# Maintenance and FM Challenges for 2022 and How to Overcome Them:

11 Experts Share Their Thoughts on What's to Come



## Introduction

If you could know what your future will look like, perhaps you wouldn't want to hear the answer. However, if you could predict the future of maintenance and facility management, that would be different.

When it comes to your professional life, knowing what the future looks like – especially the hurdles – is the biggest competitive advantage you could have.

But who knows what the future will look like when our world can change so suddenly? The pandemic showed that everything we take for granted can change overnight. On the other hand, it may have been the best sneak peek of what's to come: remote work, highly supported by technology and yet, according to Industry 5.0, also human-centric.

That is why we decided to ask 11 experts, all leading authorities in their respective markets and industries, about their predictions. We talked at length about the challenges maintenance and facility management will face throughout 2022, the changes those challenges will bring about, how to deal with those changes, and what the future holds for us in the long run. After all, the future is influenced by the leaders of today.





# What challenges will 2022 bring to maintenance and facilities management?

When we started the first lockdown in 2020, the world changed overnight – even if we might have believed it was only temporary. Then came 2021, we embraced a "new normal" and completely readjusted our work routines. But now that the steepest learning curve is over, what do our experts predict for 2022?

"I would underline six huge challenges for Facility Management in 2022:

- Successfully integrating technology with humans in a cost-efficient and effective way;
- Interpreting data in a meaningful way how to extract data when systems don't speak to one another and limit usability;
- Understanding what's the best investment: with so many systems, it's hard to know how best to spend money and ensure a return on investment;
- Balancing doing the right thing to reduce environmental impact vs. cost control;
- Increasing labour costs (it's the most significant living wage increase in recent years), combined with supply chain costs being driven up by inflation how does the industry come together to permanently stop the race to the bottom;
- Staffing, as a result of Brexit related immigration challenges there is an increasing number of vacancies, some 40% up since the start of 2021, which will impact service and the ability to retain employees."

#### Paul Ashton, CEO at Birkin Cleaning Services Ltd

"One of the key challenges will be the general move to hybrid or fully remote working. This will put a strain on landlords budgets to complete essential maintenance and may, in some cases, result in an "if it isn't broken leave it" mentality, leaving possible high replacement costs further down the line. Whilst this hopefully will be a limited situation, I certainly think that Landlords and Facilities Management companies across the board will look more carefully into getting value for money.

The knock on effect of Covid, Brexit, and the shipping crisis all happened through 2021, and it has already led to increased pricing and lead times from manufacturers. This proves essential forward planning and regular PPM maintenance to reduce any risk of downtime will be imperative. Besides, as companies have had to adapt to hybrid working and invest in software to enable this, I believe IoT monitoring for service providers will grow in 2022."

#### lan Perton, Director at CSS Facilities Services Ltd



"Today, the greatest challenge for FM is technology. Until recently, most managers didn't worry much about that component to manage their facilities. But now the tables have turned. You can't rely on your "gut feeling" or replace a certain part because it has been used for a specific number of hours, for example. Decisions need to be more assertive and data-based. You must know exactly what you need for management."

#### Roberpaulo Eller, Facility Manager at Grupo Orion

#### "The three big challenges:

- Understanding user's needs;
- Adapting facilities and services to user's needs;
- Connecting people and facilities.

#### The four big trends:

- FM is gaining momentum, focusing not only on providing services but also on user experience;
- Greater building sustainability, where FM also takes on an important role by improving its operation, as well as supporting clients' actions;
- Pledging transparency and using technology;
- A relationship between FM and HR.

Despite going back to "pre-COVID normal", the pandemic has changed our personal habits irrevocably. It's not just about transitioning to a virtual workplace, but above all acknowledging that we'll need to take a step forward and adjust to a new workplace concept. Thus, organisations no longer look at a facility manager as a mere service provider, but rather as someone who contributes towards attracting and retaining talent, as well as providing users with a unique experience.

Sustainability is just as important, if not more than, having adequate workspaces for the employees. Clients have set ambitious goals already, and they expect providers to join in and achieve them. Again, facility management plays a very important role here too, since it promotes better practices at the client's facility.

Technology helps FM with data collection and analysis, allowing us to deliver customised services. At the same time, we believe HR will work closer with FM to adapt spaces to users' needs. HR gives us precious insights regarding experience and how to best engage with users. People are right at the centre."

