

EBOOK

How technology can transform your Facilities Management organisation.

How technology is helping the Facilities Management sector to experience transformational outcomes.



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In this eBook, TBS's Steve Reynolds, Executive Director and Strategic Advisor, comments on the Facilities Management sector today, the challenges it faces and how technology can help overcome these challenges to drive efficiencies and deliver transformational outcomes.

Introduction:

Key challenges within the Facilities Management sector:

Today, Facilities Management organisations have a growing demand to deliver exceptional services to customers and are continually under pressure to deliver more for less. The sector is currently facing several challenges in relation to delivering an efficient and effective service. Since the global recession of 2008, the UK is still feeling the effects with economic stability challenged through Brexit, the living wage, pension reform and the apprenticeship levy.

However, despite these issues, the Facilities Management sector have the opportunity to overcome these challenges through the deployment of technology. Technology which invites innovation and makes processes more automated in driving change. The Internet of Things (IoT) is a popular term in recent years that simply describes the connectivity of an object with the internet, but IoT has developed into something much more transformative; it's changing how we work and live. IoT connected devices, automated monitoring and reporting and remote servicing offer organisations the ability to become leaner, be more efficient and improve that all important customer satisfaction and retention.

TBS's Steve Reynolds agrees:



"Today, Facilities Management organisations want to deliver a better-quality service with improved responses to issues and improved SLA's. The challenge is that businesses want to deliver more for less. It's figuring out how you do that in an organisation that could be struggling with providing efficiencies anyway because of lack of technology deployed within that particular sector.

Facilities Management organisations are very much focused on taking their processes and fine tuning them to the point where they are very efficient. Additionally, they will also train their workforce so they are extremely knowledgeable in terms of the way they undertake their job. The challenge is how to get more out of organisations like that.

Not only are they faced with shorter duration contracts, but they're also faced with growing cost. There are issues that impact on Facilities Management organisations such as Brexit which is having an impact on currency and

uncertainty. Additionally, pension reform and the living wage is driving operational costs up, so therefore their costs are rising despite organisations having tight processes in place and employing empowered people.

Furthermore, compliance is a big issue in Facilities Management in terms of proving that the work was undertaken is traceable and to a consistent standard. Where paper based and other manual processes are used, it is very difficult for organisations to prove compliance.

Finally, Facilities Management organisations' customers have a higher expectation to receive a good, quality service delivered throughout their business.

However, the only way forward is to invest in technology that's going to be transformational or even disruptive. Technology can provide a huge difference in driving efficient processes and ensuring people are consistent in the way that they undertake their work and report on it."

The Facilities Management Market Landscape

According to a 2019 [MTW report](#), research suggests that in the UK outsourcing will grow by £2 billion in 2019, with the Facilities Management market forecast to rise more than £10 billion in 2022. It states growth opportunities will remain significant for the Facilities Management market with a rise in market worth by 9% in 2022.

MTW's director Mark Waddy suggests that the use of technology is continually being introduced into Facilities Management providers. He stated: "More successful Facilities Management providers are extending market gains through differentiation such as strategic Facilities Management, use of IoT technology, enhanced communication, collaboration and greater understanding of the client organisation."

Gartner have highlighted three key technologies that will drive the digital businesses of the future; namely, Internet of Things (IoT), Mobile and Cloud. Individually these will provide incremental improvements, but together they have the potential to drive transformational business change. In a sector where Facilities Management organisations are slow to adopt change, using innovation and implementing technology will drive process and change and enable a leaner, more effective service delivery.

Key trends in the Facilities Management sector

Today the world of Facilities Management is rapidly changing with demographic and social influences contributing to a shift in the workplace. The introduction of technology is having an increasingly positive impact on organisations in transforming how they deliver services. According to a recent piece of research from Gartner, CIO's are focussed internally on leveraging digital transformation. Their top four outcomes are to reduce

cost, improve customer satisfaction and retention, gain more revenue from better operations and engage and empower employees. With that in mind, we take a look at some of the key trends within the Facilities Management market today, discover how they are transforming processes and in our view from the expert discussion, Steve discusses his thoughts on each.



The new workplace

According to a report by [CBRE](#), by 2020, Generation Y (those born between 1981 – 2000) will make up half of the global workforce. They state tech-savvy, educated, millennials are already disrupting the world of business and the race is on to recruit and keep them. Additionally, people are also living and choosing to work for longer.

