Q&A: Enterprise Transformation

By:

Transformation has now become paramount for every enterprise across virtually every industry. What was once a slow-roll, nice-to-have, or even utopian scenario; quickly became mission critical in the wake of the global pandemic. The pandemic not only quickly brought to light the necessity of digital transformation, but it also demonstrated the incredible benefits and resulting impact it had on efficiency, automation, customer experience, profitability, and the ability for companies to survive.

Pipeline's Managing Editor, Scott St. John (SSJ) recently had an opportunity to explore enterprise transformation with Ashwath Nagaraj (AN), co-founder and CTO of Aryaka Networks. Ashwath brings a keen perspective on enterprise transformation with years of experience helping enterprises transform before and throughout the pandemic, and is armed with a recent survey that explores the heart of digital transformation initiatives across a variety of enterprises.

SSJ: What are the key drivers for digital transformation?

AN: Before 2020, it would have been the classic pillars of cost reduction, agility, and efficiency. Based on the experience of the past year, agility and other aspects of being able to very quickly adapt to a changing environment, even in a lights-out setting, which now applies to the office as well, are top considerations.

SSJ: Why do enterprises need to transform and what happens if they don't?

AN: The world is increasingly competitive, and it is becoming a mostly level playing field. Enterprises need to become more agile—quick to adapt—as a competitive differentiator and to drive efficiency. Digital transformation needs to be part of their DNA and not just a one-off. Those that don't successfully transform will go the way of the woolly mammoth. We saw this as part of the pandemic, but many of the tactical changes need to be codified and made permanent.

You may remember when supply chains were impacted last year due to the pandemic, and manufacturers looked to relocate some of their suppliers. Closer to home, we have a good example of a company that failed to effectively transform. For decades, we had Fry's Electronics, the go-to store for everything electronic. But they had a very difficult time moving to an online model, in contrast to Best Buy, which people had written off a few years back. Well, the tables turned, and it wasn't the pandemic that led to Fry's shutting down all of their stores at the beginning of March. It was a failure to transform. More agile companies can quickly adapt to change and have actually profited from the fact that their competitors fell by the wayside!

SSJ: What would you say is the primary benefit of digital transformation?

AN: Digital transformation enables the enterprise to adapt to changing environments more quickly and dynamically, which in a broader sense spans everything from customer preference, preferred buying behavior, climate change, political concerns, M&A or divestitures, cost of goods and services arbitrage, material availability – such as the current shortage of auto chips – and yes, the pandemic. The nature of the impact can't always be known in advance, so the enterprise must be 'wired' to adapt.

SSJ: How does Aryaka define transformation, and how can enterprises get started?

AN: At Aryaka, we define transformation in the context of business—and it is occurring at multiple levels. Companies are transforming their businesses to be more agile and efficient. To achieve these goals, they need to eliminate aging and obsolete legacy applications, cumbersome processes, and other obstacles. They need to eliminate expensive infrastructure (CAPEX) and move to a usage-based OPEX model.

One simple and common first step is to shift away from multiple enterprise email, office and document management systems to a cloud-based solution like Office365. This eliminates the cost of on-premises management (such as exchange servers) and simplifies operations. But many more traditional enterprises have literally thousands of applications. Many of these have come through mergers and acquisitions. They need to be consolidated into newer applications. In fact, our recently published Global State of the WAN 2021 survey indicated that 46 percent of global enterprises report that they are using 500 or more applications.

In order to complete this business and application transformation, enterprises must first transform their WANs. Rigid networks like MPLS are a barrier to the needs of business transformation.

What is a modern WAN? What are the characteristics of a WAN that enables business transformation? Agility without giving up the stability, quality, and user experience is a must. In addition, another must is an as-a-service model, versus a CAPEX model. It must be simple to implement from the customer's viewpoint without need for expertise. It also must be cost-effective. An enterprise should not need to invest in areas outside their core business.

WAN transformation is the migration of the enterprise network away from rigid (but reliable) MPLS to an agile Internet-accessed network that truly democratizes the WAN.

SSJ: What key aspects must be considered to support effective enterprise transformation?

