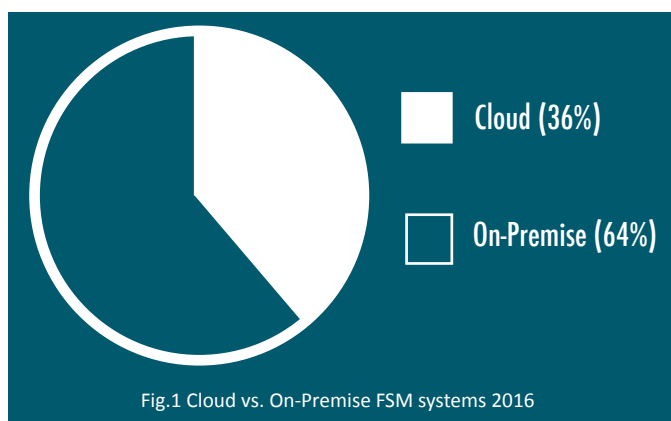# Research Report: Has field service finally made the move to the Cloud?

12 months ago Field Service News worked in partnership with ClickSoftware to explore whether field service organisations were using cloud computing to manage their operations. Our findings showed that despite the fact that the majority were still using on premise systems there was an undeniable appetite to move to a Cloud based future.

So 12 months on has that shift finally come to pass?

ClickSoftware

Executive Summary: Key findings

- Over a third of companies are now using Cloud based Field Service Management (FSM) systems
- The rate of adoption of Cloud based FSM systems has increased dramatically year-on-year with almost three times as many companies moving to the Cloud in 2015/2016 than did in 2014/2015
- The move to the Cloud appears to be directly aligned to the move away from legacy systems with over two thirds of companies that are still using on-premise FSM solutions working with FSM systems that are at least three years old
- Similarly, of those using Cloud based FSM solutions, a third have made the move within the last six months - which would suggest that not only is the rate of adoption of Cloud based FSM solutions increasing, but it is doing so at a quicker pace than in previous years
- This is further supported by the fact that over two thirds of companies that are currently using Cloud based FSM solutions would consider the Cloud for the next iteration of their FSM system
- The most common key driver for companies adopting Cloud based FSM solutions is that the Cloud offers greater flexibility. However, once implemented, increased functionality is the number one benefit felt by companies using Cloud based FSM systems
- Amongst those who have implemented Cloud based FSM systems, the move has been overwhelmingly positive with 100% of these companies stating they would recommend a Cloud based FSM system over an on-premise equivalent
- Finally, fears around the security of the Cloud, which was seen to be the biggest barrier to adoption in previous research are abating. Just 6% stated that they felt they wouldn't trust placing sensitive data in the Cloud whilst over half of respondents felt that the Cloud was the future of enterprise computing.

Research Report: Has field service finally made the move to the Cloud?

2

Fig.1 Cloud vs. On-Premise FSM systems 2016

Cloud (36%)

On-Premise (64%)

In 2015 Field Service News partnered with leading Field Service Management (FSM) software provider ClickSoftware on a research project, which aimed to take a measure of the feelings toward Cloud computing as a platform for productivity tools amongst field service professionals.

Now one year on both parties have returned to the topic to see if the trends we identified and the developments we predicted have materialised and to build an up-to-date picture of both the adoption and appetite for Cloud computing as a platform for Field Service Management systems.

In this white paper, co-published by Field Service News and ClickSoftware, we shall review the data from our latest research, providing year-on-year comparative analysis to identify what new trends have emerged and how attitudes towards the Cloud have evolved amongst senior management within the field service industry.

PREVIOUSLY IDENTIFIED TRENDS:

To begin let's briefly recap the findings of last year's research (which was the second time we had focused on the use of Cloud within a field service context as a subject for our research.)

Whilst the headline findings of that project identified that a large majority of field service companies (74%) were still using on-premise solutions, there was clear evidence that a shift to Cloud was on the horizon.

There were two key findings that supported this hypothesis.
Firstly, there was the overwhelming evidence that the Cloud was proving to be a success amongst those companies that had made the move away from traditional on-premise solutions. In fact, when we asked those respondents who had made such a move 'would you recommend a Cloud based field service management solution over an on-premise solution?' 100% of them replied that they would.

However, the findings were perhaps even more telling when we turned to those companies that were still using on-premise solutions.

