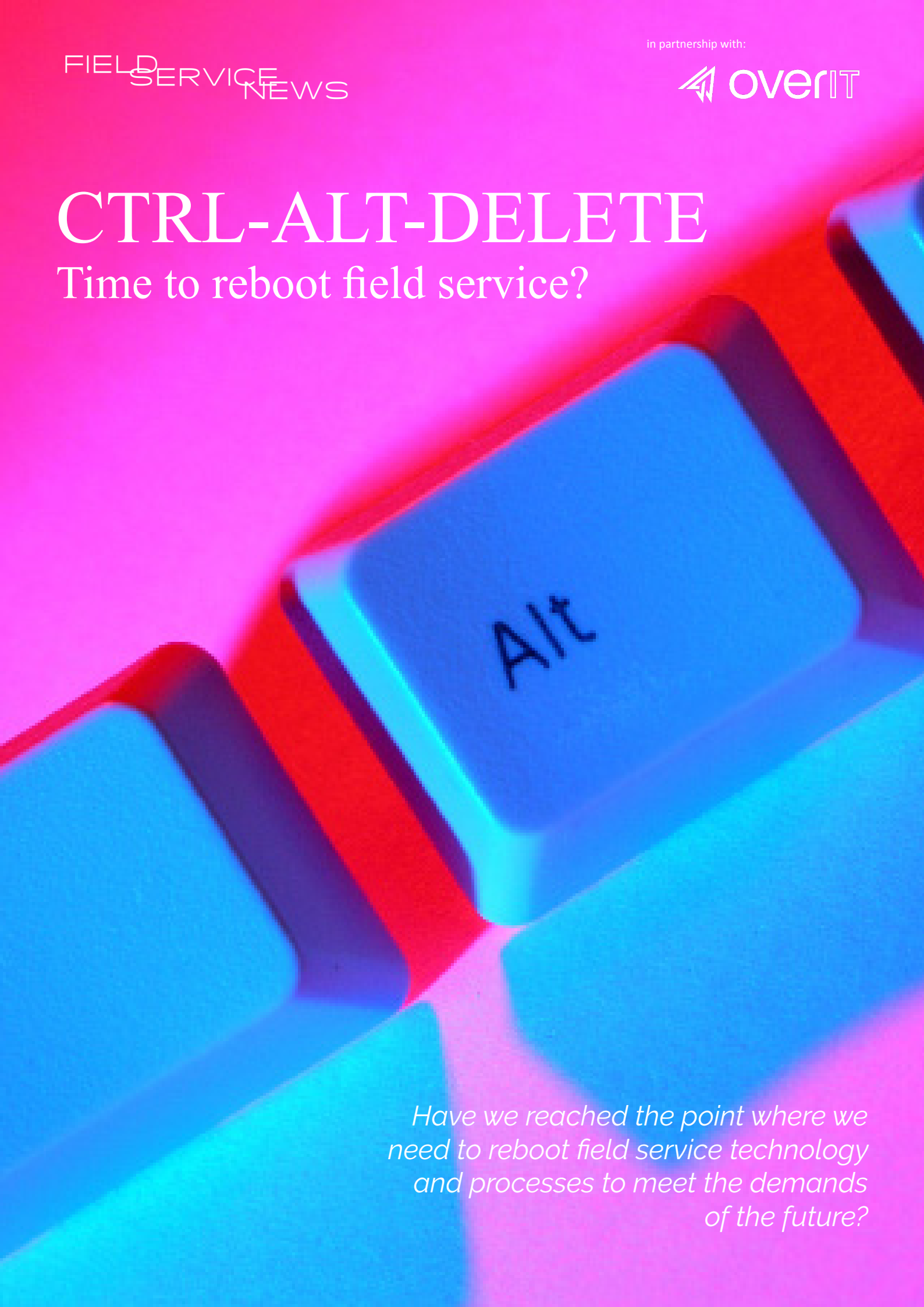
FIELD SERVICE NEWS

in partnership with: overIT

CTRL-ALT-DELETE

Time to reboot field service?



