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Digitizing Field Service Vendor Management

Under siege on all fronts, communications service providers can sharpen their competitiveness by digitizing field services management both within the business and in their interactions with third-party vendors in areas such as workforce management, command center operations, routing and dispatch, training, and skills development.

EXECUTIVE SUMMARY

Communications service providers (CSPs) face unprecedented competition – both within their industry and from players across media and technology domains.

While CSPs traditionally focused on communications-related businesses such as phone, cable television and Internet services, they have extended their footprint to include home automation/smart home solutions. As a result, they are encountering a new set of competitors – from "born digital" high-tech giants, to social media enterprises and online retailers such as Amazon. Google provides gigabit speeds to customers using Google Fiber, and has launched Google Home aimed at the connected home market.[1] Not to be left behind, Facebook plans to provide Internet services to the entire world.[2] (For additional perspectives, read "Next-Generation Insurance: Tapping into the Intelligence of Smart Homes.")

Given the complexity of providing and supporting cutting-edge voice, video, data, and smart-home offerings, CSP field services (field technicians and command center activities – from installation through troubleshooting) is now hypercritical to business success (see Figure 1 below).

Field Service Operations: An Overview

CHECK PARTS & TOOLS

RECEIVE JOBS → **FIELD SERVICE DISPATCH** → **SEND JOB TO TECHNICIAN** → **PERFORM SERVICE** → **INVOICE CUSTOMER** → **COMPLETE WORK ORDER**
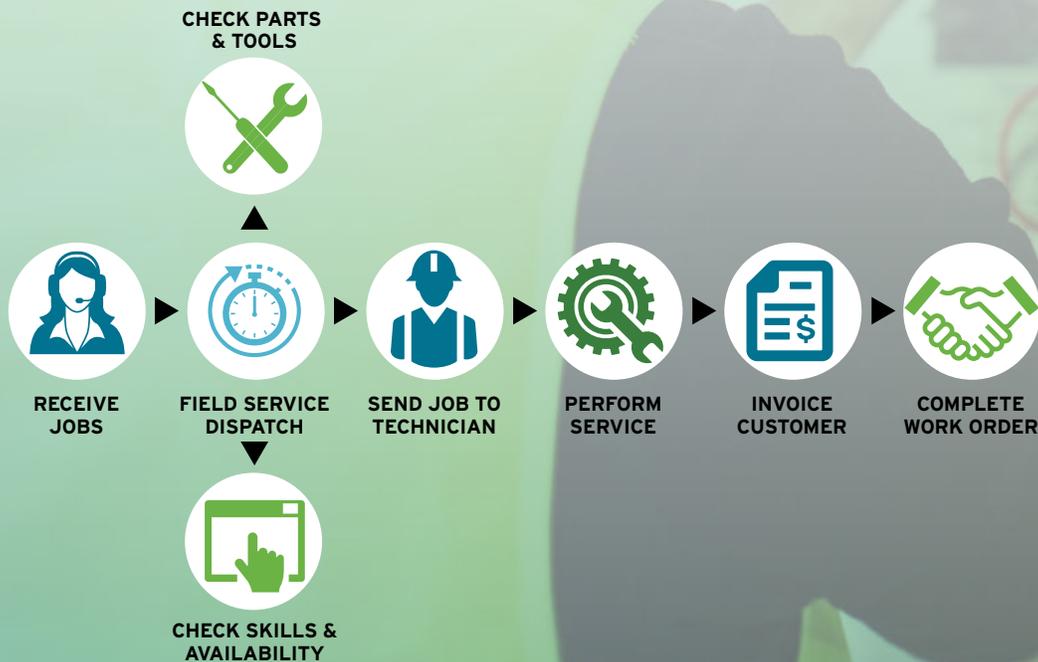
CHECK SKILLS & AVAILABILITY

Figure 1

CSP field services have traditionally relied on a highly skilled, flexible workforce comprising a mix of in-house and contract labor to deliver and support voice, video, data, and smart home products to residential and business customers. But as competition increased, CSPs started to offer new, more intricate products and services — pressuring them to turn to third-party field services to fill the supply/demand gap, and concentrate on developing new products, improving the customer experience, and expanding their market base.