Rui Gomes, Country Manager at ISS Facility Services Portugal

"The first challenge will be incorporating FM under a strategic lens, against the strictly operational approach of the past. Current and future trends demand agile and flexible management, with enormous adaptability. In that sense, service integration will be one of the trends with the highest acceptance.

The evolving workplace represents a second challenge. I believe future workplaces should be guided by these key points:

- Flexibility, given that facilities should adapt to each activity/ occasion, assuring companies the optimisation of their space;
- Collaboration, which is the way spaces potentiate communication, interaction between teams, and productivity;
- Experience, which allows an organisation to offer something unique to their workforce.

Besides agile management and workplace changes, I highlight technology. Right now, FM is going through a digital transformation. We rely on automated systems, sensors, and aggregated information for decision-makers, on digital platforms. In the future, these platforms will become increasingly mobile for everyone in the operational chain.

From the user's point of view, we'll see intelligent workplaces and facilities that offer a customised experience. Therefore, augmented reality will be one of the greatest trends in the mid-term. At the same time, decision-making will become wholly data-based, which allows us to improve the user's experience whilst optimising costs and the organisation's performance.

And the ultimate challenge is sustainability. Without it, there's no future. We should take on that responsibility and contribute to introducing sustainable practices and investments, such as equipment manufactured with recycled materials and renewable energy sources. We should set up sustainable practices at the workplace and raise awareness among all facility users."

#### Miguel Valério, Head of FM at Critical Software

"I believe the greatest challenge is already energy management, which directly impacts carbon emissions and accounts, on average, for 40% of utility costs. The environmental issue – which has been debated for years, and was recently the theme of COP26 – showcases the importance of sustainable management practices, (in utilities, waste management, etc). Indeed, these issues need to be in every facility manager's skill set."

Léa Lobo, Content Director at InfraFM

"Being a facility manager requires you to act on the relationship between buildings, people, processes, and technology. Thus, the future belongs to those who best understand those relationships and know how to turn challenges into opportunities.

Any future will have room for good, quality maintenance because it extends the systems' useful lives and reduces waste, whatever that may be. Therefore, understanding systems and people is non-negotiable to take part, and build, the future we dream about."

## Irimar Palombo, CEO at the Brazilian Facility Management Association (ABRAFAC)

"FM and/or maintenance will be affected by global raw materials and chip shortages. Maintenance could experience delays, and so could projects to implement new technologies or IoT."

#### **Guillermo Miró, Applications Engineer at ATTEN2**

"Until now, people have adapted to machines, and Industry 4.0 advances in adaptive and intelligent automation.

The challenge for the next few years is the coexistence of people and machines, which is why we need to improve the interaction between them. This implies a formidable challenge regarding the technologies that enable human-machine interfaces.

For machines to adapt to people, we will need to somewhat improve the techniques to process natural language and computer vision, and significantly improve advanced support techniques for decision making in artificial intelligence."

#### Dr. Joaquín Olivares, Head of Advanced Informatics Research Group at University of Cordoba (Spain)



"Following the evolution we've seen in the hospitality industry in the last few years, our digital transformation will remain one of the greatest challenges in 2022.

Relying on technological solutions in building ventures is increasingly needed to offer guests a complete, safe and practical experience. And that requires managers to adjust their processes, train people, and invest in their businesses, which may be challenging but will elevate the venture to a new level, one that's more modern and market-ready.

As a consequence of the pandemic, high hygiene standards are here to stay. Guests will continue to worry about their own safety."

#### Claúdio Azevedo, CEO at APP Sistemas



"The challenges for hospitality have already been making headlines this year – and they won't be going away anytime soon.

Staffing is a major issue. While it's not just hospitality that's suffering, we are one of the hardest hit. I've lost count of the hoteliers and restaurateurs commenting on mass no-shows having set up interviews – that's if they even manage to get candidates that far in the first place! Sadly, I don't think this is a flash in the pan, with the situation likely to get worse before it gets any better. It's a problem that's just one amongst many at this point too.

Supply chain issues, particularly in the run up to Christmas, add to the managerial pressures. At the same time, previously rewarding forms of income, such as international business travellers, continue to be impacted by both the pandemic and the ongoing popularity of video conferencing.

There are many winds buffeting us at present, and I don't see 2022 offering any imminent relief in the short-term."