Have we reached the point where we need to reboot field service technology and processes to meet the demands of the future?

CTRL-ALT-DELETE: Time to Reboot Field Service ?

As field service arrives in a new era of growing challenges and exciting possibilities, the move away from legacy systems is becoming essential…

In many ways, much of what is shaping field service today has been evolving for over a decade. The importance of technologies such as Augmented Reality, The Internet of Things and Artificial Intelligence has been championed by key voices in our industry, such as Field Service News, for many years.

However, while progress was slowly and steadily being made in adopting such technologies and tools, it remained at a somewhat cautious pace – which is understandable given the mission-critical nature of our operations.

However, with the pandemic bringing a once-in-a-generation disruptive force, the need for change that had been growing incrementally in corners of the market arrived upon us fully realised and everywhere at once.

Indeed, as an industry, we were fortunate that we had the tools to hand that allowed us to adapt quickly and in essence, we re-invented our industry on the fly. It was a surge of innovation that saw us through the most challenging of periods. Yet, as in any such period of rapid evolution, now, as the dust settles, we are moving past the chaotic period of disruption and establishing more refined working processes based on the leaps we made in the last two years.

As the vision of the future of field service becomes much clearer, it is apparent that the legacy systems we are currently reliant upon may no longer be up to the task of helping us optimise service operations that now sit across both field and remote. Instead, we should be seeking to embrace next-gen FSM systems that were designed with such a future in mind.

In this white paper, published in partnership with OverIT and authored by Field Service News Editor-in-Chief Kris Oldland, we explore three key reasons why the move away from legacy systems is rapidly becoming an urgent and pressing requirement for field service organisations.

#1: Remote service is now firmly established as part of our industry

While the tools for remote service were being leveraged by some forward-looking organisations and championed by many analysts in the industry as a game change long before 2020, the pandemic brought the whole field service sector onto the same page...

Before the pandemic, only a small handful of bleeding-edge cases had been using remote service delivery tools for long enough to have mastered the approach and truly woven it into their service operations.

Those that had managed to do so, invariably, were the great disruptors of their sector. Companies such as Rail Cargo Italia, for example, who Field Service News covered in a previous white paper that showcased how the company had revolutionised not just their workflows but their entire industry.

FSN PRO members can watch an indepth interview with RailCargo's Alessandro Borzacchi that outlines this case study here.

Indeed, it is organisations such as RailCargo and others that have led the way in terms of the adoption of remote services that blazed such a critical path.

Still, until relatively recently, such organisations were in the minority. Then the pandemic arrived, and all field service companies simply had to adopt some level of remote service.

Whether it was a clumsy and unsophisticated introduction of rudimentary tools such as video calling, or the rushed but more effective roll-out of one of the many Augmented Reality solutions available in our market, during the lockdowns, we saw in effect an industry-wide trial phase of whether remote service delivery as a concept could work.

While the levels of effectiveness of remote service varied as widely as the tools and processes used, in the main, we as an industry realised that resolving our customers' problems remotely was entirely possible. Indeed, in many ways, it was a more optimal solution that cost the service provider less and gave the customer what they really wanted (i.e. issue resolution) much faster.

With that realisation coming both from the service providers and our customers alike, the adoption of remote services post-pandemic has been on a path to become a significant part of our service operations moving forward.

We are now seeing remote service positioned to become a default mechanism for at least delivering the first tier of issue resolution, with many organisations shifting to a remote-first default.

Such an approach makes complete sense, particularly when we consider that our industry is rapidly moving away from the Service Level Agreement approach that has been a lynchpin of service agreements in the past to become more centred around guarantees of uptime.

The ability to diagnose an issue remotely in real-time and, where possible, provide a resolution is as critical in such models as it is appealing.

Additionally, even in those situations where a resolution is not possible remotely, the improved triage undertaken by utilising the tools and processes of remote service will inevitably lead to quicker solutions when the field engineer does have to travel to the customer's site.

However, while so much is changing regarding our approach to service delivery, many of the core tenets of service and, indeed, broader business relations with our customers remain firm. Service levels and standards across the last decade have widely become acknowledged as key differentiators amongst competing organisations. In this regard, we should view remote service in the same terms we have viewed on-site service delivery.

