



# **Emerging Trends 2023**

We commenced last year's Emerging Trends looking at the effect of COVID-19. Many of us believed that by now we would have moved to a post COVID-19 state, and whilst many appear to have recovered, the general health of people and particularly the health of the nation, still seems to be in a post traumatic state.

Three changes of Prime Minister in a Government increasingly under pressure, a war between Russia and Ukraine, an NHS crisis due to the poor health of many, and a growing cost of living crisis, where the increased costs of energy may additionally leave people and companies in a very difficult situation. Not a basis on which to start a recovery but this is where we find ourselves at the beginning of 2023.

A global shortage of semiconductors also saw companies explore in-house manufacturing and the potential of system on a chip (SoC) for relevant sectors. While this may be a very specific trend combined with the substantial shifts caused by the pandemic, more businesses will consider SoCs for their security solutions going forward.

In the 2023 forecast, we look ahead at the major developments and trends that will shape the coming year. The direction of the conflict in Ukraine and the continued fallout experienced worldwide as a result of the war, remains a central concern. This includes its part in the global energy crisis, with its challenges as well as opportunities for countries and businesses. This has also fed into economic crises with supply chain disruptions, continued inflation, growing costs of living, and the way that these issues fuel strikes and demonstrations across the world. Some protests will also be part of the flourishing trend in environmental activism, with businesses needing to consider reputational risks and social factors to drive decision-making.



#### Russia and Ukraine

In 2022, there was continued global upheaval as the world worked hard to recover from the pandemic, whilst the subsequent Omicron variant made recovery difficult, the outlook remained positive. However, any progress was swiftly eroded by the effects of the Russian invasion of Ukraine. The disruption to travel and supply chain over recent years were exacerbated by the war and the wider response to it, and the economic consequences have reverberated across Europe and beyond throughout the year.



The use of facilities management influences companies on a global scale. It has no limits when reviewed against their application and many areas of facilities management are affected by differing trends. The market is currently experiencing several influences which, during 2023, will play a major role in the application of technology to reduce costs whilst improving efficiency.

It has long been the case that the best outcome for the market is a 'people plus technology' model (people plus). However, with inflation and the subsequent economic slowdown, together with uncertainty around the continuing impact of Brexit, a significant focus on energy efficiency and the lingering effects of Covid-19, a reduction in client costs will play a major role in 2023.

Technological developments will continue to add differentiation and many companies will look to use technology to aid the decision making and cost saving decisions. As technology develops, the people plus model may become a thing of the past. Soft services such as cleaning and security have been particularly affected in this space and with an added focus on employee welfare and ESG, the relationship is developing and becoming intertwined. Difficulties in the salary expectations and Living wage increases may also force companies to think again as to the structure of the outsourced model.

The single source model has become outdated, however, with diversification comes the potential lack of specialism and it is usually this specialism that buyers of outsourced services are looking to purchase. The attraction of multiple services offered by the sector, which offer cross-selling opportunities, is only one factor that makes the sector highly attractive. Combining the purchase of many different facets of the industry is certainly appealing from a cost perspective.

The sector has the very desirable benefits of recurring incomes and opportunities for public sector contracts, as well as growing regulatory demand and the critical issue that spending is non-discretionary for client companies. This gives the sector significant protection during any potential downturn in the economy, though the size of contracts can be impacted by reductions in client activity levels if, for example, the contract involves catering to a contracted workforce.

Security has long been a prime example of a sector where there is a migration from manned services to a technologyled model, where the scale of third-party provision has strong advantages over individual provision. ESG is a growing feature of businesses generally and affords opportunities for the facilities management sector and so forms an element of M&A activity.

Energy management is a current focus given the sharp increases in costs seen in 2022. We have seen facilities management companies investing in solar powered solutions and now delivering the benefits to their clients. This will take the buyers into green energy solutions but a cautionary tale should be told. Many facilities management companies diversified into environmental solutions previously, only to find that they lacked the specialism, experience and resources to finance to deliver them.

Whatever 2023 and beyond holds, the long term prospects suggest a strong return. Continued efficiencies will open further opportunities for FM providers as companies look to outsource further aspects. Technology will continue to play an increased role and where recognised, the people plus model may continue to thrive.

#### **SECURITY**

# The 2023 Security Trends Report has four key areas of focus

- 1. An overview of the marketplace & market dynamics
- 2. The likely innovations
- 3. Upcoming legislation or regulation which will ipmact on the security sector.
- 4. What will become of the security sector?