Amongst this group of respondents, we found that over two-thirds of companies (69%) admitted they would consider moving to the Cloud when they next upgraded their FSM solution.

Such findings led us to arrive at the hypothesis that eventually we would see a widespread move to the Cloud. It was our prediction that we would potentially see a complete pendulum shift, with up to 75% of companies using Cloud based FSM solutions within the next five years.
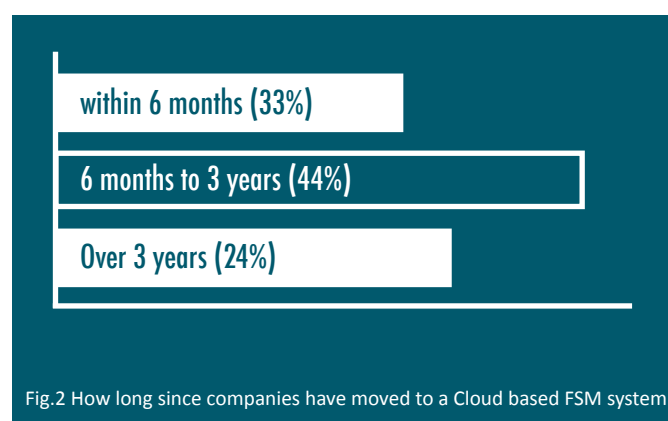
Last year's research also identified that concerns around the security of the Cloud were the biggest potential barrier to adoption. In fact, 38% of respondents that were not using a Cloud based FSM solution stated that they felt that security was the greatest issue with Cloud.

Yet that same research also highlighted that this is generally not the case - security issues were less prevalent than both connectivity and integration issues amongst companies actually using a Cloud based FSM tools.

It was our assertion last year that there was a need for greater education and understanding of the security of the Cloud, particularly at the enterprise level amongst executives within the field service sector - so that perception and reality could become more closely aligned. Once this was achieved we would likely see the shift to Cloud becoming the most widely used platform for FSM systems gaining greater momentum.

So how have the opinions of field service professionals changed across the last twelve months?

Has there been the continued trend in the number of companies making the move away from on-premise FSM software to Cloud based equivalents that we predicted we would see? Has the perception of Cloud security improved amongst Field Service Management professionals? And has the appetite for

within 6 months (33%)

6 months to 3 years (44%)

Over 3 years (24%)

Fig.2 How long since companies have moved to a Cloud based FSM system

Cloud based FSM systems gained any greater momentum?

YEAR-ON-YEAR TRENDS:

The headline finding of this year's research is that we have indeed seen a continued shift towards more companies using the Cloud for their FSM systems. When comparing data from 2014, 2015 and 2016, we have also seen increasing year on year growth.

Indeed, the number of companies now using Cloud based FSM systems is well over a third, with 36% of our respondents stating that they are now Cloud users. This is a year on year increase of 8% in terms of companies using the Cloud for FSM systems.

Not only does this show a continuing move to the Cloud, but it is also a relatively significant increase in the year-on-year growth we saw in the previous year's research. In fact, the increase in companies moving to the Cloud within the last twelve months is almost three times more than it was in the previous year (9% vs. 3%)

This would certainly add weight to our conclusions last year that Cloud was gaining traction as a platform for FSM tools, and that we would see this continue to increase as companies begun to upgrade their older legacy systems.

Further evidence that the shift to Cloud is happening at a faster rate is revealed when we look at how long those companies who are now using a Cloud based FSM solution have been doing so.

Of those companies now using Cloud based FSM solutions a third (33%) have been doing so for less than six months.

This is a slight uplift compared to similar responses in 2015, which in turn were higher than the results of 2014.

Indeed, across the three years that we have conducted research into this topic we have seen an increase of 10% amongst those companies that had recently (within

the last 6 months) made a move to the Cloud at the time of the relevant research project.

This would again support our previous hypothesis that the somewhat relatively slower move to Cloud computing as a platform for FSM solutions (when compared to other business operations tools such as CRM) is largely tied to companies' timetables for moving away from their existing, legacy systems.

Given that field service is a mission critical area of operations that is gaining ever more importance (as service revenue becomes more frequently a major proportion of many organisations' total revenue), importance of preparing and planning for a FSM system - whether it be Cloud based or on-premise, is perhaps understandable.