The delivery of service needs to be effortless and seamless for the customer. When an asset is down, the customer needs quick resolution, and customer expectations should be that the service engineer will be knowledgeable,

effective and professional. The technology implemented should be intuitive for any end-user, whether a customer or an on-site engineer. The processes from acknowledging the service request to job completion should be well structured and effective.

Ultimately, suppose your service is to be a key differentiator. In that case, you need the customer to come away from the service engagement, satisfied that the job is completed and wowed by the speed and professionalism in which it was undertaken.

Yet, field service has always been a complex beast regarding the number of moving parts required to make service operations move smoothly. We add additional complexity as we introduce remote service delivery into this mix.

This is not necessarily something we should shy away from as service providers, but this additional complexity mustn't become a burden on the customer. Indeed, introducing remote service into a service portfolio has to be seen by the customer as a more straightforward and faster path to issue resolution.

To achieve this, we need our internal teams to fully embrace the new remote service delivery workflow.

From our contact centres to our engineers in the field and, of course, our remote service engineers, we need the processes they are to follow to be clear and the systems they are using to be intuitive. It needs to be a simple process to move from initial triage to engaging a remote engineer, and similarly, when remote resolution isn't possible, to schedule an on-site engineer visit.

From a customer's point of reference, if they are passed from a contact centre agent for triage to a remote service technician, and then if on-site intervention is required, being passed on once more onto a scheduling agent to arrange an on-site follow-up- is not going to be a positive service experience.

That same customer may wish to bypass the remote service element next time as they would now see it as a waste of their time and a delay in getting an engineer on-site to fix their problem.

If we look at this same scenario from an internal perspective, we could easily see how this issue could arise. The contact centre agent may be using a CRM tool and is one layer of the team. They are likely relatively low-skilled with limited subject matter knowledge. Their primary role was to broadly identify a problem and create a work order which would subsequently be handled by a scheduling or dispatch team.

In our example scenario, however, they are tasked with doing the same job but allocating a remote service technician to the job directly. So far, so good.

The remote technician will then engage with the client, almost certainly utilising another system, and if the job can be resolved remotely, then they would need to update the job details potentially on yet another system- whether that is a dedicated Field Service Management (FSM) application, back on the CRM, or potentially an ERP or PAM etc.

If, however, the issue is not resolved remotely and has to be escalated to an on-site engineer visit, then the remote service technician will likely have to pass the customer onto yet another touchpoint in the organisation – this time, a scheduling agent who will possibly have yet another system, perhaps a dedicated, dynamic scheduling solution that allows for planning and scheduling of engineer resources where they can log the work order.

While this is, of course, a potential worst-case scenario, with multiple disparate systems and ill-thought-out processes, it is certainly one that likely exists in many field service organisations. It also serves to illustrate well that it is entirely feasible that the additional complexity of remote service delivery could reduce both customer satisfaction and service provider efficiency – and this is especially true if we are to utilise the existing technology stack in place.

Of course, with modern APIs and looking slightly further forward at multi-tenant data solutions, it is possible to have all of these disparate systems talking to each other to improve the flow of data and make the transitions from one department to another less painful.

However, one does have to step back and ask if we have reached a point where we are now continuing to shoehorn in legacy systems and processes by throwing even more technology at the issue and assess if this is becoming something of a fool's errand – particularly when the next-gen solutions, such as OverIT are available and proven to overcome such issues.

Such systems include many of the advanced technology requirements for remote service delivery, such as Augmented Reality natively and are designed with such workflow considerations in place.

As such, they have simplified implementation programmes that can massively reduce the time it takes to deliver the platform while allowing service providers to unlock the full potential of the advanced technologies that are driving this seismic shift in how we approach service delivery.

#2: Our industry will only become more data-driven and we need Artificial Intelligence to make it work

With the exponential rise of data across almost all aspects of business, we are on the cusp of true industrial revolution. Industry 4.0 is no longer a vision of the future but is today's reality. However, without AI, many organisations are set to drown in their own data lakes and oceans...

