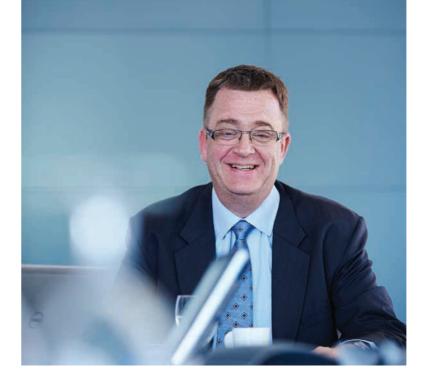
in Process Automation

Emerson's people helping to solve our customers most complex challenges





Welcome to innovations

Emerson takes huge pride in its reputation for developing innova automation products and services. However, it is vital that we are not only perceived as a world-class provider of technology, but al as an ethically strong and trusted advisor, whose problem-solving expertise can deliver significant benefits for our customers. Emer is therefore also focused on constantly pursuing new technologic capabilities and approaches, to help us support our customers by understanding their needs and driving tangible value for them. T involves early engagement and close collaboration with the custo to help manage their projects, solve their most complex challeng improve their plant safety, reliability, efficiency and productivity, most importantly ensure they achieve their business goals.

Of course, whether we are talking about new technologies, proje management or plant lifecycle support, being at the forefront of innovation requires us to attract, develop and retain exceptional personnel. Emerson has long recognised that its people are its m important asset and with that in mind, this edition of Innovations in Process Automation takes the opportunity to introduce some them to you. Representatives from engineering, operations, sale and services outline their roles and reveal how all parts of Emerso are working together, in an inclusive environment, to contribute serving our customers better.

If you would like to discuss how your company can take advantage Emerson's unmatched breadth of products, services and expertise contact us today via **EmersonProcess.com/Europe**

Roel Van Doren President Europe Emerson Automation Solutions

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Serving customers better by becoming a trusted, problem-solving partner

Perfect Execution reduces product lead times

Enhanced customer experience helps build stronger relationships

Emerson experts and technology solve customers' toughest challenges

Automation project expertise improves productivity and profitability

Lifecycle services help maximise desired outcomes

Serving customers better by becoming a trusted, problem-solving partner

When selecting an automation technology provider, customers want a partner they can trust to solve their toughest challenges and help maximise business performance. Roel van Doren, President Europe, Emerson Automation Solutions, explains why company values and behaviours are crucial in establishing such trust.

How long have you worked for Emerson, and what does your current role involve?

I have been with Emerson for 27 years, progressing through various management roles before becoming European President in 2012. I have overarching responsibility for all European business within Emerson, and a key facet of my role is helping us serve our customers better.

What is Emerson doing to serve its customers better?

There are three pillars to achieving this - customer proximity, industry fluency and being easy to do business with. Emerson has taken significant steps to move production and support services as close as possible to major process industry clusters. In terms of industry fluency, Emerson continually invests in its people with training and development to ensure they can 'talk the same language' as our customers rather than just selling the technology. We want to understand our customers' challenges and provide the right solution, which perhaps isn't just a single product. We regularly hold 'deep dive' workshops with our customers to establish their most urgent needs then, through greater access to data and analytics, we can help optimise plant performance in core areas such as reliability, energy efficiency, safety and productivity. We can create a step-change in cost and schedule on projects, and maximise return on investment during the entire plant lifecycle. We want to make it as easy as possible for customers to do business with Emerson. One element of that is incorporating all parts of our organisation within a single global business platform that serves customers better by speeding up quotes and significantly reducing delivery times.

Is it important that customers perceive Emerson as a problem-solving company?

Emerson has always been an innovator and will continue to design disruptive technologies and manufacture the highest quality industrial automation products. It is

important to become ever more efficient when supplying these products, but what sets Emerson apart is not only the breadth of our product portfolio, but also our solutions and services that help solve our customers' most challenging business issues. Of course, it's Emerson's people who create these solutions and we are fortunate to have so many talented problem-solvers, who believe in the solutions approach as the best way to help our customers and build trusted partnerships.

How important is trust within customer relationships?

Trust is a cornerstone of effective leadership and partnership. Establishing that trust - whether with a customer or with people within my own organisation – is a matter of integrity. As a leader, it's about being the person you would like others to be. As a business partner, it's about delivering on what you promise. Offering high-quality products and services is important, but if your actions don't match your words, trust is eroded and partnerships will be short-lived. Trust and confidence are precious commodities which take a long time to build, but can be quickly lost if you fail to do what you said. I always say that 'trust arrives by foot, but leaves on a horse.'

