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Alkira Real Economic Value Report

Network Infrastructure as a a Service that Simplifies Operations, Reduces Overhead, and Improves Agility

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CTO

Nemertes

October 2024

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1. Executive Summary

This research study, based on interviews with thirteen enterprise customers of Alkira, uncovered some significant and consistent ways in which Alkira delivered measurable value to the organizations.

Specifically, building on Alkira's core functionality for provisioning, managing, and securing connectivity among cloud and on-premises environments via a network-as-a-service model, Alkira users were able to realize value by simplifying their environments and the management of them, and by significantly accelerating network processes. Replacing multiple cloud-platform-specific networking paradigms with a consistent tool for configuring every platform, they were able to empower their existing network teams rather than expanding them by hiring experts for each platform. At the same time, they avoided the configurational headaches of trying to instantiate security policies consistently across all platforms and then keep each platform up to date as both platform and policy evolved.

Overall, participants on average saw:

- 44% decrease in number of network and security devices involved in connecting to cloud environments, including a 73% decrease in the number of firewalls
- 47% decrease in staff time needed to manage cloud networks
- 63% avoided, on average, 4.8 new hires needed just to support cloud networking
- 84% decrease in the staff time required to add a new cloud environment
- 96% decrease in the calendar time required to add a new cloud environment
- 80% decrease in the staff time needed to add a new security service
- 93% decrease in calendar time to add a new security service
- 98% decrease in the staff time needed to add a new partner on the extranet
- 91% decrease in calendar time needed to add a new extranet partner
- 93% decrease in calendar time needed to connect a new data center to the hybrid cloud

Deploying Alkira thus allowed these organizations to become more agile and responsive, more efficient, more reliable, and more secure, all while shifting from a focus on the details of underlay network configuration minutiae to higher-level service and policy goals and how best to achieve them across platforms.

2. About the Study

For this research, Nemertes interviewed technology leaders at thirteen global companies during a six-week period, from late May to early July of 2024. Nemertes analysts interviewed all participants—there was no use of online surveys or phone-bank interviewers. As needed, interviews were followed up via email to confirm our understandings or gather additional data.

All participants use Alkira services in their production environments.

The participating companies are small to very large enterprises, with an average employee count of 18,413 (median 6600) and average annual revenues (or operating budgets, for non-profits) of $4.3 billion (median $3.5 billion). Participant verticals include manufacturing, financial services, software development, telecommunications, pharmaceutical, and biotech.

Participants also tended towards the strategically minded when it comes to technology adoption. About a quarter (23%) consistently look at IT as a strategic investment, something they engage to be competitive with their peers. Another 31% go further and look to technology investments to given them a sustained competitive advantage. The majority of the remaining companies (38%) are more moderate, seeing a few specific technology investments as strategic but otherwise viewing it as non-strategic overhead. Only 8% identified as fully conservative, seeing IT strictly as a "cost of doing business" and never strategic.

3. Alkira Adoption: Capabilities, Use Cases, and Drivers

Alkira offers a cloud-delivered network-as-a-service platform. Companies connect to Alkira points of presence from their own branches, campuses, and data centers and provision Alkira connectivity within their cloud environments (whether in Amazon Web Services, Microsoft Azure, Google Cloud Platform, or Oracle Cloud infrastructure).

The main value proposition underlying all the various benefits Alkira users realize is that, from wherever they access the platform, it will look and act the same: one network platform used across many environments. Alkira abstracts away the platform- or environment-specific details of implementation, overlaying a consistent interface and set of capabilities. So, for example, setting up connectivity to and from a new environment in Azure will work the same way as in AWS, GCP, OCI, or in one of their own data centers or network hubs. "Without having cloud knowledge, it made things easier for me," noted the Lead Infrastructure Architect at a large telecommunications company now building customer offerings around Alkira.

Alkira users identified a broad variety of uses cases for which they employ Alkira's on-demand networking platform, the main ones being:

- Enable and manage connectivity for hybrid clouds
- Consolidate network and security stacks
- Streamline security operations
- Facilitate extranets and mergers
- Connect up new data centers

Certainly, the primary use case is the first listed, enabling and managing connectivity among cloud environments and between clouds and on-premises facilities. However, most of these companies engaged at least one and sometimes several of these use cases, and sometimes others as well, such as facilitating remote user access or speeding and simplifying cloud application migration.

While the exact statement of what drove each to deploy Alkira varies a lot, the key common theme is: deploying and managing networking in multiple clouds as well as in their own WAN was taking more and more time and becoming harder to do well. “Every dang AWS account had 17 regions spun up! Workloads everywhere!” said a Network Architect for a data security company. Most organizations, like that one, were facing the prospect of having to hire multiple cloud networking specialists, sometimes several for each cloud environment in which they deployed production workloads. The alternative most faced, before they found Alkira, was accepting more, and more frequent, downtime due to problems with the network, and greater inconsistency in the enforcement of network security policies across environments, all as a result of the clouds’ different approaches to managing networks and security. With Alkira, though, they found greater reliability, stability, and security, for less staff time invested, thanks to the consistency it brought. As a Network Architect at a large software company noted, “A network engineer consulting on [our cloud environments] said it would be cheaper to do it using native constructs. Our analysis: it would be maybe 10% to 20% cheaper for the services, but would require 2 to 3 network engineers dedicated to building and operating that across the clouds, which would make it more expensive in the long run...and, we expected, less stable or capable.”

4. Use Case: Enable and Manage Connectivity for Hybrid Clouds

As a result of making the use of multiple clouds easier, Alkira users have had an easier time expanding to new cloud providers—25% have added at least one since deploying Alkira—and also in adding cloud regions—58% have done so. They are also adding new environments on their cloud platforms—63% have done so.

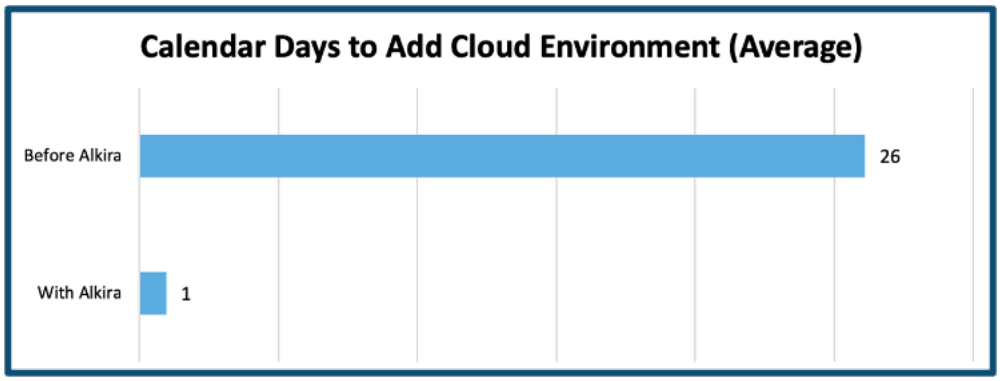
Moreover, all participants were able to point to concrete improvements in both the agility and the efficiency of their hybrid cloud network operations.

“…if I need aggregation and egress and services and such in each geography, as long as AWS or Azure are there, we can spin up what we need there—easier, with Alkira, I don’t own anything to provide those services there,” says the Director, Network and Security at a large medical manufacturer. “Alkira is our new solution to instantiating, and they are the backbone.”

