FIELD SERVICE NEWS

research

Benchmarking the New Normal from Year Zero

in partnership with:

FieldAware™

Introduction: Unprecedented Times, Untold Innovation

The last 6 months have been as tumultuous and challenging as we collectively as a global society have known since the end of the second world war in 1949. Indeed, during the pandemic it was almost impossible to not use various war analogies when discussing the challenges, we all faced. We were all in the trenches together facing an unprecedented threat, magnified by uncertainty, amplified by the very foundations of the global society we live in today.

Borders lifted by the political and economic harmonisation of a truly global economy in areas such as the EU's Schengen zone came crashing down, while in the heat of panic even medical supplies were held, as nation after nation stared into the oncoming headlights.

However, this was not a world war, this was a battle against an enemy who cared little for borders, an enemy that had no concern about the ethnicity or nationality of its victims. This was an enemy that was coming for all of us, and so unlike a war that pulled nations apart, the global pandemic of 2020 brought us together, in our hour of adversity, we ultimately, beyond the petty bickering of the politicians and media, stood together.

In business, our economy was decimated by a prolonged lockdown that still continues in various degrees in differing nations- at least at the time of writing this report in October 2020. Debate has been ongoing since the earliest of the lockdowns as to whether the economy would see a sharp V shaped bounce back or if we would see a much more protracted deeper cutting global recession.

Currently, hesitantly, the signs are positive. In the US the economy has showed almost as dramatic an uptake as it declined and predictions for the next quarter from the majority of analysts remain favourable. How robust and sustained such bursts of recovery prove to be, however remains uncertain, although it does at least offer a glimmer of hope.

What is certain however, is that whenever we find ourselves moving back towards a more standardised version of working, whenever we fully emerge into the 'new normal', it will be an environment that is very different from what came before.

For us in field service we have a peculiarly unique front seat in how this new normal is evolving.

Ours is a sector that cannot and could not ever fully stop. As an industry we have long seen our field service engineers and technicians as the unsung heroes keeping the world moving, long before as a wider society we held a collective understanding of essential workers. Throughout the pandemic field workers alongside front-line medical staff, delivery drivers and countless others have continued to keep the world ticking over while the majority adapted to the safety of working from home.

As field service leaders we have had the dual challenge of keeping operations running, adapting on the fly to the ever-changing environment that has been field service delivery in 2020, while simultaneously planning for what service delivery will look like for our organisations both on the route towards recovery and beyond.

2020 will be the year that will long live in the memories of all of us for many reasons, but for our industry it is a significant period of disruptive change that will shape the very way we approach service delivery here on in. With this in mind it is essential that we both document the changes that we have seen emerge, understand where we are seeing emergence of new best-practices, and understand the technologies that are being harnessed today that will become an essential part of the field service management tool box in 2021 and beyond.

Working in direct partnership, Field Service News and FieldAware have conducted a broad ranging study to try to get an understanding of these trends and in this first report of two based on this research, we will begin to evaluate the data from over 220 field service management professionals, allowing you as a field service leader, to benchmark your own current thinking and organisational position.

The Financial Impact of Lockdown

The impact of the pandemic and the subsequent lockdowns will be felt for a long time and in many different ways. However, perhaps the most overt and significant impact initially will be financial. Quite simply the world, including the majority of industry, was put on hiatus, on a global basis, for a period of at least two solid months. In the intervening months between the worst of the pandemic the tentative steps towards recovery have been intermittent, inconsistent and fractured.

Such a hard-stop followed by ongoing uncertainty has of course, inevitably hit many companies across a huge array of industries incredibly hard. For field service companies, the impact has to a degree been something of a domino effect. With cashflow being so suddenly and severely restricted in the market, bills are increasingly likely to go unpaid, or at least no longer be paid on time.

In our study we asked respondents if they had faced an issue with customers being unable to pay for their services because of restricted cash flow.

Over half of the respondents (57%) responded that this was indeed the case *(figure one)*. While this number may be lower than some analysts might have predicted, it remains a sizeable proportion of our sector that was being impacted financially.

What is interesting when we begin looking a little deeper is that smaller organisations have been hit disproportionally hard by this reduction of available cash within the market. When we look at those organisations with less than 50 field service engineers, we see that the number of organisations that have had issues with customers paying for their services shift to over two-thirds (69%) of respondents.

However, perhaps somewhat paradoxically, there is more optimism within companies of this size compared to their larger counterparts that this will be relatively short-term issue to overcome.

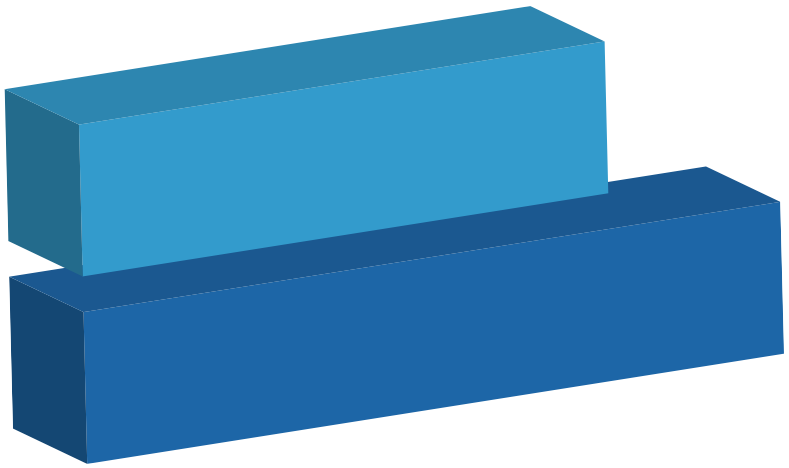
In fact, just under half (44%) of the respondents within this company size stated that the time horizon in which this would be resolved would be within 90 days.

When we look at the results to this question from companies with more than 500 engineers, the most common prediction for the resolution of cashflow challenges within the market is 2 years which was cited by nearly a third (31%) of respondent companies within that larger sized organisation segment.

While on the one hand, the economic challenges of a global market recession, the deepest since the second world war (although in fact still less than half of the 1945/46 recession), means obvious financial hardship for many organisations, there is an argument that for maintenance and repair related businesses we may actually see an increase in demand for their services.

Fig. 1: Have you had an issue with customers being unable to pay for your services because of restricted cash-flow?

- *Yes: 57%*
- *No: 43%*



This has historically been the case across the major recessions of the 30's, post-war and 2008/2009 and the reasoning behind why this occurs is grounded in pragmatic responses to such environments. At times of downward economic momentum, investment in new assets is limited, while there is a greater focus on keeping existing assets operational as they are 'sweated'.

While it may be early days for this effect to be kicking into full swing, we are certainly already beginning to see this trend emerging within the COVID recession as well. We asked our respondents if they had seen an increase in requests for extended service contracts as customers seek to find ways to get enhanced lifespans for their existing customers.

Almost half (48%) of the total respondents answered in the affirmative.

term solutions to repair and ensure equipment uptime, for fear of long-term implications and hope for medium term capital funds availability for replacement."

A third commented *"Customers' are looking to save on capital outlay also looking to extend life of assets while they assess the impact the changes to the business model will make to the stability of their company."*

However, to really drive home the point that these are truly unprecedented times, a number of respondents who responded to the initial question in the negative, outlined a very different scenario.

One respondent outlined *"If anything my customers are looking for ways to*

"The pandemic has crippled all forms of businesses and making ROA employed in income generation almost asphyxiated. Hence, the call for service contract extension by customers..."