We are undoubtedly now living and working within an age of data. In almost every aspect of our working and personal lives, data is at the heart of how we interact with organisations – and in the field service sector, the data touchpoints from assets in the field have grown incredibly across the last decade.

That level of data is only set to increase and increase exponentially.

The future of our industry is set. We are already a data-driven industry, and in the coming years, being able to combine the vast amounts of customer and asset data to drive genuinely proactive service operations is going to be how we all approach service delivery.

This, of course, opens up the doors for service providers to finally make the transition that many in the field service sector, including Field Service News, have been pointing to for over a decade.

It is a transition that sees us finally see the swing from traditional break-fix methodologies to a more servitized, data-driven approach.

It is a transition that will see proactive service becoming the lion's share of service calls. It is a transition that is becoming increasingly inevitable, and being blunt; it is a transition that will be painful for many organisations if they continue to persevere with their current legacy systems.

As we stated within the open section of this white paper, managing the data flow in and of itself will be a challenge.

To reiterate the point made earlier, in this regard, we can look towards increasing integrations that are often available 'off-the-shelf' within modern next-gen solutions such as OverIT that can ease the communication between core systems within the operation and the FSM solution.

These can allow the service organisation to access key technology such as AR and GIS natively within their service system without rebuilding the broader business technology infrastructure.

Similarly, there is much promise in the multi-tenant approach to data that allows for one central system of record to provide data access across multiple applications and locations.

However, even with the easy and seamless flow of data across disparate systems, the sheer volume and variety of data being created today mean that if we are to derive the meaningful and actionable insights required to adopt a genuinely data-driven approach, we need to have the tools in place to be able to handle such data demands.

The often-cited definition of what constitutes Big Data is referred to as the four V's.

- Volume – the overall size of the data sets
- Velocity – the speed at which data is created
- Veracity – the trustworthiness of the data
- Variety – the mix of data across structured, unstructured and semi-structured.

Additionally, a fifth 'V' has been later added to this list, Value.

Take a moment to think about the data your organisation currently produces across asset, engineer, and customer data and ask yourself if you feel it sits

within the above definition.

For most field service organisations, the answer is probably yes. Even for those readers that may not answer yes today, how far into the future do you think it will be before your organisation reaches a point where your data sets will fall within the definition of Big Data?

While at the technical level, Big Data and Artificial Intelligence (AI) are separate disciplines, the simple fact is that Big Data and AI are completely interdependent for us at the operational level.

Big Data could be viewed as the fuel for driving us towards truly data-driven service operations. Still, it is the AI that takes that fuel and creates insights from these vast data oceans that would otherwise be impossible to navigate.

The common phrase is that data is the oil of the 21st century.

This once neat, throwaway sound bite is now becoming increasingly self-evident. Like oil in the previous century, data is pervasive across all industries. It is the commodity of the future and is driving change in every sector.

However, just like oil, data in and of itself essentially holds no intrinsic value.

It needs to be processed and refined for the value it undoubtedly holds to be unlocked. To achieve this, we need to turn to AI and machine learning.

For us in the field service sector to truly see the potential we are aiming for, this needs to be undertaken within the primary system that our engineers and support staff are utilising every day.

Native AI and machine learning tools are a hallmark of next-generation solutions.

Whether it is AI-powered triage helping drive resolution at the contact centre, AI-powered knowledge bases supporting the engineer on-site or AI-powered data tagging that allows for more efficient and quicker job completion and reporting – machine learning algorithms are going to become a significant part of field service operations rapidly.

To put it clearly, we need to ensure that we have AI tools, and these tools need to be designed with an understanding of the task at hand. They need to be designed by those who understand field service operations. In short, they need to be native within the FSM.