"Facility Management Service Providers will need to embrace technology in all aspects of the business:

- Workflow software;
- Vehicle tracking Co2, usage insight;
- EV roll out:
- Co-botics investment in autonomous equipment;
- Green chemistry;
- Increased productivity in response to the rise of agile working and new ways of working;
- Investing in training and development."

#### Paul Ashton, CEO at Birkin Cleaning Services Ltd

"It will be down to the service providers to ensure clients are aware of any potential risk to their services due to long lead times on products and ensure maintenance regimes are kept up. Service providers will need to adapt to changing technologies, improve on first-time fix rates, and identify potential failures early to ensure no interruption to services."

#### lan Perton, Director at CSS Facilities Services Ltd

"The industry relies on technology more and more, and there's no way around it. Both professionals and FM companies need to be knowledgeable about management, but also about information technologies, database management, AI, machine learning, data science, and so on. The challenge from here onwards is not implementing technology, but rather knowing what to do with it.

At Orion, that future is a reality since its founding. We have always been a company that focuses on technology. We thought about structured cabling systems and satellite Internet links when nobody in our industry even considered it yet. We thought about automation, remote monitoring and building teams for each project before the market initiated that cost reduction process based on technology and team optimisation. We are one of the few companies in the Brazilian market using augmented reality in maintenance and operations, and we were the first in Latin America to install Schneider technology to that end. We use specific software for maintenance management, which effectively digitised our communication process and the management of every part of the building. We understand that FM's convergence towards technology needs to be a natural and fluid step."

#### Roberpaulo Eller, Facility Manager at Grupo Orion



"For those who work in Facility Management, it's important to make an indepth reflection about the changes these new work contexts bring about. We need to analyse its impact, the users' needs, the repercussions of this digital transformation, and the new relationships between workers and companies. Besides, we need to redefine physical workplaces and the services they will demand. To be successful, [facility management] companies need to follow trends, and that means they need to be constantly up to date with the market's new needs.

FM work will need to be done in total harmony with users, so as to suggest solutions and improvements that can be customised and quickly adapted.

It's this knowledge and close relationship with the client that will offer exceptional experiences to users, whilst upkeeping facilities."

#### Rui Gomes, Country Manager at ISS Facility Services Portugal

"Adaptability will be key to face new challenges.

Even if there is a clear vision about the future, it's not always possible to go forward and implement everything one would wish for, given that balancing finances and budgeting often compromise innovations in FM.

Cost management is the first hurdle to overcome in order to implement new technology and expand digitisation. For this reason, ensuring service levels, the safety and efficiency of the operation set the ground for, slowly but surely, introducing further innovation and showcasing its added value. The balance between resource optimisation and managing the stakeholders' expectations will always be a great challenge to pave the way for the future.

FM companies will need to shift their paradigm from "maintenance per si" to integrated services. This integration should cover all aspects of management,

operation and project management. The ability to deliver customised experiences – which contributes towards productivity – as well as integrating operations and project management, will certainly be a win-win model for everyone involved.

Using new technologies and differentiated ways to deliver services will set companies apart in the decision-making process for similar contracts, particularly in a context that will surely be more competitive and in which delivery will be heavily scrutinised."

#### Miguel Valério, Head of FM at Critical Software

"Professional training and qualification.

Unfortunately, the Brazilian economy has been going backwards, which decreases investment in professional training. Besides, there's an urgent need for companies to include digital systems that help them manage, monitor and understand buildings and assets.

A building is a product and, therefore, it has value. People still don't understand that a quality system is usually a well-defined path to organise processes, making management easier. Today, for example, companies still lose a lot of money due to the lack of understanding regarding where they use and waste their energy... If monitoring is split among several spreadsheets, oftentimes with miscalculations, without any integration, without a track record, without day to day data, it's impossible to make the right decisions.

An FM professional needs to be strategic. For as long as they manage just the tactical and operational fields, the department will be incomplete and companies lose a lot of money on their balance sheet because they lose sight of the mid and long-term implications for the entire infrastructure that supports their bottom line.

Without adequate support to that infrastructure, it doesn't matter if companies reach sales records, and it doesn't matter if they raise their prices, because their profit will remain unsustainable."

