%

Of companies **diversified**



48%

Of companies **optimised** internally



68%

Of companies **received government support**



60%

Of companies used a **service and solutions** strategy



100%

Of the companies that **collaborate** use it as an enabler for other strategies



Key lessons: government

Diversification

Lessons

- Support more diversification to counter O&G retrenchment as oil price rises.
- An integrated UK energy supply chain across all energy sectors would be more robust.
- Majority of companies are not diversifying and do not get relevant support.
- Funding from the government is necessary to ensure that diversification takes place.

Actions

- Jobs and skills across the UK supply chain would benefit from a diversification policy in line with the Clean Growth Strategy and to support energy transition.
- Fit For Nuclear (F4N) has been a resounding success and should be replicated across other energy sectors.
- Focus on FDI (Foreign Direct Investment) to the UK on offshore wind OEMs

Export

Lessons

- Despite a strong governmental focus on exports, the energy sector is not yet delivering export growth.
- Brexit is currently only beneficial to net exporters due to the weak sterling. Presently there are not enough net exporters.
- Industry feeling about Brexit is quickly changing from neutral to frustrated.
- A small percentage of companies account for the majority of energy exports revenues.
- Less than 50% of UK energy supply chain businesses export.
- We must find a way to increase the number of exporters and the amount of companies with significant export revenues.

Actions

- While UK Export Finance is a powerful tool the government should provide greater transparency about how it works, especially with regard to export credit agency deals.
- In order to grow the number of net exporters, a policy is needed to grow UK manufacturing that does not just rely on the weak sterling.
- The government should provide more statistics around which businesses and sectors export the most and commission an action plan to address any issues or gaps.

Policy

Lessons

- The UK supply chain is globally recognised as being innovative, trustworthy and easy to do business with.
- UK funding should benefit UK suppliers more than overseas companies being attracted by FDI.
- Clustering and supply chain enhancements are effective by sub-region and sub-sector and there is some funding available for this (e.g. carbon capture and storage and offshore wind), however, there is no equivalent focus or financial support available at a complete UK energy-wide supply chain level.

Actions

- To take full advantage of the excellent reputation the UK supply chain has around the world, funding for digitalisation, innovation and technology is essential.
- The UK export finance threshold for ECA deals should be reviewed and increased.
- Funding should be made available to create a national body to unite and align the UK energy supply chain.
- UK energy policy should send clear and consistent market signals so the supply chain knows where to invest in the future.

Scale-up

Lessons

- Scale-up is the engine for supply chain growth, but there is little financial support available for companies, especially SMEs, who want to grow their businesses.
- Funding is currently only available for exporters, R&D and start-ups.

Actions

- A joined-up approach towards funding mechanisms available would be welcomed by industry. Greater transparency on financial support would also be appreciated.
- Fit4Energy is the only scale-up programme on the market and should be government-funded for participating companies.
- The importance of scale-up should be reflected in financial support being ring fenced by government to support this as an initiative in its own right.

Key lessons: industry

Collaboration

Lesson

- Each time collaboration is used it is as an enabler for another strategy.
- Being open to collaborating with multiple stakeholders can produce major benefits.

Action

- Embrace collaboration when embarking upon your growth strategy.

Digital

Lessons

- Digitalisation is fast dominating client interest although not yet their spend.
- Supply chain companies are increasingly marketing proven case studies around digital rather than just the theory.
- Corporate data is a valuable commodity when converted to analytics.

Actions

- There is huge potential for any business of any size to take the lead in digital and be a major disrupter.
- Market your digital capabilities and solutions with proven case studies.

Diversification

Lessons

- A successful diversification strategy can mitigate against the risk of future downturns and enable your company to return to growth more quickly.
- Diversification is a growth strategy that typically is most attractive when oil prices are low. This cycle may change in a world of decarbonisation and energy activism.
- Fit for Nuclear (F4N) is a proven pathway to diversify into nuclear.

Actions

- Fit4Energy (F4E), an EIC initiative developed with Robert Gordon University and Opportunity North East, follows the F4N template and helps businesses to scale-up and diversify.
- There is also a new Fit 4 Offshore Renewables initiative being trialled to help diversification into offshore wind.
- As the oil price improves do not be tempted to revert to an over reliance on oil and gas again.

Export

Lessons

- Use the weak sterling to your advantage if you are a net exporter.
- Local content is a key part of doing business in many regions around the world.
- While UK markets provide faster results, exporting provides longer-term, better quality growth.
- The UK energy market is small and shrinking all the time. For those companies thinking long-term, an export strategy is a must.
- Companies that seek support make smarter and faster export decisions and progress.

Action

- Make full use of organisations like the EIC, the Department for International Trade and Scottish Development International. Use our international market data, contacts, networks and in-country resources and our representatives can help you develop your export strategy.

Optimisation

Lessons

- Activity levels are increasing across UK and global energy markets, however, competition is fierce and margins remain very tight.
- Companies are focusing now more than ever on time, process and cost optimisation.

Action

- As and when the market starts to improve, ensure you retain absolute focus on lowest possible cost and keep your fixed cost structure as low and flexible as possible.

Scale-up

Lessons

- Scaling-up a business is challenging. Without a plan in place and support to help you carry this out, you will struggle.
- There is no government support for scale-up unless it is related to export, R&D or start-up.
- Many businesses see one aspect of their strategy blossom while another withers resulting in zero net growth.

Action

- Based on the successful F4N model, the Fit4Energy scale-up course, developed by the EIC in partnership with Robert Gordon University and Opportunity North East is the only course designed to accelerate the growth of your business. Train-up to scale-up, book your place now.

Team

Lessons

- Understand in detail your customers' specific capabilities and markets, and adapt accordingly.
- Retain core skills, even in tough markets.
- Almost all growth strategies embrace flexibility and agility.
- Be open about business performance and the challenges you are facing with all staff.
- You can train skills, but you cannot train culture.

Actions

- Train your sales team to listen to each client carefully to understand their specific needs and then set up your operations to be able to quickly and cost-effectively develop bespoke solutions.
- In these tough times an organisation needs to be resilient – make this characteristic a key part of your organisation's values.
- Make time to identify the skills and culture that are needed by your business and tailor your recruitment strategy around these.
- Prioritise ideas which come from within your company and be sure to foster a teamwork culture.



EIC Survive and Thrive **success stories** **2019**

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Participating member companies

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A&P Tyne

Developing a plan to take core business strengths and expertise to deliver successful diversification and optimisation benefitting clients

How is A&P Tyne thriving?

The company has successfully implemented a five-year strategy which allowed it to diversify into sectors such as nuclear and offshore wind. A&P also invested in customer-centric capabilities including local and mobile fabrication and automation, with the aim of delivering cost and time savings.

The challenge

Until recently, A&P was a traditional ship repair organisation. Although the company engaged in occasional fabrication projects for other sectors, dry-dock work was A&P's core business and the main stay of the company's revenues. A&P's fortunes changed, however, with the oil and gas industry downturn. Enquiries were reducing and competition for large marine fabrication work was becoming fiercer across the UK and Europe. To add to the challenge the business had become reliant on a couple of key clients and their large fabrication orders. Results were not encouraging: revenues plummeted from £35m in 2013 to £18m in 2015, while margins dropped to less than 10%. Following the end of a contract involving the Queen Elizabeth class aircraft carrier programme, a workforce of 2,000 was reduced to just 110 core staff.



Challenges were mounting and options were scarce. A&P Tyne knew that it had to target other streams of revenue in order to supplement its dry-docks activity and overcome the downturn.

The solution

In early 2017, A&P Tyne decided to put in place a five-year strategy based on diversification. The company decided to enter the offshore wind segment; a new market with a different business language and standards, A&P had to work hard to ensure that customers knew that it was up to the task of supporting them in this new sector. The company also diversified into the civil

nuclear segment, successfully obtaining the Fit For Nuclear accreditation.

Following diversification, the strategy's second stage involved reorganisation. Upon reaching year three of its recovery plan, A&P assessed what could be improved in order to better serve clients. The company set up a defence branch and brought in specialist marine and renewable business development staff to translate clients' needs to A&P language and ensure successful outcomes. While competitors struggled to adapt to a fast-changing business reality, A&P differentiated by becoming more agile and offering flexible solutions to customers, focused on on-time delivery, to the agreed price and where possible partnering with the customer, in order to retain clients and secure more orders.

Better service to customers also involved skills transfer to mobile and light fabrication capabilities, going beyond the company's traditional line of work. Aiming to get closer to clients, the company set up a rapid



After a period of business transformation, A&P is now offering its large-scale fabrication capabilities to the nuclear and offshore wind sectors, delivering benefits to both markets, the supply chain and the wider north-east economy.

David McGinley, Group Managing Director

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engineering facility in Great Yarmouth, now the largest on the east coast of England. A&P also created a floating repair business to service clients locally. The company innovated by developing a light fabrication segment, becoming competitive in a new niche market. These improvements allowed the company to provide solutions that were more convenient for its customers as well as more responsive and economic.

A&P's strategy is already yielding results. The company obtained a £1.8m contract with Farrans for the replacement of existing pontoons at the port of Lowestoft to support the development of the Galloper offshore wind farm. A&P's first contract related to an offshore wind project, the contract scope includes the delivery of six units with a combined fabrication of 250te, with delivery expected in August 2019. Using an automated panel line, A&P was able to save time, money and improve repeatable quality. Another contract was awarded by Caspian Marine, in which A&P offered its off-site capabilities to remove the bridge

sections off three vessels. By taking their expertise to the project site A&P saved the client time and money.

A&P's five-year strategy was fundamental to its survival. The company's ability to win work following the diversification to offshore wind and nuclear has greatly improved, with higher conversion rates and profit margins. A&P's agile and flexible approach is retaining more customers, while winning back clients it had previously lost. The company has reversed three years of losses and is once again planning for the future. Overall, the company is growing again and increasing employment, sustaining UK capability in large fabrication and shipbuilding.

About A&P Tyne

A&P is the UK's largest ship repair, conversion and marine specialist, with a history of quality-driven engineering and marine excellence spanning six decades. Operating seven dry docks at four key locations in the country



(Falmouth, Great Yarmouth, Tees and Tyne), the company provides repair, fabrication and general engineering support services to the commercial marine, oil and gas, offshore wind, nuclear and defence.

In the fabrication segment, A&P Tyne's expertise spans subsea and floating structures, topsides, foundation structures, pressure vessels, substations and wave and tidal devices. The company also has significant expertise in the fabrication, pre-commissioning and direct load-out of modularised offshore structures. Using in-house capabilities and a strategic local supply chain, A&P is able to provide the complete integrated package from structural, piping and mechanical, through to electrical and instrumentation work.

Story type

#diversification, #optimisation, #service/solutions

Benefits

- Greater ability to win work following diversification
- Optimisation leading to greater retention of customers

Key findings

For industry

- Have a plan agreed with all stakeholders, meeting local and central needs
- Be flexible and not too fixated on the plan. It's about its final goal, not the journey

For government

- Support for companies undergoing a diversification process would be welcomed by the supply chain

Government support?

The company received support to join the UK pavilion at the WindEnergy Hamburg exhibition. A&P applied for R&D tax credits for the first time in 2019. The company benefits from the Apprenticeship Levy.

Culture change lessons

- Organise communication briefings to discuss strategies, changes and address staff concerns

A&P group at a glance:

Key products and services:

engineering products and services to energy, marine and defence markets

Main industries served:

- Defence – 40%
- Marine – 30%
- Renewables (offshore wind) – 20%
- Civil engineering/infrastructure – 10%

Headquarters: Hebburn, UK

Year established: 1953

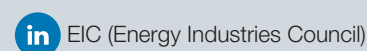
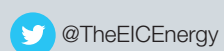
Number of employees: 800

Revenue: £120m

Revenue from exports: 0%

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The Amodil Group

Strong values and relationships boosting business

How is Amodil thriving?

The company's experienced and value-based leadership is driving a strong service mindset based on loyalty, honesty, reliability and flexibility while always remaining competitive. Amodil's approach has paid dividends by securing long-term, loyalty-based relationships with staff, suppliers and customers.

The challenge

Amodil, a stockholder of stainless-steel long products with a large inventory, like many of its competitors, had to navigate a market struggling with increasingly low returns following the downturn in the oil and gas market in 2014 (18 consecutive months of declining prices, in total). Amodil's rivals were reducing staff numbers and downgrading facilities, with some closing branches and warehouses. Having survived the economic crisis of 2008, Amodil once again had to implement a change in strategy.

The solution

While competitors were scaling-down, Amodil decided to do the opposite. A privately-owned player benefitting from healthy finances and a loyal, experienced team of employees, the company felt confident and brave enough to expand the business.



Listening to clients' demands, the company decided to increase its stocks and invest in upgrades to its facilities: two new saws, three new cranes and five new forklifts were acquired. Additional outdoor storage space was created for over 1,000 tonnes of large bars and 250 new racking locations were added to speed up order processing. Also, two new vehicles were added to the existing fleet so that the majority of deliveries were made by their own vehicles. Company image was also vital: Amodil modernised its entire marketing strategy with a fresh website, an active presence on social media and an increase in advertising and sponsorship.

The value placed on customers has

always been a key differentiator in Amodil's strategy. In developing an honest and open relationship with clients the company advises on anticipated upward or downward movement in the price of stainless-steel products, enabling them to plan and make appropriate decisions. This transparency has given Amodil a reputation for being an honest and trustworthy supplier.

Making things easier for customers is really at the heart of Amodil's service mentality. In order to help end-user clients struggling with the downturn, the company has a just-in-time system where the buyer does not need to buy for their own stock on speculative requirements. Amodil guarantees to have stock of the items they required with immediate deliveries, if necessary, directly to their machine shop. The customer therefore only pays for the product when they used it. The customer requires less space for storage and has a helpful boost to their cash-flow.

Maintaining good relationships with business partners was also essential. While competitors looked



Good service, competitive prices and strong relationships with both customers and suppliers have been key to the success of our long-term business strategy.

Ben Slingsby, General Manager

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to grow business with end-users at the expense of existing distributing customers, Amodil stayed loyal to its distributors and stayed away from their known end-users.

On occasions Amodil will work directly with a distributor to jointly service an end-user business. Honesty and trust are absolutely essential to achieve this.

Also, by investing in new capacity, the company gave its distributor customers the facility of buying on either ex stock or very short lead times, as opposed to the old traditional way of manufactured to order lead times of four/six months.

As O&G projects return, Amodil's reputation among customers grows. The company is attracting more end-users and direct businesses, which already represent 40% of the company's revenues. However, the company remains careful not to impact the businesses of its loyal distributing

clients. Amodil's growth has been consistent: the tonnage of stainless-steel products negotiated over the years has grown steadily since a low point in 2014. The company expects unprecedented growth in 2019 as business opportunities return. The various investments on-site have enabled the stock capacity to increase from 5,000 tonnes to 6,000 tonnes over the last two years.

Amodil's survive and thrive story is about the company's service mentality combined with the value of loyalty-based relationships with stakeholders. Good service, fast delivery, competitive prices, friendliness, honesty and loyalty have been key differentiators in attracting new clients and in maintaining its existing customer base. This approach has protected the company from the downturn while increasing market share during the recovery phase, ahead of the competition.

About Amodil



A privately-owned group founded in 1976, Amodil is the largest UK stockholder of stainless-steel long products supplying the oil and gas, power, industrial, construction and automotive segments. With over 6,000 tonnes in stock, the company has the most extensive range of stainless-steel long products at its headquarters in Kidderminster. Amodil also acts in partnership with and as exclusive representative for leading European mills, enabling the company to offer almost any combination of size, grade, finish, length and tolerance from production. In addition to supplying stainless steel products, Amodil also offers a range of services, from cutting and packaging to testing and certification, project management and technical support. Amodil has two stockholding subsidiaries in the UK: Amodil Supplies Ltd and Olarra UK Ltd.

Story type

#collaboration, #optimisation, #service/solutions

Benefits

- Strong relationship with clients, staff and suppliers
- Consistent, healthy profits
- Great staff morale

Key findings

For industry

- Employ younger people from the local area and invest in constant training
- Avoid employing people trained by others – always train your own team in order to meet values of your own business

- Supply 1000s of items to UK industry many of which are no longer made in this country

For government

- Provide more guidance and advice on Brexit contingency planning

Government support?

The company has not received any type of government support.

Export lessons

- Strong relationships with suppliers are a key factor for success
- High staff morale enhances the chances of a successful scale-up
- Concentrate on our business and strengths and not worry about competition
- Maintain a mixture of experience and youth throughout the company

Amodil at a glance:

Key products and services: mill agent and stockholder for stainless steel long products

Main industries served:

- Oil and gas – 40%
- Power/industrial/construction – 30-40%
- Automotive – 20-30%

Headquarters: Kidderminster, UK

Year established: 1976

Number of employees: 47

Revenue: £50-£60m

Revenue from exports: 5%

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Balmoral Offshore Engineering

Early engagement, collaboration and R&D excellence the keys for success

How is Balmoral thriving?

Balmoral's buoyancy, elastomer and composite products are driving 15-30% cost reductions for field operators and FEED contractors. This is made possible by a collaborative approach and smart application of engineered solutions at the early stages of the project design, backed up by a new £20m test centre.

The challenge

The downturn experienced by the offshore oil and gas industry across the world impacted upon Balmoral, but its effect on the Scottish company was delayed when compared to other suppliers. Balmoral's position within the supply chain structure meant that it still had a strong two-year backlog when new projects were starting to dwindle. But things soon changed: the downturn impacted the company in 2016-17, and in 2017-18 – Balmoral's toughest financial year – revenues had fallen by 40% since 2015.

Although the company was committed to retaining all its staff, costs needed to be tightened due to market pressures. At the same clients were requesting increased levels of testing and auditing which also drove costs up.