The report states that expectations such as the flexibility to work where and when you want, and the importance of the workspace environment itself is increasingly important with a significant 78% agreeing it is a deciding factor when choosing an employer. Alongside collaborative working environments, the ability to work from home was preferred over salary or job titles. Facilities Management professionals therefore need to take into account a varied approach when considering a new workplace strategy, regardless of generation.

Furthermore, organisations are increasingly designing office interiors to inspire collaboration and enhance innovation. Through the use of technology hubs, team tables, meeting rooms, telepresence facilities and many more, with the strategy to bring employees together, combine skills and stay ahead of the competition. In relation to Facilities Management organisations, the use of technology provides them with insights into how their building, assets or services are performing in order to provide efficient services such as cleaning for example.

Steve States:

“The new workplace is quite interesting certainly from a customer perspective in terms of driving productivity. If you look at it from a Facilities Management perspective, staff are working in their customers’ buildings to undertake a process whether it’s cleaning, concierge or security. So, to a certain extent, Facilities Management organisations aren’t able to influence the workplace as

such, they have to deal with what they are given. Using technology within that workplace can help manage it more efficiently in terms of delivering the service. Additionally, technology gives Facilities Management organisations a better understanding of how their buildings and assets within it work through utilising IoT technology to trigger events in order to drive service.”





The smart workplace

The Internet of Things (IoT) is a popular term in recent years that simply describes the connectivity of an object with the internet, but IoT has developed into something much more transformative; it's changing how we work and live.

For organisations and workforces, IoT is enabling a major transformation seen in the wealth of newly available data taken from interactions with customers, sensors and assets. Within Facilities Management organisations, intelligent buildings use IoT to offer a unique opportunity to ensure staff time is used as effectively as possible. Within cleaning services for example, motion sensors record when a meeting room has been used so that it is only serviced when needed. Additionally, smart bins use sensors and triggers to detect the level of rubbish in a bin and when it will require emptying. Similarly, IoT motion-controlled sensors connected to soap or paper towel dispensers can detect

when they require restocking, allowing you to keep track of stock supplies while responding to anything that needs attention. This ensures a consistent service delivery for customers, ensuring staff are only spending time completing jobs that are required and services are maintained in a timelier manner.

Furthermore, sensors can detect issues such as temperature, energy consumption, or vibrations before they arise, as data is detected in real time, reducing costs associated with break-fix maintenance before any damage occurs. With IoT sensors deployed, organisations can also prevent property damage, disruption to daily operations, improve safety conditions so that injuries are prevented and reduce costs associated with each of these. Ultimately, this technology helps to enhance the customer experience.



Talking about the smart workplace,

Steve discusses

some examples of how IoT technology can be implemented to automate processes within Facilities Management organisations.

“Most modern buildings will have some form of technology in it whether it’s heating systems that are thermostatically controlled remotely, through to lighting systems that do something similar.

From a smart workplace perspective, having solutions that are accessible for Facilities Management organisations such as automatically managing a process such as lighting systems would definitely make a significant difference.

The smart workplace is becoming increasingly clever automating processes with IoT technology. With sensors placed in rooms, we can tell that they’ve been occupied and as a result

of that, need cleaned. With sensors placed in washrooms, we can tell they’ve been used a certain number of times and staff are then able to clean them or replenish stock based on demand. Furthermore, Facilities Management organisations can use sensors in lifts to understand if they’ve been working appropriately. Additionally, sensors can be used to monitor temperature, CO2 levels and humidity to make sure the customers working environment is suitable and conducive for health and wellbeing.”



Going Green

In today's modern society which is fuelled by concerns over climate change and rising energy costs, the requirement to 'go green' is essential in order for organisations to achieve cost efficiencies. In particular, lighting and heating are the main areas of concern when it comes to the Facilities Management sector. If left uncontrolled, costs can significantly rise and it can have a substantial impact on trying to save energy.

Nowadays however, IoT enabled sensors allow heating and lighting systems to be controlled better. They feed back intelligent information to Facilities Managers on whether lights have or haven't been switched off for example or whether air conditioning

or heating is at the correct temperature which has a big impact on energy saving.

Another aspect in terms of going green is hot desking. There's nothing worse than driving into the office to find there's nowhere for you to sit and you have to drive back home. However, using technology such as occupancy counters and desk monitors, notifies staff if there are desks available. Additionally, this helps with capacity planning to understand whether or not you've got the optimum number of desks available for your staff at any moment in time.