4.1 Agility: Adding New Environments Faster

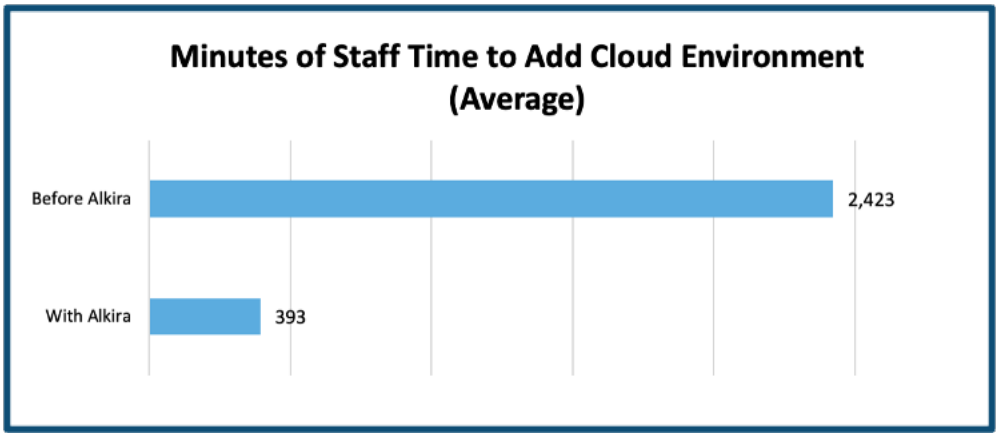
One hundred percent of participants reported that their network teams can turn around properly configured network connectivity to a new cloud environment more quickly than before.

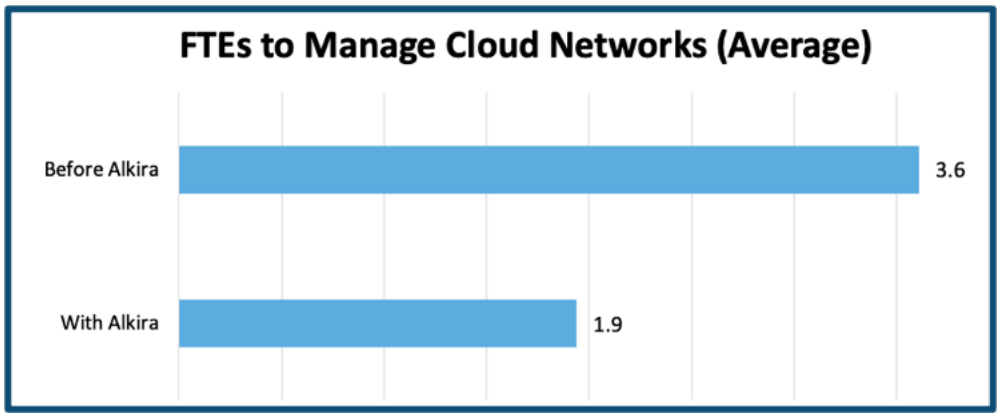
On average, deploying a new environment pre-Alkira took about 26 business days (more than a month for many businesses). After shifting to the Alkira model, they have brought that time down to less than 1 day, a 96% decrease in average calendar time elapsed!



4.2 Efficiency: Adding Environments with Less Staff Time

All participants also reported that it takes less hands-on staff time to bring up a new cloud environment. Their pre-Alkira average was more than 80 hours. With Alkira, the average is down to about 6.5 hours, an 84% decrease in the average.





4.3 Freeing Up Resources for Higher Value Work

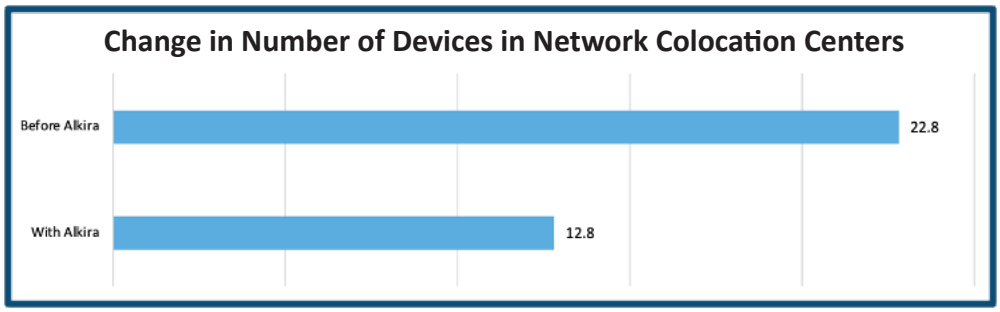
Eighty-three percent of participants reported that they had a decrease in the number of network FTEs needed to manage their cloud networks. Overall, Alkira users needed 47% fewer FTEs to manage cloud networking on average.

The 17% seeing increases were able to add far fewer than they had expected; for example, a Senior IT Architect at a large software and services company was able to add one new engineer to the network team instead of seven. Overall, 63% of participants avoided having to do new hires for cloud networking (allowing them to hire elsewhere, for other purposes), with an average of 4.8 avoided. It is worth observing that no one reported having to hire staff specifically to handle Alkira; their existing staff handled it.

5. Use Case: Consolidate Network and Security Stacks

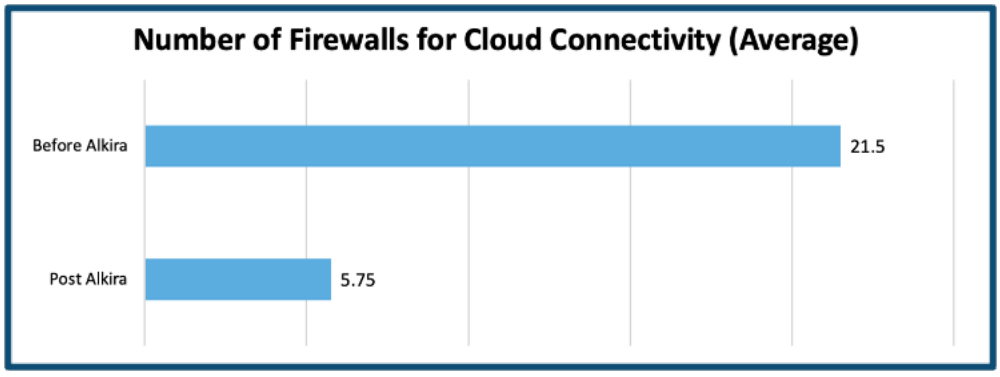
In addition to making it easier and faster to provision connectivity to other environments, be they in public clouds or other data centers, participants often found that shifting to Alkira network-as-a-service allowed them to reduce the on-premises network equipment stacks handling cloud connectivity as well. "Typical stack, pre-Alkira: $1.5M - $2M worth of routers, switches, firewalls, etc. 6 - 8 routers, 6 switches, 4 firewalls (big ones) in load balanced pairs, that's the minimum. Typical stack with Alkira: 2 routers," says the Director of Network and Security at a large medical manufacturer.

A full 40% of participants said their cloud communications equipment stacks shrank as a result of deploying Alkira. On average, participants went from having about 23 devices dedicated to the job to having about 13, a 43% decrease.



Furthermore, a full 75% said the number of firewalls they needed between and within clouds decreased as a result of shifting to Alkira—and sometimes just leveraging network partitioning functionality without needing to use Alkira's actual firewall services.

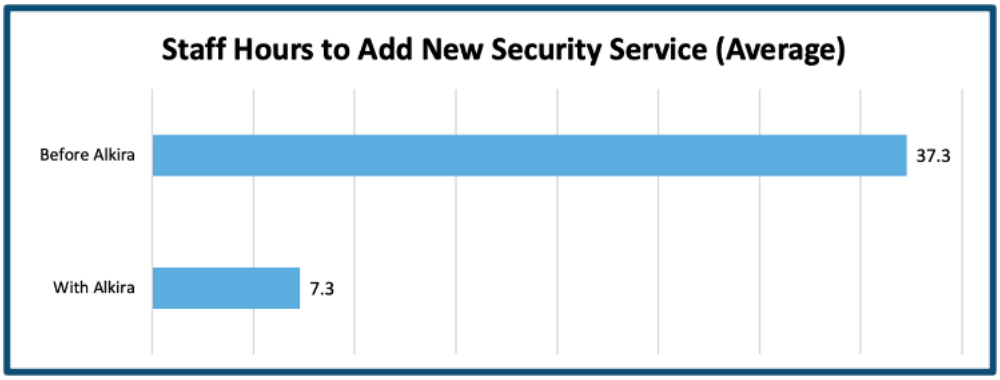
Overall, those participants experiencing a decrease averaged a 73% reduction in the number of firewalls deployed for cloud, from roughly 21 to 6, while sometimes also extending security controls to more of the network.



