



Maintenance and FM

Challenges for 2023–2025 and how to overcome them:

10 experts share their thoughts



Introduction

Remaining attuned to the developments in maintenance and facility management can confer a substantial competitive advantage. The 2020-2021 pandemic has been a pivotal teacher of the importance of preparedness, or the consequences of its absence, with enduring lessons resonating into the foreseeable future.

This transformative event unfolded as a perfect storm, impacting an ageing Western population and delicate healthcare systems. The vulnerabilities exposed were exacerbated by an already fatigued workforce transitioning towards remote work and earlier retirements.

Compounding these challenges were subsequent disruptions to supply chains. After the pandemic subsided, like a boxer's right hand, the conflict in Ukraine flared up, leading to substantial spikes in the costs of materials and supplies. Staying still in the maintenance and FM sector got more expensive, almost overnight.





**There was a clear need
for aid, and for many,
that was technology.**

While there have been notable advancements, exemplified by the prevalence of IoT sensors, other digital trends demand attention. User experience emerges as the predominant trend of the last decade, with a growing emphasis on human-centric facility management and maintenance in the context of Industry 4.0. This shift is anticipated to usher in a new wave of devices and software, fundamentally shaping the industry.

On the other hand, as technology continues to advance, integrating predictive maintenance into operations becomes a cornerstone for efficiency. It aligns with the core tenets of Maintenance 5.0, emphasising a data-driven and proactive approach that transforms maintenance from a cost centre to a strategic driver of operational excellence.

Last, sustainability is poised to take centre stage as a priority like never before. This sentiment extends to the facility management industry, presenting challenges such as the adoption of paperless operations, enhanced building efficiency, and improved waste management practices.

Considering these dynamics, we engaged with 10 experts to glean their insights into the key themes of the upcoming years; additionally, they offer strategic recommendations for addressing these new trends and challenges.

Ultimately, the future is shaped by the actions and decisions of those in leadership positions today.



What can we anticipate as the primary trends and challenges in FM and maintenance?

In the next couple of years, the paradigm of facility management and maintenance will continue to be shaped by the enduring effects of transformative shifts initiated during the COVID-19 pandemic. What initially began as provisional adaptations has evolved into enduring facets of our daily routines.

By 2021, a new normal had taken root, setting the stage for the subsequent years marked by resilience amid unprecedented challenges, including geopolitical conflicts and persistent increases in material costs.

Proactive maintenance stands as an imperative, gaining even greater prominence. The lessons from recent events underscore the critical need for facilities to predict and address issues before they escalate, reinforcing the role of foresight in operational strategies.

Embracing cutting-edge technologies becomes not only a strategic choice but a pivotal inevitability, indicative of the dynamic evolution and progress within the field. The convergence of forward-thinking strategies and seamless technological integration defines this transformative phase, laying the groundwork for a future where facility management and maintenance are propelled by innovation and adaptability.



If we had to choose 3 trends in maintenance and FM, they would be:

- Further applying artificial intelligence and machine learning mechanisms to create predictive maintenance models targeted at specific sectors
- Developing endpoints with information and UX that are better adjusted to each type of operator/technician
- Greater and better integration with IoT systems, based on the growth in popularity of sensor systems.



Ricardo F. Marques,
Head of Marketing at Pontual

Greater **automation** of processes in customer service

It's important that we leverage advancements in technology to tackle the shifting challenges in the market, specifically increased labour shortages. By exploring new solutions to improve the guest experience before, during and after their stay, hotels can stand out and increase customer satisfaction.

Automating certain processes through digital channels, like those powered by EZ4U, such as WhatsApp or SMS for promotions and booking, hotel businesses can make it easier for customers while also reducing the workload for the hotel by managing time and operations more efficiently. Small marginal gains could be the difference between thriving and surviving, and automation is a good example of this.

Adapting communication for personalised experiences

A recent report by Google and Phocuswright states that six out of ten tourists believe it's important for hotels to tailor their communication to their customers' preferences or past behaviours. Having a better idea of the customer profile represented in each reservation can allow managers to develop a targeted communication strategy to enhance the customer experience and satisfaction.

Additionally, the report highlights that 36% of tourists are willing to pay more for personalised experiences. This suggests that one of the trends for the upcoming years may be the implementation of more advanced loyalty programs using technology.