As noted, technology and media giants' foray into CSPs' core markets has directly impacted the latter's field service operations. Third-party field service vendors now provide technicians to technology giants such as Google as easily (and in some cases more profitably) as they do to traditional CSPs. Consequently, competition for skilled third-party field technicians has increased, and is no longer determined by price alone.

This white paper offers insights and recommendations on how CSPs can transform their field services organizations, and work more effectively with their vendor partners to enhance the customer experience, trim operational costs, enrich their talent pool, improve their market standing, and drive profitable growth.

FIELD SERVICES: A CHANGING LANDSCAPE

Most of us have experienced the field services end of the CSP business when technicians install or troubleshoot our voice, video, data, or home automation products/services. These interactions often go a long way in determining whether to continue with the service provider or switch to another.

Although consumers increasingly use digital contact channels, our research found that they rely on them primarily for things such as browsing for products and services. For more complex and urgent issues, consumers find CSPs' digital service channels largely inefficient and difficult to use. This should be particularly concerning to CSPs, since customer contact rates steadily increased over our three-year survey period.[3]

A bad customer experience can be the result of several factors. The top three reasons, according to our recently published research:

- It takes too long to resolve a problem.
- The problem never gets resolved.
- The problem must be explained to multiple CSP personnel.

No matter how many advances are made in digital contact channels, the need for field service technicians to serve home and business customers will not go away any time soon. Although CSPs have made great strides, especially in residential products, in creating self-service processes and tools for installing products and troubleshooting issues, field technicians are still required for the majority of installations and for troubleshooting products and services. Given existing customer demographics, as well as the complexities of today's product portfolios, a large percentage of consumers prefer having a field technician come to their home or business.

RETHINKING FIELD SERVICE VENDOR MANAGEMENT

As mentioned earlier, CSPs increasingly rely on external field-service providers whose technicians directly interact with end customers. Given this trend, CSPs need to re-examine their vendor management strategy to ensure that it aligns with the expectations of the company and its customers.

Considering the sheer number of vendor technicians across the industry (in the millions[4]), they and the companies they work for have a disproportionate impact on the overall perception of a CSP's brand.

If CSPs don't have a formal strategy for managing and nurturing their field service partners, their market share can steadily erode due to several factors:

- **Capacity management:** Over time, third-party vendors will switch from CSPs to technology players such as Google to improve their profit margins and augment their workforce. This will impact CSPs' ability to manage capacity (both in-house and vendor-provided), which could directly impact the installation or repair of their products.

- **A poor customer experience:** The lack of a training strategy for third-party vendors can result in inadequately trained technicians. Since CSPs cannot directly train these workers due to co-employment rules, keeping an eye on checks and balances can be a problem, and lead to a less than satisfying customer experience, as well as serious cost and legal implications.

- **Increased costs:** The absence of a formal vendor management strategy can directly impact operating costs, since CSPs share tool licenses, materials, and customer-premises equipment (CPEs) with vendor labor.

THE RISE OF DIGITAL IN FIELD SERVICE MANAGEMENT

CSPs' field services organizations have rapidly evolved over the past decade. The proliferation of data-driven products and advances in service delivery have motivated these companies to revamp their field operations. Many are applying digital tools and thinking internally, as well as in their interactions with third-party vendors — a strategy they believe is key to leapfrogging the competition.

Investing in Digital

Field services organizations have made significant investments in digital tools and operations to improve technicians' productivity and enhance their customers' experience.

Large CSPs with thousands of field technicians have used field service automation solutions for years. These applications typically follow a "hub and spoke" model, and employ pre-defined rules to distribute work orders to remote field technicians. At the same time, the underlying technology for field service management is evolving rapidly and becoming more digital by the day. Traditionally dependent on on-premises applications, CSPs can now utilize cloud-based solutions, the Internet of Things (IoT) and predictive analytics to transform their field service operations.