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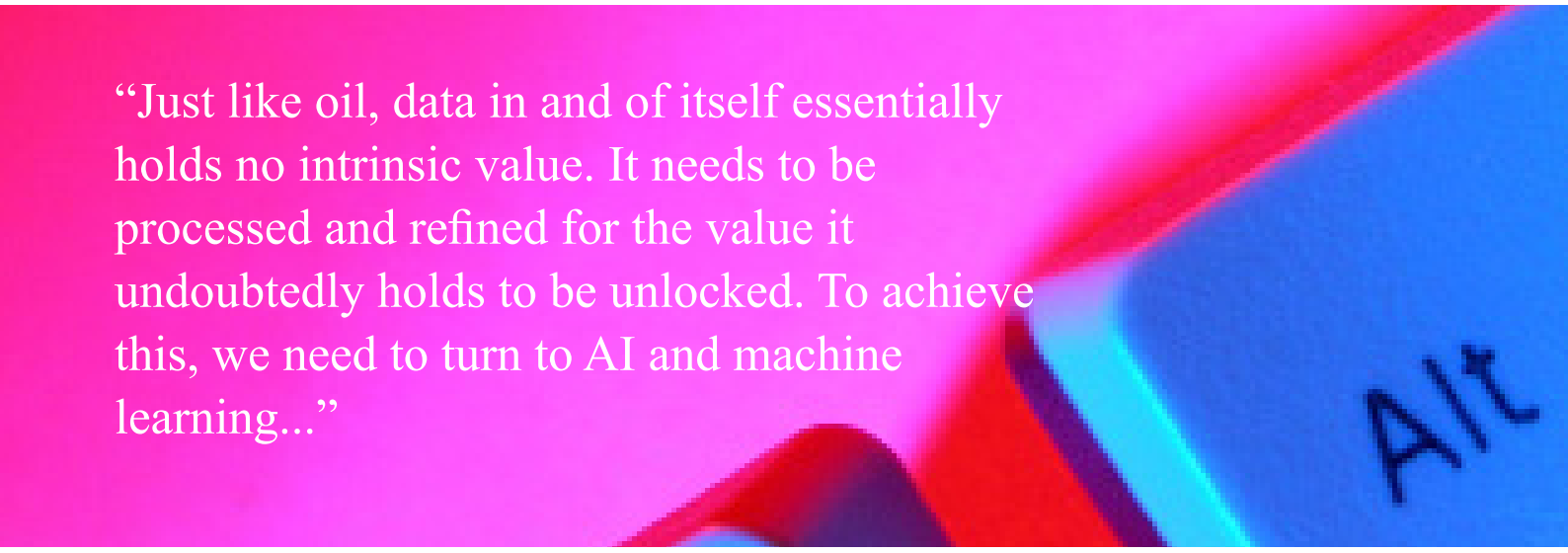

#3: Field service engineers are becoming an increasingly scarce resource

While embracing new technologies such as AR and AI to drive productivity is desirable, the reality is that in the shadow of a very real ageing workforce crisis, doing so may be a matter of survival for many field service organisations...

So far in this paper, we have focused on how technology allows us to move towards a more effective and efficient iteration of service operations across our industry. An approach to service operations that offers faster resolution towards customer and asset issues and allows us to become a genuinely data-driven and proactive industry.

It is, of course, essential for us as an industry to grow, evolve and improve in such a manner. All sectors are seeking to go through a similar development as they move through the digital transformation process.

Yet, for the field service sector, this evolution is not just desirable but essential.

As an industry, we are facing a truly existential threat in that our field workers are becoming an increasingly scarce resource. An ageing workforce crisis has loomed in our industry for many years, and we now see that crisis unfold in real-time.

The situation has, of course, been exacerbated by the pandemic both in the face of economic and cost of living challenges leading to an ever-increasing spiral of costs for the recruitment, development and retention of staff and also new societal movements that have to a degree become the bi-product of these challenges- such as the anti-work movement.

However, long before the pandemic, the writing was on the wall for our industry as the threat of an ageing workforce was already evident in every sector and every corner of the world where field service engineers and technicians were working.

As such, the importance of bringing good new engineers and technicians into an organisation is more challenging and more critical than ever, and it is an equation that is hard to balance.

While we are seeing a handful of organisations succeed by breaking out of the existing parameters and developing innovative approaches to finding new talent, the fact is that we as service organisations are going to have to face up to the reality when it comes to our field engineer and technician resources that we will need to start achieving more with less.