Given EZ4U's expertise in digital communication strategy, it's possible to provide a personalised experience for the customer not only in terms of promotions and special offers but also by automating services through WhatsApp. Imagine if guests could request products or maintenance via voice or text channels.

Changes in travel styles

The concept of hybrid or remote working is here to stay and the hotel industry must be prepared for this shift. The traditional short business trip may now turn into a longer stay where the client will seek additional comfort, work and even kitchen facilities. In this sense, it may be necessary for hotels to adapt and provide services such as rooms with office spaces, better quality WiFi networks, and spaces for remote conferences.



João Monteiro,
Head of Partnerships at EZ4U



One of the main challenges I expect to see is more of an effort to guarantee the economic viability of IoT tech deployment across all FM chapters and verticals. **Current technologies already allow you to extract multiple insights by converging sensors with several layers of artificial intelligence.** This leads to considerable gains in consumable savings, user health and well-being, sustainability, availability and multiple scenario prediction. However, the implementation and operational costs of these new technologies remain the main hindrance to their large-scale use.



Wallace Neto,
Marketing & New Business at Grupo Orion

Sharp upturns in utility costs coupled with the pressing need to cut carbon emissions means this will gain more of a spotlight. We must act as an industry — **energy management already accounts for an average of 40% of a building's costs.** The immediate dangers of climate change means sustainable management (utilities management — water, energy and gases — waste, etc.) has gained more focus, but it's worth noting that this has been a challenge for years.



Lea Lobo,
Head of Content & Events at Infra FM

I would underline six huge challenges for facility management in the next couple of years:

- Successfully **integrating technology** with human output in a cost-efficient and effective way;
- Interpreting data in a meaningful way — how people can extract data when systems don't speak to one another and limit usability;
- Choosing the best investment: with so many systems, it's hard to know how best to spend money and ensure a positive return on investment;
- Balancing the need to **reduce environmental impact vs. cost control**;
- Increasing labour costs (we've already had 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**, up 40% since the start of 2021, which will impact service and the ability to retain employees. These must be filled.



Paul Ashton,
CEO at Birkin Group



Over the past few years, hospitality has faced a unique set of challenging circumstances, to which it has responded with astonishing resilience. It must be stressed that the **rising cost of living, staff shortages** and the need to consider our environmental impact remain considerable challenges.

Despite these obstacles, we're clearly on the right path and industry education efforts are helping. Early-stage careers are feeding the industry from the bottom up, whilst leaders are finding more and more innovative ways to be carbon conscious. What's more, the appetite for hospitality and new experience-led travel is resembling pre-pandemic levels — with consumer confidence growing by the day.

Technology will play a key role in shaping the future of the industry, offering back-of-house solutions and also more avant-garde solutions like integrating the metaverse into hospitality experiences.



Jane Pendlebury,
Chief Executive at HOSPA



The first challenge will certainly be to have the openness and capacity to frame FM at a strategic level, to the detriment of the purely operational models of the past.

To meet future challenges, this framework must include: **operational agility, evolution of the workspace, technological integration and sustainable development.**

The workplace is a constantly evolving process. In a short period of time, new policies, approaches and work habits have caused a shift in the paradigms of workspace use in a considerable number of industries. The future challenges in relation to the workspace should contemplate fundamental axes, such as **flexibility**, with the capacity of spaces to be modular, adaptable to each activity and/or circumstance; **collaboration**, regarding the way in which spaces enhance communication and interaction between teams; **productivity**, in the sense of allowing the development of skills, activities, in a comfortable, efficient and safe manner; **experience**, which allows an organisation to deliver something differentiated, in the whole of what a working day is, from the simplicity of the processes to the quality of the equipment made available and to the quality and level of service that must be delivered; **technology**, already a reality with about 75% of the market having at least one IoT-based service.

FM is currently undergoing a digital transformation, which will have an exponential growth during the next few years. At this stage, the foreground is in development and growth, from a management perspective, with automated systems, sensors and aggregated information for decision makers, on digital platforms. These systems will be widely disseminated across all organisations, with the biggest blockage at the moment being costs and the perception of added value. There is still a way to go on this matter.

