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TRANSFORMING OPERATIONS THROUGH DIGITISATION

Mark Lowman, Vice President of Operations,
on digital transformation and the impact
of COVID-19**TALLEST
BUILDINGS
IN THE
WORLD**

MCDERMOTT



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TRANSFORMING OPERATIONS THROUGH DIGITISATION

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Mark Lowman, Vice President of Operations at McDermott, discusses the impact of COVID-19 in the oil and gas industry



McDermott is a premier, fully-integrated provider of technology, engineering and construction solutions to the energy industry. Operating in over 54 countries, McDermott's locally focused and globally integrated resources include more than 42,000 employees, a diversified fleet of specialty marine construction vessels and fabrication facilities worldwide.

Mark Lowman is Vice President of Operations at McDermott. Having spent his early career as a Submariner in the Royal Navy, Lowman worked his way through the ranks to advance to Lieutenant Commander, before spending a further four years with the Royal Australian Navy. In 2000, Lowman left the Navy and joined the oil and gas industry and, over the next few years, gained experience as a Project Manager delivering projects in the Subsea, Offshore and Onshore business segments. In 2012, he joined McDermott to oversee company fabrication operations in Asia and to manage the Batam Fabrication yard. Two years later, he stepped into his current role as Vice President of Operations and is now based in Houston, Texas. "I loved my career with the Royal Navy, but I always knew I was





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ABB: accelerating digitalisation with McDermott

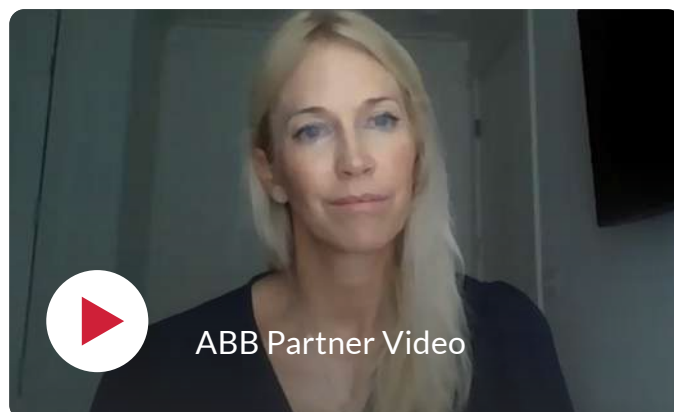
ABB is a leading global engineering company that energizes the transformation of society and industry to achieve a more productive, sustainable future. By connecting software to its electrification, robotics, automation and motion portfolio, ABB pushes the boundaries of technology to drive performance to new levels.

Heather Cykoski is the Group Vice President at ABB. Having worked for the organisation since 2005 in several different leadership positions, she has a comprehensive understanding of the industry and has observed her organisation's digital transformation journey first-hand. "It's incredibly interesting to be where we are today. Digitalisation has been at the core of what we do for many years; however, the acceleration of implementation today is truly transformational," explains Cykoski. "Now is the time for those who lead in this space to transform and deliver digital value to both our own operations and to our customers. Today's challenging economy makes this more urgent than ever. There is so much more to deliver, and we need to deliver fast."

Rajesh Ramachandran is the Chief Digital Officer for ABB's Industrial Automation business.

He joined ABB in February 2019 and brings over three decades of experience in technology and business leadership to ABB, having helped to transform world-class multinational organisations such as Oracle, Siemens, PayPal and more.

"Different customers are at different points of their digital transformation journeys," says Ramachandran. "This is even true with the solution providers as they are learning along with the customers on what the real value of digital is to drive business outcomes. In today's highly competitive landscape, industries are able to embrace digital technologies to address their core challenges, while striving for operational excellence and output of the highest quality. Digital transformation has become a high priority due to its promise of addressing strategic business imperatives. Many companies are struggling with how to leverage this potential. We believe the industry must adopt a clear roadmap of how to address digitalisation, from enabling it to implementing it through focused solutions, keeping in mind the longer digitalisation journey. At ABB, we can help our customers effectively with these challenges."