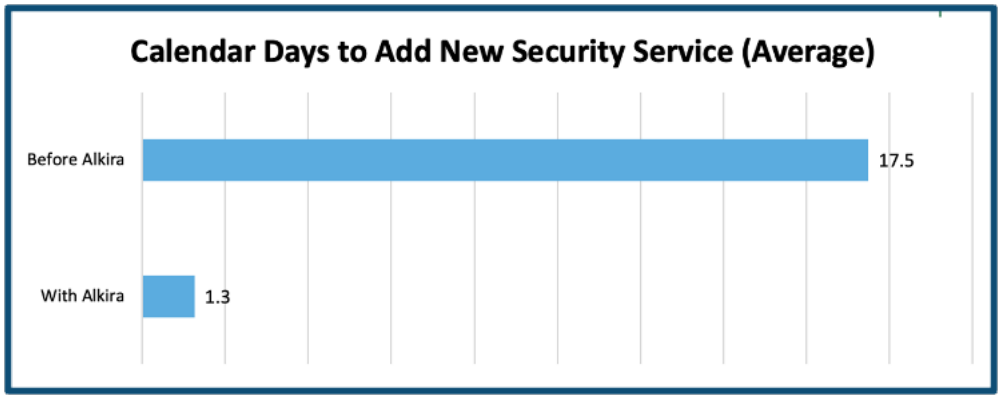
"We had ten firewall pairs before, and are down to four now, with less license cost but touching four regions now instead of three—one had not had any, but now does," notes the Network Architect at a large software development company.

6. Use Case: Streamline Security Operations

Reducing the number of firewalls to administer and also simplifying the management of security services on cloud connections allowed participants to decrease the amount of staff time required to manage multicloud network security. All reported decreases, with the average time required to add a new security service on a cloud connection dropping from nearly a full work week, 37.3 hours, to 7.3 hours, less than a work day. That amounts to an 80% drop.



Similarly, all participants reported that staff were able to turn around security service stand-up in far fewer business days: from an average of more than 17 days to just over 1, a 93% decrease.

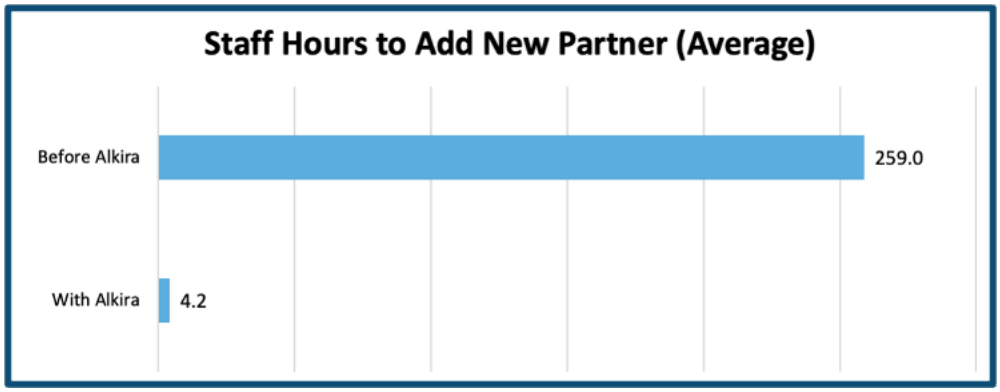


Participants also pointed out that, in many cases, they were bringing a level of control to their cloud estate that was new to the organization: "The size of our cloud environments at the time was on the order of 600 VPCs/Vnets across AWS, Azure, and Google, each with dedicated and unmanaged, unmonitored, uncontrolled Internet access. Zero security posture, none," said a Network Architect at a large software company. Post Alkira, they had consistent, controlled, and monitored access into existing and new environments, and did not have to add staff to get there.

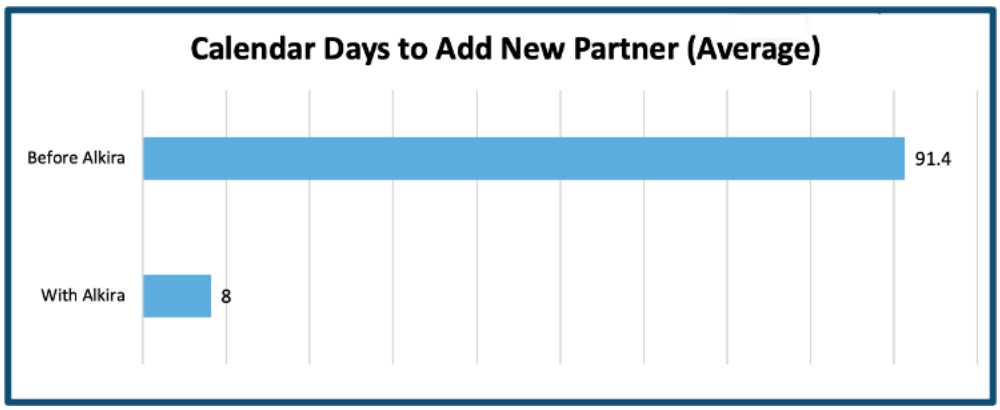
7. Use Case: Facilitate Extranets and Mergers

By abstracting away the differences in cloud environments and providing a consistent interface to key network and security functionality, Alkira can make it easier, faster, and safer to add connectivity to third parties. In some cases those third parties will be partners with whom an enterprise wants to establish regular network flows, such as connections with suppliers' inventory systems. In other cases, they will be companies the enterprise is merging with or acquiring, and whose WANs, data centers, and cloud operations need to be folded into the existing one. Either way, by providing a simplified target for the third parties to connect to and through, and a consistent place and method for the enterprise to manage that connectivity according to security and other policies, Alkira improves the process of connecting to third parties. "Overall, we're already reducing the number of VPN tunnels [we set up] to a partner: previously we had had multiple [VPNs] to cloud destinations, multiple to on-prem locations, for example 16 for one partner. Now, just two, primary and backup, to Alkira," says the Network Architect at a very large investment fund.

Two-thirds of participants reported a decrease in the amount of network staff time required to securely connect with a partner; none reported an increase. Among those seeing a decrease, the average number of staff hours needed to set up a connection properly dropped 98%, from nearly 260 to less than five.



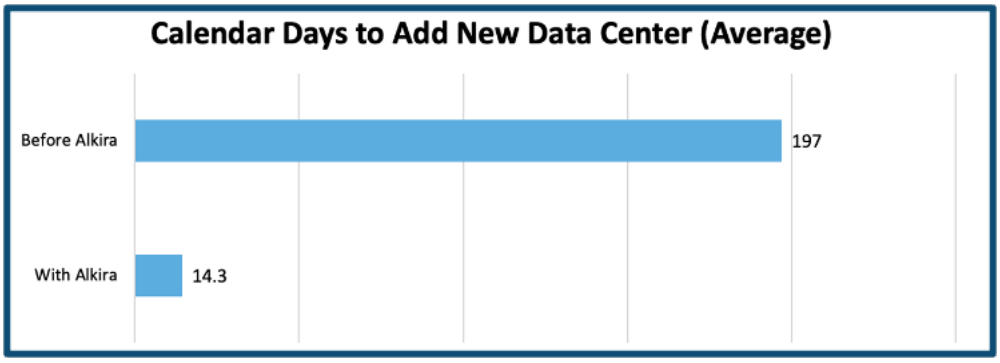
Similarly, 88% reported a decrease in the amount of calendar time required to connect to a new partner. The average number of business days dropped 91%, from more than 91—that's three months(!)—to 8, or just over a week.



Although too few had data to share on mergers, acquisitions, or divestitures to produce overall statistics and charts, the organizations that did have data reported it to be right in line with the "add a partner to the extranet" scenario: better than 90% decreases in staff time required and calendar time elapsed. "Alkira will let us just connect from their AWS stuff into a segment that isolates and segments as we need, control what can talk to what, how, even have everything on the untrusted side of the firewall service until we say different," says the Network Architect at a software maker that does a lot of acquisitions. "And it doesn't matter if it's Azure or GCP or whatever instead, the policy will be the same everywhere."