Last, **sustainability** is another challenge. The introduction of sustainable and creative policies is an opportunity for the FM to be an agent which, through its role in the organisation, contributes to a more circular economy, with equipment coming from recycled materials, investment in renewable energy sources and the definition of sustainable measures in the work space. Although with a clear vision of the future, it is not always possible to move forward and implement everything that would be desirable, given that the financial balance and the availability of investment largely condition the standardisation of innovation in FM.

Cost management is the first point to overcome, in order to introduce new elements of digitalisation and technology such as those addressed. For that reason, the guarantee of service levels, security and the efficiency of the operation are the basis to additionally and progressively introduce more innovation and demonstrate its added value to the organisation.

It is, therefore, a long road, where FM should have a central role, through the definition, support and implementation of all the challenges created for the organisation, from the logistics plan to the innovation plan of the workspace, to the management of new projects. This balance between resource optimisation and the management of expectations will always be a huge challenge in preparing the future path.



Miguel Valério,
Global Head of FM at Critical Software



FM and maintenance companies are under pressure to have more control over their operations, to be more cost-effective, and to deliver on time and within budget whilst meeting compliance standards and quality expectations.

This requires that maintenance professionals have access to intelligent data to make better purchasing decisions, taking advantage of shared workspaces to foster stronger business relationships in a fast-paced environment.

On the other hand, intelligent technology presents itself as a trend, a challenge, but especially, as an opportunity. Finding ways to use technology to improve workflows, reduce waste, enhance logistics, and create personalised solutions is something the FM and maintenance professionals will continue to pursue in the next few years.

Lastly, we cannot forget that the need to establish a more human-centric way of doing maintenance is a challenge in itself. We need to start thinking about collaboration as a means to work smarter, more resiliently, building stronger relations that lead to long-lasting outcomes. How can we do business together in a more collaborative way? This, in my opinion, is the question we'll all be asking.



Luis Martins,
Founder and CTO at Infraspeak



How will FM companies of the future look? What priorities and characteristics will define them?

What will a successful FM company look like in a year's time? How will the day-to-day operations of facility management teams be affected, and what tools and technologies can they use to address these challenges? Additionally, what new skills will facility management have learnt to meet these new demands?

The FM companies of the future will be driven by intelligent systems that will completely dematerialise the relationship they have with their entities. The priority of these companies will be to invest in technology and encourage their clients to take a chance on IoT systems that allow for greater connection between their activities.



Ricardo F. Marques,
Head of Marketing at Pontual



As the world digitalises further, the hotels of the future will need to **work for people, but ‘without’ them**. In other words, in the future, HR may only be needed for a few essential and fundamental tasks, with the remaining operational processes possibly being automated.

Some of the best examples of tasks that may be automated:

- **Automating booking and check-in processes**

Today, any customer can automatically complete their booking but this still needs to be validated by the hotel reception. In the future, this process could be much simpler. For example, by completing a booking and validating the customer’s identity, the customer could only need an authentication code sent via SMS or WhatsApp. Sharing that code upon arrival along with the hotel room will save huge amounts of time and improve check-in experiences.

- **More flexible payment methods**

There’s also set to be changes in the way hotels take payments. With the steady growth of fintechs and decreasing volatility of digital currencies such as cryptocurrencies, the hotel industry may be forced to diversify its means of payment to reach new customers and new geographies that, for different reasons, may not be reached currently.

- **Sustainability**

Sustainability isn’t a new trend, but set to be an increasingly important trend. Given that hotel customers are becoming increasingly demanding in their stays, greater care is needed to nurture that “feeling at home”. This is not easy to achieve and, in some cases, requires a considerable time investment — for example, in large hotel groups the average renovation time for a hotel will be around 10 years, and the main challenge in the short term is trying to find more neutral solutions that can last longer and produce a more positive impact.



João Monteiro,
Head of Partnerships at EZ4U

Positive and healthy user experience, with a strong focus on health, well-being and safety will become an increasingly large priority for managers. Infrastructure should adapt, even more, to users' individual characteristics. We'll find **ventilation, air-conditioning and lighting systems integrated** into the dynamic schedule of each of the employees, especially given the trend we're seeing of more dynamic physical spaces with a higher turnover of space. Another big trend will be the increasingly frequent presence of **data** professionals in FM teams. They'll further improve the user experience with usage data and evaluations.



