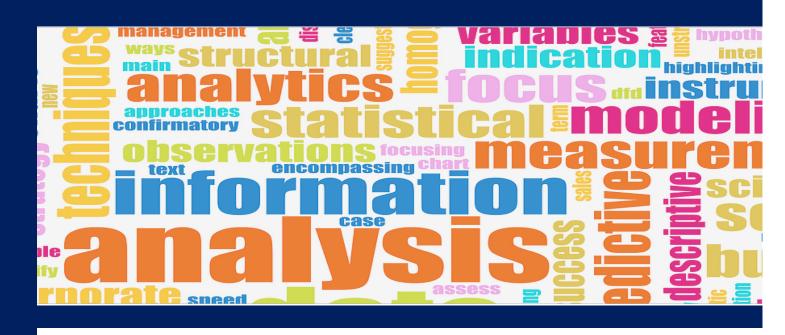
An SFG[™] Analysts Take



The Future of Field Service Management (FSM)

What Lies Ahead for an Industry that Is Constantly Evolving and Reinventing Itself

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A. The Evolution of Field Service Management (FSM)

The global Field Service Management (FSM) segment has re-invented itself several times over the years, from break/fix, to network services, to software support, to Customer Relationship Management (CRM), end-to-end customer engagement management, and such. However, the introduction of the Internet of Things, or IoT, is going to have a much greater and profound impact on the global services community than anything else that has preceded it! In fact, it already is!

For years, services managers have been talking about ways in which to reduce the number of "truck rolls" in order to save money, and repair the customer's equipment remotely – first, by phone, or assisted self-help; and, now, *via* remote diagnostics and predictive diagnostics.

Truck rolls are not necessarily a thing of the past; however, they have greatly diminished in frequency as a result of the integration of the predictive diagnostics, remote diagnostics and the IoT into Field Service Management (FSM) systems.

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Improvements in business analytics have also assisted field service managers in their ability to manage their entire business operations – and not just the field service aspects of the business. There are more analytical tools available now than ever before, and most managers are actively engaging their dashboards, so they can intelligently manage their field service operations.

Through the use of Augmented Reality (AR) apps, now actively being combined with Virtual Reality (VR) to form a more complex and robust "Mixed Reality" (MR) capability, we are likely to see even more advances in the types of technologies that will ultimately reduce the cost of performing service – for both on-site and remote repairs – over time.

Also, with technology visionaries like Elon Musk, who started out with his Tesla business, branching into solar panels, high-speed tunnel systems and, of course, SpaceX, we are likely to see more and more technological advances coming down the pike. For example, one of Musk's new ventures, Neuralink, has set its goals on attaining the ability to "merge" the power of the human brain with the power of the IoT, in order to upload and download "human thoughts" onto chips, and *vice versa*.

Imagine the impact that new ventures like this will have on all aspects of business, not just in field services, if successful! All of a sudden, veteran field services technicians will become just as important as the influx of computer-savvy millennials with respect to their experiential value to the Field Service Organization (FSO). The process goes on and on, and field service management will continue to evolve over time, as a result.



B. Strategic Opportunities for Field Service Organizations (FSOs)

The greatest strategic opportunities for FSOs will be to gain additional efficiencies as they use the IoT to power their field service operations. Of course, the converse is equally true, in that those FSOs that do not step up to the challenge will ultimately find themselves falling further and further behind the technology curve, their customers' expectations for quality of service delivery, and their ability to compete head-to-head against not only the market leaders, but even the small, medium or enterprise-sized services organization that has already embraced the new technologies.

There may still be a "wait and see" attitude toward AR, VR and MR at this time, as no single solution provider has come out with an industry-leading solution just yet (although we're getting closer). Does anyone remember the decision as to whether to go with the Sony BetaMax or VHS? For many organizations, it's the videotape wars all over again!

However, regardless of the organization's size, vertical industry segment or geographic coverage, there are ample opportunities for ALL services organizations to take advantage of the IoT and Cloud-based FSM solutions to take their operations to the next level.