8. Use Case: Connect Up a New Data Center

All who faced this scenario after getting on Alkira reported a decrease in the time required to bring a new data center or network hub on line, with the average being a 93% reduction in the number of calendar days needed to do so.



9. Conclusion

Alkira customers usually deploy Alkira to solve their core challenges in multicloud networking, then expand from there to take advantage of its ability to help them collapse tech stacks and streamline processes. Along the way, they control staff growth and shift staff attention from low-level configuration challenges to high-level policy and service-delivery goals.

Deploying Alkira often drives major reductions in the amounts of both clock time and hands-on staff time required to manage cloud connectivity and security. At the same time it increases enterprise visibility into resource consumption and performance among clouds, often providing the first detailed view of that kind of traffic data. Using Alkira allows customers to more easily, safely, and quickly connect the enterprise cloud network to third parties such as partners, suppliers, or the targets of mergers and acquisitions.

The key to all of these simplifications and accelerations is Alkira's as-a-service model for connectivity, a consumption-based approach that makes inter-platform networking just another service used as needed, scaled as needed, abstracting away the inconsistencies across platforms and shifting the burden of expertise off the enterprise and onto Alkira.

10. Case Studies

10.1 Summary of Case Studies

Very Large Software Company Needed a New Data Center Up Fast—Alkira Let Them Do It, and Better Place Workloads in the Bargain. A hasty exit from a hostile country and the need for a new data center fast drove this company off its old multicloud network solution and onto Alkira.

Large Healthcare Provider Looks to Alkira to Manage Inter-region Connectivity and Simplify Multicloud Deployment. The company had scores of apps deployed via hundreds of cloud environments in a single cloud region. With Alkira, it was able to expand to a second region to improve performance and reliability, and ramp up app deployments.

Global Investment Institution Simplifies Cloud Networking, Speeds App Migrations. Because of how it was shifting to a cloud-first model for applications and data, doing things the way it had been was too complex—and too on-premises oriented—to be sustainable over time. Alkira provided the key to enabling a cloud-centric model.

Large Medical Manufacturer Needed a More Agile Multicloud, Multi-Underlay Networking Solution. Shifting to a more aggressive approach to IT, Alkira helped the network team serve both more conservative IT operational needs and leading-edge digital transformation on the product side.

Financial Services Firm Unifies Cloud Networks and SD-WAN, Becomes Even More Agile. This leading-edge firm, always at the forefront in deploying technology that allows associates to work anywhere, as securely as possible, as fast as possible, wanted technology to help it interconnect all its cloud environments and its SD-WAN. Alkira fit right in.

Large Software and Services Company Uses Alkira to Bring Order, Reliability, Security to Chaotic Cloud Presence. This conservative software and data services company needed to clean up after ten years of unstructured, uncontrolled transition to cloud on the service development side. Alkira became a central pillar of the new architecture.

Financial Telecoms Company Makes the Move to Cloud with Alkira. Serving parts of the financial services industry that are very conservative technologically, this technologically moderate company was late to the cloud. Alkira made the transition fast and smooth.

Large Manufacturer Needed to Keep in Touch with Products, Improve Cloud Reliability, and Ease Multinational Operations and Big Acquisition. The company keeps in touch with the equipment it makes and sells, to maintain software and collect operational data. In 2019, it was still setting all that up themselves. Alkira said “We can do that!” so it left DIY behind.

Very Large Financial Services Company Speeds and Simplifies Multicloud Networking. This multinational financial services firm needed a solution for the many challenges of networking across large numbers of cloud environments hosted in multiple cloud providers, in multiple regions in each. Alkira was its first choice.

Large Software Company Improves Cloud Operations and Eases Acquisitions. Accustomed to growing through regular acquisitions, and, after seven years of making multiple cloud versions of on-premises networking work for its sprawling cloud estate, this large software company set out to make both its cloud presence and its acquisitions process more manageable.

Large Telecommunications Company Needed More Capable Multicloud Routing Solution Than the Cloud Platforms Could Provide. Always pushing the boundaries to stay ahead of its competitors, this voice and text services company got into AWS early and waited for it to add the features they needed. When it couldn't wait any more, it found Alkira to fill the gaps.

Small Biotech Company Wanted to Drop Net Hubs in Colo, Switched to Cloud Model with Alkira. The company delivers services to customers from the cloud and needs to connect scattered labs, offices, data centers, and partners to their clouds. Alkira allows them to do this while keeping IT lean.

10.2 Very Large Software Company Needed a New Data Center Up Fast—Alkira Let Them Do It, and Better Place Workloads in the Bargain

A hasty exit from a hostile country and the need for a new data center fast drove this company off its old multicloud network solution and onto Alkira.

The company provided US services out of two US data centers, but needed to expand and create a distributed architecture to serve other data centers elsewhere. It also had operations in various cloud regions around the world. Its incumbent multicloud networking solution was too complex and too expensive to serve, and did not make it easy to integrate with a changing and expanding stack of other network vendors and services.

Staff	Large (2500 to 25,000)
Revenue	Very Large (More than $10B)
Culture	Leading Edge/ Bleeding Edge

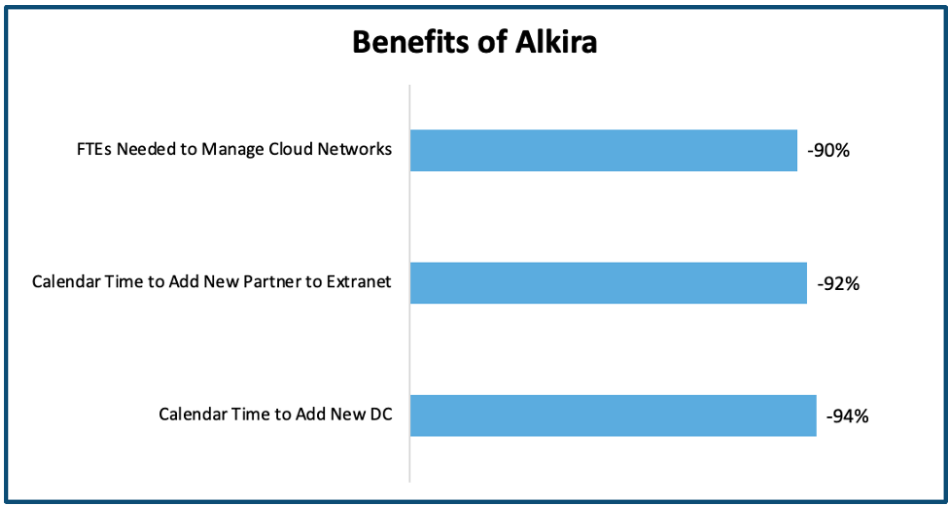
> ***"I just need one engineer to manage the world. Otherwise, 10 engineers."***
> *Principal Network Architect*

The network staff found what they needed in Alkira. It is vendor-agnostic, allowing them to choose the rest of the security and network stack freely.

And, they can see more now than ever before about the true costs of running a workload in a given cloud, because Alkira's cloud-modeled service exposes all those costs for inclusion in a chargeback or showback model. With that information it is possible to power an enterprise workload placement policy that takes platform-specific costs for everything from compute to throughput and performance factors into account. "You can't do this anywhere else," says the Principal Network Architect.

90% less network engineer time needed

In 2022 the company found itself needing to spin up a new data center to enable their exit from a country. The logistics around getting firewalls and other network infrastructure shipped was terrible—a year, two years lead time—but the network team had only a few months to create their solution. So they spun it up in colocation, and with Alkira as the nerve center for communications in and out: routing, DNS, DHCP, firewall, etc. They got the infrastructure stood up in a month.



10.3 Large Healthcare Provider Looks to Alkira to Manage Inter-region Connectivity and Simplify Multicloud Deployment

The company had scores of apps deployed via hundreds of cloud environments in a single cloud region. With Alkira, it was able to expand to a second region to improve performance and reliability, and ramp up app deployments.

