Insight Into Everything: The Criticality of a Business Assurance Platform for Digital Transformation

EMA ™
IT & DATA MANAGEMENT RESEARCH,
INDUSTRY ANALYSIS & CONSULTING

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Executive Summary

Digital transformation isn't about enterprises finding a way to replicate the success of disruptive startups. In a rapidly changing economy, innovation trumps imitation. Enterprises that have been disrupted should move past the upstarts by innovating new business models. These new business models will require continuous development of new applications and services and a digital infrastructure that is agile enough to support them.

As enterprises embark on a digital transformation journey, they need a business assurance platform that provides IT with insight into the current state of their infrastructure, helps them plan their transformation journey, and gives them the analytics and intelligence they need to understand the health and performance of the new applications they roll out to support their transformation efforts.

Digital Transformation Cannot Be Ignored

Enterprises are dealing with a new set of rules in today's business environment. Many customers expect fast, ubiquitous, and personalized access to data, products, and services. Rather than call a taxi, they want a smartphone app that provides instant insight into the nearest and most affordable ride. Instead of visiting a bank branch, they want to deposit a check by snapping a photograph of it with their mobile device. Enterprises need to deliver on these requirements with agility and precision, which requires rapid innovation of business models that can be delivered to the market quickly, cost-effectively, and reliably.

However, digital transformation isn't about established enterprises emulating the business models of digital disrupters. The hospitality industry, for instance, shouldn't try to replicate Airbnb, and the transportation industry shouldn't try to replicate Uber. Such tactical responses are signs of companies that are following, rather than innovating. Instead, companies should look beyond these competitors to innovate new business models that force companies like Uber and Airbnb to respond to them. For instance, General Motors has partnered with Uber competitor Lyft. The two companies are not just trying to compete head to head with Uber but rather are co-developing self-driving cars that could disrupt the transportation industry more fundamentally than Uber has. In a hospitality market disrupted by Airbnb, Marriott International isn't pitting its hotel rooms against the houses and apartments that Airbnb brokers. Instead, it is investing in social media, digital content, and employee collaboration technology to transform its customer experience and marketing operations.

These innovations are driven by technology, which means that successful digital transformation is contingent upon high-performing and highly available digital infrastructure, especially networks and application infrastructure. A long and ongoing journey, this transformation requires a business assurance platform with the deep visibility and analytics that allow an enterprise to know where it is in its digital transformation journey and where it is going.

The Digital Transformation Journey

There is no generic blueprint for digital transformation. However, ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) research has found that the most successful digital transformation campaigns are characterized by a partnership between IT and the business.[1]

Enterprises need to innovate with new business models that are based on elasticity, rapid scalability, and low initial investments. But they must conduct this innovation in partnership with IT, since these new business models require new applications. And these applications, in turn, require supporting infrastructure. With digital transformation, enterprises must increase their velocity not just in business model innovation and application and digital services development, but also in operations as the operations organization will support these applications and services in production. IT must be prepared to enable a variety of technologies that support transformation, including cloud/SaaS, big data analytics, unified communications and collaboration (UC&C), the Internet of Things, mobility, and social media.

EMA's digital transformation research has determined that IT organizations need to be more dynamic, transparent, and service aware during their transformation journeys. They must be more responsive to changing business needs. They must be able to demonstrate to the business how they are delivering value. They must also have a deep understanding of, and visibility into business and customer needs.

A key starting point is a "GPS" system that provides a global view of digital assets, more specifically a business assurance platform that gives IT insight into everything. By collecting and analyzing a broad set of data from infrastructure, the business assurance platform should be able to understand the current state of a company's digital assets and how those assets will behave and perform when tasked with supporting new digital business models and their enabling technologies. Finally, such a platform must offer IT a roadmap on how to successfully move from its current state to its digitally transformed future state.

Digital Transformation Requires a Business Assurance Platform That Provides Insight Into Everything

Digital transformation is characterized by high-velocity change in complex environments where legacy infrastructure and new infrastructure combine to support continuously changing business models. This transformation might also occur at a large scale, including global organizations with tens of thousands of employees, hundreds of sites, and thousands of devices. Without a business assurance platform that can provide insight into all these variables, chaos can reign.

A digital business assurance platform should be able to make sense of this complexity, first by using big data techniques to passively collect, organize, analyze, and visualize all data crossing the network within the organization's digital infrastructure. The platform must be able to scale its data collection and analysis to support digital transformation regardless of the size of the company and its infrastructure. The business assurance platform should understand the service interdependencies represented in the data it collects and analyzes and use that intelligence to create structured metadata. This metadata should then be presented in a customizable business intelligence environment that both IT operations and business stakeholders can use to understand the health and performance of digital services. This platform should also extend the analysis of metadata to provide if/then analysis for new digital services as they are introduced.

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[1] EMA, "Digital and IT Transformation: A Global View of Trends and Requirements," September 2015.

Such an assurance platform serves three critical functions in digital transformation. It provides an organization with a current state audit of the applications and infrastructure that support today's business models. It supports the engineering and capacity planning processes that IT will execute to support the transformation journey. Finally, as enterprises roll new applications into production to support new business models, a digital business assurance platform provides visibility into the health and performance of those applications.