Also, when we consider that companies have traditionally regarded the shelf life of FSM software to be somewhere between three and seven years (with

Expert View: Marina Stedman, Global Field Marketing Director, ClickSoftware

As we said in last year's report, the cloud is not a new concept, in fact it's nearly twenty years since Salesforce, a company that has only ever offered cloud-based solutions, was established.

While the field service industry has taken some time to catch up, "move to the cloud or remain on-premise" is a key topic in the field service industry today.

While field service staff have typically been managed and dispatched to customers in a fairly traditional and hierarchical manner, that's a difficult model to maintain nowadays as demanding consumers, used to instant "uberized" service and status updates expect everything to be delivered faster, more flexibly and more responsively.

"The findings from this survey clearly show that the Cloud is the way forwards for field service, with every single organisation that has moved to the Cloud saying they would recommend it over an on-premise solution..."

The power of cloud computing and the ubiquity of mobile devices means companies can now redesign their entire FSM process to the benefit of both the engineer and the customer, giving everyone instant information about their jobs, projects and appointments whenever, however and wherever they want it.

The findings from this survey clearly show that the Cloud is the way forwards for field service, with every single organisation that has moved to the Cloud saying they would recommend it over an on-premise solution and over two-thirds (69%) of users of on-premise FSM systems, considering the Cloud for their next upgrade.

When considering perceptions of the Cloud, over half (56%) now see Cloud as the future of enterprise computing, an increase of 7% in just 12 months. Organisations of all sizes see the benefit. 58% of organizations with large field teams (more than 300 field service engineers) said that Cloud is the "future of enterprise computing", (a change of 9% from 49% in 2014/15) and 57% with smaller field teams (less than 50 engineers) agreed, compared to 40% in the previous survey.

Working with customers all over the world, ClickSoftware has found the Cloud to be a great leveller, enabling every organisation, no matter what size, location or business model to rapidly adopt and improve upon the same applications and processes that drive enhanced customer service for everyone.

some companies even 'sweating' their software solutions well beyond the ten year mark) the implementation of new FSM systems takes time.

However, it is clear that the trend towards Cloud adoption is accelerating and on the main when companies do upgrade their FSM systems, they are more likely to opt for the Cloud as the platform for their new system.

THE QUESTION OF SECURITY:

So it seems that we are indeed seeing a continuation of the trends uncovered within last year's research - in that the shift towards Cloud becoming the prevalent platform for FSM systems is continuing to gain momentum.

But how does this correlate with general perception around Cloud computing and in particular around security concerns - which were the key barrier to adoption for those who were reluctant to move to a Cloud based FSM in our previous research?
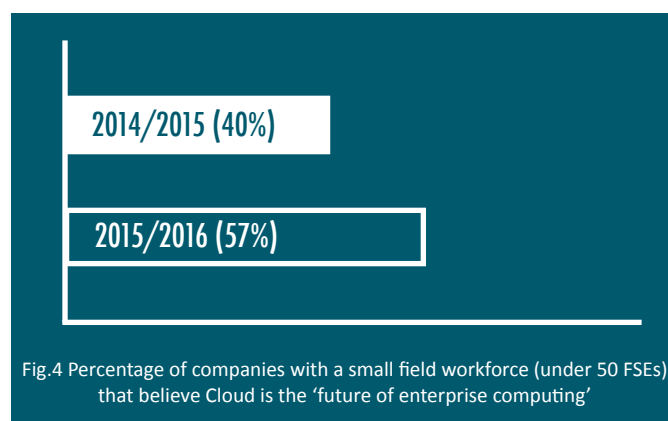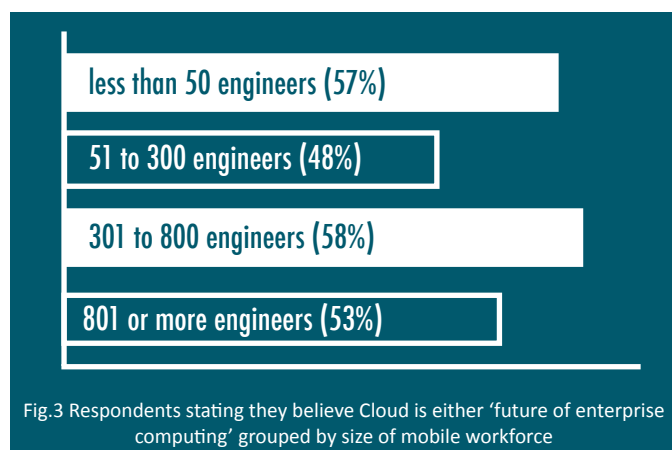
To answer this question let's start by exploring how general perceptions about Cloud computing have changed, if at all, across the last twelve months.