Digital collaboration tools and mobile devices enable field service technicians to share, send, and receive vital information regardless of time or place, and remain connected to their company, co-workers, and customers from wherever they happen to be. Automated routing engines immediately accept work orders and allocate the appropriate resources based on priority, workers' availability, skills needed, and scheduled appointment times, for example.

These capabilities can fill the "white space" in field technicians' workdays, boost their productivity, and reduce customer wait times. This is critical to improving customer satisfaction, since consumers no longer have to spend an entire morning or afternoon waiting for a technician. Digital solutions allow technicians to send and receive information throughout the day via text, e-mail, mobile apps on their smartphone or tablet, or self-service portals on the Web.[5]

As shown in Figure 2 (following page), CSPs are investing in digital technologies and tools to transform field service management in the following areas:

- Analytics & Reporting
- Command Center
- Knowledge Management
- Workflow Management

Companies are also using digital platforms and applications to upgrade their service technicians' training and skills and elevate their performance. These investments include:

- Performance management tools
- Training using virtual and augmented reality
- Mobile apps (tablets, smartphones, wearable devices)

While these initiatives are aimed at the overall field workforce, most pertain to full-time CSP employees. Given that the majority of field technicians are now sourced from third-party vendors, this approach falls short, and does little to differentiate CSPs' services.

Digitizing Field Service

Figure 2

RECOMMENDED FOCUS AREAS

Field service executive leadership teams need to take note of these trends as they plan a long-term vendor-management strategy. Although it is ideal to consider all the initiatives mentioned earlier, we recommend prioritizing core areas that can deliver the biggest business benefits for the organization.

Workforce Management

Field service workforce management (WFM) tools are increasingly moving to the cloud. According to Gartner research,[6] cloud adoption among new WFM deployments increased over 65% from 2014–2016. WFM software installed on-premises declined to 41% in 2016, down from 57% in 2014. While WFM delivers significant productivity improvements within the in-house field workforce, there is a huge untapped potential for CSPs to migrate towards the cloud so vendor organizations can also take advantage of this opportunity. CSPs currently license workforce management tools to their vendors and recover the costs via chargebacks.

Recommendation

• Utilize cloud-based WFM tools:

The ability to automatically gain access to a system's features without a software upgrade helps heighten efficiencies, improve field operations' performance, and afford real-time access to customers.

Moving vendors to the cloud not only trims operational costs (fewer support personnel) but can also improve invoicing accuracy.

Command Center Operations

Traditionally, CSPs have operated command centers for in-house field technicians and left vendors to run their own. Given the critical support command center representatives provide to field technicians, the implications of having separate command centers have a direct impact on the customer experience. The investments CSPs made in their command center operations are slowly but steadily transforming this "sub-function" within field services to a digitally-enabled organization. Typically, vendors that provide field technicians for CSPs are small to mid-size companies whose value proposition is expense optimization. Hence, the call support a vendor's command center provides to its field technicians tends to be sub-par when compared to that of a CSP's command center.

Recommendation

- Deploy or enhance self-service tools on technicians' mobile devices.

- Enhance online portals and other communications channels for customer self-service.

- Refine contact center tools to concisely capture the reasons and solutions for inbound contacts (e.g., dispositioning).

- Enable reporting to effectively identify self-service "missed opportunities" and non-compliance by callers and contact center agents.

- Provide immediate support when and where needed through real-time contact channels; handle non-time-sensitive transactions through queues, for example.

Routing & Dispatch Management

Among the critical functions of the field service command center is routing and the dispatch of field technicians. Typically, this is done via workforce automation tools. CSPs tend to use a licensing model that addresses the needs of in-house and third-party labor. Licenses are shared with the third-party vendors, and costs recovered via chargebacks to those vendors. While this approach provides consistent routing and dispatch services irrespective of in-house or vendor labor, inefficiencies creep up due to unstructured accounting and invoicing – delaying recovery of these costs.

Recommendation

- Create centralized vendor dispatch support models to eliminate disparities among vendors, improve time to market and enhance customer experiences.

- Consolidate routing and dispatch management systems to improve visibility and eliminate "swivel chair" management, thereby reducing handling time.