In an environment encompassing several scores of applications, each distributed across three or four associated AWS VPCs or Azure Vnets, managing connectivity to and among those environments was difficult. When the network engineer that had managed the buildup was promoted, he saw that the approach was not scalable and brought in Alkira. Doing so, the team was able to avoid the four new hires that would have been required following their old, highly manual approach.

Staff	Very Large (More than 25,000)
Revenue	Large ($1B to $10B)
Culture	Aggressive

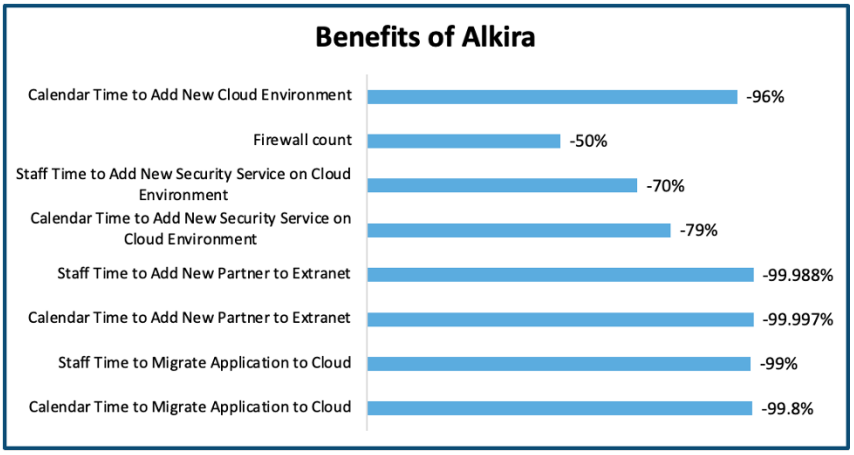
> ***"One is what we have. We NEEDED more than one prior to Alkira. Now with Alkira, one is more than sufficient."***
>
> *Associate Director, Network Security Engineering, on how many FTEs are needed to manage cloud-related firewalls*

Alkira also gave the team significant acceleration and simplification on firewall management. Pre-Alkira, they had lots of firewalls to manage and lots of rule changes to handle adding new applications. Post Alkira, they had fewer rule changes due to the simplified structure, and no firewall platform management since Alkira provides firewall as a service. Moreover, the days of forced over-provisioning of firewalls are over; they instead use autoscaling on the firewall service to deal with shifts up (and down) in demand.

300% increase in number of cloud environments, enabled by Alkira

Integrating Alkira into the devops pipelines for new application development has also helped drive cloud application deployment times down by 99% or more.

Alkira has also, for the first time, made it possible for the company to establish defined-trust extranet connections with partners. "It wasn't doable before. We had no process or standards to do this by," notes the Associate Director, Network Security Engineering.



10.4 Global Investment Institution Simplifies Cloud Networking, Speeds App Migrations

Because the way it was shifting to a cloud-first model for applications and data, doing things the way it had been was too complex, and too on-premises oriented, to be sustainable over time. Alkira provided the key to enabling a cloud-centric model.

Staff	Midsize (250 to 2500)
Revenue	Large ($1B to $10B)
Culture	Moderate

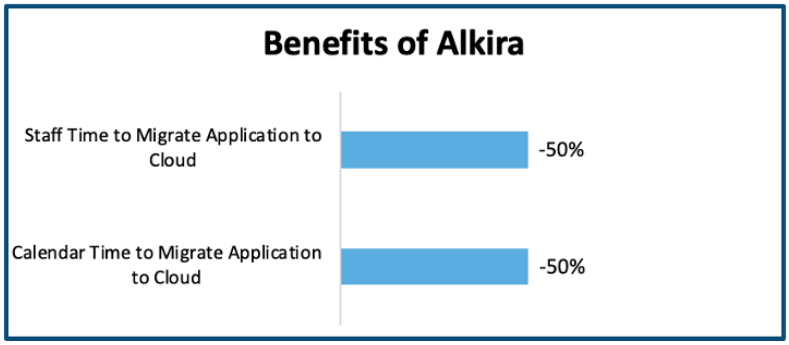
The network team gravitated to Alkira's network-as-a-service model because they are comfortable with the shared responsibility model it embodies. They felt that conventional providers had "no skin in the game" once you had spun up a VM for their virtual appliance. And, the simplicity of the approach met a key goal of the company overall: developer enablement with low overhead.

> ***"Where have we been able to save money? Telco. Got rid of some DCs, shifted to cloud, reduced spend with [our old telcos] and we're reinvesting a couple million dollars in savings into cloud."***
>
> *Network Architect*

The shift from an older, premises-centric paradigm to a cloud-centric approach allowed the company to take advantage of some underlying truths about the new Internet: that the hyperscalers are connected by links with enormous capacity, and that they are more resilient and better managed than the Internet generally. So, shifting the company's core traffic off MPLS and the public Internet onto this "super-Internet" amongst the hyperscalers both improved reliability and reduced costs—and was facilitated by Alkira.

88% fewer VPN tunnels per partner

Alkira has in fact become the spine of a global multi-cloud network, obviating the need to spend days and weeks making sure each new service added to the company environment was visible in all (and only) the parts of the network that needed it. With policies managed centrally and applied globally, and cloud network management uniformly focused on connecting new application environments to Alkira, deploying new applications is now both faster and less of a burden on network staff even while allowing for higher levels of control on routing and providing more and better visibility into traffic flows than was ever possible before.



10.5 Large Medical Manufacturer Needed a More Agile Multicloud, Multi-Underlay Networking Solution

Shifting to a more aggressive approach to IT, Alkira helped the network team serve both more conservative IT operational needs and leading-edge digital transformation on the product side.

This company's developers were leaning into digital transformation by building steadily more digital assets for physicians and patients to use, associated with both drugs and devices. This put steady pressure on the company to build product-specific production environments in multiple clouds. To meet the challenges of doing so, it deployed a multicloud networking solution—but not Alkira.

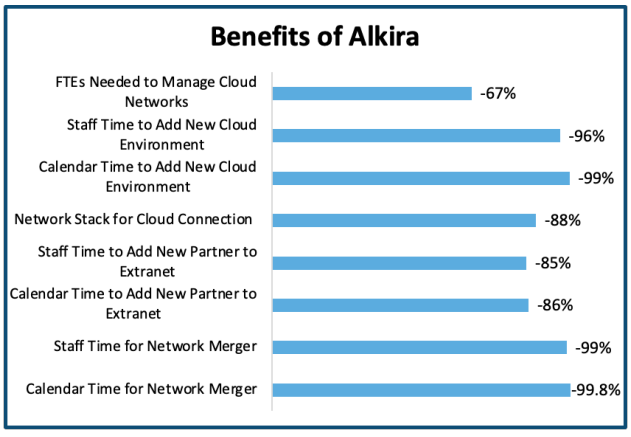
Staff	Very Large (More than 25,000)
Revenue	Large ($1B to $10B)
Culture	Moderate

> ***"Fundamentally different in Alkira: Alkira is a service, I don't have to implement any of the associated infrastructure, so we get a lot more agility. And all services are available everywhere. Innovation is about speed to market, and I get that this way: don't have to find and build a solution, can just deploy the service."***
>
> *Director, Network and Security*

At the same time, the company overall has a strong culture of controlling overhead costs, including IT. So when the multicloud network solution it had deployed proved to be both overly complex to work with and very expensive, the network team went looking for an alternative. Alkira, they found, would make managing networks among clouds and on-premises deployments simpler, more consistent, and easier—and would be less expensive than the incumbent. And, it would shift a lot of the burden the incumbent left on their service developers onto Alkira instead.

99.8% decrease in time to merge in acquired company's network

The team also found that Alkira fit neatly into their ongoing approach to multinational operations: localization of apps and services in nearby cloud regions, both to reduce latency and to promote segmentation for data sovereignty and compliance, and to limit various governments' access to data streams. "Alkira is our new solution to instantiating in a region—they are the backbone." Intra-region connectivity can leverage whatever network makes the most sense, be it best-effort Internet or MPLS or a mixture; Alkira doesn't care.



