

EASING GROWING PAINS AMONG FIXED-LINE TELECOMS



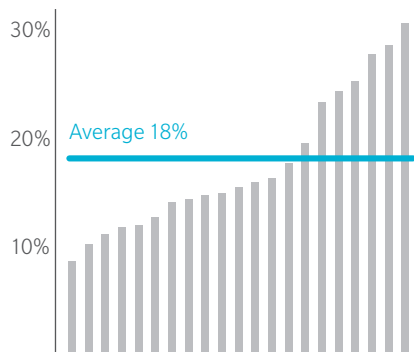
EASING GROWING PAINS AMONG FIXED-LINE TELECOMS

Growth in the fixed-line telecommunications industry is sluggish: Development has stalled in mature markets, and even emerging economies are reporting significant deceleration. Mounting competitive pressure from aggressive alternative carriers and cable companies – as well as from over-the-top services like Skype – makes its mark on revenues and leads to losses in market share and reduced prices. To stay in the game, many telecommunication executives have shifted their priorities to focus on optimizing the cost of delivery through operational efficiency. Leading the charge in this area are the large incumbent players, whose nationwide legacy infrastructures have saddled them with heavy cost structures and low growth potential.

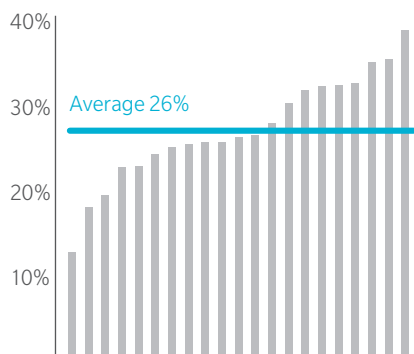
TECHNICAL SERVICE STRUGGLES

Despite advances in technology and industrial processes, fixed-line operators are still faced with a major cost driver and key target for cost improvements in the form of Technical Service – a term that encompasses technical hotlines, switching units both at the main distribution frame and at street cabinets, provisioning and error resolution directly at the customer premises as well as associated support functions, such as dispatching and remote-error diagnosis. For incumbents in Europe and the Middle East in particular, Technical Service on average makes up around 18% of indirect operating expenses, and binds the capacity of 26% of their combined internal and outsourced employees.

Technical service OPEX/ Total indirect OPEX (Fixed-line business)



Technical service FTE/ Total FTE (Including outsourced FTEs)



In recent years, many telecommunications companies have tried to offset this cost burden by pouring a considerable amount of energy into cutting costs. Unfortunately, additional costs related to changing product mixes have voided large parts of these savings. Double play (2P) and triple play (3P) products have brought on complications associated with the more intricate technology. The gap between operational key performance indicators (KPIs) for these products and standard voice-only lines (1P) remains large. The mean time between assists (MTBA) for 2P clocks in at roughly 56% of the MTBA for 1P, and the rate for 3P is as low as 37%. Add to this the exponentially worse remote-installation rates, remote-resolution rates and repeated-error rates that many operators experience, particularly for 3P, and it comes as no surprise that most incumbents have failed to reduce overall Technical Service costs to a sufficient degree despite succeeding to boost such KPIs as cost per installation or per repair for particular types of products.

These discouraging figures have prompted many operators to consider fully automated provisioning and error-resolution processes based on next-generation network (NGN) technology. However, because implementing NGN involves replacing most of the network infrastructure, investment volumes remain significantly higher than expected savings. As a relatively new technology, it involves highly complex migration processes, making it

a cost-savings gamble that most companies hesitate to take. As a result, the number of NGN investment programs has been declining as many telecommunications incumbents continue to postpone rollouts.

MAKING A CHANGE

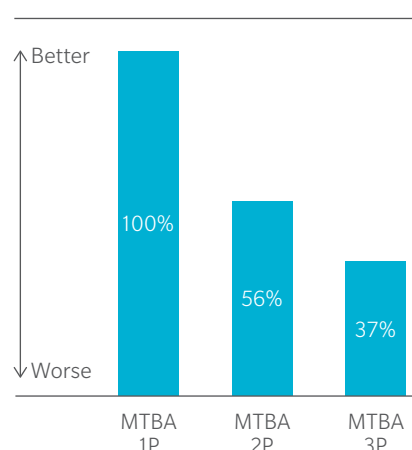
Against this backdrop, incumbents increasingly require support in analyzing Technical Service functions and realizing further savings without turning to a full NGN rollout. Unfortunately, many management teams continue to struggle to achieve transparency in Technical Service. Efforts to implement methods that gauge performance beyond the traditional global KPIs are rare. Furthermore, the specifics of innovative services such as IPTV and VoIP inhibit further transparency. Due to complexity and ambiguity, the proper root causes remain undetected, and a structure to properly code the incidents in the troubleshooting system is lacking. To overcome these challenges and to meet the need of analyzing and optimizing the Technical Service function, Oliver Wyman has developed and repeatedly, successfully applied a structured approach that draws on root-cause analyses and transparency, and helps to realize significant improvements.