Customers want to know the moral stance of any company they are looking to establish a long-term relationship with, and it is important for a potential partner's values and behaviours to mostly match their own. If attributes such as integrity, innovation, quality, safety,

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continuous improvement and customer focus were not among our values, our customers would guestion whether Emerson was an appropriate partner. Emerson's values clearly define what we stand for. Our customers know that our personnel might change over time, and our products and services will always develop, but they can rely on our values remaining constant. Sometimes when I'm faced with a very difficult decision, I go back to these values and take guidance from them, and the right decision usually emerges from that evaluation.

> 'The core values of GSK are integrity, respect for people, transparency and the delivery of products that are patient-focused. It is equally important that the companies we work with, like Emerson have a strong set of values in their own right and which align to help GSK reach their objectives."

Dave Tudor, SVP Global Manufacturing Strategy, GSK

"For 127 years, Emerson employees have always behaved with the 'utmost integrity' – ethically and honestly, not just when it's easy, but especially when it's not. We are also nothing less than 'fully committed to safety' for our employees, our customers and our communities. And finally, embedded deep in our DNA, is our never-satisfied drive to 'continuously improve,' which allows us to deliver what we promise to every customer, every project, every day." Kathy Button Bell, SVP and Chief Marketing Officer, Emerson

Perfect Execution reduces product lead times

Emerson constantly strives to be a trusted partner and a company that is easy to do business with. Per Ahlgren, Director Operations for Emerson's Rosemount Tank Radar products in Mölnlycke, Sweden, explains how innovative product design, consolidated supply chain information and Perfect Execution helps provide manufacturing flexibility and shorter product lead times.

When did you join Emerson and what roles have you performed?

I joined Emerson from Saab Ericsson Space in 2004 as Manager Production Engineering for Rosemount Tank Radar products. I then served as Manager Process Radar Operations, and Manager Quality, before taking on my present role of Director Operations in 2014. I oversee all aspects between receiving an order through to its delivery. This involves taking and fulfilling orders, procurement and inventory management, material monitoring and handling, manufacturing and product configuration. I also focus on production engineering, which both supports current production, looks at new manufacturing processes and developing new products that are as easy as possible to install and use.

Mölnlycke is a manufacturing site for Emerson's Rosemount level gauges, and is very much a centre of excellence for radar. There is extensive microwave and signal processing knowledge within the area. Radar was first developed here for military applications, before radar level gauge technology was designed for commercial industrial applications. At Emerson, we feel that having both design engineering and manufacturing in the same location provides value for our customers in terms of final product and the service we provide.

What areas are you looking to improve within the production process?

We are striving towards continuous improvements, especially in driving down lead times. This is achieved in various ways. Firstly, we are designing products that are easier for the customer to understand, order, configure, install and use. We then focus on our own manufacturing supply chain, working hard to establish 'platform products' that are simpler to manufacture and supply.

We are constantly introducing new products, features and functionality that help customers improve safety and operational performance. During product design, we run feasibility studies to see if their manufacture can be seamlessly integrated into our existing production lines or if a new line must be created. In addition to the functionality and benefits customers can receive, the product is designed with both manufacturing and assembly in mind. Our product manufacturing lines are then designed to be flexible and deliver the short lead times our customers desire. Quality is of course paramount and all products go through extensive testing and quality control procedures to ensure they meet their specification.

How will key areas of development within Operations benefit Emerson users?

To drive shorter lead times and improve flexibility, quality of information is something we are focused on improving. Critically, we have consolidated our ERP systems to bring all the data we need into one streamlined system. This means we can provide all the right information to the customer when they select and order a product, and of course have all the information we need related to the manufacturing supply chain. This is moving us towards eventually selling our radar products digitally and being able to respond even quicker. To do that we must make it easy for our customers to do business with us, reducing human interfaces, and ensuring our inventory and supply chain data is 100% reliable.

How is Perfect Execution helping to support customers?

Perfect Execution is Emerson's vision to not just satisfy, but radically exceed our customers' expectations. This programme is one of the cornerstones of our day-to-day activities in Operations, and the process and toolset we are using to drive industry-best lead times, on-time delivery, and project execution. It starts with fully understanding our customers' challenges, designing great products that help solve these problems, then having the correct manufacturing and supply chain in place so we can execute on our promises to the customer.

Find out how On Demand provides express delivery of Emerson's industry-leading instrumentation at Emerson.com/IM1201 "Perfect Execution is Emerson's vision to not just satisfy, but radically exceed our customers' expectations. This programme is one of the cornerstones of our day-to-day activities in Operations."