10.6 Financial Services Firm Unifies Cloud Networks and SD-WAN, Becomes Even More Agile

This leading-edge firm, always at the forefront in deploying technology that allows associates to work anywhere, as securely as possible, as fast as possible, wanted technology to help it interconnect all its cloud environments and its SD-WAN. Alkira fit right in.

Staff	Midsize (250 to 2500)
Revenue	Midsize ($300M to $1B)
Culture	Leading Edge/ Bleeding Edge

In addition to putting a consistent face on networking in every cloud environment it uses, making interconnections with the SD-WAN easier and more reliable, Alkira also removed single points of failure in those interconnects. The newfound simplicity of connecting new environments and modifying configurations allowed the network team to avoid three new hires they had planned. New visibility into traffic flows among cloud environments and the SD-WAN has added valuable new insight into the sources of any performance problems.

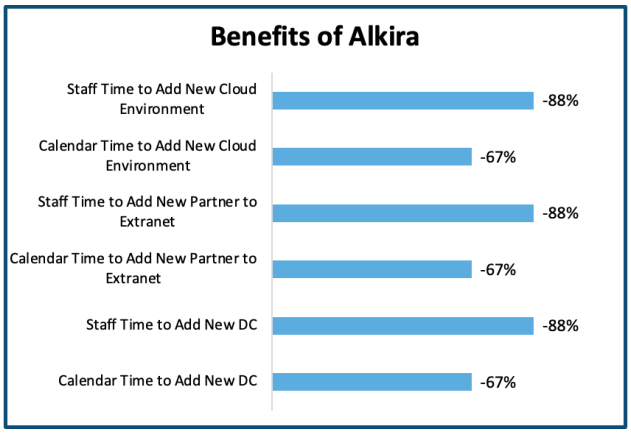
> ***"[In addition to being faster to connect to a partner company, it's] easy to connect without merging networks, keep the two separate until we can fully understand their security. We can control access in both directions with policies that provide us more control and protection. We don't know what we are getting ourselves into until we have a look."***
>
> *IT Infrastructure Manager*

Alkira also serves as the conduit from an Azure virtual desktop environment to the rest of the company's resources. Every associate, working anywhere in the world, reaches all platforms via Alkira.

The firm also leans on Alkira for easier, faster location adds and drops, both physical and cloud. Alkira has fit right into the company's "MPLS never" SD-WAN approach, both providing a backbone (as for the Azure virtual desktop traffic) and improving use of cloud platform backbones generally.

88% reduction in time to add a new extranet partner

For its extranet connections to partners, and its regular mergers and acquisitions, using Alkira accelerates the details. It shaves two-thirds off the calendar time needed to integrate a new partner, and similarly speeds up assimilation of an acquired company.



10.7 Large Software and Services Company Uses Alkira to Bring Order, Reliability, Security to Chaotic Cloud Presence

This conservative software and data services company needed to clean up after ten years of unstructured, uncontrolled transition to cloud on the service development side. Alkira became a central pillar of the new architecture.

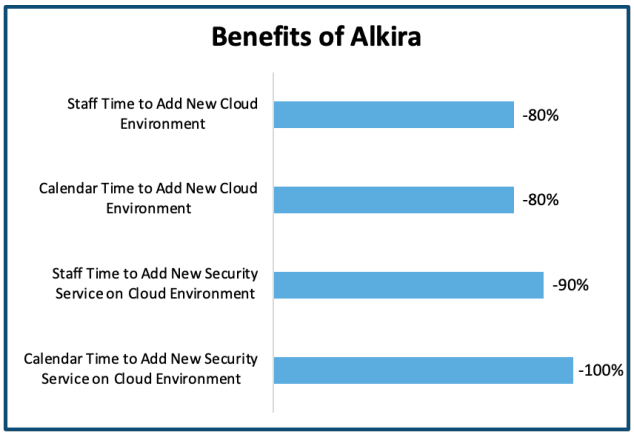
Staff	Large (2500 to 25,000)
Revenue	Large ($1B to $10B)
Culture	Conservative

Tasked by the CIO to bring order to a decade-deep mish-mash of cloud networking approaches, the Senior IT Architect brought in Alkira after a side-by-side comparison with a competitor. The other platform would require a very long process to design and deploy a proof-of-concept environment; with Alkira they could spin one up in a couple of hours. Doing so, they found that it "ticked all the boxes" and have since found it a fast, efficient way to bring feral development environments into the fold. It took only a couple of days for the network team to train up on Alkira operations, and now they can pull in development environments on AWS, Azure, or Google Cloud quickly and consistently. In the process, the company gains, for the first time, deep visibility into the nature and cost of the traffic flows associated with the development environments. And, given a single tool and approach to connecting cloud environments that is independent of the underlying cloud, the network team was able to avoid their planned hiring of two network specialists for each major cloud platform.

> ***"The size of our cloud environments at the time was on the order of 600 VPCs and Vnets across AWS, Azure, and Google, each with dedicated and unmanaged, unmonitored, uncontrolled Internet access. Zero security posture. None."***
> *Senior IT Architect*

6 new hires avoided

Adding Alkira has even taken some of the brakes off the development teams. Pre-Alkira, adding a new environment meant changing firewall rulesets to allow new IPsec tunnels. Such changes weren't allowed during the company's many "large change-freeze windows," blacking out as much as three months a year. With Alkira in place, no new rules are needed. All tunnels end at the same set of cloud exchange points, so those three months are no longer off limits.



10.8 Financial Telecoms Company Makes the Move to Cloud with Alkira

Serving parts of the financial services industry that are very conservative technologically, this technologically moderate company was late to the cloud. Alkira made the transition fast and smooth.

Staff	Midsize (250 to 2500)
Revenue	Midsize ($300M to $1B)
Culture	Moderate

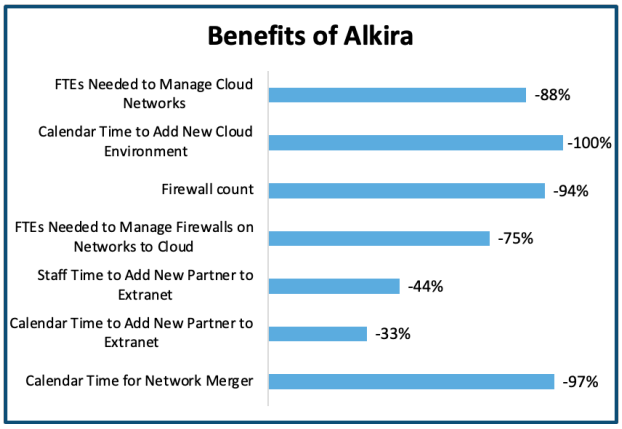
This service provider was preparing to make a big push into cloud in 2022. Partnering first with AWS, it made little progress: "We talked with AWS professional services—we worked with them for maybe six months to design and build out a cloud environment suitable for our services," notes Senior Director, Network Architecture. "They came up with a convoluted design that actually didn't work." When a new corporate parent pointed network leadership at Alkira, the team were able to talk through their needs with sales engineers and work up a functioning proof-of-concept deployment in just a few hours.

> ***"We set up a meeting with Alkira, sat with their sales engineers, and explained what we were trying to do, and after about an hour of us explaining what we needed we [together] created a POC that mirrored what AWS should have done for us—and stood that up in a morning. Design-to POC-setup in about 4 hours."***
>
> *Senior Director, Network Architecture*

Getting new leverage on WAN and cloud connectivity let the network team avoid eight new hires they had planned to deal with networking to and in the cloud. It even allowed them to reassign twelve existing staff to other projects as the network became simpler and more reliable.

At the same time, Alkira's ability to interconnect infrastructures, segment traffic, and handle large-scale NATting has allowed the company to assimilate the networks of acquired companies far more quickly. What took 80 to 120 days pre-Alkira, to accommodate long lead times for private circuit provisioning plus router and firewall configuration and testing, shrank to a mere three days, using IPsec to connect an acquired company's infrastructure to Alkira cloud exchange points.