As a follow up to this question we offered our respondents the chance to add comments in an open text box. There were a number of interesting answers that painted a picture of two very different forks in the road with regards to whether companies are seeing an increase in requests for extended service contracts.

From those respondents that had answered in the affirmative we saw some of the responses that we would perhaps have anticipated. As one respondent explained, *"the pandemic has crippled all forms of businesses and making ROA employed in income generation almost asphyxiated. Hence, the call for service contract extension by customers."*

Meanwhile another respondent added "*Customers are looking for short*

shape their organisations for the COVID world now and the post COVID one around the corner, sweating physical assets just doesn't make sense anymore."

Another respondent added *"Companies need field service experts to do onsite visits and during the pandemic this has not been always possible. Customers will look for other options."*

Finally, one particularly interesting comment was left by another respondent that indicates how many forward-thinking companies are beginning to rethink their approach to service offering strategies.

This respondent commented *"we have seen an increase in remote services and offering new service contracts to lock down customers who want priority."*

The Changing Dynamic Of Customer Relations In A Post-Pandemic World

What is particularly interesting about the final comment above is that it shows an organisation directly responding to a very sudden shift in dynamic which has emerged amongst field service organisations.

One of the earliest changes that we saw arise amongst field service companies during the height of the lockdown was the need to prioritise service calls. This was of course, borne out of the necessity, in such chaotic times, we were all fighting fires – fortunately most of us in service management leadership, have honed that skill across the years.

What we found within the research study was that nearly two thirds of companies (63%) have had to implement a method of prioritisation for service calls during the pandemic. (*Figure 2*) However, what is perhaps more enlightening is that almost half of the respondents (49%) believe that this will be an ongoing rather than temporary measure.

Could a company's ability to opt for a lower level prioritisation within their service contract- as our respondent commented, be something that we begin to see become more prevalent as our customers look to find a balance between a necessity for service and a restriction of funds within the market.

Possibly, although it does appear that we are still in a state of flux and the hard lines of which direction we are going in as a sector are not fully formed. The study revealed that just under a quarter (24%) of companies state they are uncertain as to whether the measures they are taking now regarding customer prioritisation will be temporary or something they will continue to implement beyond the recovery.

What is clear though is that throughout the COVID-crisis, those companies that have been closest to their customers are the ones who have adapted and faced up to the challenges presented to us all the best. Over a third of the respondents (35%) stated that the amount of time they spend communicating with their customers has increased during the pandemic.

In fact, over two thirds (67%) of the respondents to the study stated that they speak to their customers on at least a weekly basis with more a third (33%) of the total respondents saying that they speak to their customers on a daily basis.

Furthermore, well over three quarters of the respondents anticipate that this level of communication will continue after the recovery.

Indeed, as we begin to work our way through the findings of the survey, while the data reveals in one way the tale of hardship, challenge and struggle that we would certainly expect, there is also an undertone emerging across the trends of a refinement and general shift towards what has previously been outlined as the core habits of the best-in-class service providers. This focus on customer-centricity is just one such theme that fits within this category and to further highlight this 85% of customers outlined that they now have more than one touch point within their customer's organisation that they regularly communicate with.

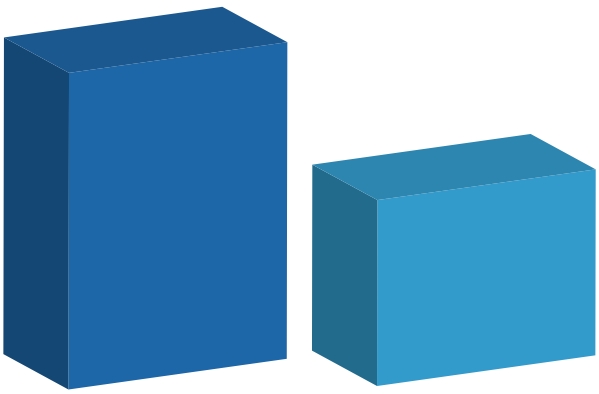


Fig. 2: Have you had to implement a method of prioritisation for service calls as a result of the pandemic?

- *Yes: 63%*
- *No: 37%*

Transactional vs Partnership-Based Relationships

This closeness to customers is perhaps understandable given that the relationship between a service provider and their customers has largely become one that is centred around genuine partnership rather than a more transactional agreement. True partnership-based relationships allow for much more closely integrated understanding of the challenges that our customers face. This, in turn, leads to opportunities to work with those customers to solve their problems for them and alongside them. Ultimately of course, this leads to an environment in which customer loyalty is developed and new revenue streams for the service provider can be unearthed.

The study certainly revealed this to be the case with over three quarters (76%) of respondents stating that they believe their relationships with their customers are partnership based rather than transactional. Perhaps even more tellingly 92% of these respondents also believe that their customers share that view.

However, despite their being a general closeness between service providers and their client base in the main, for the majority of field service organisations, this hasn't safeguarded them from feeling the strain of the pandemic on those customer relationships. Indeed, three quarters (78%) of field service organisations within the study admitted they had felt under pressure to reduce their service costs or increase the services provided within the same fee structure (*figure 3*). While there was slight variance in this number depending on the size of the respondent organisation (78% of SMB's compared to 70% of enterprise level companies) the numbers remain consistent enough to state that this is being felt by all organisations of all sizes across the sector.

As a follow up to this question we asked our respondents to identify the reasons for this that they felt this pressure was being felt. The majority of companies (64%) stated that they felt that market conditions were driving this pressure on service contracts, although just under half a (44%) also stated they felt customers were forcing prices down as well.

Slightly less respondents (40%) also stated that new market entrants and competitors were driving the price of service downwards. This pressure was also felt across both new and existing customers for over half (53%) of the companies in our study.

Given the shifting and uncertain landscape that field service organisations are operating in, one might be forgiven for thinking that we would see something of a defensive mindset emerging amongst those companies within the study.

However, this appears to be a false assumption. Even in the face of such adversity, over three quarters (76%) of the respondents in the study state that they are focused on growth over survival in the next 12 months. It should be noted that such optimism diminishes amongst companies with a larger field service technician footprint of over 800 workers or more where we see the percentage of companies expecting growth dipping to just 57%.

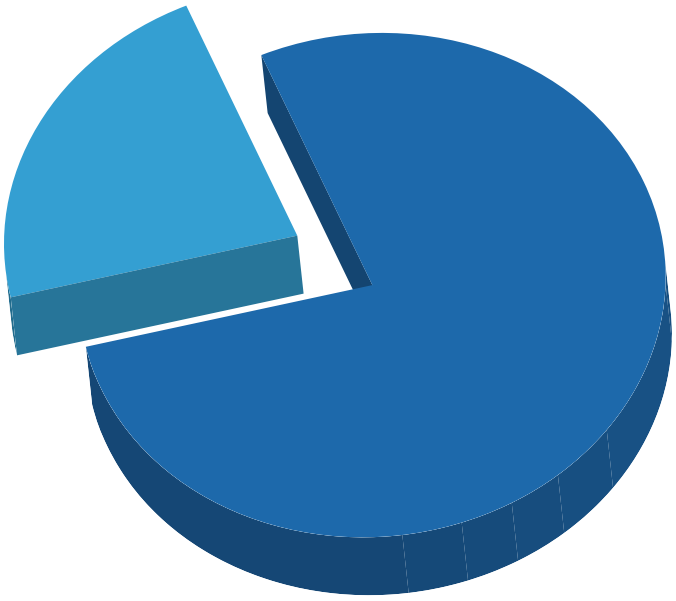


Fig. 3: Are you under pressure to reduce your service costs or increase the services provided within the same fee structure?