In the 2023 forecast, we look ahead at the major developments and trends that will shape the coming year. The direction of the conflict in Ukraine and the continued fallout experienced worldwide as a result of the war remains a central concern.

### Market Overview

The global market for Manned Guarding Services is projected to reach US\$228.6 billion by 2025. Analysts believe this is driven by growing crime rates and an inadequacy of the police and law enforcement to provide complete protection coverage across locations globally.

In last year's Emerging Trends we focused on the challenges and nature of the response to COVID-19. As in 2021, security officers played a significant role in 2022. It is right to focus on the resilience of the service especially given the changing political and economic landscape. We have clearly demonstrated our resilience to changing needs brought about by such events as the death of the Monarch, Queen Elizabeth II, the Commonwealth Games in Birmingham and the sporadic and changing terrorist threats. Our innovation and response demonstrate we are ready to undertake roles at short notice and with great effect.

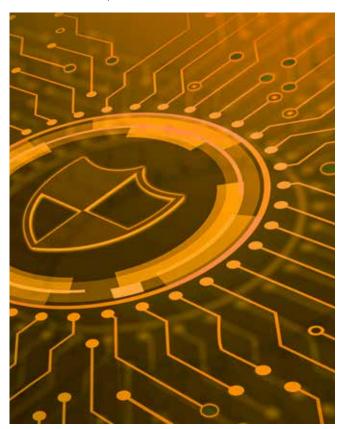
As we look ahead to 2023, we believe the changing face of threats from within the UK and elsewhere, will again be a key focus. Our security officers need to be protected and we are leading the way with other high profile security companies, to celebrate the role of the officer. Look out for the 3P's campaign, where we will demonstrate the role played by our officers delivering great service, whilst keeping people, property and places safe.

Our officers protect properties through a highly visible presence while averting inappropriate and illegal activities. Security officers undertake physical patrolling using advanced technology such as video surveillance cameras and alarm systems. These security professionals are trained to monitor for signs of intrusion, disorder, fire or crime.

Having said this, we are no different to many other industries who are struggling, post Brexit, to fulfil resourcing needs. Availability of good calibre officers continues to be an issue, so look out for some innovative solutions to address this need in 2023.

Market demand remains positive and the possible rise in investment in leisure and entertainment facilities appears to demonstrate that whilst major shopping areas may struggle for some time to come, the rise in exhibitions, trade shows, leisure events and others shows no sign of abating.

Without realising it, the general public are becoming security savvy through the various apps which can activate and deactivate alarms, turn on exterior lighting whilst the owner is miles away and undertake a myriad of events all from a mobile telephone.



We all recognise that contracted out security services can be labour-intensive, so there has been significant investment in technology in the sector by facilities management companies looking to address this situation, which provides a considerable contractor advantage. However, the use of technology such as CCTV is well established as a means of reducing manpower in certain applications, and this is no longer a significant product differentiator between contractors.

The growth of the market is dependent on market conditions, government support, and industry development. Organisations focus on strengthening their presence worldwide through partnership & collaboration followed by mergers & acquisitions during the previous 12 month and upcoming 12 month period. These strategies are widely adopted to increase their presence and the customer base. The competitive environment in the market is likely to intensify further due to the increase in new product developments and business expansions.

## Security technologies

Access Control, Cameras and Incident Management technologies top the list of solutions the UK's leading Security professionals are sourcing in 2022/23. When asked by the Total Security Summit organisers (27-28th March 2023), what aspects visitors to their exhibition would be most looking forward to, the answer was undoubtedly CCTV & Access Control innovations. This probably identifies that new innovation in other areas is not the main focus for people attending such events or that the event is targeted at electronic security buyers.

From a manufacturing perspective, suppliers believe MACH architecture will be the buzz phrase of 2023. Rather than building your entire system on all-in-one, monolithic architecture, MACH architecture, relies on choosing best-of-breed providers, and connecting them via an open API platform. Popular among companies looking to deploy modular, customized systems with less development time, many see this as the future of security technology for enterprise organisations.



Looking at the top security trends, it's clear that adaptive technology is where the industry is headed. The future of security technology will rely heavily on new ways to centralise data and automate operations. Cloud-based systems, Al-powered software, and stronger IoT connections are all key to navigating the new security landscape.

As organisations seek new ways to make workplaces more efficient and support a sustainable hybrid work model, the right security technology will play a crucial role in being able to quickly adapt to the needs of tenants and employees, as well as protect data and information from a host of new cyberse-curity threats.