In 2015 and 2016 we asked our respondents 'Which of the following best sums up your perception of the Cloud in business?'
We gave our respondents a choice of four options:

• I believe it is the future of enterprise computing
• I see its benefits but still have some concerns
• I wouldn't trust placing sensitive data in the Cloud but would use for general applications
• I think we should be keeping everything on premise, there is too much risk in the Cloud

This year we saw the number of respondents who stated they saw "the Cloud as the future of enterprise computing" rise to over half (56%) of all

Fig.3 Respondents stating they believe Cloud is either 'future of enterprise computing' grouped by size of mobile workforce

less than 50 engineers (57%)
51 to 300 engineers (48%)
301 to 800 engineers (58%)
801 or more engineers (53%)

2014/2015 (40%)
2015/2016 (57%)

Fig.4 Percentage of companies with a small field workforce (under 50 FSEs) that believe Cloud is the 'future of enterprise computing'

respondents, an increase of 7% compared to the 2015 results.

We also saw a five point increase (i.e. from 35% to 40%) amongst those who stated that they could see the benefit of the Cloud but still had some concerns.

However, it is at the other end of the spectrum, where the responses offered had more negative connotations, that perhaps the greatest shift is apparent.

The number of those who stated they "wouldn't trust putting sensitive data in the Cloud" has reduced from 13% in 2015 to just 6% in 2016 whilst the admittedly small (3%) section of respondents in 2015 who stated they felt we should be keeping "everything on-premise as there is too much risk in the Cloud" has completely disappeared within this year's results.

It is also interesting to note that when we drill down further into the findings and look at the responses from companies based on the size of their mobile workforce that there is further evidence of a growing confidence in Cloud computing across the board.

To begin let's take a look at those companies within the largest bracket of mobile workforce, i.e. those with 801 or more field service engineers/ technicians.

Indeed, in this bracket of companies 100% replied positively when we asked for their overall perception of the Cloud.

Over half (53%) of the field service professionals within this company size bracket stated that they saw the Cloud as the 'future of enterprise computing' whilst just under half (47%) stated they whilst they may have some concerns they 'could see the benefits' of the Cloud.

Similarly when we look at the responses to this question from those representing companies within the smallest bracket of mobile workforce (i.e. 50 field engineers or less) once again there certainly appears to be a

Research Report: Has field service finally made the move to the Cloud?

5

Expert View - Paul Whitelam, VP of Product Marketing, ClickSoftware

Something that comes through clearly in this research is the increasing benefit that respondents are seeing from moving Field Service Management to the cloud. When comparing respondents' view on the main benefit of moving to the cloud in the 2014/15 survey with this year's research, "greater flexibility and scalability" was still the number one cited benefit, growing by 6% from 79% last year to 86% today. In addition, nearly two-thirds (63%) of respondents ranked both "easy remote access" and "less reliance on the IT department" in equal second in terms of benefits gained, similar values to last year.

Our experience as a software vendor in the field suggests that the priority given to "flexibility and scalability" not only reflects the ability to control operational costs but also that field service companies are prioritising customer satisfaction – and want to flexibly tune their cloud-based software solution to meet user requirements in this area. As products become more commoditised, service delivery becomes the differentiator. Companies need to improve their customer experience while keeping operational costs in check, servicing the needs of the business and the customer.

> "The ability to rapid introduce new applications and services across an entire field service operation, without having to rely on the availability of the right IT infrastructure, plays a critical role in empowering field service engineers and delivering fast service differentiation..."

In many cases today, a customer's only engagement with the supplier of their goods or services is when they need something fixing. In the retail space for example, it might be a field service visit to repair a washing machine, in the utilities industry it might be when a central heating boiler breaks down. That field service engagement may be the only opportunity to impress the customer during the lifetime of a product that might last five, 10 or 20 years.

The ability to rapid introduce new applications and services across an entire field service operation, without having to rely on the availability of the right IT infrastructure, plays a critical role in empowering field service engineers and delivering fast service differentiation. Real-time communication via smart devices between field service professionals, dispatch teams and customers increases efficiency and enhances customer service. Examples of these include using traffic monitoring systems to direct engineers to each job as quickly as possible and on-line tracking to keep the customer updated on when they will arrive.

