

Digitizing the Customer Experience: Win Loyalty and Sell More with Last Mile Service Trackers

What to Do Now That You've Captured Subscriber Attention During the Last Mile of Service

An Operational Practice prepared for SCTE•ISBE by

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Introduction

The cable industry has spent years solving for how to give customers waiting for an installation or service appointment better visibility and accurate information about when an appointment will start and end. This critical moment makes or breaks customer satisfaction. Today, operators are equipped to solve this last mile customer frustration problem with digital insight and accurate estimated time of arrival (ETA) predictions provided by customer-facing technician trackers.

Problem solved, but that doesn't mean operators can afford to stop innovating. So, what's next?

Operators that provide last mile customer portals and technician trackers with the goal of reducing inbound calls and customer no shows have *already* built the foundation for deeper customer engagement and revenue generation. In the quest for transparency, they've created a captive audience that's dialed in and paying close attention to a centralized web experience monitoring their technician's location and ETA, much like ride sharing apps have spawned crowds of rapt travelers staring at their screens as they wait in the airport pickup zone.

This is an (often missed) opportunity to introduce new experiences into the customer journey. Not only that, but digital marketing spend is predicted to reach nearly \$120 million annually in the U.S. by 2021. With a large part of that spend made up of digital display and video advertising, web-based technician trackers are an untapped channel that could reap the rewards of the digital investment trend.

This paper presents ideas for transforming this customer engagement dead zone into a highly engaging and interactive customer touchpoint.

Repurposing Customer Engagement Dead Zones for Profitability

1. Learning Outcomes

After reading this paper, the reader should possess a clear understanding of the four key elements of this operational best practice, and how to deploy those elements in their own operations.

Learning outcomes include:

- How to identify the right moment or moments during the critical last mile with the most potential for innovation
- Strategies for leveraging customer attention to deepen engagement, grow loyalty and create natural connections that guide customers to related digital branded experiences
- How to create and embed interactive experiences that make sense to customers and improve satisfaction
- Strategies for integrating sales and marketing programs that drive add-ons and additional revenue to take advantage of customer down time during the last mile

2. From Last Mile Profitability to Last Mile Revenue

Jobs per day. First time fix. Wasted truck rolls. Rerolls. Then there's mileage, optimized routing and service parts management. These are the metrics cable operators strive to minimize every day, every hour

for field services. In an industry facing rising costs and customers expecting more amidst unprecedented competition from OTT services, it's no wonder executives are constantly seeking new and creative ways to reduce field service operations expenses. More recently, best-in-class organizations have focused on driving better customer service around field service as a path to better margins. The connection to efficiencies: happier, more informed and less frazzled field service customers are less likely to cancel their contract or service, less likely to miss an appointment and less likely inundate customer support channels looking for answers or apologies. A step further: numbers show that informed customers who keep their appointments begin generating revenue immediately. Empowered customers with the flexibility to change a field service well in advance are less likely to churn.

Many best-in-class organizations also connect customer-focused field service to customer loyalty and/or lifetime customer value (LCV) and have focused transformation strategies on this approach. If field service appointments are the only in-person interaction a customer has with the business, this last mile of service delivery is what they'll most likely judge the entire brand on. When it is time to reach out again – whether to seek support, buy more or extend/renew a service – that field service interaction is the one they'll remember.

Data supports this approach. A recent NewVoiceMedia study that found that 49 percent of consumers switched vendors due to poor customer service. This number increases for 24-34-year-olds, where 62 percent of consumers have switched to another business because of subpar customer service.

While reducing costs and improving customer satisfaction both contribute to healthier margins and long-term revenue growth, field service arms will succeed faster if they can play a role as an active revenue generator for the business *today*. Strategies that focus solely on continually cutting costs and improving service levels as a means to improve profitability will only create expectations from ever-cheaper, ever more “delightful” service from management and customers alike. It perpetuates the vicious cycle of pressure to do more with less. There are more direct paths to generating field service revenue, and penny-pinching will do little to solve the larger industry threat.

3. The Right Department for the Job

There are plenty of reasons field service leaders should actively pursue revenue-generating initiatives. There's the obvious:

- To reach personal and departmental goals
- To establish safety, security and even notoriety for your department within the broader organization despite mounting competitive pressure
- To grow the size of your department and influence by demonstrating success

Perhaps more importantly, leaders that present demonstrable results are more likely to win funding for their own priority projects faster. For example, showing the connection between how securing the latest technology and training for service technicians can result in a new revenue stream during the last mile of home services and installations is a creative way to bundle strategies for holistic modernization. Well-intentioned projects often get stuck behind major system upgrades and tech debt that can take months, or worse, years to complete. Good luck prioritizing employee retention programs in this environment.