Technology continues to shape the evolution of the sector. There's no doubt that innovations in Al, biometrics and the cloud have changed the face of how security systems are specified, installed and operated. Unsurprising then, that tech has been central to many of the predictions we've come across as they look ahead this year.

# **Video surveillance** – Al expands the frontier for security. (Further evidence of aspects mentioned in this report)

Video analytics have evolved at an alarming pace in recent years. Genuine artificial intelligence (AI) and machine learning programmes have allowed video surveillance cameras to become a central feature in data collection. From a security perspective, AI-based applications enable operators to respond to potential threats faster than ever, while simultaneously reducing false alarm notifications that plaqued earlier analytics models.



The metadata generated from sensors allows for new opportunities, too – assisted search capabili-ties designed to drastically improve the effectiveness of post-event investigations, for instance.

Outside of this, though, cameras are increasingly acting as a central data collection point, pushing the boundaries of a traditional siloed security device. The next step for the security professionals that manage and operate these systems will be develop actionable insights for other parts of the organisation to profit from. Already, video surveillance cameras are being marked as key to the evolution of smart cities, where they will play a sensory role in not just ensuring the safety of citizens, but also in traffic management via ANPR applications, early fire detection, and seamless access management.

Crucially the dashboards which collect the (metadata) data and present these as insights will grow in popularity. The challenge will be in how effectively organisations are able to utilise this data not only for security, but also for cross-departmental operations to increase efficiencies and revenue." We believe this will be the electronic security mantra in 2023.

# **Cyber security** – Breaking down siloes and zero trust

Cyber security is critical to the overall resilience of organisations. Whatever size of business, the growing threat from more and more sophisticated hacking techniques is very real and as we have seen in previous years, can cause major damage to businesses, public sector services, or increasingly, critical national infrastructure.

#### How does this relate to physical security, though?

According to research from Genetec, 36% of IT and security professionals are looking to invest in cyber security-related tools to improve physical security in 2023. There is now much greater awareness that with so much of the security infrastructure connected to the network, a siloed approach between physical and cyber teams is no longer conducive.

As we have identified elsewhere in this report, we are seeing smart devices such as routers, firewalls, cameras etc. exploited by attackers, in the case from Russia. Whilst the compromised device isn't used to attack OCS, it is used to attack other companies and, if detected, could cause reputational damage to OCS. Whilst these devices are outside of the scope of OCS IT the cyber team should be informed so a review can be carried out.

Genetec confirmed: "While a more holistic, automated approach to defending against threats will take precedence, so too will proactive security architecture planning and procurement."

Frederic Peyrot, Chubb Fire & Security stated: "Fire and security equipment are increasingly connected and interconnected which can open up businesses to cyber security risks. In 2023, business continuity requires rigorous product selection & implementation, regular hardware and software updates, high reactivity maintenance, expertise and strong collaboration between customers and all solutions providers on site."

There is no doubt that the continued push to secure networks by IT professionals and network vendors will create even more cyber security awareness in 2023."

# **Cloud** – Adoption of hybrid on-premise and cloud security management

The evolution of the cloud has transformed the way systems and processes operate and where they're managed. Outside of security, organisations and consumers are using the cloud every day for a multitude of reasons – whether it be to reduce on-site storage requirements, or simply for remote access capabilities. There's a reason that Amazon – best known for its online marketplace – has seen its AWS cloud service grow significantly in recent years. In 2021, AWS accounted for 16% of Amazon's total revenue.

The security industry may have taken a little more time to adopt cloud-based platforms than the consumer market, but it's clearly a growing segment, with companies such as Eagle Eye Networks, Brivo, Verkada and Cisco Meraki just some examples of those basing their entire business models off the cloud. The traditional industry players haven't exactly ignored it either, with almost all of them now offering a mixture of on-premise and cloud-based solutions. Cloud proponents point to the flexibility to reduce on-premise storage requirements, as well as regular data back-ups and remote accessibility, while 'Software-as-a-service' models support a transition of security budgets from CapEx to OpEx.

That being said, on-premise solutions have not disappeared – nor do they look likely to in the coming years. Certainly for enterprise solutions, what we're seeing is a shift towards a 'hybrid' model taking place, whereby processes are split between the cloud and on-premise where deemed appropriate.

Genetec: "As businesses rationalise costs, concerns, and approach to cloud migration, we can expect an increase in demand for ready-to-deploy hybrid-cloud appliances. This infrastructure will support edge-computing workloads and make existing devices cloud-compatible and help centralise access to systems and data across many sites."