The solution

Instead of dropping margins, Balmoral found ways to better serve its clients to overcome the new-found challenges. In 2016, the company made the decision to reinforce its strategy of providing the best engineered solutions rather than just products. It made early engagement and collaboration with clients a priority, focusing on getting to know their needs and finding win-win solutions that would generate sustainable and tangible savings.

This initiative led the company to invest £20m in a subsea test facility and new

R&D labs, benefitting from a grant provided by Scottish Enterprise. The intention to invest in R&D preceded the crisis, but the downturn made the need for enhanced testing capabilities – and the differentiation they provided – even more vital. In addition, the innovation made possible by new R&D facilities would help Balmoral reduce its overall cost.

The solutions-based approach was put into practice when working with TechnipFMC on BP's Thunder Horse project in the Gulf of Mexico. TechnipFMC had initially specified a specific size and number of buoyancy modules for the flowlines and was seeking to reduce project costs by 15%.

In collaboration with TechnipFMC, Balmoral's engineering teams designed larger products, tested them and checked if they worked within the client's vessel and handling equipment constraints. Deploying larger buoyancy modules combined with the identification of innovative ways to significantly reduce installation



We are entirely focused on early client engagement to engineer out cost while providing the best overall solution, not only in terms of products, but in regard to overall cost of ownership.

Gary Yeoman, Sales Director

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time, generated material savings to TechnipFMC's project. A successful outcome for both TechnipFMC and BP, made possible through collaboration, innovative thinking and engineered solutions.

The company's strategy has been successful: revenues have increased by 18% in the latest financial year. Order conversion rate is up by 20% compared to two years ago and Balmoral has received very positive feedback from customers. The business is now entirely based on engineered solutions, with a strong focus on optimising field design and ensuring FEED studies incorporate Balmoral's engineered solutions approach.

About Balmoral

Balmoral Offshore Engineering specialises in supplying engineered buoyancy, elastomer and composite solutions for demanding applications in the offshore oil and gas industry spanning the E&P and marine segments.

Headquartered in Aberdeen, the company offers a varied portfolio which includes buoyancy modules for drilling and production risers, riser towers, as well as bend restrictors, bend stiffeners and protection equipment for subsea infrastructure, cables, pipelines and risers, among other products.

Balmoral's manufacturing operations



include a range of syntactic, hot and cold cure processing capabilities. In addition, the company's proprietary laboratory, hydrostatic and mechanical testing facilities enable Balmoral to research, identify and develop cost effective materials across a spectrum of applications.

Balmoral Offshore Engineering is part of Balmoral Group Holdings Ltd, which is also active in the advanced composites and tanks sectors, in addition to property management.

Story type

#collaboration, #innovation, #service/solutions

Benefits

- Material project savings generated by early engagement
- In-house vertically aligned service, from concept to testing, maintains project integrity throughout

Key findings

For industry

- Early engagement saves money. Savings generated through collaboration would be massive if adopted by the whole supply chain
- Educate clients through face-to-face meetings, lunch and learns, conference presentations and updated promotional literature
- Use relationships to influence projects in the design stage
- Retain your skill base to have the knowledge, resource and agility to

react to market fluctuations

- Avoid knee-jerk reactions when dealing with changing market conditions
- Keep all plates spinning – safety, quality, delivery and value are all equally important

For government

- Grant funding support is helpful and should be maintained
- When promoting export markets, the government should give suppliers the opportunity to obtain greater clarity on tax and logistics as well as state-level business aspects

Government support?

Balmoral received a grant from Scottish Enterprise for its test centre. The company has also benefitted from R&D tax credits as well as a Patent Box tax relief. In addition, the company has received inward DIT trade delegations.

Export lessons

- Know your product, know your market, know your people
- Local agents, strong visibility at industry events and government support are key resources for exporting companies
- Local content issues, language and culture barriers as well as shipping costs and timeframes are some of the biggest hurdles when exporting

Balmoral at a glance:

Key products and services:

engineered buoyancy, elastomer and composite solutions

Main industries served:

- Upstream O&G – 90%
- Offshore wind – 10%

Headquarters: Aberdeen, UK

Year established: 1980

Number of employees: 331

Revenue: £70m, 2018

Revenue from exports: ~88%

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Booth Welsh

Unlocking innovation through internal collaboration

How is Booth Welsh thriving?

By unlocking staff potential to innovate and collaborate, Booth Welsh has boosted market differentiation by offering digital-ready products and engineering services to existing and new clients – whether they were specified in the tender or not – as a standard across all industry sectors.

The challenge

Innovation is key for any business, and this is no different for Booth Welsh. As an engineering expert focused on digitalisation, innovative ideas fuel its growth and are a key differentiator in a very competitive market. Three years ago, however, the company sensed that staff engagement in this area was low and teams were not driving innovation.

An innovative mindset was needed to drive Booth Welsh's digital strategy, and this process had to start within the company.

The solution

In order to boost innovation, Booth Welsh embarked on a process to engage staff and change the company's mind set. To kickstart the



process, Booth Welsh's management team was sent to two workshops dedicated to innovation growth, both in technical terms and in workplace engagement. After six months of learning they reported back to the MD well-trained and fully aligned, and they proceeded as a team to rewrite Booth Welsh's mission, vision and values with the support of a much wider employee group.

The second step was to take engagement to a higher level. Starting with 'digital' as a key theme, the company decided on four strategic pillars: business performance, people and skills, project excellence, and digitalisation and innovation. All team members were invited to join, with each employee free to select which pillar they wanted to focus on. Involved employees began wearing badges in order to identify with their chosen pillars and the strategy they were pursuing, allowing colleagues to approach them with suggestions. This initiative led to over 50 staff driving the pillars, allowing the creation of cross-working teams within the company. To reaffirm the initiative's importance, Booth Welsh's management decided to replace four of 10 board meetings with pillar meetings.

Another initiative to generate innovation within Booth Welsh was Co-lab. Realising that many staff



Our new but robust products and technologies enable our clients' workforces to become more effective, to take the next best action and ensure a right first-time approach. This idea of being 'digital ready' allows clients to unlock the potential within their people and assets to future proof their operations and operate safely.

Martin Welsh, Managing Director

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were not always fully aware of what their colleagues did in different departments, this internal event allowed employees to present their own business as best as they could, breaking silos and increasing cross-functional sharing. This was followed by a second Co-lab event, focusing on innovation. It was a platform for early ideas for new products that brought together digital and data, enabling different features for clients. This process led to the development of the company's first product named Digital Advantage, an integrated digital workflow solution.

Booth Welsh's efforts to foster collaboration and innovation met with success in the market. In 2019, the company secured a £1.5m contract with a large chemicals company for the replacement of a control system and new product installation. Booth Welsh was able to win the contract from a large incumbent due to an

innovative bid approach: the company was willing to apply technology to allow cost and time savings, while exceeding the customer's expectations. Unlike its larger competitor, Booth Welsh was less prescriptive and more flexible.

Starting as an internal exercise, Booth Welsh's improvement process led the company to find new ways of bringing flexibility, collaboration and innovation for its clients. Eighteen months since its implementation, Booth Welsh's strategy has yielded £2m in revenues from brand new clients across a number of industry sectors. The company unlocked innovation from within, which allowed it to improve its service offering to the market. This allows Booth Welsh to help clients become 'digital ready'.

About Booth Welsh

Booth Welsh delivers integrated

BOOTH WELSH

Integrated Engineering Services

engineering services to a variety of industries across the world. Its service portfolio includes areas such as process engineering and consultancy, process control systems, mechanical and piping, electrical and instrumentation, EPC and EPCM as well as technical recruitment. Booth Welsh's main market segment today is pharmaceuticals and life sciences, and the company is also involved with the nuclear, food and beverage, oil and gas and utilities segments.

Started as a family business in 1989, Booth Welsh was acquired in 2014 by Clough, an Australian EPC contractor with locations in all five continents. It works closely with other companies within the group to deliver a complete end-to-end multi-discipline service to clients.

Story type

#digital, #innovation, #optimisation, #service/solutions

Benefits

- £2m revenue from brand new clients
- Development of Digital Advantage product
- Internal culture of innovation fostered

Key findings

For industry

- An innovation mindset is a business game-changer
- Generate opportunities for staff to contribute to innovation
- Differentiate by offering benefits to customers regardless of whether they specified in tenders or not

For government

- Support the supply chain in the transition to a digital business reality

Government support?

Booth Welsh has received grants from Scottish Enterprise in addition to R&D tax credits. The company has also received support from Scottish Development International to join pavilions in trade shows. The company benefits from the Apprenticeship Levy.

Booth Welsh at a glance:

Key products and services: engineering services and digital technology

Main industries served:

- Pharmaceuticals – 45%
- Oil and gas – 20%
- Power and nuclear – 20%
- Food and beverage – 15%

Headquarters: Irvine, UK

Year established: 1989

Number of employees: 250

Revenue: £17m

Revenue from exports: 12%

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Brainnwave

Harnessing big data for competitive advantage

How is Brainnwave thriving?

The company's data-driven and cutting-edge visualisation tools have contributed to a transformation in Aggreko's commercial organisation. By converting the company's data-sets into insight and business intelligence, Brainnwave's Ossian platform has saved Aggreko time and money, while enabling the company to get more business and serve customers more effectively.

The challenge

Two years ago, Aggreko – one of the world's leading providers of mobile and modular power and temperature control solutions – was eager to become more competitive and efficient. They were looking for ways to obtain additional business opportunities while servicing existing customers more effectively. Access to business data was not a problem: the company already had resources dedicated to tracking multiple streams of information. The issue was how to make its decision-making process smarter and faster, to the benefit of the company and its customers. How could Aggreko reduce the burden of aggregating, cleansing, organising and analysing its huge data



sets across regions and sectors for vital strategic analysis?

The solution

Created to get value from data, Brainnwave benefits from substantial technical expertise and a unique mix of team skills. The company developed Ossian, a unique, innovative business intelligence platform. Ossian connects to customers' various internal and external data silos and enriches them by creating a single stream of information that provides significantly improved clarity and focus.

Brainnwave's opportunity to present

Ossian's capabilities to Aggreko came in 2017, when the two companies met at the Data Lab trade show in New York. Networking during the trip led to discussions on how to collaborate: Aggreko had the data, while Brainnwave had the analytical skills to interpret it efficiently. Aggreko then asked Brainnwave to provide a platform to help convert its data into insight and business intelligence.

This collaboration kick started a pilot project. Brainnwave got key Aggreko decision-makers around the table to discuss the issues affecting the company. The first was the difficulty in getting key information out of Aggreko's subscription services, which led Brainnwave to focus on cleaning and visualising the key data across the company's various sources. The second step involved interviewing key people across Aggreko's sales team with the aim of understanding what kind of information was crucial for them. After codifying Aggreko's information into Ossian's algorithms, Brainnwave developed a platform that was able to search, sort and rank opportunities across the world, based on elements that were most important to Aggreko. Internally re-labelled Aggreko Market Intelligence or AMI, the platform was ready for use after just 10 weeks. Fast results provided by the pilot project



Brainnwave is helping change the way we do business, enabling us to make more informed decisions. The platform Brainnwave has developed is using data analytics to provide us with the insights that we couldn't previously access due to the complexity of the questions we need to answer. This is a game changer for our global business.

Stéphane Le Corre, Strategy and Commercial Development Director Power Solutions, Aggreko

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allowed Brainnwave to expand its relationship with Aggreko: satellite imagery showing gas flaring was added as a new capability to Ossian in just two weeks.

The adoption of Brainnwave's Ossian platform made a massive difference to how Aggreko obtained and interpreted business intelligence. The platform was able to enrich and integrate Aggreko's various data sets, providing visualisation tools that helped the company control how its data is shared and presented. It also allowed Aggreko to reduce the time to produce strategic updates – which guide the allocation of resources within the company – from three weeks to just two days. Financial savings were also possible as Aggreko was able to rationalise data subscriptions.

Aggreko's business development efforts further benefitted from Ossian. By accessing data concentrated in a single platform, Aggreko's BD teams were able to identify previously

unnoticed projects and contacts to tap into. As an example of the benefits being delivered, country profiles which previously took six to eight weeks per country for an external consultant to create, can now be generated much more efficiently and clearly, in only three days per country by Aggreko's internal Strategy and Market Intelligence team.

Brainnwave is currently in the process of bridging the chasm dividing early adopters and mass usage of its business intelligence solution. The company is keen on growing its relationships with existing clients but is also looking to win more business on the back of the success of its Ossian platform. Brainnwave has already signed a three-year enterprise licence with Aggreko – which is currently negotiating an expansion of the platform – and has recently secured another contract with Wood. The company is also collaborating with the University of Edinburgh on projects to apply data science in new ways to identify business opportunities.



About Brainnwave

A growing start-up created in 2015 by three experienced entrepreneurs, Brainnwave is an Edinburgh-based business intelligence expert. The company offers solutions in areas such as data management, data science, machine learning, software engineering and geospatial analysis. The company is active in the oil and gas, utilities, metals and mining and housing market segments.

Ossian, the company's business intelligence platform, pulls structured and unstructured data from multiple sources, enriches it and provides cutting-edge visualisation tools, as well as plugging into CRM systems. Working with a range of data suppliers, Brainnwave helps clients by discovering, connecting and getting the most value from their data.

Story type

#collaboration, #digital, #innovation, #technology

Benefits

- Country profiles which previously took six to eight weeks per country for an external consultant to create, can now be generated much more efficiently and clearly, in only three days per country
- A task previously outsourced to external consultants is now managed internally at a far lower cost

Key findings

For industry

- Tenacity is key: resistance is normal in the market, but companies must

not lose belief in their abilities and vision

- Approach sales with the long game in mind
- Crossing the gap from early adopters to mass adoption is a key obstacle for disruptive businesses

For government

- The Scottish government has a good business support structure in place: initiatives such as Scottish Enterprise, Scottish Development International and Data Lab do great work to support Scottish businesses and entrepreneurs

Government support?

The company joined a Data Lab trade delegation to New York as well as the SDI-led Scotland pavilion at OTC in

Houston. Brainnwave has also received a Regional Selective Assistance grant from Scottish Enterprise to relocate from England to Scotland. The company has also benefitted R&D tax credits.

Brainnwave at a glance:

Key products and services: data intelligence solutions

Main industries served:

- Mining – 50%
- Oil and gas – 30%
- Social housing – 20%

Headquarters: Edinburgh, UK

Year established: 2015

Number of employees: 14

Revenue: <£2m

Revenue from exports: 0%

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Calash

Successfully moving into new markets and diversifying from offshore to onshore M&A and restructuring consulting

How is Calash thriving?

Following a successful expansion into the US market, the company has embarked on a diversification process. Encompassing everything from offshore and onshore projects to mergers and acquisitions (M&A) and restructuring. Where Calash stands apart and truly excels, is through its laser focus on the oil and gas markets, employing only senior oilfield experts to provide advice to owners and investors on how to grow, restructure or exit their businesses.

The challenge

Back in 2013–14, business was going well for Calash. The oil and gas industry, the backbone of the company's revenues, was yet to experience the downturn and the M&A market was business as usual. With this in mind, the company underwent an expansion programme and in September 2014, the company moved to new premises in London.

Striking while the iron was hot and sensing an opportunity to drive revenue growth, Calash turned its attentions to international markets, specifically the United States. In order to provide the essential link between US oil and gas



players requiring funding and major financial sponsors, the company had to aspire to new heights. New York, the world's financial mecca, was the place to be if Calash wanted to expand and succeed in the burgeoning US oil and gas market.

The solution

And so, Calash incorporated its US entity in July 2016 and shortly after opened offices in New York and then Houston. With access to investors a priority, New York felt like a natural home for Calash. Houston, meanwhile,

provided direct access to the biggest players in the oil and gas market. Presence in the two cities gave Calash a platform to act as a bridge across the Atlantic. The expansion to the US was also an opportunity to follow existing clients and help UK businesses with their own entry strategies and acquisitions in North America.

The decision to expand into the US was made just before the oil and gas downturn and despite this being a risky move, Calash saw the opportunity to help distressed investors dealing with the downturn through a combination of restructuring, acquisitions and other strategies. Of course, there were fewer business opportunities, but enough to justify going ahead with the US expansion. The company was also confident that the American onshore market would continue to prosper, primarily due to the expansion of shale oil and gas production.

Entering the US was also an opportunity for diversification. Based



Calash draws on its deep knowledge and experience from across the energy and industrials sectors to deliver strategic advice and provide market intelligence that helps bridge the gap between the energy, industrial and financial sectors.

Cameron Lynch, President

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in Aberdeen, Calash was usually associated with the offshore oil and gas market. With that in mind, the company made a conscious push into the growing onshore segment in the US, believing it would help change this perception. The diversification strategy was not just limited to market segments though; in addition to M&A deal makers, Calash also wanted to become known as a restructuring advisor.

One of Calash's key success stories in the US took place in 2018, when the company was contacted by a large public business focused on the aerospace and automotive markets. This company had inherited an energy business through various acquisitions, and Calash immediately advised them to close business lines that effectively had no markets. However, there was a business line which, albeit loss-making, could be sold to other investors. Although the oil price was down when Calash was engaged, its

client successfully managed to sell the business it had inherited. Benefitting from Calash's expertise, the company earned 150% of what would have been generated if the business line was sold straight away.

Calash's US business is growing fast. Since opening, Calash has secured 16 new clients since it established its American offices, enjoying 35% profit levels in the two years that followed – with a 50% growth expected this year.

About Calash

An award-winning energy advisory consultant, Calash offers a range of strategic, business and M&A advisory services to investors and lenders, business owners and corporate finance players, as well as accountancy firms, legal and other specialist advisors. The company prides itself on the fact that its consultants are market experts with practical experience of the demands of the oil and gas sector. Headquartered



in Aberdeen, Calash also has offices in London, New York, Houston and Sydney.