- *Yes: 78%*
- *No: 22%*

Has the Pandemic Shifted the Value Perception of Field Service?

Service excellence has historically been a key differentiator for companies wining and retaining business.

However, as we touched upon in the introduction to this report, in 2020, all of the rules changed. As we saw with the responses regarding both the emphasis being put on service contracts and also the pressure service companies find themselves under in this strained economy, the value proposition of service is being redefined in real-time.

However, is the new definition of service one that will be valued more or less by our customers?

Our study reveals that currently the majority of companies (70%) believe that despite the rapid changes both within our sector and industry at large, service will remain a key differentiator in both winning and retaining business *(figure 4)* and that almost three quarters (74%) of respondents believe that this will not change within the next 24 months.

What is particularly interesting though is when we dive deeper into what our respondent companies state are the key differentiators they believe will be key as we move through the recovery period.

Interestingly, here the focus has largely remained with the status quo, i.e those service differentiators that we have come to accept as the staple traits that we see in best-in-class field service organisations.

In fact, many of the differentiators that we may have assumed would have become more prominent in light of the pandemic all scored below 10%- a particularly illuminating find within the research. Lower costs (7%), bio-security compliant service standards (6%) and speed of service (9%) are all factors that one might have anticipated would score higher as a direct result of the current operating environment we find ourselves in.

However, it is exceptional customer service that remains the most frequently cited differentiator that our respondents believe will be key with 39% of respondents stating this followed very closely at 38% by a balance between cost and service.

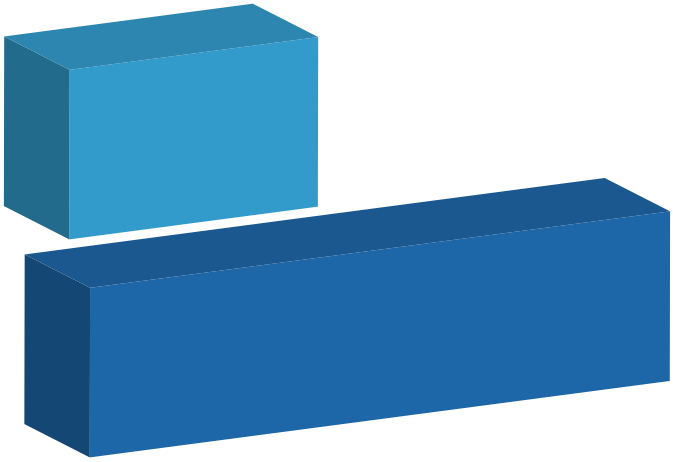
If we look back to the Great Recession of 2008 many companies realised the value of high customer service standards as a critical factor in retaining and winning business.

As Natalie Petouhoff, senior analyst at Forrester and co-author of the report "The Economic Necessity of Customer Service." Explained in 2009 *"The one thing that happens in a downturn is that everyone is focused on keeping customers. Don't you spend on advertising? Of course, you do, and it costs money -- but it has value if it's done well. The same goes for investment in customer service."*

It seems that many of the service leaders have remembered that lesson from just over a decade ago and are holding on to this premise as we look towards an even greater recession in 2020.

Fig. 4: Service excellence has historically been a key differentiator for winning and retaining business. Do you think the pandemic has changed this?

- *No: 70%*
- *Yes: 30%*



Delivering Service in a World of Zero-Touch Requirements

Of course, delivering great customer service means delivering your service offerings as and when you're your customers want them.

Yet, in a world that requires remote service and zero-touch is that possible? From a practical side of things our industry has adapted incredibly well and relatively easily to delivering service from afar.

This is largely because the tools required to adopt such an approach were already available within the marketplace and had been for some time so have a reasonable level of maturity. For many organisations prior to the pandemic these tools were a consideration but not a burning necessity, almost overnight the drivers for adoption exploded.

They were no longer nice to have, they were now necessity.

Adoption of such tools has now reached over three quarters of market saturation with 76% field service companies now having the ability to offer remote service/touch free delivery to their customer base (*figure 5*) and of these over two-thirds (67%) implemented these tools as a direct result of the pandemic.

Further to this of those companies who stated that they hadn't yet invested in such tools over three quarters (76%) were planning to do so and two thirds of these companies were aiming to do so within the next 6 to 12 months.

Simply put, within the space of 12 months we will see industry wide prevalence of remote service delivery tools.

This really is compelling evidence as to just how significantly our industry has evolved over the last 6 months and a good yard stick for quantifying the disruptive impact of COVID-19 on the field service sector.

However, while the rapid adoption of remote services may have been introduced as a result of the pandemic it looks like becoming a fixture of service delivery well beyond the recovery and an established part of the 'new normal'.

Focusing on those companies that already had remote service delivery capabilities in place, over three quarters (76%) saw remote services primarily as a new means of generating service revenue entirely compared to just 17% who saw remote services primarily as a tool for working around the new restrictions.

Often, industry benchmarking studies such as this project tend to be more guiding indicators of possible emerging trends rather than clear assertions of the direction a sector is heading. Here however, the data would appear to be an exceptionally firm predictor of the importance that remote service capabilities will play in the field service landscape of the near future.

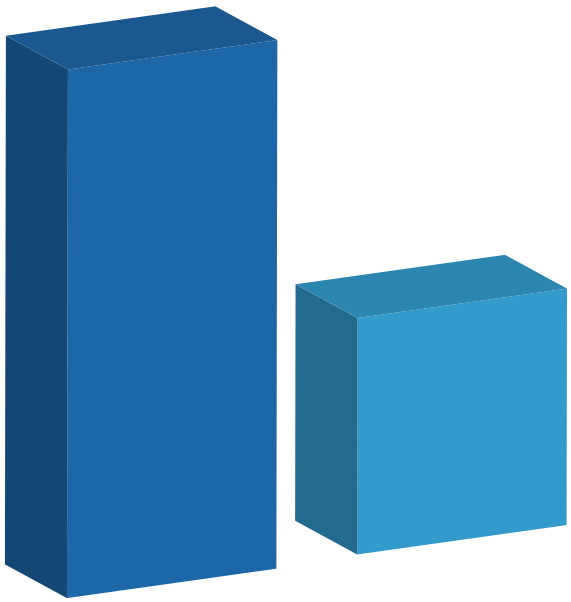


Fig. 5: Do you have the ability to offer remote service/touch free delivery to your customer base?

- *Yes: 76%*
- *No: 24%*

The Emergence of a New Tier of Service Support?

Having established that remote service delivery will almost certainly take hold as a prevalent means of delivering service moving forward, the question that follows is whether remote service delivery will shift to become viewed equally to a traditional on-site service visit?

It is perhaps the most critical question that we must address as we move through the recovery period and begin to establish our service strategies for the post-pandemic age. On the one hand, an argument could be made that the speed and efficiency of remote service delivery could be perceived as an increase in service standards, particularly in service agreements that are based upon outcomes and guarantees of uptime.

On the other hand, the field service engineer, for many customer-centric service companies is far more than a pair of 'hands on site' as we saw in an earlier finding within this report. The service engineer for best-in-class organisations is an ambassador for the brand, a subject matter expert and a trusted advisor in the eyes of the customer.

The value for the customer of having such a resource on site can be invaluable and immeasurable and is often fundamental in their perception of the value proposition of the service agreement. This is something that simply cannot be replicated in an online setting.