However, while this, at first glance, may seem like a daunting prospect that we collectively face, the tools we have already discussed within this paper, i.e. AR to empower remote service delivery and layers of AI-based automation across the entire service cycle to drive efficiency holds the key to achieving this.

An experienced service engineer utilising remote service tools can serve a far greater number of customers than they would be able to if they were still working in a field-based role.

Additionally, alongside this increased productivity which can go a significant way to negating workforce resource challenges, shifting towards remote service can also reduce an organisation's fleet footprint.

In a period where controlling costs becomes an absolute focus for many companies, this is more than a bonus; this is another compelling reason for the shift. Similarly, the major emphasis on sustainability and the increasing regulation in this area is another critical driver toward remote service delivery.

However, it would be naively idealistic to paint a picture where remote service replaces on-site service delivery entirely. There will always be those jobs that require physical intervention.

Yet, even if we reduce the number of jobs that need to be handled on-site, the same drivers and benefits we've listed above in adopting remote service tools can still be applied to improving the efficiency and productivity of our on-site workers.

For example, image recognition AI can dramatically reduce the time it takes to

complete the administration aspect of a work order. Similarly, shifting to a more data-driven proactive approach to service and maintenance makes it possible to group jobs closer together geographically.

Once again, by increasing our efficiencies in this regard, we can simultaneously ease the strain on the workforce by boosting productivity while also reducing the time spent on the road for our field engineers- again boosting the bottom line and our green credentials.

And, as we have seen in the previous sections of this paper, such endeavours are more likely to succeed if using next-gen FSM solutions with such advanced technologies and capabilities included natively.

Indeed, when technicians and engineers are positioned to become valuable commodities, who will likely have multiple employment options to select from, then those companies who demonstrate a willingness to invest in their field workforce with the latest technology will likely succeed in securing their employment.

Further compounding this benefit is that tools like Augmented Reality and AI-based triage can dramatically reduce the time it takes for a recruit to go from the classroom to becoming an effective and productive team member.

When it comes to the most significant challenges our industry faces, the recruitment and development of the next generation of field service engineers and technicians will undoubtedly be one of the greatest we face as a sector.

If we are to meet this challenge and overcome it, we must embrace the technology that will empower us.

Therefore, leveraging the next-gen systems such as OverIT and the technologies natively embedded within such systems will be critical for our sector moving forward.

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About OverIT:

OverIT is a multinational company backed by US capital, with more than 20 years of international and cross-industry experience in Field Service Management. It is recognized by premier global advisory and consulting companies as a leading vendor in the FSM, Mobile WFM, and AR industries, providing more than 300 international customers and 170,000 Field Service users with process knowledge, innovative functionalities, and cutting-edge technologies.

OverIT supports everyday operators, engineers, and teams of technicians in fixing faults, performing preventive or emergency maintenance, and effectively inspecting assets, in mobility, in the field. HOW? Leading its customers to the Field Service of the future due to its most valuable asset, the OverIT Next-Gen FSM Platform.

The Next-Gen FSM platform covers end-to-end the entire FSM process and provides the most advanced features for the smoothest integration with our customers' application map, such as CRM, ERP, Asset Management, GIS, and IoT.

OverIT Next-Gen FSM platform has modules explicitly designed for Field Service Management processes and activities.

From asset maintenance to managing the maintenance processes of highly complex organizations, plants, and assets, and tracking performed tasks (resources, timeline, warranties, materials, etc.)

The Next-Gen FSM platform enables the schedule optimization of field resources, associating an appointment for an asset with the technician that best meets the requirements in terms of skills, optimized routing, materials and equipment, unexpected events, available/unavailable customers.

Finally, mobile empowerment provides technicians with the mobile devices needed for accurate and effective execution of work orders, as well as for collecting data offering the best possible service. Mobile empowerment applies to a wide range of scenarios, such as mobility, cooperation among users, Augmented Reality, Machine Learning, and further integrations.

For more information, visit https://overit.uk/

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