Embracing the latest cloud and mobility technology helps companies to develop a far more collaborative, immediate and customer-focused infrastructure and to enable a culture where customer service is the priority. One where a mobile network of technicians and engineers are both enabled and encouraged to put the customer first and, as brand ambassadors, are driving customer loyalty and potentially identifying opportunities to sell more products and services to the customer while on-site.

significant shift in thinking in favour of Cloud adoption.

The number of respondents that stated they saw the Cloud as "the future of enterprise computing" has risen year on year by 17% to 57%. Meanwhile the number of those who stated they "I wouldn't trust placing sensitive data in the Cloud but would use for general applications" fell by 9% year on year to just 8% and there were no longer any respondents that felt "we should be keeping everything on premise, there is too much risk in the Cloud."

Meanwhile, amongst those companies with between 51 and 300 engineers 48% stated that they felt 'Cloud is the future of enterprise computing' and 58% of those working in companies with between 301 and 800 field service engineers stated the same – so it does indeed seem clear that the general

perception of Cloud is not only improving but that this is happening across companies of all sizes.

But how does this correlate to the separation between Cloud apps that are used mainly be consumers (e.g. Google Drive or iCloud) and those designed specifically for business users?

In response to the question 'Have high profile breaches in consumer privacy influenced your opinion of the Cloud in enterprise?' We saw a move of 7% from the previous year's results towards responses that accepted that 'there are far more security protocols in the business world' and that such security breaches in the consumer world didn't impact their thinking around enterprise level Cloud security.

In fact, almost half (48%) of the service professionals that participated in our research now stated that high profile breaches in security in the consumer sector have no impact on their perception of enterprise level Cloud security - an increase of 8% more than in 2015.

## THE BENEFITS OF MOVING TO THE CLOUD:

The benefits of Cloud based solutions, whether it be a FSM solution or another business tool, are by now very well documented.

Key benefits of the Cloud include: less reliance and strain on internal IT departments, more manageable costs, built in disaster recovery, scalability, and easier implementation both of the system initially and also of upgrades and updates.

But what are the key benefits that companies that have actually moved to a Cloud based FSM solution are experiencing, having made the switch away from on-premise software?

We asked our respondents to identify both the key drivers for them moving to the Cloud and the biggest benefit they have experienced since having made the switch.

Interestingly, our results showed there is some variance between the two,

Fig.5 Primary reasons why companies opted to move to a Cloud based FSM system
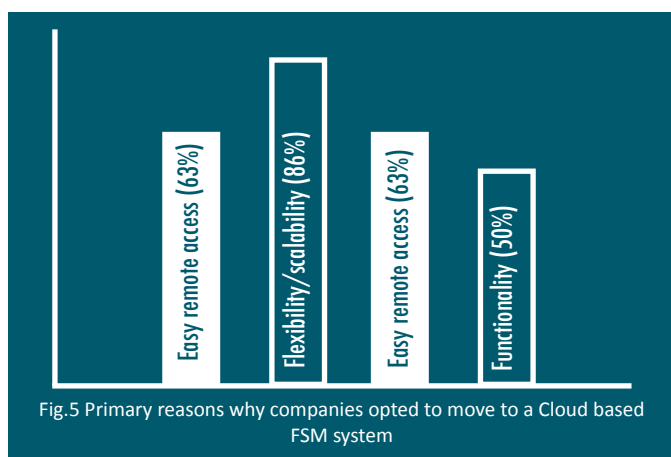
indicating that after making the move, companies are discovering different benefits to those that they originally expected.

Firstly, let's look at the drivers for selecting a Cloud based FSM system.

The most commonly cited driver for moving to the Cloud was that Cloud solutions offer greater flexibility and scalability, which 86% of companies using Cloud based FSM systems cited as a reason for them opting for Cloud.

Other commonly cited factors in driving companies to the Cloud were 'easy remote access' and 'less reliance on IT' both of which were cited by 63% of companies.

Meanwhile, improved functionality was also widely acknowledged to be another important consideration with exactly half of respondents citing this as a benefit that drove their decision to move to the Cloud.

However, when we turn our attention to the actual benefits that companies have experienced after moving to a Cloud based FSM system - we see that improved functionality is in fact the most commonly cited benefit with over two thirds of companies (71%) identifying this as the biggest single benefit realised.