Wallace Neto,
Marketing & New Business at Grupo Orion



FM is a reflection of the organisations' strategy. It shares its values and mission and consolidates the corporate culture. At the same time, FM is responsible for ensuring the life cycle of the organisations' support activities, from corporate real estate to sustainability, maintenance and project management, services and workplace.

With their eyes set on the future, companies must have the ability to be flexible and adapt to the needs of today. Energy constraints, the impacts of climate change or even **social changes** resulting from situations such as the pandemic we have recently experienced are some of the examples of the indicator of the robustness of FM companies.

In the transformation phase we are living in, the priorities of FM companies should be **innovation, entrepreneurship and social inclusion**, without ever losing their focus on customer proximity and talent retention. These priorities are in harmony and complement each other. Having **talent** within organisations makes it possible to foster entrepreneurship and develop more innovative solutions.

Focusing on the customer, being close, leads organisations to assert themselves through their differentiation.



Mariana Abreu,
Operations Coordinator IFS at SAMSIC Portugal



As demonstrated year after year, the industry must remain resilient and quick to adapt to the changing circumstances as situations can change quickly, often without warning. In light of this, it's so important to keep up to date with the latest industry trends and remain versatile in your approach.

As mentioned, technology will have a big influence in the coming years, so being aware of what solutions are on the market and how they could elevate your business is essential for remaining competitive and contemporary.

Surrounding yourself with fellow hospitality professionals is also a great way to navigate the challenges throughout the year. After all, we are one big family and at HOSPA, we provide our members with continued support to ensure they remain at the sharp end of the industry.



Jane Pendlebury,
Chief Executive at HOSPA



In the management plan, structures must evolve and be created that allow the delivery of this service, not only in an occasional way, but in a complementary way, upstream of the operation. This is currently the major aspect to be developed in FM companies.

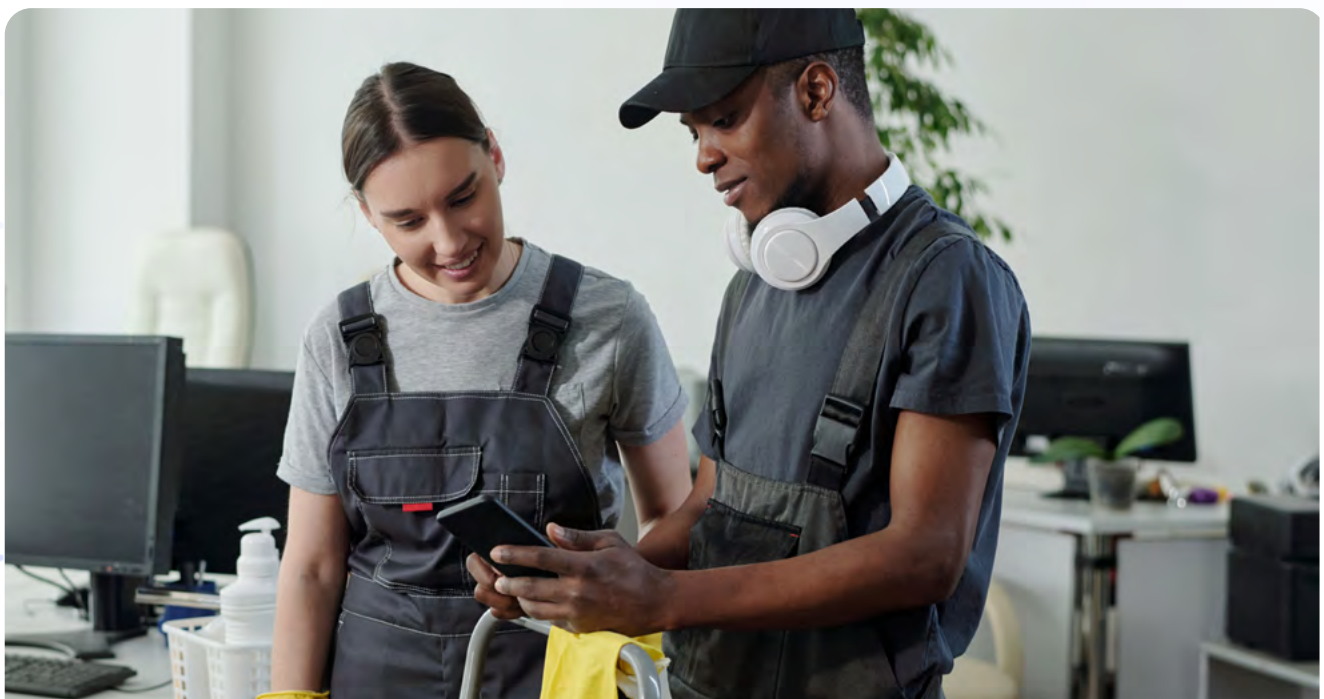
At a more operational level, the **focus on the end user** should be the priority, in order to actively contribute to the positive experience of the occupants and, consequently, to the success of the business.