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Enhanced customer experience helps build stronger relationships

Elliot Bostock, Director of Customer Relationship Management for Europe, outlines the vital role CRM is playing in providing a 360-degree view of customers' operations, so that Emerson can help solve their challenges quicker and more effectively.

When did you join Emerson and what is your current role?

I have been with Emerson for over 12 years, the past six as Director of Customer Relationship Management for Europe. Previously I was Operations Director, managing the UK sales office. Before joining Emerson, I spent over 20 years working at the FMC Corporation, now Lanxess, speciality chemical plant in Manchester, where I was an Emerson customer.

How did you go from being a customer to working for Emerson?

As Site Control Manager at the plant, I managed several significant automation projects, involving the implementation of an Emerson PROVOX[™] control system, later migrating to a DeltaV[™] distributed control system. This experience gave me great insight into what users of Emerson technology want in terms of customer support and service. In addition to my instrumentation and process control experience, I spent two years managing logistics and customer service, which provided further insight into what customers value. When the opportunity to join Emerson arose, it felt like a natural progression from being a customer to a provider of automation solutions. I could certainly empathise with customer challenges and provide good advice in terms of solutions.

What is Customer Relationship Management and what benefits does it provide?

On face value, CRM is an internal tool supporting our marketing, sales, customer care and service organisations, but it's also much more than that. CRM is a customer-centric business strategy with the goal of maximising customer satisfaction, by providing comprehensive information about them and their needs. That includes all the problems and challenges they have had, or are currently facing, the meetings and discussions that have taken place about these, plus details about site visits, quotes, orders and support requests. CRM captures a 360-degree view of a customer's entire business relations with Emerson, and provides us with instant visibility of their requirements. It is a portal to everything that is going on in the world of our customers.

How does CRM help Emerson's customers?

CRM enables us to optimise the management of our relationship with our customers, and the more insight we have into their requirements, the better we can support them. We want them to have the best possible customer experience when dealing with Emerson, so that we become a partner they can trust and rely on. Because CRM helps Emerson to collaborate more effectively internally, we can then improve the speed and quality of our service to our customers. Emerson is a huge and diverse company, but CRM is driving standards and processes that enable us to deal with our customers in a more consistent way. Having access to all the information relating to a customer means that any Emerson employee can take responsibility for dealing with whatever problem the customer has, rather than having to pass on that responsibility to another person or department. It accentuates the personal touch, and as a customer I would be very impressed to see that Emerson has so much knowledge and understanding about me and my plant. It's very powerful to have all that information at your fingertips, so CRM is a vital tool in helping us to help our customers.

How is Emerson looking to develop CRM?

CRM is a journey, and it is constantly being enhanced to support the business. Our customers change and our business changes internally, so CRM is a continuous programme of work. It's a global collaborative tool, and although we have already successfully implemented many significant functionalities, we still have more to do. My vision is that when an Emerson employee logs onto their PC in the morning, they instinctively open CRM and begin managing all their customer-related work through it. By helping us manage and organise our activities, CRM helps us serve our customers better.

"Emerson is a huge and diverse company, but CRM is driving standards and processes that enable us to deal with our customers in a

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innovations

"Our sales people, subject matter experts and consultants are highly motivated individuals with a wealth of experience across the process industry sectors."

Emerson experts and technology solve customers' toughest challenges

Customers require Emerson to provide the solutions to their toughest operational challenges. Veronica Constantin, Vice-President for the Europe Southern Region, explains how Emerson experts and consultants collaborate with customers to identify ways of improving plant safety, reliability and efficiency.

How has your career with Emerson progressed?

I have been with Emerson for 20 years. Before that, I worked for a company that represented Emerson in Romania. When Emerson later opened its own office, I joined as Sales Manager before becoming Country Manager in 2002. In 2010, I grouped a few smaller countries into one region and became General Manager for South-East Europe. Three years later I was promoted to Vice-President Strategic Accounts Europe. This is a pivotal position, acting as the key point of contact for global customers, and representing their requirements within Emerson. As Vice-President for the Europe Southern Region I now have responsibility for a larger group of countries, including France, Italy, Spain, Portugal, Central Europe, and South-East Europe.

How has business developed within the region during your time with Emerson?