Alongside this, improved productivity is equally common at 68% and more manageable costs were also widely cited, with over half (57%) of our respondents stating they saw this as a major benefit.

Given our assertion that the move to the Cloud is heavily tied to the replacement-cycle of FSM systems, and because improved functionality and productivity are the most commonly cited benefits, we think it reasonable to assume that many companies who have yet to update their systems are now facing a competitive disadvantage by not doing so.

This argument could also be further supported when we look at how long

those using on- premise FSM systems have had their current systems. In fact, over two thirds (70%) of companies using on-premise FSM systems have had their systems for more than 3 years.

The results undeniably prove that older systems are more likely to be on-premise, whilst more recently implemented systems will be Cloud based.

One of the widely cited benefits of Cloud based systems is the ease of installing system updates and the introduction of new features and functionality - and this is corroborated by the research findings as directly stated by those companies that have adopted Cloud based FSM systems.
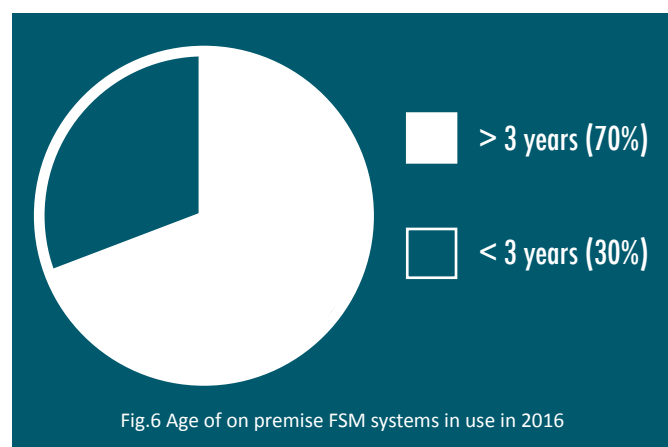
In fact, this is highlighted perfectly by the fact that of those companies that have made the move to a Cloud based FSM system 100% stated they would recommend the Cloud over an on-premise equivalent - the second time running that Cloud based systems were given such an overwhelming endorsement.

REMAINING BARRIERS TO ADOPTION:

As we touched on above, our two previous studies into the use and appetite for Cloud computing as a platform for FSM systems found security to be the ever present elephant in the room.

However, this year, for the first time ever, concerns amongst those yet to move away from on-premise software to Cloud based equivalents have been as much about connectivity issues as they have around security.

Of course, the ability to access the internet is a fundamental tenant of Cloud computing, so it is of little wonder that as concerns around security lessen to then connectivity will become the most pressing concern for those debating a move to the Cloud.

> 3 years (70%)

< 3 years (30%)

Fig.6 Age of on premise FSM systems in use in 2016

Research Report: Has field service finally made the move to the Cloud?

7

Whilst it may not be a particular issue for back end systems, one of the key benefits of Cloud computing is the ability to provide remote access to elements of such systems such as asset management, parts inventory and of course job schedules to our engineers working in the field.

Whilst within the UK at least, 3G data signals have now reached a projected 97% coverage, not every country has such a widespread service.

This may be why connectivity issues were the most commonly cited reason why companies do not feel confident in making a move to the Cloud with over a third (35%) of companies stating this is the single biggest concern around moving their FSM system to a Cloud based platform.

Security fears then came in as the second biggest concern cited by a fifth (20%) of companies - whilst issues with legacy systems were cited by 15% of organisations.

However, despite these concerns once again we have seen a year on year increase in the number of companies still using an on-premise solution considering a move to the Cloud for their next upgrade or iteration of a FSM system.

In fact the number of companies using on-premise FSM software stating that they will consider moving to the Cloud is now approaching almost three quarters (71%).

CLOUD IN OTHER PARTS OF THE BUSINESS:

As we move more firmly into a world of Big Data and real-time analytics the easy-flow of both customer and asset data between differing systems is absolutely vital, as is the ability for such systems to be able to communicate with each other.

Alongside the ongoing willingness for organisations to develop APIs, the advent of Cloud computing has been the major factor in enabling such a seamless flow of data.

But what other areas within a business are predominantly becoming Cloud based and how they complement any given FSM system?

We asked both those who were using on premise and Cloud based FSM solutions if they were using the Cloud based systems in any other areas of their business.