Our study suggests that while undoubtedly the majority of service organisations within the response set will embrace remote services and add this to their arsenal of service delivery tools, the majority still see the traditional on-site service call as a premium offering.

Almost half (48%) of respondents stated that they believe their customers will still perceive a greater value in a face-to-face service engineer call compared to only 13% who believe that their customers will see greater value in remote services.

Meanwhile just over a third (39%) state that they believe their customers will see equal value in both. (*Figure 6)*

This could in fact be where we something of a balance emerge. One mooted suggestion that is gaining traction amongst service executives is the emergence of a hybrid model.

Such models are able to take advantage of the quicker resolution time that remote can offer in emergency scenarios and also leverage remote technology for routine maintenance, but with on-site engineer visits being preferred for particularly complex issues but also for more in-depth asset reviews which allow the engineer to bring to the table their experience and expertise they offer the customer.

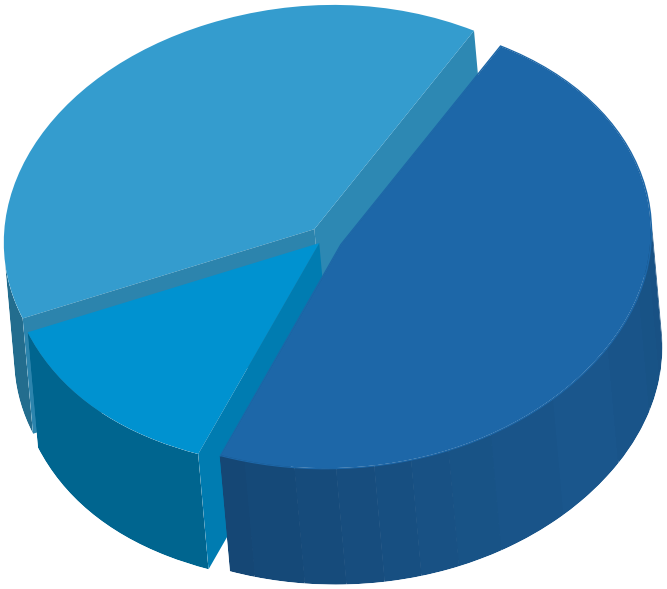


Fig. 6: Do you think that customers will still perceive a greater value in a face to face service engineer call than remote services after recovery?

- *Greater value in face to face engagement: 48%*
- *Greater valuer in remote services: 13%*
- *Equal value in both: 39%*

The Era of Connected Field Service is Upon Us

The one technology that could play a significant role in companies' ability to maintain asset uptime from off site is of course the Internet of Things (IoT). The importance of IoT in the role of field service delivery has long been documented. In an exclusive Field Service News Research Study back in 2016, while adoption had yet to truly take root, the predictions of an IoT based future in the field service sector were already well identified.

In that study four years ago, we asked our respondents to rank the technologies they felt would have the biggest impact on field service within the next five years.

IoT was the clear winner with more than twice as many people stating they felt IoT would be the big technology in the short to mid-term for field service, than those who cited the second most popular technology, Big Data.

This belief in IoT was further evidenced when over half (55%) of our respondents stated they thought "IoT will become a fundamental part of field service operations in the future" whilst a further 21% went further stating that "IoT is critical to any field service organisation's strategy".

Further findings in previous studies from Field Service News also pointed to a rapid rise to prominence of the role of IoT in Field Service, including the fact that almost three quarters of respondents (74%) felt that IoT based field service strategies were applicable to companies of all sizes and that well over two thirds of respondents (71%) felt that IoT would be commonplace amongst field service companies by the end of the decade.

So have those predictions met up with the reality?

It would seem they have. We have now reached a point where over three quarters (76%) of field service companies within the study have the capabilities to read data from their assets in the field. *(Figure 7*). Additionally, over two thirds of these companies are able to do so in real-time.

What is interesting here is just how firmly established the practice of taking this asset data and utilising it within the service workflow is. Of those companies that are able to access asset data remotely, again almost three-quarters (72%) of companies are utilising this data as part of the triage process for identifying faults and guiding the best route for issue resolution. The findings of the study are clear, we are now entering into the dawn of a new connected age and asset data is becoming a fundamental part of field service delivery in many ways.

Yet, when we look further into how many companies have 'joined-up' the dots and have implemented smart sensors and alerting updates to monitor asset usage and performance status – essentially adding a degree of automation to the modern IoT centred workflow, just over half (55%) of field service companies have still yet to take this next step. This would suggest that the while we can firmly state we are in an IoT-focused era of field service management; our industry at large is yet to fully leverage the potential of such tools.

Essentially, while there may be growing pockets of maturity within this space, in broad strokes you would still have to say that the current use of IoT data is in its infancy in terms of the true potential that we could be harnessing.

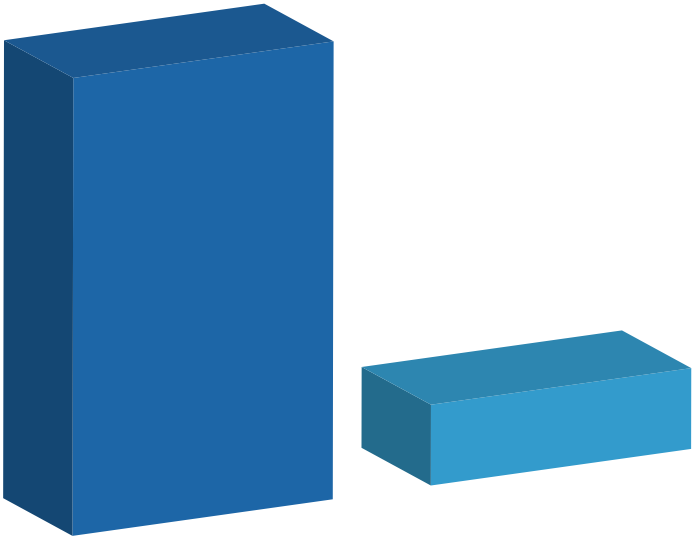


Fig. 7:Do you have the capabilities to read data from your assets in the field?

- *Yes: 76%*
- *No: 24%*

Rising Concerns Around of Cyber-Security?

One potential reason we are seeing a slightly slower adoption of automation to act upon the insight which lies within the IoT based data we are now able to access is a pervasive fear of the great threat of the twenty first century for business - cyber-security.

As we enter a new data-centric era full of new opportunities, new threats and challenges will equally emerge. The biggest threat in an environment where all of our assets are on the IoT or even the emerging Industrial IoT which is potentially far more robust, is of course cyber-security.

This is clearly something that field service leaders are aware of and concerned about. Our study reveals that over three quarters (78%) of the respondents in our study agreed with the statement '*cyber-security is now a greater threat as service-delivery becomes more digitally centred and more assets become connected.*'

However, it would appear that this in and of itself is not a barrier to adoption of IoT automation in the field service workflow. Indeed, when we look at those respondents who have stated that they felt cyber-security was a greater threat in a connected fleet of assets we actually see a slightly higher percentage of companies (48%) that have implemented such solutions.

The real disparity here though is when we compare those companies in the enterprise sector to those in the SMB sector.