PUTTING IT TO THE TEST

Discussions with incumbents have revealed that many operators do not keep a consistent, coherent database for reporting and root-cause analyses. Instead, data is often stored in multiple trouble-ticketing systems with little regard for gaining an end-to-end overview of individual cases. For example, if technical hotline employees and field employees working on the same case do not record data points using similar codes, this leads to inconsistent tracking of the subsequent actions taken on a specific case. This becomes an even bigger issue when the case involves more complex services, such as IPTV technology, for which the technology delivery chain spans multiple organizational departments and technical platforms – from television headend to customer premises equipment (CPE). This disorganization and lack of consistency makes it impossible to perform a structured root-cause analysis. Furthermore, the lack of transparency prevents continuous improvement, resulting in inevitable and repeated errors.

The renovation of these ailing technical-service processes begins with an assessment of a company's current situation. In concrete terms, this means conducting interviews with technicians, engineers, and dispatchers as well as visiting call centers and accompanying technicians in the field. It also includes mapping installation and repair processes, including IT support systems, which cover network documentation, ticketing systems, troubleshooting expert systems, diagnosis systems and performance benchmarks on the basis of technical KPIs. In addition to perfunctory mapping and tracking, Oliver Wyman collects a random, statistically representative sample of 500 to 1,500 tickets with which it conducts a structured questionnaire over a period of six to eight weeks. These questions, which are tailored to reflect each operator's specific situation, delve deeper into the specific steps taken during fault resolution and provisioning. In conducting the survey, it is essential for participating employees to be adequately informed of what will be expected of them, and to be given enough time to complete

Mean time between assists (MTBA) per product type comparison

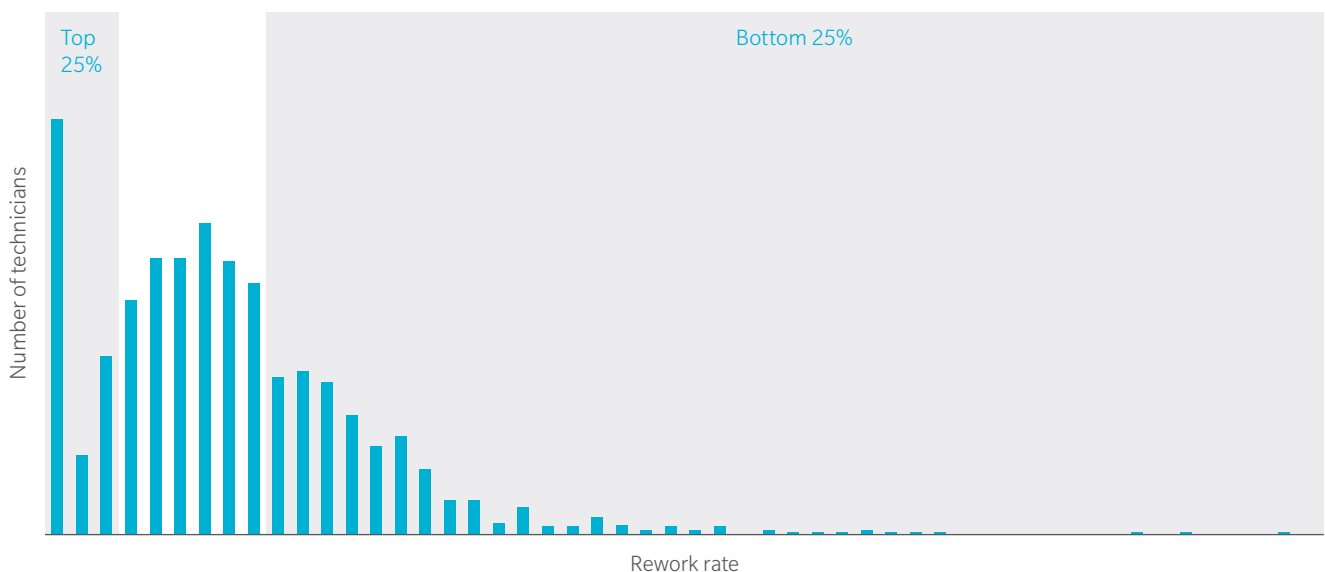


the required documentation. To further ensure quality, the collected data is counterchecked and discussed by a “quality-assurance team” comprised of senior process experts along the entire procedural and delivery chains. The final results ultimately serve as tangible evidence of hypotheses and can also reveal unforeseen bottleneck triggers and process inefficiencies.