Steve comments:



"By deploying sensors throughout a building, Facilities Management organisations can effectively measure occupancy and usage to measure and monitor hot desks 365 days a year. Having an occupancy strategy or review in place ensures you can manage your building to guarantee there's suitable space for staff

to sit and it also takes into consideration whether there are too many desks free at any one time. Ultimately this will help improve cost efficiencies and add to the momentum of going green."



Data insights

By using technology, Facilities Management organisations have access to insights generated from the data collected. This real time information is readily available all on one platform with the ability to review reports, identify faults or performance issues and generally provide organisations with a better understanding of the way their facility is operating. These valuable insights provide information on not only your assets and buildings but also your mobile workforce. Your organisation can then use this information to make intelligent decisions and put a plan in place to prevent issues from escalating further.

An example of this is when Facilities Management organisations use data from sensors placed on assets to trigger an event such as monitoring a temperature monitor on a lift. If the temperature goes over a certain amount of degrees, then it will trigger a job for an engineer to go out. Additionally, monitoring the current on a HVAC system is another example and if it stops working, again that can trigger a job as well. This is known as asset condition monitoring which monitors the actual condition of an asset to decide what maintenance needs to be done.

Steve comments:



“Having this information and insights is great in terms of being proactive. The next stage is for monitoring to become predictive and this is where it starts to get really interesting. For example, if we’ve got thousands of sensors on thousands of devices and we’re monitoring and storing that data in the cloud. Through predictive analytics we can start to look at characteristics of failure in lift motors

for example that states if a temperature over a period of time goes from x to y then the motor will fail in say 2 weeks’ time. Action can be taken to look at that motor and prevent it failing because the analytics data enables organisations to do that. This is a typical example of where IoT and technology starts to make a big difference.



Process traceability and proof of compliance and SLA's

Steve

talks about how Facilities Management organisations can evidence proof of compliance:



“Facilities Management organisations can evidence proof of compliance by deploying mobile devices throughout their workforce. These devices can be used to document when a job was sent out, to when the worker arrived on site, to completing the job and the process they went through to complete it. All of

which complies with the standard that's associated with that particular repair. The organisation is able to document and record the information and send that to a customer to prove that piece of work was undertaken to a standard within the expected timescales.”

Indeed, mobile devices ensure information is accurately recorded at the point of service and ensures compliance standards are met through standardised workflow application. This information allows facilities staff with full visibility as to when buildings have been cleaned or stock replenished for example. Integrating mobile devices ensures a reduction in paper-based processes and the amount of time spent carrying out administration tasks. With intuitive forms easily accessible via a mobile device, Facilities Management staff can capture

images, complete forms and document information effectively. Additionally, organisations can ensure information is evidenced and easily accessible which is essential for compliance purposes.

Facilities Management organisations need to be able to maintain building systems properly and comply in accordance with their service agreement in order to avoid breaches.



How technology is transforming the Facilities Management sector

The introduction of innovative technologies such as mobile, scheduling, IoT enabled sensors and intelligent business insights eliminates inefficient processes which consume time and resources. From cleaning to mechanical and electrical services, integrating this technology allows for efficient delivery of on-demand and condition-based services. Embracing the ability to connect devices and sensors via the internet and automate subsequent actions is transforming how we work. IoT, mobile workforce management and dynamic scheduling provides Facilities Management organisations with ground breaking improvements as this technology ensures delivery is easier, faster and more secure for customers. Furthermore, it enhances services, increases engagement and strengthens security.

Facilities Management organisations are able to automate processes such as monitoring and optimising office use and space, reacting to preventative maintenance errors such as a HVAC repair, monitoring facilities for temperature and lighting and assisting with daily task monitoring and scheduling of workforces. Each of these processes enables a unique way to ensure services are delivered more effectively and staff time is used more productively.

Furthermore, by equipping your facilities teams with the correct tools to carry out their job, Facilities Management staff have everything they need to hand

to capture information such as images, signatures and access to workflow via mobile applications. Additionally, Facilities Managers can gain full visibility of their teams and automate the allocation of resources against planned or unpredictable work demands. With access to real time information Facilities Management organisations can immediately respond to issues as the day unfolds and make more efficient decisions, ultimately delivering a quality service to customers while remaining compliant and reducing operational costs. Staff can be made aware of any errors or warnings of potential problems before they turn into major issues, saving both time and costs as well as remaining compliant.