"Having established a key, strategic business relationship with McDermott, Cykoski affirms that this collaboration is influential to mutual success.

"The partner ecosystem has changed. The combination of a technology provider like ABB, and an EPC like McDermott, supporting the end user, is the trifecta that creates the perfect project," says Cykoski. "We know how important an EPC is: 80% of large projects go through an EPC. When you look at digitalisation and partnerships, what it truly means is that you trust one another and collaborate to provide value. McDermott and ABB both have very similar outlooks and values, and that is key."

"With the future in mind, Ramachandran has a clear idea of what the partnership with McDermott could hold. "We're actively working on how to build solutions together that have a lifecycle value for customers, from design through operations through continuous improvement," he says. "The trusted relationship that we have with McDermott is important to ensure projects are delivered on time at the right cost. There is now a new normal in the industry following the pandemic. It's the right time for partners to come together and develop, test and implement new technologies that challenge traditional ways of working. We're confident that by working together, we will ensure safer, smarter and more sustainable operations across the industry. "It's a great opportunity to bring the combined power of domain knowledge and leading technology to our customers. We're confident this joint value proposition will help our customers succeed today and tomorrow."

Learn more



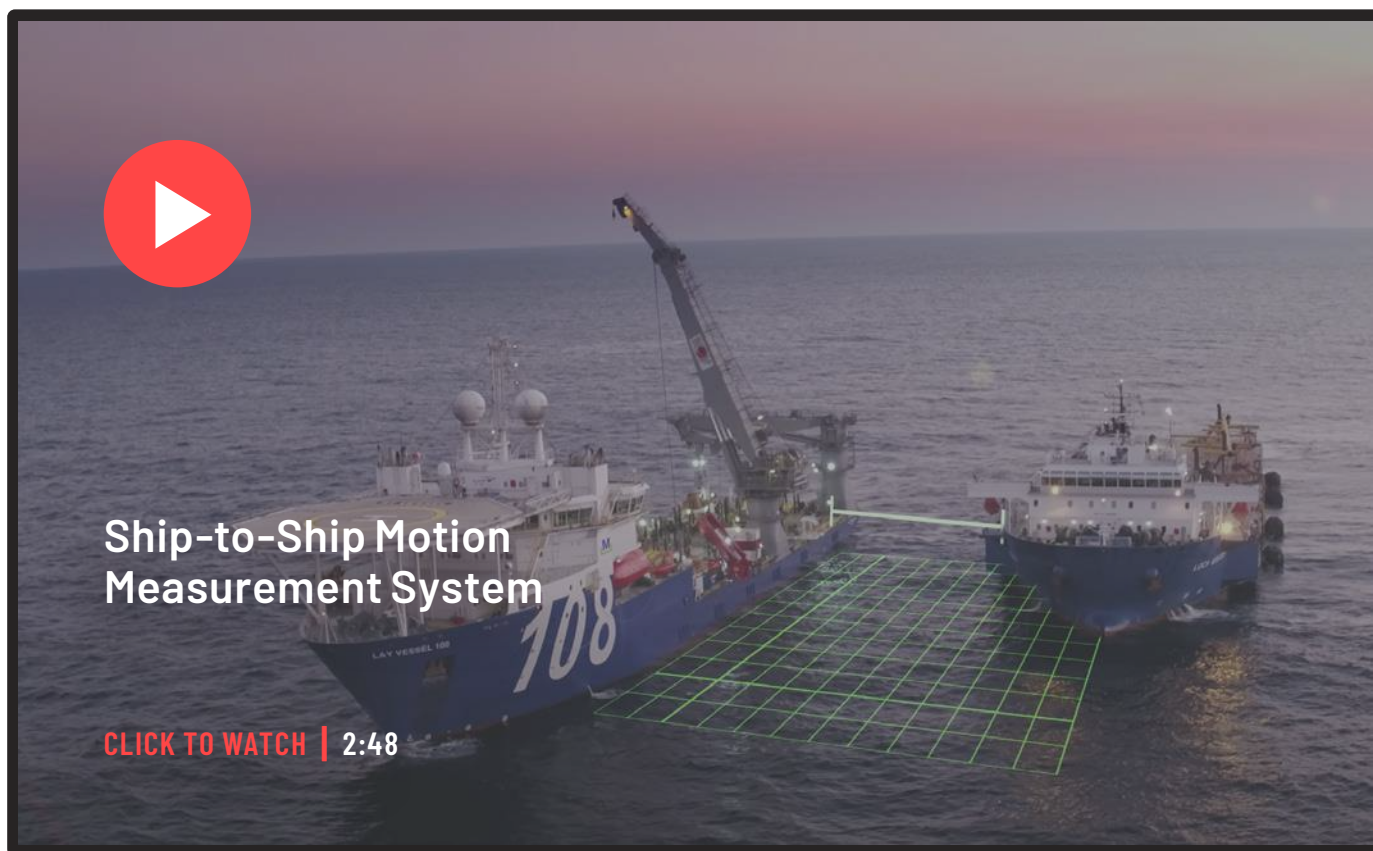
**"MCDERMOTT HAS
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WE HAVE A MANTRA
TO 'TAKE THE LEAD'"**