#### Léa Lobo, Content Director at InfraFM



"I believe our future will be defined by those companies that can understand the client's needs and act in an ethical, committed manner, and also get the most from internal teams with flexibility and innovation. ESG should guide companies' ethical responsibilities in every decision.

In the future, FM companies should commit to technique, because using the available technology implies mastering the sector's technical concepts, especially in building maintenance, and commit to taking care of people and employing ethical business practices."

# Irimar Palombo, CEO at the Brazilian Facility Management Association (ABRAFAC)



"There are several strategies but flexibility in project management and previously acquired knowledge may help prevent these crisis situations sooner. For example, by managing critical stock successfully or anticipating complex scenarios."

#### Guillermo Miró, Applications Engineer at ATTEN2

"Industrial service providers will continue to go forward with automation, sensor technology, and data analysis. Despite their enormous growth, these services are still not implemented in most industries. In other words, in my opinion, there's still a lot to achieve with Industry and Maintenance 4.0 before we jump to 5.0. On another note, intelligent software providers, along with mechatronics and other related fields, will reach enormous heights."

Dr. Joaquín Olivares, Head of Advanced Informatics Research Group at University of Cordoba (Spain) "Inevitably, future hotels will be much more tech. Not only due to market changes and the new solutions it offers but also due to the guest's needs and wishes. That will make operations easier while distancing people and compromising their experience. Thus, the priority will be finding ways to provide guests with a cosy and human-centric experience, even when activities are automated."

#### Cláudio Azevedo, CEO at APP Sistemas

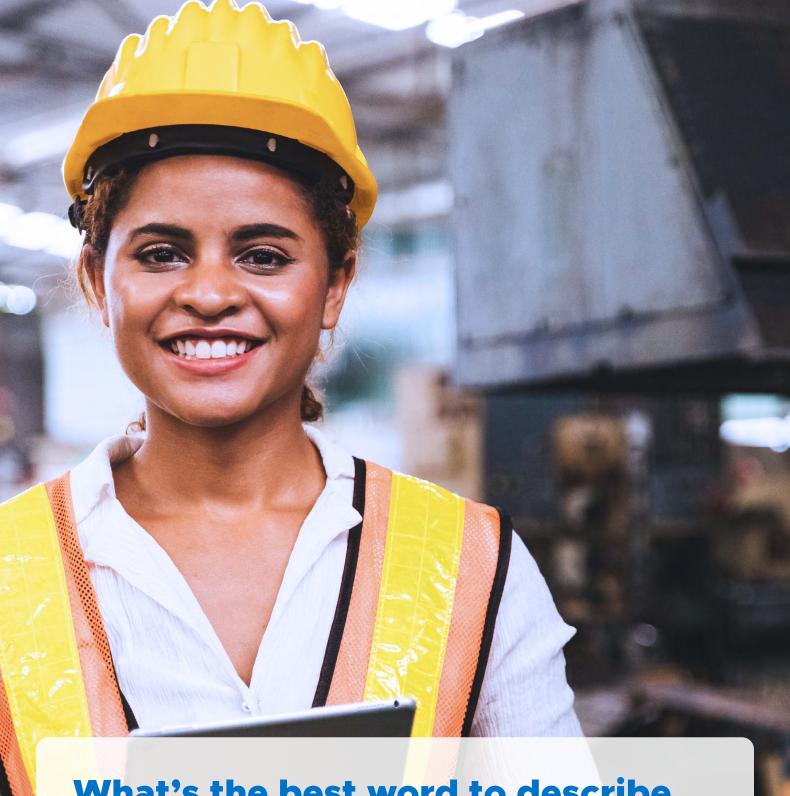
"One thing that I think hospitality has always been is resilient. It's an industry that's quick to adapt, and the agility that has been on display over the last 18 months or so has been breathtaking at times. I'm fully confident that the latest challenges will prove to be hurdles we're able to overcome as we march onwards as an industry – albeit with some of the hurdles being painful at times.

The staffing issue, whilst impacted by external factors such as Brexit and others, is causing us to look hard at what we stand for as an industry and what we can offer those working within it. It's going to take some analysis and self-reflection to work out what makes us an attractive option, and then we're going to need to champion those elements – while also working to improve the elements that are putting people off.

For me, personally, I know just how wonderful hospitality is as a career path. But, as an industry, we do too little to celebrate that fact, which, in times when we're competing with other sectors to recruit staff, can lead to us being overlooked as a simple stopgap. I think the key is to focus on just what makes hospitality so great and then trumpet those aspects for all we're worth.

