

The 'how-to' guide for accelerating fiber deployments

#2: Value-centered program planning

Planning large-scale fiber projects can be a complex and daunting task without the right tools and approach. Far from straightforward, these types of projects can be costly, time-consuming and loaded with pitfalls. Fiber projects often involve long-running and complex processes that require end-to-end process management across multiple systems, organizational groups and external partners. Traditional manual planning tools and methods can get in the way of progress and may result in poor project prioritization, inefficiencies and failure to meet business objectives.

In this 'How-To' guide, we take a look at the program planning stage of the project, the planning challenges faced by the project manager and what it takes to carry out program and demand planning, prioritization, project creation and approvals.

Planning challenges

Service providers are struggling to deliver fiber-based infrastructure while also meeting commercial objectives. The cost of passing a home with fiber and the time needed to do so have a huge bearing on service profitability. With hundreds of personnel and thousands of sites, project managers and planners need help with smarter ways to plan complex fiber expansion projects more effectively. What they need, is a more efficient and commercially viable way to do this based on business value metrics.

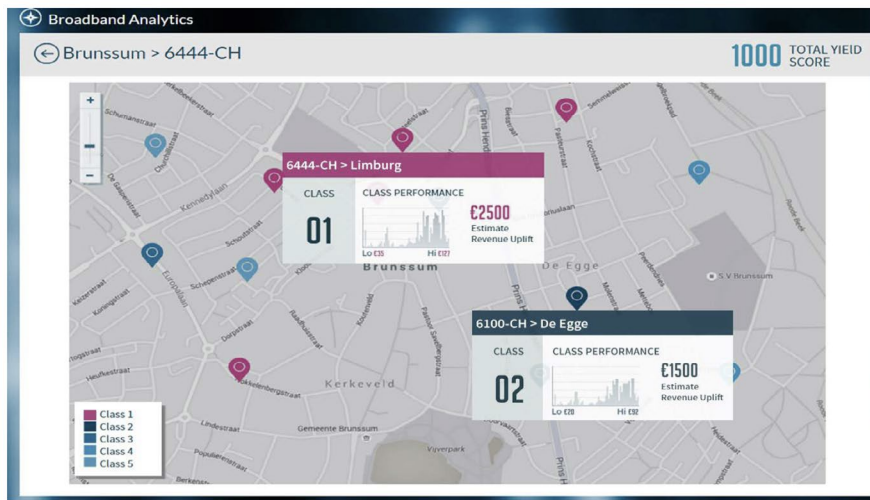
Business impact

If estimates and priorities are badly calculated, time, money and resources can be expended unnecessarily on low-value sections of the network. Unforeseen problems also mean that costs can escalate and return on investment can take a lot longer to recover. Projects therefore need to be prioritized based not only on capacity demands but also on real business value and costs, ensuring revenue streams are protected and assured earlier.

Plan complex fiber expansion projects in a more **effective, efficient and commercially viable** way.



"Process automation is key to the program planning and design stages of the fiber project."



Using big data and business analytics to help determine project ROI

Demand planning and prioritizing fiber rollout projects

The first step in a high-level fiber program is project initiation. This is where all the basic project requirements are gathered and entered into the project management system, and program properties are verified. Before detailed project plans are created, the planner needs to gather key data from the operations and business support systems, which can help estimate the value and cost to deploy fiber to each area. For large-scale rollout programs with hundreds or even thousands of locations, big data and business analytics tools and techniques can help by gathering this data automatically and determining the relative return on investment for each location. This enables the planner to rapidly classify and prioritize projects in order of importance to the business, so that revenues can be maximized earlier. Also during this stage, data for each fiber serving area is imported into the demand planning tool along with enrichment data gathered from operations and business support systems. These include details about revenues and costs for each serving area. A prioritized list of serving areas based on their ROIs is then generated and used to create a plan of record, which is submitted for approval during the program approval phase.

Program planning

Once the plan of record is approved, the process moves forward into the deployment project creation phase. The planned schedule is reviewed and a project manager assigned. A number of sub-project plans can then be generated automatically by the workflow tool, based on the plan of record and types of sub-project. For example, if we consider a fiber-to-the-home (FTTH) project, predefined task flows would be available for single dwelling neighborhoods, multiple dwellings (MDUs), and aggregation networks, accelerating project initiation.

The process then moves on to the program completion stage, where project plans are reviewed and approved before the deployment projects are kicked off.

Summary

One of the key determiners of profitability for a fiber project happens up-front: key decisions are made about where and when to roll out fiber, based on the predicted costs. By using automated demand planning tools that combine both network and business metrics, service providers and contractors can make the right choices early in the project and avoid unnecessary project risk and expenditure.

The next 'How-To' guide in this series will discuss project orchestration.