Calash's services include: market education, growth strategy, new market entry strategy, analytics, strategic leadership review and target identification. Business advisory services include a broad range of consultancy support from: market reviews, specialist referencing, benchmarking and commercial turnarounds to specific technical or product assessments or challenging environmental reviews. In the M&A segment, Calash provides expertise across the transaction lifecycle, from target identification to due diligence reviews and onwards to post-merger integration and execution support, among other services.

Story type

#diversification, #export

Benefits

- 16 new clients since US base was opened

Key findings

For industry

- Manage your company's expectations and be as transparent as possible with employees
- Create an inclusive culture and communicate openly
- Recruiting people with the right blend of industry experience – and deciding where to locate them - is a major challenge when scaling-up

For government

- Capital is a key issue when scaling-up, and this is an area where the government should provide support
- The government should help potential exporters by opening doors

Government support?

The company has not received any government support.

Export lessons

- Use the right advisors when preparing to enter international markets
- Make sure to carry out due diligence before entering into partnership agreements

Calash at a glance:

Key products and services: strategic consultancy and M&A advisory services

Main industries served:

- Oil and gas – 70%
- Others – 30%

Headquarters: Aberdeen, UK

Year established: 2003

Number of employees: 20 (15 in the UK)

Revenue from exports: 30%

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Cargostore Worldwide

Customer focus and a win-win attitude delivering value for the supply chain

How is Cargostore thriving?

Cargostore provides DNV 2.7-1 certified cargo carrying units (CCUs) and ISO certified shipping containers to the offshore energy, and aid and stability sectors. Supported by a global depot network and an enthusiastic team, the company differentiates itself through deep customer relationships and a focus on service, which enables fast problem-solving of clients' issues and a reduction of unnecessary logistical delays and costs.

The challenge

A few years ago, Cargostore saw an opportunity to enter the offshore wind market. However, the company did not have a proper grasp of the equipment and location requirements for this segment. Meanwhile, a large inventory compromised cash flow; debt increased, while revenues dwindled. Following a big loss in 2015, a new team was brought into the company with bold objectives to pursue: debt had to be refinanced, revenues had to grow, the portfolio



needed rebalancing and Cargostore had to expand internationally.

The solution

Reverting losses was essential and in 2015 Cargostore embarked on a strategy to recover its financial health. The company needed to restructure its debt, which led its Managing Director Justin Farrington Smith, who had just joined the company, to work on the task of negotiating the company's refinancing. Additionally, Cargostore sold off non-core assets, rebalancing the company's portfolio.

The strategy also involved a repositioning in the market. Cargostore focused on the rental segment rather than sales in an attempt to protect long-term revenues with existing clients. In addition, the company proceeded to cease working with most of its agents to ensure they were more engaged with customers. Cargostore reinvested shareholder funds in order to acquire equipment with better

specifications that would meet clients' requirements more effectively. To increase efficiency and help clients reduce the logistics burden, Cargostore opened depots in locations close to the end destinations of clients' cargo.

Following the implementation of its strategy, Cargostore was ready to take on new challenges. In 2018 the company received a request for quotation from a contractor working on the Johan Sverdrup project in Norway. The contractor was looking for 70 refrigerated containers to transport bonding material for a pipelaying contract. The problem, however, was that nobody had such a large quantity of refrigerated containers.

Cargostore had to deliver, and smart problem-solving was key to obtaining the contract. After securing a meeting with the client's procurement manager, the company proposed an alternative arrangement: the 70 refrigerated containers would be delivered, but over a four-month window. Cargostore already had 30 units, and the extra 40 would be manufactured to Cargostore's bespoke criteria. The schedule would be longer, but the client would benefit from standardised equipment and a single supplier interface.

The client considered its choices and decided to award the purchase order to Cargostore. With a contract in place, the company proceeded to build the additional refrigerated containers and shipped all 70 units from the Netherlands to Norway successfully. Cargostore's best-in-class service mentality earned the company two follow-up projects



Cargostore builds strong relationships with its customers whereby we are valued as a trusted partner in the supply chain. The Cargostore team becomes fully involved in operational discussions and this collaborative approach enables us to deliver the most cost effective and timely solutions to meet customer and project objectives.

Managing Director, Justin Farrington Smith

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as a result, again offering the customer greater efficiency and cost savings.

Cargostore's strategy is defined by its success. Since its implementation, the company has returned to profit, making better margins each year. Now it is a major supplier to the offshore wind industry thanks to investment in client focused specifications and strategic depot locations. Equipment utilisation has improved and Cargostore's commitment to customer service has been recognised by an independent customer survey.

About Cargostore

Cargostore Worldwide is one of the world's leading suppliers of ISO shipping containers and DNV 2.7-1 certified CCUs for on and offshore projects. With offices in London, Abu Dhabi, Holland and depots across the globe they provide

a seamless and fast service with the flexibility to meet any client requirement.

Cargostore's Offshore Division provides a complete range of CCUs to service the oil, gas and offshore renewables industries, project movers and offshore supply companies. All equipment is designed, built and certified to DNV 2.7-1 standard. Cargostore has invested in a wide range of regular and specialist products which are available via their location network in the US Gulf, the North Sea, the Arabian Gulf, Middle East and East Africa.

Its Intermodal Division supplies ISO certified storage and shipping containers for hire or sale and can offer bespoke container conversions and specialised equipment. The company supplies projects in mining, defence, aid, community development, large

cargostore

worldwide

Suppliers of ISO and DNV 2.7-1 equipment

scale sporting events, general logistics and B2C.

Cargostore has offices globally with staff that collectively speak over 13 languages enabling it to provide the very best in customer service for clients worldwide. With constant availability, faster delivery, 24/7 telephone answering and local representatives the Cargostore motto of 'global reach, local touch' is the company's way of making buying, renting and modifying ISO shipping containers and DNV 2.7-1 certified offshore CCUs a quick and simple process.

Story type

#optimisation, #service/solutions

Benefits

- Cost savings for clients
- Additional orders from existing customers

Key findings

For industry

- Always deliver what you promise
- Tenacity is key when doing business
- Know your limitations
- Be honest when something goes wrong
- Empower all team members to respond to customers immediately

For government

- Provide funding toward staff training and recruitment
- The current Apprenticeship Levy framework must be reviewed

- DIT should be able to provide better country specific information itself rather than just referring to local service providers

Government support?

Apart from the Apprenticeship Levy (which the company does not plan to use again), Cargostore has not received any type of government support.

Export lessons

- Precautionary measures in anticipation of Brexit are essential
- Know your market – do not start expanding based on a good idea
- Check if your products are certified in target markets
- Companies must have T&Cs agreed with end-users and/or rental companies
- Make sure your company is an approved vendor with target clients
- Learn as much as you can about tax and legal aspects in target countries

Scaling-up lessons

- Getting the right staff is a major challenge, especially in a small business or if they are working remotely
- Make sure your company is in a good financial condition
- A scale-up process should be supported by good products and services

Cargostore at a glance:

Key products and services: provider of ISO shipping containers and DNV 2.7-1 certified CCUs

Main industries served:

- Oil and gas
- Wind
- Stability and aid
- Others

Headquarters: Wimbledon, UK

Year established: 1993

Number of employees: 26

Revenue: £10m

Revenue from exports: 90%

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Comeca

Capturing key aftermarket opportunities while diversifying from OEM into third-party equipment servicing

How is Comeca thriving?

Comeca's UK start-up is growing quickly with a successful strategy to capture the aftermarket of legacy equipment, while building on strong client relationships to diversify into third-party equipment service and bespoke project engineered solutions.

The challenge

Although the Comeca Group was founded in 1974, the company's experience in the energy distribution and management segment spans more than 50 years. Successive acquisitions of world-leading brands over the years (e.g. Alstom T&D LVE, Areva T&D, GEC Alstom, Hazemayer) gave Comeca a large installed base of legacy equipment present in facilities in the most varied sectors across the world.

Back in 2014, the company was keen on tapping into the potential of its legacy equipment in the UK. The UK market was supported by the company's operations in France back then, but Comeca saw that it was losing market share to competitors across the Channel.

The solution

In October 2014, Graham Reynolds,



an industry veteran with 30 years of business experience, was asked to open a Comeca UK subsidiary. Although supported financially by its parent company, the UK unit had to win orders from scratch. Initially a two-man operation working 18 hours a day, Comeca UK started sending flyers to end-users to let them know that a local subsidiary was up and running.

As happens with most start-ups, Comeca UK experienced some obstacles at first. Some competitors tried to convince customers not to consider the new entrant on the grounds that Comeca UK was too small and could not be trusted. However, these concerns were quashed by Comeca's comprehensive

technical understanding of its legacy equipment and installed base, made possible through original intellectual property documents and drawings.

After an initial business development effort, Comeca UK quickly started to receive enquiries and win new business. The company earned a life extension contract with Shell for the retrofit of old GEC Alstom low-voltage switchgears with modern Comeca products. Shell's choice of Comeca avoided a complete equipment replacement, which would have cost millions. Another opportunity came with INEOS, for whom Comeca delivered a containerised substation at the operator's Grangemouth site under a £2.1m EPC contract.



Comeca is experiencing real growth in the UK market by providing bespoke high specification electrical equipment and solutions, products, aftersales services and support on new projects while supporting its existing installed base.

Graham Reynolds, Managing Director

Comeca also wanted to diversify beyond the OEM segment into third-party support services; an opportunity to do so was provided by a contract with Valero. The company's Pembroke refinery featured Martelli switchboards from the 1970s, for which there was no OEM support available in the UK. Comeca UK received a request for quotation and eventually won a £200,000 contract following an open tender process. This was the

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company's first major opportunity to work as a service provider for equipment manufactured by other firms.

Comeca not only succeeded in recapturing its UK market but also expanded its business offering. Using its broad expertise as a foundation, the company was able to diversify from a purely OEM role to a service provider for third-party equipment. Revenues have grown from zero to £6m in four years, and the company already has a 2% market share in the UK. Comeca UK now has a new bold target: achieve revenues of £15-£20m in the next three years, using its manufacturing capabilities, services and third-party support as pillars for growth.

In addition to this success Comeca Group were chosen as a Tier 1 supplier

for the new nuclear power station at Hinkley Point C where its best in class low voltage equipment has been chosen by EDF. Comeca UK will play a major role in the project management, installation and commissioning and aftersales services for this new facility, due to come online in 2025.

About Comeca

Comeca is a specialist in energy distribution and management, as well as associated services. The company's portfolio includes manufacturing of bespoke high specification electrical equipment including low and medium voltage switchboards, automation, monitoring, system integration, control and command, power electronics, energy conversion, cabling solutions, electrical solutions for HVAC systems, system integration, commercial vehicle charging systems and related services.



Comeca is very active in the energy sector, with products and project management offering across segments such as oil and gas, petrochemicals, power generation, nuclear, energy storage and general process industry sites.

Headquartered in southern France, the Comeca Group is active across the world and has in excess of 1,250 employees, with subsidiaries in Algeria, Australia, France, Indonesia, Korea, Malaysia, Morocco, Spain, the UAE and the UK. The company has 23 production units worldwide, and its products are marketed in over 130 countries.

Story type

#diversification, #optimisation, #service/solutions

Benefits

- Revenue growth from 0 to £6m in 4 years
- Market share of 2% since start-up

Key findings

For industry

- Understand your customers' expectation by listening and working with them. Do not sell them something they do not want

Government support?

The company has not received any type of government support.

Scaling-up lessons

- Getting the right people into the right roles is a major challenge during a scale-up process
- Scaling-up requires a good, central location to access all clients and skilled employees

Comeca at a glance:

Key products and services: energy distribution and management solutions

Main industries served (Comeca UK):

- Oil and gas (downstream) – 70%
- Nuclear – 15%
- Industrial – 10%

Headquarters: Saint-Mathieu-de-Trévières, France (group); Stoke-on-Trent, UK (Comeca UK)

Year established: 1974 (group); 2014 (Comeca UK)

Number of employees: 1,250 (group); 11 (Comeca UK)

Revenue: £150m (group); £6m (Comeca UK)

Revenue from exports: 5% (Comeca UK)

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Crondall Energy

Thriving by developing innovative O&G technologies

How is Crondall Energy thriving?

Benefitting from a loyal and experienced team of specialist consultants working across the oil and gas industry, the company has focused on developing exciting and transformative technologies that is working for major players in the offshore oil and gas field.

The challenge

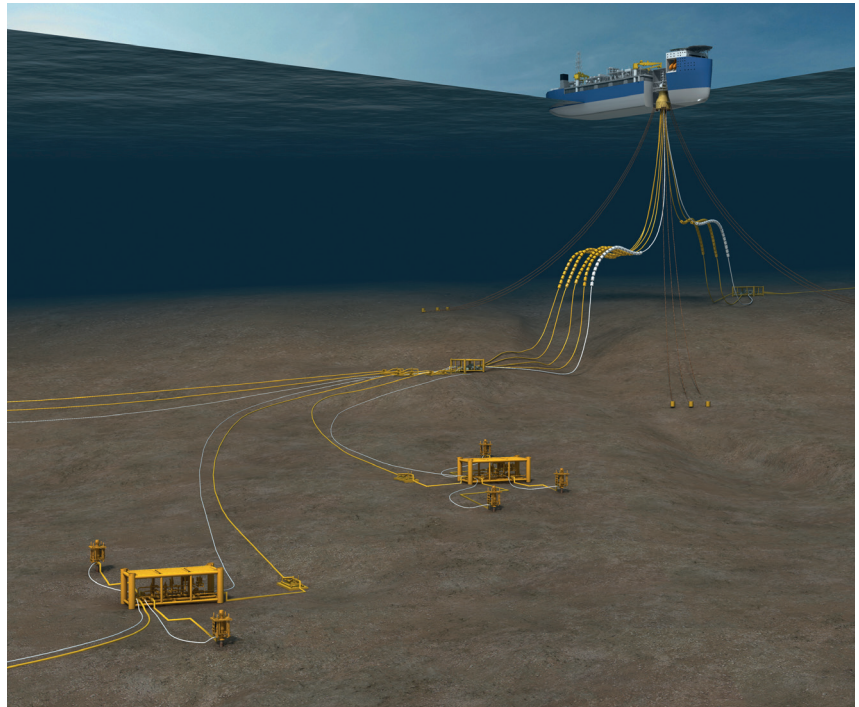
Differentiation is key for most businesses, and for Crondall Energy it was no different. The company believed that good consultancies should be specialists and not generalists, leading them to offer the kind of technical edge that makes them recognisable as the best company in a particular segment.

Before the oil and gas market crashed, Crondall Energy provided both an integrated design capability and technical consultancy. Opportunities were booming and the market generally favoured companies providing a range of integrated services. As the market entered the crisis, fewer projects were being sanctioned and revenues were falling. Differentiation was essential if the company wanted to thrive.



Our technology strategy has two parts. Firstly, it keeps us abreast of the latest developments which we use to support our clients. Secondly, it allows us to focus on new technologies with the aim of achieving simplification of facilities and cost savings.

Stephen Booth, Managing Director



The solution

In 2016, Crondall Energy's directors made the decision to focus on technology as a response to market conditions. It was not really a crisis, but rather a change of emphasis motivated by much lower demand for conventional consulting services. Crondall Energy already had an innate technological approach and, benefitting from its exceptional pool of engineers (who have worked together for more than two decades), the company got

back to the basics, focusing on its core technical skills of pipeline and subsea engineering.

After deciding on its strategy, Crondall Energy immediately set to work. The company set up a technology steering group, which identified four areas of potential interest to oil and gas players: high pressure and high temperature (HPHT), deepwater, cost reduction and small pools (i.e. marginal accumulations of oil and gas). Lots of brainstorming ensued, followed by narrowing down topics based on three criteria: influence, resources and expertise. Which areas could be influenced by the company? Could the company resource a small team to advance the project? Is it an area in which the company can offer its expertise?

A list of ideas emerged, among them that of internal coatings. Supported by the Oil & Gas Technology Centre (OGTC) and the Oil & Gas Innovation

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Centre (OGIC), Crondall Energy is leading an investigation into how modern coatings can be used to improve flow assurance in upstream pipeline systems. Instead of using heat or chemicals, modern internal coatings can minimise the risk of wax blockage – and massively reduce costs – by preventing the wax from sticking to the pipe’s internal surface. The study is still at early stages and is being conducted within the Institute of Chemical Sciences and the Institute of Petroleum Engineering at the Heriot-Watt University.

Another area Crondall Energy is working on is the pipeline design for HPHT environments. Specifically, the company has developed software which, based on reliability analysis, can be used to design or verify pipeline designs

in challenging environments where pipeline buckling is common. Working for a major oil and gas player, the more innovative pipeline design developed by Crondall Energy resulted in more than £10m saving according to the operator.

Crondall Energy is also working in other areas. They are actively supporting the OGTC Tie-back of the Future initiative in a number of areas, with the aim of reducing the time and cost of subsea tie-backs by 50% , allowing more marginal fields to be developed profitably.

This focus on technology has not only helped Crondall Energy to prosper in a difficult market, but also make a great contribution towards greater efficiency and cost savings in the oil and gas industry.



About Crondall Energy

Crondall Energy is a leading independent provider of commercial, strategic and technical consulting services for oil and gas projects using floating production and subsea technologies. The company works with a range of project stakeholders, including oil and gas companies, investors and law firms. Founded in Crondall, Hampshire, in 2001, the company today is present in London, Winchester, Aberdeen and Newcastle, in addition to international offices in Houston, Singapore and Stavanger.

Story type

#innovation, #technology

Benefits

- New technologies offering potentially huge industry benefits
- Savings as a result of efficient pipeline design

Key findings

For industry

- Focus is needed when developing technology. Companies should avoid the temptation to keep ‘changing horses’, as it will take years to consolidate solutions and commercialise them fully
- Choosing the right people with the right skills is essential in any business, even more so in technology
- Carefully choose your target export market. Do not spread yourself too thin

For government

- The government should support diversification towards the offshore renewables segment
- Energy policy U-turns, such as the cancellation of carbon capture and storage projects, must be avoided
- Additional funds should be made available to support technology. There are many opportunities and the UK should be able to scale them up faster than other countries

Government support?

