Survive & thrive

EIC Insight Report 2023
VOLUME VII

AWARD WINNERS EDITION 2023

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Survive & thrive

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VOLUME VII

AWARD WINNERS EDITION 2023

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For over 80 years, the EIC, a not-for-profit organisation has devoted it's time to working closely with energy industries around the world. With over 900 members worldwide, we help companies, large and small, to maximise business opportunities – sourcing or supplying goods and services across the globe.

We are experts in tracking global projects, energy assets, and supply chain capability, across multiple sectors and producing quality market intelligence. This means companies operating in the competitive energy marketplace can rely on our invaluable resources to develop their businesses.

We build relationships with buyers and suppliers worldwide, bring them together to discuss projects and capabilities, and help them to make contacts that will generate new business. Beyond this, we also build powerful networks across all stakeholders, including governments.

For more details, e-mail us: **membership@the-eic.com**

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WINNING COMPANIES BY CATEGORY AND REGION

COMPANY OF THE YEAR

Cokebusters

Collaboration

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London
ASCO

Innovation

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London	Houston	Kuala Lumpur	Rio de Janeiro
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Affinity Test Services

Breaking ground in Malaysia with a pioneering real-time X-ray inspection technique

How is Affinity Test Services thriving?

Affinity Test Services has managed to break the mould in the field of inspecting for corrosion under insulation (CUI) in Malaysia. Up against a well-established method which oil and gas operators had relied upon for decades, the company is starting to reap the rewards of a persistent marketing and demonstration campaign that has seen it win over the minds of many. Today, it still stands as the only non-destructive testing (NDT) company in Malaysia that has acquired real-time Xray inspection capabilities.

The challenge

Malaysian firm Affinity Test Services first entered the country's oil and gas market a decade ago. A provider of asset integrity management services, including routine plant online inspection, turnaround inspection, fitness for service assessment and non-destructive testing, the company stands as an important partner for operators seeking to remain compliant with health and safety regulations in a range of important areas.

Central to its offering has been sustained investment in real time Xray, a pioneering and new method to inspect the problem of corrosion under insulation across oil and gas assets.

However, as with many incumbent techniques and ways of doing things, especially in traditionally conversative markets such as this, transitioning to new methods is not always an easy sell. If an existing method isn't broken, why fix it?

The solution

To establish itself in the market and make inroads, Affinity has been engaged in a prolonged awareness generating exercise ever since it acquired this technological capability around five years ago.

An immediate point in the company's favour is that the problem it is helping to solve is a common one faced by oil and gas asset operators. Indeed, corrosion under insulation is typically caused when insulation becomes wet. This can happen for several reasons – water ingress beneath the weather barrier (jacketing), moisture condensation from steam tracing leaks, cooling tower drift or ambient air in humid and windy climates.

Traditionally, the most common way to inspect for CUI is to cut plugs in the insulation that can be removed to allow for ultrasonic testing. However, where Affinity differentiates from conventional methods lies in the fact that radiography (Xrays) can be applied to detect corrosion without requiring the removal of insulation.

Although the benefits of utilising this technology are clear, especially in regard to cutting asset downtime, achieving buy-in during the early years was extremely challenging. Not only did operators generally prefer to open the insulation cladding and perform visual inspection with their own eyes, but the Xray technique Affinity was bringing to market was also untested and unproven in Malaysia, with no track record to help lure prospective customers.

There was only one viable solution to this problem. In order to convince operators to place their faith in a new CUI inspection technique, the company needed to put its solution in front of as many decision-makers as possible.

This has required a full-scale programme of marketing and demonstrations. Affinity has also performed site trials for pilot projects and, slowly but surely, it began to develop an all-important track record for performing this inspection technique in Malaysia. And such is the confidence the company has in the Xray solution, it committed to a significant initial investment to carry out the initial trial process without charging the end user.

This persistence has started to pay off. After several years of proving the concept and generating awareness, the technology is now being embedded into several operators' processes across Malaysia, with Affinity's first contract for CUI inspection services being landed with PETRONAS Carigali Sdn Bhd.

A growing orderbook has also contributed to stronger revenues, with revenue for 2022 recorded at almost RM 15m (£2.6m) compared to around RM 8.4m (£1.5m) in 2018. Indeed, as more and more success stories and real-world deployments are undertaken, Affinity will only see momentum around its real-time Xray solution gather strength.

About Affinity Test Services

Affinity Test Services, established in 2012 and previously known as NDT Advances, is an organisation based in Miri, Sarawak, Malaysia. The company provides non-destructive testing services and consultation in accordance with international and national standards for quality and integrity assurance. Affinity Test Services contributes solutions to oil and gas industries, civil or advanced construction industries, plantation and agricultural, mining, powerplant or, essentially, any organisation within any industries which requires quality assurance and integrity check via non-destructive test.

Story type

#technology (main category)
#resilience

Benefits

- Almost RM 15m in revenue in 2022.
- Affinity Test Services' technology under use by operators across Malaysia.

Key findings

For industry

- Always be open minded to look for solutions.
- Expand your networking to have access to knowledge and information.

For government

- Companies need incentives in terms of reduction in tax and more simplified administrative procedure.

Affinity Test Services at a glance:

Key products and services: Asset integrity management services including routine plant online inspection, turnaround inspection, fitness for service assessment & non-destructive testing.

Main industries served:

- Oil and gas – 100%

Headquarters: Miri, Malaysia
Year established: 2012
Number of employees: 70
Revenue: £2.6m

Alderley

Accelerating innovation through cultural transformation

Andrew Charles, Aftermarket Operations & Projects Manager

How is Alderley thriving?

End-to-end integrated services provider Alderley has achieved a complete cultural transformation, updating and enhancing its innovation platform to improve its prospects. Underpinned by the launch of a new Special Projects team to deliver high-quality, quick-turn solutions for its clients, the company has firmly moved from loss to profit making, with significant growth potential extending far beyond 2023.

The challenge

Established in 1989, Alderley has enjoyed a lengthy and successful history in the oil and gas industry, carving out its niche as an independent expert in system integration, with a primary focus on capital equipment. However, even established enterprises must negotiate challenges and periods of flux.

During the 2010s, Alderley found itself facing stiff competition in the market, with several large and ongoing shifts leaving it in a situation where standing still and not innovating simply became an unsustainable strategy.

The company also opted to conduct a wide-ranging internal culture study in 2019 involving team members from all corners of the business. By doing so, it identified several issues, including siloed teams, a lack of agility and few new initiatives that were limiting the company's progress. The study found that product development and innovation was not prioritised within the existing culture, leaving it unable to improve its offering significantly and better serve its customers, not only in the oil and gas industry, but energy transition technology markets such as hydrogen and CCS too.

Not only did this limit the scope for growth and innovation, but it meant the erosion of margins in the face of strong competition and unfavourable economic periods, with Alderley recording losses in both 2018 and 2019.

The solution

To turn the tide, a new market-led strategy designed specifically to put the organisation on a new, more prosperous and sustainable path was agreed. As with all business strategies, it needed its people to succeed. It was decided that three key business behaviours would form the foundations of this strategic change: agility, ownership, and customer focus.

A company-wide audit in the form of a culture survey was key to understanding the challenges faced by Alderley. Here, two inter-departmental and international teams were empowered by Alderley senior management to investigate and discuss the existing culture of the organisation, and workshop potential business improvement ideas to address the challenges.

Once the business improvement process kicked-off, the firm evaluated various business changes implemented by other companies and examined how effective they may be in the Alderley context. Solutions were presented to the board and approved.

The use of inter-departmental teams was critical here, extending the reach of the initiative significantly through several "culture champions". Through a continued process of communication and engagement as well as workshop activities and feedback, previously perceived "walls" were broken down across previously siloed locations and departments, energising the team through cross-functional working that helped to inspire new initiatives. Key strategic hires further cemented this newly collaborative approach, including Martin Shaw as the Group's CFO and Nicholas Doherty as the Group's Head of Strategic Sourcing.

One key initiative that emerged was the establishment of a new Special Projects division in 2021. Composed of a team of both internally and externally recruited specialists, its goal is to fast-track projects, accelerate the firm's innovation cycles, and deliver high-quality, quick-turn solutions for Alderley's clients.

Equally, this plugged a gap in the firm's offering between its capital projects and field service work. This included upgrade and retrofit projects and small, fast-track capital projects, which Alderley had not focused on for over 20 years. Through a complete operational and cultural overhaul, Alderley's capability to develop new processes, products and services has been supercharged, owing to refined focus and improved use of resources across the group.

The strategic shift has enabled Alderley to achieve status as an agile, customer-focused and solutions-oriented business, improving its innovation culture. New ideas are now deemed critical to the business and given priority. This ensures that the company continues to adapt and futureproof itself.

The results have also been telling. After successive losses, Alderley returned to sustainable profitability in 2022 – a position it hopes to build upon in 2023 and beyond. By the end of this year, the firm expects revenues to reach £80m and profits to exceed £3m.

Without question, the company has turned a corner, with significant growth potential on the horizon.

About Alderley

Alderley is the end-to-end integrated solutions provider for the global energy industry. The company's priority is to maximise the value and efficiency of its clients' energy assets – from concept to operation and beyond. Alderley's regional teams work closely with its clients to understand their needs and deliver the right solutions – with the flexibility, integrity, and customer service you would expect from a family business.

Story type

#culture (main category)
#transformation

Benefits

- Sustainable profitability reached in 2022.
- Revenues and profit to reach £80m and £3m, respectively, in 2023.

Key findings

For industry

- Take organisational culture as one of your greatest allies.
- Always be ready to challenge the status quo.

For government

- Consider smaller, innovative companies when writing export finance support policies. They are engines for growth, exports, and energy sustainability.

Alderley at a glance:

Key products and services: Advanced digital, mechanical, hydraulic, electrical, process, metering, consultancy, systems, and aftermarket services.

Main industries served:

- Oil and gas – 95%
- Energy Transition – 5%

Headquarters: Wickwar, UK
Year established: 1989
Number of employees: 400
Revenue: £80m
Revenue from exports: 85%

Alypz

Broadening horizons on multiple fronts

Hanafi Abu Bakar, Hd BD/Mgr BD
Anne L Awan, COO
Amer Ezzadeen, Financial Controller

How is Alypz thriving?

Realising that it could no longer afford to rely on generating income from oil and gas-related activities from clients in Malaysia, Alypz has successfully diversified in a number of ways. As well as establishing itself in international markets such as Kuwait and Indonesia, the company has opened up new service lines and is also reaping the benefits of investing in R&D and product development – all of this being achieved amid a series of challenges in the form of the oil price crash and Covid-19 pandemic.

The challenge

Alypz has been in the business of providing radiation safety and NORM (natural occurring radioactive material) solutions and services in Malaysia since 1985. With its own radioactivity and dosimetry laboratory, the company is fully in control of the delivery time and quality of service, a capability which has enabled it to assume the position of local market leader.

However, growth in its home market was becoming stagnant, the company realising that it was time to venture beyond Malaysia. In 2013, Alypz was awarded a three-year contract by Petronas Carigali in Turkmenistan to provide NORM Services, a success which inspired it to push on with growing into more international markets.

Indeed, the company was always confident that it could perform well elsewhere given the many years of experience serving multinational companies such as Shell, ExxonMobil and Murphy Oil in Malaysia. However, little did it know a crash in oil price and global pandemic lied in wait, two challenges that would test the resolve and resilience of the company during the implementation of its bold expansion strategy.

The solution

Having secured the contract in Turkmenistan, Alypz went on to receive project orders in Singapore, Myanmar and Indonesia. Alypz finally set up a permanent office in Jogjakarta, Indonesia in 2015.

This was a natural move, not least because Alypz had recruited and trained the relevant Indonesian personnel many years prior. It enabled the firm to better engage with prospective clients in Indonesia and made the implementation of a permanent base in the market easier. The company also brought on board an experienced member of the international and local regulatory body as a consultant to guide it in making inroads in the country.

Then arrived the first major obstacle. With business revenues largely deriving from clients operating in the oil and gas sector, the oil price drop of 2015 had a major impact and prompted a change in thinking in three major ways.

First, the company knew it had to diversify its customer base not just geographically, but also beyond its traditional bounds of the oil and gas market and into sectors such as mineral processing and healthcare. Second, it needed to diversify its service offering for existing and new clients, adding additional value to its proposition through the provision of training and OSL services, for example. And third, Alypz recognised the need to ramp up investment in R&D and collaboration with local universities to help develop new products that would complement and enhances its services.

Undeterred, in 2016 the company made a major breakthrough when the Kuwait Oil Company (KOC) awarded it with a two-year contract to provide services around NORM study and NORM procedures development. Two more major contracts from KOC followed in 2019 in what has proven to be a flourishing client relationship, the latest project concerning the disposal of radioactive materials.

Shortly after securing the work in 2019, the Covid-19 pandemic arrived. This put the brakes on immediately, with the projects virtually lying idle for months due to lockdown. In addition, Alypz found that acquiring financing from its local Malaysian banks was difficult due to their unfamiliarity with the risks involved in contract scopes and being in a new market.

However, thanks to its ability to innovate and adapt to new customs, regulations and ways of doing business, the firm has been able to establish firm roots in both Kuwait and Indonesia. Today, its export revenues represent more than 60% of total turnover, with over 40% of its workforce now being located outside of Malaysia. Profitability is also on an upward trajectory, with provisional estimates for 2022 showing a strong growth in margins from 0% (2021) to 17%.

Meanwhile, since venturing into the OSL service line back in 2015, the company managed to recover the initial investment within two years and now commands a market share of around 40%. And its R&D activities are also bearing fruit, the company securing an order from Bangladesh Atomic Energy Commission for a new product developed in collaboration with Multimedia University (MMU). By May 2023, Alypz expects to have launched its very own survey meter which is currently undergoing SIRIM inspections.

Despite encountering numerous bumps along the way, Alypz has determinedly stuck to its diversification strategy. Today, it stands as a much broader enterprise that is no longer dependent on serving oil and gas customers in its home market, and there is plenty more to come yet.

About Alypz

Alypz was incorporated as Asia Lab (Malaysia) Sdn. Bhd. in 1985 and was the first company in Malaysia to have dual accreditation from the Atomic Energy Licensing Board (AELB) and the Ministry of Health. Alypz is the market leader serving all the top oil and gas companies in NORM/TENORM monitoring services in ASEAN region, as well as providing comprehensive radiation safety services across various industries involved with radioactive materials and irradiating apparatus.

Story type

#resilience (main category)
#export

Benefits

- Alypz now commanding a market share of 40% approximately.
- About 60% of turnover currently coming from exports.

Key findings

For industry

- Take advantage of the financial assistance given by the government such as grants and soft loans.
- A prior understanding on different countries' working culture, bureaucracies, and regulations can help in mitigating or avoiding any unwanted issues that can be costly when venturing abroad.

For government

- Government agencies should provide local intelligence that covers more countries.

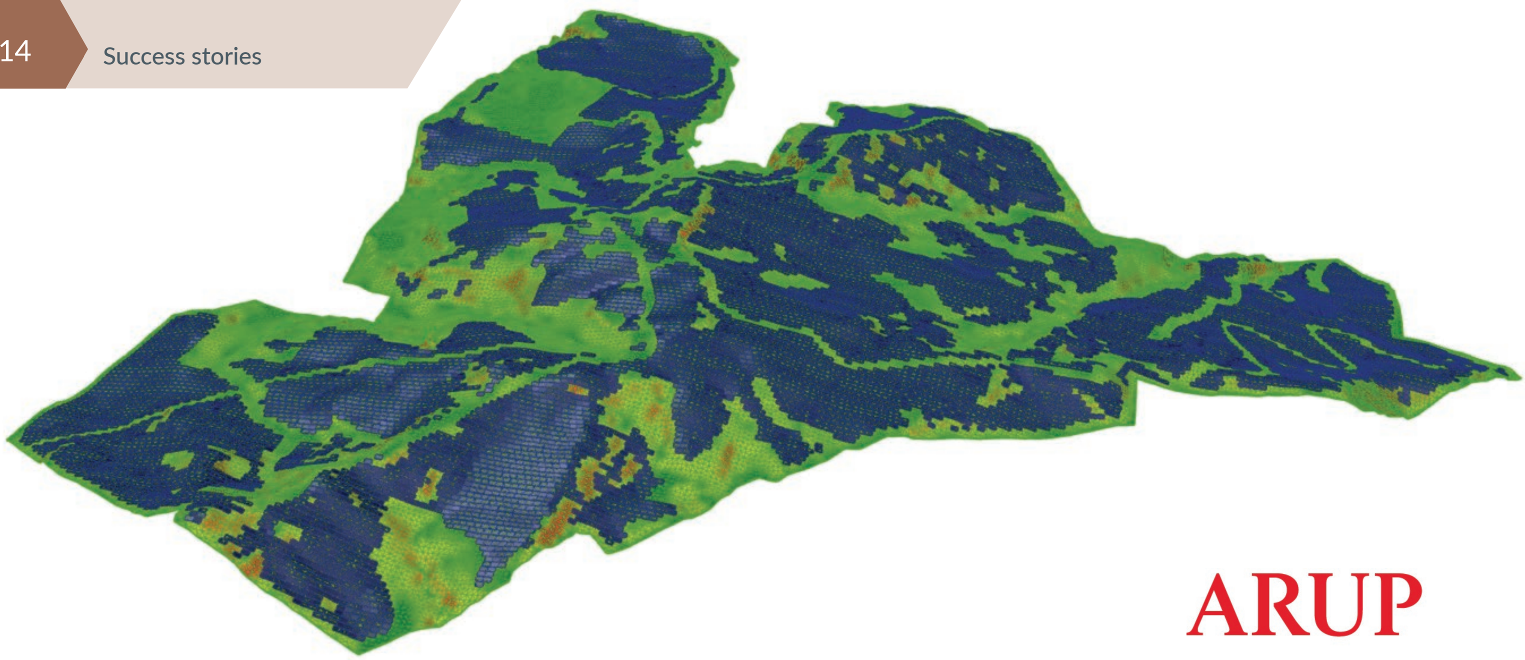
Alypz at a glance:

Key products and services: Radiological and environmental consultancy.

Main industries served:

- Oil and gas – 65%
- Others (healthcare and industries associated with radioactive materials and radiation equipment) – 35%

Headquarters: Subang Jaya, Malaysia
Year established: 1985
Number of employees: 89
Revenue: £2.5m
Revenue from exports: 60%



ARUP

ARUP Philippines

A critical friend to a complex hillside solar plant in the Philippines

Lynn Dimayuga, Associate Director – Energy Business Leader

How is ARUP thriving?

ARUP is drawing on all its experience in supporting solar farm developments and operating in awkward terrains to help the Philippines on its much-needed energy transition journey. Faced with a grid unable to provide a stable power supply during the pandemic, the government has ramped up its efforts to facilitate more renewable energy developments, with solar plants identified as a critical component of its energy security strategy. To make the most of the opportunity, projects need to be delivered on challenging parcels of land, especially mountainous terrains that are in abundant supply across the country. Here, ARUP has risen to the challenge, supporting a client in what is a first of its kind solar plant development in the country.

The challenge

As well as presenting major health and economic challenges, the covid pandemic highlighted the fragility of the Philippines' energy security. Power outages became rampant and regular as the national grid was not able to provide consistent service to the whole population, this prompting the government to accelerate projects on renewables.

For ARUP, a UK-headquartered firm of designers, planners, engineers, consultants and technical specialists, that has been present in the Philippines since 1990, this prompted the need to project itself as the go-to expert in infrastructure works in the country. With vast experience working on renewables projects around the world, ARUP's mission is to shape a better world by being what it terms a 'critical friend' for clients – a go-to organisation that can help resolve complex issues.

This was put to the test when a client asked for support on developing a utility scale solar PV plant on an undulating hillside terrain.

