



# Fulfillment as a Service Architecture Drives Scalable Telecommunications Growth

## Challenge

A leading broadband infrastructure and telecommunications provider was preparing to expand its utility and data product portfolio, including the introduction of new multi-gig service offerings. However, the organization lacked a scalable fulfillment framework capable of supporting growth without increasing operational complexity.

Order fulfillment processes relied heavily on manual intervention, operational workarounds, and institutional knowledge. Previous efforts to automate fulfillment had resulted in fragmented ownership, inconsistent customer experiences, and fulfillment logic embedded across multiple disconnected systems.

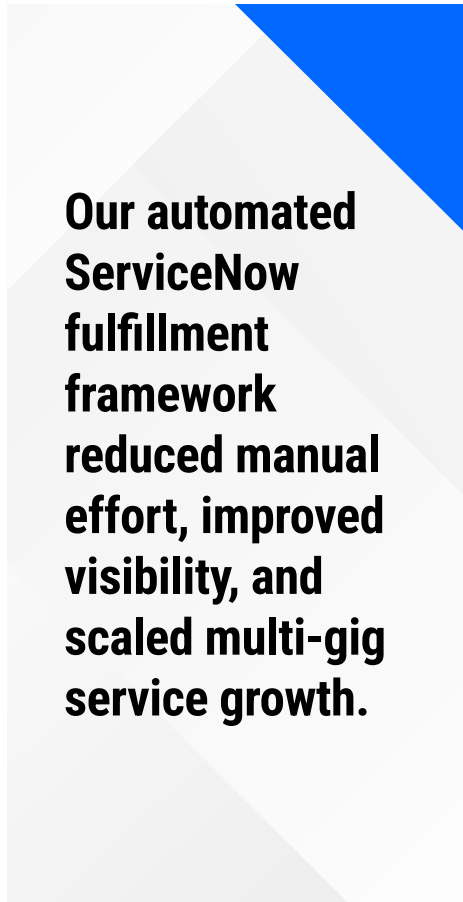
As order volumes increased, operational complexity grew at the same rate. The lack of a centralized fulfillment architecture limited visibility

into order status, created challenges with root-cause analysis, and increased the risk of orders becoming delayed or stalled. The client needed a strategic partner that could transform its fulfillment vision into a repeatable, scalable execution model capable of supporting future growth.

## Solution

The client engaged INSPYR Solutions to convert its fulfillment as a service (FaaS) architecture requirements into a comprehensive ServiceNow implementation strategy, technical delivery plan, and formal scope of work (SOW).

Drawing on extensive ServiceNow expertise, our team designed and implemented a fulfillment framework that established a centralized execution layer capable of orchestrating end-to-end service delivery.



**Our automated ServiceNow fulfillment framework reduced manual effort, improved visibility, and scaled multi-gig service growth.**

Next, our team designed a scalable fulfillment architecture that aligned operational processes, field service execution, and system integrations into a unified ServiceNow platform. Key elements of the solution included:

- **Dedicated Fulfillment Application:** INSPYR Solutions developed a dedicated ServiceNow fulfillment scoped application that serves as the central execution hub for all fulfillment activities. This approach aligned order execution directly with field operations, client success teams, and provisioning processes while creating a single source of operational visibility.
- **Reusable Fulfillment Architecture:** The team implemented a FaaS architecture built on reusable ServiceNow Subflows, configurable mapping tables, and standardized playbook patterns. Product routing and fulfillment logic could now be managed through configuration rather than custom development, significantly improving maintainability and scalability.
- **Dynamic Appointment Scheduling:** To support varying fulfillment scenarios, INSPYR Solutions designed a flexible scheduling framework using placeholder tasks that are dynamically replaced with scenario-specific work activities or removed entirely when field work is not required. This allowed fulfillment workflows to adapt automatically based on service requirements.
- **End-to-End System Integration:** The solution incorporated



inbound scripted REST APIs that accept canonical orders from the ServiceNow Marketplace platform and outbound IntegrationHub messaging for automated provisioning, callback management, and device-account linking. This integration architecture eliminated manual handoffs and improved fulfillment accuracy.

- **Enhanced Mobile Field Experience:** Field technician applications were enhanced to provide real-time access to service data, network topology information, utility product options, and installation requirements. Technicians gained greater visibility into drop installs, cabinet cross-connects, customer premises equipment (CPE) swaps, and related field activities, improving execution efficiency.

## Outcome

The new fulfillment architecture transformed fulfillment operations from a collection of manual processes into a scalable, repeatable execution framework capable of supporting business growth. Benefits realized through the implementation included:

- **Accelerated time-to-revenue** by transitioning multi-gig service fulfillment into a predictable, operationally manageable process.
- **Reduced reliance on manual intervention** and operational workarounds through automated orchestration and workflow execution.
- **Improved visibility across the fulfillment lifecycle** with centralized tracking, monitoring, and operational reporting.

- **Enhanced scalability** by enabling new products and services to be onboarded through configurable fulfillment patterns rather than custom development.
- **Increased operational consistency** through standardized workflows, reusable components, and automated integration points.
- **Improved field service efficiency** by providing technicians with real-time operational data and streamlined mobile workflows.

By establishing a modern fulfillment as a service framework within ServiceNow, the client gained a foundation capable of supporting future service expansion while improving operational efficiency, fulfillment reliability, and customer experience.

### Client Profile

The client is a leading broadband infrastructure and telecommunications provider that designs, builds, and operates open-access fiber-optic networks supporting communities,

businesses, utilities, and government entities. The organization provides network design, construction, operations, and technology services that expand connectivity and support modern digital infrastructure initiatives.

### Technologies Supported

ServiceNow Field Service Management (FSM) & Appointment Booking, ServiceNow Flow Designer (Playbooks and Subflows), ServiceNow Scripted REST APIs & IntegrationHub, ServiceNow Common Service Data Model (CSDM) & CMDB, Mobile Field Applications, External Marketplace Catalog & Provisioning APIs

### About INSPYR Solutions

Technology is our focus and quality is our commitment. As a leading expert in delivering flexible technology and talent solutions, we strategically align industry and technical expertise with our clients' business objectives and cultural needs.

Our tailored offerings include a wide variety of professional services, project solutions, managed services, and talent resources, all bolstered by our strategic partnerships with cutting-edge technology services.

By always striving for excellence and focusing on the human aspect of our business, we work seamlessly with our talent and clients to match the right solutions to the right opportunities.

