

WorkAssure Perform

Reducing Repeat Service Calls

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As multi-system operators (MSOs) search for ways to increase average revenue per user (ARPU), one of the key areas being analyzed is subscriber churn. This, in turn, is shining a light on the increasing cost of service calls. At the heart of the issue is a lack of simplified tools and automated processes to ensure protocols for initial installation and service are completed before technicians leave the home.

The rising cost of service issues

While evolving network technologies offer more and better services for subscribers, they also introduce greater network complexity, especially where it matters most—inside the customer's home. One result is that the number of service calls for post-installation first-time and repeat issues is increasing. The cost to MSOs is rising.

The average annual churn among MSOs is a staggering 30 to 40 percent for basic video, 40 to 60 for data services and 70 to 100 for digital services. It is estimated that about 10 percent of churn is the result of recurring service problems. In a typical network, about half of all subscribers will either have an installation of new equipment/services or place an initial trouble call for a service issue. However, nine percent of all installations and ten percent of all first-time service calls will result in repeated calls. These repeat service calls take a toll on the MSO's productivity as they:

- Decrease work order response time
- Reduce available technician capacity
- Increase overtime
- Increase technician frustration

In addition, repeat service calls also create additional burden on the call center by increasing calls to customer service representatives (CSRs), which:

- Increases hold time for customers
- Reduces available customer service capacity
- Increases overtime
- Increases CSR frustration

For even a modest-sized MSO, the annual direct cost of repeat services calls and churn can be in the millions. This doesn't include the indirect cost from negative word-of-mouth. To reduce repeat service calls and unnecessary truck rolls, we must first understand the cause of repeat service calls, and then examine tools and process changes that can reduce these repeat calls.

Repeat Service Calls:

- #1 cause of customer dissatisfaction and churn
- Consume 15% of repair technician productivity
- Occupy 1.5% of CSR
- Cost operators \$5.98 per sub per year

The root cause of repeated truck rolls

Every MSO has installation and service processes for responding to and resolving on-site customer issues after the installation. These include protocols to be followed and minimum standards that must be confirmed before the job is complete. Based on the number of initial and repeat post-installation service calls, a percentage of these protocols are not being completed and/or met. The issue, then, is a lack of quality control. But before affixing blame on the service technicians, we need to consider the conditions under which they are working.

As MSO's fiber networks evolve, customer premise equipment must evolve as well. As the equipment and technology become more complex, the technician's job demands more time. Yet, their workload continues to increase.

In their rush to get to the next job, technicians often forget or simply ignore one or more process steps. The tech may fail to properly tighten a connector, verify signal levels or educate the customer on how to use their system. Adding more quality assurance steps only intensifies the problem, further pressuring the technician to cut corners and fill out the quality assurance sheet as a formality.

While effective supervisor quality assurance audits can increase compliance, a manual workflow system typically prevents the details from a service call from being entered into a database. Technicians often resort to hastily scribbled shorthand notes in the margins of work order that may never be flagged by a supervisor. The few cursory quality assurance checks supervisors can make each day often occur days after the visit.

In most cases, these problems stem from time management issues rooted in inefficient manual workforce management practices. To prevent repeat service calls and unnecessary truck rolls, MSOs need to be able to address the root causes.

How to lose a customer, step-by-step...



1. The customer has a problem. After several days of frustration they make the initial call, spending time on hold before being transferred to different representatives asking the same questions.
2. Finally, the CSR dispatches a technician, forcing the customer to spend half a day at home. The technician arrives at the customer's premise and "fixes" the problem and leaves.
3. Within a few days, the problem is back and the customer is more frustrated than before. They call customer service again and wait on hold until a different CSR tries to troubleshoot the issue, only to dispatch another tech, forcing the customer to take more time off work.
4. A more agitated customer greets a different technician who may or may not fix the problem before leaving.
5. Should the problem come back, the customer most likely will not.

Automated workflow management

WorkAssure Perform from CommScope is an automated field service management solution that enables the creation of custom workflows to ensure that the MSO's service standards and objectives are met. Within the the WorkAssure Perform suite is a unique and important "quality check" function that enables techs and their MSOs to realize significant improvements in quality assurance. Quality check provides a defined process to ensure the tech meets all service metrics before moving on to the next appointment. It also automates the collection of the necessary data regarding a service call and centralizes it so that it's easily accessible and reviewable by supervisors and dispatchers. The system helps MSOs eliminate customer churn, un-necessary costs and process inefficiencies by helping improve service call productivity, maintaining higher quality assurance levels and enhancing oversight.

Improved time management

The WorkAssure Perform suite and its quality check function work together, enabling technicians to reduce transit times as well as the amount of contact needed with dispatchers. A sophisticated automated routing system reduces technician drive time between jobs by as much as 20 percent. It also provides increased access to job information and enables technicians to handle more tasks autonomously. By reducing their time on the phone with dispatchers by as much as 90 percent. This translates into an estimated time savings of ten minutes per work order, giving the technician extra time to focus on quality assurance.

Higher quality assurance

The quality check module guarantees specified tasks—called completion rules—are completed before a work order can be closed out. Completion rules, such as entering a new tag number, recording signal levels and getting a customer signature, can be specified by job type and service category. If a technician has not captured this information, they cannot complete the work order.