The solution

Hillside solar farms represent an increasingly popular alternative to taking up large, flat swathes of land – they increase the usability of awkward terrain, provide clean renewable energy to the grid and improve employment opportunities for local communities.

In this instance, ARUP was working with a contractor that had never developed a solar power plant, much less on a hillside, the project also being the first of its kind in the Philippines. The company also lacked the exact experience, but it was able to draw on the lessons it learned from developing complex projects on very similar kinds of terrain and its extensive solar design knowledge to make it work – indeed, ARUP has garnered a reputation for mastering complex projects, and applied the same process of critical thinking and creativity to this development.

First, it had to identify the risks and challenges of the project site, a key task being to find safe, stable and accessible ground, as well as optimal places to position panels to maximise solar yield. Here, the company applied its familiarity with the local climate and site conditions to identify probable risks to the project for the long term, mapping the constraints of the terrain and setting a safe clearance for development.

To expedite best panel positioning in consideration of best sun capture, it developed its own automated tool to generate the optimal layout of the plant, saving it around a third of the time compared with completing the process manually and helping ARUP to secure two more sites of similar complexity. The automated layout keeps track of all individual panel data, creating a mine of information that underpins crucial decision making and enables maximum performance to be derived.

The credentials of ARUP's approach were tested on numerous occasions by the elements. For example, two typhoons were encountered during the construction phase which challenged the design of the plant regarding wind direction and uplift force. The mounting structure foundation design held up to scrutiny, granting the client confidence that the plant could withstand severe climatic conditions.

Projects like this will serve ARUP well in the future. As its track record for supporting hillside solar developments in the Philippines continues to strengthen, it looks well placed to play an important role in building up the renewable energy capacity the county badly needs to ensure its energy security.

About ARUP

Dedicated to sustainable development, ARUP is a collection of designers, consultants and experts working globally with more than 40 offices in seven continents. Founded to be both humane and excellent, ARUP collaborates with clients and partners using imagination, technology and rigour to shape a better world.

Story type

#service & solutions (main category)
#optimisation, #sustainability

Benefits

- ARUP becoming a leader in supporting the hillside solar energy market in the Philippines.
- Client's first solar project in the country successfully developed.

Key findings

For industry

- Challenges are part of any project or business, one must know their limits and leverage on the skills and capabilities of their team members to supplement their skills.
- Be updated on current events and know the market so that a holistic view on things can be provided.

For government

- Ease off a few challenges for developers in regard to meeting their construction timelines by streamlining and permitting process.

ARUP Philippines at a glance:

Key products and services: Specialist services on infrastructure, buildings, management consulting, economics and planning.

Main industries served:

- Renewables – 100%

Headquarters: London, UK
Year established: 1990
Number of employees: 200
Revenue: £1.9bn
Revenue from exports: 30%

ASCO

Growth and diversification inspired by international markets

Fraser Stewart, Managing Director – International

How is ASCO thriving?

ASCO is successfully finding inspiration in its people, offering safe, lean, efficient and sustainable end-to-end logistics solutions. Having appointed a new CEO, Peter France, in 2018, the company has transformed its prospects through a renewed strategy underpinned by an emphasis on safety, service and sustainability, and a more focussed approach to international growth.

The challenge

Created in 1967, ASCO has developed an esteemed reputation as a leading logistics and materials management company for the global energy industry. Providing a range of services, ASCO is an established and highly regarded enterprise. The company has been working to expand its operational footprint into its first new international locations since 2013, which has come with challenges around resources, training and local content requirements.

Additionally, operating in a cyclical sector, ASCO experienced particularly highly competitive price market during the last Oil & Gas downturn and a change in management has served to steady the ship, return to growth and set ASCO on a new, more prosperous path.

The solution

Since Peter France came on board as CEO in 2018, he pivoted the company's strategic focus towards excellence in service and safety. For France, safe, reliable and efficient service needed to be the core of ASCO's offering.

From that point on, the firm no longer aimed to differentiate based on price but on service. By doing a much better job, ASCO would get a better return through better client relationships. Sustainability also became a core focus under France from the end of 2019 onwards, not just from an environmental perspective, but equally looking at raising the longer-term value of the business. Overall business performance was improving, underpinned by a culture of respect and equality. However, some early speed bumps were encountered.

ASCO faced a difficult situation when the covid pandemic arrived, the firm erring on the side of caution in opting to request that higher paid staff take a temporary pay cut. This helped limit the number of long-term headcount reductions to less than 10% of global staff. These difficult decisions ultimately paid dividends, with 2020 turning out not to be as gloomy as originally foreseen and subsequent years returning to sustainable growth and the recruitment of additional heads.

More recently, the war in Ukraine has also pushed the company to be more reactive. Where ASCO had previously been looking at diversifying away from oil and gas, it is now anticipated to continue to be the majority of ASCO's business for at least the next decade, with oil and gas continuing to offer business opportunities in a tough market.

Beyond these reactive responses, perhaps the most significant change for ASCO in the past half decade has been its approach to international growth. Prior to 2018, the company had taken what can only be described as a scattergun approach to international markets, reacting to any inquiry, no matter where it originated from.

From 2018 onwards, it was decided that a more coherent and planned approach was needed, undertaking country specific due diligence in advance of establishment. Critically, management felt that the firm had the capacity to develop three new overseas opportunities in parallel in order to give them the necessary resource and focus. Resultantly, Suriname, Senegal and Mexico were targeted, and while the latter provided significant difficulty and ultimately did not progress, ASCO became established on the ground in Senegal in 2021 and Suriname in 2022.

In each of these new markets, the idea is to have local people eventually driving each respective regional business. In Senegal, for example, while much of the business is currently driven by expats, the aim is to hand over each role to locals over a two-to-five-year period. To support this, each expat position has a local deputy attached to accelerate knowledge transfer through an understudy process. A team of subject matter experts, expats and HR personnel carefully designed the operating model for the new locations with layouts, workflows and personnel org charts to ensure there was no disruption to ongoing operations in any of ASCO's locations.

With Senegal and Suriname now established, ASCO is now looking ahead to additional potential locations, the plan being to develop out from existing presence and hubs. Indeed, having become profitable in two of these initial three overseas ventures which mark ASCO's first new international footprints in almost 10 years, the firm now sees international growth as a profitable, high growth and managed risk avenue.

The change in company culture has also had a huge impact, with employees that have been with ASCO for more than two decades reporting that the atmosphere is much better, more open and inclusive, creating a collaborative, positive and happier place to work.

Company performance has continued to improve owing to these changes. While revenue was down 10% in 2020 vs 2019 due to the pandemic, it rebounded to 2019 levels in 2021, and then expanded in 2022, with this growth anticipated to continue in 2023. While ASCO recognises that there are still improvement opportunities that need to be addressed, good progress has been made that is only likely to gather momentum through the remainder of this year and beyond.

About ASCO

ASCO is a leading logistics and materials management company for the global energy industry. ASCO's safe, lean, efficient, and sustainable end-to-end solutions include logistics, transport and freight, supply base management, warehousing and storage, materials management, fuel and bulk provision, marine services, training, lifting and assurance, personnel and environmental services.

Story type

#people & competency (main category)
#export

Benefits

- Building long-term capabilities allows economic benefits to be apportioned equitably in the local economy.
- Developing a positive workplace culture ensures the business strategy is successful.
- Providing expat opportunities allows knowledge sharing and process standardisation.

Key findings

For industry

- Have confidence in yourself and your decisions. It's easy to be swayed off strategy when things get hard.
- Invest in local capability in the markets you operate. Politics and culture issues fare better when managed by someone local.

For government

- Focus on local capability, not local content. Your economy will benefit more.

ASCO at a glance:

Key products and services: Logistics, transport and freight, supply base management, warehousing and storage, materials management, marine services, training, lifting and assurance, personnel and environmental services.

Main industries served:

- Oil and gas – 96%
- Renewables – 4%

Headquarters: Aberdeen, UK
Year established: 1967
Number of employees: 1,500
Revenue: £419m (2021)
Revenue from exports: 25%

asset55

Delivering immense value for clients with a growing portfolio of digital solutions

Les Bartlett, Global Development Lead

How is asset55 thriving?

Building up its reputation as a digital solutions specialist in the energy industry, largely thanks to its market leading flange management software Calculate, asset55 has kicked on since 2018, expanding significantly through the introduction of three additional platforms.

With its product portfolio now also comprising of Operate (optimal planning and controlled execution in operation), Execute (optimal planning and controlled execution of capital projects) and Validate (automated validation to secure data integrity), the firm has doubled its users and demonstrated a proven ability to keep on delivering value with these new solutions.

The challenge

More than 10 years ago, Robert Noble, a pioneer in flange management with torque wrench manufacturer, Hedley Purvis, and Mike Rudd, who was Managing Director, identified an opportunity. With 60 years' experience between them, the pair saw the industry was on precipice of immense change.

Operators were looking for ways to move away from outdated spreadsheet-based processes and unlock efficiencies by embracing cutting-edge, industry-tailored digital solutions.

To capitalise on this shift, the pair set up asset55 – a software technology engineering company specialising in the development of solutions for the energy sector, with significant focus on operational systems, consultancy management and engineering support for CAPEX and OPEX projects.

With the help of an experienced team of software development experts, the company launched in late 2012 and after two years of development, in 2014, Calculate was born. A highly successful product, the firm has managed to secure business from three quarters of UK energy operators, with Calculate also established as a flange management software solution of choice.

However, despite the successes of its primary product, the founders knew that they couldn't afford to sit still and solely rely on one solution alone. Resultantly, the decision was taken to kick on and develop new software solutions to diversify and consolidate its position in the market.

The solution

This decision came to fruition in 2018 as asset55 began to expand its portfolio of software platforms from one to four, the firm launching three further key products in the five ensuing years.

Execute was the first of these – a solution specifically designed to optimise planning and controlled execution in operation, launched in 2018. Come 2021, Operate was then added to the collection – a solution designed to optimise operations including shutdown and turnaround projects. And in 2022, Validate was rolled out – a capital project engineering platform with data validation capabilities.

Significant efforts went into developing each of these solutions to ensure they were addressing the unique requirements of the market. To achieve this, asset55 brought in industry subject matter experts and experienced individuals from operator backgrounds to complement its internal software development team. With this combination, the solutions were successfully developed in house.

While each of these distinct platforms is undoubtedly sophisticated, the firm has faced several challenges regarding its go-to-market strategies and deployment. In the case of Operate, for example, the company faced some resistance from industry players regarding its efforts to change the mindset of shutdowns and turnarounds and optimise processes by reducing helicopter flights, manpower requirements offshore, and more. In such instances, it has had to be innovative, adapting its marketing techniques to specifically target those willing to embrace innovative solutions.

Despite some kickback, the immense value of the firm's portfolio has been demonstrated by massive increases in uptake. While it had already achieved 10,000 annual users five years ago, this has now doubled to more than 20,000, with the firm's annual licence renewal rate also reaching 95% despite ongoing economic difficulties. Within this, the firm is now also serving 30 operators – up from eight in 2018.

Indeed, asset55's solutions have proven their worth among its client base which has benefitted significantly through the adoption of Calculate, Execute, Operate and Validate. In the case of Execute, for example, one client has saved more than US$2m simply by optimising its installation and fabrication sequence.

Despite being a company just 11 years in the making, momentum continues to gather at pace at asset55. And with an impressive, proven ability to deliver efficiency, productivity, operational and cost benefits to its clients, the company's reputation and customer base are only likely to continue growing.

About asset55

At its core, asset55 is a software engineering technology company. It brings together highly experienced industry engineers combined with leading software developers to drive real and positive change within the energy sector. Established in 2012, asset55 has grown organically to become a leading and trusted provider of SaaS technology to the wider energy market whilst maintaining clear objectives to support customers on critical operations. asset55 ensures to go above and beyond expectations on delivery and execution of its services.

Story type

#digital (main category)
#innovation, #optimisation

Benefits

- A single client saved US$2m by using Execute.
- asset55's users have doubled to more than 20,000 in five years.

Key findings

For industry

- The energy industry, where there are major opportunities in digital, should embrace technology more. Still afraid to take risks.

For government

- Open up boundaries: stop making business harder and instead embrace technology that's out there to help.

asset55 at a glance:

Key products and services: Software technology engineering company.

Main industries served:

- Oil and gas – 85%
- Energy Transition – 4%
- Renewables – 3%
- Conventional power – 2%
- Nuclear power – 2%
- Others (data centres) – 4%

Headquarters: Sunderland, UK
Year established: 2012
Number of employees: 26
Revenue: £4.5m
Revenue from exports: 50%

ASYAD

Oman's shining example of ESG-driven success

Dr Essam Al Sheibany, Group VP Sustainability

How is Asyad thriving?

Asyad is a leading example of ESG-led success in Oman, owing to its explicit commitments to reform. By prioritising sustainability in its business strategy and culture, the Group has achieved record-breaking profits, secured key funding to further expand its fleet, and achieved a Gold Rating on the Oman Sustainability Index for two consecutive years. Asyad's commitment to promoting positive change attracts top talent to the organisation.

The challenge

Sustainability is currently the most prominent trend transforming the energy industry, and Oman-based integrated logistics solutions provider Asyad recognises the importance of evolving and adapting to sustainability demands for its future success.

Asyad is committed to decarbonising its operations, not only to meet regulatory changes, but also to play an impactful role in the global drive to net zero. To that end, the company is undergoing a comprehensive transformation, with particular focus on its shipping business and deep seaports. Sustainability is deeply ingrained into the company's values and culture, reflecting the impetus with which Asyad approaches this issue. The logistics group acknowledges that achieving true sustainability, as a global enterprise, is a challenging task that cannot be accomplished alone. It requires collaboration and partnerships to drive innovation and the sharing of knowledge and best practices.

The solution

Asyad began developing ESG strategies in 2022, placing them at the centre of a wider transformation with a clear focus on KPIs for 2023. This ESG framework didn't just focus on the decarbonisation of the business but was split into four key areas: environmental leadership, thriving workplace, community engagement, and robust governance and sustainable growth.

Asyad also established a culture of transparency by implementing disclosure mechanisms to maximise accountability and setting quantifiable milestones to track progress across its multiple units. This not only enhances Asyad's reputation as a sustainable and responsible business, but it also enables the Group to attract funding from ESG-led investors.

The benefits of this approach are already apparent. Asyad became the first Omani company to secure sustainability link loans based on its low CO2 emissions, securing US$35m in funding to purchase two new vessels. Beyond financing, Asyad has received a Gold Rating on the Oman Sustainability Index for two consecutive years and is publishing its first Sustainability Report in 2023, which will also undergo an international ESG rating process to verify its measurement and commitment mechanisms.

Furthermore, Asyad has recognised major international shipping lines' increased demands for ports to disclose ESG commitments and decarbonisation plans, as well as regulatory and operational demands for reporting on carbon footprint and emissions targets.

The sustainability transformation has also enabled Asyad to better meet ESG and regulatory demands worlwide, with its expansive portfolio comprising three deep ports, two free zones, and an economic zone supported by Oman's five airports, alongside a world-class road network. In addition, the company operates a wide array of maritime services, with one of the largest drydocks in the Middle East and a diversified fleet of more than 80 vessels, supported by a sea transport network that connects Oman to key ports across the region and the globe.

Although there have been challenges along the way, including difficulty finding and retaining the right talents with the expertise required, as well as the increasing cost of adopting key sustainability technologies and solutions, Asyad has remained committed to change. Partnerships have proven key, with the Group collaborating with Sultan Qaboos University on biofuel projects and building partnerships with international corporations to create clean fuel alternatives and find further frontiers for emission reduction.

Through these efforts, Asyad has established itself as a corporate role model not just for Oman, but internationally. Its credibility has enabled the Group to attract and retain promising talents and a wider client base, garnering a reputation as one of the world's elite energy transporters in terms of sustainability. As a result, Asyad has been able to secure better financing to sustain its growth and fleet expansion goals. In fact, profit-wise, 2022 was a record-breaking year for Asyad, with some segments that were previously underperforming financially becoming self-sustaining.

Overall, the Group's commitment to sustainability has been crucial to its success and its capacity to develop and adapt in line with sustainability requirements being viewed as critical to its future. By integrating sustainability into its core values and culture, and emphasising transparency, collaboration, and partnerships, Asyad has become an example of ESG-led success.

About Asyad

Asyad Group is Oman's global integrated logistics service provider. As a US$4bn enterprise and backed by an initial US$20bn in government infrastructure spending, Asyad is attracting customers keen to leverage the country's integrated logistics facilities and establish manufacturing. Asyad Group provides integrated logistics solutions across ports, free zones and shipping. It comprises three deep ports, two free zones and an economic zone supported by Oman's five airports, and a world-class road network. In addition, Asyad operates full maritime services with one of the largest drydock in the Middle East and a diversified fleet of more than 60 vessels, supported by a sea transport network that connects Oman to key ports across the globe. The Group offers integrated logistics services to meet market needs and support Oman's economy.

Story type

#sustainability (main category)
#culture, #transformation

Benefits

- Record profit in 2022 and new self-sustaining segments.
- ESG entirely embraced and reputation elevated.

Key findings

For industry

- Build your strategy to evolve under ESG.

For government

- ESG should be self-driven, regulation is a key enabler to take businesses to this direction.

Asyad at a glance:

Key products and services: Integrated logistics solutions.

Main industries served:

- Oil and gas – 90%
- Others – 10%

Headquarters: Muscat, Oman
Year established: 2016
Number of employees: +8,000
Revenue: around £1bn

Baker Hughes

Bringing pioneering inspection and monitoring capabilities to the world of flexible pipes

Victor Farid, Business Leader

How is Baker Hughes thriving?

Baker Hughes has successfully adapted and applied its inspection and monitoring services to flexible pipe structures, which are commonly used in the oil and gas industry. For many years, the company developed and introduced a solution to the market. Now, the objective is to build on the success it has experienced in regions like Brazil, where the solution has proven its worth significantly.

The challenge

For many years, the R&D company called MAPS Technology has been developing and deploying magnet-based technology to identify stress in steel structures supporting a variety of industries. With venture capital backing, the company effectively applied its solutions to the US rail market, among others.

In 2013, the company was acquired by GE's oil and gas division (now part of Baker Hughes) with the intention of applying the technology to flexible pipe systems as well. These pipe networks are commonly found in offshore and subsea oil and gas developments because they enhance production and asset integrity, while reducing the overall cost of pipeline systems.

However, these pipe systems are susceptible to mechanical failure, which, if undetected, can cause issues that significantly reduce the life of assets. Consequently, Baker Hughes needed an additional solution to monitor and inspect flexible pipes in a simple and non-intrusive manner. This capability would enable users to keep pipes operational for longer and boost on-site safety.

The solution

The journey to this new market has been one of perseverance and patience.

A major engineering challenge involved developing the mechanical components that transmit signals and capture the response, as well as the ability to read the collected data. Concerning the latter, the key to success was to clean and interpret data using improved algorithms and software to eliminate excess noise in offshore environments.

Development took six years. By 2016, Baker Hughes had reached a stage where it could successfully demonstrate its system in flexible pipes; however, reliability and consistency was needed before the technology could be commercialised. Three years later, Baker Hughes achieved the crucial milestone of fully qualifying its technology through blind testing.

Today, Baker Hughes can offer a full inspection and early warning service for operators of flexible pipe networks. This process involves collecting and analysing data on wires, which can number up to 70 in each pipe. When unloaded wires are detected, reports and alerts are sent so remedial action can be taken before serious problems arise. Importantly, the system can also indicate safe service life, informing users when pipes will require repair or replacement and allowing them to plan maintenance work accordingly.

To date, Baker Hughes has completed 118 inspections, with its current ambition being to scale up the system's deployment.