Even when there is a strong business case for an innovative project that can also save the business money, that project is often “funded” by cutting the budget of the team that is leading it. Build a case for an important and exciting new project around new *revenue generation* rather than *cost savings* instead.

There is one reason that stands out among all others as to why the same team that owns and executes the last mile the customer's journey – whether for a new installation or a service – should be driving new proactive engagement, marketing and sales initiatives.

Field service teams already intimately understand the nuances of the critical last mile of the customer journey; field service departments have engagement data and they own the direct, two-way customer communication and interaction that happens around the most emotional touchpoint in a customer's lifetime journey.

A field service interaction is the first, and often the only, face-to-face interaction many operators will have with their customers. It's a deeply personal interaction because it is in a person's home or workplace, and it's often happening at a critical moment when customers form strong perceptions of a brand – at the start of the relationship or when something is broken or wrong.

Considered in context of the holistic customer journey, field service owns what happens at a pivotal moment in the customer relationship. It's a prime opportunity to stop thinking of field service as an operational necessity with costs to be minimized and instead, to start positioning it as a lucrative engagement channel. This becomes even more powerful for field service leaders who can transform not just the on-site field service experience, but every point of customer engagement leading up to and immediately after that field service meeting. It's a chance to own and transform a major gap in the typical customer journey for the better.

The following sections explore the required technology, processes, performance and engagement metrics required for foundational planning. Then, we present an outline for the detailed procedure and best practices for collaborating with marketing and sales to go from last mile revenue vision to last mile revenue reality. It all starts with customer-facing technician trackers.

4. Required Equipment and Technology

This operational best practice requires one primary platform and subsequent data as a launching point, as well as several supporting technology platforms for integrating sales and marketing into customer-facing last mile engagement.

4.1. Customer-facing field technician tracker

As the introduction of this paper clearly articulates:

Operators that provide last mile customer portals and technician trackers with the goal of reducing inbound calls and customer no shows have already built the foundation for deeper customer engagement and revenue generation. In the quest for transparency, they've created a captive audience that's dialed in and paying close attention to a centralized web experience monitoring their technician's location and ETA.

Thus, the operator must have a customer-facing technician tracking experience in place. Ideally, this solution should be web-based (though an app-based experience can work with additional development), it should be interactive, and it should be flexibly architected for easy communication with other customer experience platforms and systems of record. Ideally this experience will be multi-phased in nature, with the ability to update/change content and engagement options served to the customer, corresponding with various stages of the last mile of service delivery.

4.2. Embedded Web Analytics

Google Analytics is a common and popular tool. Regardless of which tool is used, this approach requires web page analytics. Data about customer engagement and activity on each web page of the journey – ranging from clicks to user flows and heat map data – is what will form the foundation for building personalized, targeted marketing programs. Tools like Piwik go so far as to connect web page activity to marketing campaigns. Others like CrazyEgg, Mouseflow and Clicktake incorporate eye tracking heat map data and to even visualize in-page behavior.

While these tools will all be familiar to marketers, the innovation is in understanding how these same tools can be applied to collect engagement data during service delivery experiences, whereas they are traditionally only used to predict and measure shopping and initial buying behavior.

4.3. Method for summarizing, analyzing and/or visualizing customer engagement data

Whether it's an integrated console or raw data in excel format, users will need to set up a process for collecting and organizing the data collected from web page analytics and behavior for their last mile technician tracker. The ability to segment and compare this data by individual steps and stages in the customer-facing journey is ideal.

4.4. APIs and webhooks to pass customer and task data

These are required in order to connect individual customer preferences, previous behavior, collective trends and new offers to one another, as well as to make actions available directly in the technician tracker and/or customer platform.

4.5. Content management platform

Regardless of final decisions for segmenting customers for campaigns and A/B testing, a content management, content marketing or marketing automation platform will play a vital role in uniting customer data with appropriately timed and themed offers.

4.6. Ad Server

This may be the same platform or a platform that's connected to your content management or marketing automation tool. At the most advanced level, this will be a predictive tool that defines which offer to serve to which customer or segment at an ideal time or based on certain engagement triggers

4.7. Digital ordering or ecommerce capabilities (for advanced projects)

Related to ensuring the appropriate RESTful APIs and web hooks are in place, if the strategy includes an offer for an on-site upgrade, a method for completing the order and collecting payment within the same screen as the technician tracker is necessary.

5. Key Performance and Engagement Metrics

Two primary metrics will determine overall success – revenue and customer engagement. However, multiple last mile customer engagement metrics will be critical both to establish a baseline and in order to effectively categorize customers into segments for personalized ads and offers.