- **0 cloud environments pre-Alkira**
- **100 cloud environments across seven regions with Alkira**



10.9 Large Manufacturer Needed to Keep in Touch With Products, Improve Cloud Reliability, and Ease Multinational Operations and Big Acquisition

The company keeps in touch with the equipment it makes and sells, to maintain software and collect operational data. In 2019, it was still setting that all up itself. "We can do that," Alkira told it, so it decided to bring Alkira in. The network team soon found that they could bring up secure, private connectivity to a new customer infrastructure in about one-fiftieth of the time it took them to do it on their own, an enormous acceleration of their full value proposition to customers.

Staff	Large (2500 to 25,000)
Revenue	Large ($1B to $10B)
Culture	Aggressive

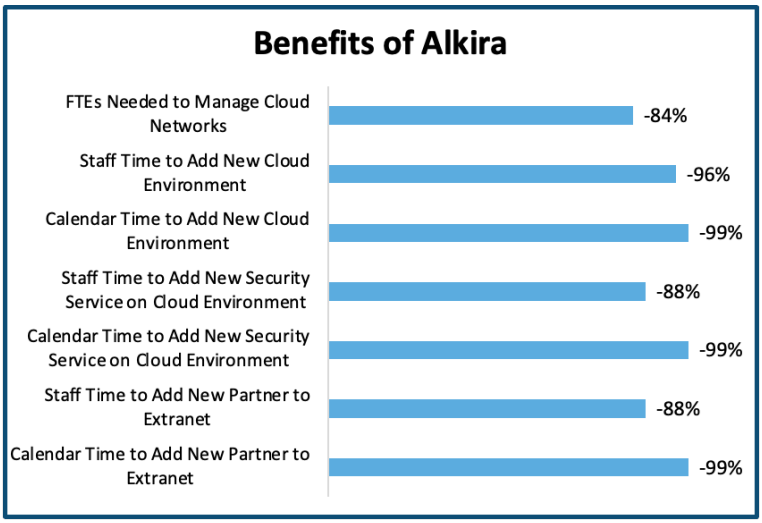
"The IT DIY approach was going to take 6 months to be secure and redundant and all. Alkira did it for us in 3 days, and at very low cost."
Network Architect

Shortly after, the networking team found itself wrestling with Microsoft Azure's networking functionality. "Azure kept changing architectures and updating software on gateways without telling us!" notes the Network Architect, "and on our third rebuild, after Azure yet again made a change, Alkira said 'We can do that.' " So instead of following their old plan—hiring a new full-time engineer to specialize in Azure networking—and also avoiding any costs or other negative impacts from interruptions to cloud services, the company deployed Alkira in Azure.

1650% more cloud apps "since Alkira makes it so easy"

A little further down the road, the ability to bring cloud connections together quickly became crucial in the wake of a massive acquisition. Linking the new infrastructure to the old through an Alkira gateway in Azure, with microsegmentation to maintain security during the transition, meant that "in 2 weeks, not 2 years…we were in business."

Alkira has also been instrumental in helping the company address various aspects of international operations, from making it simple to segment by region to improving connection reliability.



10.10 Very Large Financial Services Company Speeds and Simplifies Multicloud Networking

This multinational financial services firm needed a solution for the many challenges of networking across large numbers of cloud environments hosted in multiple cloud providers, in multiple regions in each. Alkira was its first choice.

Staff	Very Large (More than 25,000)
Revenue	Very Large (More than $10B)
Culture	Aggressive

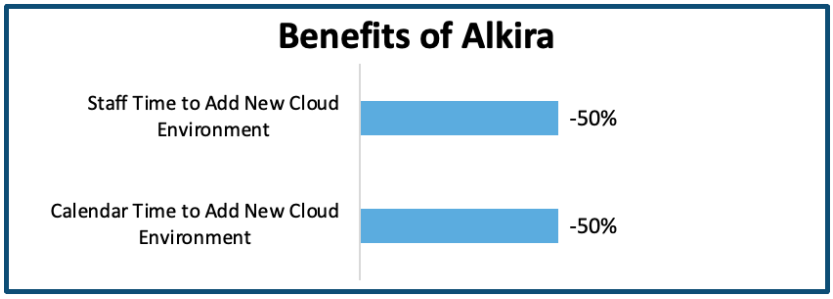
To facilitate an ongoing migration of applications and services from on-premises data centers to environments in multiple regions of AWS, Azure, and Google Cloud Services, the network team searched out a networking platform that could give them a unified networking environment and uniform policy enforcement across clouds. They opted to try Alkira and kicked off an 8-week proof- of-concept implementation, during which they were able not just to get through all their target use cases but also, with Alkira, put together a "road show" to get business teams' buy-in.

> ***"Love how attentive and responsive they are. How flexible and willing to spin up or enable new features in the environment. For example, we were moving to [a new firewall provider] and they didn't support it. They enabled features to make it available! They won by being responsive and for how agile they are."***
>
> *Global Telecommunications Lead*

Their first production use case was to provide for connections from each cloud provider to the others, with controls on those east/west flows. "Pre-Alkira, we had firewalls in every cloud and in every environment in every cloud. Alkira let us consolidate it all down into their communication exchange points and manage all the policies in one place," notes the Global Telecommunications Lead. Staff time and calendar time to spin up such connections decreased by 50%.

Alkira was soon also made part of the standard for on-premises connectivity to the clouds, and has become central to the assimilation of the networks of acquired companies by allowing large scale NATting to deal with IP range overlaps and enabling traffic segmentation by division and by environment within each division (i.e. production, dev, test, QA). Alkira is now considered a strategic platform and a strategic partner.

- **Number of cloud platforms: up 100%**
- **Number of regions: up 50%**
- **Number of cloud environments: up 200%**



10.11 Large Software Company Improves Cloud Operations and Eases Acquisitions

Accustomed to growing through regular acquisitions, and, after seven years of making multiple cloud versions of on-premises networking work for its sprawling cloud estate, this large software company set out to make both its cloud presence and its acquisitions process more manageable.

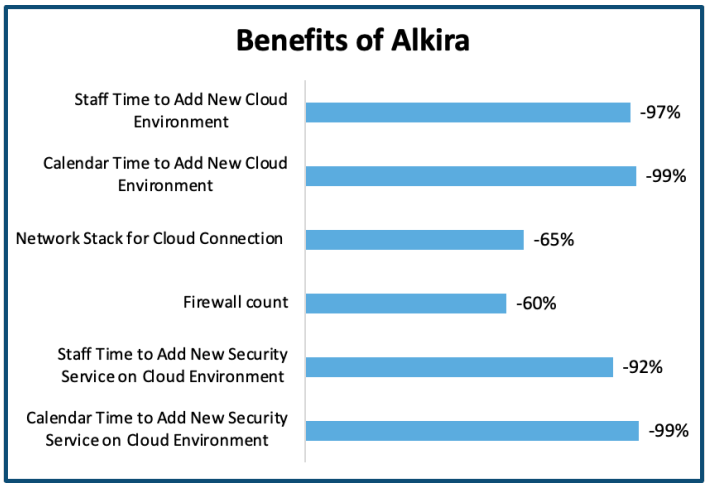
Staff	Large (2500 to 25,000)
Revenue	Large ($1B to $10B)
Culture	Leading Edge/ Bleeding Edge

Already spread across 11 cloud regions and 2 platforms, its "virtual version of on-prem was scaling poorly—a new Cisco HA pair in every region, and HA in Azure very different from HA in AWS," notes the Network Architect. "It was hard to stay expert in everything." The network team evaluated solutions post-Covid, and found Alkira "head and shoulders above the rest" for their needs. They replaced "tons of Cisco routers" and cloud-related firewalls with Alkira CXPs, and in addition to the savings on licensing and maintaining those (and providing the infrastructure for them in their data centers and IaaS instances), found that a lot of traffic fell off their WAN and shifted to CSP and Alkira backbones, allowing them to adjust their WAN link capacities as well.