This endeavour should be aided by the fact that Baker Hughes has a highly successful real-world case study under its belt involving an independent energy firm in Brazil. Located off the coast in Sergipe state, the operation entails transporting LNG from offshore assets to be converted back into gas on land and commercialised. After noticing the abnormal shapes within the riser, the client suspected there might be issues with its wires, prompting an inspection from Baker Hughes that confirmed this suspicion. With no previous measures to compare against, a full-time monitor was installed to analyse the evolution of the damage. As Baker Hughes also manufactures flexible pipes, it was able to use the data to assess whether the pipe still maintained integrity.

Due to the monitoring capability provided by Baker Hughes, the client has been able to continue producing. Without the technology, the client would have been forced to shut down the operation and replace the pipe – a process which would have taken two years and cost US$5m. Including the cost of lost production, the solution has saved the client a further US$38m in revenues, more than justifying the US$300,000 per year cost.

With use cases such as this to draw upon, it is no surprise to see Baker Hughes increasing the volume of inspections it completes, scaling up from an average of one per month to three or four. After six years in development and a decade since the challenge first presented, Baker Hughes is poised to take full advantage of the commercial opportunity it has worked tirelessly to unlock.

About Baker Hughes

Baker Hughes is an energy technology company that provides solutions to energy and industrial customers worldwide. Built on a century of experience and conducting business in over 120 countries, its innovative technologies and services are taking energy forward – making it safer, cleaner and more efficient for people and the planet.

Story type
#service & solutions (main category)
#technology

Benefits
- Client saved US$38m in revenues by using Baker Hughes' solution.
- Over 110 inspections completed so far, with plans to scale up.

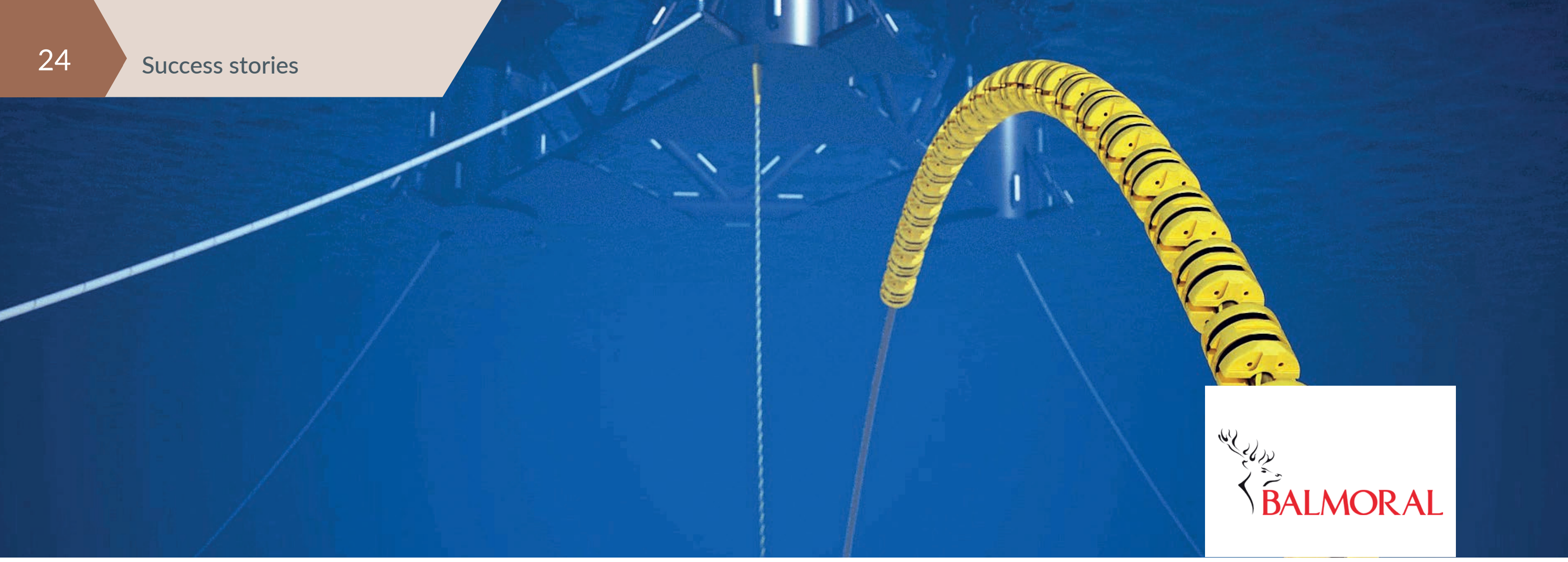
Key findings
For industry
- Focus on people, hire character not skills.
- Build your own knowledge to avoid buying into the hype.

For government
- Establish regulatory stability – instability of regulations and decisions impact long-term planning and drag investments.

Baker Hughes at a glance:
Key products and services: Inspection and monitoring services in flexible pipes.

Main industries served:
- Oil and gas – 90%
- Renewables – 10%

Headquarters: Houston, US
London, UK
Year established: 1950
Number of employees: 55,000
Revenue: £17.1bn
Revenue from exports: 70%



Balmoral

Re-invigorated R&D tackles toughening competition and new market demands

Fraser Milne, Engineering and Projects Director
Gary Yeoman, Sales Director

How is Balmoral thriving?

Having commanded a leading market position with its premium buoyancy and protection systems for offshore energy assets for the best part of two decades, Balmoral was coasting. Customers loved its product, and the competition couldn't compete on quality.

However, as the 2010s progressed, it became clear that disruptors were closing the gap through price competitiveness. With more and more industry players coming on stream, Balmoral knew it needed to radically evolve its offering to compete on cost and offer new advantages, not just for its core oil and gas market but also for offshore renewable sites.

A big decision was made to invest heavily in R&D, with the pioneering Integral Plus buoyancy module paving the way for the company to find a new edge.

The challenge

A critical threat facing any incumbent company with a strong market share is the temptation to drift along. For Balmoral, a leading provider of buoyancy modules and protection products for offshore energy industries since the 1980s, the danger of resting on its laurels was well and truly alive.

In 2006, it had released a high-performance clamp system that was huge success and led the market ever since. However, as the years went by, the competition started to close in – while not always able to compete on performance and quality, some were managing to produce alternatives at more competitive prices which would appeal to offshore oil and gas players.

To avoid being overtaken and protect its market share, Balmoral needed to find a way to shave costs with a new offering that could also appeal to operators in future energy markets such as floating offshore wind. Doing so is no easy task – rigorous standards must be met to bring new safety and protection solutions to market.

The solution

In 2018, the company's leadership decided to change course. Continuing with the status quo, it was feared, would result in Balmoral being usurped by competitors which had been coming up on the rails in recent years.

R&D therefore took centre stage. Backed financially with 2-3% of company turnover being invested each year, an in-house R&D team named the Discovery Unit was carved out of the project engineering team. A nine-strong unit spread across three subcategories (product development, material, process), 2019 saw the Discovery Unit brainstorm the concept of a semi-clampless technology through a series of educated trial and error projects.

The new solution had to compete on price and offer a radical step-change in comparison to the premium clamp if it was to interest existing clients and win over new customers.

The Integral Plus was thus born. It is a two-plane buoyancy module containing a clever rubber part – as the load is applied, the rubber (which is now patented) reshapes and reforms to give even distribution load.

Towards the end of 2020, a four-tonne prototype was built and independently tested to prove the concept, with the results providing cause for optimism on many fronts. Key benefits include the ability to spread load in modules, suitability for use in renewables, and incorporation of thermoplastic, recyclable components.

Crucially, the Integral Plus makes it easier to automate the installation process, helping to optimise cost, power, use and safety – for the renewables sector in particular, which potentially operates with thousands of modules, this automation capability could bring enormous advantages.

Indeed, the company calculates that for each major deep floating production storage and offloading (FPSO) unit, a total saving of £4.5m can be made (based on a 400 module per FPSO average). This is thanks to a 12-20% lower product price, cheaper logistics, and savings made on time, space and other cost bases during the installation process.

Alongside developing the prototype, another crucial step has involved working with API to evolve standards and enable the use of non-separate clamping solutions, with a new standard release being achieved in June 2021.

The decision to change course in 2018/2019 already looks like an astute one. The new offering is already being adopted by customers and has opened up the floating offshore wind market to the company. Presently, orders for 2023/24 for the Integral Plus stand at £20m, which already represents around a quarter of all revenue.

It is clear that the foundations for the company's next chapter have been laid. Today, Balmoral operates out of manufacturing facilities in Aberdeen (HQ) and Newcastle, its 325-strong team complemented by agents based in key markets around the world to give it a global industry presence. With Integral Plus establishing itself and picking up momentum across the oil & gas and renewables sectors, the future looks entirely different (and a lot brighter) than it did just a few short years ago.

About Balmoral

Established in 1980, Balmoral has an enviable reputation across the world for product design, development, and delivery. With 350 people based at its purpose-built 250,000ft2 facility in Aberdeen, Balmoral builds successful relationships with clients working with them from concept development and advice through to product design, manufacture, testing, delivery and support. All managed in-house to give total safety, quality and scheduling control.

Story type

#technology (main category)
#diversification, #innovation

Benefits

- Balmoral has now diversified into the offshore wind market.
- New solution provided lower product price, cheaper logistics, and savings made on time, space and other cost bases.

Key findings

For industry

- Never rest on your laurels – resist temptation to delay investment to next year.
- Aim high for all your goals.

For government

- Support the British industry, stop letting it go overseas.

Balmoral at a glance:

Key products and services: Buoyancy installation and protection products for offshore energy industries.

Main industries served:

- Oil and gas – 85%
- Renewables – 15%

Headquarters: Aberdeen, UK
Year established: 1980
Number of employees: 350
Revenue: £90m
Revenue from exports: 90%

Blaze

Diversifying to move away from O&G dependency

Ann Johnson, Business Development Director/
Howard Johnson, Managing Director

How is Blaze thriving?

Embarking on a renewed strategy underpinned by innovation, diversification and export opportunities, the fire safety and loss prevention solutions provider has effectively secured its future, bolstering its reputation across several geographies and industries.

The challenge

Like many companies emerging out of the oil and gas sector, Blaze found itself in a precarious position when the oil price crash of 2014-2015 hit. Indeed, all large-scale capital projects were put on hold, the firm finding itself in a vulnerable position and at the mercy of market fluctuations. Its owners, Howard and Ann Johnson, saw that diversification was required to survive, and so embarked on a strategy of research and development to identify new markets both at home and overseas that their products and solutions could be applied to.

The solution

The resulting business strategy is fuelled by innovation, and a client-focused approach, to seek out new opportunities through market expansion.

Through diversification, it was anticipated that the company could diminish risk in any one single market while increasing profitability, improve certifications from appropriate bodies, and more easily find and execute projects.

This was no easy feat. Crucially, the complex contractual nature of CAPEX works associated with the government imposed the need to build a deep understanding of CEMAR and DIMIC contracts. Equally, in renewables, the firm quickly experienced the need for performance and warranty bonds coupled with punitive damage clauses which impacted cashflow and its ability to grow as a company.

Come 2019, the company sought to find a partner to help it invest in growing its share of the new markets it had diversified into, having successfully completed fire systems projects in the renewables sector at this time. This led to Balmoral Group acquiring a 70% share in Blaze, the fact it is now part of a larger group enabling it to bid for considerably higher value projects.

Today, the firm is spread across four different sectors. First, it has successfully completed five renewable platforms with a sixth on its books. Second, it is also working well within the nuclear greenfield market and has qualified as a tier one contractor direct to EDF, which will see the company migrate into the service and maintenance of nuclear assets.

Thirdly, in the industrial space, Blaze is now accredited by FIRAS and is awaiting the award of further formal certification which will enable further growth within the sector. And fourthly, the firm remains proud to continue to support its oil and gas clients both across the upstream and downstream segments.

The geographic expansion of the company has been equally impressive. Having targeted opportunities in Democratic Republic of Congo, for example, Blaze built key regional relationships to expand into Zambia, all while exporting across Europe, the Middle East, the Falklands and Azerbaijan.

In Zambia there has been considerable success. The firm was mandated to protect two transformers for Copperbelt Energy on a highly remote site in the Zambian Jungle. With limited water supply and no power in the region, there could be no use of power tools. Further, the site was over three hours from the nearest town, meaning access to deliver goods was highly dangerous due to road conditions and local wildlife.

Blaze developed an innovative mechanical approach, designed in such a way that the native workforce could be trained to maintain the system and swap out the cylinders locally without the need for any physical intervention from its UK workforce. It designed a standalone pressurised water mist system to deliver automatic detection and protection of a fire event on the transformers, negating the requirement for fire water pumps, water storage tanks and bore holes. And despite several challenges, the project was delivered within budget.

Internally, there has also been significant change. The firm has completely restructured its teams, it now having a full commercial department and with cross-trained engineers that can take on a diverse range of projects owing to the experience the company is continuing to gather.

Despite the challenging period that the business endured through the downturn and subsequent diversification, the loyalty of the workforce allowed Blaze to maintain a core level of knowledge in this niche sector. The diversification strategy has also allowed Blaze to recruit specialists keen to broaden their skillset across multiple industries, with a 50% increase in headcount in the last 18 months. This has brought new thinking and ways of working, and a healthy culture of challenge, that will ultimately benefit Blaze's clients, as they seek innovative solutions to protect their assets.

With a refined business strategy that is now focussed on a combination of export, diversification and innovation opportunities, Blaze continues to seek out new opportunities to ensure that this growth lasts. Owing to these ongoing achievements and growth drive, the firm is now optimistic that its revenues will rise from £4m in 2022/23 to £7m in 2023/24 – a significant jump that is fully within its grasp.

About Blaze

Blaze Manufacturing Solutions is a privately owned business providing technical safety and loss prevention solutions in the oil and gas, renewables, nuclear, mining, commercial and industrial sectors. This involves everything from the front-end definition of concepts, detailed design, supply and installation, and the commissioning and maintaining of active fire extinguishing systems and fire alarm systems both in the UK and internationally.

Story type
#culture (main category)
#export, #service & solutions

Benefits
- Successful geographic expansion of the company.
- Increasing teams and revenues.

Key findings
For industry
- Diversification needs to be carefully planned and executed because this will help with business sustainability and resilience.
- Don't underestimate the importance of your network, surround yourself with experienced, positive voices.

For government
- We need local content laws to be enforced, proving a level platform to the SME community.

Blaze at a glance:
Key products and services: Fire safety, protection and loss prevention solutions.

Main industries served:
- Oil and gas – 20%
- Renewables – 12%
- Nuclear power – 10%
- Others (industrial) – 58%

Headquarters: Aberdeenshire, UK
Year established: 2006
Number of employees: 35
Revenue: £4m
Revenue from exports: 7%

BMT

A purpose-driven enterprise focused on sustainable outcomes

Dr Louise Ledgard,
Global Business Development Director
Laura Blake, Sustainability Manager

How is BMT thriving?

BMT embarked on a revitalised sustainability drive a number of years ago. Underpinned by a refreshed purpose and with the essential ability to set and measure emissions targets, the company is determined to become net zero by 2035 and is taking its employees with it on this transformative journey.

The challenge

For global engineering, science, and technology management consultancy BMT, the opportunities and challenges presented by climate change have become increasingly important.

In 2019, it was recognised that the company needed to become more purpose-driven, with sustainability embedded at the board level and etched into the wider business strategy.

It was seen as an opportunity to prepare BMT for future regulation requirement, winning work and to attract and retain talent.

The solution

In 2020 BMT's executive committee agreed a new ambition for sustainability, to embed it into the organisation as an enabler for growth. Shortly after, BMT's refreshed purpose was agreed with the board as follows: "BMT exists to navigate the most important and impactful engineering challenges of our time. We create environments where people with outstanding technical knowledge deliver meaningful, practical solutions. We are driven by a commitment to a safer, more efficient, effective and sustainable future."

Their purpose has now become a pivotal mechanism in driving several steps to incorporate sustainability into the business.

From an organisational and structural perspective, BMT launched a dedicated sustainability action team, bringing together a diverse pool of people to discuss ideas and drive change. Meeting once a quarter, those involved have had their job scopes altered to allocate regular time to concentrate on sustainability issues. Meanwhile, the company's executive committee has added sustainability as a monthly agenda item, the aim being to embed it into every business function across the organisation. From January 2022, it is now also a regular item on the board meeting agenda.

Central to the strategy has been the setting of various science-based emissions targets. The company is due to have its net zero targets approved and published by summer 2023, the major goal being to become net zero across specific areas by 2035, with travel related emissions cut by 65% by 2030.

BMT seeks to hit these targets through the adoption of several key strategies. These include embedding digital technologies to streamline processes, pivoting its business delivery model to a regional setup, and purchasing carbon reduction credits - once they have done as much as they can to reduce their emissions.

Critically, the idea is to achieve behavioural buy-in across the entire organisation. Whether this is through how BMT manages its supply chain, to reducing travel. In support of this BMT is updating its policies and procedures and has provided supporting workshops, including advising executive management on how to cut their travel and incorporate more sustainable forms of transport into their journeys.

A broader discussion around ethics within BMT was also started in 2022. This has involved deliberations over how to approach traditional energy sectors such as oil and gas, and what type of stakeholders the company wishes to engage with moving forwards.

For instance, this is likely to entail ramping up its activity around smart grid solutions for energy management and distribution in rural and remote (off-grid) locations.

In Canada, BMT has designed a smart microgrid energy management (controller) and distribution system (switchboard) built from commercially available, off-the-shelf components, to create a solution that reduces both development costs and time required to integrate renewable energy sources.

Armed with a full-scale prototype, the company is currently engaged with a pilot project to achieve proof of concept and take a step closer to market entry. If successful, this has the potential to minimise use of diesel generators in remote communities.

In just a few short years, sustainability has shifted away from being a nice to have to becoming a fully-fledged driver of BMT's broader business. With a newly defined purpose and tangible action points in place across a number of areas, including the all-important ability to set and measure emissions targets, the company is well-placed to futureproof itself for the long term.

About BMT

Formed in 1985 following the merger of the British Ship Research Association and the National Maritime Institute, BMT is a leading international design, engineering, science, and risk management consultancy with a reputation for engineering excellence. Active in the oil and gas, defence, renewable energy, ports, risk management and maritime transport sectors, BMT has around 1,300 professionals located in 27 offices in Asia, Australia, Europe and North America.

Story type

#culture (main category)
#sustainability

Benefits

- Sustainability became a concern throughout the company.
- BMT futureproof to changing society and market's needs.

BMT at a glance:

Key products and services: Engineering, science and technology management consultancy.

Main industries served:
- Oil and gas – 19%
- Renewables – 1%
- Others (defence, maritime) – 80%

Headquarters: London, UK
Year established: 1985
Number of employees: 1,300
Revenue: £157m
Revenue from exports: 30%

Cokebusters

Breaking new boundaries with a pioneering intelligent pig

James Phipps, Managing Director

How is Cokebusters thriving?

Having dependably served the fired heater and power generation market for many years, Cokebusters was set an entirely new challenge to provide its trademark combined services solution to mechanically descale and intelligently inspect the ultra small diameter tubing within a vast solar steam array.

The ability to successfully develop and deliver this service has unlocked a stream of new business opportunities in the increasingly narrow diameter networks associated with alternative energy markets.

The challenge

Established in 2005, Cokebusters has forged a reputation as the international go-to for petrochemical and power generating operators seeking to clean fired heaters, steam generation plants and associated pipelines with its mechanical cleaning pigs.

As a highly effective cleaning device, the patented mechanical pigs have been the foundation and stalwart of the business and enabled it to operate sustainably for nearly two decades. Along its journey, the company found its customers asking for more. A challenge from Total to develop a pig which could 'see' how clean the surfaces really were triggered a chain of developmental events.

Today, Cokebusters' range of intelligent pigs not only enable customers to quantify how clean the process is, but they also provide full diametric and wall thickness profiling, thus enabling an essential insight into asset integrity.

In 2021, a new opportunity was presented to the company from Oman operator, Petroleum Development Oman (PDO) – to create a solution for the descaling and inspection of an equivalent 1GW solar steam array.