Amongst enterprise sized organisations over three quarters of companies (79%) had implemented automated monitoring of their IoT enabled fleet. When we review the data for SMB companies (i.e. those with less than 50 engineers) this figure drops to just over two fifths (42%). Meanwhile, mid-sized companies (with between 100 and 300 engineers) see exactly half (50%) of companies having such tools enabled. *(Figure 8)*

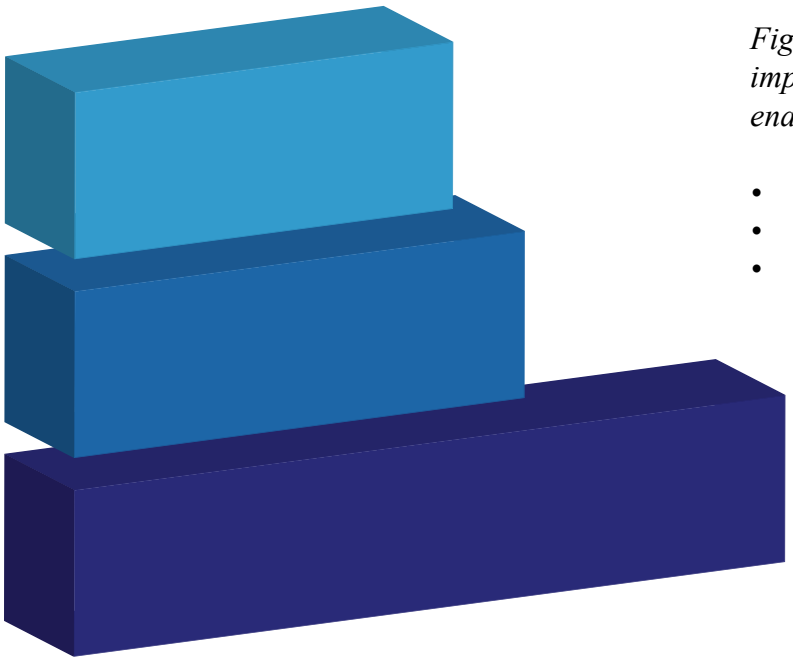


Fig. 8: Percentage of companies that have implemented automated monitoring of their IoT enabled fleet by company size.

- *SMB Companies: 42%*
- *Mid-Sized Companies: 50%*
- *Enterprise Companies: 79%*

A Widening Gap Between Digital Haves and Have Nots

One insight that emerged from the study which was something of a surprise was that amongst those companies with IoT enabled assets, it appears the trend is towards having such capabilities across the majority of the fleet rather than building this forward in an iterative basis.

In fact, as we see from the graph below (*figure 9*), there is a distinct step pattern here which indicates that amongst those companies that do have IoT enabled assets, the dominant approach is to have over three quarters or more of the assets in the field connected. This is stated by over a third (39%) of organisations as their current situation, while a quarter of companies (24%) have between 51and 75% of their assets connected, just under a quarter (22%) have between 25 and 50% of assets connected while only 15% have less than a quarter connected.

This would seem to suggest one of two things. Firstly, that once the decision is made to move to a connected asset fleet, it is sensible to make that deployment as widespread as possible, potentially to avoid the headache of having legacy systems and new systems being used in tandem. Secondly, it would seem to suggest that those companies that have embraced IoT are reasonably mature in their adoption of the technology, at least in terms of the fundamental infrastructure of a network of connected assets.

For those companies who are yet to start their digitalisation journey with regards to IoT this could be a worrying trend as it suggests that the gap between the early adopters and the laggards is getting potentially too wide to be bridged. Given the numerous external threats of the pandemic, a hesitancy to act now and embrace IoT, could mean falling further behind until the competitive advantage of those companies who did act early is to great to be overcome.

The good news is that even now, half of the market appears to still be playing catch up in this regard, so if this is your company, you are not alone and there is still time to act.

In addition to this, the benefits to being a slower adopter of an emerging technology is that you can allow others to make mistakes, so you don't have to.

We are now at a point where over two thirds (67%) of companies now state that they have no issues getting access to machine data feeds that are on a customers' site – traditionally one of the most challenging aspects field service organisations faced with regards to IoT. Interestingly, for those who still have a challenge in doing so the most common issue is *'customer concerns over security'* cited by 35% of the respondents, followed by a lack of *'connectivity on site'* cited by 33% and finally *'customer concerns of data ownership'* cited by 24% of respondents.

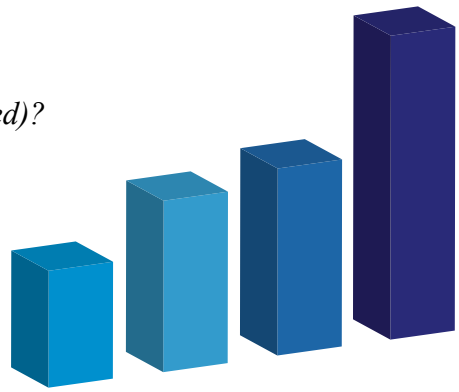
Perhaps the biggest indicator of the maturity of IoT use within field service delivery though is in the effectiveness of how organisations that are doing so are leveraging that data and turning it into both insight and actions.

Here we see that there is a genuine best-in-class emerging which is just over a fifth (21%) of organisations who state that they are using data effectively. Beyond that we see just under half (43%) of respondent companies state they are utilising data effectively, but it requires improvement, while over a third (34%) of field service companies admit they are not using asset data effectively enough.

Again it seems that while the foundational layer of an IoT infrastructure seems to be emerging in our sector to build upon, at the moment those who are leveraging the data connected assets yield effectively, remain within a minority. This would suggest that we will see a continuing maturation of such capabilities within the coming 12 months.

Fig. 9: Approximately what percentage of your equipment is capable of providing data (IoT enabled)?

- *Under 25%: 15%*
- *26 to 50%: 22%*
- *51% to 75%: 24%*
- *Over 75%: 39%*



Are we about to see an Evolution in the Service Contract as well as Service Delivery?

The study certainly shows we are facing massive changes in how we approach service delivery, both with the spike in capabilities for delivering service remotely as a result of the pandemic and also the continuation of a shift towards a more connected workflow that is beginning to reach the maturation phase of at least its first iteration.

The question is will we also see a similar shift in thinking with regards to service offerings. We have been seeing a growing number of companies beginning to establish more advanced services and the shift away from traditional break fix, SLA focused, service contracts to those offering guarantees of uptime and outcome-based solutions.

It has been suggested in some corners of our sector that the pandemic will accelerate these strategies as much as they have accelerated digitalisation plans. Indeed, digitalisation and servitization are often discussed in the same breath.

When the great recession of 2009 took hold, we saw Software as a Service go from fringe concept to ubiquity within a very short period. Given that we have seen the world move to a more service-centric economy at large within the last decade, could it be that the large impact of the COVID recession will be the mass adoption of an Everything-as-a-Service economy?

First though, let us set the parameters of what a service contract looks like currently.

With regards to service contract length, the most common length of service contract is between 1 and 3 years which just over half (53%) of companies within our response set state to be the case.

A third (33%) of companies however state that their average contract length is longer than this while just 13% of companies state that their average contract length is less than 12 months.

What is interesting is that when we look at those companies who appear to be specialised in shorter term service contracts, half of these state that they envisage that the average length of service contract will increase post-pandemic. For contrast, just under of fifth (17%) of companies whose average length is between one and three years feel the same.

What is of particular interest here is that amongst those respondents whose service contract length is above three years we see the opposite impact occur. In fact, almost of half (45%) of the companies within this segment believe that the average length of service contract will increase.

Now this really is an interesting revelation and while it may be open to interpretation, one possible hypothesis as to why we are seeing companies in this segment predicting even further increases in service contract length could be that they have already moved further down along the advanced services path.