5.1. Success Metrics

As this best practice is focused on generating new revenue streams via customer-facing technician trackers and appointment tracking portals, revenue is the primary success metric. Some variations to consider are:

- change in average revenue per customer (ARPU)
- installation revenue
- service cycle revenue
- incremental revenue per customer

Secondarily, engagement metrics can be useful to determine which offers and new revenue initiatives need revising. This is where web page analytics will be crucial to track which offers are least effective, the ideal timing and on-page placement/location for offers and which offers miss the mark on final conversion. For example, which offers do customers often click on but don't confirm purchase? Is that because they don't perceive the offer to be valuable, or because the process for completing the order and payment are too cumbersome? Or, was the offer surfaced too early or too late in the journey?

5.2. Baseline Metrics Required

Prior to measuring success, revenue programs must be devised and implemented. This will require a clear understanding of baseline engagement for each step or stage in the web-based, customer-facing journey. Data about which elements of this journey receive the highest engagement and when will also help inform decisions on sales, marketing and eCommerce programs.

Start with understanding views per stage of the journey. That is, how many views does each stage in the technician tracking experience receive. Which stages receive the most views, and the least? Does this data vary by season, job type or customer type? How long does each customer – as well as the average customer – spend engaged with each step of the customer-facing experience? Some may be extraneous, and some may be more critical than originally anticipated.

Next, document and analyze engagement with various interactive elements for each journey stage. Common elements include:

- Add to calendar widget
- Technician or field engineer details
- Buttons to chat, call or reschedule
- Real-time live map tracker
- ETA countdown
- Feedback capture
- Downloadable PDF installation or services summaries
- Options to share feedback or comments to social channels

Understanding how customers interact with these elements and when each element is most popular will provide clues and context as to what types of offers can be most beneficial at various phases of the last mile service journey. Even deeper, they may provide inspiration for entirely new lines of service that existing customers may buy into. Finally, consider contextual language analysis of comments provided via feedback forms and surveys to help identify opportunities to change the experience – for example, adding a new page to the live journey that would entertain them as they track their technician.

6. Calibration and Equipment Preparation

No calibration of equipment is required. Some ongoing iteration of engagement metric parameters will be useful, as well as some adjustments to proactive ad services. This is covered below in detailed procedure.

7. Detailed Procedure

7.1. Setting up basic integration

7.1.1. *Collect data*

Set up the recommended web page analytics tools to collect engagement data from your customer journey. Customer-facing technician tracker experiences have resulted in customer engagement of five to more than ten minutes for each appointment. The goal is to leverage web page analytics tools to gather more nuanced data about which steps in the journey customers are most interacting most and least with, which elements of the web experience they are interacting with versus ignoring, and how these measurements change as the scheduled appointment gets closer.

7.1.2. *Categorize and segment*

Best practice for this step is to collaborate with marketing and/or sales teams. Field service teams should start by parsing and analyzing data for engagement at each progressive step or new screen in the technician tracking experience. However, marketing can provide insight to help further segment engagement data based on demographics, customer history, etc.

7.1.3. *Set Up Integrations*

Next, consider which platforms will need to be integrated with the tech tracking experience. The best practice is to start with something simple and get progressively more complex as processes are refined. For example, a common first step is to integrate a marketing platform or ad server with the tracking experience, essentially enabling the brand to surface a targeted advertisement at various steps in the appointment tracking lifecycle. Some test a static ad throughout the entire journey, while others test different advertisements at different steps of the journey, and even immediately after a service is complete during a feedback capture phase.

Examples of more advanced integrations include interstitials, links to my loyalty or my account programs that encourage customers to try new services, etc. eCommerce solutions can be embedded directly as a widget in a technician tracking portal or web view so that customers can “add-on” and even complete payment and verification for incremental products. The simplest example is the offer for a customer to add a sports or premium channel package for a discounted rate, with that rate only valid while the technician is on site. This type of intelligent and sophisticated upsell solution requires seamless bi-modal communication between the technician tracking tool and the platform managing transactions, for example.

Organizations with advanced marketing automation and digital personalization tools in place will also need to decide whether to define offers based off average customer data or rather, to surface predictive offers based on a unique customer profile.

7.1.4. A/B Testing

All that said, consider testing multiple methods of segmentation and personalization. A/B testing can be as broad as offering two entirely different services to different customer segments or as granular as testing ad copy performance with those segments. It may be difficult to conduct A/B testing at the individual level only because the frequency of home service visits is low. This means, testing should be robust and modeling based on similar customers and similar engagement behaviors will be key to capitalizing on each individual’s engagement during the last mile tracking experience.