The solution

The assignment from PDO has opened the door for Cokebusters to enter a brand-new market, a crucial breakthrough that will be essential to the futureproofing of the business as the world embraces energy transition and net zero strategies.

PDO's Miraah plant converts water to steam by focussing solar energy. The steam is utilised for a variety of utility and process needs, including enhanced oil recovery. The array comprises some 100km of tubing, with each individual process loop being approximately 2km long.

One hurdle for Cokebusters to overcome was that its latest third generation (Mark V) intelligent pig, whilst capable of navigating an internal diameter as low as 65mm, was in fact still too large for the solar tubing network.

Undeterred, the company set about the development of a prototype intelligent pig that would be capable of inspecting internal diameters as low as 40mm. Key questions addressed during the design phase included how to create a robust exoskeleton which would house the ultrasonic detection sensors and be light enough to be sufficiently buoyant, as well as how to build a miniaturised power cell and what sort of end cap and brush design was most appropriate.

Several designs were tested specifically in response to these questions. Crucially, as well as being able to house all the electronics in a much smaller device, the design also had to allow flexibility to navigate through additional tubing restrictions.

Cokebusters had a working prototype within just six months. The testing process, using a purpose-built mimic loop, identified several new enhancements, including the need to modify the end cap design further as a result of potential water ingress and navigational challenges. Meanwhile, several iterations of circuit board and power design were also required.

In conjunction with smaller mechanical descaling pigs, a full-scale trial was conducted on site in August 2022. The pigs were able to successfully navigate and clean the complex circuits with a reported 20% enhanced efficiency, all whilst collecting valuable integrity data to produce 3D imaging of the solar steam tubing.

The trial's success is testament to Cokebusters' ability to turn a challenge into a solution; a feat all the more impressive given the firm wholly funded the R&D work behind the new Mark VI intelligent pig. With some minor equipment modifications required on site the company plans to complete the remaining scope in 2023.

Cokebusters has developed what is now believed to be the smallest, untethered, single bodied intelligent pig available worldwide. In doing so, the company has opened up an entirely new market for ultra small pipe diameters, a move which will support the progressive reduction on traditional power sectors such as oil, gas and coal.

About Cokebusters

Cokebusters is an international energy and utilities services business specialising in the provision of mechanical decoking/descaling, intelligent pigging, and associated integrity management advisory. From its world headquarters in the UK and regional headquarters in the US, the company is able to consistently deliver high quality services to the energy and utilities sector across the globe.

Story type

#innovation (main category)
#diversification, #technology

Benefits

- Successful development of a revolutionary new intelligent pig.
- Full contract pending following completion of minor engineering modifications on site.
- Ability to now provide rolling efficiency enhancement and integrity assurance for modern ultra small piping systems.

Key findings

For industry

- Be bold and take risks to feed innovation. You will succeed more often than you fail.
- Time and bureaucracy can kill off a good idea.
- Process safety should not take second place in the drive for transition.

For government

- Hydrocarbon knowledge and experience will feed innovation and transition.
- There is room and requirement for all forms of energy.
- Support for SMEs should be aligned throughout the UK. Experience shows how engaging and forward-thinking governments in Wales are.

Cokebusters at a glance:

Key products and services: Provision of technologies and services for specialised mechanical cleaning, water filtration and intelligent pig inspection of small diameter tubes, pipes and pipelines.

Main industries served:

- Oil and gas – 90%
- Conventional power – 5%
- Renewables – 2%
- Others (chemicals) – 3%

Headquarters: Chester, UK
Year established: 2005
Number of employees: 105
Revenue: £11m
Revenue from exports: 97.5%

Consortiq

Flying high by helping firms make the most out of their drone data

Gareth Beverley, Managing Director

How is Consortiq thriving?

As more and more companies take advantage of drones to carry out vital inspection and data gathering tasks, Consortiq has successfully repositioned itself as a consultative partner, pilot and pilot trainer capable of unlocking key productivity benefits. Such has been the success of the move, revenues are set to treble in 2023.

The challenge

Far from being a novelty gadget or a 'nice to have' for businesses, drones are quickly becoming a vital tool for energy asset operators seeking a more efficient, accurate and safer way to carry out critical inspections and surveys.

For London-based Consortiq, starting out in 2015 centred around CAA-accredited drone pilot training. Over time, the company realised the value in diversifying its services, moving into consultancy to offer advice on how clients in various sectors can make the most out of drone usage, as well as how to ensure data best practice.

This consultancy style work took off from 2018 as more and more companies sought about accelerating their digital transformation and industry 4.0 strategies. With drones entering the mainstream at the same time, the company soon realised it was sat on a potential gold mine of business – provided it positioned its offering and expertise in the right way.

The solution

The elevation of Gareth Beverley to CEO in 2020 sparked the beginning of a more joined-up approach to doing business.

This did not require a root and branch transformation by any means. Instead, the transition represented a natural evolution of the team so it could offer combined drone piloting, consulting and training in a seamless and flexible way depending on client needs.

Indeed, the key to shifting successfully has been to allow the experts within the Consortiq team to be able to follow new opportunities, a culture built around trust and scope for development, as well as learning and collaboration. Alongside this, the firm started to be more precise in its recruitment of skills, hiring talent to fill very particular gaps.

Now positioning itself as a consultative partner, Consortiq adopts a relationship building approach to doing business as opposed to operating on a purely transactional footing. This is proven by its 2022 revenue breakdown, which shows that 43% of all income is derived from activities with recurring clients.

Such customers include The Chemours Company, an American chemical firm that was founded in 2015 as a spin-off from DuPont.

Consortiq was onboarded in 2019, initially as a consultant. Over time, the relationship has progressed as the company sought to incorporate LIDAR into its asset inspection activities, Consortiq flying these specialist missions to ensure it reaps the full benefit of what LIDAR has to offer.

Since 2020, the enhanced use of drones has enabled The

Chemours Company to reduce the need for humans to be on site carrying out inspections in potentially dangerous areas and cut the amount of manual processes involved.

This has brought about key safety and financial benefits. For example, it is estimated that $9mn in costs can be saved annually on stack inspections across its sites by removing the need for expensive crane hire and human inspectors. Meanwhile, in the area of tank inspections, periodical checks used to involved US$125,000 per inspection – thanks to the incorporation of drones into the process, that cost is reduced to somewhere closer to US$20,000. Taking into consideration the scale of The Chemours Company's asset portfolio, Consortiq is enabling savings of around US$5–10m.

Additionally, the client looks set to make further efficiencies in parts ordering, the use of drones now enabling it to order only what is needed in a much more responsive manner. Likewise, its human workforce are now freed up to take on more preventative tasks, a move which should lead to superior uptime and reliability outcomes.

It is long-term, collaborative relationships such as this that typifies Consortiq's modernised approach to doing business.

Indeed, it is a strategy that appears to be translating into success financially, with revenues set to treble to US$3m in 2023 after the firm reached the US$1m landmark last year. By proving its worth across a multitude of drone-related services and positioning itself as the partner to help organisations maximise their use of drones, Consortiq looks well set on its onward growth journey.

About Consortiq

Consortiq are Drone Enablers. They bring together consultancy, training, and flying in their Enterprise Drone Blueprint, and using this blueprint Consortiq aims to enable 1 million drone flights for its clients in the next 10 years. Consortiq aims to help clients find a better way to improve their safety, efficiency and quality through the use of drones and robotic technologies.

Story type

#collaboration (main category)
#digital, #service & solutions

Benefits

- Revenues set to triple in 2023.
- Approach to doing business mordenised.

Key findings

For industry

- Don't be afraid to give people the freedom to learn and try new ideas.
- If you want to implement new technology successfully, need buy-in from the top, and promulgating through organisation. Bottom-up advocacy only gets you so far.

For government

- Reform the drone/aviation regulators to be forward-thinking, growth-based.
- Be less focused on bureaucracy, be more focused on the bigger market-creation prize.

Consortiq at a glance:

Key products and services: Use of drones and digital technology to customers safely and more efficiently.

Main industries served:

- Oil and gas – 45%
- Conventional power – 50%
- Renewables – 5%

Headquarters: London, UK
Year established: 2015
Number of employees: 10
Revenue: £821,910
Revenue from exports: 60%

COOEC-Fluor Heavy Industries

Providing high quality fabrication certainty during challenging times

How is COOEC-Fluor thriving?

COOEC-Fluor Heavy Industries (COOEC-Fluor) has been in operation since 2012. At over 2 million square meters, COEOC-Fluor is one of the largest fabrication yards in the world with a capacity to deliver in excess of 250,000 MT/yr and completed structures of up to 50,000 tonnes. With an unwavering focus on maintaining quality and safety, this fabrication yard has rapidly developed a proven track record in delivering for significant projects working with internationally renowned clients in offshore oil and gas, LNG, refining and chemicals.

The challenge

Around the onset of the Covid-19 pandemic, COOEC-Fluor had secured significant contracts for clients in Asia, Europe and the Americas. Among these were 157 modules for a large LNG project in Canada, 34 fixed platform jackets for an offshore windfarm in the UK, Asia's largest deepwater jacket to be installed in the South China Sea, as well as several other large onshore and offshore modular projects.

The yard faced several challenges during the pandemic period including multi-wave infection resurgence in the local area, price increases in bulk materials, manpower mobilisation challenges due to limited ability to travel weekly even within the provinces, and sometimes daily testing requirements for a crew of up to 15,000 craft workers, to name a few. In order to effectively mitigate these issues, COOEC-Fluor took a very pioneering and pro-active approach.

The solution

The major priority was to ensure that the Zhuhai fabrication yard always remained operational, responding effectively and efficiently to minimise impacts to clients' projects, all while always keeping its personnel safe.

Some of the strategies employed were:

- Developing specific safety policies to be implemented during the Covid-19 andemic.

- Establishing proper communication channels for Covid-19 and safety protocols.

- Developing proper quarantine protocols for incoming vessels and personnel.

- Providing free weekly covid testing for all craft and staff.

Due to these and other conservative measures, the Zhuhai yard did not have a single incidence of Covid-19 outbreak throughout the pandemic while the yard delivered over 125,000 MT of fabricated steel each in 2021 and 2022. While the initial phases of the pandemic proved challenging, this firm was successfully able to implement strategic control mechanisms to keep the yard open and operational without any compromise on safety and quality.

In the last few years, COOEC-Fluor has also made significant strides in developing and implementing a strategy for the offshore wind market. According to the Global Wind Energy Council, global offshore wind capacity will go from close to 100GW currently installed to over 300GW. Europe and China will account for the bulk of this installed capacity. With its large assembly area and production capacity, COOEC-Fluor has the ability of a "manufacturing driven" approach for the fabrication of offshore wind platform foundations and transition pieces and capitalise on this rapidly growing industry.

Looking ahead, the company is now exploring further international growth in renewables, deepwater oil and gas as well as large scale module fabrication for the upstream, downstream and chemical industries. With a proven domestic and international track record behind it, COOEC-Fluor looks well placed to expand its horizons even further.

About COOEC-Fluor

COOEC-Fluor Heavy Industries (COOEC-Fluor) is a joint venture formed by Fluor and China Offshore Oil Engineering Co. (COOEC), a subsidiary of China National Offshore Oil Corporation. Through COOEC-FLUOR, the appointed management team operates and manages the Zhuhai Fabrication Yard in China's Guangdong province. At 2 million square metres, the yard can accommodate fabrication modules weighing more than 50,000 tonnes.

Story type

#diversification (main category)
#collaboration, #export, #resilience, #service & solutions

Benefits

- COOEC-FLUOR becoming a leader in the Chinese fabrication market, delivering approximately 130,000 metric tonnes of fabrication solutions on an annual basis.
- Company building Asia's largest deep-water jacket and entering the renewables sector.
- Significant quayside accommodating large vessels without height restrictions for delivery to western locations.

Key findings

For industry

- As one of the largest fabrication yards in the world, COOEC-FLUOR is always engaged to offer the most efficient solutions to energy players by providing fabrication certainty.
- Worked diligently to prove that Chinese yards can offer a combination of quality and good value solutions.

For government

- Providing the most efficient solutions to renewables market in China, COOEC-FLUOR is exploring its way to contribute to the government's net zero commitment.

COOEC-Fluor at a glance:

Key products and services: Offshore fixed platform jackets and topsides, onshore modules fabrication and assembly, offshore wind foundations and substations, floaters, FPSO/FLNG modules, subsea equipment.

Main industries served:

- Oil and gas – 33%
- Conventional power – 33%
- Renewables – 33%

Headquarters: Zhuhai, China
Year established: 2012
Number of employees: 1,500 (direct yard employees) 10,000 – 15,000 (subcontracted employees)
Revenue from exports: 50%

deugro

Driving forward with digitalisation, innovation and energy transition

Jasmina Tuncheva,
Senior Tender Manager

How is deugro thriving?

Recognising the need to evolve in the face of difficult market conditions, deugro has taken significant strides forward on multiple fronts. From collaborating more closely with its clients, carriers and ports to leveraging market intelligence, tailoring client solutions, introducing innovative contract models and pursuing transformative energy transition and digitalisation strategies, the company has futureproofed with a brand-new business model.

Having successfully completed more than 200 onshore and offshore wind projects in more than 40 countries since 2003, deugro has established itself as a leading provider of key logistics services to the energy industry. From project planning and preparation to complex transport engineering concepts and the complete logistical handling of turnkey projects, the firm has built a renowned reputation.

The challenge

Despite deugro's solid position in the market, even the most robust companies have faced hardship in recent years. While the covid pandemic resulted in global economic and societal hardships that impacted capital investments, environmental and climate change commitments, and the global demand for goods and services, the Russian Invasion of Ukraine then further exacerbated the situation, adding even more uncertainty to global supply chains.

The key challenge for deugro stemmed from the fact that many of its major clients in the energy industry were used to standard contracting models based on long-term fixed rates, yet servicing these contracts proved to be a major challenge in this highly volatile freight market environment.

Some carriers would not honour long term fixed rate contracts nor commit on any rate validity. Obtaining space and equipment availability became a challenged due to the overdemand caused by the pandemic.

The solution

Given the circumstances, deugro recognised it would soon face significant financial difficulties and the inability to deliver project cargoes on time if it didn't work to overcome these challenges. In opting to proactively follow all market developments and indices closely, the firm successfully began to negotiate alternative contracting models for the project forwarding industry.

These models – including index-based pricing, cost plus options or various hybrid models – ensured deugro could provide the highest standards of service to its clients, even when it was faced with a lack of space and equipment availability, skyrocketing freight rates, port congestions and cancelled sailings. Critically, these models are now allowing its customers to benefit from cost efficiencies and optimise their supply chain costs, especially with the current softening of the freight markets in last few months.

At the same time, the firm worked extremely close with its clients on obtaining strategically informative and accurate project outlooks, supporting their planning and consolidation efforts while also looking at alternative modes of transport.

In addition to these alternative contracting models, deugro has placed strong emphasis on digitalisation and innovation in the last five years. First, the firm has invested into a new, state-of-the-art IT system called deugro visiotrack – a highly customisable customer information portal designed to help clients not only obtain live tracking updates on their cargo, but also acquire QHSES and financial project information. Meanwhile, the firm has also rolled out a new transport management system, Axis, a CargoWise integrated logistics execution platform, for its global forwarding operations.

deugro also has been looking at servicing both its traditional energy and EPC clients better while focusing on energy transition. Here, it has joined forces with NORDFROST in a strategic cooperation officially announced in January 2023 that will see the establishment of a new Green Energy Logistics Hub in Wilhelmshaven, Germany. It will serve clients in the onshore and offshore wind energy industry, as well as grid-related players. In terms of services, it will offer handling, storage, consolidation and commissioning of components, as well as condition inspection, packing and stowage/unloading of containers, import/export clearance and more, primarily to clients across Central Europe.

With its tide-independent access from the North Sea and direct, traffic-light-free hinterland connections to the German freeway, the new facility will enable the delivery of faster services. Existing port handling capacities guarantee an optimal process flow, while expansion options will be able to improve scalability.

deugro has adapted successfully in order to succeed in the face of tough and changing market dynamics. Today, 25% of the firm's revenue is driven by renewables spanning onshore and offshore wind and hydrogen, its energy transition journey now well underway. The company also looks to progress with its talent development and digitalisation strategies simultaneously.

From winning new contracts with existing clients (80%) and newly established customers (20%) to seeing greater success in the green market, deugro seems well placed to expand its already formidable footprint moving forward.

About deugro

deugro is a highly specialised project freight forwarder with a strong focus on turnkey logistics solutions for various industries. The company was founded in 1924 in Frankfurt am Main, Germany, and has a proven track record in successfully executing projects of any magnitude, even under the most challenging conditions and requirements. Thanks to a vast network of more than 70 company-owned offices in over 40 countries, deugro leverages comprehensive and in-depth expertise around the world to deliver on its promise.

Story type

#service & solutions (main category)
#collaboration, #digital, #innovation, #resilience

Benefits

- About 25% of revenues now coming from renewables projects.
- Over 90% of projects delivered in a timely and safe manner during the last 12 months.

Key findings

For industry

- Create future talent pools through skills and hiring, reskilling programs, flexible working. People are the best assets of our business, so look after them.
- Be open to embrace change to remain competitive.

For government

- Allow policy changes to foster innovation and develop human capital.

deugro at a glance:

Key products and services: Leading international project freight forwarder specialising in executing turn-key projects and engineering logistics solutions for various industries.

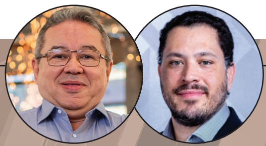
Main industries served:

- Oil and gas – 45%
- Renewables – 25%
- Conventional power – 5%
- Nuclear power – 5%
- Energy Transition – 5%
- Others (pulp & paper, infrastructure, mobility, mining) – 15%

Headquarters: Pfäffikon, Switzerland
Year established: 1924
Number of employees: 1,400
Revenue: £843m
Revenue from exports: 90%

EquipSea

Pursuing savinvy investments to emerge successfully from market crises



Claudio Evangelista, CCO
Vitor Ramos, CEO

How is EquipSea thriving?

A Brazilian manufacturer of welded, machined and coated parts and provider of turnkey tested sets, EquipSea has emerged from a difficult early period even stronger than before. Through a focus on quality, continuous client alignment and willingness to invest during hard times, the company has seen its revenues double for three consecutive years.

The challenge

EquipSea celebrated a successful sixth birthday at the beginning of 2023. And while it is a young company, its relatively short story so far has been fraught with challenges and curveballs.

While the organisation was founded in 2017 and enjoyed relatively fruitful beginnings, it was then plunged into incredibly difficult few years with Brazil's internal oil & gas market facing several major challenges. Between 2018 and 2019, the Petrobras crisis – labelled the biggest corruption scandal in Latin America's history that saw executives at Brazil's national oil company accepting bribes in return for inflated contracts – began to explode, causing market activity to grind to a near halt.

From 2020 onwards, EquipSea then equally began to experience the worst effects of the pandemic, including raw material shortages and price increases that all fed into an increasingly harsh national energy landscape. Undoubtedly, the Petrobras crisis was the main obstacle, but the pandemic prolonged the consequences for the market for a further year and a half.

The solution

Despite these hardships and its vulnerable position as a new company in the market, EquipSea continued to power on, the business persevering with its strategic growth plan that involved investing in new machinery and the expansion of its shop floor.

Although its projects were frozen, EquipSea's leadership made the major decision not to dismantle its team of 50-plus staff, instead pulling together and working tirelessly to put the company in the best possible position to emerge from the crisis stronger than when market conditions began to improve.

This decision was made easier by the strong relationships that the company had already cultivated with its industry partners in the short period it had been operating. Indeed, many of the major industry players in Brazil's oil & gas market reassured EquipSea that they would remain operational in Brazil for decades to come. Further, some even began to provide forecast scenarios for the coming years and queried EquipSea on how it would help to deal with those demands.