Crondall Energy is account managed by Scottish Enterprise, which has helped by providing travel support, access to graduates and website design. In addition, the company has received grants from the OGTC and the OGIC for technology projects. Crondall Energy has also benefitted from R&D tax credits.

Crondall Energy at a glance:

Key products and services:

commercial, strategic and technical consulting services

Main industries served:

Oil and gas – 100%

Headquarters: Aberdeen, UK

Year established: 2001

Number of employees: 50

Revenue: £5.5m

Revenue from exports: 60%

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Emerson

Driving innovation through smart internal collaboration

How is Emerson thriving?

Looking inwards for inspiration, Emerson reinforced its values of innovation and collaboration by enabling employees to submit ideas through a digital portal. The platform's responsiveness and visibility allowed staff to see opportunities in a fresh light. With these new insights the company accelerated its continued improvement initiatives and drove growth and cost savings across many areas of the business.

The challenge

A few years ago, before the industry downturn, Emerson had a strong focus on the oil and gas market. This segment represented more than 60% of the company's revenues in the UK, of which a significant portion was associated with the upstream segment. The company recognised the need to diversify and balance its portfolio, and in subsequent years successfully entered markets such as life sciences and power. This move proved to be timely, as three years later the collapse in oil prices would lead to a global impact on the oil and gas market.

The decision to diversify showed



good insight from Emerson's UK management team, but the company knew that there was a great amount of untapped insight across the wider organisation. Business was slow during the downturn and the company needed new ideas. How could Emerson create more demand and value in a stagnant business environment? What additional insights could be identified?

The solution

In August 2018, following a strategic leadership meeting, Emerson's European unit decided it would innovate through internal collaboration. The company realised that it had a solid business culture and wanted to make the most of this important asset. Rather than look outside and up, the company would look inside, across the organisation in the search of knowledge, insights and ideas to improve business processes and create value.

This exercise led to the creation of an internal platform in which employees could submit their ideas. Suggestions were highlighted to line managers, who would implement or escalate the idea if it needed additional discussion or investment. Ideas were seen by everybody, and line managers would



Our customers look to Emerson to help them solve their toughest challenges. Across the organisation we see an opportunity to anticipate, act and accelerate innovations that will lead to a more prosperous future. We are here to help our customers unlock new possibilities.

Stuart Brown, VP UK and Ireland

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be able to identify the most popular ones through the number of 'likes', similar to content in social media. All ideas were acknowledged, with the best ones given priority. Feedback was always provided, even if ideas could not be implemented.

Emerson's innovative platform proved to be a resounding success. After six months, more than 1,200 ideas had been submitted by the company's employees in Europe. Emerson was able to collect a lot of low-hanging fruit in the process, identifying ideas which drove innovation, led to material cost savings and improved overall performance. On time delivery continued to increase, while win-rates in its maintenance, repair and operating business increased significantly on prior year. All in all, process improvements led to significant revenue growth as Emerson sped up its orders, improved execution and adopted a smarter approach to tenders, removing duplicate processes and waste.

Emerson's smart initiative enabled

the company to have a broader perspective of the market. By developing an innovative digital platform to aggregate and act upon ideas from all employees, the company was able to create value and drive demand in a time of stagnant business opportunities. More importantly, the initiative motivated and inspired staff, whose ideas accelerated businesses processes and application innovation, maximising returns.

About Emerson

Emerson is a global technology and engineering player that provides innovative solutions for a wide range of applications in the industrial, commercial and consumer markets around the world. Following a recent portfolio reorganisation, the company's main businesses are divided into the Automation Solutions and Commercial & Residential Solutions segments.

Emerson's Automation Solutions segment offers a broad array of products, integrated solutions,



software and services which enable clients to maximise production, protect personnel and the environment, reduce project costs, and optimise their energy efficiency and operating costs. Significant markets served include oil and gas, refining, chemicals and power generation, as well as pharmaceuticals, food and beverage, automotive, pulp and paper, metals and mining and municipal water supplies. The segment's major product and service offerings include measurement and analytical instrumentation products; valves, actuators and regulators; solenoid and pneumatics products; control and safety systems and electrical components, in addition to services such as asset management and operations and business management.

Story type

#collaboration, #digital, #innovation, #optimisation

Benefits

- Additional revenues due to optimised processes

Key findings

For industry

- Seek growth opportunities outside the organisation, but do not overlook untapped potential that resides within
- Recognise that all employees have valuable insights that often get overlooked or are not encouraged

For government

- Clarity is needed around Brexit. Delayed decisions prevent the supply chain from adequately structuring their plans

Government support?

The company has benefited from R&D tax credits in the past.

Culture change lessons

- Line managers must be open-minded and welcome ideas from staff

Emerson at a glance:

Key products and services:

technology and service provider to the process automation industry

Main industries served:

- Oil and gas – 50%
- Petrochemicals – 25%
- Life sciences – 20%
- Others – 5%

Headquarters: Leicester, UK (Emerson UK); St. Louis, US (group)

Year established: 1890

Number of employees: 1,800 (Emerson UK), 87,500 (group)

Revenue: US\$310m (Emerson UK); US\$17.5bn (group)

Revenue from exports: 36% (Emerson UK)

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EnerMech

Successful diversification and improved service approach minimised the downturn impact

How is EnerMech thriving?

EnerMech tackled the O&G downturn head on by diversifying into the liquefied natural gas (LNG), refining, infrastructure and nuclear sectors, which included developing its smart System Integrity Management (SIM) technology and adapting the company's service approach to offer long-term, customer-centric contract models that share risk and align objectives.

The challenge

Like many businesses EnerMech was impacted by the recent downturn in the oil and gas industry. Its UK business bore the brunt of the deflated market, leading to a realignment and downsizing, with staff numbers unfortunately reduced. EnerMech is a company which is fast-moving, resilient and has a reputation for innovation, all qualities which it relied upon to overcome the pressing challenges of the downturn and to come out the other end in good shape.

The solution

Although the company had a focus



on key markets and core service provisions, in 2015 EnerMech decided to look at diversification. The aim was to strengthen the business with a wider portfolio of services and revenue streams, leveraging its vast experience of the oil and gas sector and introducing its integrated offering to new industry sectors. After obtaining an understanding of markets and undertaking competitor analysis, the company was able to identify opportunities and gaps. This exercise led to the acquisition of the Australia and US-based EPS Group in early 2017, allowing the company

to tap into valuable opportunities in the LNG and infrastructure segments. With existing relationships in the defence sector, securing a contract award from defence technology company BAE Systems strengthened EnerMech's perspective of the potential scale of opportunities arising from diversification.

EnerMech also prioritised alignment with its clients' strategies and goals. The aim was to deliver products and services that fully met clients' needs. EnerMech's approach involved the application of different contracting models, as well as the use of enhanced technologies to improve the service offering.

Also in 2017, EnerMech secured a £2m contract with a major European operator to assure quality control on the hook-up of a bridge-link between two platforms in the North Sea. Using its SIM technology, a bespoke software package developed in-house, the company was able to track joint integrity in real-time through commissioning and start-up, providing the client the assurance of each flange's status.



The strength of EnerMech is in the diversity of our market sectors, the depth of our knowledge and our focus on service delivery. The contracting strategies we are adopting with our clients ensure that we deliver positive outcomes for both parties by adopting innovative outcome based KPI's.

Stuart Smith,
Integrated Maintenance & Integrity Director

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EnerMech's approach was fully aligned to the operator's goals. The company gave a leak-free guarantee for the joints, a commitment linked to project KPIs. EnerMech took a wider view of the scope of work, looked at whole system integrity and took ownership of the complete joint system in order to ensure leak integrity until leak tests were finished. The company's excellent performance earned it additional opportunities with the operator. Working alongside the operator's employees, and on the back of the initial contract success, EnerMech now does all the work for these two North Sea assets.

Growing its revenues from zero as a start-up business to £450m in 10 years, (UK revenues in 2018 are forecast to be £88m) EnerMech is scaling-up again. While 95% of the company's total revenues were associated with oil and gas prior to the downturn, today sectors such as

defence, LNG, refining, infrastructure and nuclear make up 25% of revenues. EnerMech's successful diversification and adapted service approach, as well as the smart development of technology such as SIM to solve client problems, have been instrumental in securing key business opportunities.

About Enermech

EnerMech is a global services company specialising in critical asset support across an asset's entire lifecycle, from pre-commissioning to decommissioning. The company's broad range of services include mechanical, electrical and instrumentation solutions, which can be provided individually or as part of a fully integrated package. EnerMech's capabilities are varied and the company is able to offer the appropriate tools and services, including an extensive range of cranes



Safer • Smarter • Solutions

and lifting, hydraulics, valves, electrical and instrumentation, pipeline and umbilical, industrial, process, training, inspection, integrity and equipment rental services. Active in the whole spectrum of the energy market, the company offers services to operators, plant and asset owners, EPC contractors, subsea contractors as well as drilling contractors.

Headquartered in Aberdeen, EnerMech employs 3500 staff and is present in over 40 locations around the world, including Europe, the Americas, Africa, the Caspian, Middle East and Asia-Pacific.

Story type

#digital, #diversification, #innovation, #service/solutions, #technology

Benefits

- Increased revenues and new business opportunities
- £2m contract value thanks to leak-free guarantee
- Ongoing work with major European operator

Key findings

For industry

- Trust intuition
- Build true and lasting client relationships
- Be very customer centric – tailor solutions to customer needs
- Take time to understand client and what they are not able to currently get or solve

- Genuine local content – offices, workshops and people – is essential to boost exports

For government

- Economic uncertainty is not helpful for companies considering scaling-up

Government support?

The company has received R&D tax credits. In addition, EnerMech has benefitted from the Apprenticeship Levy.

Scaling-up lessons

- Identify the right acquisitions

Export lessons

- Enter the right geographical markets at the right time
- Follow client relationships around the world

- Have equipment and infrastructure in overseas markets, allowing the business to grow organically in their regions

Enermech at a glance:

Key products and services:

Integrated services provider

Main industries served:

- Oil and gas (upstream) – 50%
- Oil and gas (midstream) – 30%
- Others – 20%

Headquarters: Aberdeen, UK

Year established: 2008

Number of employees: 800 (UK), 3,500 (Group)

Revenue: £188m (UK), £460m (group)

Revenue from exports: 80%

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Glacier

Resilient and diversified business portfolio across O&G and renewables, winning opportunities in the UK and abroad

How is Glacier thriving?

The resilience of the company's diverse business portfolio across the oil and gas, and renewables sectors, both in the UK and globally, has enabled smart and fast responses to the industry downturn. Glacier has restructured and refocused, emerging stronger from the crisis.

The challenge

Backed by private equity investment, Glacier was formed in 2011 following a management buy-out of two MB Aerospace companies: Wellclad and Roberts Pipeline Machining. The newly-created company soon realised it could do more, and then proceeded to buy four additional companies: MSL Heat Transfer, Professional Testing Services, Ross Offshore and Site Maching Services, with the aim of broadening its offering and expanding its client base. Almost immediately, Glacier saw its revenues soar to £25m.

This fast growth, however, was slowed down by the crash in oil and gas markets. New ideas for expansion were put on hold as revenues decreased: while the company's annual revenue was £26.4m in 2015, it fell to £22.3m in 2016 and £19.5m in the following year. Although profits remained robust and investors showed



faith, Glacier, like most of its peers in the oil and gas industry, was in 'survival mode' and recognised that it had to restructure if it wanted to remain strong and grow.

The solution

Glacier had a sense of urgency and knew it had to look at ways to survive. The company quickly took steps to revert its losses: layoffs, pay cuts and facility consolidation played a key role in reducing overhead costs. The company also decided to take the industry downturn as an opportunity to properly integrate all the businesses it had acquired since 2011. This involved

the implementation of improved business systems in addition to a more consistent sales and marketing effort, focusing on the Glacier brand.

Glacier also realised that diversification was key to overcoming the industry downturn. The company had four core offerings, which made it a naturally diverse group. In addition, it was not overly reliant on any particular market or sector, which proved invaluable during the crisis. Glacier looked at its portfolio and focused on opportunities beyond oil and gas. The company benefitted from excellent technical expertise in providing engineered solutions, which ensured it was able to react to new customers' needs. Glacier's early acquisition activity had exposed it to the renewables sector, helping to accelerate its diversification: in 2014 Glacier did not generate any revenue from this sector; by 2018 it was responsible for 44% of total earnings.

Diversification also entailed new acquisitions. In late 2018, Glacier acquired Whiteley Read Engineering, a respected brand in the design and



We recognised the need to diversify into new sectors and geographic markets to survive the downturn, and believe we have created a more robust, international, energy services group as a result.

Scott Martin, Executive Chairman

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manufacture of pressure vessels. This transaction enabled Glacier to tap into larger CAPEX projects in the up and downstream markets, but the acquisition also had a strategic purpose: it allowed Glacier to integrate its operations in Birmingham into Whiteley Read's Rotherham facility. Each of the units was making £2m in revenues but were both loss-making. Their integration, however, along with tapping in to Glacier business development function, will facilitate an increase in combined revenues to £5m in just six months with profits forecast for the next financial year.

After what has been a challenging period for the industry, the company is in a strong position and is back in growth mode, with a 28% revenue increase in 2018. It is once again back

to Plan A: achieve further growth and then raise capital to embark on further acquisitions.

About Glacier

Glacier Energy Services is a specialist provider of services, products and engineered solutions for energy infrastructure around the world. This includes engineered on-site machining solutions (benefitting from world-renowned Roberts pipe-cutting capabilities), non-destructive testing (NDT) and inspection, the design, fabrication and repair of heat exchangers and pressure vessels as well as weld overlay and fabrication solutions.

Originally formed in 2011 following a management buyout of Roberts



Pipeline Machining and Wellclad, Glacier went on to acquire another six companies – Whiteley Read being the latest - to boost its portfolio in the oil and gas (upstream and downstream) and renewables sectors. In addition to its headquarters in Altens, close to Aberdeen, Glacier also has offices in Glasgow, Methil and Rotherham.

Story type

#diversification, #optimisation

Benefits

- Revenue growth of 28% in one year following two consecutive years of decline
- Successful diversification to renewables: from 0% to over 40% in four years
- Company acquisition and subsequent integration with existing facility allowed £1m revenue growth in six months

Key findings

For industry

- Act quickly and decisively when downturn hits
- Results from diversification may take longer than expected and companies should avoid the temptation to abandon efforts
- Lots of communication is needed with stakeholders, especially in times of crisis

For government

- A more proactive approach is needed to help SMEs succeed
- Government should be aware of working capital challenges faced by suppliers in the process of entering new markets

Government support?

Glacier has joined trade delegations and is account managed by Scottish Enterprise. The company has also benefited from the Apprenticeship Levy.

Export lessons

- There is a high cost associated with exporting. It takes planning, research, travel and time
- Test market opportunities before fully committing to exporting

Culture change lessons

- Acquisition of new businesses is a key driver for culture change
- Companies should adopt a more upfront approach when assessing culture change

Glacier at a glance:

Key products and services: heat exchangers and pressure vessels as well as NDT and inspection, on-site machining and weld overlay services

Main industries served:

- Upstream O&G – 60%
- Renewables – 30%
- Downstream O&G – 10%

Headquarters: Altens, UK

Year established: 2011

Number of employees: 200

Revenue: £25m

Revenue from exports: 60%

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HKA

Smart use of data to reduce engineering and construction disputes

How is HKA thriving?

HKA's CRUX research programme has enabled the company to boost its reputation as a thought leader in the dispute resolution sector. By capturing and analysing data from hundreds of project disputes, CRUX identifies key findings and causes, eliminating the 'simplicity myth'. The programme has given clients the opportunity to obtain innovative predictive insights, helping them reduce the prevalence and severity of disputes occurring on their projects.

The challenge

HKA recognised it was 'data rich but information poor' and embarked on a programme of change. As dispute resolution experts, HKA has global exposure to some of the world's most complex projects and the myriad of issues that can arise. In the course of delivering its services, the company aggregates an enormous amount of deep, broad and valuable data. The challenge was to transform this data into intellectual property and valuable insights that assist clients and the broader industry.

It was felt that the complexity of dispute causation was generally underestimated in the literature and by the market, which HKA coined the

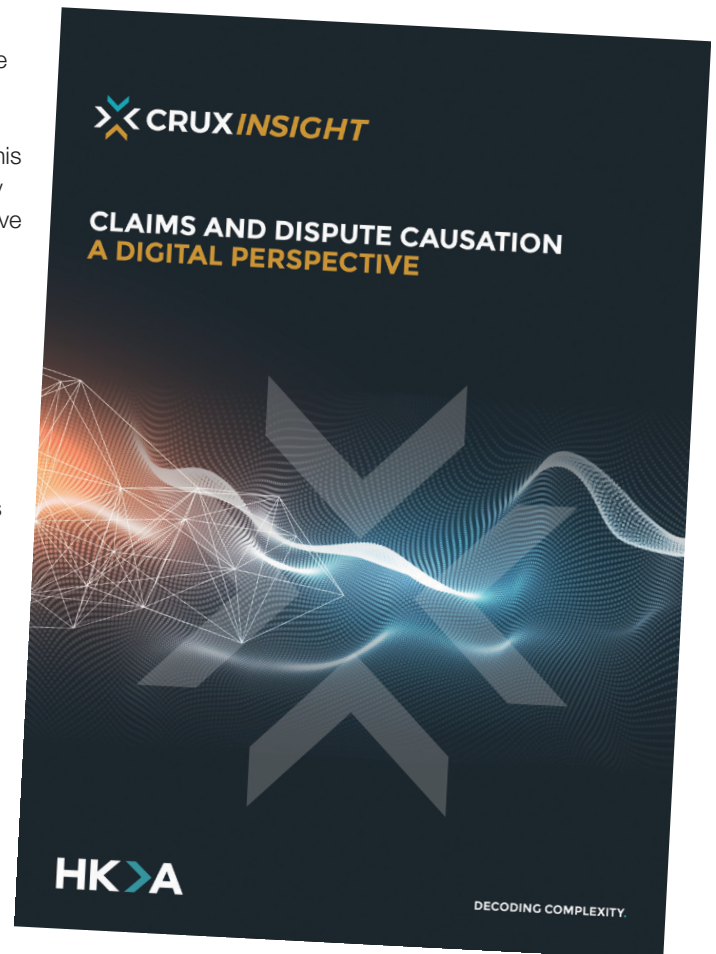
simplicity myth: the tendency to over simplify claim and dispute causes. This is compounded by a lack of quantitative and qualitative data, which can be attributed to items such as short-termism, overconfidence in project controls and failure to implement lessons learnt.