# **Sustainability** – Taking ownership of sustainable practices and technologies

It's getting almost impossible to avoid the impact of climate change. 2022 saw significant disruption across the globe as a result of extreme weather events, from flooding in China and Pakistan, to Storm Eunice across Europe. Organisations from every sector are realising they can play a part in contributing towards more sustainable practices, and the security industry is no exception.

Leading security vendors are now including sustainability achievements such as corporate social responsibility (CSR), environmental, social and governance (ESG), and sustainability in their reporting systems. Meanwhile, installers and systems integrators are building in 'green' credentials when pitching for new projects and business – a positive trend we can only see continuing.

Marc Gaunt, Eaton: "For building owners across Europe, the common thread is the need to manage energy carefully and differently."

Mark Rowan, QCIC: "It's not just us driving environmentally friendly values anymore, as clients themselves are wanting to drive their own sustainability credentials. It's becoming much harder to 'cut corners' in specification, particularly on large projects, when end-users and building owners are committing to sustainable goals

Frederic Peyrot, Chubb Fire & Security: "...we are seeing customers increasingly ask about sustainability and system reactivity. A large part of the Fire & security business is focused around on-site preventive and curative maintenance visits or software upgrades."

Johan Paulsson, Axis Communications: "While organisations might make great efforts to reduce emissions from their own operations, these can be undermined if their upstream and downstream value chains are not aligned with the same targets. Tech companies will also be expected to demonstrate more clearly the ways their products and services support the sustainability goals of their own customers, creating novel and intelligent efficiencies that also help those organisations reduce emissions."



#### Mobile first technologies

One of the responses to the COVID-19 pandemic was the migration to remote and hybrid working which in turn emphasised the need for more mobile solutions. As a result, one of the biggest physical technology trends will be the continued development of mobile experiences for keyless door entry systems. Tomorrow's technology will not just be a mirror of the desktop experience, either. The front-runners are designing uniquely for the mobile user. While many innovations last year focused primarily on the end user, it's expected that security trends 2023 will focus more heavily on the management side of the equation.

#### Pitfalls of using certain technologies

Whilst we consider what to look out for in 2023, I am sure many of us remember statements made by the Government of the day, including the then Prime-Minister David Cameron in 2010, who stated that the investment made by the UK and China into the UK technology landscape would see China as the 'best partner to the West', Those who were around at the time will remember that a key element of this was investment into smart surveillance cameras manufactured by Chinese stateowned companies. I am not sure of the total devices deployed in the UK since but it must be over 1 million.

It is now thought a number of the cameras were fitted with potential interference monitors relaying data back to China. The biggest issue now is mitigating the risks presents a considerable challenge as it is doubtful the public purse will stretch to replacing or 'neutralising' the devices. Providing a solution is costly and can only probably be effected by a firewall in the device, which prevents migration to or from the camera. Interestingly, the Government have now prevented the use of such cameras across the Crown estate.

#### So, what can we expect?

One of the most significant trends for the security sector and an opportunity at the same time, is the move beyond security. Surveillance cameras have become powerful sensors. The quality of video information they capture, in all conditions, has increased dramatically. Now through advanced analytics, they also create metadata – unbelievably data within the video data!! This is just another layer of information and value.

In essence this is linking data from other sensors and devices and, enhancing their ability to support other requirements, and linking it all together to provide the FM or security manager with real time, accurate date with imagery of situations.

Imagine sensors monitoring air quality, temperature, room availability, weather and them combining the data to create a sensory network allowing managers to make decisions based on-site activity (or non-activity). Where this links into facilities management environments through the monitoring of cleaning and security processes, this data can be a very effective tool. For every instance or exam-ple, a Facilities or security manager with a great imagination can apply these tools to a whole range of solutions.

## Upcoming legislation and regulation

Given the sector's pervasiveness and power, the technology sector as a whole and specific technologies are coming under more regulatory and policy maker scrutiny. Some believe the focus should be on how the technology is used not on the technology itself but it can be complicated.

The privacy and rights of citizens will always be a key focal point and whether we are in Europe or outside, risk categories for Al technology is a common discussion across the European landscape. Whatever happens, it's clear that technology companies in the security sector will increasingly need to adhere to more stringent regulations. In broad terms, this should be welcomed as ensuring business transparency and ethical practice continue to be critical. You would like to think that the combination of our human inventiveness, advances in technology, and ethical business practice can be combined to make the world a better place.