In terms of project management, in a future that is expected to see a greater pace of change, the **integration** between operation and project management, which may range from contingency plans to space fit-outs, the ability to deliver this type of value, taking advantage of the existing relationship, synergies and history, will certainly be a win-win model for all involved.

The adoption of **new technologies** and different ways to deliver your services will make the difference when it comes to deciding between similar contracts, where the context will surely be much more competitive, with the value delivered being scrutinised in detail.



Miguel Valério,
Global Head of FM at Critical Software



The FM companies of the future are aware, for example, that there are more multi-layered issues to handle, like the emergence of hybrid facilities such as workspaces. Intelligent technology is the way to meet those needs, with IoT, virtual reality and, of course, Intelligent Maintenance Management Platforms.

Catching up in terms of **customisability**, user experience and integrability must be a priority, and resorting to intelligence is the way to meet it. Of course, transforming working habits brings challenges too. It's essential for facilities management and field service teams to be closely connected, at the heart of operations, and to be the primary beneficiaries of advanced intelligent technologies.

That's why **we cannot separate intelligence from collaboration**, since this is what allows the removal of obstacles from the maintenance work and its natural, operational processes. The FM companies of the future will look for agility, transparency, visibility, actionable data and resilient relationships with their partners. If there's something both the pandemic and the war have shown us, it is that we cannot operate alone.



Luis Martins,
Founder and CTO at Infraspeak

If the future of the maintenance and facility management sector was to be described in one word, what would it be?

In the long term, the maintenance and facility management sector will likely see many changes and it's important to be prepared. However, if these experts had to use one word to describe the future of this sector, what would it be? The opinions were diverse, with some emphasising the need for **resilience**, others highlighting the importance of **innovation**, and others focusing on making operations more **people-focused**. Despite these differing viewpoints, all agree that the future of this sector will be both challenging and innovative.

Intelligence. We understand that equipment and sensors will articulate more with one another and, with the intelligent treatment of all transacted information, we will have increasingly autonomous systems supporting end-to-end relationships with all stakeholders.



Ricardo F. Marques,
Head of Marketing at Pontual

Although there are new trends in the hospitality sector, we have chosen a traditional word that points to the future: **customer**. The customer will be at the front and centre of all decisions made because, at the end of the day, the most important thing is their satisfaction.

It will not be worth investing in top-range technological equipment, extending the unit to more services or spending years turning the whole environment sustainable if, in the end, the client is not satisfied and does not make reservations.

In this sense, the future passes by using all the available mechanisms and taking advantage of everything that technology gives us to improve day-to-day operations in order to meet the needs and demands of our customers.



João Monteiro,
Head of Partnerships at EZ4U



Resolve. When thinking about the future, it's important to remember that we have the power to shape it through constant learning and understanding of technologies, the economy, finance, and environmental issues.

A systemic approach is crucial in order to fully grasp the complexities of the world we live in. With the current crisis of perception, including wars, loss of lives and environmental catastrophes, it's important to also question what we are working towards and why. We must be mindful of the potential negative impacts of our actions and consider the direction in which our companies and society are heading.

To do this, we must ask ourselves what hasn't been done yet, what we should do, and how we can enable ourselves and communicate our actions effectively. Additionally, it's important to consider the human aspect of our actions and decisions and to approach them from a more human and environmental perspective.

We need to address what is being demanded, remembering that people should always be at the centre of our actions and decisions, and that we need to make room for a more human and environmental perspective.