7.1.5. Continuous Measurement and Trend Spotting

As typically follows from A/B testing, ongoing analysis of results will be critical. As previously stated, each customer may have only one in-person engagement with a cable operator every one to two years. Relying on aggregate data of previous successes and failures, identifying trends and testing potential motivation for behavior will mean the difference between success and failure. With this method, unlike email marketing or digital advertising, there won’t be multiple opportunities to get the offer right. Data will be the foundation of successful programs.

7.1.6. Define Time-Based and Seasonal Initiatives

Don’t overlook the opportunity to incorporate seasonal offers along with personalized ones. Seasonal offers are also a good, simple place to start for those not equipped to support targeted or segmented offers to customers directly within a technician tracking tool – whether that’s because they lack the marketing tools or the buy-in and necessary collaboration from other parts of the organization. Seasonal offers can be a good testing ground to demonstrate results and drive for more advanced programs.

7.2. Advanced options for consideration

7.2.1. Rich Communication Services

Rich communication services (RCS) are becoming increasingly popular and mainstream. RCS offers the ability to visualize not only various steps and stages of a last mile tracking service directly in message, but to add interactive elements. This is a prime channel and flow to test interactive ads and new offers.

7.2.2. Gamification

Those that take the care to analyze tracker engagement by stage or step in the appointment process may come to realize that customer engagement ebbs and flows in relation to the scheduled time for the pending appointment. For example, a customer will likely spend less time viewing a “pre” type phase that establishes a broad ETA and allows a customer to add an appointment to their calendar, and more time actively watching a live map view of a technician’s truck on a map. This may mean that ads and offers at earlier stages of the appointment lifecycle will be less frequently viewed and thus less effective. This is where advanced teams may get creative with gamification or other interactive elements they can insert into the web experience in earlier stages in order to drive more time spent on these web pages.

7.2.3. Live Chat or Chatbots

Similar to gamification, the chance for customers to chat with an agent or even with a chat bot service directly within the tracking experience can be highlight valuable. Beyond answering questions and offering support about the upcoming home service, this is a massive opportunity to engage with customers who are considering complementary services.

7.2.4. Artificial Intelligence

Taking it a step further, artificial intelligence can add a predictive layer to these experiences and increase the probability of converting new sales. The key, going back to the required technology component of this best practice, is to ensure that the technician tracking experience you are building around is open, flexible and can easily embed or share data with partner solutions via the appropriate APIs, software development kits (SDKs) and web hooks.

7.2.5. Machine Learning

Further, applying machine learning algorithms with in web page or unique view of a customer journey can offer a path for much more unique and sophisticated offers at the individual level so much that it's possible to offer different choices, offers, advertisements or engagement paths depending on actions a customer takes to engage with distinct elements of the technician tracker tool.

8. Recording Results

Recording of results should be simple and straightforward. Following the guidelines established during the detailed procedure to establish parameters, track results in a central dashboard, console or if less advanced, in raw data format. Clearly define engagement phases and clearly label engagement metrics by phase. Data should then be mapped back to customer records, which will be associated with individual tasks corresponding to field service actions. This framework will provide the foundation you will use to map marketing content management and personalized ad services to each customer, during the appropriate phase or status of each task. Finally, track success over time in terms of revenue and engagement as defined for the business (using the defined success metrics) – as well as recording the impact of each change on all results.

Summary of Lessons Learned

The reader should now possess a clear understanding of how to apply web analytics tools and data analysis to identify the right moments for new engagements. This means the reader should be equipped to start planning how to actually leverage a subscriber's attention as a technician travels to their home for a service, in order to create a measurable new revenue stream. Identifying the right moment or moments during the last mile with the most potential for innovation requires thoughtful collection and segmentation of data, and a creative approach for viewing customer behavior. Most importantly, success with this operational best practice requires tight alignment and close collaboration with sales and marketing departments. IT will also play a crucial role in connecting the required systems to offer a seamless experience.

It's possible to create and embed interactive experiences that make sense to customers and improve satisfaction by first understanding them, and then learning and responding to how they react to new offers and interactive components of what used to be a dead zone for customer communication and engagement.

Abbreviations

API	application program interface
ARPU	average revenue per customer
ETA	estimated time of arrival
LCV	lifetime customer value
RCS	rich communication services
SDK	software development kit

Bibliography & References

<https://www.forbes.com/sites/shephyken/2016/08/27/bad-customer-service-costs-businesses-billions-of-dollars/#54bb86165152>

<http://www.iacquire.com/blog/15-google-analytics-alternatives>

<https://www.forbes.com/sites/forrester/2017/01/26/us-digital-marketing-spend-will-near-120-billion-by-2021/#4a09cdd7278b>