The solution

HKA determined that mining its ever-expanding data could help clients and industry better understand causation.

Tackling the simplicity myth would enable better planning, potentially helping organisations reduce the prevalence or severity of claims or disputes.

In December 2016, the company initiated the CRUX programme.



Formed to capture both tangible and intangible knowledge across HKA's operations through digitalisation, its objective was to apply data science to derive value not only for HKA and its clients, but the wider industry. The aim was to allow the industry to better manage risks and uncertainty in order to achieve successful business outcomes.

The first CRUX insight report titled Claims and Dispute Causation: a Digital Perspective, was published in November 2018. Its findings have reignited global debate and generated significant interest, with requests for targeted analysis on EPC contracting from the energy industry. Most importantly, the programme –



The company aggregates an enormous amount of deep, broad and valuable data. The challenge was to transform this data into intellectual property and valuable insights that assist clients and the broader industry.

Renny Borhan, CEO

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which plans to collect data on 1,500 projects by 2020 – has reiterated how digitalisation can reduce the cost of claims or disputes, especially at a time when productivity, efficiency and competitiveness are increasingly important.

CRUX revealed truths and challenged common misconceptions. After collating and analysing data and objective expert opinion on 257 projects valued at more than US\$400bn, where HKA provided claims consulting and dispute resolution services, the research revealed an average of 13 interrelated causation factors per project (with several projects amassing 39 causes). On average, there were seven major causes and six secondary causes, debunking the simplicity myth.

The programme undergoes continual development. In 2019, HKA is refining the causation taxonomy, improving sector granularity and extending

the analysis of the interconnection between causes to provide even deeper insight.

CRUX has proven to be strategically significant. It positions HKA as a thought leader and has allowed the company to engage earlier and more frequently with existing and new clients to assist with avoiding, as well as resolving, disputes. The programme has also strengthened relationships with key accounts through the sharing of deeper and targeted CRUX insights and has generated intellectual property adding to business value. These benefits are expected to grow as the data expands year on year.

About HKA

HKA is one of the world's leading providers of consulting, expert and advisory services for the engineering and construction industry. From construction and manufacturing to processes and technology, the



company anticipates, investigates and resolves project disputes, allowing the best possible outcomes for clients in the public and private sectors.

HKA has over 900 professionals operating from 39 offices in 19 countries across the world. It has over 40 years' experience in dispute resolution and was formed as an independent company in 2017.

HKA was named Construction Expert Witness Firm of the Year at the Who's Who Legal Awards in 2018 and topped the list of WWL Construction 2019: Expert Witness Analysis and ranked number one in the Global Arbitration Review Top 100 11th Edition Expert Witnesses for the number of construction arbitrations a firm has undertaken.

Story type

#digital, #innovation

Benefits

- Recognition as thought leader in the industry
- Strengthened relationships with key accounts
- Intellectual property creation
- New business opportunities

Key findings

For industry

- A holistic approach to dispute avoidance is required to address causation complexity
- Embracing digitalisation can result in dispute avoidance by proxy
- Corporate data is a valuable commodity

For government

- There are common causes of dispute on public sector projects worldwide
- The private sector is using causation data to reduce risk and grow margins

Government support?

The company has not received any type of government support.

HKA at a glance:

Key products and services:

consulting and advisory services

Main industries served:

- PNR – 20%
- Oil and gas – 13%
- Others – 67%

Headquarters: Warrington, UK

Year established: 2017

Number of employees: 900 (205 in the UK)

Revenue: US\$179.5m (US\$45.5m in the UK)* unaudited and therefore subject to change

Revenue from exports: 0%

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Hughes Safety Showers

Zero Power Cooling system for emergency tank showers

How is Hughes Safety Showers thriving?

Collaborating with an industry partner, Hughes has developed an innovative cooling technology for emergency safety showers which does not require the use of electricity and fully meets industry standards. An ideal solution for remote areas, Hughes' new product allows up to 30% CAPEX savings and completely removes the need for maintenance, with performance assured under a 20-year guarantee.

The challenge

Safety is crucial for any business, particularly in hazardous industrial areas. Such environments require specialised emergency safety equipment, which must adhere to strict international standards. When it comes to emergency safety showers, for example, international regulations mandate firm requirements around the water that is used, which must be made available within a certain temperature range.

Water must be cooled to prevent potential scalding of the shower user, and this creates a challenge for companies operating in certain areas. There are places with exceedingly high temperatures or remote/undeveloped locations where power supply is scarce. This creates cost pressures

for operators and developers, which demand more efficient and environmentally friendly cooling solutions for their projects.

The solution

Hughes' answer to this challenge was born out of collaboration. A few years ago, the company was approached by Celantel, an Italian expert in passively cooled shelters, who saw an opportunity to adapt its technology to Hughes' safety showers. The two companies had a brainstorming session on how to develop a tank cooling system which did not depend on power but still met industry safety standards. No such product existed in the market, creating an innovative new solution that ensures the safety of employees.

This cooperation led to the development of the Zero Power Cooling (ZPC) system for emergency tank showers. The innovative product features a passive cooling system which requires no electricity to work.



During the night-time, the system's convection process draws heat out of the water tank, reducing water

temperature to required industry levels. During the day, the external exchanger is heated by solar radiation and the coolant no longer circulates. This causes the coolant in the system to stratify, keeping hot water on the top and cooler water below, preventing the water in the tank from heating up.

In 2018, the company had its first ZPC production unit ready for testing. Using contacts at Saudi Aramco obtained at ADIPEC, Hughes was able to mobilise the prototype to the Khurais oil field in Saudi Arabia for a testing campaign, which took several months. After a successful trial, the prototype demonstrated its effectiveness when installed on the gravity-fed tank shower: after only 16 hours, the water temperature inside the tank achieved an adequate safety level to be used in the emergency shower. Withstanding day-time temperatures of nearly 55C, ZPC successfully maintained the water temperatures well within the required ANSI Z358.1 regulation for emergency safety showers, which requires water to be within the 16-38C temperature



This technology has been developed and tested, ready for future demand and requirements in this area and ensuring that safety remains a top priority for Hughes and our customers.

Kiran Damji, Product Manager

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range. This was achieved without use of a power source, making the solution ideal for any location where there is a requirement for a safety shower. Further prototypes were produced, and in 2018 TÜV provided third-party certification for the product – confirming its complete adherence to safety and compliance standards.

ZPC was formally launched to markets in September 2018. The product, which is patent pending, has clear commercial advantages: its cost is 30% lower than chiller cooled emergency safety tank showers. There are no maintenance costs involved, with ZPC-equipped showers supported by a 20-year lifetime guarantee. As a zero-power solution, the product does not require any power infrastructure, which reduces costs and contributes to a reduction in carbon footprint. Considering conventional requirements in large facilities, Hughes estimates that its solution can save up to £1m per typical project*.

As temperatures rise and CO2 reduction requirements increase, measures like Hughes' ZPC will make a big difference to customers in coming years. This innovative technology collaboration with Celantel, has been developed and tested, and is now ready for future market demand and requirements. Developed by an industry leader in emergency showers, Hughes' new ZPC solution ensures that safety remains a top priority for the company and its customers.

* Based upon a 30% saving when compared to a tank shower with flameproof chiller on large sites.

About Hughes Safety Showers

Established in 1968, Hughes Safety is Europe's largest manufacturer of emergency safety showers, eye and face wash and decontamination

HUGHES



HUGHES-SAFETY.COM

Justrite Safety Group

equipment. The company's varied portfolio includes indoor and outdoor emergency showers, including temperature-controlled solutions. A selection of the company's emergency showers is also available for hire. Hughes also carry out servicing and repairs and conduct site inspections to assess condition and suitability of safety equipment. In addition to its headquarters in Stockport, UK, Hughes has offices in Canada, Germany and in the US.

Hughes Safety Showers is part of the Justrite Safety Group, a US-based group of companies dedicated to supplying industrial safety and environmental spill containment products.

Story type

#collaboration, #innovation, #technology

Benefits

- CAPEX and OPEX savings of up to £1m on large sites*
- Zero OPEX costs
- Solution reduces carbon footprint

Key findings

For industry

- Do not stand still, as market is constantly changing
- Listen and speak to customers
- Keep your brand relevant and in the spotlight through innovation
- For exporters, good relationships with local partners is essential

For government

- The government should step-up support to cost-efficient, environmentally friendly solutions for the energy sector
- Support with tariffs and certificates required on overseas projects

Government support?

Hughes Safety Showers has received R&D tax credits.

Hughes Safety Showers at a glance:

Key products and services:

manufacture of emergency safety showers and decontamination equipment

Main industries served:

- Industrial – 35%
- Processing – 20%
- Oil and gas – 35%
- Power – 10%

Headquarters: Stockport, UK

Year established: 1968

Number of employees: 85

Revenue: £14m

Revenue from exports: 65%

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KBR

Engineering the future across a diverse range of smaller energy projects

How is KBR thriving?

Benefitting from an innovative team culture, KBR's Project Solutions division, established in late 2016, is thriving with a turnover that has increased fivefold and providing agile solutions for a diverse range of energy clients across the world.

The challenge

A global engineering consultancy with a vast track record, KBR has always thrived on big energy projects. In 2017, however, the industry downturn led to reduced capital spending by the big players in the energy sector. Major greenfield projects were scarce so KBR took the opportunity to diversify in to segments outside of its normal sphere of operations.

The solution

KBR's Project Solutions division was created to allow diversification into other business areas to pursue new clients and projects.

The new division would deliberately focus on smaller projects below an internal ceiling based on contract value and in markets that fell outside the company's usual interest. This included venturing into industry segments such as renewables and marine as well as into geographical areas such as the



UK, continental Europe and the Middle East. KBR's brand, structure, global presence and experience would help its new division start off with a small amount of work to assess business potential with new clients and sectors.

New strategies often face obstacles and KBR Project Solutions was no exception. The division only had a small budget to start with and, during the early days, it adopted an agile approach to develop new ways to prepare marketing material, bids, cost estimates and manage small projects. KBR Project Solutions learned the importance of brand and promoting the idea that it could work in new areas, developing relationships as well as being responsive and engaging with companies for small scopes of work.

From 2017 to 2018 the turnover increased by fivefold by developing into new renewables markets, developing working relationships with key clients, developing a brownfield capability and the ability to be agile to react to client. This has even included responding quickly to support a client impacted by a natural disaster situation. These small opportunities have opened up further batches of work, which have unlocked opportunities and work in further diversified areas that are firmly outside the core business of KBR.

Another important experience for KBR Project Solutions was a feasibility study for an offshore wind HVDC platform. This helped enforced KBR's diversification into other areas and continues to raise the profile of KBR Project Solutions internally. The contract has provided an important springboard to expand KBR's offshore capabilities and has the potential to generate future business opportunities.

The success of KBR Project Solutions' strategy to seek opportunities beyond KBR's usual client base is reflected in its results. KBR Project Solutions' revenues are expected to grow by another fivefold in 2019 with 70% of



Launching KBR into the alternative energy and innovation sphere has been a great learning experience, allowing KBR to adopt a culture of openness to change, diversification and agile project management.

David Cole, KBR Project Solutions Manager

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that already in booked backlog. The division has succeeded in achieving greater diversification in sectors such as renewables, digital and power grids representing 30% of its revenues. The future plan is to continue to grow the renewables and digital side of the business to eventually to become the larger core business.

About KBR Inc.

KBR is a global provider of differentiated professional services and technologies across the asset and programme lifecycle within the government solutions and energy sectors. KBR employs approximately 37,500 people worldwide (including joint ventures), with customers in more than 80 countries, and operations in 40 countries, across three synergistic global businesses:

- Government Solutions, serving government customers globally, including capabilities that cover the full lifecycle of defence, space, aviation and other government programmes and missions from research and development, through systems engineering, test and evaluation, programme management, to operations, maintenance, and field logistics
- Technology Solutions, including proprietary technology focused on the monetisation of hydrocarbons (especially natural gas and natural gas liquids) in ethylene and petrochemicals; ammonia, nitric acid and fertilizers; oil refining and gasification
- Energy Solutions, including onshore oil and gas; LNG (liquefaction and



regasification)/GTL; oil refining; petrochemicals; chemicals; fertilisers; differentiated EPC; maintenance services (Brown and Root Industrial Services); offshore oil and gas (shallow water, deepwater, subsea); floating solutions (FPU, FPSO, FLNG and FSRU); programme management and consulting services

KBR is proud to work with its customers across the globe to provide technology, value-added services, integrated EPC delivery and long-term operations and maintenance services.

Story type

#diversification, #innovation, #service/solutions

Benefits

- Revenue growth fivefold 2018 to 2019
- Successful diversification: 30% of revenues from non-O&G sectors (renewables, power grid, and digitalisation)
- Repeat orders through strong client relationship

Key findings

For industry

- Diverse group of staff, good training and cultural understanding are key resources when doing business in international markets

For government

- Better messaging is needed around engineering as a career

Government support?

Only the Apprenticeship Levy.

Scaling-up lessons

- Companies should focus on three topics: cost efficiency, relationships and quick response to bids
- Strategy is needed to keep developing, and it must be updated as necessary. Companies should react fast and be open to accepting what is not working
- Keep developing new innovative ideas to discuss and develop with clients

Culture change lessons

- Sometimes quick decisions are needed to move project forward on schedule
- Encourage teams to multi-task, learn and develop in areas that take their interest
- Younger staff generally show interest in new energy sectors

KBR Project Solutions at a glance:

Key products and services:

innovative engineered solutions for the energy sector

Main industries served:

- Oil and gas – 70%
- Renewables – 30%

Headquarters: Leatherhead, UK (KBR UK); Houston, US (KBR Inc)

Year established: 2017 (KBR Project Solutions)

Number of employees: 70 (KBR Project Solutions); 1,700 (KBR UK); 34,000 (KBR Global)

Revenue: US\$4.6m (KBR Project Solutions); US\$1bn (KBR UK); US\$5bn (KBR Global)

Revenue from exports: 70%

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Lloyds Register

Expert insight and assurance for transformative decisions

How is Lloyd's Register thriving?

In a world of increasing complexity, overloaded with data and opinion, Lloyd's Register (LR) stands out from the competition as one of the world's leading providers of professional services for engineering and technology. By effortlessly marrying engineering expertise, technology and data, LR is an experienced hand and trusted partner that enables clients to attain independent and technically derived insights and solutions. LR is uniquely underpinned by its 250-year legacy, commitment to engineering a safer world through the LR Foundation, a dedication to assurance and a deep-rooted desire to drive better performance for its clients.

As pioneers, LR has some notable firsts, publishing the first classification notes for offshore platforms, successfully delivering the first HPHT well drilled in the North Sea following the Macondo incident, designing and project managing the construction of



Hagshaw Hill, Scotland's first wind farm, and certifying the first additive manufactured component for the oil

& gas sector. But what's next for the engineering powerhouse?



Our purpose remains resolute - working together for a safer world. In all areas of the energy mix, throughout the supply chain and across the globe, LR will continue to support its clients through the complexity of tomorrow's market challenges, providing the technical confidence and credibility they will need for improved business performance as new energy sources are developed.

David Clark, Energy Director

The challenge

A company operating for more than two centuries, Lloyd's Register boasts a wide breadth of capabilities. However, the company's energy business needed to transform itself in line with an oil and gas industry that, upon finally emerging from one of its worst downturns, had significantly changed. In a business reality increasingly influenced by disruptive transformation, Lloyd's Register had to reposition its energy capabilities, with an enhanced focus on providing value-add solutions for their clients across increasingly complex operations and infrastructure in both the oil & gas and renewables sectors.

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The solution

In line with an objective to re-scale the business and create a long-term, sustainable organisation, Lloyd's Register appointed a new leader who had a clear focus on growth by taking advantage of the company's many differentiators. Although a complex task which required new skill sets, the company's energy division reshaped and refocused quickly, a process which included departing from markets that had become commoditised

Lloyd's Register realised it could do much more. Going beyond the traditional consulting and assurance service offering, the company made the decision to leverage its deep understanding of complex operations – in areas such as project management, risk management, operational efficiency and maintenance optimisation – to play a more material role in meeting energy clients' needs by helping maximise productivity and recovery, reducing operating costs, mitigating risk and demonstrating compliance with government regulations, industry codes and standards. In the oil and gas business, this strategy involved targeting independent operators and in 2018, Lloyd's Register secured a drilling project management contract with a UK-based E&P player. The company wanted to drill an exploration well off the Shetland Islands, an area where challenging weather conditions imposed

a limited operational window. The project was planned and executed in a short timeframe to ensure that the well could be drilled and tested in the summer and autumn months. Working within tight timings, Lloyd's Register created a bespoke rig intake plan, ensuring crew and equipment were ready. Drilling problems were encountered, but the company took swift actions to remediate them. Lloyd's Register's expertise limited non-productive time to 11.8% of total operational time and the project was successfully delivered 20% under the agreed authority for expenditures budget.