Perhaps unsurprisingly, those companies that were using Cloud based FSM systems showed a greater tendency to use Cloud in other areas of their business than those using on-premise FSM solutions.

However, amongst both sets of respondents, the business tool most commonly running in the Cloud was CRM with 75% of companies with a Cloud based FSM solution also using Cloud based CRM and only 20% of those companies using on-premise FSM software having their CRM system based in the Cloud.

While we don't know the background, we can speculate that this may be largely due to the dominance of Cloud based CRM solutions driven in part by Cloud only provider Salesforce. Their success has seen other key players within the CRM sector (such as Microsoft) focus heavily on delivering a Cloud solution as well as driving a number of smaller providers to offer similar Cloud only CRM models.

Another factor for consideration is the importance of moving data between service and sales focused systems.

It has long been a major focus for a number of field service organisations to better leverage the insight of their service teams to greater effect in terms of revenue generation and the Cloud can be a key enabler to help organisations achieve this more effectively.

CONCLUSIONS:

The results of this trends-based research certainly support the assertions made twelve months ago.

Not only have we seen a continued increase in the number of companies using Cloud based FSM systems and replacing on-premise systems with Cloud-based solutions, we have also seen the rate at which this number is growing increase significantly at the same time

In addition to this, we have seen an increase in the number of companies still using on premise FSM software who are actively looking to make a move to the Cloud when they next upgrade their FSM solution.

Meanwhile, fears around the security of the Cloud are beginning to reduce, particularly as understanding of the higher levels of security embedded within enterprise focused Cloud platforms improve.

However, there remains a proportion of field service professionals who see security as the biggest barrier to adoption and platform and solutions vendors need to continue to provide information and education on this topic.

Of those who have made the move to the Cloud, real life benefits of improved system functionality and enhanced productivity are widely felt, as is the positive impact of the more manageable cost base of Cloud based FSM systems, usually offered on a Software as a Service basis.

While at the current time, there may still be more companies using on-premise FSM software than using Cloud based FSM systems, the shift towards the adoption of the Cloud that we identified within our previous research is indeed gaining further momentum and at a faster pace than ever before.

The research has also proven our previous assertion that the move to Cloud based FSM solutions is tied directly to the replacement cycle of FSM at large and the evidence would certainly suggest that as more companies continue to move onto next-generation FSM, the adoption of Cloud as the primary platform will become ever more prevalent.

It seems our prediction of a Cloud based future for most FSM system implementations looks set to happen, perhaps even sooner than we may have at first imagined.

ABOUT THE RESEARCH:

In total 162 FSM managers responded to this year's research which was conducted via an online survey.

The respondents came from a wide range of field service industries including Utilities, Aviation, Medical, IT, HVAC, Manufacturing and Hi-Technology amongst others.

The respondents themselves were predominately senior Field Service Management professionals with job titles such as Director of Global Field Service, Head of Field Service or Field Service Director, although some respondents came from other areas of business leadership such as Managing Directors, Chief Executive Officers and Chief Information Officers.

ABOUT CLICKSOFTWARE

ClickSoftware is defining field service engagement, empowering the world's most customer-centric and demanding organizations to optimize the full potential of every service interaction.

With ClickSoftware, field service becomes the new competitive lever to drive differentiation and business value. The Click Field Service Edge Platform arms field service leaders with the smartest technologies, a limitless technology-forward platform, and the knowledge gained from a global community of best practices.

Exclusively focused on field service since creating the market, ClickSoftware has managed billions of service engagements and is relied upon by nearly a million field service professionals every day.

The company is the recognised market and technology leader by analyst firms including Gartner, IDC and Frost & Sullivan. And, Click is the field service solution of choice for Salesforce, SAP and top systems integrators. More than 350 global enterprises across 20+ industries tap into ClickSoftware for the world's smartest thinking in field service.

ClickSoftware. The field service leader.

Web: www.clicksoftware.com
Email: info@clicksoftware.com
Call: +44 (0) 1628 607000

ABOUT FIELDSERVICENEWS.COM

Field Service News is the industry leading publication for field service professionals globally.

With an unparalleled collection of widely respected industry leaders contributing insightful and informative articles published daily, plus access to key educational materials for field service professionals including white papers, podcasts, video and webinars fieldservicenews.com is a key resource visited by over ten thousand field service professionals each month.

Find out more and if you qualify for a complimentary subscription @ fieldservicenews.com/subscribe