Other factors, such as the supply chain issues, international business travel and more, are somewhat out of our control – but I have complete faith that our renowned durability as an industry will see us through these difficulties in the long run."

Jane Pendlebury, Chief Executive at HOSPA



# What's the best word to describe the future of the sector?

In the long run, there are many changes we must prepare for. But if they could sum up the future in one word, what would it be? Here, not all experts agree. Some mention resilience, others turn to innovation, while others settle for speed. There's just one thing nobody disputes: the future is as challenging as it is ingenious.

"Progression. We are at a point where the cleaning sector, in particular, has the potential to change massively and one could argue it needs to change.

The advancement of technology is becoming ever more progressive and the key to our future is integrating humans with all aspects of tech. Co-botics, proof of clean software, sensor tech, app based training platforms, EVs, chemical advancement, coatings. Additionally, the formation of the APPG, British Cleaning Councils' efforts to raise our profile and the opportunity for the trade associations to work closer together, combined with the general raised profile of cleaning and hygiene – the time for change is now."

#### Paul Ashton, CEO at Birkin Cleaning Services Ltd

"Exciting!"

#### lan Perton, Director at CSS Facilities Services Ltd

"Data. It's the new oil, for sure. Because data-based decision-making eliminates "trial and error" and becomes more assertive.

With the pandemic, we noticed that a lot. On March 17th 2020, on a weekday, everything changed in Brazil. The next day, buildings were deserted. Managers who were not prepared, who didn't have data at hand, took two, three months to adapt. Even some who did have data could not transition seamlessly, because they didn't have good insights.

Some facilities generate thousands of data sets per day, yet they provide no insights. What sets them apart is their know-how, knowing how to turn data into information. You need to have a platform that can integrate the management of every part of FM, resulting in more assertive decision-making. We cannot neglect much-needed investments, logs, asset predictions and depreciation, ROI, and so on. It's not enough to generate data, you need to turn it into valuable insights."

#### Roberpaulo Eller, Facility Manager at Grupo Orion

"Experience. Because we believe Facility Management's role will focus on users' experiences and needs."

Rui Gomes, Country Manager at ISS Facility Services Portugal

"Innovation.

Several words may define FM's future, like "adaptability" or "foresight". However, the future will be characterised by innovation, at several levels and in different contexts.

Facility management's core philosophy, which is that of foreseeing problems, is key. Therefore, every tool, technology and process improvement that allows us to make better decisions will enable FM to be more efficient and to become an added value for the organisation it is a part of.

FM will always be the agent that, after identifying several challenges, will implement and deliver the solution that enables sustainable growth and user productivity and, by extension, the success of the business.

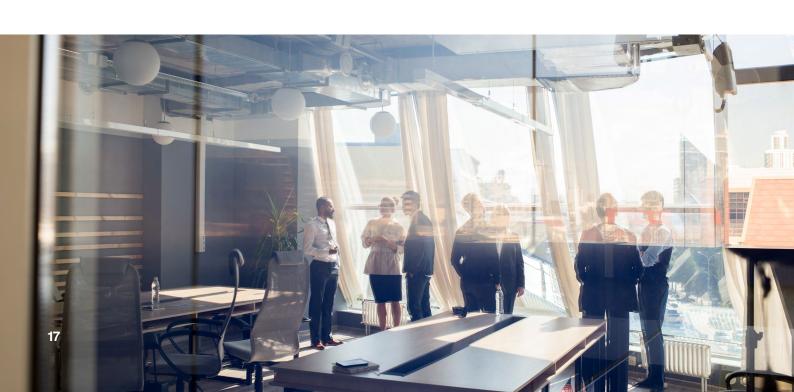
In a world that's constantly evolving, the leaders pave the way to turn today's trends into tomorrow's standards."

#### Miguel Valério, Head of FM at Critical Software

"Speed. Today, to remain competitive, we need to respond quickly and well. These are attributes we all seek but a facility manager will hardly match the two because they lack adequate management tools. Unfortunately, despite having excellent service providers, their operational teams still can't provide satisfactory services.

Speed can be achieved through the digitisation of real data, which translates the building's life as it is, and if information and data are available on any gadget, at the palm of your hands."