Delivering solutions that optimise processes, improve performance and reduce costs is what drives Lloyd's Register. Aker BP were keen to see how it could make the most of its real-time equipment data to safely reduce maintenance workloads and spending on its Skarv floating production, storage and offloading (FPSO) unit. Focusing on two core maintenance areas: the FPSO's centrifugal pumps and fire and gas detectors, covering a total maintenance history of 60 months, Lloyd's Register applied its engineering expertise and its AllAssets Maintenance Optimisation™ software, reducing the annual planned maintenance hours/cost for fire and gas detectors by more than 50% and optimising centrifugal pump maintenance, with an estimated annual saving of 400KNOK.



About Lloyd's Register

Starting in 1760 in London as a marine classification society, Lloyd's Register today is one of the world's leading providers of professional services for engineering and technology, improving safety and increasing the performance of critical infrastructures for clients in over 75 countries worldwide. The company is active in many industry sectors, including aerospace, defence, energy, financial, food and beverage, healthcare, manufacturing and marine, among others. Its portfolio includes certification, inspection, assurance, consulting and training services, in addition to digital and software solutions. In the Energy space, Lloyd's Register provides solutions across the entire value chain and lifecycle, from field development, asset management, and decommissioning of fields and assets, to offshore wind farm development and grid connection, among others.

Profits generated by the company fund the Lloyd's Register Foundation, a charity established in 2012 which supports engineering-related research, training and education.

Story type

#service/solutions

Key findings

For industry

- Take advantage of your core differentiators

For government

- Ensure a fiscal and regulatory regime that supports safe investment

Lloyd's Register at a glance:

Key products and services: professional engineering and technology services

Main industries served:

- Oil and gas (upstream) – 70%
- Downstream and other energy sectors – 30%

Headquarters: London, UK

Year established: 1760

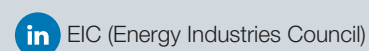
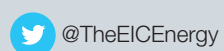
Number of employees: 6,000

Revenue: £800m

Revenue from exports: 60%

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MES

Smart optimisation and differentiation to overcome the downturn

How is MES thriving?

Following the downturn in the oil and gas market, the company successfully diversified its business towards the OPEX segment, achieving a balance with CAPEX. Monaco Engineering Solutions (MES) shifted its focus from offering standard risk-management and reliability consulting services to more client-focused, value-added solutions delivering multi-million dollar savings.

The challenge

As a consultancy mainly supporting FEED and EPC projects, MES was not immediately affected by the oil and gas downturn in 2014 since projects that had been sanctioned before the downturn were forced to continue until their completion. The company would only feel the impact of the crisis in the following year, when the consequences of a reduction in CAPEX projects were working their way down the supply chain. Consultancy prices plummeted due to increased competition.

MES realised it was not reacting quickly enough to the market conditions. Revenues were falling fast as the company's business pipeline narrowed significantly. Meanwhile, staff morale was low. There were no redundancies, however, key senior management were asked to take voluntary salary



cuts. The company had to find a quick solution.

The solution

MES' first step was to revisit their strategy and align it with the current market conditions. In 2015, the company arranged a meeting involving all Operations Managers to discuss the future outlook of the organisation. Three options were put on the table: reduce size and cut costs; diversify into new markets and sectors; or seek to offer differentiated solutions specifically targeting the OPEX market. The first alternative would enable short-term gains but would probably cause an impact in the short to medium-term.

Although a good idea in principle, diversification into other markets was considered to require a lot of upfront investment and take a long time to produce returns. Facing a dwindling CAPEX market, the company decided to optimise in order to tap existing opportunities in the OPEX market.

As part of its growth strategy MES decided to become a one-stop-shop, integrating its services under one roof, offering a full set of specialised services. The idea was to package its expertise into a single integrated product, offering increased reliability, safety and cost reductions.

MES also wanted to use innovation and technology to show clients the real value of what the company could offer. Instead of producing the conventional risk assessment reports, MES would help clients act on them, showing them the real added value of the work performed. This approach led the company to develop various in-house software tools, make them available to customers and educate them on their use, with the ultimate goal of allowing them the continuously benefit of what



As part of its growth strategy, MES decided to focus on offering a customer focussed orientated business model with the aim to minimise the risks to client operations and assets whilst maximising performance and operability.

Giovanni Monaco, Managing Director

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was offered. It was about changing a transactional relationship to a long-term one.

Since adopting this strategy, MES has met success in various markets. Incorporating its fire and gas know-how and software solutions with the client's own operating experience, MES were awarded several contracts with a major operator in Oman for fire and gas optimisation studies, saving the client over US\$40m after eliminating a large proportion of spurious trips. Another opportunity came with a major client in Kazakhstan who intended to phase out operations at one of their existing facilities. MES were engaged to perform a risk assessment using its in-house tool MERIT and showed that the operations could continue with implementing a number of risk reduction measures and thereby allowing the client to continue generating 500+ million USD of revenue.

In another case study, the MES Reliability tool PLASMA, was used to

drive performance improvement at a refinery in Pakistan by over 0.5%, allowing increased annual revenues/savings of US\$12m by reducing downtime at the refinery and increasing maintenance optimisation.

MES has reverted its losses and is back on a path to achieving strong growth and profitability. Revenues grew from US\$6m in 2015 to over US\$11m in 2018. While CAPEX dominated the company's revenues in 2014, it is now evenly balanced with OPEX. Safety and Reliability optimisation, and fire and gas mapping work for clients took off: representing approximately US\$700,000 of the company's revenues in 2014, both services now contribute over US\$3m towards the annual revenues.

About MES

MES is an independent consultancy company specialising in technical safety, HSE risk management, asset integrity and operational assurance.



Focusing primarily on the oil and gas market, MES serves clients through a project's entire lifecycle - from the conceptual design to the operational phase and eventual decommissioning. The company offers a wide range of services, including workshop facilitation, safety engineering, design of fire protection and detection systems, qualitative and quantitative risk assessments, reliability availability and maintainability as well as specialist inspection and audit services, among others.

Founded in 2006, the company has its headquarters in the UK, with additional offices in Italy, Kazakhstan, Kuwait, Malaysia, Nigeria, Oman, Qatar, the UAE and the US.

Story type

#digital, #diversification, #innovation, #optimisation, #service/solutions

Benefits

- More than US\$500m in savings for one client

Key findings

For industry

- Prepare a strong business plan and put it in place. Once implemented continuously review performance

For government

- Greater support should be made available to smaller businesses, especially when it comes to financing
- DIT should do more to support companies seeking international markets
- UK Export Finance should improve transparency

Government support?

The company has not received any type of government support.

MES at a glance:

Key products and services:

technical safety, risk assessment, loss prevention, process optimisation and asset integrity engineering services.

Main industries served:

- Oil and gas – 95%
- Renewables – 5%

Headquarters: Dorking, UK

Year established: 2006

Number of employees: 100 (23 in the UK)

Revenue: US\$11m (US\$4m in the UK)

Revenue from exports: 85%

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EIC (Energy Industries Council)

Pipeline Induction Heat (PIH)

Prize-fighter mentality to overcome the crisis

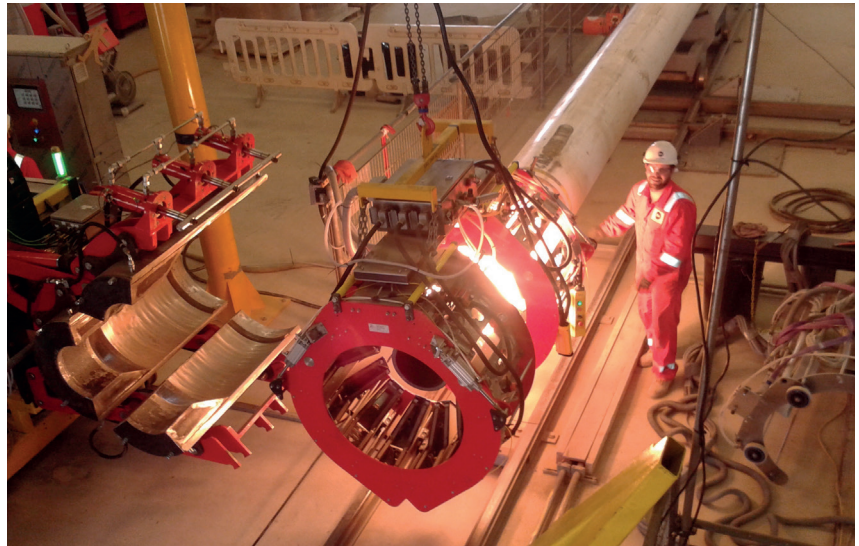
How is PIH thriving?

After a reboot of the company's business model and size in 2015, PIH's implemented a successful plan to grow exports and diversify its client base and service offering. The company has retained its number one market position, albeit in a much reduced market size, while protecting its core workforce.

The challenge

The collapse in oil price dealt a significant blow to PIH. A fast-growing company, which doubled its size just before the crisis, PIH saw its revenues fall by over 40% in a two-year period. Although the company managed to overcome the initial impact thanks to a good business backlog, the need to survive led PIH to cut 50% of its workforce, a tough but necessary decision to make.

Moreover, PIH's clients were changing the way business was done. Due to local content requirements and with excess capacity themselves, key subsea companies were undertaking field joint coating work themselves instead of hiring subcontractors, such as PIH, to undertake the task.



These challenges significantly impacted PIH. The company could not afford to wait until the market improved and there was no room for complacency.

The solution

Time was of the essence, and the company quickly developed a plan. PIH's MD Paul McShane had previous experience in companies undergoing financial trouble and he knew how important it was to act fast. The first action was to reorganise and resize: called 'Project Rocket', this strategy entailed a complete business

reorganisation and the identification of core talent within the company.

Four key strategies ensued, beginning with 'Project Funnelweb'. Supported by internal and external market intelligence sources (such as EICDataStream), networking and stakeholder engagement, PIH developed a world-class business development (BD) funnel to bring in leads in key markets. The company focused on winning all opportunities available, even if this meant spending more, rather than less, money on marketing and BD activities.

The second initiative was 'PIH Lite'. Under price pressure from clients, PIH developed a more streamlined offering, involving a shallower scope of work as well as lower prices and costs. While PIH Lite represented 5% of the company's revenue in 2015, PIH eventually decided to morph the best elements of Lite into its core offering, which is now much leaner than in pre-crisis years.

Then came 'Regain #1', PIH's third strategy. PIH wanted to reclaim its place as the number one spool base subcontractor for thick insulation work



PIH has consistently embraced the need to change as critical to its survival. Enjoying a number one market position for many years, it has fought complacency and focused on the voice of the customer and investments to future proof the organisation. A people focused client centric can-do attitude has been the key to PIH's ability to thrive.

Paul McShane, Managing Director

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in deepwater applications, a market that collapsed following the downturn. Pre-2015 PIH was present in every spool base across the world. Following the crisis it was committed to regaining that spot. Although this market shrunk by 80% since the downturn hit, PIH continued to invest in breakthrough materials, end-to-end partnerships and automation which will pay dividends in the coming years.

Lastly, PIH embarked on a regional consolidation and diversification strategy. After 2014, the company streamlined its operations back to its UK Centre of Excellence and its Middle East operations, reducing its Malaysia operations and manpower levels in Houston. After its implementation, this strategy allowed PIH's first ever contracts in Bulgaria, China, Kazakhstan and Kuwait (having met Kuwaiti customers at an EIC Connect event), all supported by the company's

UK operations. New markets provided a boost to PIH's revenues, generating 25% of current revenues. As to diversification, the company managed to increase the share of non-core field services to 25% of total revenues, while relying less on major contractors (which previously accounted for 100% of the company's customer base).

PIH not only retained its leading market share following the adoption of its multi-strategy plan, but the company also managed to diversify and focus on new countries, services and sectors. The company has stabilised its revenues while retaining its core workforce. Key metrics performed well in 2018: RFQs are on the rise, as well as contract awards. In total, PIH won 34 projects worth over US\$25m in 2018. PIH knows well that market dynamics are inescapable, but the company's prize-fighter mentality, battling for every dollar, has been key

in overcoming the crisis and succeeding at home and abroad.



PIPELINE INDUCTION HEAT

About PIH

One of the world's leading field joint coating subcontractors, PIH provides application equipment and material solutions that protect onshore and offshore pipelines from corrosion, heat loss and mechanical damage at field joints. Since 1980, the company has diversified from the original core business of providing induction heating services for welding to offering a full range of anti-corrosion, insulation and profile infill solutions for pipeline field joints.

Headquartered in Burnley, PIH has offices in Australia, Oman and the UAE. Through CRC-Evans, PIH is also present in Brazil and the US.

Story type

#diversification, #export, #optimisation

Benefits

- Successful business reorganisation, retaining number one position in field joint coating market
- Customer base doubled since 2014
- New export markets generating 25% of current revenues
- Successful diversification to non-core field services (25% of current revenues)

Key findings

For industry

- The market is fragile, so companies must be agile
- Be ruthless and go early if you want to control your own destiny and be an inside-out business, rather than a market led business

For government

- Additional funding support is necessary
- Tax breaks and reforms are needed
- Reduce corporation tax on export revenues

Government support?

The company has joined DIT-led trade delegations. In addition, PIH has benefited from R&D tax credits as well as Apprenticeship Levy support.

Export lessons

- Look at the demographics
- Calculate the addressable market
- Understand customs processes
- Develop knowledge on local content
- Understand tax issues

Scaling-up lessons

- Keep employee engagement as a core skill
- Learn how to manage rapid growth
- Go digital
- Set targets
- Build a talented team

PIH at a glance:

Key products and services: anti-corrosion services for pipelines

Main industries served:

- Oil and gas – 100% (offshore – 60%, onshore – 40%)

Headquarters: Burnley, UK

Year established: 1980

Number of employees: 193

Revenue: US\$50m

Revenue from exports: 90%

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Powertherm

Innovative Space-Ring System combatting corrosion under insulation

How is Powertherm thriving?

As a thermal and acoustic insulation service expert, the family-run company made its first leap into innovative product design with its Space-Ring System (SRS), a unique patented solution to combat corrosion under insulation (CUI). The SRS has improved safety, reduced the need for relentless maintenance and as a result significantly reduce costs in critical installations.

The challenge

Back in 2015, Powertherm's Managing Director and his father – the company's founder – were at Düsseldorf Airport having a discussion about how to address CUI. A condition caused by the presence of moisture on the external surface of insulated equipment, CUI is responsible for estimated costs of £4tn globally per year. Its cause is generally attributed to a chloride-rich moisture build-up inside the insulation. As it cannot be seen, CUI has become a critical safety hazard, with numerous cases causing catastrophic outcomes.

Although it is a serious industry issue, Powertherm did not see an appropriate solution in the market. There were options to attempt to prevent moisture entering the cladding,



by using stronger insulation material, however, if moisture was still entering no solution had the capabilities to allow it to escape and none had drying proficiencies. A company with a strong safety focus, Powertherm wanted to provide a solution to this industry challenge.

The solution

Insulation services is in Powertherm's DNA, and the company was determined to tackle CUI. Following internal discussions, it identified a key issue in many installations: the sheet metal cladding of many insulation systems was not sufficiently strong,

causing the system to buckle and become damaged. This in turn allows moisture into the system, encouraging CUI.

Powertherm saw the opportunity to develop a practical, cost-effective solution for the problem. The company introduced a support system that provided more strength by using support rings to transfer the weight load from the soft, often friable insulation onto the pipe itself, which is considerably stronger. This solution has the benefit of reducing impact to the cladding, rendering it much stronger and preventing seams from buckling. In addition, an air space was introduced, through which low-level drainage points and free-flowing air help keep the pipe and surrounding insulation dry, in the unlikely occurrence of moisture entering the system. The modular design of the SRS also allows for routine inspection of areas which are prone to CUI and allowing installation on pipes of varying sizes.

Dubbed the Space-Ring System (SRS), this solution was the first CUI product



The Space-Ring System is the most comprehensive solution in the market to combat a critical safety issue on a global scale: corrosion under insulation, and in turn significantly reduce costs.

Paul Ashton, Managing Director

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developed by Powertherm. The SRS requires little additional training and time for installation, and its associated costs are negligible compared to the lengthy and expensive processes of inspecting, repairing and replacing corroded pipes. Getting SRS off the drawing board was not easy, however: the company funded the development of its new solution by itself, and the patenting process took three years.

The SRS started being marketed to the industry in 2017, and has already found market opportunities. Powertherm provided its solution to a major client's terminal in Pembrokeshire, Wales, via a sub-contract. Of the total contract value, 3.6% was related to the SRS scope. Since its launch, SRS has been used in 20 onshore and offshore sites.

It is only the beginning for Powertherm's innovative solution, but the company is intent on providing not only the solution to CUI but the platform to inform companies of the threat of CUI. Powertherm will

be holding several CUI sessions, bringing a CUI expert to demonstrate the importance of combatting CUI.

Powertherm, is keen on designing engineered solutions, selling directly to operators and offering them a 10-year insurance backed contract with a zero CUI warranty and regular inspections for high-risk pipework and assets. Discussions regarding specification have also taken place with key individuals at the Health and Safety Executive, who sees CUI as a major safety hazard and that the industry would see the benefit from offering such a package. The SRS has been tweaked and improved over time, and the company is now working with operators with the aim of getting them to specify SRS for their projects. The SRS has the potential to eradicate safety risks, associated production losses and maintenance costs, saving clients millions in the process.

About Powertherm

A family-owned business founded in



1989, Sheffield-based Powertherm is a leading provider of a range of innovative thermal and acoustic insulation solutions to the power generation and petrochemical industries.

A member of the Thermal Insulation Contractors Association and safe contractor approved, the company's insulations are used in cryogenic to high-temperature environments, pressure vessels, boilers and associated piping and storage tanks, among other applications.

A multi-discipline industrial service provider with 30 years of experience, the company also offers electric trace heating, painting and specialist coatings, scaffolding and rope access, refractory lining, as well as bespoke flexible insulation covers and expansion joints.