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going to move jobs eventually because there comes a time when you can no longer serve at sea," explains Lowman. He studied at Deakin University and was awarded an MBA in Law, Finance, Human Resources, Economics and Marketing in 2001. He points to that experience as vital in providing a network of like-minded individuals. "That programme had a big influence on me as I got introduced to a number of senior executives from other companies and those conversations about opportunities really drove me to switch my career."

Lowman believes the oil and gas industry has been slower to adopt new technology than other industries, but recognises that digitalisation is beginning to have a greater influence on operations. "When I started, digitalisation was in its infancy in the industry," he explains. "McDermott was still working in the same way it always had with adequate systems and processes while not fully understanding the benefits of digitalisation. We have created our Digital and Project Innovation Group who are supported by resources across the organisation. This allows us to educate our employees and the leadership as





we prepare to evolve to a digital culture. Digital disruption is very likely to upend the way we operate.” Pointing to his organisation’s ongoing digital transformation journey, Lowman acknowledges that there has been a combination of small point solutions as well as longer running programmes. “We’re leveraging cloud technology in certain areas, such as our ERP and utilising technology platforms like PLM from the aerospace and automotive industries,” he says. “We have tried to ensure that we don’t have an ‘only invented here’ mentality and are always looking to leverage the best that

we can find. Going forward, our focus is heavily on technologies which help us improve collaboration, expand our project predictability through analytics and automate repetitive activities to free up our people.”

With the COVID-19 pandemic impacting businesses across the globe during the first half of 2020, Lowman recognises how difficult the challenge of transforming operations rapidly was. “There’s no doubt that COVID-19 has had a significant influence on the way businesses operate now,” he explains. “Almost overnight, we had to switch





**"THE KEY IS UNDERSTANDING
THE CUSTOMER'S DRIVERS"**

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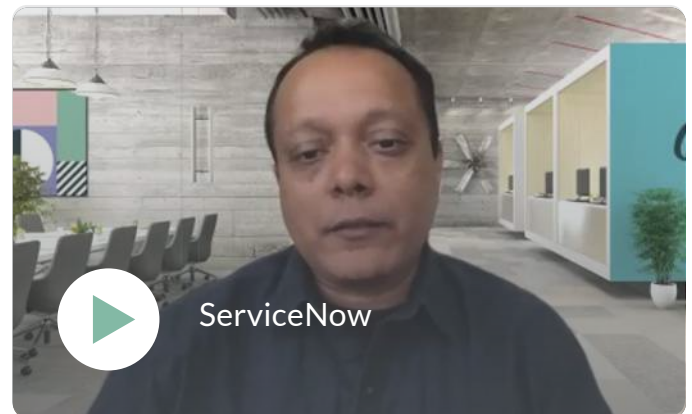
ServiceNow: driving digitalisation with McDermott

Kevin Galloway, Director of Enterprise Sales, and Sunny Mahato, Advisory Solution, Consultant at ServiceNow discusses their firm's partnership with McDermott.