It is a well-documented aspect of servitization, that as a service provider becomes involved within delivering outcome-based services for a client, as they become more tightly woven into the fabric of the client's ecosystem their service contracts will increase in longevity. In power generation for example, an industry that has embraced such approaches to service delivery, service contracts run for a minimum of ten years and often can stretch as long as twenty.

So could it be that the reason we are seeing this perhaps somewhat unanticipated spike in the findings is because generally those companies who have longer service contracts are already offering servitized solutions to their client base?

Again, the findings of the study would certainly seem to indicate so. Within this response set well over two thirds of companies stated that their organisation offers a form of advanced services/servitized or outcome-based solutions.

When we look at the full response set this figure drops down to two thirds (66%) of companies, which in and of itself is still a very significant size of companies that have already stepped along the road towards a more advanced service-centric economy.

An Industry in a State of Flux

An important question to understand is whether what we are seeing in terms of the move towards advanced services is the direct result of the pandemic or if this is this the continuation of a trend that has been slowly emerging across the last decade?

A good place to look for some data to support either hypothesis would be in the question *'was your service delivery more reactive or more proactive prior to the pandemic?'*

Here we saw a real snapshot of an industry that is apparently right in the middle of the shift from being reactionary to becoming proactive. In response to this question we saw an almost completely even split across the three options we provided to the respondents. These were predominantly reactive 33%, predominantly proactive 35% and an even mix of both 32%. *(figure 10)*

However, there is evidence that this shift does seem to have been impacted by the pandemic at least to a degree . With half of the respondents stating that the balance between reactive and proactive service in their organisation had changed as a result of COVID-19. Of course, as we saw customer prioritisation becoming common place it could also possibly be that preventative work was put aside to attend to more emergency reactive needs, in essence seeing the service evolution we have witnessed regress somewhat. This is an area that we will be exploring in the second phase of this project where we shall be conducting further interviews with a selection of respondents to find further insight beyond the analysis of the quantitative data.

Regardless of the impact of the pandemic will have had in the short-term, the data presents a clear picture of the future as we look towards the future in the mid-term. As with the data revealed earlier relating to trends both in remote service and also IoT, the data also appears to offer a very clear indicator that we will see the further adoption of advanced services and that this will become a commonplace inclusion within service portfolios for the majority of organisations.

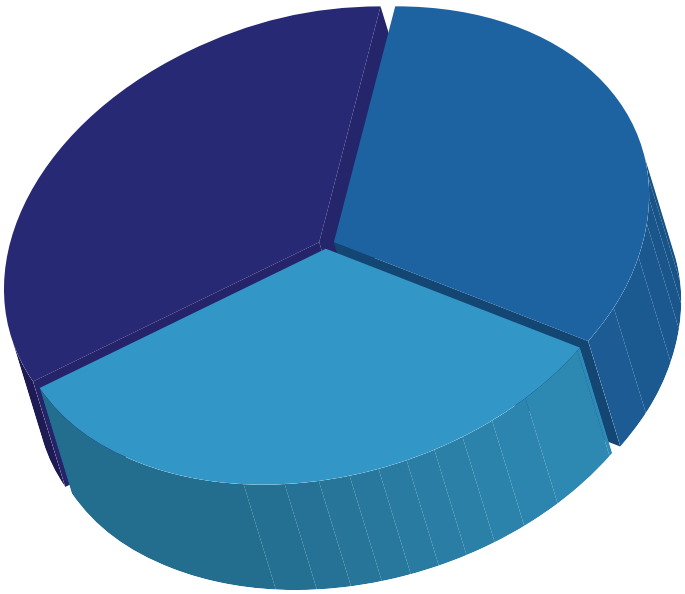
Further evidence of this in the study appears when we see that of those companies that currently do not offer such solutions, over three-quarters (77%) are actively considering introducing an advanced service strategy. Meanwhile, of those respondents that have active experience of operating such service offerings, over nine in ten (93%) state that they believe advanced service offerings will become more attractive to customers post Covid-19.

To add even further weight to the belief that we are hurtling into a far more service-centric economy than we operated in at the start of the year, again over nine out of ten (91%) of all respondents also felt that we would see the perception of the importance of service and maintenance will increase as we move through recovery. This is a particularly positive finding for the field service sector, where the shift to more predominantly service-centric revenue streams is already appearing to be borne out.

Currently almost three quarters of all field service companies within this study already attribute at least half of their revenue to service versus product revenue while a third of the total response set (33%) attribute three quarters (75%) of their revenue to service. Further to this almost half (48%) of field service companies in the study believe that their revenue split will be more weighted towards service both during and beyond the recovery.

Fig. 10: Was your service delivery predominantly reactive or more predominantly proactive prior to the pandemic?'

- *Predominantly Proactive: 35%*
- *Predominantly Reactive: 33%*
- *Even Mix of Both: 32%*



Digital Transformation is Accelerating, But How?

Across this report we have seen the sudden emergence of widespread adoption of remote service capabilities and the rapid acceleration of advanced services be evidenced by the data. The other key area that we have seen dominate the conversations amongst senior service executives in the last decade is digital transformation. Anecdotally, most of us would assume that we would see a similar trend of acceleration with regards to service organisations digitalisation programs – but has this actually been the case?

The study reveals that just under two thirds (64%) of respondent companies were already in the process of undergoing some aspect of digital transformation prior to the pandemic which would fit with the industry narrative. However, of these companies a further two-thirds (65%) have stated that their digital transformation programs have been accelerated since Covid-19 which is compelling evidence that the pandemic has truly been a major driver towards the adoption of the next-generation of field service management solutions that have emerged as part of the digital transformation revolution.

However, digital transformation is a broad church. When building out the study we also wanted to identify whether there had also been a shift in focus amongst service companies with regards to the elements of their digital transformation that had now taken the highest priority.

This was indeed the case with over two thirds (71%) of respondents stating that they have had to change their priorities in terms of processes and technologies that they believe are essential for their organisation to improve service delivery as a result of the pandemic.

Overwhelmingly, the most important of these new priorities is remote diagnostics tools which well over half of companies (59%) stated they were currently implementing or looking to implement.

What could be an interesting predictor of another shift we may begin to see emerge in the service sector is the significant focus on customer portals/self-help solutions. These were, in fact, the second most sought after technology cited which just under half of respondents (49%) were implementing/actively seeking to implement. We discussed earlier in the report whether the shift towards remote service delivery tools could see the emergence of a new approach to tiered service delivery. Could it be that a very light transactional or subscription-based self-help service offering could become the de facto first rung on the service offering ladder?

The third most important technology cited was Workforce Management Solutions which are also proving to be important with well over a third of companies (38%) looking at implementing such technologies. With the majority of companies already now having at least some semblance of an FSM solution, it will be interesting to see if this is the shift towards third-generation systems that we have seen emerge in recent months or whether it is a shift away from using more generic CRM/ERP type tools to a more dedicated set of best-in-class tools designed with field service in mind. Again, this is an area we will be exploring further in the follow up paper based on detailed respondent interviews.

While there is a clear need for investment in digital transformation, there is a challenging dichotomy emerging. Despite the study revealing a strong requirement for investment in field service management technologies less than a quarter of companies (23%) have increased the budget available to do so, while just under a third (32%) of companies have had their budget decreased.

However, respondents of both positions seem to think that this budget reset will be more permanent than temporary with 73% stating they think this level of investment will become standard moving forward. This could suggest that many companies may be caught in the headlights as they see the need for investment yet freeze at the onset of an ongoing economic downturn.