Story type

#innovation

Benefits

- Avoidance of CUI cases, allowing multi-million cost savings
- Increased safety of personnel

Key findings

For industry

- Find good consultants to advise your company
- Talk to companies which have had a similar experience
- Provide advice and guidance to clients on best practices, to achieve their goals

For government

- Greater support is needed for innovation and technological development, especially with regards to funding

Government support?

The company has received grants and R&D tax credits. In addition, Powertherm has also benefitted from the Apprenticeship Levy.

Powertherm at a glance:

Key products and services: design and manufacture of insulation products

Main industries served:

- Renewables – 64%
- Power – 16%
- Oil and gas – 10%
- Others – 10%

Headquarters: Sheffield, UK

Year established: 1989

Number of employees: 170

Revenue: £13m

Revenue from exports: 5%

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Proserv

Boosting growth through service localisation

How is Proserv thriving?

In a bid to boost growth in the Middle East, Proserv became the service partner for legacy and third-party equipment in the region after a smart localisation process put into motion before the industry downturn began. This successful strategy has led the company to invest US\$1m in the expansion of its service centre in Abu Dhabi and further consolidated the company as a leader in the wellhead controls segment.

The challenge

Unlike many other companies, Proserv's survive and thrive story is not related to the downturn in the oil and gas industry. Boasting the largest installed base of control systems in this market, the company's core business was doing well. However, Proserv's businesses outside its usual markets in the UK, Norway and the US were not as successful: they were not growing and, rather than being integral parts of the company, were more like outposts.

Coincidentally, these remote units were located in markets where local content was beginning to become more important. Measures such as the In-Country Value (ICV) or the In-Kingdom Total Value Add Program (IKTVA)



were being introduced by national oil companies in the Middle East, and competitors were already gearing up to this new challenge. Proserv recognised that local content was a reality and the company had to adapt fast.

The solution

In order to grow and adapt to new market demands, Proserv implemented a service localisation strategy by creating manufacturing and service centres in the Middle East. The company had a large installed base of legacy equipment in the region

- this was an opportunity to set up capabilities close to existing customers as well as companies with non-Proserv equipment. The company wanted to engage with local companies, listen and work with them to find solutions for the refurbishment or upgrade of existing equipment with the aim of extending its life, improve operability, and, ultimately, reduce costs. In short, Proserv wanted to be the go-to supplier for local players in need of equipment and services.

Proserv's strategy identified a leading regional national oil company (NOC), as a key client. The NOC was facing issues which required equipment to be transported from Europe or the US. The client also required skilled technicians for surveying and reporting services, which, in principle, would have to be mobilised from other countries. However, sourcing goods and services from Europe or North America would be costly and time-consuming.

Proserv had the technology and the skills transfer capability to meet the



We adapted our strategy by recognising the needs of our clients and understanding the prevailing market conditions. Currently, operators want to reduce costs, save time and optimise the performance of their existing equipment – that's exactly what we are offering them.

Andy Anderson, President, Production Controls

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NOC's requirements efficiently and at a lower cost. Beginning as an ad-hoc arrangement the relationship soon developed and Proserv signed a service agreement with the client to carry out surveys and reports as well as service their wellhead control systems. Proserv's local capabilities reduced mobilisation costs to zero, while avoiding time-consuming procedures that would be needed had staff been brought in from the UK. Today, Proserv has a team of 15 technicians dedicated to the NOC, with an additional 10 working on an ad-hoc basis.

The solution provided to the NOC was an example of Proserv's successful optimisation strategy and technological expertise. Instead of resorting to costly equipment acquisitions, which often lead to downtime or reduced plant capacity, operators are able to upgrade or repair their equipment using Proserv's technical capabilities. Even when major upgrades are necessary, Proserv's R&D hubs in the UK and Norway, specialised in SCADA

and wireless communications, can add new technology into older equipment. This avoids the need for replacement and reduces the requirement for repeated maintenance checks at the field.

Proserv's strategy to get closer to its customers in the Middle East while going after clients with third-party equipment has been successful, leading to the expansion of the Abu Dhabi service centre in 2019. Not only did the company anticipate the local content trend and successfully react before the downturn, Proserv also increased its revenues from previously neglected markets and became a trusted partner for clients with non-Proserv equipment seeking technological expertise and lower costs.

About Proserv

Proserv provides innovative life of field controls technologies and services that improve reliability, maximise production and enhance asset integrity.



By combining technical ingenuity with design, engineering, manufacturing and field service expertise, the company creates state-of-the-art solutions that can be applied to standardised systems.

Proserv operates across four key business units: drilling controls, production controls, subsea controls and field technology services. The company offers additional capabilities in renewables, acoustic communication and positioning (through its Nautronix brand), sampling and injection solutions, as well as testing and calibration solutions.

Although the company was founded in 1974, Proserv has an extensive brand heritage spanning over 50 years. Headquartered in Aberdeen, the company has offices in 18 locations around the world with operations in more than 60 countries.

Story type

#digital, #export, #optimisation, #service/solutions

Benefits

- Enhanced productivity thanks to faster response time
- Upgrades/repairs allowing significant cost savings
- Zero mobilisation costs thanks to local presence

Key findings

For industry

- Understand and listen to your customer
- Take your time to develop and implement a plan based on your customers' needs

For government

- The government's energy policy should be properly marketed, with a better menu of solutions to the business segment
- Many suppliers are unaware of the support available to them

Government support?

The company has not received any type of government support.

Export lessons

- Local presence is critical to understand clients' requirements and culture
- Have a full understanding of the supply chain involved when exporting

Proserv at a glance:

Key products and services: controls technologies for the oil and gas market

Main industries served:

- Oil and gas – 90%
- Renewables – 10%

Headquarters: Aberdeen, UK

Year established: 1974

Number of employees: 1,300 (650 in the UK)

Revenue: N/D

Revenue from exports: 75%

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Raytec

Passionate about lighting

Intelligent Emergency. Never Without Light.



How is Raytec thriving?

After listening to clients, Raytec innovated and quickly brought to market its game-changing Intelligent Emergency lighting technology. This solution automates self-testing and prolongs battery life, eliminating manual testing and increasing reliability and safety.

The challenge

Hazardous area environments

present many challenges: one of them is sites relying on unstable power sources and consequently the high risk of power outages. Emergency lighting plays an essential role in providing back-up illumination in case of blackouts. For emergency lighting to operate effectively, however, batteries must be regularly checked and tested to ensure there is no degradation in their capacity. Further conditioning is also required to maintain their optimum performance.

The maintenance of emergency lighting presents challenges, however. Most emergency variants of hazardous area lighting products rely on manual testing to regularly check the equipment's performance in emergency mode, as well as the battery's health. This can be problematic, as reliance on human intervention for routine monitoring, checking and testing carries an associated risk of human error or neglect, compromising site safety.

The solution

As industry experts with a strong reputation for creating innovative and exciting new products, Raytec set out to make emergency lighting more reliable and intelligent. Listening to feedback from clients and distributors, in 2018 the company developed Intelligent Emergency, a solution that goes beyond conventional emergency lighting. Intelligent Emergency luminaires feature a built-in microprocessor which automatically cycles the emergency batteries, checks the health status of the luminaire and



We developed Intelligent Emergency after listening to customer feedback and the end result will provide them with a real benefit once installed. Intelligent Emergency hits two of our key product design focuses: class leading emergency products and easier maintenance.

Barry Thompson,
Director of Hazardous Area Division

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communicates it via an LED indicator. The entire process is automated, unlike conventional emergency illumination products in which checks and battery cycling are a manual process.

Raytec's innovation boosts safety. Automating the maintenance process by introducing intelligent emergency luminaires effectively eliminates the risk of human error or neglect, increasing reliability of the emergency network, improving overall site safety and allowing time and cost savings with regard to maintenance. Moreover, Intelligent Emergency lighting maintains 100% of light output during testing or battery cycling, whereas other lighting products operate at a reduced output, leading to loss of illumination. Intelligent Emergency products also carry out testing randomly, ensuring there is never a significant proportion of luminaires undergoing a testing cycle at one time, and thus preventing any unexpected shortage should a problem occur.

Innovation is key to Raytec's success.

After listening to clients, the company used its speed and agility in product development to quickly bring to market a solution that introduces self-testing capabilities to emergency lighting, boosting reliability and safety. While competitors offer similar solution through costly add-ons, Raytec was the first to market this innovation as a standard product, creating value for costumers. This solution is helping the company succeed by winning new clients and staying ahead of the competition.

About Raytec

Raytec is a leading player in LED lighting for hazardous areas. As LED specialists, every Raytec luminaire uses a bespoke housing to thermally manage the LEDs, ensuring long life and reliability. As well as their pioneering emergency solutions, Raytec's portfolio includes several innovative products, such as the Linear and Bulkhead ranges, as well as the latest High Power Flood and Bay luminaires. All products are engineered



for easy maintenance to reduce downtime and lifetime costs.

Founded in 2005, Raytec has its headquarters in Ashington, UK, with an office in Ottawa, Canada. All the company's products are manufactured in-house, in the UK. Raytec's products are distributed over 70 countries across the world.

Story type

#innovation, #service/solutions, #technology

Benefits

- Improved site reliability and safety
- Intelligent Emergency as standard offering is a major market differentiator

Key findings

For industry

- Always listen to customers
- Proactivity is essential – always innovate
- Find distributors with local market knowledge that add value to the selling process and not just take commissions

For government

- The government should help suppliers choose local partners in international markets

Government support?

Raytec has received R&D tax credits. The company has also benefited from the Apprenticeship Levy.

Scaling-up lessons

- Grant support at the early stages of a scale-up process is essential.

Raytec at a glance:

Key products and services: design and manufacture of LED lighting for hazardous areas

Main industries served:

- Hazardous industrial – 65%
- Oil and gas – 35%

Headquarters: Ashington, UK

Year established: 2005

Number of employees: 80

Revenue: £12m

Revenue from exports: 60%

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Samuel Knight International

Successful scale-up combined with trusted partnerships with clients

How is Samuel Knight International thriving?

Founded in 2014, the company went through a rapid scale-up process, building an international client base in the energy and rail sectors, while offering key managed services across manpower, immigration, payroll and compliance, among others. Samuel Knight International (SKI) has focused on building deep and wide partnerships with energy and rail customers throughout a project's entire lifecycle, from directors to technicians.

The challenge

The recruitment business is a challenging one. As industry sectors become increasingly demanding and governed by tight budgets with peaks and troughs, identifying skilled talent is no longer a recruiter's only concern. Companies can often be cautious about permanent contracts, especially in times of downturn and market uncertainties. This creates an opportunity for recruitment companies, like Samuel Knight to go beyond their conventional offering and stand out from the competition.

The solution

Benefiting from years of experience in the energy sector, Steven Rawlinsong decided to establish SKI in 2014. Supplying permanent and temporary recruitment solutions to the energy



(mainly in power generation and transmission and distribution projects) and rail sectors, the company determined it would operate vertically rather than horizontally. Instead of having a varied client portfolio with a focus on the recruitment of top-level employees, the company would focus on a narrow range of clients and support their manpower needs from directors to technicians. SKI's strategy was to build partnerships with key clients, forging trusted, long-term relationships and improving brand recognition.

SKI knew that market conditions required solutions beyond simple

recruitment services. The company decided to improve its service portfolio by offering a full project solution which included not just manpower, but also payroll, immigration, registration and a wealth of other services. In addition, SKI began offering clients a short-term credit line for their project-specific contractor requirements to aid their cash flow. SKI would hire and provide contractors, which are paid for by the client in arrears.

This strategy was not without its challenges though. SKI was a new entrant to the market and, as such, faced competition from well-established corporations in the recruitment segment. The company's fast track to growth also demanded lots of capital, a key concern for any company in the process of scaling-up. In addition, skill shortages and operations in hostile environments in international markets contributed to the challenge.

SKI's strategy led to its biggest business opportunity in the energy



SKI's vertical market strategy means our clients benefit from a team who works specifically in their market – a reason why, since our inception, we have enjoyed phenomenal global success.

Dan Kerr, Associate Director for Energy

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sector. In 2016, the company secured a contract with NEM Energy, a heat recovery steam generator (HRSG) specialist rebranded as Siemens Heat Transfer Technology in 2018. The OEM contractor had been awarded an order to provide HRSGs for three 4.8GW power plants in Egypt and was seeking specialists for the project. SKI engaged with NEM Energy in the early stages of the project with a view to fully understand its requirements and soon signed a non-disclosure agreement with the company. SKI, which had identified all specialists eight months in advance of the start-up date, eventually supplied 30 contractors to Siemens on a monthly basis for 28 months. At its peak, this contract earned SKI approximately £150,000 per month, its biggest contract in the energy sector so far.

SKI's fast scale-up is proof that

the company's strategy has been successful. After growing by 400% during the first two years since the implementation of the strategy, the company's revenues are rising steadily. SKI's net fee income currently sits at £12,000 per head, which is almost the double of £7-8k industry standard. The company has secured a significant new investment from an equity partner to fund further growth and is about to open a new chapter in its successful scale-up journey.

About Samuel Knight International

SKI is a global recruitment and project manpower specialist, providing skills and project solutions to the energy and rail sectors on a permanent, contract and project basis. In the energy sector, SKI covers the

SAMUEL KNIGHT INTERNATIONAL ENERGY & RAIL SPECIALISTS

renewables, power generation, transmission and distribution, nuclear and oil and gas segments. The company's contractor services offering includes mobilisation of contractors, payroll, immigration, registration, taxation as well as contractor care and localisation. In addition, SKI also provides bespoke skills testing, competency-based interviewing as well as industry and market trend insights.

SKI has offices in Newcastle, London and Bristol, and in 2019 the company will open a subsidiary in Houston, its first overseas office.

Story type

#service/solutions

Benefits

- Successful business scale-up
- £12-15m in revenues from a single contract
- Net fee income at £12,000 per head, almost double the industry standard
- Strong network of clients and candidates

Key findings

For industry

- Have a clear and defined strategy, but maintain flexibility
- Maintain diverse revenue streams
- Foster a team-work environment
- Keep an open dialogue with employees
- Engage early with project developers and identify key decision-makers

For government:

- It is difficult for a business to know if there is government support available when scaling-up

Government support?

The company has not received any type of government support.

Scaling-up lessons

- Make sure the scale-up process is based on concrete foundations, with all functions established

Samuel Knight International at a glance:

Key products and services: provider of specialist technical and engineering manpower

Main industries served:

- Power – 49%
- Rail – 30%
- Renewables – 14%
- Oil and gas – 7%

Headquarters: Newcastle, UK

Year established: 2014

Number of employees: 52

Revenue: £16m

Revenue from exports: 80%

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Transcar

Proudly small enough to care and big enough to deliver

How is Transcar thriving?

For over 42 years, Transcar has honed its business model and culture to embrace volatile global energy markets, providing fast and resilient project logistics management. This approach has allowed clients to benefit from on-time, on-budget, high-quality and low-risk projects.

The challenge

Volatility is a major concern for any industry, especially energy. Projects are very sensitive to issues such as the downturn in oil prices, wars and trade conflicts, which often lead suppliers to be reactive to events instead of adopting a more energetic proactive approach.

In 2012, following the conclusion of high-value, multi-million-dollar logistics project in Qatar, a contract vacuum soon followed and Transcar saw its associated revenues decrease. This resulted in a classic and occasionally used switch away from standard revenue streams, back onto its own company cash pool to maintain liquidity.

The company knew that merely reacting



to opportunities would not change this scenario. Proactivity and responding quickly to challenges were needed to ensure continued success.

The solution

Operating for over 40 years, Transcar is no novice when it comes to dealing with market changes. In fact, it assumes that there will always be market uncertainty and has developed the ability to adapt and react through all challenges and downturns.

Being a privately-owned company with no third-party investors also has its benefits: Transcar has always

adopted a prudent approach which includes keeping its core size and cost structure to a minimum, even when winning many projects. This involves scaling-up when a project is awarded and scaling-down following its conclusion. Company size certainly helps too: being smaller and more agile when compared to multinational rivals, Transcar implements its changes almost instantly – to the benefit of its customers.

Regional reputation and a like-minded approach earned Transcar an opportunity with a global procurement company contracting on a major gas-to-liquids project in Qatar.

This company had its own freight forwarder at the time, although the forwarder had limited experience in the Qatari market in respect of this type of specialised operation.

A company with vast experience in Qatar, Transcar was approached to come up with a solution. Initially, to improve the KPI related issues that were generated as a result of the incumbent's lack of experience on the client specific processes and procedures. Transcar was able to review any rejected material stored



Professional and highly agile, project logistics management specialists are becoming a high-value commodity in an ever-changing global environment that is driving the need for smaller businesses with a well-honed ability to proactively change and add value to high-profile, multi-billion-dollar contracts. These companies are now few and far between across a global stage, wherein Transcar currently shines so brightly.

Dean Rossiter, MD

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in the other forwarders warehouse, re-checking and re-counting all the components - including the goods' quality, damage and description – as well as re-doing all the associated paperwork. This resulted in all legacy issues being resolved within three months.

Transcar's prompt and ongoing competence in dealing with the work resulted in it being awarded 100% of the freight arrangements associated with the procurement contract, representing a significant revenue boost.

Confidence in Transcar's capability and performance has also assisted this client's success in additional ways:

the company has gone on to tender and win contracts with other major Qatari companies in the petroleum, gas and solar sector – with Transcar as its local partner.

About Transcar

Transcar Projects is one of Europe's leading privately-owned project logistics company. The company provides specialist services for land, air and sea operations for a range of sectors, including oil and gas, power, renewables and process industries, among others. Operating since 1977, Transcar's headquarters are located in the UK and the company has additional sites in the Arabian Gulf and Australasia.



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With a 42-year track record spanning all corners of the world, Transcar's global network of own and trusted, compliance-tested partners provides crafted solutions to ensure the collection, transport, secure handling and delivery of goods - from the smallest critical component to a project's largest specialist piece.