By implementing technology, Facilities Management organisations can drive efficiencies and use real time information from dynamic scheduling for example to drive as much benefit as possible to ensure the best service is delivered.



TBS in Facilities Management

TBS have been revolutionising both hard and soft Facilities Management, integrating workforce management and dynamic scheduling with the Internet of Things (IoT) to deliver on-demand and condition-based services and help improve the efficiency of service delivery.

Our solutions provide real-time visibility of data captured on IoT, mobile, and wearable devices to identify flaws, prevent KPI breaches, initiate proactive services,

increase efficiencies, ensure compliance, enhance customer satisfaction and deliver a sustainable ROI within Facilities Management organisations.

TBS Customer Case Studies

We are working with some of the largest Facilities Management companies throughout the UK including Interserve and Mitie. Below are a few examples of

how our technology is delivering innovation and operational excellence throughout their organisation.

Interserve



Legionnaires disease is a lung infection you can catch by inhaling droplets of water containing bacteria from things like air conditioning units, hot tubs, showers, taps etc which causes the condition.

It is usually caught in offices, hotels or hospitals where bacteria has gotten into the water supply. Organisations usually employ a third-party organisation to carry out legionella testing. Today, IoT enabled sensors can be deployed at various points within an organisation's water supply to monitor the temperature and flow of the water system. The sensors collect information and send it back to a monitoring system. Alerts notify facilities managers when there is an issue with the water temperature or a risk of bacteria is identified.

Interserve, a TBS customer, implemented our IoT sensors to monitor the temperature of their pipes and water system in order to remain compliant and reduce the risk of a legionella outbreak. By implementing the sensors, they are able to adhere to health and safety and compliance regulations and ensure the safety of their customers. Additionally, the placement of IoT sensors removes time consuming processes such as sending out engineers to detect the temperatures manually. It also leads to better accuracy of monitoring conditions and is a pro-active approach to tackling a wide spread health risk.

Mitie



As an established provider of outsourced mail and print services since 2000, Mitie Document Management has evolved during the data and digital revolution from traditional “onsite” service provision into a multi-faceted business fully embracing the power of data transformation and the digital medium.

Mitie decided to partner with TBS to reimagine its mail tracking operation. Mitie had developed their own technology some time ago but had not kept pace with the unprecedented speed of technological change the world was seeing. With ideas of how Mitie wanted to shift the ways in which teams worked, TBS provided a platform to bring this to life. Pinpoint was developed with ‘Mobile’ as its main proposition. Moving to cloud hosted provision and taking advantage of Samsung’s ruggedized hardware offering created an exciting innovation for Mitie. As part of the solution, wirelessly connected sensors were deployed

to automate processes that were traditionally manual such as triggering a workforce service request to collect urgent mail from a sensor-enabled tray.

TBS’ platform allows Mitie’s clients to maximise their investment by ensuring they are using the latest technology in the most efficient way for their businesses. Improved efficiency, cost saving, enhanced security and reduced risk are just some of the benefits. [Download the full case study here](#) to read how Mitie are benefiting from our solutions.

Conclusion:

How technology will continue to progress and transform the Facilities Management market

Technology will continue to be the key enabler to the future success of Facilities Management organisations. Whether it's IoT enabled sensors to make cleaning and maintenance tasks more efficient and predictive, businesses will need to ensure they embrace and adapt to technology changes and innovation in order to sustain their business and stay ahead of the competition. As IoT grows, so too does the increase in

data and it is what organisations do with that data from instrumentation of sensors, to mobile devices and using that as core intelligence to drive better processes into organisational and operational processes.

How we can help

TBS has been involved with many ground-breaking projects, using wearable and IoT technologies to tackle unique business challenges within the

Facilities Management industry. To find out more, please contact TBS to discuss further.



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The Totalmobile Group are a leading innovator in field service management and mobile workforce software solutions. We enable our customers to maximise the potential of their mobile workforce by optimising field service management.

We provide our customers with a complete solution that empowers the mobile workforce, provides organisations with a real competitive advantage and customers with a great experience.

With offices in Belfast, London, Derby and Bury-St-Edmunds, the Totalmobile Group continue to grow and establish itself as the leading field service management software organisation in the UK.

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