The UK Government issued the following information:

#### Why do we need Martyn's Law?

There have been 14 terror attacks in the UK since 2017. These tragic attacks have caused deaths and casualties amongst people going about their everyday lives. The terrorist threat we currently face is multifaceted, diverse, and continually evolving. As such, it remains difficult to predict which locations could be targeted by terrorists with attempts being harder to spot and harder to stop. We need to improve security and ensure robust, proportionate, and consistent measures at public places to make sure we can better prepare and improve public security, in light of possible future attacks.

We are aware through engagement with industry that, without legal compulsion, counter terrorism security efforts often fall behind legally required activities. The prioritisation, consideration and application of security processes and measures is currently inconsistent.

#### What will Martyn's Law do?

Martyn's Law will keep people safe, enhancing our national security and reducing the risk to the public from terrorism by the protection of public venues. It will place a requirement on those responsible for certain locations to consider the threat from terrorism and implement appropriate and proportionate mitigation measures. The legislation will ensure parties are prepared, ready to respond and know what to do in the event of an attack. Better protection will be delivered through enhanced security systems, staff training, and clearer processes.

#### Who will be in scope?

Premises will fall within the scope of the Law where "qualifying activities" take place. This will include locations for purposes such as entertainment and leisure, retail, food and drink, museums and galleries, sports grounds, public areas of local and central Government buildings (e.g., town halls), visitor attractions, temporary events, places of worship, health, and education.

It is proposed that the Law will apply to eligible locations which are either: a building (including collections of buildings used for the same purposes, e.g., a campus); or location/event (including a temporary event) that has a defined boundary, allowing capacity to be known. Eligible locations whose maximum occupancy meets the above specified thresholds will be then drawn into the relevant tier.

Therefore, premises will be drawn into the scope of the Law if they meet the following three tests:

- That the premises is an eligible one i.e., building or event with a defined boundary.
- That a qualifying activity takes place at the location; and
- That the maximum occupancy of the premises meets a specified threshold – either 100+ or 800+

#### How will it work?

The Bill will impose a duty on the owners and operators of certain locations to increase their preparedness for and protection from a terrorist attack by requiring them to take proportionate steps, depending on the size and nature of the activities that take place there. Proportionality is a fundamental consideration for this legislation. It will therefore establish a tiered model, linked to the activity that takes place at a location and its capacity:

- A standard tier will drive good preparedness outcomes.
  Duty holders will be required to undertake simple yet
  effective activities to improve protective security and
  preparedness. This will apply to qualifying locations with
  a maximum capacity of over 100. This could include
  larg-er retail stores, bars, or restaurants.
- An enhanced tier will see additional requirements placed on high-capacity locations in recognition of the potential catastrophic consequences of a successful attack. This will apply to locations with a capacity of over 800 people at any time. This could include live music ven-ues, theatres, and department stores.

#### Who will it apply to?

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Eligible locations whose maximum occupancy meets the above specified thresholds will be then drawn into the relevant tier.

There will be some limited exclusions and exemptions from Martyn's Law. This includes locations where transport security regulations already apply; and those that are vacant over a reasonable period or are permanently closed. Those with a large floor space and low occupancy in practice (e.g., warehouses and storage facilities) as well as offices and private residential locations, will not be in scope.

#### How will Martyn's Law be enforced?

An inspection capability will be established to seek to educate, advise, and ensure compliance with the Law. Where necessary, the inspectorate will use a range of sanctions to ensure that breaches are effectively dealt with. As this report is written, there is no definitive arrangement in place for any such compliance body.

# What will become of the security sector?

As has been seen in the past, recruitment and retention is by far the biggest factor in developing the industry. The industry finds it increasingly difficult to recruit high level security officers and whilst pay is not rising at a rate that helps attract staff, this will remain for some time to come. Some reasons as barriers to recruitment include

- · low pay
- licensing, training, and vetting requirements
- work patterns (unsociable hours)
- lack of flexibility, which is a barrier to attracting those with caring responsibilities (partic-ularly women) to the industry
- overcapacity and saturation of employment within local areas means fewer people are applying for the roles
- reduction in candidate pool due to Brexit (reduction of local job seekers) and the effects of the pandemic (as people have moved towards more flexible, safer, reliable roles)
- · high levels of verbal and physical violence in the workplace
- roles viewed as a stop gap job rather than a career
- lack of career pathways and progression opportunities

The pandemic showed the resilience of the industry's supply chains, with manufacturers successfully sourcing new components and redesigning products to conform with tightening supply.

Despite a global shortage, distributors also transitioned during the last couple of years as well, with many growing strongly on the back of thoughtful supplier choice, rigorous customer service, and a willingness to invest in stock.