Improved project oversight

As the tech progresses through the completion rules, the quality check function captures key order information and uploads to the centralized WorkAssure Perform database, making it easier for supervisors to confirm quality assurance. Supervisors can monitor quality assurance system-wide or track the performance of individual technicians. Instead of reviewing a manual work order in which the technician noted signal levels were "OK", the supervisor can see the actual signal level in near real-time.

Enabling the quality check capabilities within WorkAssure Perform has demonstrated the ability to increase customer satisfaction, keep technicians on schedule and improve overall system profitability. This, in turn, has led to decreased churn, fewer truck rolls and fewer calls to customer service. Based on data from existing field deployments, quality check has resulted in:

- 50 percent fewer unnecessary truck rolls
- One percentage point reduction in subscriber churn
- 50 percent reduction of per-subscriber cost of repeat service calls
- 40 – 50 percent reduction in repeat service calls

Results from the field

A system-wide deployment of WorkAssure Perform—initially without and then with quality check enabled—illustrates the potential for MSOs to realize benefits across the board. The deployment involved a Latin American MSO serving 210,000 subscribers. Service issues generate 1,000 total work orders per day, which are handled by 125 installation and repair techs and 100 CSRs. New installations average 15% of total work orders and trouble calls average 28% of total work orders.

Prior to enabling quality checks

Upon deployment of the WorkAssure Perform suite, the MSO chose not to use the quality check function. During the initial three-month period for which data was collected, the MSO performed an average of 150 new installations each day and experienced 280 trouble calls daily. Nine percent of all service calls were for issues reported within 60 days of installation. Another ten percent were repeat service received calls within 30 days of the initial call.

In total, installation and service activities resulted in 42 repeat trouble calls per day—15 percent of the 280 trouble call work orders generated each day. Servicing the repeated trouble calls required the total working hours of 4.2 full-time repair technicians. With a ten percent incident of repeat calls, each repair tech causes an additional repeat call per day. The system's estimated cost of all truck rolls is \$567,000—or \$2.70 per subscriber in annual expense.

Inside the system's call center, CSRs field 84 customer calls per day regarding recurring service issues. With the average CSR handling 60 customer service calls per day, the MSO must dedicate nearly 1.5 full-time CSRs to handling issues the visiting tech was unable to resolve. As a result, the average cost of each repeat call is about \$3.

It is important to note that the rate of repeat service calls is directly attributable to the technician's inability to satisfy the MSO's quality assurance standards and not the automated workflow system.

Sample System Details

Subscribers:	210,000
Repeat CSR Call Rate:	10%
Post-install CSR Call Rate:	9%
Work Orders Per Day:	1,000
Trouble Calls Per Day:	280
Installations Per Day:	150
Install/Repair Techs:	125
Repair Tech Productivity:	10 Jobs/Day
Cost of Truck Rolls:	\$45
Customer Service Reps:	100
CSR Productivity:	60 Calls/Day
Cost per CSR Call:	\$3

After enabling quality check

Beginning in the fourth month of the data collection period, the MSO enabled the WorkAssure Perform quality check module system-wide. In terms of reducing the time, cost and churn of initial and repeat post-installation trouble calls, the results were significant.

In the three months after enabling the quality check module, the MSO saw a 60-percent reduction in the volume of daily repeat trouble calls—from 280 to 255. Annually, this amounts to an estimated savings of \$340,000 in truck rolls.

The number of repeat service calls coming in to the call center also declined, from 84 to 34 per day. At \$3 per call, the MSO was able to save an additional \$45,000 per year—or \$0.21 per subscriber.

Finally, by reducing the number of repeat calls, the MSO anticipates a reduction in churn rates due to repeated service issues. Based on the correlation between repeat service calls and the churn rate, the MSO can expect to reduce churn among analog video subscribers with repeat service issues from 1 percent to 0.4 percent. The 0.6 percent reduction translates to 1,260 more customers. With an average annual revenue of \$540 per subscriber, the MSO stands to retain over \$600,000 more in annual revenue. In total, the system should be able to prevent the loss of \$3.54 per subscriber per year.

Of course, preventing revenue loss does not fully quantify the benefits to the system. Each retained subscriber provides potential for future revenue growth, reduces pressure on the MSO to acquire new subscribers and helps strengthen the operator’s brand.

	Before quality check	After quality check
Repeat issue call rate	10%	4%
Initial post-install call rate	9%	4%
Work orders (per day)	1,000	975
Repeat issue truck rolls (per day)	280	255
New installations (per day)	150	150
CSR calls from repeats (per day)	84	34
Churn from repeat calls (annual)	1%	0.4%
Cost of repeat calls (Annual, per subscriber)	\$5.98	\$2.44

Building a stronger MSO—one subscriber at a time

To understand the degree to which an automated workflow system like WorkAssure Perform and its quality check functionality can improve an MSO’s operations and bottom line, is to understand the fragile relationship between any service provider and its customers. As consumers of content, subscribers have more choices than ever. Even as MSOs work to edge ARPU higher, an increasing number of customers are choosing to cut the cord, opting instead for the growing number of over-the-top services. A lot of this churn can be directly attributable to subscribers’ frustration over recurring service issues. Seen from this broader perspective, a platform such as WorkAssure Perform with quality check enabled is less about saving time and reducing OpEx cost. It is really about strengthening the subscriber relationship upon which success is built.

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