"These costs never bubbled to the top, but looking across regions and accounts and VPCs and clouds...the combined correlated costs were way higher than we thought. This is what we were unable to see and would never be able to see without a different kind of solution."
Network Architect

In addition to bringing consistent management and policy enforcement across clouds, Alkira gave them new leverage on a constant challenge: onboarding acquired companies. With several acquisitions a year typical, the company still lacked a reliable, replicable way to assimilate a new, untrusted infrastructure. Each acquisition was a one-off, "a white board exercise, some easy, some not." Having each process be a one-off dragged out the process of fully integrating a new company and made it hard to maintain security. Alkira's ability to integrate separate cloud networks while providing flexible segmentation across them gave the network team a simple, consistent method for onboarding and merging in acquired infrastructures more securely and far more quickly. "Alkira will allow us to realize the full value of an acquisition much more quickly."

- **65% fewer routers for cloud**
- **60% fewer firewalls for cloud**



10.12 Large Telecommunications Company Needed More Capable Multicloud Routing Solution Than the Cloud Platforms Could Provide

Always pushing the boundaries to stay ahead of its competitors, this voice and text services company got into AWS early and waited for it to add the features they needed. When it couldn't wait any more, it found Alkira to fill the gaps.

Staff	Large (2500 to 25,000)
Revenue	Large ($1B to $10B)
Culture	Leading Edge/ Bleeding Edge

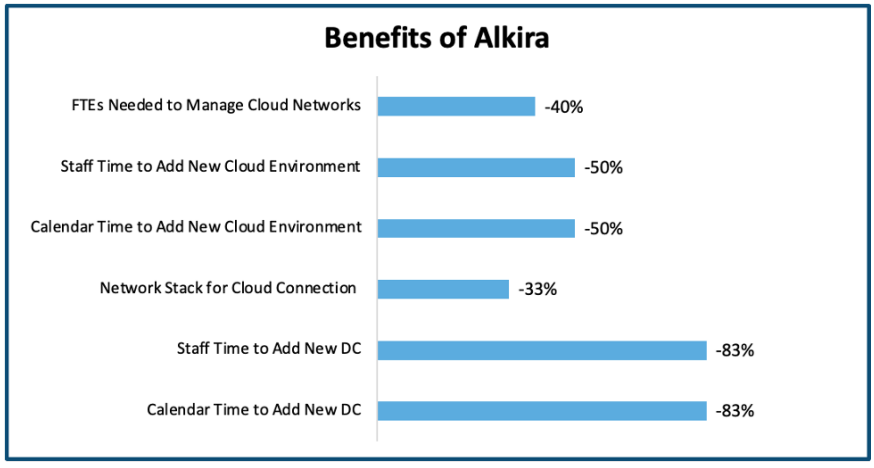
Sometimes Amazon "got there" in a timely fashion, as with Chime and voice connectors; sometimes not, as with the ability to route packets larger than 1500 bytes. Ultimately, the lack of features like that added up to a crucial functional barrier, such as the inability to provide 911 services using native AWS functionality.

> ***"How did we justify buying Alkira? Easy—if we didn't, it was going to break production."***
> *IT Platform Reliability & Operations Manager*

Searching for a solution to the networking deficits in AWS, the network team found Alkira able to fill the gaps and empower them to offer their full suite of services from the cloud. In addition to allowing them more control over things like packet sizes, Alkira is allowing them to route traffic with more control over paths and lower hop counts. It also allows them "to see the traffic flows a lot more easily than with the native cloud tools," notes the IT Platform Reliability & Operations Manager, "and we can do packet captures and different tests, and it is much simpler and more visible." And even though operations were already highly automated, adding Alkira allowed the team to cut the time to hook up a new environment in half.

200% more cloud regions connected with Alkira

Up next for the team: migrating all call center connectivity to Alkira, and then, leveraging the increased ability to use and interconnect environments in AWS and Azure, shutting down three more data centers.



10.13 Small Biotech Company Wanted to Drop Net Hubs in Colo, Switched to Cloud Model with Alkira

The company delivers services to customers from the cloud and needs to connect scattered labs, offices, data centers, and partners to its clouds. Alkira allows it to do this while keeping IT lean.

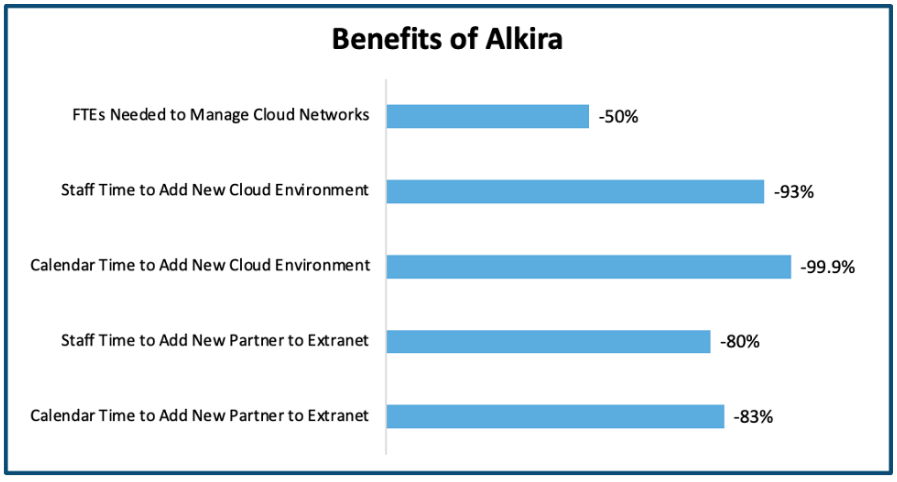
Staff	Midsize (250 to 2500)
Revenue	Small (Up to $300M)
Culture	Moderate

The company had a data center in colocation for non-cloud infrastructure, and a mix of Azure and AWS for cloud estate. The network staff brought Alkira to replace a legacy network architecture of colo-based regional hubs connecting sites to clouds. They wanted, instead, a flexible cloud-style model based on actual consumption, something that would provide direct access to clouds from every site and simplify connecting to partners and customers in an extranet. The alternative, as they saw it, was to directly utilize each cloud's native networking constructs, but the IT team felt that would not be possible without adding several new network engineers specializing in those platforms. "We are not a large IT organization, and want to stay lean," notes the Director of Networking. They went looking for solutions that embed the best practices, approaches, and behaviors specific to each cloud.

> ***"We did not have much in the way of WAN management tooling pre-Alkira. What visibility we have, we have because of Alkira – it filled a gap. We don't need to put [our monitoring tool] in the Alkira environment."***
> *Director of Networking*

98% reduction in number of WAN outages

They selected Alkira because it is consolidated, allows them to segment, inject and route, and add security services while looking the same on each platform. As a startup with a heavy focus on controlling costs because they were not yet profitable, they were able to bring Alkira on in a cost-neutral way, or even as cost-reducing when factoring in hires avoided by reallocating one network specialist to other projects.



11. Methodology

In April and May of 2024, Nemertes developed a customized set of hypotheses and questions focused on uncovering the business value and operational impact of Alkira's network infrastructure-as-a-service platform. We reviewed these hypotheses with Alkira, which provided Nemertes with the names of current, experienced customers to interview. Nemertes scheduled calls with and interviewed these customers in May through July of 2024. Nemertes senior analysts interviewed all participants, independently (no one from Alkira joined the calls), to gather detailed data on each organization's experience with Alkira's services. Nemertes analyzed the data collectively across organizations and for each one separately. We have kept the names of the staff interviewed and their organizations confidential to protect their competitive information.

About Nemertes: Nemertes is a research-based advisory and consulting firm that analyzes the business value of emerging technologies. Since 2002, we have provided strategic, client-centric recommendations based on data-driven operational and business metrics to help organizations deliver successful technology transformation to employees and customers. Simply put: Nemertes' better data helps clients make better decisions.