Story type

#innovation, #optimisation,
#service/solutions

Benefits

- Substantive, multi-million-dollar contract with a global procurement company
- Transcar's expertise allowed this partner to keep high-value contract and obtain new contracts for which Transcar is its exclusive partner

Key findings

For industry

- Companies should remain agile, informed and proactive
- Finding niche business opportunities is the way forward
- With international business, think internationally. You will not succeed if you are unwilling to learn and understand international culture values

For government:

- SMEs are as important as major players when it comes to feedback on energy policy
- Engage with industry at all levels is necessary to ensure outcomes are understood and supported
- UK funding in international and UK projects should preference UK suppliers as much as possible
- Exporting should be made as simple as possible

Government support?

The company has not received any type of government support.

Scaling-up lessons

- Scaling-up or down should be a standard part of a company's project planning process
- Controlling cost overruns and sourcing the right people are major challenges when scaling-up
- Efficiency is the keyword for any scaling-up process

Culture change lessons

- Culture change should be a standard component in all staff training and ongoing development
- Understanding cultural differences is key to global business success
- Technology plays a key role in culture change
- Staff must be made aware of the need and benefits of culture change at an early stage

Transcar at a glance:

Key products and services: project logistics management, including freight forwarding

Main industries served:

- Oil and gas – 50%
- Power and renewables – 25%
- Process and petrochemicals – 20%
- Civils – 5%

Headquarters: Sidcup, UK

Year established: 1977

Number of employees: 40 (28 in the UK)

Revenue: ~£15m annual

Revenue from exports: 90%

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EIC (Energy Industries Council)

Wood (Nuclear)

Customer focus as a tool to win business opportunities

How is Wood thriving?

The company has become a market leader in its segment with contracts that genuinely align objectives and behaviours with clients around the world. Taking care of customers over the long-term is ingrained in Wood's Nuclear team's ethos, resulting in significant business growth.

The challenge

The electricity market is a challenging one. Pressure on wholesale energy prices and other market issues have sometimes led industry players to delay or even cancel capital investment projects (e.g. Horizon's Wylfa Newydd and NuGeneration's Moorside nuclear new builds in the UK). Delays and cancellations have effectively reduced the total UK market size for Wood's reactor support and new build services and increased competition among the supply chain for remaining opportunities available.

The solution

Wood has coped with these challenges for a number of years. However, thanks to increased customer focus and closer alignment to their clients' strategic and operational challenges, the company has become more successful at winning business in tough markets.



Source: Sellafield Ltd

Customer focus is at the heart of Wood's business strategy. This involves working collaboratively with customers to focus on outcome-related incentives where feasible, and with other members of the supply chain in nuclear and beyond to unlock wider value for clients. In addition, Wood's approach also includes bringing in new capabilities from other parts of the group to help support customers.

This strategy led to double-digit growth in nuclear turnover during the course of 2018. In December, the company was awarded a 10-year, US\$66m contract to supply

programmable digital control technologies for Sellafield in the UK. The contract covers all stages of system design, manufacture and assembly of equipment, obsolescence management and maintenance support to project work and decommissioning carried out by Sellafield. The contract was secured thanks to collaboration between the automation technology and nuclear parts of the business.

Wood's deep technical knowledge and reputation earned the company a major contract in 2019. In May, the company secured a 20-year, US\$1bn contract to provide engineering design services to Sellafield as part of the company's new Programme and Project Partnership. Wood will provide the front-end design and engineering capability and services required to deliver a portfolio of major projects and site-wide project delivery improvements.

Wood's strategy is about deep understanding of its customers and continuing to build enduring relationships with them – through



Wood's success is built on world-class expertise combined with a commitment to working fully in partnership with customers and with fellow suppliers, whether these be within Wood or from other companies.

Clive White, President (Nuclear)

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thick and thin. The quality of Wood's solutions is intrinsically related to the company's grasp of customers' challenges and needs – and everything else is built on this.

The company sets out to fully understand its customers' business objectives so that it can find new and better ways to deliver their requirements, bringing an innovative approach which can have a transformational effect on their business operations.

Wood spends a lot of time listening to its customers and wider stakeholders, understanding not just their immediate needs but their long-term plans and vision. To become a true, long-term partner for its customers, Wood

invests in building strong relationships throughout the breadth and depth of their organisations.

The hallmarks of the Wood approach are taking care to achieve high standards of work and safety, demonstrating a commitment to collaboration and having the courage to do things differently.

About Wood (Nuclear)

Wood is one of the world's main providers of engineering, project and technical services. The company's nuclear segment designs, delivers, maintains and decommissions strategic and complex assets for customers across the globe. The company has built a solid track record in the nuclear

wood.

segment by operating in five continents and over 15 countries, with an experience spanning 60 years.

Technology-independent with comprehensive experience in all major reactor types, Wood's capabilities are applied in all project lifecycles, including design and operations, new build programmes (including Gen IV, small modular reactors and fusion), waste management and decommissioning and defence; all underpinned by expert knowledge in delivering safety, assurance, engineering, technology, innovation and R&D.

Story type

#collaboration, #diversification, #innovation, #optimisation, #service/solutions

Benefits

- US\$1bn contract award with Sellafield
- Double-digit revenue growth in 2018

Key findings

For industry

- Focus on understanding and delivering value to customers, aligning your teams to their goals
- Be prepared to challenge your own thinking, particularly when it comes to collaborating with potential competitors for the good of your customers
- Costs need to be reduced in order to keep nuclear energy competitive

- Use support from the DIT to understand international markets at a macro level
- Target specific opportunities based on the ability to offer something different and unique

For government:

- Industry needs a balanced and integrated approach when it comes to energy policy, financing and the supply chain
- DIT does a good job promoting the capabilities of the UK nuclear sector in overseas markets

Government support?

Wood's nuclear division has good governmental relations on strategic and practical issues.

Culture change lessons

- Employees need to understand reasons for change
- Companies must be open with staff when it comes to business performance and industry challenges

Wood (Nuclear) at a glance:

Key products and services:

engineering, project and technical services

Main industries served:

- Civil nuclear – 84%
- Defence – 16%

Headquarters: Knutsford, UK

Year established: 1982 (John Wood Group)

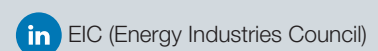
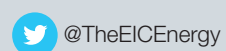
Number of employees: 2,200 (Nuclear); 60,000 (group)

Revenue: US\$300m (Nuclear); US\$11bn (group)

Revenue from exports: 11%

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Wood (Pipeline)

Data as a deliverable for subsea pipelines

How is Wood thriving?

Wood has developed a unique information management solution combining the Pipeline Open Data Standard (PODS) and geographical information system (GIS) technology. This digital twin allows standardised data integration across the entire supply chain of major subsea projects delivering seamless project handover while allowing significant time and cost savings.



The challenge

Data management is a key challenge, especially in large CAPEX projects. There is a massive output of engineering, construction and inspection data which is captured in documents when the project reaches handover stage, meaning that key data can be buried in thousands of pages of information. It is very time-consuming – if not impossible – to check certain datasets held in documents during the project stage and subsequently find them in the operational phase. This is driving a transition from managing documents to directly managing the important data they contain.

The issue with the volume of data is made even more challenging by culture and behaviours. They are the hardest things to change, especially when there are costs involved. A significant share of the supply chain is conservative

or unpractised in managing data rather than managing documents, so the challenge at hand was to break with tradition and prove to the wider industry that the way forward is a truly data-centric approach, using innovative digital solutions.

The solution

Wood's opportunity to tackle this challenge for a big energy player came with BP in 2012. The supermajor awarded Wood a contract to oversee the pipeline data management for one of the major projects in Azerbaijan. The contract scope comprised subsea pipelines and flowlines connecting wells spread over a number of clusters. Wood's scope involved the capture and validation of over five million pieces of information collected from ten engineering contractors as

well as 35 suppliers responsible for the manufacture, coating, fabrication and installation of the field's complete subsea infrastructure.

BP required the use of the PODS database for the contract. A reporting tool for pipeline projects, PODS acts as a central repository for data generated by all the supply chain involved, including design engineers, manufacturers, coating yards, fabricators and installation contractors. Looking to achieve greater efficiency, this was the first time BP asked a company to collect, validate and handover such a big volume of data.

Wood was well-prepared to meet BP's requirements. They had already delivered projects requiring this solution, and the company had previously developed its own enhanced implementation of the PODS database – called Wood-PODS. The company had also created a web portal called Nexus-GIS for accessing data as well as 70 templates for project data collection. Given the project scope, Wood created additional templates for the project, reaching a total number of 320.

However, given the resource and timeframe challenge set by the client,



This project is a great example of how Wood applies data integration expertise and leverages the latest digital technology to ensure efficient delivery and benefit through the CAPEX phase and throughout the operational life of the asset.

Matt Kirk, SVP Subsea and Export Systems

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it was not possible to manually validate and load such a large volume of data. Wood then developed a novel data management system which, based on configured rules, could validate the data prior to loading it into the Wood-PODS database and displaying it in Nexus-GIS. The latter used GIS technology to show the actual location of each piece of equipment, providing the ability to drill down and access their complete set of data, creating a digital twin of subsea infrastructure for clients.

Wood knew, however, that Wood-PODS, Nexus-GIS and the data management system would not be enough for successful delivery to BP. Supplier engagement was an early hurdle, as they were traditionally used to providing just the standard set of documents, without digital inputs. Wood introduced new processes and procedures to support these innovative systems, while educating

not only suppliers, but also the project team and contractors.

The uniqueness of Wood's PODS implementation and Nexus-GIS solution, combined with the company's holistic approach to its implementation were key to success. Benefitting from a standardised data format, handover of data – comprising almost 2 million documents and 5 million pieces of validated asset data – was successfully completed under the 90 day target. The company's innovative use of digital tools enabled their information management scope to be delivered with 50% less manhours and reduced handover complexity with standardised data management integrated across the project's extensive supply chain.

About Wood

Wood is a leading player in the delivery of project, engineering and technical services in energy, industry and the

wood.

built environment. The company operates in more than 60 countries, employing around 60,000 people, with revenues of around US\$11bn. It provides performance-driven solutions throughout the asset lifecycle, from concept to decommissioning across a broad range of industrial markets, including the upstream, midstream and downstream oil and gas; power and process; environment and infrastructure; clean energy; mining; nuclear and general industrial sectors.

Founded in 1982 as John Wood Group, the company has acquired various players over the years. One of its notable transactions took place in October 2017, when the company completed the acquisition of Amec Foster Wheeler.

Story type

#digital, #innovation, #optimisation, #technology

Benefits

- Standard format of a project's supply chain data, allowing cost and time savings

Key findings

For industry

- Assemble teams of people who share the same vision and are willing to work as needed to deliver
- End-clients need to embrace innovation through engagement. Without their commitment, it is hard to deliver results
- Develop and support digital standards to enable better data sharing

For government:

- Incentivise digitalisation and development of open data standards

Government support?

Wood has benefitted from various government support initiatives, including grants, R&D tax credits, DIT trade delegations and apprenticeship levy.

Culture change lessons

- A gradual steering process for staff, suppliers and clients is needed to ensure that innovative, ground-breaking solutions are implemented efficiently

Wood at a glance:

Key products and services:

operations solutions, capital projects, environment and infrastructure solutions, clean energy solutions, mining and minerals solutions, digital and technology, automation and control, consulting, subsea and export systems

Main industries served:

- Oil and gas: 47% (upstream: 29%, downstream and chemicals: 18%)
- Power and industrial: 32%
- Environment and infrastructure: 13%
- Minerals and processing: 4%
- Automation: 4%

Headquarters: Aberdeen, UK

Year established: 1982

Number of employees: 60,000 (13,500 in the UK)

Revenue: US\$11bn (US\$1.3bn in the UK)

Revenue from exports: 87%

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Yokogawa TechInvent

Game-changing solution to chemical injection control

How is Yokogawa TechInvent thriving?

Applying his deep knowledge of chemical injection controls to solve a major industry problem, inventor and TechInvent founder Alf Egil Stensen developed and launched FluidCom. An innovative and revolutionary chemical injection valve and metering controller for the oil and gas industry, FluidCom dramatically enhances process efficiency, increases safety and reduces OPEX costs.

The challenge

Back in 2006, the Norwegian oil and gas engineer Alf Egil Stensen pondered over the question of why chemical injection had been slow to follow technological development. Although this discipline played a key role in process optimisation by preventing or reducing the risk of issues that might negatively impact output flow, traditionally the area was treated as not too important.



The FluidCom™ is a fully automatic chemical injection controller for production chemicals. Its unique patented technology is considered a worldwide game changer, enabling significant CAPEX and OPEX savings.

Alf Egil Stensen, CEO



Alf had worked and focused on the chemical injection niche for many years, and he knew its conventional technology intimately – including its shortfalls. He looked around at other industries for solutions but could not find anything. This provided a big opportunity to innovate.

The solution

Starting from scratch in his garage, Alf invented a chemical injection valve and metering controller. Named FluidCom, the solution is a fully automated, simple and reliable device

equipped with an integrated autonomous valve control and continuous flow metering, as well as a self-cleaning functionality. A solution that weighs one quarter and occupies one third of a conventional chemical injection control solution, FluidCom allows flow control through a controlled heater that causes thermal expansion in tubes for fluid flow. This thermal expansion is used to choke and control the fluid flow through a unique flow control arrangement. In addition, there are less mechanical moving parts, with much reduced wiring.

FluidCom allows significant savings. Contrary to conventional chemical injection solutions, which require constant maintenance as they get exposed and filled with chemicals, FluidCom does not require technicians to go in person for maintenance, dramatically increasing safety. In addition, the product also saves costs associated with the eventual shutdown of chemicals injection, which can impact processes and lead

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to significant production losses. On top of that, FluidCom also eliminates the need for adjustment in injection points (which can be as high as 120 on large platforms), reducing the number of maintenance visits. All things considered, maintenance and adjustment costs can be reduced significantly.

As a new technology, FluidCom had to be proven and trialled before it succeeded in the oil and gas market: Alf had the commercial background and confidence to make this happen. He founded TechInvent in 2008 and obtained a patent in 2009. The same year, Alf approached Equinor (then Statoil), which showed a lot of interest in the innovative solution. TechInvent entered the operator's LOOP technology funding programme, while also obtaining funding from Innovation Norway.

Equinor was enthusiastic about the solution. The company made an internal case study on FluidCom's

savings, comparing how much time was saved in the adjustment of chemical injection, maintenance as well as the amount of chemicals which could be saved. The study determined that the solution had a very attractive payback time, offering significantly lower OPEX costs. After an eight-month qualification period, FluidCom successfully obtained its TRL-7 qualification, Equinor's highest technology-readiness level.

In 2015, following its certifications, Statoil Technology Invest and Aarbakke Innovation acquired 35% of TechInvent. FluidCom was launched a year later, with two international oil majors as first customers. In 2017, TechInvent was fully acquired by the Yokogawa Electric Corporation, a major Japanese electrical engineering and software player. Yokogawa TechInvent is on the verge of a massive scale-up: FluidCom is being specified for use in Equinor's future platforms and the company has already sold more than 150 units since the product's launch.

YOKOGAWA

Yokogawa TechInvent AS

About Yokogawa TechInvent

Yokogawa TechInvent is the supplier of the FluidCom chemical injection valve and metering controller. Founded in Norway in 2008 by inventor, entrepreneur and CEO Alf Egil Stensen, the Stavanger-based company has been supplying its FluidCom chemical injection technology to major oil companies since 2016. Originally branded TechInvent, in 2017 the company was acquired by Yokogawa Electric Corporation and in August 2018 the company officially changed its name to Yokogawa TechInvent.

The Yokogawa group is based in Japan and is a leading provider of industrial automation and test and measurement solutions. The company has a global network, with 113 companies across 60 countries.

Story type

#innovation, #technology

Benefits

- Savings of £3.5m–£5m p.a. per production platform
- Safety and efficiency improvements

Key findings

For industry

- Do not underestimate timing and cost when working on a new technology
- Be open minded to let other partners come into the project

For government:

- Funding for innovative technological development is essential
- The Oil & Gas Technology Centre is a great initiative

Government support?

The company has received financial support from Innovation Norway, in addition to R&D tax credits.

Yokogawa TechInvent at a glance:

Key products and services: supplier of FluidCom, a chemical injection solution

Main industries served:

- Oil and gas – 100%

Headquarters: Stavanger, Norway (TechInvent); Tokyo, Japan (group)

Year established: 2008 (TechInvent); 1919 (group)

Number of employees: 22 (TechInvent); 20,000 (group)

Revenue: £1.3m (TechInvent); US\$4bn (group)

Revenue from exports: 15%

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EIC (Energy Industries Council)



About the EIC

Established in 1943, the EIC is the leading trade association for companies working in global energy industries. Our member companies, who supply goods and services across the oil and gas, power, nuclear and renewable sectors, have the experience and expertise that operators and contractors require.

As a not-for-profit organisation with offices in key international locations, the EIC's role is to help members maximise commercial opportunities worldwide.

We do this in a variety of ways from providing detailed project information and regional market insight; to showcasing specialist skills and connecting suppliers with buyers; through to running tailored training courses and events that inform and engage the industry.

The services we offer play an important part in supporting nearly 700 member companies to do business in a competitive marketplace.

EICDataStream

Our projects database, EICDataStream, provides extensive information on almost 8,500 active and future projects in all energy sectors worth US\$10tn. By tracking the full project lifecycle from feasibility to construction and then completion, it helps members to identify opportunities and plan their business development strategies.

EICAssetMap

The only operations and maintenance database to map all major energy assets across all sectors, covering Asia Pacific, Europe and the Middle East, EICAssetMap puts the details of over 4,000 facilities at your fingertips. Fully interactive, it allows you to search by location, sector and operator, as well as find out who you need to do business with at each site.

Energy Industries Council (EIC)
89 Albert Embankment
London SE1 7TP
United Kingdom

Tel: +44 (0)20 7091 8600
Email: info@the-eic.com
Web: www.the-eic.com

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