ServiceNow is an industry leading SaaS provider, helping to make the world work better for people and has a mission to improve the overall employee experience.

ServiceNow has formed a key, strategic relationship with McDermott and helps the organisation with their digital strategy. Kevin Galloway is a Director of Enterprise Sales at ServiceNow. Having been with the company since February 2019, he has operated in the oil and gas industry over the past decade and has observed the rise of digital transformation first-hand. "Before McDermott brought in ServiceNow, they had a very manual process," he explains. "If there was an issue, it would have to be passed around different employees until it reached the right person. With ServiceNow, we automate that process." Sunny Mahato is an experienced technology leader with experience in strategic account software sales cycles, advanced enterprise software applications, business process optimisation, solution development and consultancy. He believes that ServiceNow's solution is of significant value to McDermott as it streamlines the process considerably. "McDermott doesn't have to worry about maintaining or managing the servers or having people go into the office to look after it. It's all driven from the cloud."

Prior to joining forces with ServiceNow, McDermott had no way of tracking inventory or streamlining their HR processes. Galloway believes that upon the beginning of the partnership with his organisation, the cost savings have been considerable. "McDermott went from 100% manual intervention and spreadsheets to now running our platform which they now use as ERP," he says. "They track millions of dollars of assets automatically through our platform and their onboarding process has transformed from a manual process to a workflow which streamlines that process. Sometimes, people don't realise



the cost involved with some of these manual processes and the cost savings are in the millions." Mahato affirms the importance of displaying a compassionate and understanding approach to customers and employees alike. "Our mission is all about showing compassion to not just employees but also our customers, particularly in the current challenging environment," says Mahato. "We want our employees and customers to know that we stand with them."

Looking to the future, Galloway has a clear idea of the next stage of the partnership with McDermott. "As we continue to grow our relationship with McDermott, we want to begin to leverage AI into our platform and machine learning to help McDermott further automate their environment," explains Galloway. "The world is going more mobile, particularly because of COVID-19. Working from home isn't going to go away so being a cloud-based mobile platform provider has become more important than ever. The ability to connect mobility and through an automated fashion is vital." Mahato adds that he believes in an agile and lean approach in order to drive success in the market. "We're hopeful we can continue to help McDermott with project management and introducing greater technology such as AI and ML," adds Mahato. "It's crucial to be as proactive as possible instead of reactive."

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from a normal office environment to virtual working. Travel restrictions meant that we haven't been able to visit our customers face to face and as we're a global operation, travel was an essential element to remain connected. COVID-19 has forced us to make the switch to online communications as well as encouraged us to find innovative ways of working together." Lowman recognised the importance of reassuring employees while undergoing significant disruption and change to everyday operations. "Our employees needed

reassurance," says Lowman. "We have fabrication operations where we have thousands of staff that work in close proximity to one another and we need to be able to communicate and reassure them, while ensuring they understand the evolution post-COVID-19." Despite the unprecedented challenge of the coronavirus, McDermott managed to keep all sites fully operational globally. "From the beginning, our QMW Fabrication operation on the Qingdao coast, Shangdong province, Central China, was able to respond quickly and

EXECUTIVE PROFILE:



Mark Lowman

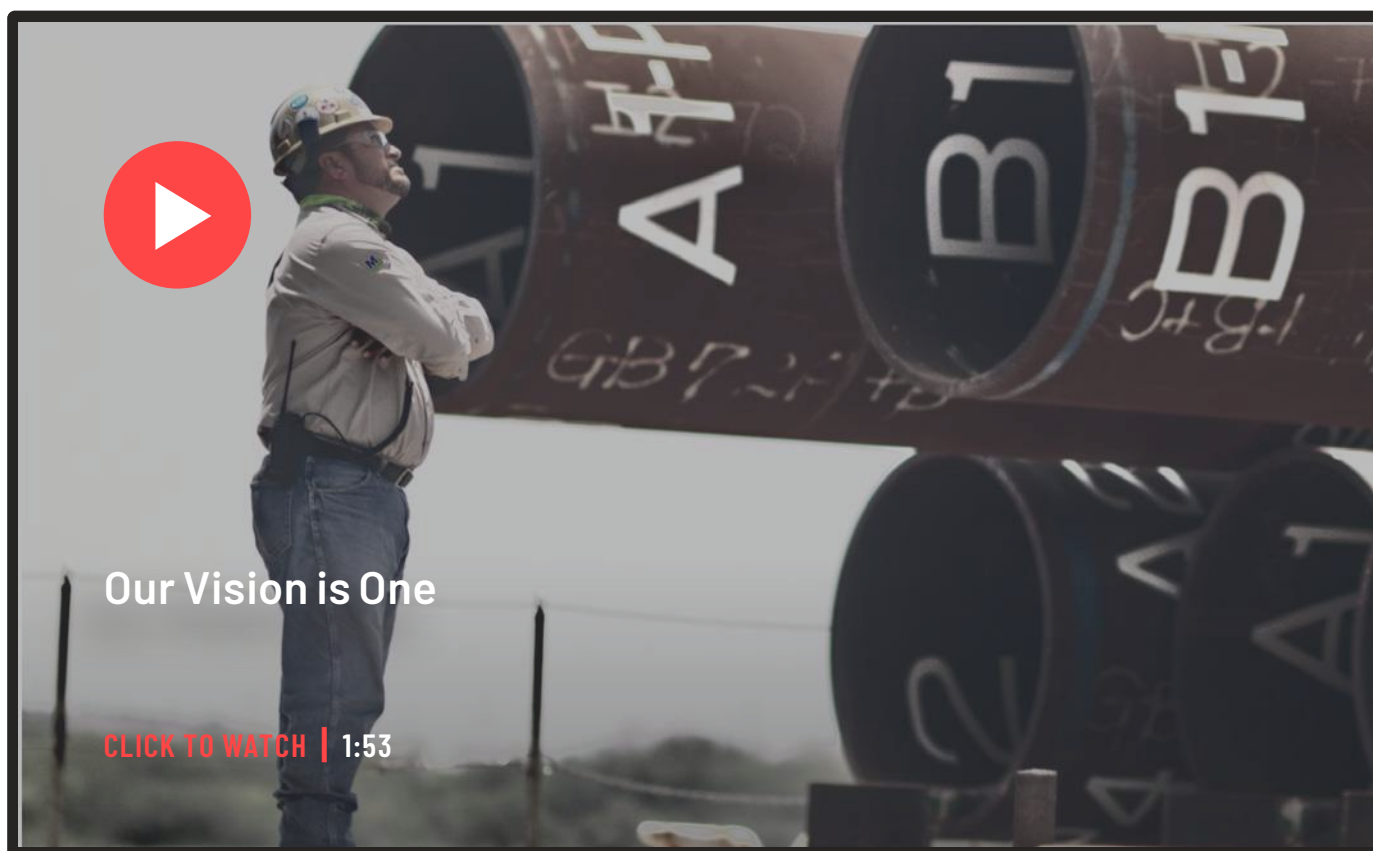
Title: Vice President of Operations**Company:** McDermott**Industry:** Oil & Energy**Location:** Texas, USA

Mark Lowman is an accomplished, highly resourceful Executive Management professional with a wealth of experience in managing multi-billion dollar construction projects in the Oil and Gas industry from inception to delivery. Prior to his career in the oil and gas industry, Mark had a successful naval career moving from the ranks to Lieutenant Commander.

