

Doing More with Less: The Value of Adding Automation and Intelligence into the Network



Listen Now

Charlotte Patrick, Telecoms Analyst interviews
Andrew Colby, Vice President, VIA AIOps, Vitria

In a recent Vitria webinar Charlotte Patrick, industry analyst and thought leader, shared her research on the financial value for telcos adopting AIOps. Her research provides a model which telcos can use to measure the financial value of investments focused on assurance.

Patrick was joined by Andrew Colby, a former telco industry executive, who spent thirty years heading engineering teams and solution groups in the telco environment. Andrew is now an executive with Vitria, the developer of VIA AIOps – a solution that is transforming how large service organizations are using AI and automation to lower costs and improve service. During the webinar he lights up some real examples of the processes Patrick introduces and how forward thinking telcos are improving assurance and exceeding service expectations with VIA AIOps.

Charlotte: Does Vitria provide a strong consulting partnership?

Andrew: There are significant decisions that businesses will make to fully utilize a solution like VIA AIOps. We take an incremental approach – you can do new things on day one and then you can build on and enhance the intelligent automation as your operations teams get more experience with the platform. We bring the value of our experience with some of the largest and most complex telcos to every customer with our consultative approach. From simple decisions regarding data ingestion to correlation logic and how to interpret signals and events for the business we provide out of box suggestions and work with each customer to understand their business model. Most important is understanding their desired

outcome – what good looks like for them. Customers can tap into the Vitria Professional Services or the customer may be working with one of our partners that can help with product configuration.

Charlotte: Does VIA AIOps provide the iconic 'single pane of glass' for monitoring across different platforms and services?

Andrew: The promise of a single pane of glass has been around for a while. We position VIA AIOps as the **first pane of glass providing a consolidated view across silos**. The difference is that VIA is automating the ability to consolidate ALL the relevant information – the information on performance, telemetry, faults, configuration and we're enriching that in a holistic way to answer the question "what is going on"? We're providing a view that shows impact and what events occurred that created the current state. Then operations has the option of trusting the VIA automation or they can drill down to many **single panes of glass** to troubleshoot. The single panes of glass are the element management systems. So, VIA is the **first pane of glass** operating across silos, revealing what is going on. Other screens provided by element managers can provide detailed views for further investigation or remediation. But we're not trying to be those systems. VIA's intelligent automation is designed to obviate the need to visit the other systems to automate a response. Over time operations comes to trust the VIA automation and use other systems to make changes to ensure the fault doesn't occur in the same way again.

Charlotte: A customer relates they did a lot of early customization work with Splunk, will this be a problem in implementation?

Andrew: VIA AIOps has a flexible ingestion layer to support a variety of source systems, whether they're native applications, infrastructure, network, or server environments. Splunk is a great example where it's collecting a lot of tremendously valuable information, combining it in different ways and making it available for downstream systems to leverage and utilize. So, the short answer is VIA can support a Splunk implementation - no problem. Vitria provides a Splunk connector. It's not tied to a specific implementation or representation, and all of that flexibility is available through configuration to allow ingestion and interpretation, and even derivation of further information based on the inputs from the source systems, including Splunk.

Charlotte: How does VIA AIOps scale? Can you provide an example?

Andrew: Scale is a critical capability – and the answer is VIA AIOps is designed to scale. We have very large North American service providers that support tens of millions of subscribers, hundreds of millions of devices, churning out hundreds of millions and billions of events per day. VIA ingests and processes events in real-time and turns them into actionable information. So, the backend of VIA AIOps leverages technologies that have both horizontal and vertical scalability. The flip side is that VIA can also scale down effectively. We run on a containerized or virtualized software environment, so for development labs and small configurations it's viable to scale down effectively as well as scale up to very large solutions effectively.

Charlotte: How do users access VIA AIOps?

Andrew: VIA's primary design use case is the network operation center, which is largely a laptop or workstation environment. Customers haven't asked for VIA on a mobile device or tablets. If we had a use case that required other access platforms we would work with the customer to build out the required screens or visualizations.

Andrew: Is there an expectation that gen AI can add value to processes for telecommunications companies?

Charlotte: Based on my research and the model I've built there are seven categories where gen AI could potentially make a

difference. The ones having the greatest ROI now are the processes where humans and machines are interacting. For example – chatbots used to field customer service calls to a help desk or billing department. There's also an opportunity to provide a digital assistant for telco staff to close the knowledge gap between new employees and experienced employees. With the churn in staffing, this is the use case having the most interest right now.

There are also opportunities in areas like code creation, validation, and testing. The use of gen AI to do anomaly detection is a compelling use case, especially for telcos. ChatGPT and other large language models provide a good foundation. The LLMs are going to provide some useful opportunities for anomaly detection. There are other transformational use cases for content creation in marketing but it would be difficult right now to determine financial value for implementing LLMs in marketing.

The use case with the highest perceived value, now, is related to data management – the ability to do synthetic data generation and augment data by using large language models. There is anticipated value in the knowledge management area as well. Wherever there are databases of information provided to humans, for example in a contact center or network operations, LLMs have the potential to add value.

Andrew: Can you provide more details about the hypothetical telco you used in your model? For example number of customers, subscriptions, headcount?

Charlotte: : In my model and research, I reference a telco with annual revenues of \$16 billion. This breaks out to 31 million consumers or mobile customers, 6 million fixed line and about 900 large enterprise customers. Given my roots in Europe, I was thinking about a reasonably large European telco with the real diversity in what they offer.

Andrew: In your model you reference "owned channels". What do you mean by that?

Charlotte: In this case it is about the telco in the model and this refers to channels that marketing owns. These include social media, text messaging, web based channels as opposed to channels they may purchase – like voice. These are channels used in marketing campaigns where personalization and micro-segmentation play a significant role. In the last five years we've seen growth in prepaid recharge types of channel activity.

Applying AI here could have a positive impact on financial value resulting from increased revenues coming from owned channels.

Andrew: Where do you think the industry will see the most intelligent automations deployed?

Charlotte: That is an important question. We're already seeing some intelligent automation in network management. For example automated root cause analysis requires a certain amount of intelligence, and there is increasing demand for intelligent automation as adoption rates increase for self healing. These processes require closed loop automation that depends on intelligence. Many of the processes in network management fall in the category of assurance and I see this space being able to adopt or consume intelligent automation.

There are cases where intelligence is needed inside the automation - processes like trouble ticketing, order management, and incident management. This is exactly where automated root cause analysis and the potential application of predictive capabilities are useful. These improve the automation to provide more value.

Networks are a prime target for applying more intelligence. Despite the progress on the technology, there is some reluctance on the part of the user, a lack of trust we would say impacting the adoption rate. Vitria has focused on building trust in their VIA AIOps solution. It will be interesting to watch in the next four or five years to see where intelligence can add value inside the automation. This is an area we're going to investigate in the next webinar with Vitria.

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.