The future of electronic security expressed as medium-term trends is very spread but there's an accelerating digital element that's no longer about add-ons, it is now becoming the very foundation of the industry. Once IT was seen as external to the electronic security industry, but that's no longer true. Manufacturers, distributors, integrators, installers, consultants and security managers have entirely embraced digital technology wherever it best serves their solution.

Networks have a long history in the security industry, beginning with access control and alarm monitoring software in the 1980s. As has been highlighted elsewhere in the report, today, the appeal of digital is multi-faceted. The ability to deploy systems on existing secure and monitored networks has considerable benefit in terms of ease of installation and return on investment. Another key attraction is the way the latest software solutions make small and medium-sized integrations so seamless.

It's only a slight reach to say the best VMS and SMS express much of the functionality of Physical Security Information Management (PSIM). They bring in access control, alarms, lift control, automation, CCTV, video intercom, vehicle access and plenty more, and what's more, they make these systems accessible on a single workstation.

As previously alluded to, the mapping, icon driven functionality, smart reporting, operator logging and notification to smart devices is becoming the norm rather than the exclusive.

There are strengths and weaknesses in this interaction as we all know. Cyber security is key to digital evolution in the electronic security industry, and the ability to control ones defences continues to evolve. However it evolves and it will, it's a mistake to think electronic security solutions will go all-digital, with remote devices connecting to globally accessible networks via a traditional blue cable.

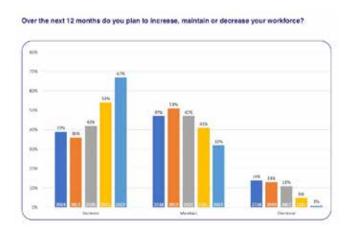
Bringing all of these together in facilities provision in manned guarding, electronic solutions and other FM services, one thing is clear, they still need reliable and cost-effective providers and services. Challenges around crime and costs of living will persist for some time to come. Working toward cleaner, more connected and decent transportation systems and more vibrant stable economies will enable the sector to flourish.

Another cautionary tale comes from the I-FM 2023 Report where senior executives offered a note of scepticism regarding game changing innovations and their ability to change the sector.

'I'm not convinced 'game-changers' will fundamentally change the sector', he said. 'Such new technologies have been around for 10 years. They have certainly enhanced the sector, but not transformed it. Ten years ago, predictive maintenance tools were expected to wipe out the need for site engineers within five years, but that just hasn't happened, adding that if anything, there is a greater demand for more skilled engineers to take on wider remits. Technology does continue to grow but Covid taught us that people make buildings work, not computers', he concluded.

The future will no doubt bring more integration, more focus on ESG and how companies prioritise social value will no doubt play a stronger role as we progress through the year.

Finally, the I-FM Report asked some fundamental questions of their contributors



Standing somewhat at odds with this, but perhaps reflecting FM's seemingly innate optimism and its resilience as a business sector, is the improved expectation around workforce growth. Headcount has been down at many firms since the pandemic days and complaints about skill shortages have been a feature of the industry for some years – perhaps the coming year will be a period to focus on attracting new talent to help in meeting the challenges of the future?

### Market Overview

As a multi-billion-pound sector globally the cleaning industry is a growing sector from a business perspective, it is a necessity for commercial space.

The cleaning sector currently has 66,420 operating cleaning companies employing 941,000 people. In 2021, the cleaning sector employed approximately 5% of the UK workforce. It makes the industry one of the top 10 biggest employers within the UK, delivering over £58 billion to the UK economy.

27% of the industry workforce is above the age of 55 years, with only 6% under the age of 25 years. This is compounding the staff shortages within the industry, which is working to find solutions to make the industry an attractive career of choice.

The cleaning industry provides a clean and safe environment which enhances end users' well-being and a clean and safe environment increases productivity and ensures creativity.

The cleaning industry has continued to be far more resilient than other sectors. COVID-19 is still with us, so does this mean a return to the deep cleaning regime of 2020/2021? Not strictly but it's apparent that the message of clean hands has fallen by the wayside.

Comprehensive cleaning schedules, trained staff and the right cleaning processes will maintain a clean and safe environment but we should all still be playing our part by washing hands and using hand sanitiser, however the trends are all pointing to a number of areas.

Six key trends.

- The environment
- IOT to gain productivity.
- Data to drive efficiencies.
- Technology to support the workforce shortages.
- Indoor air quality
- Energy efficiencies

Like other areas of industry, the cleaning sector is driving the use of technology, using on demand products providing data that can be analysed to enhance productivity, seeking out more environmental products and processes.