Lea Lobo,
Head of Content & Events at Infra FM



FM companies have been driven by innovation, digital transformation and sustainability, but the future must focus more on **inclusion**. As the promoters of the values of organisations, being the catalysts of corporate culture, inclusion is the key to fostering a more balanced and healthy business environment.

It is essential to invest in new ways to share ideas, spaces, and cultures. By promoting inclusivity in corporate spaces, we can build a better and longer-lasting world.



Mariana Abreu,
Operations Coordinator IFS at SAMSIC Portugal

Progression. The cleaning industry is at a crucial turning point, with advancements in technology leading to potentially significant changes. Technological advancements are becoming more progressive and the key to guaranteeing our success 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 Group

Vibrant. 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.



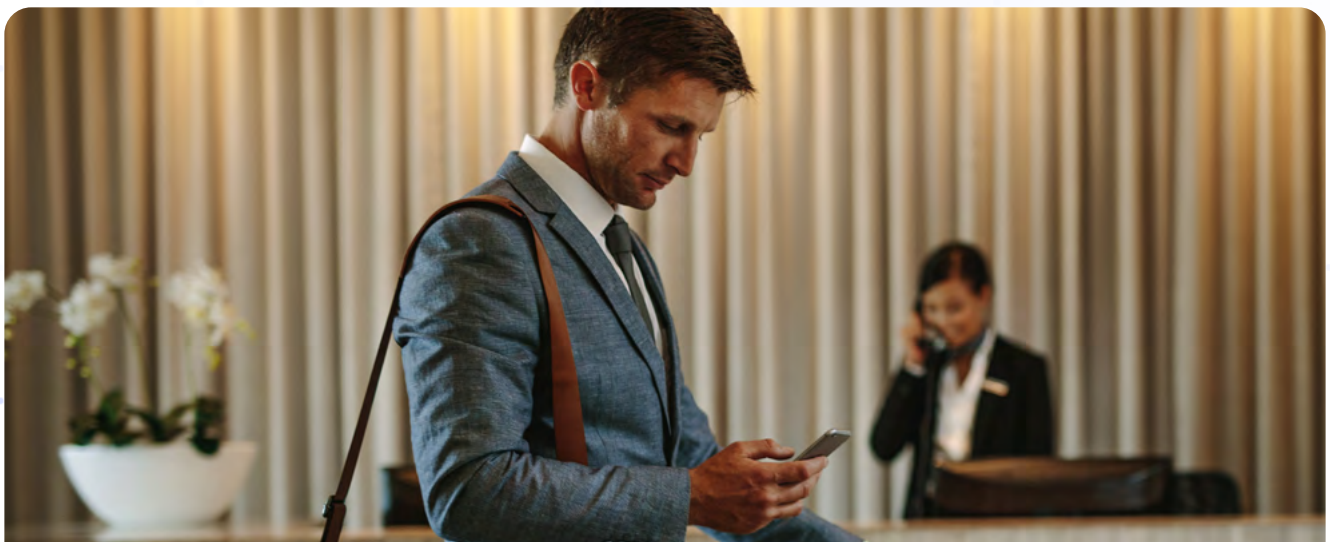
Jane Pendlebury,
Chief Executive at HOSPA Management

The hospitality sector has undergone significant changes in recent years, as it seeks to diversify revenue streams, improve processes, streamline operations, and review staff. Alongside this, it has had to adapt to new consumer behaviours and meet the evolving demands of guests.

Without a clear, data-driven, and strategic vision, it will be challenging for hotels to remain profitable in the industry. Technology can play a vital role in this process, providing hotel managers with the tools they need to make informed strategic decisions for their properties.