In fact, this kept Equipsea calm and faithful during an incredibly tricky period, providing the grounds to maintain confidence in the national oil and gas market despite the hardships and historical oscillations.

Further, EquipSea's candid conversations and open-door policy with clients enabled it to adapt its offering to better align with its clients' changing needs. While the company had originally been known for small-sized, lightweight and low complexity products, it began to take on projects that required welded fabrication and machining while improving its ability to take on complex technical tasks involving hydraulics, electrics and testing to cater to demand.

This willingness to align with clients' needs wherever possible didn't go unnoticed. Take its support of OneSubsea in delivering a project for Shell, for example. This was a unique development in which special welds (F22 and F65 with buttering) were required. Being the only company in Brazil with the specifications for producing such welds, EquipSea expands its capabilities from simple welds so that it could deliver special processes for global projects such as this. Resultantly, within the space of just three years, EquipSea has moved from being a top-10 supplier for OneSubsea to its number one partner in its category by the end of 2022.

With its turnkey tested sets ranging from three to five tonnes that include seals, hydraulic and electrical components, EquipSea continues to support clients with their extensive testing and assembly requirements. Further, it is now getting ready to develop turnkeys in the range of 30-35 tonnes to be delivered from September 2023 on, while planned future investments will also be put towards a production park, overhead cranes, the hiring of skilled people in testing, and a large testing bunker with capacity for 120 people.

Such investments are possible owing to the fact that the company has rebounded in the past couple of years, its efforts in building capacity and continuing with its improvement strategy during a difficult period having proven more than worthwhile.

Indeed, EquipSea's revenue has been doubled these last three consecutive years, up from US$3m in 2020 to US$12m in 2022, while its OTD and quality scores have continuously been improving with its clients.

Despite being a young company that started life in tough waters, it is clear that EquipSea has a bright future, especially when calmer waters arrive.

About EquipSea

EquipSea is a Brazilian manufacturer of welded, machined, and coated parts as well as turnkey tested sets including seals, hydraulic and electrical components with expertise in the oil and gas sector but not limited to it. Parts and sets in structural carbon steels, alloy steels, stainless steels (austenitic, martensitic, duplex, and super duplex), high-nickel alloys, from a few grams to 40 tonnes parts. Inconel cladding and high-precision machining, bunker for hydrostatic tests up to 30kpsi.

Story type

#optimisation (main category)
#scale up

Benefits

- Revenue doubled in the last three consecutive years.
- Major oil companies as clients.

Key findings

For industry

- Clearly determine your target market and clients, completely understand their needs and stay always close to them.

For government

- Create a healthy environment for business with tax reforms.
- In Brazil, fortify transport networks.

EquipSea at a glance:

Key products and services: Manufacturer of welded, machined, and coated parts as well as turnkey tested sets including seals, hydraulic and electrical components.

Main industries served:

- Oil and gas – 95%
- Others (pulp and paper, sugar, ethanol) – 5%

Headquarters: Piracicaba, Brazil
Year established: 2017
Number of employees: 120
Revenue: £10m

Fluor

A business inspired towards achieving net-zero ambitions

Helen Kilbride, Process Director

How is Fluor thriving?

The world's appetite for energy is changing and Fluor is meeting those needs with the adoption of a new approach inspired by the global mission to transition to net zero. Leveraging its formidable in-house expertise built up over the course of more than a century, the company is not only on its own journey to carbon neutrality but is also positioning itself as a developer of technological solutions to support energy transition strategies across several sectors. Today, it has several projects and people immersed in sustainability as it seeks to build its knowledge base further.

The challenge

In business since 1912, Fluor has carved a reputation for itself as a reliable provider of comprehensive engineering, procurement, construction and maintenance services for clients, delivering capital efficiency and project certainty through its highly skilled workforce that today stands at 40,000-strong. Throughout this time, it has ridden many challenges as market fortunes have fluctuated and today's energy consumers are not only seeking clean and sustainable energy, they are demanding it. A rethink was therefore needed – how could Fluor utilise its technical expertise to support clients on their decarbonization journeys and advance its own sustainability goal.

The solution

At the beginning of 2021, after a series of meetings looking inwardly and outwardly, a new strategy emerged in terms of how to position the business as well as achieve Fluor's own net-zero targets.

In broad terms, the strategic shift entails detailed engineering work in emerging technologies and engaging with clients earlier in their project cycles. This has involved examining and developing Fluor's own technology and IP, refocusing its people, and collaborating with start-ups, existing and new clients.

Fortunately, the appetite and culture for aligning with net-zero agendas was already strong. Internal expertise is being championed externally, with public sessions, knowledge building workshops and Q&As all becoming staple events in the Fluor calendar. The firm has established a dedicated Office of Technology which is pushing internal technology development strategies and exploring ways of taking its solutions to new markets. For example, Fluor is home to over 1200 patents, and over 15 licensed technologies. Fluor owns one of the top three proven carbon capture technologies and is helping not just traditional but other industry sectors such as cement and steel production to decarbonise.

For Hydrogen, the company is already applying its carbon capture expertise to make the production of blue hydrogen more affordable with a solution that cuts the space and energy required to produce it.

On the post-combustion side, in May 2020, Fluor was awarded the front-end engineering and design (FEED) for California Resources Corporation (CRC's) 550 MW natural gas combined cycle power plant, a carbon capture, utilisation and storage retrofit project at the Elk Hills Station in Bakersfield, California.

Collaboration with and learning from external partners, especially startups, is also proving valuable. Fluor is supporting prominent venture capital partners with programs that invest in companies utilising emerging technologies that reduce emissions. Strong partnerships have been built from this participation, which has also led to the company expanding its portfolio.

It has also been actively involved in the Carbon to Value (C2V) Initiative, assuming the role of Cohort Champion for Year 2 of the programme. A three-year initiative, the collaboration seeks to accelerate the CarbonTech industry by linking established and resource-rich entities such as Fluor with innovative startups to help bring solutions to market faster. 2022 saw the selection of eight CarbonTech companies across the globe under Fluor's stewardship, including Aluminium Technologies. They challenge traditional Aluminium manufacturing with their Carbo-Chloride Reduction (CCR) technology, which not only captures CO2 emissions, but also requires less power. Aluminium Technologies was facing challenges in scaling-up, so through the C2V program mentoring, they identified key risk areas and developed mitigation plans. In 2023, they are working with Fluor to design their first pilot plant. Fluor has built over 25 working relationships with stakeholders through this programme. Outside these programmes, Fluor also provides support to several university research projects in need of funding and expert advice. Indeed, such is the momentum being built by the new technology drive, the major challenge facing the company now centres around recruitment and being able to fulfil the work that comes its way. Although in revenue terms Fluor is still in the early stages of monetising this line of business, its involvement in several projects and programmes is certainly cause for optimism.

Meanwhile, Fluor's own aggressive net-zero target, i.e., net-zero for Scopes 1 and 2 by 2023, shows leadership towards sustainable solutions as compared to its competition.

About Fluor

Fluor provides innovative and sustainable solutions across a diverse range of markets while conducting business in a socially, economically, and environmentally responsible manner to the benefit of current and future generations. The company also delivers comprehensive engineering, procurement, construction, and maintenance services for clients, delivering capital efficiency and project certainty.

Story type
#collaboration (main category)
#culture, #innovation, #transformation

Benefits
- Fluor was recognised for its carbon capture, utilisation and storage retrofit project.
- Progress in net-zero push.

Key findings
For industry
- Do what's right and positive. Social responsibility "from the heart".
- Be patient, learn and consolidate skills, develop engineering expertise. You cannot shortcut this to progress your career.

For government
- More integrity is needed. Be stronger in context of what we need.

Fluor at a glance:
Key products and services: Engineering, procurement, construction, operations and maintenance, project management, fabrication, program management, design, supply chain management, logistics, power, energy, architecture and more.

Main industries served:
- Oil and gas, Energy Transition - 50%
- Others (infrastructure, advanced technologies, mining, US government, intelligence agencies and more) – 50%

Headquarters: Irving, US
Year established: 1912
Number of employees: 40,000
Revenue: £11.4bn

Fulkrum

Scaling up in anticipation of a turbocharged 2023/2024

Owen Gibbons, Commercial Director

How is Fulkrum thriving?

After another successful year of growth in 2022, quality control and technical services provider Fulkrum will be accelerating its global expansion strategy over the next couple of years. Having worked hard behind the scenes focusing on recruitment, restructuring and skills development, the company is seeking to scale up and open new streams of business as it continues to expand its offering to support cross-industry projects.

The challenge

Since establishing in the UK in 2011, Fulkrum has provided expert vendor surveillance and technical staffing services to companies operating in the energy industry around the world. With a network of in-house experts and an active database of over a million engineering and technical personnel, Fulkrum has steadily grown and expanded its infrastructure over time, enabling it to offer turnkey inspection, expediting, auditing and technical staffing solutions to clients in a responsive and agile manner – no matter where they are or what stage of the project they are working on.

As the firm headed towards the end of the last decade, the need to diversify into other energy subsectors became essential in order to properly scale and safeguard itself in the longer term. This would require a new approach to people and culture within the business, as it continues to deliver consistent and class leading service.

The solution

Over the last two years, Fulkrum has been implementing significant changes to support the growth of the business. A new leadership strategy was formed in 2020 which allowed Fulkrum to move away from a purely centralised decision-making model, with regional and departmental managers given the training and autonomy to drive business development opportunities in new markets.

One of the most significant moves was the promotion of Brock Falkenhagen to the role of Global Vice President in May 2022. Having seen significant success operating Fulkrum's Americas region after joining the firm in 2017, the decision was made to move him into a global position to spearhead international operations.

Recruitment activity has increased across the organisation, with Fulkrum bringing in new disciplines of people with the necessary expertise and experience as they put down roots in Guyana, Mumbai, Italy and Qatar, among other territories, to prepare for growth over the next couple of years. Indeed, across 2022, the company expanded its direct hire team by 16%.

Now led by an expanded HR team to drive hiring forwards, recruitment has been proactive in anticipation of winning clients, giving it the capacity to deliver immediately and efficiently. Alongside this, Fulkrum has continued significant investment in its proprietary software to help it better track project data and coordinate its operational processes. Named IRIS, the system has improved process efficiency and allowed key business performance metrics to be measured with opportunities for improvement realised. Fulkrum's team members have had their KPIs and performance tracking metrics refined to identify individual opportunities for improvement and skill development. This data is used not only to ensure compliance and consistency across all offices, but also to identify progression potential and promotion opportunities within the company's team.

Supporting the training and development of the team has been another important priority for Fulkrum. Streamlining company processes has involved 30-, 60- and 90-day check-ins during probation periods, while also making use of the in-house software platform to keep training and HR records up to date. These efforts produced quantifiable results, such as successful proposals to customers increasing by 49% and customer aged debt decreasing by 28%.

Change of this scale and speed is rarely easy to manage, and from a cultural perspective, the firm has also had to make adjustments to ensure its colleagues are onboarded and pulling in the same direction. Another component of Brock's remit has been improved internal communication and alignment. New flexible working arrangements have been received well across the company and have helped to keep engagement and retention rates high – this is vital given how competitive the talent market is. Similarly, budgets are allocated for regular social activities away from the office to encourage team bonding which further drives team performance.

Amid the ongoing behind the scenes activity, Fulkrum has also laid solid financial foundations from which it can grow through 2023 and 2024. Last year the business grew by 13% after a successful 2021. In 2023, Fulkrum expects to see a revenue growth of around 30% in as a result of recent contract awards, organic growth with existing clients, expansion into new territories, and further diversification into renewables.

Now, with the new structure in place and a growing team giving it a wider presence both technically and geographically, Fulkrum is poised to enter the next phase of its development journey that will see it continue its transition into a diverse and robust global player.

About Fulkrum

Fulkrum is a leading inspection, expediting, auditing and technical staffing service provider. As a trusted partner, Fulkrum enhances the quality and safety of clients' projects, safeguarding their operations and budgets whilst improving environmental performance. Its innovative solutions-based approach, technical capabilities, and highly skilled and motivated team ensure operational excellence across multiple sectors in more than 30 countries. Fulkrum works closely with clients and partners through the entire project lifecycle from feasibility, FEED and procurement to fabrication, construction, commissioning and beyond, ensuring compliance throughout, with an unparalleled level of engagement and commitment to the successful delivery of every project.

Story type
#people & competency (main category)

Benefits
- Successful proposals to customers increasing 49% and aged debt decreasing by 28%.
- Revenue calculated to grow 30% in 2023.

Key findings
For industry
- Continuously training your staff is key for improvement.

Fulkrum at a glance:
Key products and services: leading provider of expert quality control and quality assurance services to the global energy industry.

Main industries served:
- Oil and gas – 90%
- Renewables – 9%
- Nuclear power – 1%

Headquarters: London, UK
Year established: 2011
Number of employees: 70 (direct hire), 500 (freelance)
Revenue: £28m
Revenue from exports: 90%

Hempel A/S

Resilience and ingenuity: Hempel A/S pioneers epoxy intumescent solutions for a competitive edge

Rameer Tharola, Segment Development Manager – Global H-PFP

How is Hempel Paints thriving?

Recognising a gap in its portfolio of protective coatings a decade ago, Hempel Paints has invested a huge amount of energy in developing a product for clients in the hydrocarbon passive fire protection segment. Now, after many years of testing and refinement, the company is already making inroads with customers who have responded well to the new solution. With new contract wins secured and a growing pipeline of awards emerging, the decision to target this sector appears to be an extremely wise one, not least because the company can now position itself as a one-stop coatings shop for many of its customers.

The challenge

Any business that has been operating for a century has the right to say it has stood the test of time. Since 1915, Denmark's Hempel Paints has been developing, producing, and distributing paints, coatings and coating systems predominantly for the protective, marine, container, yacht and decorative industries.

Its ethos is simple – to provide high-quality, sustainable coatings solutions that protect and enhance surfaces and structures around the world. And it is a truly global enterprise, its footprint comprising 30 factories, 130 distribution points and 14 research and development centres that are operated by a workforce of 6,500 employees who oversee more than €2bn worth of business each year.

Despite the company's huge legacy and standing with clients in multiple industries, one relatively underexplored segment is hydrocarbon passive fire protection. A key challenge, therefore, lay in developing fire protection coatings that could fill this prime gap in its extensive portfolio.

The solution

Hempel has invested significant time and resources into R&D in the hydrocarbon segment. It has a dedicated department based in one of its centres in Spain which is charged with developing a product to cater to energy industry standards and offer something superior to what is currently available on the market.

In July 2022, the company launched Hempafire XTR 100. A lightweight product with easy application compared to its competitors, it has been successfully trialled against industry test standards and in highly corrosive environments. It is already proving popular with several large industry operators, including NOCs/IOC's and EPC's working in the downstream segment – key to its popularity, among other things, has been the ability to find the optimal balance between low weight and the quality of protection offered.

Getting to this point has been a decade in the making, with the testing cycle alone lasting several years to ensure it can perform against numerous tests and standards.

During this time, the company's business development team has been working in the background with operators and asset owners to get the product specified prior to launch.

Winning over prospective users of the product has not been difficult. Hempel is over 100 years old and represents a trusted brand with a solid client base who already had a demand for this new service. Now, with its portfolio as complete as it has ever been, the company can serve as a one-stop coatings shop for many of its customers. In addition to the Hempafire XTR 100, Hempel offers additional services which include on/off field technical support, applicator training program, fire engineering, application assistance and specification writing. The company also offers customised solutions and on-site support for customers around coatings selection, project management and inspection services.

Being a member of the EIC has also proven valuable in terms of branching out into the hydrocarbon fire protection segment, not least because it has enabled Hempel to network with other industry players, gain access to market intelligence, and stay up to date on the latest trends and regulations in the energy sector.

Although it is still relatively early days, the firm has already made some key strides in the form of significant contract wins, its project pipeline and awareness increasing in line with growing awareness of the new product offering. Over time, the ambition is to grow its client base, the company identifying more than 160 clients and new clients that could benefit from its latest product development.

About Hempel Paints

Hempel A/S is a global coatings manufacturer that develops, produces, and sells coatings and related products for the protective, marine, container, yacht, and decorative industries. Hempel's main activity is developing, producing and distribution of coatings.

Story type
#optimisation (main category)
#innovation

Benefits
- Significant contract wins.
- More than 160 clients and new clients identified.

Key findings
For industry
- Understand requirements in your market and bring in a sustainable product to fill this gap, you will do well.
- Accept new ways of working and technologies to deal with in a changing market.

Hempel A/S at a glance:
Key products and services: Protective, marine, decorative and yacht coatings, technical support, training and application assistance.

Main industries served:
- Oil and gas – 45%
- Others (marine) – 55%

Headquarters: Copenhagen, Denmark
Year established: 1915
Number of employees: 6,500
Revenue: £1.85bn

Koil Energy Solutions

Embracing a new culture centred around innovation and energy transition

Charles Njuguna, President & CEO

How is Koil Energy Solutions thriving?

Confronted with a series of challenges, Koil Energy has emerged thanks to a major strategic rethink and sweeping cultural change. In pivoting proactively towards energy transition technologies, the firm has succeeded in instilling a mindset shift across its employee base that is now focused on curious thinking, collaboration and innovation.

The challenge

Design, engineering, manufacturing, installation and after-market services provider Koil Energy (formerly Deep Down, Inc.) is an enterprise primarily focused on delivering subsea energy products and services.

Back in 2019, the firm faced turbulence and change in the aftermath of its founder retiring. With Charles Njuguna stepping into the role of CEO, he became tasked with steering the company in a new, futureproofed direction – challenging aspirations as Covid-19 hit just a few months later.

Faced with negative oil prices, increasingly intense energy transition demands and the volatility of the pandemic period, Koil was plunged into uncertainty. The bread and butter of its operations was centred around hydraulics – a specialism that the industry was speaking about leaving behind as organisations worldwide actively began moving away from oil and gas.

The primary concern was clear. How could the company overcome its challenges, transform under new leadership, and establish status as an important player in a rapidly evolving industry?

The solution

If Koil Energy was to transform effectively in an industry that was transitioning, significant change would be required. The organisation recognised it needed to retain the best parts of itself from the past, while repositioning for the future.

This strategic shift culminated in a rebrand in March 2022, the firm moving away from its former name as it pursued a new strategy pathway aimed at energising the future of the subsea energy sector while preserving a standard of creative solutions developed over the years.

“Koil Energy may be a new name, but our DNA remains the same… As our customers expand their horizons beyond traditional oil and gas, this move is a charge into a new era, with a steadfast commitment to what we pride ourselves on, nimbly finding unique ways to enhance offshore energy operations,” said Njuguna, commenting on the rebrand.

The focus of the strategic repositioning was two-pronged. First, the company sought to continue to have an intentional focus, whilst widening its reach in relation to innovative industry technologies. Expanding its reach beyond oil and gas required an internal cultural change. Second, to both influence and obtain buy-in to this cultural change, Koil Energy created cross-functional working groups to act as charters to drive cultural changes in various areas, including operational excellence, growth and sales, products and innovation, ESG and sustainability, brand and market perception, and talent development and retention.

These groups provided Koil Energy's employees with the platform to take ownership of the firm's transition, encouraging them to think innovatively. It enabled engineers with a passion for marketing to contribute to marketing efforts, and service technicians to suggest process improvements outside their original areas.

The initiative has improved cross-functional relationships, providing staff members with the confidence to suggest and implement disruptive improvements and changes. To maximise involvement across the groups, Koil Energy has rotated participants across these charters. Further, the company moved into a new facility in September 2022. It has invested heavily in amenities such as flexible desks, creating an entirely new clean and modern look and feel. Its new campus now has state-of-the-art breakout rooms, a game centre, gym and wellness rooms. Critically, with everyone now operating out of one central location, the team has become increasingly unified, physically breaking down potential internal divisions.