According to EMA research, organizations that are pursuing digital and IT transformation projects have identified two top functional technology priorities for the next 12 months. First, 51% have identified that they must improve customer and user experience, and 45% said they need to improve application performance management. As mentioned before, a business assurance platform can support both of these priorities by providing visibility into the health and performance of new digital business applications.

Thirty-two percent (32%) of transforming enterprises said they are currently partnering with IT operations management software vendors to support their transformation initiatives. EMA also asked these enterprises to identify the key external partner that would be most relevant to supporting their transformation initiatives going forward. "IT operations management software vendors" was the number two response, trailing only "application management software vendors." Finally, EMA research found that "service performance and availability-related metrics" (31%) was the most important operational metric enterprises were using to measure digital transformation success. IT operations management vendors are the leading providers of digital business assurance platforms, and they typically provide deep visibility into service performance and availability-related metrics.

This research indicates that a business assurance platform with the analytical capabilities to track user experience, application performance, and service dependencies will lower the risks of an organization's digital transformation journey. This platform will also help the organization understand its progress.

Big Data and Business Intelligence: Critical Enablers of Digital Business Assurance

The business assurance platform for a digital transformation initiative must have the big data ability to collect, organize, analyze, and visualize large volumes of traffic data flowing over the network at high velocity and to correlate it with secondary data sources, such as NetFlow, SNMP, log files, and synthetic transactions, to provide an accurate, real-time view of the health and performance of digital services.

The platform must also leverage business intelligence technology to present this analysis with service contexts, beginning with a dashboard and reporting interface that can inform IT and business operations of the current state of the digital enterprise, including network utilization, application usage, and service dependencies. It should also enable the digital transformation team to quickly detect and troubleshoot service delivery anomalies.

The business intelligence console of the service assurance platform should offer a holistic view of the entire physical and virtual service delivery infrastructure with a dependency map that visualizes all the interdependencies among service elements and the client communities that consume these digital services. This console should allow IT organizations to track their progress as applications for new business models roll out.

Assuring Digital Transformation in the Financial Services and Health Care Industries

Regardless of the industry in which it competes, an enterprise will depend on its business assurance platform to successfully navigate digital transformation. Two industries in particular—financial services and health care—have very precisely defined requirements for digital business assurance.

Given that consumers expect instant access to highly available and high-performing digital financial services, financial companies need business intelligence consoles that provide end-to-end operational insight into how consumers are experiencing digital channels and services. These organizations must be able to assure user experience via real-time, actionable business intelligence while simultaneously enabling new technologies that support their digital transformation, including IoT and artificial intelligence.

Financial companies also need to support other initiatives with the business intelligence capabilities of their digital business assurance platform, such as data mining, online analytical processing, querying, and reporting. This will require the conversion of large volumes of unstructured information that is continuously monitored and analyzed in real time.

Like the financial services industry, the health care industry is transforming to serve consumers, in this case re-aligning services and operations to support patients who have become proactive, value-seeking consumers who demand instant, trouble-free health care information, day or night.

The health care industry also faces two unique challenges. Many of its services are mission critical, and the infrastructure team is tasked with monitoring industry-specific standard protocol transactions, such as EHR HL-7, and compliance with regulatory requirements such as HIPPA. Scalability, too, will be a growing concern as health care organizations seek to leverage IoT, mobility, and big data analytics.

Health care organizations can address these challenges with business assurance platforms that have big data capabilities, which can collect, normalize and analyze traffic data and secondary data sources including network flows, logs, and synthetic transactions. This analysis can enable IT operations to assure patient experience while also monitoring the unique requirements of a health care digital transformation initiative.

A key component of the business assurance process is that it must process large volumes of structured metadata for real-time as well as back-in-time analytics purposes. This information is vital in complying with health care mandates such as the Affordable Care Act and HIPPA regulations.

It's a challenge to conquer the inherent chaos brought about by digital transformation within the service-delivery chain of health care organizations, financial services companies, and enterprises in many other industries. Full visibility across all applications, networks, service enablers, servers, and databases is only becoming more important.

EMA Perspective

Digital transformation is about innovating and enabling new business models in almost real time. EMA research has found that the most successful transformation initiatives are partnerships between the IT organization and business stakeholders. As the business creates new business models, the IT organization needs to provide infrastructure and business assurance platforms to support the agile development and deployment of new applications that enable those new business models.

EMA research has shown that performance management and infrastructure operations software are key enablers of digital transformation success. They are foundational elements of a business assurance platform that can provide IT operations and business stakeholders with insight into every step of the digital transformation journey, from its current state to a future state of continuous innovation. With the right service assurance platform, IT operations can be a successful partner to the business in any transformation initiative.

About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help EMA's clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals and IT vendors at www.enterprisemanagement.com or blogs.enterprisemanagement.com. You can also follow EMA on Twitter, Facebook or LinkedIn.

Corporate Headquarters:
1995 North 57th Court, Suite 120
Boulder, CO 80301
Phone: +1 303.543.9500
Fax: +1 303.543.7687
www.enterprisemanagement.com
3396.052716