

Cloud Acceleration – with Governance – Helps Indeed Achieve Mission

Keeping a seat at the table for the job seeker

There's an orange chair in Indeed offices around the world. Why a chair? It's there to reinforce Indeed's focus on the job seeker and it's easy to understand its meaning when you consider their hiring principles: Compassionate, Human, Authentic, Inclusive, and Responsible & respectful.

Indeed's focus is on helping people get jobs. As the #1 job site in the world, Indeed gets over 250 million unique visitors every month. Beyond job postings, the site hosts over 300 million company ratings and reviews and more than 700 million salary entries. More than 10,000 employees across the globe support the Indeed mission, contributing to the site and to other Indeed initiatives such as their Lead with Indeed podcast.

Digital transformation — specifically, the adoption of public cloud offerings — has become a key enabler of Indeed's efforts.

The cloud at Indeed

Indeed has partnered with Amazon Web Services (AWS) to migrate more than 30 petabytes of data to AWS, moving its customer-facing products, business-critical workloads, and legacy databases to the cloud provider. Indeed expects to significantly reduce its global data center footprint, while streamlining overall IT operations. By giving developers access to the wide range of AWS services, Indeed is empowering team members to build powerful and efficient tools to further the mission of helping people get jobs.

Akin Akinboro has a key role in Indeed's cloud transformation as the head of the Cloud Foundation Group (CFG), a 36-member team of professionals responsible for global infrastructure on premise and in the cloud. When Akin first joined Indeed a few years ago, cloud was the exception. Today, cloud is the choice and the CFG provides the infrastructure that enables other platform teams to deliver recruiting solutions in the cloud.

While the CFG team supports both technical and business users, there's a particular focus on the developer experience at Indeed. This ties back to the Indeed mantra to focus on your customers (internal and external). As a result, there's equal effort given to all aspects of cloud use and optimization: getting access, making it easy to get work done in a cloud account, ensuring compliance, and monitoring and optimizing for cost.



Looking for cost control and finding much more

As cloud use began to grow at Indeed, Akin saw the writing on the wall. "I knew we would see ongoing growth. Our team was relatively small, so we began to wonder: how do we automate some of our efforts?"

The first stop was AWS' flagship industry conference, AWS re:Invent, and he was on a mission to find help with a particular issue from amongst hundreds of AWS partners. "I wanted a company interested in cost management because you can sell your first child when it comes to spending money in the cloud if you don't have a cost control mechanism. It was becoming cumbersome to manually try to control costs."

As Akin hunted on the tradeshow floor, his focus was on one pillar of cloud governance — financial management. The other two pillars — account automation and orchestration and compliance — were not top of mind. "Initially, we didn't care about all three pillars of cloud governance, but the other pillars — and their value — became quite clear when we looked at Kion." (At the time, Kion was branded as cloudtamer.io.)

While the team considered the 'build vs buy' question and evaluated building a solution made up of native services, he saw an advantage that Kion had over native services delivered by the cloud providers.

"Native cloud services are like a hardware store: you can get tools, but you still have to go build it. Getting Kion is like getting a finished shed that's awaiting your foundation." You can manually stitch together native services, but the team saw the ability to fast track Indeed's efforts by combining Kion and their own internal policies.

"Kion shines at cloud governance by providing solutions across all pillars of governance, and they do this from cloud account setup to deprovisioning."

Beyond complete governance support — including the all-important ability to enforce spend limits — Akin initially noted two aspects of Kion that made the buy choice easy for Indeed:

- Kion is not a SaaS solution but, rather, installs inside of the customer's cloud environment. "This model provides more control for the customer," said Akin.
- Kion models and depicts your cloud footprint via an organization chart layout, allowing teams to see their complete cloud environment in one place. "This resonated with us as a way to visualize our cloud. It was something the team hadn't seen before, and it fits in with our culture of transparency," he noted.

Bringing cloud governance to Indeed

After a successful proof of concept with the Kion team and the Indeed Financial Planning and Analysis (FP&A), Site Reliability Engineering (SRE), and the CFG, it was full speed ahead on governance.



Kion is a cloud enablement solution that addresses all the pillars of governance and management: automation and orchestration, financial management, and continuous compliance. Kion helps organizations manage and control their cloud environment, ensuring teams get the business value of the cloud without sacrificing security and compliance or incurring substantial cloud cost overruns.

Kion is currently being used by developers, technical leads, and the FP&A, product, and cost management team members. Indeed uses Kion to set up, provision, and manage all new and existing AWS accounts. With Kion, Indeed ensures core infrastructure is enabled and critical services are available within each account. End user access is provisioned under the appropriate roles and all access is mapped back to Indeed's single-sign on and identity solutions.