Technology is being used to back fill the staffing shortage being felt across the cleaning industry, either through IOT <u>and/or robotics.</u>

Training is high priority; well-trained educated cleaning operatives ensure the clean and safe environment contributing to your employee's well-being and to support the reduction of staff sickness.

Air quality to support well-being programmes, supporting new technology that reduces the need to use HVAC systems in the same way as the past reducing energy costs, re investing in equipment with new battery technology, not overusing the life of equipment which reduces productivity and increases energy costs for recharging.





#### Sustainability

This has moved to being top of the c-suite conversation, minimising damage to the environment is an increasingly important consideration in today's professional cleaning industry.

The importance of sustainability in the professional cleaning and hygiene industry has been growing for years, incorporating sustainability in your business strategy will likely improve trust with employees and investors, while protecting the environment. Sustainability is transitioning from being a "nice to have" to a "must have".

We need to look at this area not only for sustainable products, but also eco-friendly solutions, leaving out one and following the other will not serve any purpose, a solution should be ecologically beneficial, by using less water, reducing temperature, using less water, looking at closed loop recycling products reducing or removing plastic waste.



#### **Internet of Things**

It's no secret that the number of connected workplace devices is growing. IOT seems to have unlimited potential and as more devices come to market and brands being to distinguish themselves, these devices are being picked up at a faster rate than ever before.

Large and small companies are building the IOT ecosystem to varying degrees of sophistication. A smaller building may only have a couple of smart outlets with basic synergies with larger buildings they may have a complete array of connected devices powering their IOT.

Soon enough a building without an integrated IOT will be the anomaly.

Using IOT has many ESG benefits from waste and recycling collection driven by solar energy providing on demand emptying only when required, the status of washroom dispensers only filling when required, robotics driving chemical free cleaning and removing repetitive tasks, fleet management of equipment reducing the need for mobile engineers reducing carbon emissions.

#### Data

There is an emphasis on quantification of the workplace. Data from IOT devices and FM software helps the industry to understand more about the workplace and its function and what employees need to do their best work and drive productivity.

Using data and breaking it down to recognise trends, then using that insight to effect change.

For example – fleet management systems typically work through cloud-based systems this enables the users to view and manage a whole fleet from one location, the data can be used to create workflow plans, by knowing exact run times and machine users, managers can identify other areas in a space that need the specialised attention of cleaning operatives, or more productive cleaning patterns.

#### **Robotics**

The cleaning industry is an essential part of our daily lives, highlighted through the pandemic and the work the industry did to support the NHS in saving lives and to ensure that business could stay open and re-open ensuring a safe and clean environment for employees and visitors.

The cleaning industry has been evolving for many years and a big drive to robotics and automation.

As technology continues to progress, it's also changing the way people work, improving performance, productivity, and efficiency.

The pandemic had an adverse effect on the cleaning labour market of which it has not recovered, robots where not designed to replace labour but to work in collaboration with humans, however during this period of staff shortages it is filling the labour gap, but we have to bear in mind that below 10% of cleaning tasks can be conducted by robots, so a strong highly trained workforce is still the main way of providing a cleaning service.

#### **Indoor Air Quality**

The clean air human rights bill successfully passed through the house of lords and is currently in the house of commons for the parliamentary stage. The planned passing of the bill is expected in February 2023 but what does this mean?

WHO (World Health Organization) has defined ventilation and purification standards to prevent airborne disease transmission, 10 litres per person per second for non-residential (offices, workplaces, schools etc.,) within a healthcare setting. This is 60 litres per person per second where AGPs (Aerosol Generating Procedures) are performed.





In the UK as mentioned there will be the Clean Air Bill, which calls for tight IAQ (Indoor Air Quality) standards that should be regulated. Furthermore the National Engineering policy centre has called for a major reform of ventilation and purification to improve infection resilience across all buildings and public transport.

Better indoor air quality not only mitigates against the risk of airborne transmitted illnesses, including seasonal flu and Covid-19, it can significantly help hay fever suffers and asthmatics, therefore reducing absenteeism, reducing labour costs and delivering increased building occupant satisfaction.

However, you will need to manage the conflict between net zero energy and cleaner indoor air requirements.



However, when you look at items that use the most energy like HVAC systems, this may require a large capital expense. If this expenditure is not available what are the options:

- Heat recovery
- Solar
- Motion sensors
- LED lighting
- · Upgraded BMS system.