There has been tremendous growth in the region, with process industries investing heavily in automation technology, followed by economic downturns and more difficult times. It is therefore vital for Emerson to have knowledgeable and experienced personnel who can collaborate with the customers and help solve their most difficult challenges. Our sales people, subject matter experts and consultants are highly motivated individuals with a wealth of experience across the process industry sectors. It is imperative that we retain such industry expertise, so we provide them with the best possible training, support and progression opportunities, enabling their careers to develop and flourish at Emerson. This leads to us having a very good retention rate, which in turn means we have the right people available to advise our customers and address their toughest pains.

How important is it to properly understand customers' requirements?

It is essential that we fully comprehend our customers' problems, and that is why we look at things differently during our early engagement with them. Emerson has the broadest portfolio of automation products and solutions, but rather than simply trying to sell as many as possible, our approach is to listen to our customers and understand their specific challenges. We then use that information to identify appropriate solutions and provide a prioritised business case for investments by using our Plantweb[™] digital ecosystem. The result is a roadmap for operational improvement over a period of several years.

What kind of customer challenges does Emerson help to solve?

There is significant opportunity for improved operational performance across critical areas like reliability, safety, production and energy. We believe that automation is a high-impact leverage point to sustain performance improvement over time. We can provide a wide range of innovative solutions in these key areas via Plantweb, which is the foundation of our Operational Certainty™ programme to help customers achieve Top Quartile performance. In addition, the breadth of automation products and services we offer enables us to solve our customers' problems, and as a result there is probably at least one Emerson product installed in every process plant around the world.

How does Plantweb help to provide solutions for customers?

Our scalable approach enables customers to start small and obtain quantifiable results that support a larger investment. Everything begins with real time data. With our Pervasive Sensing[™] portfolio we have a lot of new sensors that are easy to install and maintain, and provide real-time data, which is then securely routed to the appropriate expert or application. Once the data arrives at the desired destination, Plantweb provides a broad portfolio of applications designed for actionable insights. Supporting this, we have experts who can analyse the information for our customers through our Connected Services[™], delivering access and outcomes through innovative monitoring solutions. It is a combination of expert advice on the right solution, implementing the innovative automation technology, and providing ongoing advice to ensure optimum plant performance.

Learn how Emerson's consulting services and Pervasive Sensing can help solve some of your toughest challenges at Emerson.com/IM1202 and Emerson.com/IM1203

Automation project expertise improves productivity and profitability

Emerson has a team of specialists who design and implement a range of advanced technologies and solutions to complement its core systems business across Europe. Chibuike Ukeje-Eloagu, Manager Projects and Engineering, Strategic Services Europe, describes the significant benefits these technologies and solutions provide for customers.

How long have you been with Emerson?

I joined Emerson 19 years ago as an engineer focused on real-time optimisation technology, before moving into project management. In 2013, I took on my current role managing projects and leading a team of solution managers, who provide project management expertise for solutions delivered by Strategic Services Europe.

What responsibilities does Strategic Services Europe have?

Emerson's core Systems and Solutions business across Europe is primarily based on the DeltaV[™] distributed control system, DeltaV[™] safety integrated systems and Syncade[™] platforms. Complementing these is a range of advanced technologies and solutions. Strategic Services Europe comprises a team of experts that provide leadership to drive the adoption of these advanced solutions and provide governance to ensure that they are well implemented and supported to deliver sustained benefits for our customers. The portfolio of advanced services delivered by Strategic Services changes as new solutions are developed. It currently includes machinery health management, control performance services, industrial energy, performance consulting, advanced data management solutions, functional safety consulting, reliability consulting and the Plantweb[™] Advisor Suite, an enabling technology for the Plantweb digital ecosystem.

How do these technologies and solutions benefit customers?

Plantweb, through a range of software, services and intelligent devices, enables customers to leverage the digital intelligence within their plants, to improve operational performance. Our information networks services support this by delivering the infrastructure – traditional and wireless – for getting data and information securely from the devices or control room to wherever the customer needs them. Our control performance services, through a combination of loop performance audits and implementation of model predictive control, address control stability, production variability and energy optimisation issues on the customer's plant. Machinery health management via predictive intelligence helps to increase productivity and profitability by reducing plant downtime and maintenance costs, while increasing safety and reliability. Our industrial energy experts help our customers stabilise and optimise the performance of their boilers and fired heaters. Our reliability consultants guide our customers to sustainable Top Quartile performance through effective enterprise asset management, including the optimisation of maintenance, spares and work processes.

What does your management role involve?

Every project we embark on is unique and begins with customer consultation, which involves expert analysis to assess how a plant can, for example, improve its maintenance planning, or increase its productivity or profitability. Our highly experienced consultants and experts advise on the most appropriate solution to the specific challenge, which creates the most value for the customer. My role is focused on how Emerson delivers these solutions, from initial engagement, right through to completion, including installation, configuration and commissioning. It is my responsibility to ensure that we deliver the best possible customer experience throughout the lifecycle of each engagement.

