ACCEDIAN

Solution Brief

Giving Control Back to CIOs

For Successful Digital Transformation Business Outcomes

Every business problem that looks to technology for an answer in the modern era falls under the umbrella of digital transformation. This leaves us with both a diverse and large group of projects, yet consensus research shows that approximately 66% of CIOs fail to deliver on their digital transformation investments.

What causes digital transformation initiatives to fall short of their promised outcomes? It certainly isn't investment as digital transformation budgets are only growing. In fact, IDC predicts that by 2023, digital transformation spending will grow to more than 53% of all IT investment, up from 36% in 2019.

Unfortunately, a good percentage of the dramatic increase in IT spend is due to the inflation of non-optimized IT infrastructure evolving over years of overprovisioning. Public cloud spending is ballooning, telecommunications services spending is out of control, but companies continue to prioritize and fund digital initiatives without evidence-based ROI.

The ability to measure and assure hybrid IT environments for applications that have to be developed, published, and supported on a global scale, traversing cross-orchestrated, cross-domain federated networks, is critical to the success of digital transformation initiatives.

Why are digital transformation projects failing to deliver?

As the figure below illustrates, today's application delivery is complex, multi-tiered, and more network dependent than ever. This is largely due to the distribution of cloud compute processing (core, edge), the network dependencies of these cloud and hybrid IT environments, and the rapidly emerging world of IoT devices that not only exist in industrial control devices, but in many other aspects of consumers' daily lives: the clothes we wear, the vehicles we drive, the intelligent traffic management platforms that guide us in traffic, the supply chain equipment that handles the materials we use, and the platforms that deliver those goods, among others.

Legacy Single App
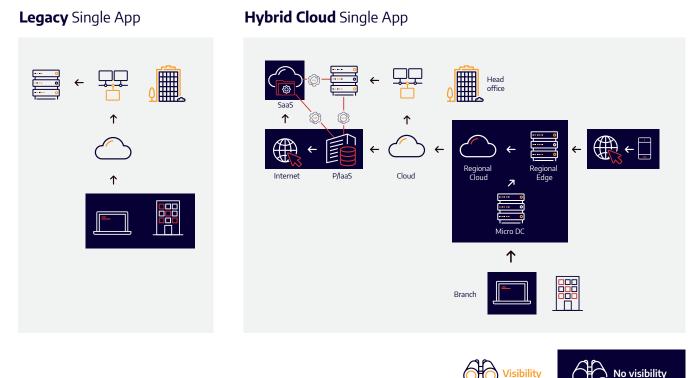

Hybrid Cloud Single App

Figure 1: The application delivery chain is changing and increasing in complexity

Reducing digital transformation risk relies on making evidence-based decisions, as opposed to blindly allocating resources for the resolution of application performance degradations. CIOs will regain control through monitoring, measuring, proving, and thereby assuring that applications are performant in a structured manner.

Regaining control and delivering on digital transformation goals

The intended outcomes of digital transformation will not be realized until CIOs begin to think differently about performance management. Today, many think of performance management as something of an insurance policy—paying money you don't really want to pay in order to minimize the risks of something you really don't want to happen.

Instead, performance management of application delivery should be viewed as a way to accelerate and assure revenue. Because digital transformation by nature involves cloud, and now multi- and hybrid-cloud, architectures, the ability to control the successful outcome of digital transformation is directly proportional to one's ability to measure application delivery across hybrid IT architecture domains at scale and with precise accuracy.

5G will usher in and enable an entirely new class of applications that become mission-critical for sectors like autonomous transportation, aerospace, defense and weapons, medical robotics, and industrial IoT, as an example. These applications are not just about entertainment or luxury; they will be essential for businesses to survive and thrive over the next decade.

This drives two very important dynamics:

1. The ability to accelerate the deployment of applications, and for those who sell infrastructure and software, to accelerate their revenue

2. The birth of tiered service offerings around quality of experience (QoE); for example, a business service will thrive as QoE can in fact be measured and thus have a service level agreement (SLA) attached to it

Bringing clarity to the challenges consistently derailing digital transformation projects

Today, organizations often have a lack of clarity around:

- Monetization of IT investments
- Which networks are overprovisioned and which can be turned off without impacting user and customer experience
- How to optimize hybrid and multi-cloud investments
- Which IT investments can be shuttered
- Which business applications actually deliver on target ROI, which need to be optimized, and which can be decommissioned

Accedian provides CIOs with the ability to reduce risk and accelerate ROI on their digital transformation investments through detailed visibility, or clarity, in these areas:

- Application pre-deployment (migration or repatriation) baselining
- Post-deployment continuous validation of application performance
- Rapid triage of performance degradation root cause
- Independent verification of employee and customer experience
- Optimization of application delivery across hybrid infrastructures
- SLA verification for cloud connections
- Understanding on what drives bandwidth billed by cloud providers
- Recovery of lost productivity from historical overprovisioning

Not only is it important that application delivery be accomplished in a performant manner, but as we look at the emerging world of 5G and the types of applications that will enable new experiences and business models, it will be essential that the delivery of data via these applications also offers a forensically auditable trail. The trail of application protocal transactions that attests to and verifies that the delivery and exchange of high-value application data took place between the intended parties is critical for industries such as insurance, reinsurance, industrial IoT, transportation, and telecommunications supply chain stakeholders. Thus, performance management is not just about performance, but also about revenue assurance and risk mitigation of expected returns.

Performance management is a digital CIOs revenue assurance

Imagine autonomous transportation, delivery of goods via a supply chain, or industrial or medical robotics: all of these areas will be bombarded with a massive amount of IoT sensors and devices, and all will leverage numerous applications to execute business and industrial operations.

If something goes wrong, who is at fault? Who bears the risk? When does the transfer of risk take place?

Whether machine-to-machine, human-to-machine, or machine-to-infrastructure, the answer to these questions will be required by governments, as well as risk and compliance organizations in order to understand what data was delivered or not delivered to its intended destination, and what role these applications had.

Analogous to how blockchain provides auditable verification of financial or other high value transactions, Accedian's Skylight offers forensically-auditable verification of the data delivery chain for network-based application protocol transactions.