While these cultural and office shifts underpin the core shift in thinking at Koil Energy as it moves into a new era, much has been achieved since Njuguna became CEO. The result of this focus on collaboration has been several changes. Indeed, the company is now more intentional in its efforts, slowing down the pace of change around HR initiatives to more effectively gauge and measure success, for example. And it has also revamped its paperwork, establishing a more precise, fluid and quality-centric system.

A deep dive into Koil Energy's equipment strategy to position more effectively for energy transition has also led to several changes. Where the firm was historically provided multi-quick connect (MQC) plates by others, it now manufacturers its own such products including a new version rated 20,000psi for new frontier energy projects, based on a patent-pending design containing 50% fewer unique part numbers, while increasing capacity by over 125%. These tweaks are testament to the company's embrace of change. No longer do Koil Energy's employees ask "if", but "how", with a mindset shift having swept across the company. With this philosophy now at the heart of the enterprise, it is now poised for innovation in the coming years.

About Koil Energy Solutions

Koil Energy is a leading energy services company offering subsea equipment and support services to the world's energy and offshore industries. The company provides innovative solutions to complex customer challenges presented between the production facility and the energy sources. Formerly Deep Down, Inc., the Houston-based company was founded in 1997, and is comprised of world-class experts in engineering, manufacturing and offshore installation, with a fearless commitment to Energizing the Future.

Story type

#culture (main category)
#energy transition

Benefits

- Koil Energy better positioned for energy transition.
- Internal processes enhanced.

Key findings

For industry

- The oil & gas industry not done enough to drive the energy transition conversation. It is a source of good, it can drive the energy transition. Oil and gas can be part of the solution.

Koil Energy at a glance:

Key products and services: Design, engineering, manufacturing, installation and after-market services of subsea energy products and services.

Main industries served:

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

Headquarters: Houston, US
Year established: 1997
Number of employees: 49
Revenue: £10.5m
Revenue from exports: 25%

MHB

Year of tremendous growth for MHB with net profit surging to RM68m, the first NPAT since 2017

Pandai Othman, CEO and Managing Director

How is MHB thriving?

Malaysia Marine and Heavy Engineering Holdings Berhad (MHB) has embarked on a series of strategic shifts and transformations over the past two years, where these realignments have facilitated it to return to profitability at a far greater magnitude than previously expected. Now, with a healthy pipeline of projects awarded and currently being developed by both business divisions i.e., heavy engineering and marine, momentum is clearly gathering pace.

The challenge

The past decade has felt like an unrelenting conveyor belt of challenges. Year after year, companies operating in the energy space have been hit hard by the low oil price scenario from 2014/15, economic downturn and ongoing geopolitical tensions in various parts of the world.

The COVID-19 pandemic in particular has caused disruptions, for instance, forced shutdowns of activities, new safety procedures, and a crunch in the supply of labour which often relies on seamless cross-border travel.

MHB is no stranger to these dynamics. Faced with such a mix of challenges, its leadership embarked on a detailed reassessment of risks, challenges and opportunities. Indeed, if it was to emerge from this period of difficulty stronger, the company needed to realign its key strategic priorities to ensure sustainable growth and enhanced competitiveness. In short, it had to demonstrate 'adaptation' and 'prudence' to reverse four straight years of losses and return to profitability.

The solution

Having conducted a thorough strategic risks and opportunities assessment, MHB enacted several transformations through 2022 that have driven its turnaround.

The first focus was on capability development. Here, the company developed three functional core teams in the disciplines of Design Engineering, Transportation & Installation (T&I), and Hook-up & Commissioning (HUC). Alongside this, it also expanded the scope of its in-house work to strengthen self-reliance for critical processes, as well as upskilled numerous employees through external courses and on-the-job training.

Another key transformation executed was in the form of digitalisation. Named the PANTHERA initiative, the strategy centres around optimising and digitalising end-to-end Engineering, Procurement, Construction, Installation & Commissioning (EPCIC) supply chain management processes, from bid preparation through to end of warranty. Work processes will be documented, and data altered and used with transparency, reliability and traceability to establish a single source of truth for any particular project at any one time. Although this digitalising effort is still being implemented phase by phase, the company is already reaping its commercial benefits.

The third key focus concerns culture, especially in regard to the way MHB approaches risk management. Over the last two years, the company has totally revamped its risk-related processes, setting up a host of standard procedures that made risk management compulsory, clear and transparent for prudent decision making. To this end, MHB has averted financially onerous projects and risky investments.

Finally, the company has been ironing out critical issues that have led to project delivery challenges across every department of heavy engineering. This has involved identifying gaps in personnel and process, leading to the creation of 30 mitigation plans which were executed and tracked progressively. Most of these gaps have been closed, notably in areas around the bidding process as well as activities in the Front End Engineering Design (FEED) verification.

Implementing such root-and-branch changes has not been without its obstacles. It has required a mindset shift for all employees, moving away from a focus on individual roles into holding a sense of accountability and understanding on how they contribute to the overall business. Employees have also had to be reassured during periods of financial losses, with communication of turnaround strategies and successes being critical to keeping people motivated, optimistic and on board.

All these initiatives have fuelled a remarkable financial recovery through 2022. Headline figures for the year include a total order book of RM6.6bn, which was among the highest in MHB's 50-year history, and a profit of RM68m, first net profit after tax (NPAT) since 2017. Both the heavy engineering and marine divisions have played their part. The former, for example, was awarded the Kasawari Carbon Capture & Storage (CCS) project, the first of its kind in Malaysia and the world's largest offshore CCS project by volume of CO2 captured. Meanwhile, the marine division secured 53 projects from 41 new clients, 31 of these being international customers. This paints a much more optimistic picture than what MHB was faced with at the start of 2022. Having remained measured and taken the time to evaluate the areas in need of transformation, the company is now very much on an upward trajectory and once again firing on all cylinders.

About MHB

MHB is a globally trusted energy and marine solutions provider for a wide range of offshore and onshore facilities and vessels. It has 50 years of track record in delivering integrated and complex solutions to international oil & gas clients. Owns and operates the largest fabrication yard in Malaysia and Southeast Asia that is equipped with world-class facilities, MHB is recognised for its expertise in offshore deepwater fabrication, offshore conversion services and ship repair which include LNG carrier repair and dry docking. MHB also owns three dry docks which are amongst the largest dry docks in Southeast Asia. MHB is also commonly known as Malaysia Marine and Heavy Engineering Sdn Bhd or simply MMHE, its wholly owned subsidiary and main operating entity.

Story type
#transformation (main category)

Benefits
- Headline figures for the year include a total order book of RM6.6bn, which was among the highest in MHB's 50-year history, and a profit of RM68m, first net profit after tax (NPAT) since 2017.

Key findings
For industry
- Be meticulous and precise when considering the risk of any venture. Always ensure that you are able to deliver on your promise in order to maintain your client's trust.
- Your people are your biggest asset. Take care of them through tough times, guide them to perform their duties with sincerity and integrity.

For government
- Implement easy and clear tax facilities for export products via specific export schemes, as well as tax exemption on import duties and sales tax on material purchased or imported for construction/ production of the products for export.

MHB at a glance:
Key products and services: full EPCIC services for the offshore energy industry; and comprehensive marine services (repair, maintenance, conversion, refurbishment, etc) for all types of marine facilities

Main industries served:
- Heavy Engineering – 79.6%
  - Oil & Gas
  - Energy Transition
- Marine Repair and Maintenance - 20.4%

Headquarters: Menara Dayabumi, Malaysia
Year established: 1973
Number of employees: 3,933
Revenue: £278m
Revenue from exports: 20%

Mott MacDonald

Helping to put hydrogen on the European clean energy map

Prem Mahi, Technical Excellence Director – Energy

How is Mott MacDonald thriving?

Having already proven itself as an early backer of new technologies when it picked up a significant market share in carbon capture more than a decade ago, Mott MacDonald continues to place its faith in solutions designed to advance the journey to net zero by 2050.

Of particular note is its current involvement in developing hydrogen (H2) production capabilities in Northern Europe, the company taking on the role as a technical and commercial partner in a project to develop a network of offshore wind farms in the North Sea that will power onshore green H2 production. Given the project is backed by a consortium of industry heavyweights, the contract award is another major feather in Mott MacDonald's extensive cap.

The challenge

A longstanding, multi-sector engineering and management consultancy service provider, Mott MacDonald has witnessed first-hand the peaks, troughs, breakthroughs and challenges facing the energy sector over recent decades.

Today's challenge very much centres around how to transition to a net zero society in a way that is feasible by 2050. The UK, along with many other nations, has made strong commitments that continue to be solidified at successive COP conferences, and time is getting away if targets such as those outlined in the Paris Agreement are to be met.

Mott MacDonald can approach this challenge from a privileged position. Thanks to its formidable experience, it is able to help set industry thinking and passionately cares about meeting 2050 deadlines. The key question facing the company, therefore, lies in what projects to back and to ensure that its skills and knowledge are both futureproofed and invested in the right areas.

The solution

The company has been a proactive exponent of its partnership with EIC. Leveraging its contacts and information hub, it has been able to identify energy transition trends early and therefore invest in the relevant people and capabilities ahead of the curve, a formula which has won over clients time after time.

This was undoubtedly the case with carbon capture, a technology it placed huge faith in and resultantly gained a significant market share in the early UK market. This included the installation of carbon capture and storage at Longannet power station in Scotland, a UK first at the time (2009).

Today, it is actively positioning itself in the thermal energy transition market, as well as various applications of green hydrogen and associated products such as ammonia, ethanol and e-fuels. Indeed, hydrogen has been on the company's radar for at least six years, with activity in this space snowballing since the turn of the decade.

In 2021, Mott MacDonald secured involvement as the principle technical and commercial partner for NorthH2, an international consortium that is jointly investigating the feasibility of large-scale production, storage and transmission of green hydrogen in north-western Europe.

Made up of Groningen Seaports, Eneco, RWE, Equinor and Shell, the group is investigating how a large-scale supply of hydrogen fuel can be achieved by working together on all aspects of the supply chain – from wind energy and electrolysis to transmission and storage. Ultimately, its aim is to supply industry with 4GW of green hydrogen by 2030 and 10GW per year by 2040, at which time it will be producing 1,000,000 metric tons on an annual basis.

With its multifaced expertise and track record for backing technologies in their early days of development, Mott MacDonald is perfectly positioned to support NorthH2. The work entails a technical scope, as well as consultancy on health and safety, commercial, permitting, and environmental and social issues. Phase one involved calculating potential costs to produce the hydrogen, with phase two currently looking deeply into various engineering and technology solutions to make the project viable. Once these studies have been completed, positioning for phase three and the introduction of architect engineers will begin.

Although still at a relatively early stage, Mott MacDonald's involvement to date is testament to how the company is viewed by some of Europe's most prolific developers. The company has form in making the right call on emerging energy technologies, a track record that has paved the way for the opening of yet another door into energy transition and Europe's net zero journey.

About Mott MacDonald

Mott MacDonald has a uniquely diverse range of consultants delivering extremely high profile projects across the world. Their purpose is to improve society by considering social outcomes, relentlessly focusing on excellence and digital innovation, transforming clients' businesses, communities and employee opportunities.

Story type

#energy transition (main category)
#people & competency, #service & solutions

Benefits

- Efforts towards energy transition and net-zero goals.
- The company's good reputation among some of Europe's most prolific developers.

Key findings

For industry

- Energy transition will happen, don't be afraid of it. Have a flexible mind.
- Identify the key players. It's difficult to get action with too many players involved.

For government

- Mandate carbon capture on all thermal power plants before moving to other policies.

Mott MacDonald at a glance:

Key products and services: Multi-sector engineering and management consultancy service. The sectors covered are transport, energy, water and buildings and cities. Also, international development sector.

Main industries served:

- Conventional fuels – 10%
- Conventional power – 25%
- Nuclear power – 35%
- Renewables – 15%
- Energy Transition – 15%

Headquarters: Croydon, UK
Year established: 1989
Number of employees: 18,000 (Global), 8,000 (UK)
Revenue: £2bn (Mott MacDonald turnover), £300m (Energy turnover)
Revenue from exports: 70%

RevEnergy

Achieving rapid expansion through "empathy selling"

Hazry Hassan, Senior Business Development Manager

How is Rev Energy thriving?

In a mere half decade, RevEnergy has enjoyed incredible success. Through a culture of continuous learning, the firm has prioritised the training and development of its staff that have become industry experts through a cradle to grave approach to operations, quickly building confidence in its customer base surrounding competency and efficiency. With key client Petronas on its books and revenues growing at an astounding speed, the firm has established a renowned reputation in a short space of time, underpinned by its unique "empathy selling" approach.

The challenge

Founded in 2017, Malaysian enterprise RevEnergy remains a relatively young company. An organisation providing comprehensive solutions for valves, actuators, fire protection, sealant and other equipment, it has faced two key challenges in its first five years of operation.

To enter and establish itself in the market, it needed to develop a niche with a reputable brand and proven products – a feat that is easier said than done when starting from scratch. Critically, it had to register its products with Petronas before finding a way of successfully competing with existing players.

Building on this, the firm also recognised it would need to develop the technical knowledge and skills to supplement its offering and bring value-added solutions to its customers. As a new company, RevEnergy saw this strategy centring around the hiring of a combination of experienced professionals and graduates that would be hungry to learn. For this reason, a strong company culture was imperative.

The solution

Hiring the right people was naturally a key priority, with RevEnergy able to nail this by securing the talents of seasoned industry experts that were renowned among its founders, OEMs and industry peers. Crucially, this injected a significant level of confidence in the company's capabilities from the outset, providing comfort relating to RevEnergy's competencies to key parties such as investors.

In this sense, while the firm wasn't known in the market at launch in 2017, it could lean on the personal reputations of its employees as it got off the ground, successfully convincing customers of its capabilities and technical knowhow.

To consolidate this reputation, the firm worked tirelessly to improve its knowledge base and reputation in its early years. To achieve this, an internal business culture was implemented which assigned a single engineer or team to take charge of each project from cradle to grave. With this culture, all its staff would be exposed to the whole value chain.

This also included a focus on ensuring that the company didn't lose visibility in any transition from sales to project teams. The firm's leadership were all too used to this causing efficiency and delivery issues from experience in previous roles, and thus made sure these same challenges didn't creep into Rev's own operations.

The value of this approach has already been proven through several successful projects. A contract delivered for Malaysia Marine and Heavy Engineering Sdn Bhd (MMHE) stands as a primary example, in which the engineer involved in the quotation and bidding stage was also the engineer who oversaw project management, enabling RevEnergy to successfully deliver for its client with minimal issues.

In many ways, the firm's position as a young, agile company enabled the adoption of this culture. With the enterprise setting out as something of a blank canvas, it has been able to develop a key unique selling point through its "empathy selling" approach.

In essence, this revolves around ensuring any sale will offer a genuinely valuable solution that solves a customer's problem, rather than driving revenue regardless of potential outcomes. By building rapport with prospective clients and gaining the understanding of their business and needs, the firm demonstrates genuine interest in offering bespoke support and build client relationships centred around candid conversations and comfort.

To achieve this, RevEnergy ensures all its sales staff are trained to be curious. They are taught to listen diligently and clarify any uncertainty to ensure that the prospect's exact demands are understood, while also enabling the company to better manage expectations and clarify what is realistic. In this way, Rev can align the best possible solution to match the needs of its individual customers in any unique situation.

Albeit a young company, RevEnergy has successfully carved out an esteemed reputation in the market owing to its customer-focused approach and commitment to knowledge building in just half a decade of operations.

The firm's revenues in 2022 were 17 times greater than in 2018 – testament to its already renowned reputation, established through several successful projects. Among these, the firm secured a major contract with Petronas in 2019, the Malaysian oil and gas major now retained as a key repeat client after delivering a strong service.

Looking ahead, RevEnergy is now eyeing continual year over year growth, as well as diversification of its business portfolio both in terms of contract type and geography – goals that should be easily achievable considering its sizeable success to date.

About Rev Energy

Rev Energy provides comprehensive solutions for valves, actuators, fire protection, sealant and other equipment. The company has an abundance of choices in oil and gas, refinery, pipeline and chemicals, from the most lavish zero leakage valves to the simplest flame arrestors.

Story type
#culture (main category)
#resilience

Benefits
- Rev Energy offers bespoke support and build client relationships centred around candid conversations and comfort.
- Big increase in revenues.

Key findings
For industry
- Passion for the business, people and the desire to help others succeed are essential criteria to enable the company to grow.
- Help others succeed and create a culture of openness that allows the expression of ideas for improvement, whilst maintaining strict conformance to the values and objectives of the company.

For government
- Rev Energy were able to secure the needed facilities from the financial institutions to run its business with the government's help on a partial guarantee through SJPP, which provided an alternative solution to collateral requirement needed to secure the necessary loans. The government policy on this has been instrumental on the survival of SME companies such as Rev Energy which has made it viable with the necessary fundings gap.

Rev Energy at a glance:
Key products and services: Comprehensive solutions for valves, actuators, fire protection, sealant and other equipment.

Main industries served:
- Oil and gas - 90%
- Conventional power – 9%
- Energy Transition (CCUS) – 1%

Headquarters: Shah Alam, Selangor, Malaysia
Year established: 2017
Number of employees: 18
Revenue: £6.2m

Samuel Knight

Diversifying to build resilience

Dan Kerr, Managing Director – Energy

How is Samuel Knight thriving?

Having survived the pandemic period thanks to an onshore wind breakthrough in the US, Samuel Knight has sought to build resilience to combat future adversity, diversifying its operations, regions of interest and revenue streams to enhance its offering across multiple energy sectors.

The challenge

Like many businesses operating in the energy sector, the pandemic period was a torrid time for Samuel Knight. As a market leading recruitment and project manpower specialist, providing engineering, technical and construction professionals on a permanent, temporary and project basis globally, the impacts of social distancing measures and national lockdowns on the company were severe.

Fortunately, Samuel Knight found isolated success with an onshore wind farm client in the US that, by the company's own admission, saved it during this tough time. However, having emerged from this, the firm quickly sought to put the necessary provisions in place to build resilience in the face of continuing tough market conditions, ensuring it could not just survive by thrive in the face of any future adversity.

The solution

Having downsized by 25%, the leadership team took the opportunity to revisit the vision and purpose of the business in 2021 to ensure any renewed strategy could be cultivated on strong and clear foundations.

Here, the new objective of making the organisation a 100% employee-owned business was highlighted as a means of creating a culture of greater accountability, while also improving internal buy-in on key growth strategies.

While there is 20% institutional investment in the business from a silent partner at present, Samuel Knight is aiming to buy this external party outcome 2024 – a move which will enable it to redistribute those additional shares to its staff in support of its improved ownership agenda.

At the same time, the company has also been focused on adapting and evolving to capitalise on new market opportunities.

This diversification and de-risking strategy was a direct consequence of the challenges faced during COVID. While the firm has continued operations in its traditional markets that include renewables, conventional power and training and development, its successes in onshore wind paved the way for it to develop a fully-fledged project solutions business in the US, as well as working in verticals including solar, battery storage more recently.

In the case of solar, Samuel Knight has supplied commercial solar racking solutions provider TerraGen with a team of experts comprising project managers, operations managers, assistant site manager, project engineers, O&M engineers, performance engineer and many other roles, supporting the company with The Edward Sandbourne Solar Farm in the Mojave Desert – one of the largest projects of its kind in the United States.

With a total capacity of over 2,200 MW enough to power more than 300,000 homes, the project was completed in several phases, the specialists supplied by Samuel Knight having helped these to be carefully planned and executed.

Additionally, the firm has also moved away from its historical focus on recruitment and towards a hybrid offering – part independent service provider, part recruitment partner.