This is a challenge that simply needs to be overcome one way or another.

Whether it be diverting funds to meet the investment needs or adapting to a more simplified service model something will have to give. The challenge being what could keep the business buoyant in the short-term, maybe the very thing that causes it to sink further down the line.

How has Covid-19 Impacted our Relationship with our Engineers

The pandemic has put a strain on all of us both in our working lives and our personal lives.

As we touched on during the introduction to this report, while those of us who were office based had the relatively easy transition of moving to home-based working, it was our engineers who continued in the face of adversity to keep things moving while the world went into lockdown.

As IDC's Aly Pinder Jr commented during a Field Service News Digital Symposium live stream, *"we have to understand that it is not just a resource we are sending out into this environment, it is a person."*

There has never been a more important time to make our engineers feel valued within the organisation not just because it is the right thing to do, but equally because as we look to reclaim lost capacity and bring ourselves back on track, the skill-sets of a highly trained engineer or technician are likely to be very much in demand.

Those companies who have failed to emphasise the value their field service team bring to the organisation at this most testing of times could just see their key personnel jumping ship to their competitors at the worst possible moment – just when they are beginning to head down the road to recovery.

The study findings though reveal that most organisations are aware of the importance of ensuring their relationships with their engineers has stayed healthy throughout the pandemic. In fact, the study shows that the overwhelming majority of respondents (80%) believe that their relationships with their engineers has improved since Covid19. *(Figure 11)*

It is perhaps of little surprise that the key to sustaining such strong relationships with our engineers lies in communication. Almost half of the total respondents (43%) stated that they speak with their engineers on a daily basis while a further quarter (26%) of companies stated that they speak with their engineers' multiple times a week. Interestingly while there is very slight fluctuations, as would be expected, these numbers remain consistent across all of the various segments of company size we've monitored across the study.

The deployment of communication tools which allow field service engineers to connect with the wider organisation and for their to be two-way communication between engineers and their line management also appears to be near ubiquitous, with nine out of ten (90%) companies stating that their engineers have effective means of communicating with management.

Similarly, 86% of companies within the survey also state that they have tools in place which allow for peer-to-peer communication. Of these organisations, over two-thirds (70%) state that they have a dedicated tool to do so.

Fig. 11: Do you feel the relationship with your engineers has improved or weakened since Covid-19?

- *Weakened: 20%*
- *Improved: 80%*

Understanding the Value of the Field Service Engineer

It is clear within the study, that the field service engineer and technician is not only highly valued within most field service organisations, but they are also well connected to and able to easily communicate with both peers and management alike. So, having established that value, lets us take a moment to dig deeper and break down what that value is founded upon.

In the light of such findings we can also take a look at how central the engineer is to the technology ecosystem. One of the hall marks of the best-in-class field service management systems is the ability to deliver knowledge and expertise to the engineers when they need it most.

We took a moment during the study to understand how field service organisations are managing this task.

The largest segment of the companies in the study, which accounted for nearly half (48%) of field service companies utilise peer-to-peer coaching to achieve this. The second most commonly cited method was via an online knowledge base which over a quarter (27%) of companies utilise while just under a fifth deliver knowledge to their engineers via a mobile application. Only 4% of field service companies are still providing their engineers with onsite manuals.

We asked the respondents in the study what was the primary function of the field service engineer or technician within their respective businesses? For over half (55%) of companies the primary function of the engineer is to *'be able to trouble shoot problems and identify resolution that couldn't be found through initial triage i.e. to be an expert onsite'.* For almost a third (27%) of companies the primary function of the engineer is *'to interact with the customer in a professional manner and identify additional service revenue opportunities i.e. to be an ambassador onsite'.* The smallest response group here which was just under a fifth of companies (18%) stated that for them the primary role of the engineer was to *'implement a fix based on fault analysis that leverages machine data and remote expert interaction – i.e. to be a pair of hands on site'. (Figure 12)*

This set of findings within the study are strongly juxtaposed with earlier findings relating to the rapid adoption of tools that provide the service provider with the capability to deliver remote service offerings, as well as the findings that the majority of service organisations see remote service delivery as a new revenue stream.

It is clear from the responses to this particular question that the large majority of field service organisations see far more value in the service engineer than being a physical asset 'a pair of hands on site'. In a world of remote-first service delivery that many are predicting, this would appear a significant part of the engineer and technicians' value being sacrificed?

Once again we appear to be building a case for the emergence of a hybrid model of service delivery that finds the balance between the rapid effectiveness of remote-service delivery and the deeper value of the field service visit bringing the expert knowledge and insight directly to the customer on site.

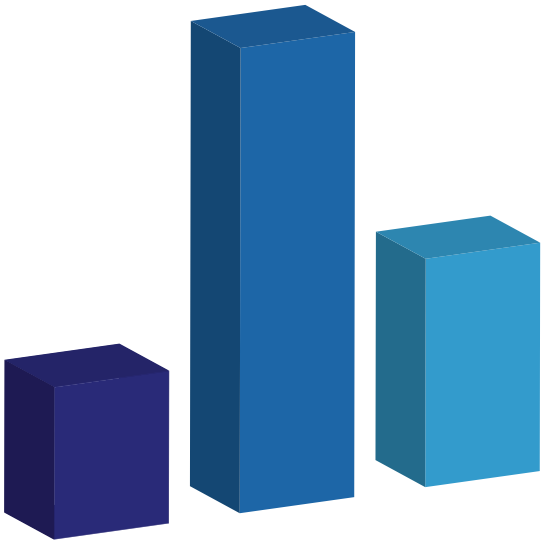


Fig. 12: What is the primary function of an engineer within your business?

- *To be a pair of hands on site: 18%*
- *To be an expert On-site: 55%*
- *To be a brand ambassador: 27%*

The Gig-Economy, Field Service and Recovery

Another aspect that could emerge within such a hybrid model could be the rise in prominence of the gig-economy within the field service sector. In a 2019 white paper and accompanying video series published by Field Service News, a series of arguments were put forward as to why the field service sector should embrace the gig-economy.

Now less than a year later as the sector begins to contemplate how we can recover from the backlog of nearly six months of stunted operations – turning to the gig economy suddenly seems to be something that every field service company should be embracing.

Yet, the study shows that this is yet to become the case with over two-thirds of companies still not employing via the gig-economy or utilising 3rd party labour at all. *(Figure 13)*

Of those field service companies that are using such contingent labour pools, the sweet spot in terms of the balance of the workforce appears to be between a tenth and a quarter of the workforce being third party labour – which over a third of companies (36%) state is the blend between internal and external workers that they currently have in place.

However, one sign that the gig-economy in field service may be ready to develop more rapidly than it has done before (beyond the obvious market drivers of the pandemic), is that from a technology standpoint it is now a lot easier to integrate third party workers into the same workforce management system as internal workforce.

In fact, of those companies that are using the gig economy over half (55%) are currently doing so.

One final important data point to note is that currently the gig-economy is being positioned amongst field service organisations to cover a different set of tasks to the internal workforce.

Over three quarters (82%) of companies who operate a blended workforce allocate different types of jobs for third party workers than they do to their internal workers.

In the next phase of the research project, during our interview series, we shall look a little bit closer at the split, however, the most obvious assumption would be that the more routine tasks are handed out to the gig-economy freeing up the internal workers to utilise their industry expertise to bring value to the organisation in the more complex work.