Mark has been with McDermott International Inc. for seven years in a variety of roles, including as the Director of Fabrication in Batam, Indonesia, Senior Director of Commercial Asia Pacific, and Vice President of Project Execution in both Asia Pacific and in Houston. Prior to McDermott, Mark held leadership positions at Technip Oceania Pty Ltd. Mark holds a Master of Business from Deakin University and has degrees in Nuclear Engineering, Naval Science and Operational Studies, from Britannia Royal Naval College and Royal Naval College Greenwich.

Mark has a proven track record leading global operations, building business and setting up operations in new geographical areas and countries. He is a results-driven business leader who creates shared vision and leads from the front, to build, empower and motivate multi-cultural, cross-functional teams to achieve goals.





proactively by introducing control and mitigation measures well in advance of Government restrictions,” explains Lowman. “This has also been the case for all our fabrication yards including Dubai, Indonesia and Mexico, as well as our project construction sites in the US and across the world.” McDermott took the pandemic seriously from the outset and quickly established global and local area Crisis Management Teams. “We very quickly and efficiently developed procedures and processes to manage our response to the pandemic, but more importantly to keep our employees safe.”

McDermott currently has a backlog of US\$16bn worth of projects to execute over the next few years. “This is a great position to be in, particularly at a time when market conditions are so uncertain,” affirms Lowman. The projects in question include BP Cassia – Cassia C Greenfield and Gulf Coast Joint Ventures – MEG project. “In terms of BP Cassia, McDermott is undertaking the procurement, construction and fabrication of a 7,250 MT topsides and a 3,400 MT four-legged jacket and piles. That project is progressing well and our fabrication yard in Mexico has remained open

“WHEN I STARTED, DIGITALISATION WAS IN ITS INFANCY IN THE INDUSTRY”

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McDermott

during the pandemic and has responded with remarkable productivity,” explains Lowman. “With the MEG project, we’re fabricating large modules in two of our global fabrication yards. The first modules were delivered in early April and they are now in Texas where the construction site is putting together and creating the plant.” Despite the seismic shift in the scale of projects, Lowman believes the core foundations remain the same. “The key is understanding the customer’s drivers,” explains Lowman. “This will help execute the project successfully and provide a level of assurance to the customer. As a project director, I would want to build a project management team with a high-level of experience. With some of these larger multi-billion dollar projects,

you can’t do it as a one- man band. You need a series of experienced, industry professionals whom you can trust to build the team and empower them to align to the project goals.”

McDermott places considerable value on sustainability and has established several CSR initiatives. McDermott holds an Annual Batam International Golf Tournament which has been able to raise over US\$1mn to fund the building of orphanages in Batam Island in Indonesia, providing health kits to children, digging wells for a nearby island and offering a range of other events. “We have a series of sustainability goals that we’ve been developing over time,” explains Lowman. “We like to engage with the communities to ensure we provide the support that is needed and make sure that McDermott as a business is conscious of the worldwide effort to reduce carbon footprint.” Those goals that Lowman mentioned centre around developing sustainable solutions that support energy transition, contributing to sustainable growth, reducing operational environmental footprint and promoting workplace and community wellbeing. Having previously focused on

developing natural gas power technology that produces low cost electricity while providing zero carbon emissions with NET Power, Lowman says that McDermott remains well placed to keep sustainability at the fore. “Everyone understands that climate change is an area that needs to be considered in planning,” he says. “Clean Fuels and NET Power have generated interests and we’re still providing customers with the opportunity to become engaged.”