Training & People Development

One of the most important aspects of field service operations is an effective, well-trained field force. People development is thus critical to ensuring that all investments in new product development, operations and technologies can be fully leveraged. Due to co-employment rules and regulations, CSPs cannot directly train vendor technicians. The "train the trainer approach" is typical, where a handful of vendor trainers are taught by CSPs, who then train the rest of the vendor's technician workforce.

Recommendation

- Deploy the latest digital training tools, such as virtual reality and augmented reality. These technologies are increasingly used by CSPs for their in-house workforce, and can be rolled out to vendors.

  Because most vendors have smaller operations, they typically take longer to establish digitally-enabled training solutions. Vendors that embrace digital are better able to reduce costs, specifically by not having to send personnel to remote training sessions and delaying the purchase of CPEs/devices needed for training.

BENEFITS & NEXT STEPS

As detailed throughout this white paper, it is imperative that CSPs create a formal strategy for both their in-house field workforce and vendor partners. Digital tools and approaches go a long way in enabling vendors' field technicians to help CSPs outperform the competition. The benefits of digital far outweigh the costs in several key areas – making it possible for CSPs to:

- **Improve the customer experience.** Field technicians directly impact a CSP's reputation in the eyes of customers (both residential and business). Achieving corresponding digital capabilities in-house and with third-party vendors can, at a minimum, vastly improve how consumers are served by in-house and vendor technicians alike.

- **Reduce operational costs.** Digital platforms and applications can significantly lower operational expenditures for in-house and third-party vendors. This has a far-reaching impact on overall business performance.

- **Rapidly expand market reach.** Digital tools provide the agility needed to undertake and support market expansion. For example, training that utilizes virtual and/or augmented reality (VR/AR) can help bring field technicians up to speed on new products and new markets in less time. Similarly, cloud-based workforce management tools make it easier and faster to acquire new customers in existing and new markets.

- **Build greater synergies among in-house field services and third-party vendors.** Equipping CSPs and third-party vendors with corresponding tools and capabilities can

result in more seamless operations, which in turn can drive long-term stability and success.

- **Retain vendor technicians:** Most field service vendors are small to mid-size companies with very limited budgets for piloting digital initiatives. With the support of CSPs, they can get a taste of the advantages of digitally transforming their own operations, not the least of which is retaining the most effective talent.

LOOKING AHEAD

Applying digital thinking and tools throughout the in-house and vendor-supported field service ecosystem is a good starting point in the journey to digital transformation. As CSPs mature, it will be critical for field service leaders to consider additional focus areas that can enhance their company's overall competitiveness. (See Figure 3).

Taking Field Services to the Next Level

Digital Capability Assessment for Vendor Operations

CPE Management/ Fleet Optimization
- Reduce chargebacks for vendors by efficient CPE management.
- Improve material cost management.
- Enable real-time fleet tracking.

Field Mobility and IoT
- Develop a mobility strategy to optimize vendor dispatch productivity.
- Replicate CSP's mobility tools to vendors.
- Deploy IoT to manage materials/inventory.

Investmenting in Digital Marketing & Brand
- Enrich brand value by investing in digital branding channels.
- Especially critical for vendors trying to grow footprint in various markets.

Big Data Analytics & Insights
- Formal reporting and analytics on vendor field technicians' performance, tracking it against KPIs.
- Critical for vendors as they grow from a small shop to a large enterprise.

Figure 3

FOOTNOTES

1 www.wired.com/2016/08/google-wireless-faster-route-home/

2 www.wired.com/2016/01/facebook-zuckerberg-internet-org/

3 The percentage of customers who reported switching providers at least twice a year was 10% in 2013, 13% in 2014, and 17% in 2015. www.cognizant.com/whitepapers/quality-of-experience-in-a-digital-world-a-csp-action-plan-for-millennials-and-beyond-codex2072.pdf

4 www.slate.com/articles/business/the_grind/2016/04/more_cable_and_internet_installers_are_independent_contractors_and_the_hours.html

5 www.oracle.com/us/products/applications/new-rules-of-field-service-mgmt-2412956.pdf