While this undoubtedly helped to consolidate its position in the US market, Samuel Knight has since taken the same approach and applied it in Europe, adopting a project service solution in the Nordic renewables market to great effect in 2022. In the area of conventional power recruitment services, meanwhile, the company has moved from supplying one or two supplementary individuals to entire teams.

Indeed, this multi-faceted transition has not come easy. The firm has had to grow its pool of suitable candidates significantly while also grappling with cashflow challenges that were exacerbated by stretched internal headcounts – this being necessary to deliver its improved client solutions. Further, it was critical for the firm that these initiatives remained self-funded, ensuring it did not have to seek more support from, and lose additional equity to, institutional investors.

Despite these challenges, however, the successes are clear to see. Revenues in 2022 (£20m) exceeded those of 2021 (£13m), 2020 (£17m) and 2019 (£12m), with £5m having been derived from US solar last year (up from £2m in 2021). Additionally, Samuel Knight's client base has grown – having supported approximately 80 active clients in 2021, this number increased to roughly 130 in 2022.

Resultantly, the company now stands with a more diversified and resilient revenue mix, a position that is only likely to be strengthened moving forward as it rolls out its new 'tech' offering that will support all sectors with solutions such as plant efficiency monitoring.

With this improved stance in mind, the firm's 2024 objectives now seem well within reach.

About Samuel Knight

Samuel Knight Energy is a global recruitment and project manpower specialist, providing skills and project solutions to the energy sectors on a permanent, contract and project basis. The company's contractor services offering includes mobilisation of contractors, payroll, immigration, registration, taxation as well as contractor care and localisation. SK Energy also provides bespoke skills testing, competency-based interviewing as well as industry and market trend insights.

Story type

#diversification (main category)
#resilience

Benefits

- Growth on annual revenues.
- New clients wins.

Key findings

For industry

- Have a plan, retain flexibility, but stick to the plan.
- Be open, be innovative and adapt to the market that is forever changing.

For government

- Engage with the policies that impact up front. Stop kicking the problem down the alley.

Samuel Knight at a glance:

Key products and services: Provider of specialist technical and engineering manpower.

Main industries served:

- Renewables – 60%
- Conventional power – 30%
- Energy Transition – 10%

Headquarters: Newcastle, UK
Year established: 2014
Number of employees: 70
Revenue: £20m
Revenue from exports: 75%

Score Group

Adapting to deliver tens of millions in sustainability-driven savings for clients

Scott B Will, Business Unit Director Europe and Africa

How is Score thriving?

World class valve management services provider Score Group has turned a corner after focusing on its emissions reduction capabilities. Having identified that valves account for 60-75% of operational leaks, the company has launched a new Emissions Elimination Program (EEP) underpinned by a unique four-step process. Score's program delivers major reductions in customers' total carbon footprint, as well as multi-million-pound savings annually for a wide range of clients throughout the world.

The challenge

Like many companies operating in the energy industry, Score found itself navigating significant turbulence spanning several years, driven by a combination of price uncertainty, energy transition and covid-imposed challenges that had resulted in postponed projects.

As the global drive to reduce Green House Gas (GHG) emissions accelerated year on year, oil and gas exploration activities waned. Equally challenging to growth post-pandemic, the company has suffered at the hands of industry skills shortages.

At the same time, Score was undergoing its own transition. Having been a family-owned enterprise for almost 40-years, the firm was acquired by private equity firm SCF Partners. Score was left facing a tricky predicament, with revenues down during the pandemic period, and several staff exiting.

The company knew it needed to adapt, taking a hard look at how to grow in line with rapidly evolving market demands to improve its presence, margins, and current skillsets.

The ultimate goal? To tap into new markets and help clients to reduce their total emissions, all while growing Score and ensuring the business remained an attractive and prosperous place for current and future employees to work in.

The solution

In 2021 the firm changed its tack as it shifted focus to supporting emissions reductions through a newly developed service offering. This service is called the Emissions Elimination Program (EEP), which offers a new and unique four-stage, end-to-end solution for emissions management.

Firstly, they survey with the best available technologies and tools (including some of their own in-house developed equipment) to measure and benchmark emissions at source. Secondly, they then analyse the survey results, to allow them to prioritize and deploy their repair methods and technologies, targeting maximum emissions reduction. Thirdly, Score's elimination process commences delivering their repair services, methods and technologies that measurably mitigate total emissions. Finally, their "closed loop" approach leads into a continuous improvement phase, where they seek to engineer out recurring failures.

All work is managed through their unique software solution provided by their digital partner, enabling the client to monitor the environmental performance of their entire asset and track any / all emissions through to repair.

Critically, in recognising that 60% to 75% of emissions come from valves, as a valve specialist company, Score saw that it could make a massive difference to its clients' performance.

While the company had essentially been working to support emissions reduction for 40 years, it had never marketed itself in such a way, and therefore repackaged its offering to demonstrate the prospects and customers the sustainability impacts that its solutions could deliver.

Score has invested in looking at how it could make better use of existing skillsets and technology. In doing so, it has developed an EEP tool kit including its in-house developed and award-winning acoustic monitoring equipment, while also working with their digital partner to develop a bespoke software solution, which will hold and manage all survey data and provide clients with detailed evidence, reports and actionable insights.

The company's focus has changed, with its attention being turned towards building a sustainable future for all stakeholders. By expanding its horizons and taking on new projects, Score has demonstrated the difference it can make to clients, gaining the confidence to further invest and grow its EEP service provision.

The results of this change of tack are striking. Whilst this new offering remains in its infancy, customers have already intimated they have been very impressed by Score's survey results, and the capabilities and competencies of their newly trained in-house emissions elimination technical experts.

For one customer, the company surveyed 62 relief valves, finding that eight were leaking into flare lines. In fixing these, the firm reduced the loss of 147 pounds/hour of flared gas, equating to a £250 saving in lost product per hour, or £2.2m annually. For another, Score designed a tailored integrity clamp to eliminate a highly unique leak. Following the initial survey, the clamp was designed, tested and installed within five days, with the client benefitting from eliminating the release of 18.3 tonnes of methane annually.

With tougher legislation in relation to emissions measurement, reporting and management anticipated to emerge moving forward, Score is working hard to optimise and improve its offering that is already delivering major, measurable benefits for its customers. Between upfront works delivering remarkable cost reductions and the organisation's efforts to continuously monitor and eliminate emissions and avoid legislative penalties, the value to customers of its new approach cannot be understated.

About Score Group

Score Group was founded in 1982, by the late Charles Ritchie as an engineering services provider for valve management, and industrial gas turbines solutions. Today, the company is a global market leader in valve management and associated services for the upstream oil and gas industry. The company is now owned by private equity firm SCF Partners.

Story type

#sustainability (main category)
#culture, #innovation, #service & solutions

Benefits

- Score's survey results delivered major benefits to customers.
- Improvements and optimisations in Score's offerings to clients.

Key findings

For industry

- Be adaptable and think outside the box to have more than one product in your portfolio.
- Changing people's perceptions and culture can be tough, but it can be the most rewarding outcome.

For government

- Drive through oil and gas methane partnership methodology.

Score Europe at a glance:

Key products and services: Specialist in valves and associated equipment.

Main industries served:

- Oil and gas – 89%
- Conventional power – 3%
- Others (non-energy) – 8%

Headquarters: Aberdeenshire, UK
Year established: 1982
Number of employees: 820
Revenue: £93m
Revenue from exports: 19%

Shipham Valves

How a 225-year-old business successfully started over

Rob Moulds, Managing Director

How is Shipham Valves thriving?

Shipham Valves has survived eight years of hardship to emerge stronger than ever. Under new ownership, the company has invested £4m in manufacturing and R&D, doubling revenues in 2023, with strong markets, great teamwork, skills and culture, and a 225-year reputation to draw upon.

The challenge

Shipham Valves is one of the longest established, highly trusted and most respected valves manufacturers in the world. Founded all the way back in 1798, the longevity of the business speaks of its track record, experience and quality of service and solutions. Through time, the firm has continued to adapt to cater to market needs.

However, that is not to say that the company hasn't faced tough times.

Back in 2012, Flow Group (the former owner of Shipham Valves) was acquired by Hamworthy, then Hamworthy was acquired by Wartsila in late 2012, putting Shipham Valves in a precarious position. Internal frictions started to emerge and during 2018 the entire management team decided to leave the business, compounding internal conflicts as Wartsila had closed Shipham Valves' machine shop and made many of its machinists redundant.

Shipham Valves resultantly found itself in a position where it had lost nearly all its staff, with a distinct lack of internal knowledge of the business.

The solution

Where Wartsila's acquisition of Shipham Valves' had not worked out as intended, the subsidiary was eventually put up for sale in January 2020, with Managing Director Rob Moulds, who had initially joined in July 2018, finding a buyer in October 2020.

Resultantly, the company resumed operations as a standalone SME, Moulds having laid much of the groundwork ahead of the sale to ensure it could embark on this new chapter in the firm's extensive journey successfully, bringing expertise back in house.

The immediate focus post-acquisition centred around re-investing to rebuild internal capabilities. Indeed, £3m was spent on machines, with a further £1m being invested in research and development – significant expenses that were made amidst the uncertainty of the pandemic.

A new ERP system was also installed and the firm's QMS system redeveloped, various audits being passed to re-establish Shipham Valves reputation as a market player with leading capabilities. Further, all of the company's products had to be standardised once more.

It was a prolonged and tricky period of rebuilding lasting 18 months in total, the company having to work hard to repair the reputational damage it had suffered during the previous eight years. The company had lost all its approved vendor lists (AVL) approvals, for example, while it also took two years for it to bring good engineers back on board.

However, having worked hard to iron out a multitude of operational and reputational creases, the organisation has laid the foundations for a new, more prosperous era moving forward.

In order to bridge the skills gaps it has faced for the longer term, Shipham Valves has both reinstated its apprenticeship scheme and partnered with Ron Dearing UTC to gain input into the priorities for technical training. As a result, it is now able to provide tailored training to push talented employees forward into new roles with tailored development programmes, enabling it to build high performance teams over the long term with improved talent retention.

The company's culture has also been revived, driven by the setting of a clear vision and values that are now at the centre of everything the organisation does. Specifically, this approach was set and delivered by Moulds, who has taken inspiration from Goldman Sachs' training programme.

Come April 2022, the Shipham Valves machine shop had become fully operational again, and the company's order book began to grow in tandem. Indeed, having entered 2023 with £9m of projects on the horizon, the company is now targeting revenues of £17.6m for the year (it already has £13m booked) – double what it achieved in 2022.

Equally, its offering and footprint have begun to simultaneously expand. Indeed, the company is in the process of rolling out new product ranges spanning the LNG and hydrogen markets as it seeks to participate more actively in net zero opportunities. Further, after establishing a presence in key export markets including UAE, Singapore, Malaysia, India and UK, the firm opened a new sales office in Houston and Dubai, with a further site set to open in Kuala Lumpur, Malaysia, soon.

Albeit a business 225 years in the making, the company's startup mindset which it has adopted over the past two years has provided reason for optimism. Taking the time to lay the optimal foundations for its revival, the company is now well set to reach even greater heights as it embarks on this latest, exciting chapter in its ever-expanding story.

About Shipham Valves

Founded in 1798, Shipham Valves started life as a brass foundry supplying products including brass valves, bells, cocks, gauges and whistles to the shipping industry. Since the 1930s, Shipham Valves has become one of the longest established and most trusted and respected manufacturers of high-quality alloy valves for severe service and safety-critical applications involving seawater and other corrosive media.

Story type

#transformation (main category)
#culture, #resilience, #people & competency

Benefits

- Partnership with Ron Dearing UTC resulted in tailored training and development programmes for employees.
- New product ranges spanning the LNG and hydrogen markets.

Key findings

For industry

- Get the right people, with the right attitude.

For government

- Business is difficult enough already, stop adding more complexity. Why would people set up a business right now? Make it easier.

Shipham Valves at a glance:

Key products and services: High-quality alloy valves for severe service and safety-critical applications involving seawater and other corrosive media.

Main industries served:

- Oil and gas – 80%
- Conventional power – 5%
- Energy Transition – 2%
- Others (sea water utilities, marine, desalination, fire suppression) – 13%

Headquarters: Brough, UK
Year established: 1798
Number of employees: 80
Revenue: £8.2m
Revenue from exports: 85%

Siemens Energy

Supporting the world's largest renewable-powered LNG facility

Patrice LaPorte, VP Sales Compression Americas

How is Siemens Energy thriving?

After years of stop-start progress which delayed the Woodfibre LNG facility, this highly anticipated project is finally becoming a reality. Selected as the key compressor, auxiliaries, electrical equipment and expertise partner, Siemens Energy stands ready to support the project and make it the greenest of its kind in the world.

The challenge

Getting a new greenfield LNG project off the ground has not been a straightforward task in recent years.

The current energy crisis, triggered by the Russian invasion of Ukraine, has once again thrown the dynamics of the sector off balance after the Covid-19 pandemic brought global economies and industries to a near standstill through the course of 2020 and 2021.

For Siemens Energy, identifying which green energy projects to focus on, as well as how to shape their approach to them, has been a highly complex process during this period that has tested the company's agility and ability to respond to rapidly changing circumstances.

However, the company's involvement with Woodfibre LNG in British Columbia, Canada, is a tremendous piece of business that places it at the heart what promises to become one of the largest and greenest energy projects the world has seen to date.

The solution

Located between Squamish and Vancouver, Woodfibre LNG is based on a former pulp mill site and, once operational, will be the world's greenest LNG export facility.

The demand for low-emission Canadian natural gas is high, especially in countries looking to make a transition to cleaner energy systems from their current base of coal as a primary fuel source. In order to export Canadian natural gas to overseas markets it must be cooled to -162 degrees, and by using renewable hydro-electric power to fuel this process, the site will become the lowest-emission LNG export facility globally.

Compared to conventional LNG facilities, Woodfibre will be able to reduce carbon emissions per tonne of LNG by approximately 86%. In addition, the project will create more than 100 jobs and contribute around US$80m in taxation to the Canadian government every year.

Siemens Energy will be playing its part as the project enters the construction phase. Siemens Energy's scope includes providing all the major rotating equipment (including large compressors and synchronous motors), connections to the grid and electrical systems (including variable speed drives and complete power houses).

The task is complex. Because the site will be powered by hydroelectric, Siemens Energy had to carry out several analyses with the client to ensure it correctly specified all electrical equipment and avoids reliability issues in operation. Additionally, the reliability of the grid must impact the operation of the LNG facility. Meanwhile, other complicating factors include raw material price increases, current material delivery impacts, CSA requirements and the remoteness of the site itself, which adds in extra considerations when it comes to installation and decommissioning of the facility.

Risk has also been added by the project's stop-start status ever since it was initiated in 2017. Financial difficulties caused delays in these early years, before the Covid-19 pandemic arrived and put the brakes on progress. Finally, in early 2022, Woodfibre LNG was ready to move forward, only for the Ukraine crisis to ignite a matter of weeks later. However, rather than scupper the project, the war in Europe has highlighted the urgent need for LNG developments such as this to advance as quickly as possible.

Despite the complex nature of the project and ever-changing backdrop against which it is being developed, Siemens Energy secured the contract in March 2022 by impressing on a number of fronts, including its e-LNG electrical experience for large motors and drives; complete technical support of the EPC and the client during - the FEED and demonstration phases. Acquiring certification has also been no mean feat, especially given the stringent processes adopted by Canadian authorities.

Today, Siemens Energy stands ready to help Woodfibre LNG into the engineering and construction phases with a view to delivering equipment in 2025. The current schedule will have operational by as soon as 2027. When it comes online, the facility will have a storage capacity of 250,000 m3 and produce approximately 2.1m tonnes per year of LNG.

About Siemens Energy

With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power generation and transmission to storage. The portfolio includes conventional and renewable energy technology, such as compressors as well as gas and steam turbines, hybrid power plants operated with hydrogen, and power generators and transformers. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy.

Story type

#energy transition (main category)
#sustainability (main category)

Benefits

- Project currently fully under execution.
- Start-up expected in 2027.

Key findings

For industry

- Don't believe that technical solutions that are true one day will remain true for the rest of your life.
- Believe that energy transition can be driven with gas.

For government

- Help companies to get tax incentives and facilitate permitting processes.

Siemens Energy at a glance:

Key products and services: Power generation gas turbines, grid transmission, compression, steam turbines and wind business.

Main industries served:

- Oil and gas - 80%
- Energy Transition – 20%

Headquarters: Berlin, Germany
Year established: 2020
Number of employees: 91,000
Revenue: £24bn
Revenue from exports: 17%

TEXO

Much more than a video streaming solution

Pat McKay, Director

How is TEXO thriving?

TEXO believes in innovation. Rather than being content with the way things are, the Group and its divisions are always looking for ways to improve and offer greater value to customers. TEXO Technologies already knew that its video-streaming platform was a great tool. But the team felt it had much wider applications across multiple sectors. In order to tap into that market, the division took the decision to investigate that growth potential. After listening to customers, testing the waters with different marketing campaigns, developing a new training programme and building a portfolio of successful use cases, the business is gathering financial and reputational momentum.

The challenge

Expanding TEXO's technologies across several new markets presented a range of challenges, the most pressing of which was creating market awareness. The division, established in 2022, had two product lines: a remote streaming solution; and a data management platform

The original market focus for the technologies relied on meeting survey, inspection and maintenance needs. However, senior leaders in the business saw an opportunity to rebrand both product lines, expand their use cases and demonstrate the considerable value they can bring to customers.

The video platform was identified as a gamechanger. Traditional video streaming solutions offered limited functionality for industrial users, whereas TEXO's product offered features including remote snapshots from a video stream, live annotation, footage storage and facial recognition redaction. The ability to live stream from a bodycam also offered numerous advantages for energy sector customers, especially around conducting and viewing asset inspections remotely.

The challenge lay in branding this technology properly, getting the right messages out to the market, and building a team that could maximise the product's potential. Now called 'Fuse', this solution was much more than a video streaming solution.

The solution

TEXO built a plan to address these two key challenges: Messaging and building a team.

First, the company undertook a major listening exercise. This involved talking to customers about their own challenges in light of the operational changes they experienced during and after the pandemic period. TEXO used the results of these conversations to build a clear idea of how Fuse could support these customers to work more efficiently, safer and across borders.

Alongside this, TEXO Technologies developed a series of test marketing campaigns and carefully tracked their performance. The firm examined the success of and response to different types of content – for example, using streaming cameras on machinery such as cranes to create a small campaign directed at construction and port services. This revealed what messaging was having an impact, helping the team to focus its efforts and budget in the most productive markets.

Secondly, the division started to look for the perfect balance of expertise to meet its commercial targets. With a strong management and operational team in place, it was the technical team that needed expanding – and within a short time frame so that the business could capitalise on its opportunities.

To manage this challenge, TEXO Technologies set up its own Graduate-to-Industry training programme, a means of fast-tracking new entrants into the business. This has been extremely successful, and the division is now seeking to roll out the scheme to other businesses and training providers. With a focused marketing strategy and a pipeline of emerging technical talent on stream, TEXO Technologies is now far better placed to bring Fuse to market.

Indeed, the company has already had commercial success in the port services market. In Rotterdam, it successfully supported the installation of a new 1,500-ton J-Lay tower onto McDermott International's newly converted AMAZON vessel. Partnering with body camera hardware firm Halo, TEXO's Fuse system was operated live in areas where the client did not want to place people due to heavy lift hazards, offering a much safer means of installing the tower.

Meanwhile, for ORE Catapult, TEXO's technology has enabled the annotation of live video footage capture by a drone to instruct local technicians working on a wind turbine. Located 200 miles from the client's base, this has saved considerable time and resource by removing the need to transport more people to the site.

Overall, given the early stage of the business, the signs are extremely encouraging. Having posted healthy but small returns in 2022, TEXO Technologies is on track to double its turnover this financial year, with significant returns coming from its bodycam video streaming solutions – a clear sign that its newly focused commercial strategy is starting to producing a significant return on investment.