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From *Strategies For Growth^{SM's}* (*SFGSM*) 2017 Field Service Management Benchmark Survey Update, we find that the top two drivers influencing the global services community, as cited by a majority of respondents, are (1) customer demand for quicker response time, and (2) need to improve workforce utilization and productivity.

The question arises, then, "How can the services organization adequately address these two key issues without the strategic advantage of an IoT-powered FSM solution? "The answer, of course, is increasingly. "It can't!"

Other strategic opportunities can also come through strategic partnering with complementary technology solution providers. Leading Internet of Things (IoT) innovators, such as GE Digital/ServiceMax, IFSWorld, Microsoft, PTC/ThingWorx have already established partnership alliances with other industry leaders; and many smaller FSOs have found themselves involved in supporting partnerships with either Microsoft, for its CRM capabilities; and/or Salesforce, for its sales and marketing management tools; etc.

Customers want what they want, and in most cases, they don't care whether their primary FSM solution vendor is offering its services directly or indirectly through strategic partnerships. In fact, many customers like the fact that their FSM vendor is linked in some way to GE Digital, PTC, Microsoft, Salesforce or other industry giants.



C. The Importance of Selecting the Right FSM Platform

For many FSOs, a standard scheduling functionality is simply not doing the job anymore, and many have set their sights on solution providers that can offer optimized scheduling, etc. The same applies to standard business analytics *vs.* advanced analytics, as well as for the various components of spare parts and inventory management. In fact, what used to be "passable" in the past, now looks a little bit "dusty" and, as such, some FSOs have elected to move forward with more robust functionalities made possible through the integration of the IoT into their FSM systems.

Nowadays, legacy platforms may not be able to accommodate such new technology apps as AR, VR and MR, and, as a result, newer platforms need to be implemented to power these new capabilities. The same goes for implementing predictive diagnostics and remote diagnostics capabilities for many FSOs.

Mobility is also important, particularly with respect to real-time data collection, sharing and transmission to relevant parties within the organization. Can the organization's existing platform handle all of these new technologies? Probably not! Therefore, newer platforms will need to be implemented, and they will need to be pretty much state-of-the-art.

"FSOs will be greatly behind the technology curve if they do not have existing IoT-powered FSM capabilities – or at least a primary FSM solution provider that does."

D. The Role of the Internet of Things (IoT) in Field Service Management

The Internet of Things (IoT) is becoming an integral component of *any* FSO's desire to be able to improve its services operations, streamline its services processes, collect and share business analytic data, and serve the customer better. It's already here!

FSOs will be greatly behind the technology curve if they do not have existing IoT-powered FSM capabilities – or at least a primary FSM solution provider that does. The IoT is quickly becoming the chief differentiator that divides those FSOs that can meet the challenges of the present, let alone the future; from those that cannot.

Without the IoT, there can be no predictive diagnostics; there could be no AR, VR or MR; there could be no chance of being able to compete directly against those FSOs who do have these capabilities. Just as Cloudbased FSM solutions normalized the playing field across all services industry segments, the IoT is now doing the same – but on steroids!

In the past, falling behind the technological curve still gave an FSO the opportunity to catch up in another year or so. However, there is not that much time available for catching up anymore. Falling behind for just a few months may represent too much of a gap to make up. The IoT allows all FSOs to keep pace with the market leaders, regardless of their size, reach or reputation, etc.



E. How Mobile Technologies Are Changing the Way FSOs Interact with Customers

Mobile technologies are, of course, also of critical importance to FSOs. Without a full complement of mobility, it would be as if you've got all this technology "hidden" in your office, but you can't share the benefits with your field force or customers. This is particularly true with respect to customer engagement activities and business analytics.

For example, competitors may already have the capability to generate customer contracts, invoices and other types of paperwork right at the customer site. They can obtain a customer's signature immediately and, by doing so, eliminate much of the "float" that has been historically associated with paper-based forms management and USPS "snail" mail, etc.

Mobile technologies can also make an FSO's business analytics capabilities much more vibrant. What good does it do to collect real-time data if you can't share it in real time? In other words, a full-bodied mobility platform can improve any FSO's "velocity of service" by shaving off days, if not weeks, of delays and potential paper-based mistakes, etc.