#### Léa Lobo, Content Director at InfraFM



"I'm naturally an optimistic and positive person, I always believe the best is yet to come. So I choose "growth"."

### Irimar Palombo, CEO at the Brazilian Facility Management Association (ABRAFAC)

"Resilience. New technologies have brought resilience to these complex times, and the flexibility of all agents will further this resilience."

#### **Guillermo Miró, Applications Engineer at ATTEN2**

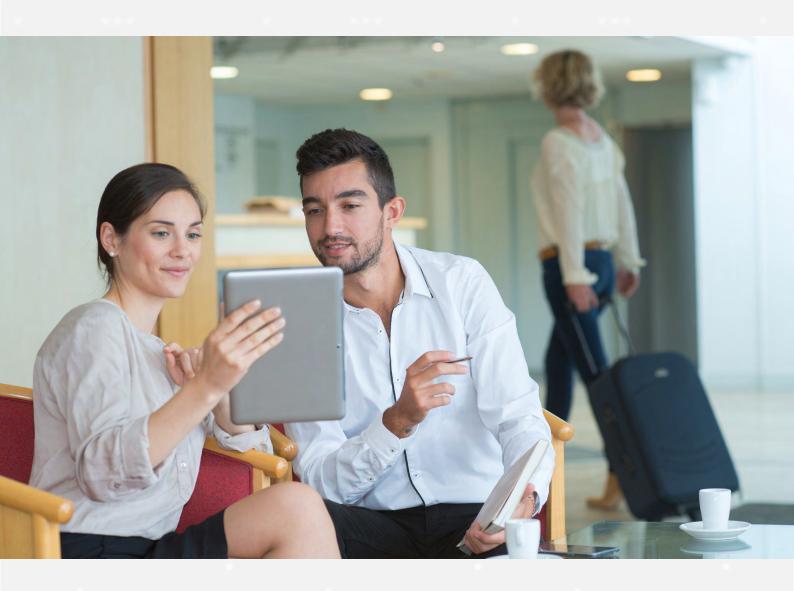


"Thrilling. We've arrived at the beginning of a time in which we need to give machines consciousness. Asimov would enjoy these times."

#### Dr. Joaquín Olivares, Head of Advanced Informatics Research Group at University of Cordoba (Spain)

"Experience. Mainly in the tourism sector, which is already a little simpler to offer through customer attention and the activities we recommend to the guest. But that will become the norm for business hotels too, which will need to offer a fuller experience to meet their customers' expectations and set themselves apart from the competition."

Cláudio Azevedo, CEO at APP Sistemas



"Exciting. As touched upon, our agility as a sector is phenomenal. Blessed with a wealth of sharp minds and entrepreneurial spirit, there's always something exciting happening, and we're an industry that doesn't stand still. From operators to suppliers, we're always looking to innovate, so, regardless of the challenges, I truly do think we're an exciting, evolving industry that there'll always be a need for. The future, in my book, is bright even amidst a raft of challenges."

Jane Pendlebury, Chief Executive at HOSPA

# Conclusion

The challenges each company faces change according to their own market and the industries it provides services for. However, judging by these answers, there's no question about a common denominator: technology. Technology will be ubiquitous, be it in managing or out there in the field. But there won't be technology or innovation just for the sake of innovating.

Mobile and intelligent technology will serve clear purposes. The first one is collecting, analysing and mining data to generate valuable insights. The second is offering better work conditions both to maintenance teams and users. Finally, we begin an era where technology serves humanity – and not the other way around.

We can refer to this new era as Industry, or Maintenance, 5.0. Nevertheless, this time we shouldn't brace for a new industrial revolution. Rather, it's a natural evolution of what we've achieved so far. After an era of unbelievable innovation and a pandemic that changed irrevocably the state of affairs, people are right back at the centre.



# **About Infraspeak**

Infraspeak is an Intelligent Maintenance Management Platform (IMMP) that brings outstanding connectivity, flexibility and intelligence to your operation.

Gain full control and the flexibility to build your own, custom, maintenance management solution capable of answering your own operational challenges.

Online. Offline. Behind a desk or in the field. Infraspeak connects your team to your plans, your plans to your goals, and your goals to the intelligent maintenance you need to take your operation into the future.

Talk to our team of specialists and enter a world of data, intelligence and automation

Intelligent maintenance starts here.

#### **Learn more**