The results of these in-depth sample analyses often uncover a number of surprises that could not have been traced in a paper trail. After working with a number of clients, Oliver Wyman has identified common issues: Actual performance within the sample tends to fall significantly below reported levels, indicating that KPIs are adjusted to compensate for weaker numbers. KPI tracking is not the only measure not being fully leveraged among troubled telecommunications companies, though. Most incumbents do have adequate diagnostic tools and automation potentials in place, but either no one is in charge of managing them, or the people who are in charge lack the knowledge or time to effectively utilize them. This issue of time management also heavily impacts the success rate of remote resolutions, which varies according to workload. For example, technical hotlines tend to direct difficult calls to colleagues in the field in order to increase their turnover speed. This ultimately causes a backlog of tasks for technicians, especially, for instance, on Friday afternoons. Targets that aim to minimize call times encourage this practice, whereas attempts to solve more tickets with longer calls would result in a better remote-error resolution rate. Even with longer call time, remote resolution generates only 4-8% of the costs of an average field visit.

To complicate matters even further, a surprisingly large number of customer-reported issues mysteriously resolve themselves or disappear, according to data gathered by Oliver Wyman. More common with 2P and 3P products, these “phantom failures” make it difficult to compile an effective system for diagnosing future issues or streamline solutions even if such procedures

Distribution of rework rate among technicians



exist. When technical errors can be pinpointed, the range of causes has proved narrower than expected, and disruptions can be assigned to distinct error sources. Performance levels, however, vary widely among teams and individual employees, especially in connection with new products.

These assessments often indicate that errors stem from departments outside of technical service. When high-speed DSL is sold for lines of inadequate quality, for example, or maintenance windows are missed in the network department, problems emerge that could have been avoided with compliant practices. An additional problem area emerges from outsourcing field forces, which has been shown to correlate with low automation levels and remote-repair and remote-installation rates. Such findings indicate that third-party technicians cannot be relied upon to meet targets for error reduction and cost reduction. Overall, Oliver Wyman has found that actual processes diverge considerably from officially documented ones, even varying among teams and individual technicians, compounding the challenge of identifying the significant uncodified expertise that exists within the organization.

ACTIONABLE AND SUSTAINABLE IMPROVEMENTS

Once all the assessments and root-cause analyses have been completed and sufficient transparency has been achieved, it's time for the final stage: developing long-term solutions. Working with a team of technical experts at the client, solutions are framed around the areas of network stability, behavior and performance management, and process management and organization.

NETWORK STABILITY

Increasing network stability reflects the most concrete goal of the three solution areas: improving MTBA for mass-market products. One way to achieve this involves eliminating sources of error. This might include replacing or updating particularly error-prone components, configurations, or software. Oliver Wyman also concentrates on improving line documentation and network inventory as well as revising the product design in order to minimize problems at the customer level. Such measures may include ensuring that a physical network connection is retained for churners for at least three months, improving self-installation manuals, introducing plug & play modems and extending tolerance levels to reduce installation errors. Ideally, these actions would be supported by a maintenance strategy based on correlation analysis and indispensability of equipment as well as a more targeted, proactive maintenance approach.

Once problems do occur, however, streamlined diagnostic and enhanced network-monitoring processes that cover all active components ensure swift, lasting solutions. Streamlined diagnostic processes, for example, could enable operators to more precisely locate an error – whether in a cabinet, main distribution frame or CPE – from a remote location. In countries where theft of copper poses a serious problem, introducing antitheft measures such as forensic tagging or alarms is a necessary measure for improving network stability. Some regions may even benefit from focused investments to retire old infrastructure altogether and replace them with mobile-connectivity alternatives.

BEHAVIOR AND PERFORMANCE MANAGEMENT

Making improvements to human behavior poses more of a challenge.