Having the IoT generate data in real time, but not getting relevant data and information out to the field in real time, is a big mistake. The combination of the IoT and mobility can help FSOs avoid this opportunity cost.

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F. Using Mobile Technologies to Drive Revenue and Competitive Advantage

The float issue is only one small component of how mobile technologies can assist in driving revenue and maintaining a competitive advantage. There are many others, as well.

However, it is important to note that, if all you're doing is automating bad processes, then you'll only be doing all of the wrong things faster – but not better! That's why it's so important to use the tools of a Cloud-based FSM solution, powered by the IoT, to improve your processes first; empower your field techs with real-time data, information and analytics; empower your customers through customer portals and self-help platforms; and generally perform all of your services activities better. Then, you can see additional benefits by doing it all faster – that is, through the functionalities of the IoT, etc.

Also, by doing so, customers will recognize the improvements you have made and, therefore, will be more reliant on the organization for future services needs and requirements, upsells and cross-sells, etc. This will have the combined impact of reducing the cost of customer acquisition, while simultaneously increasing the existing revenue stream. Then, increases in customer satisfaction metrics can be used to promote the organization's competitive advantage, which can also benefit through the use of social media coverage and word of mouth. But, it all starts with making improvements to the processes!



A broadly robust economy can stimulate increased product sales, which in turn, can stimulate increased services opportunities; conversely, a poor economy can dampen everything – including the growth of the field services segment.

However, the sign of a truly progressive services organization is one that has already taken into account the projected effects of a weakened economy and has planned on how to best deal with a temporarily reduced workforce (through the use of a Freelance Management System, or FMS, solution); temporarily diminished service call activity; or the like. If these types of economic-influenced events occur, those FSOs that have already taken measures to address these temporary downturns can more effectively "roll with the punches".

I. The Evolving Role of the Chief Service Officer (CSO)

The role of the Chief Service Officer (CSO) has already evolved significantly over the past several years. In many cases, today's (and tomorrow's) CSO must also be a Chief Data Officer (CDO) willing and able to manage the data and business analytics that drive the operations of the services business.

He or she must also be a Chief Customer Officer (CCO), once again, willing and able to interface with the customer directly when customer problems need to be escalated. As you can imagine, the role of the CSO can also be expanded to be the Chief Operations Officer (COO), Chief Business Development Officer (CBDO), Chief Social Media Officer (CSMO) and ..., well, you get my gist!

The days of simply managing a staff of dispatchers, field technicians and administrative assistants are long over. From this point forward, all CSOs must also be accomplished and experienced in a much larger variety of customer-facing, analytics, business development, sales, marketing and social media functions.

J. The Top Three KPIs that FSOs Need to Track Today – and in Five Years

Basically, the rule of thumb is that you should be measuring all of the metrics that focus on areas where you are underperforming, or have recognized (or suspected) problems in service delivery. For example, if your customer satisfaction ratings are lower than desired, then you will need to measure and track customer satisfaction ratings; if your on-site response time is deficient, then you will need to measure things such as on-site response, providing an Estimated Time for Arrival (ETA); and so on.

However, there are also several Key Performance Indicators, or KPIs, that a majority of FSOs measure, based on the results of **SFG**SM's 2017 Field Service Management Benchmark Survey. For example, the top KPIs currently being measured by a majority of FSOs are:

- 73% Customer Satisfaction
- 62% Total Service Revenue
- 61% Total Service Cost
- 53% Field Technician Utilization
- **50%** On-site Response Time
- 49% First Time Fix Rate



G. The Importance of Capitalizing on Services Sales Opportunities

One area where many services organizations do not do a good enough job is with regard to contract and warranty management. It's so simple; but it's not "sexy" or "glitzy" enough.

However, by using an FSM solution that has a contract management and warranty management capability built into it, or by finding a reputable warranty management solution provider, an FSO can focus directly on contract attachments, contract renewals and contract management, all of which can contribute to generating not only an increased revenue stream, but one that is also a more predictable revenue stream.