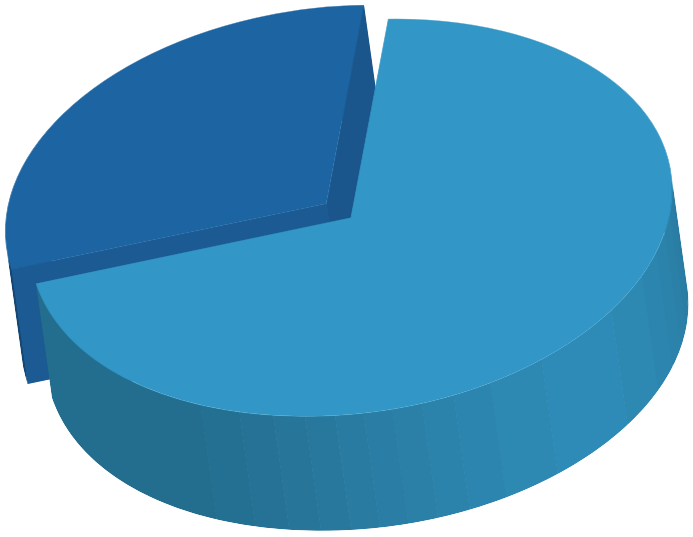


Fig. 13: Do you employ via the gig-economy/3rd party labour sector?

- *Yes: 30%*
- *No: 70%*

Conclusion: The New Normal of Field Service Has Been Coming for a Long Time. Now it is Here.

There is no-doubt that the global lockdowns of the 2020 coronavirus have hit all of us hard, including the field service sector. Yet, despite talk of the pandemic continuing to dominate the news cycle and an ongoing fear, founded in uncertainties meaning some six months on we are still trying to piece together what recovery will even look like, across this study one can't help but feel an undertone of positivity from our respondents.

Everywhere we look throughout the findings we see evidence of the impact of the pandemic, not just in the short-term financial aspects but in how we are shaping our conversations with customers, with our engineers and with each other.

However, when we look at how field service companies are looking to the future one statistic within this report really shines out – in the next 12 months over three quarters (76%) of field service companies will be focused on growth rather than survival. This is a huge indicator in our sector's belief in itself.

Indeed, the most singular effect the pandemic has had on our sector has been the acceleration of the widespread adoption of technologies and advanced service thinking. We have seen the facets that at the start of the year, were examples of best-in-class of field service, delivery become the mainstream. As the study shows, the whole industry has taken a quantum leap forward in the last 6 months. The majority (73%) of field service organisations now have capabilities to deliver service remotely. The majority (84%) of field service companies now have their assets connected in the field. The majority (66%) of field service organisations now offer some form of advanced services, servitized or outcome-based service offerings.

We truly are on the cusp of a new era of field service, our industry has been slowly been building the blocks of evolution across the last decade. COVID-19 has simply put us all on the same page.

However, as with all growth and development there will come moments of pain as we shed the skin of our previous incarnation.

There are some challenging discussions ahead for many field service companies and the sector at large that the study has brought forward into the light. Namely this is the growing dichotomy between the seeming desire of many in the field service sector to shift towards a remote-first approach to service delivery and the value proposition of the field service engineer.

Indeed, the very value proposition of field service itself, is something that we must re-examine as we look to the future. With remote service delivery, even though 60% of companies with such capabilities state that they only

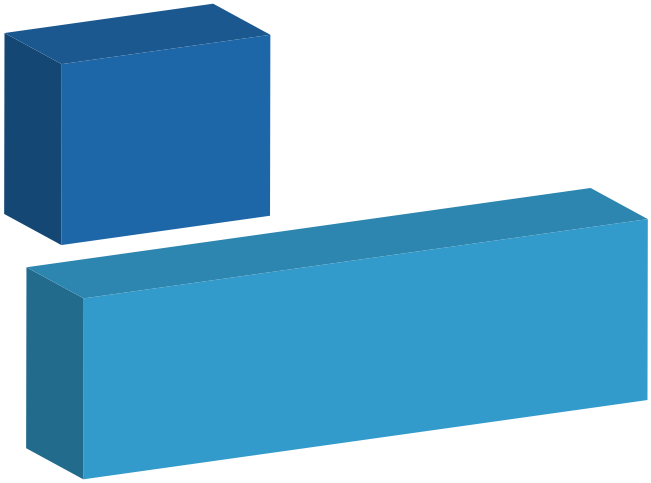


Fig. 14: In the next 12 months will your business be focussed on growth or survival?

- *Survival: 24%*
- *Growth: 76%*

implemented them as a result of the pandemic, still 78% see remote services as an opportunity to develop new revenue streams. This is of course, a sensible approach to take with any new capability, but let's take a brief moment to reflect on the value proposition of remote service delivery.

The benefits of remote service delivery in the immediate are of course the ability to deliver service within a zero-touch environment, protecting our customers bio-security measures. However, as we look beyond the current operating environment remote service delivery can deliver the customer quicker issue resolution.

Yet, almost half (48%) of the respondents still felt that the customer sees greater value in a face to face engineer service visit. Why? Perhaps the answer lies within how field service companies see the fundamental role of their engineers. With over half (54%) of companies seeing their engineers primarily as a subject matter expert and a further 27% seeing their engineers as a brand ambassador, the value for the customer of having the ear and advice of such an individual on site is self-evident.

In a world of outcome-based services, the quicker resolution of issues that remote service delivery offers is not just a benefit it is essential. Yet, the study suggests it is the customer's access to the expertise, knowledge and insights of the field service engineer is where the true value perception of field service delivery lies. It is hard to see how such intimate trust-based relationships can be replicated remotely.

Within this report the notion of a hybrid model of service delivery has been suggested and this could indeed be a strategy that we will see emerge. While the permutations would vary within differing organisations, broadly speaking it would be easy to envision most routine service being undertaken remotely with an allocation of on-site visits taking on more of an opportunity for an engineer to offer guidance on how to get the best out of the assets while performing some analysis and adjustments to the assets to offer the customer enhanced optimization where possible.

This is just one example of how a hybrid model that blends remote service delivery and enhances the importance of the onsite service visit could work, but as the study suggests some similar forms of hybrid models will inevitably need to emerge given this emerging dichotomy will need addressing.

Discussion about what the new normal will look like in a post-pandemic world has been so prevalent that in just a matter of months the very phrase 'new-normal' has started to become hackneyed.

However, it is of course a conversation that we must have as we look to the future. For the field service sector though, this study would indicate that the new normal will look very much like what best-in-class service delivery has been evolving into for quite some time now.

"The infrastructure for connected service has been built. The thinking for advanced services has been considered. Now as a result of necessity the digital transformation required has been accelerated..."

The infrastructure for connected service has been built. The thinking for advanced services has been considered. Now as a result of necessity the digital transformation required has been accelerated.

The field service sector is ready for its next phase of evolution. One that has been building across a decade, brought to fruition by the greatest disruptor we have ever known. For the third (33%) of companies who have had to reduce their available budget for digital transformation projects, while survival must be the first reaction to this crisis, it is a dangerous time to be left behind in terms of technology and service-thinking.

That future has already begun to emerge and it is those companies who seize the opportunity to grow, develop and evolve with the market in these first years of a new era that are best placed to flourish.

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Combining our award-winning, easy to use/easy to adopt software with the industry's best implementation and support services, FieldAware provides rapid ROI, accelerating improvements in productivity, safety, compliance, customer satisfaction, reduced environmental impact and revenue growth.

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