Oliver Wyman generally pursues two goals in this area: eliminating performance differences, and improving performance averages. As a primary measure, fixed-line operators need to encourage transparency. This means that tickets must be assigned to the specific technicians involved as a way of tracking their involvement. This facilitates focused feedback from positive and negative cases and improved performance monitoring throughout all process steps. The transparency gained in these practices must be linked to clear performance-management guidelines, including clearly communicated consequences. These subsequent measures could take the form of targeted reskilling measures, such as regular requalification certification for all technical field-force staff.

Furthermore, it is important to introduce stronger performance-based compensation consisting of monetary and nonmonetary rewards for extraordinary performance, which should also play a key role in promotion decisions. In addition, incumbents need to ensure that all critical technical information, including prequalification of errors, has been gathered and all checks have been performed by the appropriate technicians and hotline operators before a ticket can be closed or forwarded. Such safeguards might involve implementing system checks or final checks with the customer. Last but not least, the introduction of flexible working hours is necessary to better manage peak volumes, particularly during such recognized trigger times as thunderstorm season.

PROCESS MANAGEMENT AND ORGANIZATION

Because many root causes are not generated by the technical service department, focus is placed on clearly defining responsibilities to ensure stronger end-to-end collaboration. By harmonizing ticketing systems, error coding, handoffs, KPIs and incentives across all critical departments, Oliver Wyman establishes an end-to-end view of the entire process chain and, thereby, a strong foundation for continuous improvement. This is further bolstered by improvements to the definition of “production-ready” orders in cooperation with sales departments. As a rule, error-resolution processes run more efficiently when employees in technical call centers are incentivized to achieve “first time right” or “first-call resolution” KPIs rather than focus solely on call time. In some cases, it might even be appropriate to merge the technical hotline and field force to ensure end-to-end responsibility for full costs and to avoid conflicting targets.

Ideally, this streamlining would also extend to outsourcers, whom Oliver Wyman advocates holding to tighter service-level agreements, better tracking and more stringent success requirements in the future. This implies especially an innovative compensation model incentivizing outsourcing partners to reduce volumes to help to increase automation and a vendor selection process which avoids becoming increasingly dependent on the outsourcing partner. In addition, setting up technical data marts for more complex services, such as IPTV, leads to substantial benefits created

by correlating quality-of-service and quality-of-experience indicators with events and conditions in the technical delivery chain. This ultimately eliminates root causes and error sources.

Further automation could take the form of interactive voice response, remote configuration, Internet-based diagnostic tools, or even GPS-based workforce management systems that use skill-based logic to dispatch the appropriate field force from a limited number of dispatch centers, thereby minimizing driving and idle time. On a larger scale, automatic correlation analysis could detect mass failures early and appropriately manage them throughout the organization. Overall, standardized terminology and improved communication will enhance the entire technical-service team's ability to detect potential issues sooner and apply the appropriate solution.

THE FINAL TOUCHES

Throughout these implementation phases, it is important to avoid badly planned changes that can lead to immediate and negative customer reactions. In the past, some clients have tried to implement a subset of the ideas described above and failed due to internal and external resistance as well as a lack of proper change management. Oliver Wyman therefore advises its clients to begin by rolling out pilots whenever possible. Only when test modifications have proved successful and the parameters for effective communication and training are in place is it safe to move into national modifications. To further ensure a successful implementation, it is best to establish incentives that team leaders can strive toward while successfully implementing various elements.

Even once these requirements are in place, the process isn't over for Oliver Wyman – the overhaul's effectiveness is measured in subsequent progress audits to make sure that measures are actually put into practice and produce the desired results. Past projects have demonstrated that companies willing to make reasonable investments now can achieve savings of up to 30% – that does not just apply to the fixed-line telecommunications sector. The suggestions described above could lend themselves to improvements in other areas of media and mobile infrastructures. In terms of telecommunications, subsequent savings directly relate to the lower incoming call volume made possible by more stable products, better self-service capabilities, higher remote-installation and repair rates, and the increased productivity of technicians. In the end, companies benefit from more than just tangible cost savings – business in general will operate at a higher-quality level with smoother processes and faster response times. Together, these factors all but guarantee increased customer satisfaction.

ABOUT OLIVER WYMAN

Oliver Wyman is a global leader in management consulting. With offices in 50+ cities across 25 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm's 3,000 professionals help clients optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities. Oliver Wyman is a wholly owned subsidiary of Marsh & McLennan Companies [NYSE: MMC]. For more information, visit www.oliverwyman.com.

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