Cláudio Azevedo,
CEO at APP Sistemas

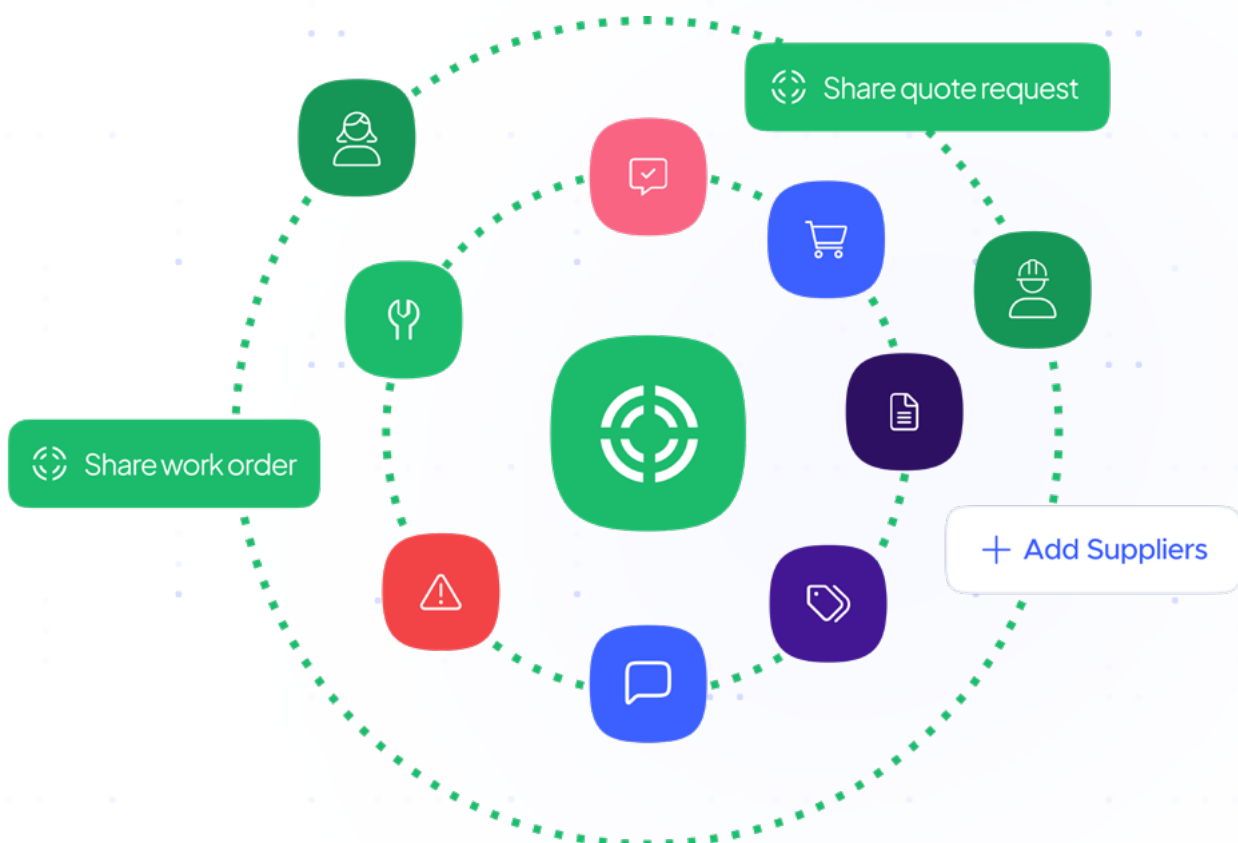


Collaboration. There's no way to face the challenges brought by Maintenance 5.0 without a human-centric approach, where software, hardware and people work seamlessly. This human-centric view asks for the use of intelligent tech to create dematerialised shared environments where [collaboration can happen in real time](#), with access to synchronised data and with in-built chat capability, and where planning is done altogether.

At Infraspeak, we strongly believe that a more synchronised, intuitive and transparent workflow is key to work as one towards the future of FM.



Luis Martins,
Founder and CTO at Infraspeak



Conclusion

The specific challenges that each company faces depend, of course, on their market and their industry. However, it is clear from the responses we gathered that technology will be a common factor in addressing these challenges, both in managing operations and in the field.

Technicians, teams, facility managers and service providers are and must be at the centre of operations, and must be the main beneficiaries of new, and more sophisticated, intelligent technologies. The use of technology and innovation should not be an end in itself, but a means to an end, such as collecting and analysing data to gain valuable insights that boost productivity and allow better decision-making, add predictability to the operations, or gain back full control.

We're coming out of an unprecedented period of innovation, with people at the centre of this new era.

By collaborating, we have the best chance of overcoming the challenges brought by Maintenance 5.0, and that's why we have so much to gain collectively by having this conversation.

[Learn more about Infraspak's Intelligent Maintenance Management Platform](#)

Join the IFM **Innovators** Programme

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