Indeed has been able to scale up dramatically to meet organization needs — from an early footprint of dozens of AWS accounts to hundreds of accounts. Their approach is based on need and scope — Starter, Medium, and Large packages — as the team automatically provisions an initial setup with a budget based on needs. Necessary approvals on accounts are paired with a consistent check-in process to reassess budgets as cloud adoption grows.

Beyond initial efforts around account automation and orchestration, Indeed is using Kion to:

- **Enforce compliance to both external and internal rules and regulations via Kion's unique Cloud Rules.** Cloud Rules are set once within the organization hierarchy and can then be inherited to automate and enforce boundary setting. At Indeed, these Cloud Rules bundle together AWS Service Control Policies with baseline infrastructure and settings to enable services, configure integrations, and deploy guardrails such as public s3 blocks.
- **Manage budgets.** In addition to budget enforcement actions to alert and freeze spend if needed, Kion gives cloud account budget owners visibility into their current spend, and helps them perform forecasting and cost optimization.

Ensuring success with process and people

Technology is just one leg of the 3-legged stool of digital transformation. Process and people are the other two keys to success. Indeed documents processes and communicates with their cloud users via a widely popular wiki that includes 300+ pages of content and 32K+ views across those pages.

A shared Slack channel is also available for resource sharing and assistance with questions. Regular asynchronous video training helps users understand the role of cloud governance and shows where Kion fits in Indeed's governance model.

Indeed hosted the first in a planned series of AWSome Days — a two-day virtual event that is supported by both AWS and other vendors supporting cloud use at Indeed. The initial event brought nearly 1,000 registrants to participate in 100+ training hours from Indeed and these vendors. Feedback to this immersion was excellent, with 80+% saying they were very satisfied or higher with the program.



Indeed Goals

- **Speed account setup and provisioning**
- **Get insight into account use across the organization**
- **Deliver cost control and cost transparency**
- **Provide forecasting abilities to cloud users.**

Basically, lay the foundation for cloud use at scale across Indeed, using Kion as a key enabler on top of the foundation.

"Without a great team, you can't succeed in these types of transformation efforts. Our transformation is succeeding because of the team members in our Cloud Foundation Group," said Akin.

Seeing the results of complete cloud governance

Akin notes several benefits from using Kion at Indeed. "We've unlocked additional speed and agility to meet the demand for cloud access across the organization. Moving fast is critical today. Responding to this demand is not a nice-to-have – when the cloud is what you need to do your job, speed directly impacts the bottom line," said Akin. "There's another benefit that I think folks don't often realize: giving control and confidence to your users. Control is important because the only way to really scale successfully and get the benefits that cloud vendors promise is through controlled decentralization. You have to allow folks to get work done, with the checks in place to ensure compliance with rules and policies. Confidence is important for the same reason – don't worry that you may have set up something that bypasses a rule because we've taken care of that for you. Just focus on the work."

Integrating Kion with Jira has allowed Indeed to move from over a week to get an account to a self-service, on-demand model with instant creation of a new AWS account, automated deployment of guardrails and actions, and end user access provisioning.

"We responded to a 150+% increase in new accounts requests within two quarters. There's no way under our previous model that we could have done this. Using Kion, aligning internally on processes, and collaboration between my team and the business were the keys to making this happen," Akin said.

"We want to introduce as much automation as possible to help our users move quickly. The Cloud Foundation Group must be an enabler across Indeed to help everyone focus on impactful tasks that deliver on our mission of helping people get jobs. That's our goal – not spending time and effort on cloud governance and management that's baked into Kion."



Since Kion was introduced,

Indeed has seen a 10x reduction in provisioning time through standardization and automation – all while seeing substantial growth in cloud access requests. In addition, Indeed is able to support provisioning of personal sandbox accounts with control and agility, a new capability for the team.



Three Pieces of Advice from Akin

"You're only going to win if you start decentralizing stuff."

"Kion is the airplane. At Indeed, the Cloud Foundation Group was key as they built the airport, runway, and the infrastructure that leverages this airplane. Plan for cloud governance early in your journey so you have time to build infrastructure and then operationalize your governance platform and onboard your users."

"If you care about cloud governance and all three pillars of governance, Kion is the tool you should check out."

Building on a strong cloud foundation

Two near-term efforts for Akin's team are:

- Pairing the Kion compliance score feature with financial spend data and cost savings information to generate an account-level report card that can be given to leaders and account owners.
- Using Kion's savings opportunities feature to optimize spend by identifying cloud resources that could be rightsized and decommissioned.

"Our ultimate vision is to help our users go from idea to building in 10 minutes or less. Kion will be a key piece to help us get there," Akin said. "I don't recommend product investments; I recommend people investments. Working with the Kion team has been a true partnership."