

How to Ensure You Get Funding for a Successful AlOps Project in 2023

The tough economic environment requires a targeted and smart approach to funding requests.

We offer a five-stage approach to preparing for such requests. These stages look holistically at the issues that should be addressed prior to making the funding request – to ensure maximum chance of success, and afterwards, in the deployment of the AlOps solution.



ONLY THE MOST PROMISING PROJECTS WILL GET FUNDED

- Use case prioritization
- Creating a successful business case



LACK OF UPSTREAM OR DOWNSTREAM FUNDING WILL IMPACT

- · Delivering robust topology
- Planning necessary automations



FUTURE FUNDING IMPACTED IF ROI IS NOT DEMONSTRATED

Creating solid KPIs/KQIs



A BROADER PERSPECTIVE IS ALSO REQUIRED

- Bringing governance to both the data and Al
- · Ensuring explainable AI

Real-time visibility across all layers of service delivery Total Ecosystem Observability



Detect Incidents and Change fallout before customer impact Experience Assurance

Provide root cause analysis on cross-correlated Incidents

Explainable AI

2023 is a tough year for investing

As Western markets continue to feel the impact of post-COVID inflation and some dip briefly into recession, telcos operators struggle with a range of issues – most noticeably, how to generate a good return on investment from their large capital outlays in areas such as 5G and increased operational costs. Announcements from the likes of BT Group which is looking to cut back on 55,000 jobs in the next decade and Vodafone which suffered from a \$380M increase in its energy bill leaving a reduced cashflow forecast of \$253M to its year-end, illustrate the scale of issues in the market.

Getting new capital projects signed off is therefore more difficult. We will likely see companies implementing a classic corporate action plan to ensure they come out of the recession as strongly as possible. Action items will include:

- · Reducing debt
- Preserving capital
- Sharpening the business plan by focusing on a small number of initiatives
- Invest in opportunities that will generate revenue as the local economy begins to recover
- And investing in technology and innovation that will prove a cash generator as global growth returns.



The near-term future for network investment

Even though there has been negative industry discussion this year around the difficulties of generating good return-on-investment from 5G, it will remain the main driver of growth for the telcos into the short and mid-term. It represents the telco's long-term goals of developing a programable network, introducing more intelligence and automation than is possible with prior network generations and the opportunity to generate new sources of revenue.

New services are the place where telco investment offer opportunities for revenue generation in the short to medium term, as their local economies recover. One non-negotiable is the need for all new technologies in the network to work together in order to provide a good, reliable experience for services with newer requirements such as lower latency. Achieving this good, reliable, experience while rolling out multiple new types of service is not going to be easy – as there are many barriers to achieving consistency and meeting SLAs – making AlOps a key part of the solution. The monitoring of both network and service performance and fault identification increasingly requires the use of intelligence and automation to meet the needs of a new and significantly more complex 5G network.

1. Prioritization of use cases and business cases

Telco AlOps has been suffering from the usual issues of new technology development with inflated expectations around what it can most usefully provide in the first few years of deployment. Use case prioritization is therefore key: Which provide solid return on investment and what is actually needed by the organization today compared to the range of possible functions that the vendors would like to sell? Vitria finds that those in the early days of deployment should usually consider three areas of functionality:

• Where is time-to-value most important? Use cases that will benefit from new platforms/software which bring solutions to immediate issues should be a high priority. For example, a Vitria customer was experiencing 140,000 application access attempts per day; impacting customer churn and contact center efficiency. The VIA AIOps platform was implemented to correlate app failures with network elements; enabling root cause analysis, auto-triage and incident assignment. It resulted in the removal of 11 million failures a year and 250,000 customer support calls (equivalent to approximately 20 full-time staff and \$2.3M / year)

- What ecosystems are most in need of being observed end-to-end – and what depth is required (ie. across what technology layers, applications, and services for each ecosystem or product)?
- Where could AlOps be applied to deliver actionable, triaged tickets to the service management?

Needs statements coming from this type of exercise should then be put in front of a range of business teams and tested against top-level corporate goals for the mid-term. This will unearth needs which do not fit with the wider strategic environment – for example, network slicing may need end-to-end observability that is not available from existing assurance solutions – but, not be as strategically important as being able to monitor Fixed Wireless Access (FWA) effectively. By ensuring this strategic fit, the business case should be at its strongest; as it will be aligning closely with the small number of post-recession focus areas that the organization has identified.

2. Ensure upstream and downstream funding

Alongside purchasing the most strategically important AlOps capabilities comes the equally important question of whether the upstream and downstream processes, data, and functionality can support the capabilities within the business case. This requires considerable time spent at the business case stage analyzing the requirements and their availability; and speaking with process and data owners to ensure that there is agreement about any additional funding which needs to be included in the business case.

Areas likely to require considerable investigation (and, quite possibly funding in the business case) include:

- Data availability and quality particularly, where information around inventory, topology, and service dependency needs to be collected in order to enrich network data and inform correlations and root cause analysis. For example, does the telco have a suitable topology in place to enable it to predict and mitigate issues with the AlOps software; or does it require investment in developing this capability?
- Automation service providers often struggle to fully appreciate the difficulties of creating more than simple, single-domain automations. Early days AlOps requirements often only require these simple automations – but should still be planned in detail with process owners: what data is required and is it available? Are the processes defined well



enough that they can be automated? How will exceptions be handled? Unexpected costs may crop up during implementation if this exercise is not undertaken properly before the AIOps platform is installed – leading to budget overrun which becomes a significant issue in a post-recession era of tight capital and operational expenditure budgets.

3. Creating strong KPIs

Once a solid business case that includes upstream/ downstream costs is included; and AIOps capabilities are purchased, the need to measure tangible value becomes the next step toward a successful project. This topic should be part of the funding discussion to demonstrate that a plan is in place for comprehensive measurements. AIOps presents some challenges in this area:

- As always with network performance, the measurement of improvement in customer experience and, therefore, reduction in churn is difficult to assess. Those in the top-level customer experience team or finance department should be able to provide a list of drivers which should be included within the KPIs set for AlOps.
- Fault and performance measurements should, obviously, be part of the measurement set – with particular focus on performance measures around the time a fault is detected, as these are especially interesting for both capturing improvements in the number of faults, while also bringing information back to the AlOps algorithms around the exact situation for closed-loop improvements.
- Cross-domain interplay and interactions so you can have a cohesive view.

4. Broadening the picture

A final piece of the puzzle around creating confidence that a project is going to be successful if funded is demonstrating awareness and offering solutions for the cultural issues that arise around AlOps. Vitria sees model explainability as top of mind for telcos currently and recommend that a number of issues should be looked at and then demonstrated as having solutions within the business model presentation:

- Consider whether models with better explainability (decision trees and linear models) are "good enough" for your AlOps requirements – over more complex deep learning, which may sound impressive but prove more difficult to use.
- Describe how the models selected can demonstrate which input features (eg. performance data, fault data, customer data, etc) were most influential over the model's predictions.
- Also, look at the vendor's offering around visualizations to see if they provide good explanations of the model's decision-making.
- Describe the process for iterative development and feedback – predictions and explanations presented to domain experts should come with a request for feedback to allow refining of the model.



Contact us today for a demonstration

About VIA AIOps

VIA AIOps delivers the process automation capabilities to shorten the incident lifecycle and improve the overall service experience. VIA's total ecosystem observability, internet-scale noise reduction, machine learning based anomaly detection, and cross silo correlation transforms and optimizes operational practices. The result is lower costs, superior customer experience, and augmented intelligence to support a more efficient and effective operational staff.