The increased use of business and customer analytics can also provide the organization with increased insight into which customers may require expanded services agreement based on anything from surpassing their throughput limits for existing equipment, repetitive failures for the same problems; or to make adjustments for an expansion of the business, a recent acquisition or merger, or the increase in the number of daily shifts using the equipment; etc. This is something that the organization's field techs can recognize either through the customer analytics they have access to, or simply by being at the customer site on a recurring basis.

Many FSOs also do not have the expertise for upselling and/or cross-selling their existing customers. This is a critical component for any business – not just for field services. If you do not already have these capabilities, you may need a new, highly-trained salesperson, or a process for ensuring that no sales opportunity ever goes unrecognized.

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H. The Impact of the Broader Economy on Field Service Management

The broader economy affects businesses of all types, including field services. However, field services has one thing going for it that many other industry segments don't (i.e., particularly manufacturing and product sales) – that is, while not necessary recession-proof, businesses will always need their systems, equipment and devices to be up and running for the duration – in many cases, in spite of what it may cost to do so.

Even at reduced capacity, factories will need their production lines to continue to operate; hospitals will need their medical devices to be readily available; banks will need their transaction-related systems to run continuously; and so on. However, Business-to-Consumer, or B2C-focused services organizations may feel the full brunt of any economic downturn, as a majority of consumers may opt to wait until they can afford to have their home electronics serviced until they can better afford to pay for those services.



Five years from now – actually, even sooner – there will also be an entirely "new" way of collecting data and reporting KPIs as a result of remote diagnostics, Augmented Reality and the growing influence of the IoT. It will be analogous to keeping two sets of books – that is, one set of KPIs, like Mean Time to Repair (MTTR), Elapsed Time from Problem Identification to Correction, etc., for the way service has historically been performed (i.e., having a field tech dispatched on-site), *vs.* the "new" way *via* remote diagnostics and repair. Combining the two will not make sense, so they will need to be measured, monitored and tracked separately.

The future of Field Service Management isn't even the future anymore – it's already here! However, by scoping out how the global services community is evolving, at what pace, with which technologies, all FSOs can plan to adapt to the multitude of changes that are ultimately coming.



About The Author

About Strategies For Growth[™]

Bill Pollock is President & Principal Consulting Analyst at *Strategies For Growth*[™] (*SFG*[™]), the independent research analyst and services consulting firm he founded in 1992.



Previously, Bill served as President &

Chief Research Officer (CRO) at The Service Council; Vice President & Principal Analyst, heading up Aberdeen Group's Service Management Practice; and Managing Analyst, Services Industry at Gartner.

In 2015/16/17, Bill was named "One of the Twenty Most Influential People in Field Service" by *Field Service News* (UK); one of the "Top 10 People Every Field Service Pro Should Follow" by *Field Service Digital*; one of Capterra's "20 Excellent Field Service Twitter Accounts"; and one of Coresystems' "Top 10 Field Service Influencers to Follow".

Bill has also had more than 350 articles, columns and features published on topics including Field Service Management (FSM), Service Lifecycle Management (SLM), Customer Relationship Management (CRM), Warranty Chain Management (WCM), Reverse Logistics, Augmented Reality (AR), the Internet of Things (IoT) and others for leading international services publications.

He writes monthly feature articles for *Field Service News*, *Field Service Digital*, and *Field Technologies Online*, and is a regular contributor to *Warranty Week* and other services-related publications.

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During the past 25+ years, **SFG**sm has consulted to more than 300 client organizations around the globe. These engagements have involved strategic services planning, market research/custom surveys, thought leadership content development and market outreach support, customer needs & requirements analyses, customer satisfaction measurement & tracking programs, business intelligence gathering, vertical market segmentation, services assessments and the development of strategic recommendations for improving service performance and customer retention.

SFG^{SM'}s thought leadership content development services include White Papers and *Analysts Take* reports; Webinars, ghostwritten/published articles, data support for Infographics, guest Blogposts, expert interviews, User Group keynote presentations and development of Website content.

The original **SFG**SM website is now archived, and has been rebranded as <u>www.PollockOnService.com</u>. However, previously published articles and white papers are still accessible for download at <u>www.s4growth.com</u>.

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