What kind of challenges does your role present?

Most of the projects we work on are about making measurable improvements for the customer, as opposed to implementing a solution to a supplied design. This typically entails preliminary assessments to define a roadmap to achieving the required improvement, followed by an audit to confirm that the expected benefits are achieved and sustained. In addition to this, we are often implementing solutions which are new and are challenged with defining the best practices for their implementation.

Learn how DeltaV DCS Advanced Control and Plantweb Performance Advisor can improve productivity and profitability at Emerson.com/IM1204 and Emerson.com/IM1205

"Most of the projects we work on are about making measurable improvements for the customer, as opposed to implementing a solution to a supplied design."

What are the biggest areas of development within Strategic Services?

Strategic Services Europe is constantly evolving to ensure that it continues to be able to meet the needs of our customers while also developing the expertise needed to deliver each new solution. Reliability consulting, Plantweb Advisor and advanced data management solutions are recent additions to the Strategic Services portfolio and we are looking forward to adding batch analytics shortly. "The future is about collaborating with customers to understand their desired outcomes, then providing innovative solutions, access, value and education to help them reach those outcomes."

Lifecycle services help maximise desired outcomes

Shahin Meah, Emerson's Senior Director Plantweb Solutions & Services for Europe, explains how his role involves developing and providing access to an increasing range of innovative, outcome-focused solutions to help Emerson's customers.

How long have you worked for Emerson?

I have been with Emerson for over six years. Previously I worked in product management, marketing, project management and an array of automation, engineering and manufacturing roles with two large multinational companies in the motion and fluid control and electrical distribution segments.

What attracted you to the company?

I have always known Emerson to be a market leader and innovator amongst its peers. I was therefore excited by the prospect of working for a company that offers an unrivalled range of technology and service capabilities to help its customers achieve higher plant availability, throughput, safety and compliance. I viewed the move as a career-defining opportunity.

What roles have you performed at Emerson?

As a Chartered Mechanical Engineer with an MBA, coupled with my industry and business experience, I have worked on an array of strategic plans, business cases, industry and market reports to help shape Emerson's journey to become a Solutions provider, first as a Strategic Planner for the Industry Solutions Group and then Europe.

How does your current role help Emerson customers?

Everything we do is about making our customer more successful, profitable, compliant and safer.

With regards to lifecycle services specifically, we are increasing relevance with customers by being an integral part of their shutdown, turnaround and outage events, broadening the scope of long term service agreements and increasing our managed services portfolio to include smart repair or replace, optimisations of spare parts, inventory management and outcomebased services.

> We aim to make impactful improvements such as increased uptime and reliability of operations

at customer sites throughout the lifecycle of their installed base. We help achieve this by having outcomebased discussions with customers about what they want to achieve and how Emerson can help maximise those outcomes. The future is about collaborating with customers to understand their desired outcomes, then providing innovative solutions, access, value and education to help them reach those outcomes, which could relate to any number of KPIs. A customer could be looking to achieve 99% plant uptime, or might want to ensure engineers are always available in an emergency.

Part of my role is ensuring that we provide access, education and support for Emerson's lifecycle services. It is important we provide access to the different life cycle service services, no matter where they are located around the world. Our customers want to be served very quickly, treated as an individual case, and supported by local resources. We believe that using the Industrial Internet of Things, Emerson's Plantweb[™] digital ecosystem and Connected Services[™] helps provide this. We also need to make our customers aware of the value these services will bring to their business in terms of achieving better performance and improved outcomes. When adopting a service we also help customers understand how to maximise the performance of their automation equipment or preventive maintenance programme.

Which area of development in your department will positively impact customers the most?

Developing more transformational solutions, lifecycle services and processes to help our customer move towards Top Quartile performance. We will broaden our foundation services in terms of turnaround services, long term service agreement, parts and repair services. We will also increase our portfolio of 'connected and outcome based services', using new technologies, integrated solutions, and taking on responsibility for equipment lifecycle services, to meet pre-agreed requirements and outcomes. This approach is already being provided extensively for life sciences customers in Ireland and Switzerland and petrochemical customers across Europe.

To learn how Emerson's lifecycle services can help meet your desired outcome, visit Emerson.com/IM1206

Gain a return on investment from the IIoT using the Plantweb digital ecosystem: Emerson.com/Plantweb

Discover how you can achieve Top Quartile Performance: EmersonTopQuartile.com

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