About Texo

TEXO is an Aberdeen-based multi-disciplinary industrial services company that provides services in the oil and gas, renewable energy, nuclear energy and marine sectors. The company's team is made up of engineers, constructors, surveyors, designers, creative thinkers, service-givers and problem solvers. TEXO offers seven distinct services: Engineering & Fabrication, Workspace Solutions, Asset Integrity, Recruitment, Port Services, Livestream and Land & Aerial Surveys. Between them, these services support customers both onshore and offshore to design and complete essential projects on time and on budget. TEXO Group won "Young Business of the Year" at the Courier Business Awards 2019, "Transformation Award" at the EIC Awards 2021 and "Business Transformation" at the Scottish Engineering Awards 2022.

Story type

#digital (main activity)
#innovation, #people & competency

Benefits

- TEXO Technologies calculates to turn over £450,000 in 2023.
- 'Together we are one' approach enabled £40m in revenues for group.
- Insertion in new market bearing fruits.

Key findings

For industry

- Having a passion and drive is great but it's not always enough, you can still push in the wrong direction. Listening more and talking less does have its benefits.
- Seriously look at solid technical skills shortages and address them.

For government

- Support businesses that are taking it upon themselves to address skills training (a fund that helps businesses develop training programmes internally).

Texo at a glance:

Key products and services: One-stop shop with services for the whole asset life cycle: engineering & fabrication, workspace solutions, asset integrity, recruitment, port services, livestream and land & aerial surveys.

Main industries served:

- Oil and gas – 50%
- Renewables – 20%
- Others (building, utilities, marine) – 30%

Headquarters: Aberdeen, UK
Year established: 2018
Number of employees: 100
Revenue: £40m

TNF Energy

Overcoming eight challenges through key strategic changes

Tengku Faiz Tengku Yusoff, CEO

How is TNF Energy thriving?

Despite being founded only five years ago in 2018, TNF is already making headway as a survey technical support and engineering specialist. With unique expertise in providing professional laser scanning and 3D modelling services, the firm has successfully completed more than 500 surveys, mapping, engineering projects and converting asset to digital twin data.

Having overcome a series of issues through a major change in strategy, the firm is now able to combine its significant suite of the latest technologies; laser scanner, UAV, GNSS & GPS and generate 3D models for clients, accelerating production and uncovering major cost savings.

The challenge

A company that is just half a decade in the making, TNF Energy has had to overcome several challenges as it navigated significant uncertainty in the years following its inception. Broadly, these can be split into eight key categories.

First, the company found it hard to talent familiar with key technologies such as PDMS and S3D software, both owing to geographical and budgetary constraints. Second, the firm also required significant capital to launch as a digitalisation company, investing in key tools such as laser scanners and software licenses.

Thirdly, the firm faced stiff market competition, driving down potential profit margins, and fourthly it faced the challenge of convincing prospects that its solution was technically sound and commercial sound as a new enterprise.

Budgetary constraints and approval durations proved to be a fifth issue, while the sixth stemmed from the fact that discussions and proof of concepts required to demonstrate the viability of its solutions were lengthy. The seventh challenge then related to considering market share and untapped opportunities, while the eight surrounded contractor concerns of job opportunities being slashed due to displacement by technology.

The solution

Despite the odds being stacked against it on several different fronts, TNF Energy has continued to preserve, adapt and evolve in order to iron out client concerns and gradually build its reputation as a survey technical support and engineering specialist in the market.

In the middle of 2019, the firm embarked on a new market strategy, implementing a dedicated proof on concept (POC) and targeting the operation and maintenance (O&M) department. In addition, the firm introduced a new way of working with full visibility that emphasised the high accuracy through 3D digital twin technologies.

The latter offered several benefits. With digital twin technologies, TNF Energy can mitigate site reworks, accelerate production times, reduce downtime and more for its clients.

Critically, Petronas Sabah (SBA) was one of the earliest beneficiaries of this switch in emphasis, this successful contract paving the way for others to follow suit, providing

TNF Energy with a proven reputation and significant market credibility.

Where the company had previously experienced several points of friction with its clients relating to hook up and commissioning, prolonged shutdown times, lost injury time, and the lack of availability from 3D models and digital twins, it has adapted specifically to mitigate each and every one of these potential combative challenges.

Today, TNF is now able to combine its significant suite of tools, including laser scanning, UAV, GNSS and GPS, to generate the digital twins that can then be converted into 3D formats with realistic photo image for its clients. Further, the firm is also developing an artificial intelligence (AI) algorithm for the detection of corrosion, enabling it to produce accurate inspection, expedite and improvise the corrosion preventative maintenance reports digitally.

These changes have been transformative. Indeed, TNF is now providing its customers with full visibility into the design and construction aspects of projects to improve alignment, relationships, as well as enhancing its execution of projects and restoring assets into digital format, make it more valuable data to all asset owners. Not only has production been accelerated, but the change intact has also provided tremendous cost savings and an expanded project schedule with 0% HSE issue and 0% non-conformance report (NCR).

The figures speak for themselves. Where revenues sat at RM172,800 (USD$38,740) with a profit margin of 22.9% in 2018, this has growth significantly to RM7,997,329 (USD$1,792,922) and 59.35% in 2022. The growth also come along with the increase of manpower resources. TNF started with only 15 personnel in 2018, and now has more than 100 personnel on the field that are always ready to serve the industry.

Indeed, after a bumpy start, the future looks unquestionably bright for TNF Energy with a new branch opened in Bangkok, Thailand and Lumut, Brunei.

About TNF Energy

TNF Energy is a 100% Bumiputera company, focusing on its expertise in providing total solution from survey up to engineering services. As a licensed company with PETRONAS, and with over 12 years of experiences, TNF has served most of the mega players in the oil and gas industry such as PETRONAS, Shell, ExxonMobil, PTTEP and has completed more than 500 surveys and mapping, including engineering, oil and gas projects, non-oil and gas projects, in and outside Malaysia. Throughout the years, TNF has always focused on striving to be at the top on possessing up-to-date technology know how on its field

Story type

#innovation (main category)
#technology

Benefits

- Technology suit for technical & non-technical personnel.
- Production enhanced and accelerated.
- 0% LTI, 0% NCR.
- Commercially attractive product and adaptable to any local market.
- 3D digital available 24/7.

Key findings

For industry

- R&D must be part of the business plan. Small improvement on innovation can bring big changes to the company revenue, profitability, and also sustainability.
- Always seek to improve services or products and avoid comfort zone attitude.

For government

- Embrace technical, commercial, and local content criteria when evaluating any tender or development grant.

TNF Energy at a glance:

Key products and services: Engineering, laser scanning, as-building, underground mapping, soil investigation, artificial intelligence and digital twin.

Main industries served:

- Oil and gas – 60%
- Conventional power – 15%
- Renewables – 10%
- Others – 15%

Headquarters: Petaling Jaya, Malaysia
Year established: 2018
Number of employees: 105
Revenue: £1.5m
Revenue from exports: 20%

Vahterus

Sustaining quality and service excellence in a period of rapid expansion

Leighton Nicholas, Key Account Manager

How is Vahterus thriving?

In the face of a rapid rise in demand for its products across all core sectors and regions, Vahterus has been successful in overcoming key challenges including skills shortages and supply chain issues to maximize market opportunities. Thanks to savvy investments in facilities expansion, R&D scaleup and US collaboration, the firm has sustained its emphasis on delivering premium solutions to customers while doubling its order intake to €100m in the space of two short years.

The challenge

Plate and shell heat exchanger technology specialist Vahterus entered 2021 in an extremely positive position. The firm had begun to experience exceptional demand for its products, with its sales in all sectors across EMEA, APAC and America having achieved unprecedented growth. The firm's order book was filling up at a dramatic rate, driven by recent forays into the LNG, heat pumps and hydrogen markets.

This was of course positive. However, such high level of growth needs careful management, and it presented several challenges. Owing to its partnership approach of working with customers to develop bespoke solutions that meet specific needs, the firm was accepting orders that did not immediately have the answers to – particularly as it had begun operating in new markets involving new technologies.

As it experienced higher growth than it had ever anticipated, it faced difficulties in meeting its customers' requirements on price and lead times. And while scaling up in such a short period would be incredibly challenging, the task was made greater as a result of the strains that had been placed on critical supply chains by both the pandemic and Russian invasion of Ukraine.

The solution

Vahterus had to quickly adapt to respond to this rapid and extensive growth and continue to meet customer requirements while maintaining its core values on quality. The main challenges the firm encountered were in expanding its manufacturing capacity to meet the global demands for its product, the company opting to further develop its local manufacturing facilities and assembly capabilities to support its key business regions.

Here, the decision was taken to extend its core facilities in Finland and in mid-2021, the company successfully doubled its plate pack assembly production capacity with a new 3,000m^2 production facility, Vahterus' biggest expansion yet. With the building now complete, the manufacturing machinery is expected to be in place by the end of March that will compromise of critical robotics solutions which will serve to improve factory performance.

Alongside this, the firm eyed expansion overseas. Having opened its first assembly facility in China for the Asian market with great success 10 years ago, the decision was taken to replicate that very same model in the US. This process started at the end of 2021 when the company acquired US-based manufacturing entity Harliss Specialties to support its supply chain capabilities in North America and decrease the delivery times in the region. With the newly improved manufacturing headquarters in Finland providing the foundation for the business, Vahterus also successfully enhanced its regional footprint with its own US-based facilities.

Enhancing its square feet in manufacturing was only part of the puzzle, equally, the company's headcount also had to be expanded appropriately. This was no easy task. Indeed, the firm needed to quickly acquire many more highly skilled individuals with specific expertise in R&D, welding and manufacturing – a task that was made difficult in current markets with high employment rates. Any new welders also had to be vetted, tested and assured – a process which can take 3-4 months. However, in successfully persuading many overseas experts to relocate and join the company, Vahterus successfully raised its headcount from 350 at the start of 2021 to 450 just two years later.

This rapid expansion has been a taxing process, demanding long hours from its R&D, project and manufacturing teams to meet the demand of new technologies, and requiring the training of 100 new employees over a sustained period of months. However, the firm has ultimately been extremely successful.

Not only has it seen its turnover explode but it has been able to sustain its core values focused on people, quality, service and delivery, whilst continuing to provide a tailored approach to its customers and successfully establishing itself in its new core markets of LNG, heat pumps and hydrogen.

Vahterus has achieved an incredible amount in such a short space of time and is now looking on continuing the growth and development into 2023, better and stronger than before.

About Vahterus

Established in 1990, Vahterus is a Finnish family business focused on sustainable heat exchanger solutions. The main drive was to invent a new type of heat exchanger, combining the benefits of the shell and tube heat exchanger and the plate exchanger, and Plate & Shell Heat Exchanger (PSHE) technology was born. The PSHE heat exchanger is utilised in various demanding processes in the oil and gas, chemical and process, energy and refrigeration industries worldwide. Vahterus currently employs more than 450 people globally, with headquarters and manufacturing facilities in Finland and subsidiaries in the UK, Germany, China and the US, and a global network of more than 50 distributors.

Story type

#scale up (main category)
#collaboration, #diversification

Benefits

- Biggest expansion yet: new 3,000m^2 production facility.
- Reached €100m barrier in order intake in 2022.

Key findings

For industry

- Follow your dreams – you can start your own business in your garage (as CEO did in Vahterus).
- Don't rely on your legacy equipment to survive just hiking prices – keep investing through the tough times as well or instead.

For government

- Keep the investment flowing consistently to keep people in employment and investors committed to deliver on net zero.

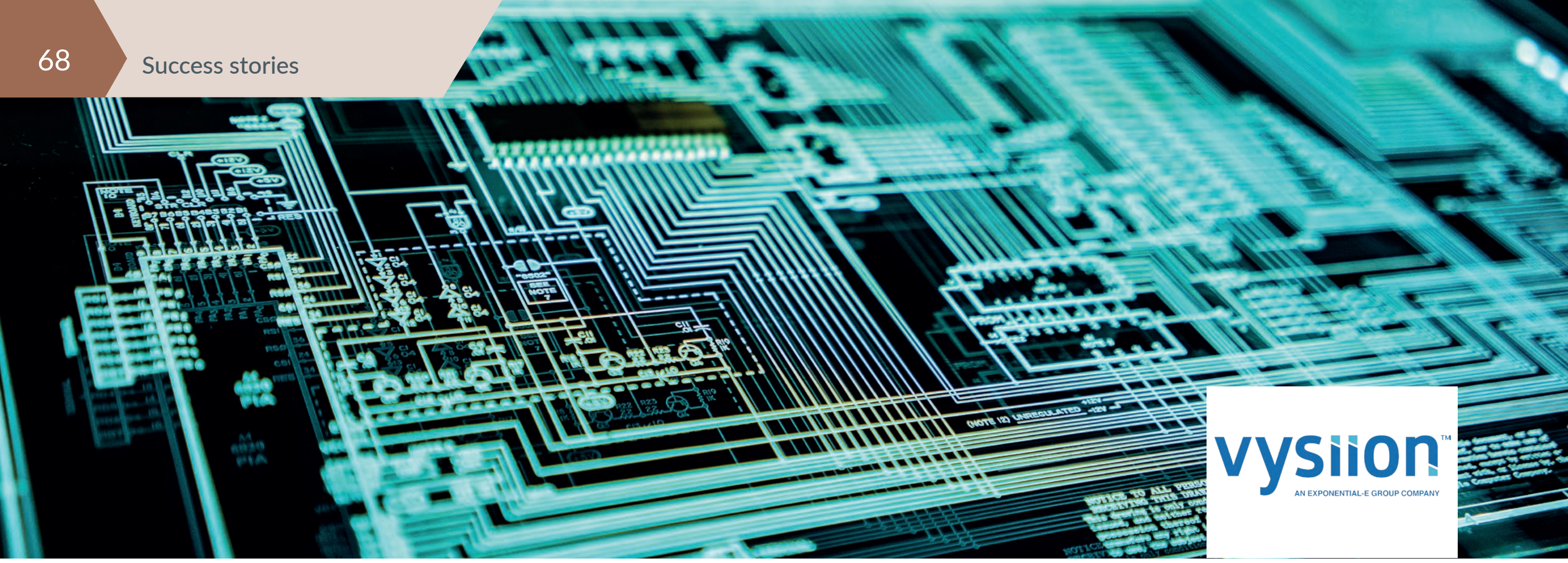
Vahterus at a glance:

Key products and services: Market leader in custom-made plate & shell heat exchanger solutions.

Main industries served:

- Oil and gas – 15%
- Conventional power – 10%
- Energy Transition – 5%
- Others (refrigeration, heat pumps, pharmaceutical, chemicals and process) – 70%

Headquarters: Kalanti, Finland
Year established: 1990
Number of employees: 450
Revenue: £84.9m
Revenue from exports: 95%



Vysiion

Futureproofing through a brave investment in diversification

Peter Clapton, CEO

How is Vysiion thriving?

Having made the bold decision to seek private equity investment in 2015, and the ensuing sale of the business to fast paced technology company Exponential-e in 2020, Vysiion has a firm foundation for accelerating their growth.

Today's revenue is balanced between the delivery of high value project work, and thanks to the advancement and diversification of its expertise, the provision of more sustainable reoccurring support services that include, field maintenance of edge and core smart assets, connectivity, Enterprise IT, and cloud-based solutions. These services are supplied to support operational technology applications within a critical national infrastructure (CNI) customer base.

Thanks to this transformation, which has helped to create a long-term order book, Vysiion is able to be far more proactive, invest in their mid- and long-term strategy, and better serve its clients.

The challenge

As a provider of operational technology and IT solutions, along with installation, integration, and technical support services, the Vysiion of today has a wide and valuable offering, highly relevant and aligned to the needs of clients operating across an array of CNI subsectors, including the energy sector.

However, rewind to the early-mid 2010s and the company was faced with a futureproofing problem. Having started out in 1996, it was finding it difficult to scale, and whilst it had begun life in the operational technology space, there was a risk that the early day propositions would fall out of fashion.

The early 2010s saw the IT market transitioning away from legacy infrastructure. As Vysiion's customers sought to accelerate their digital transformation plans to meet operational and regulatory demands, it was faced with several pressing challenges. First, it needed an agile technology team conversant with the latest systems, processes, and applications, as well as an understanding of how they could be applied within their customer based, a reality that would require serious investment. Second, it needed to build a cybersecurity capability, giving it the ability to address the issues of an expanded attack surface brought about by the sectors increased deployment of new smart assets and capabilities. And third, its operating model needed to realign to incorporate OPEX and CAPEX lines of business, as new digital systems require frequent support to ensure high availability.

The solution

In 2015, the company took a risk by bringing private equity investors on board, a move which resulted in the firm's original owners being diluted, with the view of a longer-term gain. This proved to be a vital turning point.

The investment enabled Vysiion to adopt the radical approach it needed, and build a team capable of embracing emerging technology, as well as understanding the challenges and disciplines of delivering into a regulated sector where system availability and security are paramount. To this end, another crucial step, also made in 2015, was the acquisition of an IT support company and investment in a 24/7 support function.

Success did not follow overnight. The investments impacted the firm's margins, while time was needed to develop its offering and build credibility. Meanwhile, access to the depth of knowledge required was not achievable purely through recruitment and upskilling, hence the move down the acquisition route.

However, over time this investment in people and product has produced a platform that will allow Vysiion to scale by tackling the emerging challenges presented by increasingly connected CNI assets.

While the firm was acquired by Exponential-e Group in 2020, it continues to trade independently while enjoying increased access to a range of relevant products and services. Indeed, continued growth and success has defined recent years, the company now typically delivering higher value contracts and working from a more balanced revenue base comprised of 50% new projects and 50% ongoing support. In 2022, Vysiion turned over £28m – double what it generated in 2018.

In terms of its current client roster, the firm trades with all the UK utilities, large systems integrators, and contractors, and has worked on some of the country's most significant renewable energy assets. This includes the Moray East offshore windfarm. The CAPEX phase involved a £1m build project for a major System Integrator, which included the design, installation, and commissioning, of OT network infrastructure on the offshore and onshore substations, used to connect critical protection and control assets. Today, Vysiion provides a wide reaching and ongoing 24/7 support service, a process which involves the controlled update of customers digital assets, including general operations and maintenance for stakeholder companies involved in the generation, transmission, and distribution of power. In addition, the firm has built expertise in the design, build, and maintenance, of increasingly complex DMZ gateway platforms.

These types of CNI projects have been a game-changer for the business and a true test of its new modus operandi and extended offering. Despite being more digitised than ever, Vysiion knows its greatest assets have and always will be its people – looking ahead, transparency between all parts of the business, including senior management and how challenges are approached, will be a key priority.

About Vysiion

Part of the Exponential-e Group, Vysiion provides innovative edge to core IT and telecommunications product and solutions, supported by an agile, proactive, and responsive technical service capability. Customers include system integrators, companies, and organisations within the CNI sector. The solutions supplied include IT on premise, private and public cloud technology, critical network infrastructure often referred to as OT, and IDS and IPS cyber security.

Story type

#diversification (main category)
#culture, #service & solutions, #transformation

Benefits

- Learnt that people are a fundamental piece for scaling up.
- Transparency within the company increased; flat culture built.

Key findings

For industry

- Create space for everyone, success counts on innovation, operational flare, and reliable hard-working people.
- Understand the value of your propositions.

For government

- Be more consistent with standards.

Vysiion at a glance:

Key products and services: OT and IT digital technology product and solutions, their installation, integration, and technical support.

Main industries served:

- Renewables – 20%
- Conventional power – 10%
- T&D – 10%
- Oil and gas – 5%
- Energy Transition – 5%
- Defence, transport, public sector – 50%

Headquarters: Chippenham, UK
Year established: 1996
Number of employees: 160
Revenue: £28m
Revenue from exports: 5%

EXPORT | DIVERSIFY | GROW