Regular monitoring is also a way to find trends of over usage, but what should you be monitoring?

- Check installations for energy waste.
- Check installations are functioning as designed.
- Adding, replacing or retro fitting energy draining installations and technologies
- · Using IOT to monitor and control HVAC systems.

Finally creating an energy reduction strategy that looks at the following 6 areas:

- Design
- Construction
- Equipment and installations
- · Office culture
- Regular monitoring
- · Plans for improvement.

The cleaning industry is a lot more than cleaning, we are at the forefront of driving technology and innovation. We have taken on the role to support Hard FM, with regards to indoor air quality and energy efficiencies, whilst also championing ESG. Have you thought about speaking with your cleaning provider about these topics?

In 2023, the cleaning trends and influences are hard to predict due to the constant development in the cleaning sector however, as we enter the new year, it is the time again to look towards what are expected to be major players in each sector for the upcoming year.

The COVID-19 pandemic thrusted the cleaning industry into the spotlight with an importance being placed on the possible formulas and appliances available on the market seemingly becoming more important than ever before.

After lockdown, it can be ascertained that more and more industry professionals take pride in the cleaning tools they use and have demonstrated an increasing gratitude towards the sector. So in conclusion we would identify the following

#### **Special Services**

In 2022, we saw more and more cleaning businesses adding custom attachments or add-on like laundry and carpet cleaner. The importance of carpet care cannot be understated as it can improve the wellness of everyone in the vicinity as it will increase the indoor air quality, allergen control and will also project a clean image to your customers. This is why knowing the very best tools and formulas is crucial to a commercial establishment. When dining, two aspects that will be most scrutinised are the floors and walls, the reason being these areas are most seen in a bar or restaurant. Thus clean carpeting is an essential as it can be a key factor in why a customer will return next time. Especially in the post-COVID-19 lockdown where any dirt or grime will be analysed incessantly by consumers understandably.

#### **Employee Training**

The idea that all you need for clean areas and spotless spaces are the formulas themselves is a misconception that has seen many employees not knowing how to properly apply the tools and formulas correctly. Especially nowadays in modern society we are seeing advancements made in the cleaning sector seemingly every day and it can be hard to keep up with for industry profes-sionals let alone for regular employees. This is why employee training is so crucial, providing employees with the tools and information should be of paramount importance. Some companies have started to train their employees in accordance with these increased demands. With this heightened focus on cleaning equipment currently happening it can be ascertained that more emphasis should be placed on providing the staff of your commercial establishment with the care and help required.

In conclusion speak with your FM service provider who will be able to support your business strategy with regards to ESG, provide reassurance in the standards being achieved and the current and potential technology that will support your staffing structure, provide productivity increases along with efficiencies, they will be able to support and guide you through the clean air bill, and finally we are all recognising the impact of energy costs review your delivery model with your supplier and look for equipment and technology that will reduce usage.



OCS's Emerging Trends is a collaborative document assembled from industry consultations and experts in the relevant service line. It is open-sourced information that seeks to enlighten and inform OCS customers and partners about the continuing global trends. It should not be taken or constitute advice.

#### About the Authors

Yvonne Taylor started out in facilities management as a cleaner, 26 years ago, and joined OCS in 2015. As Global Head of Cleaning, she is responsible for ensuring we provide our customers with safe, efficient and sustainable solutions, delivered by skilled cleaning operatives.

As a service expert, Yvonne sits on public bodies including the British Institute of Cleaning Scienec and the Cleaning and Support Services Association (CSSA). In her role as Board Director of the CSSA, she has been working to raise the profile of the cleaning industry, and she continues to call for cleaning to be recognised as a profession.

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**Steve Gardner** joined the security industry in 1993 when he worked with small to medium sized companies in the electronic security industry.

His work with companies in improving standards, creating efficient processes and demonstrating compliance led to him joining an implementive consultancy specialising in security strategies. Fourteen

years later and having worked as a Global Project Manager in security in a number of industries including Oil & Gas, Facilities Management and FMCG, Steve joined OCS as the Head of Standards & Compliance for the Security Division. He became Head of Security in 2015 and subsequently Global Head of Security in 2020. Steve provides direction and support in many areas of security and works with many of the major security organisations including the BSI and the BSIA, is regional Chairman of the SIA Network Forum and contributes as a Thought Leader with Perpetuity Research.

A member of the Institute of Strategic Risk Management, Steve continues to champion manned guarding and electronic security standards together with acknowledging the great work played by the industry in the recent Covid-19 pandemic.