AN: Digital transformation crosses people, processes, and technology. Miss even one of these key facets and you end up with a two-legged stool. On the processes front, one can begin to look at an enterprise as being software-defined. What investments, tools and such will enable a more effective path from A to B, and then, what technology and staffing skills will enable this? Think of the classic legacy telco with very ineffective workflows that prevent agility. They are working to change this. The same applies to the enterprise.

SSJ: What does Aryaka see as the key technology trends being supported by digital transformation?

AN: Many times, we see enterprises link transformation with adoption of new WAN technologies such as SD-WAN and SASE. This then enables more effective connectivity to the cloud, to end users both on-premises and remote, and to devices. The WAN needs to be able to flexibly handle this diversity. In our latest State of the WAN report, we also identify key initiatives, many of which have a digital experience underpinning, such as IIoT, collaboration and UCaaS, increased visibility, greater use of automation and AI, data center consolidation, and mobility integration (for instance with the advent of 5G). Other considerations include the cloud replacing captive infrastructures, SaaS replacing legacy applications, consumption replacing construction for networks, and outsourcing replacing in-house expertise in non-core areas.

SSJ: What are the top enterprise transformation considerations?

AN: First, get the network right—transform your WAN before starting out on a journey of business transformation. Then, create a well-thought-out and resourced plan that includes skillset and culture considerations. Understand the productivity needs of your users. Security is a key consideration, including risk analysis, maintaining your security posture in an increasingly dispersed environment, and understanding what intellectual property needs to be guarded more carefully. Identify the areas

where cost can be eliminated, which goes together with what applications and processes to evolve or discard. Finally, plan for any potential impacts on the customer or supplier experience and how to mitigate.

SSJ: What are the real-world risks to digital transformation?

AN: The process needs to be planned in advance, including roles, goals, and costs. Errors occur when it is ad-hoc. An example could be public cloud costs. There have been horror stories, but this has been due to a lack of planning or monitoring. The tools are all in place to avoid this. There is also a perception that all existing processes and investment in tools, software, and so on will need to be scrapped. There are multiple paths for transformation, some more gradual than others.

SSJ: What are you seeing as the resistance or barriers to transformation?

AN: Some are staffing but remember that humans play a visionary role. Others could be security, compliance, and so on but with planning, this is not a barrier. We're told by analysts that even in the fast-paced pandemic environment, many of the changes made by enterprises in regions or verticals that were considered to lag in transformation, or with roles that were thought not to be able to be carried out remotely... for the most part it works, and it is secure. Overall, there are still lessons to be learned, but we've made great progress.

SSJ: What are the key outcomes enterprises can expect from digital transformation initiatives?

AN: Agility and competitiveness are table stakes, but the proof is in the cost of doing business. What gains translate to savings or greater efficiency? On the IT front, but generalizable across the enterprise, these may span hardware and software investments, facilities, and operational expenses that include staffing and training, change management and issue resolution or downtime, and ongoing maintenance of the hardware and software-installed base.

SSJ: Going back to something you said earlier, how do you see AI and automation playing a role in digital transformation now or in the future?

AN: AI and automation play a key role in providing the visibility and software-defined workflows to enable the transformation. As examples, consider a factory floor with sensors that can predict

outages, or the adoption of digital twins and AR.

SSJ: How does the human role evolve as the adoption of AI and automation continue to increase?

AN: The human element will make or break the process. There will be shifts in roles, and enterprises need to be clear on what this will entail. As an example, one of our larger customers considers themselves to be a digital enterprise. Some of the IT staff were CCIE-certified, and now they are transitioning to the equivalent cloud certifications such as an AWS Solution Architect. In other cases, an enterprise IT role may transition to a cloud provider. As an example, Aryaka once had two on-premises Exchange server admins. When we went to the cloud, they were no longer required but quickly found better roles at Microsoft. Other previous roles will be augmented by AI or machine learning, but once again, there will be new opportunities. A well-developed retraining program will be critical.

The digital transformation journey

It's never been more critical that enterprises transform, but it's not too late to start. A well thought out plan, considering people, processes and technology – that addresses the many outdated legacy applications and systems – to derive the largest benefits to your business, is a good place to start. But, it must be embraced by the entire organization and key considerations – such as cost, culture, staffing, security, and compliance must be considered. In the end, digital transformation can unlock a wealth of new opportunities, profitability, agility, and ultimately ensure your organization can survive through the increasingly competitive and ever-changing landscape.