122 Lowman recognises the importance of partnerships and believes developing key, strategic business relationships are vital to success in the oil and gas industry. “Due to the sheer size of some of the projects, it means that you have to share the risk and one partner may have a higher level of expertise in a particular area

“DIGITAL DISRUPTION IS VERY LIKELY TO UPEND THE WAY WE OPERATE”

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than another,” he explains. “However, by working together, this allows for more confidence in delivery and we rely on partners and vendors across the globe.” Lowman points to McDermott’s relationship with Baker Hughes and ABB as particularly important. “We’ve been working together on Subsea production solutions in conjunction with Subsea



umbilical rises and flow lines (SURF) and by collaborating we've been able to offer solutions to the market that can deliver savings to the customer that are potentially in the millions," says Lowman. "ABB is a great supporting company that provides technical solutions to help us position ourselves to win work. ABB offers switchboard equipment for our

Onshore and Offshore business and is extremely supportive. They're also involved in some of our management discussions with customers in terms of providing the best lower cost solutions that the customer is always looking for. The relationship is really built on aligned goals and the ability to communicate and work together effectively."



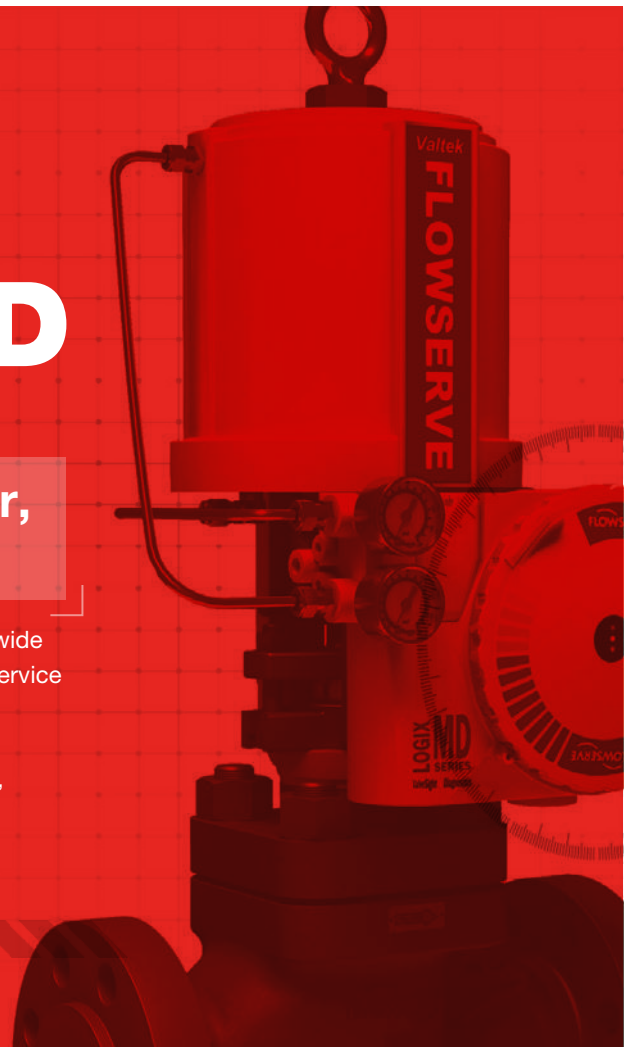
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**"I BELIEVE WE WILL
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Having been around for almost 100 years, McDermott has significantly evolved over the years. Following the merger of McDermott and CB&I in 2018, the organisation has matured into a company that has a presence both Onshore and Offshore. "Despite the challenges, we've adjusted and grown," affirms Lowman. "We continue to be a company that prides itself on technology-led solutions and we have secured a partnership with Lummus Technology for the longer term. This relationship will enable McDermott to remain at

the forefront of technology and the ability to continue to offer project concepts to final delivery to our customers both upstream and downstream from Petrochemical and LNG plants, Storage Tanks and Offshore and Subsea. I believe we will evolve and become a different kind of company, but we will always be here to deliver projects to our customers."

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