CYIENT

TRANSFORMING FIBER PLANNING: UP TO 95% FASTER POLE PROFILING THROUGH INTELLIGENT AUTOMATION

Business Challenge

- **Labor-Intensive Design Process:** Back-office designers manually reviewed the data and created pole graphics in AutoCAD, adding time and complexity.

- **Limited Scalability and Speed:** Each pole profile took over 75 minutes to generate, creating bottlenecks that slowed project timelines and limited the ability to scale with growing volumes.

- **Impact on Downstream Activities:** Delays in profile creation affected critical phases, including permit applications, make-ready work, approvals, and construction, jeopardizing overall project delivery.

Overview

Aerial fiber planning in North America and Canada requires detailed pole profiles—including attachment types, heights, and specifications—for permitting and construction. Traditionally, creating each profile manually could take up to 75 minutes and was prone to errors. Cyient addressed this challenge with CyPlaNet, its comprehensive hyper-automation solution that integrates tools like Microsoft Power Automate and AutoCAD to digitize and streamline the process. The result: rapid, reliable pole profiles with minimal manual input, enabling large-scale, efficient document delivery.

The Cyient Solution

Cyient delivered a two-stage hyper-automation solution that transformed pole profile generation:

Automated Data Collection

A Power Automate bot extracted detailed pole information directly from the IKE portal, minimizing manual entry errors.

Automated Profile Creation

Custom AutoCAD scripts processed the bot-generated JSON files, while CyPlaNet triggered the automated creation of graphical pole profiles.

Each profile captured critical details—pole number, hydro/Bell ID, height, class, year, and all attachments—clearly represented with appropriate labels and symbols. The system handled poles sequentially, ensuring consistent accuracy and enabling high-volume scalability without manual intervention.

This comprehensive automation freed up design teams to focus on higher-value planning activities and accelerated project delivery timelines.

The Results

Accuracy

Improved accuracy with reduced risk of human error

Processing Time

Reduced by up to 95%, enabling faster workflows

Time Saved per Profile

67 to 70 minutes saved per pole profile

Project Turnaround

Faster turnaround for permit packages, make-ready assessments, and construction readiness

Designer Experience

Freed up designers to focus on higher-value planning tasks

Scalability

High-volume scalability achieved through fully automated, sequential pole processing

Designing Tomorrow Together

Cyient's intelligent automation solution accelerated pole profile generation by 95%, enhanced accuracy, time-to-market, and scalability. By combining engineering expertise with smart technology, we empower faster project delivery and a stronger foundation for tomorrow's telecom networks.

#DesigningTomorrowTogether

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