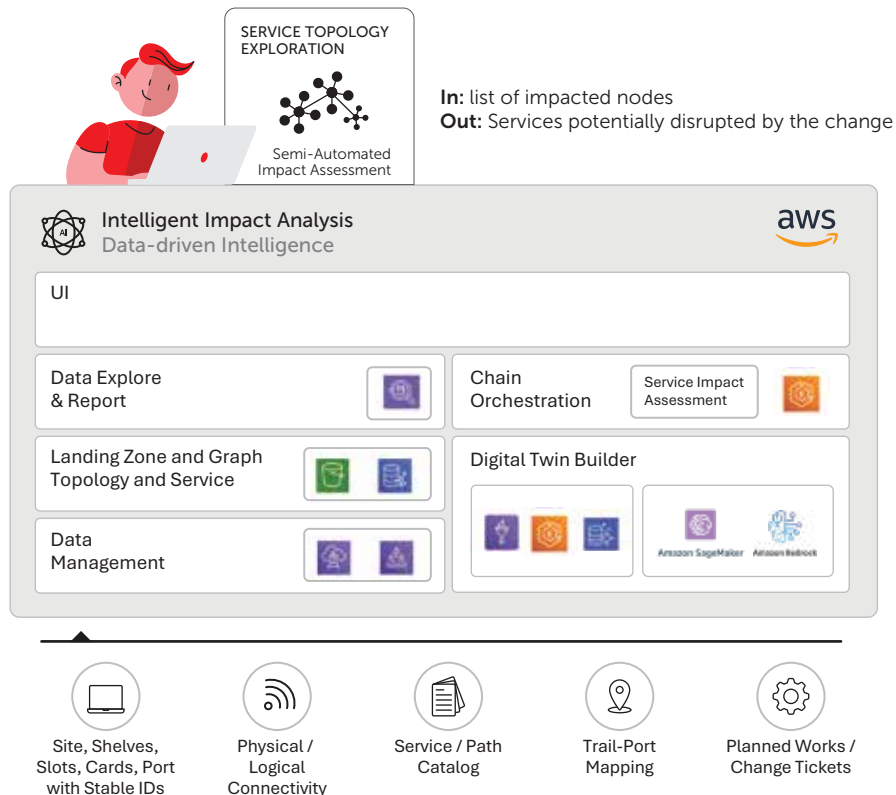


# Redefining AIOps with Predictive Digital Twins

Fastweb was struggling with fragmented data, manual Change Impact Analysis (CIA), and limited network visibility. To overcome this, the telecom operator partnered with Celfocus to **implement an AI-native Digital Twin that automates and accelerates CIA through a unified, graph-based view of the network**, enabling faster and more informed operational decisions.



## CHALLENGE

As part of its Autonomous Networks transformation, Fastweb faced key operational challenges:

- Fragmented data and tooling landscape with multiple siloed systems
- Manual Change Impact Analysis with limited automation
- Lack of correlation between services, topology, and network elements
- Slow decision-making, higher operational costs, and reduced visibility

These constraints significantly impacted operational efficiency and the ability to proactively manage network changes.

## SOLUTION

Celfocus delivered an AI-native Digital Twin platform, enabling automated, topology-aware Change Impact Analysis.

### Capabilities

#### Unified Data Layer

Integration of multiple data sources into a single environment within Fastweb's AWS/Databricks ecosystem

#### Digital Twin

Network topology and service model built using a graph database to represent nodes, links, and service relationships

#### Automated Change Impact Analysis

Graph-based engine **using Celfocus algorithms** to assess service and customer impact of network changes.

## BENEFITS

Celfocus delivered a solution that operationalises an **Observe → Decide → Act model**, shifting Fastweb operations to an intelligent and automated approach with the following benefits:



#### Reduced Operational Effort

Elimination of manual processes and tool fragmentation



#### End-to-End Visibility

Unified and correlated network and service data



#### Faster Impact Assessment

Near real-time evaluation of affected services and nodes



#### Improved Change Planning & Service Reliability:

Reduced risk of service disruptions



#### Foundation for Autonomous Operations:

Enables AIOps and predictive assurance

**Making Data Actionable.**

[www.celfocus.com](http://www.celfocus.com)