6 www.gartner.com/doc/3502617/magic-quadrant-field-service-management

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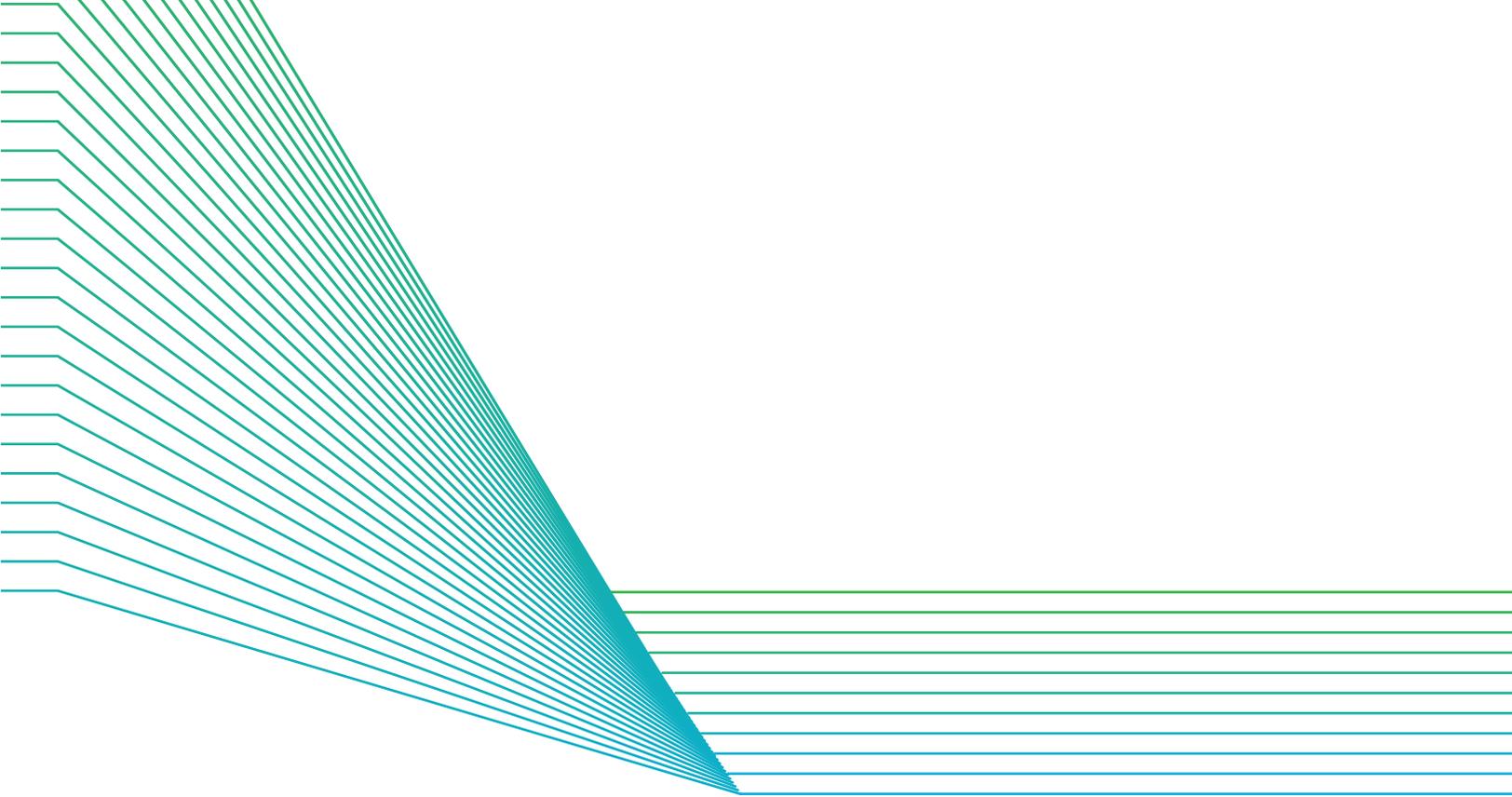
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