

Network transformation

The foundation for digital business

Part 1:
Shifting enterprise priorities
and challenges

orange-business.com



Business
Services

 GlobalData.

About

Orange Business Services

Orange Business Services is a network-native digital services company and the global enterprise division of the Orange Group. It connects, protects and innovates for enterprises around the world to support sustainable business growth. Leveraging its connectivity and system integration expertise throughout the digital value chain, Orange Business Services is well placed to support global businesses in areas such as software-defined networks, multi-cloud services, Data and AI, smart mobility services, and cybersecurity. It securely accompanies enterprises across every stage of the data lifecycle end-to-end, from collection, transport, storage and processing to analysis and sharing.

With companies thriving on innovation, Orange Business Services places its customers at the heart of an open collaborative ecosystem. This includes its 27,000 employees, the assets and expertise of the Orange Group, its technology and business partners, and a pool of finely selected start-ups. More than 3,000 multinational enterprises, as well as two million professionals, companies and local communities in France, put their trust in Orange Business Services.

For more information, visit:

-  orange-business.com
-  orange-business-services
-  orangebusiness
-  orange-business.com/en/business-insight

GlobalData

GlobalData is the leading data & analytics company that, for over 40 years, has been helping over 4,000 organizations across 18 industry sectors worldwide to make better and more timely decisions through our unique data, expert analysis and innovative solutions.

The GlobalData mission is to help our clients to decode the future, enabling them to be more successful and innovative. Our actionable, trusted and forward-looking insight helps our clients with their strategic planning, market intelligence, innovation & new product development and sales & channel management, together with insight into latest developments in their markets and views of leading opinion formers.

Within our Technology unit, we cover the entire spectrum of the IT and Telecom technology and services value chain – from IT and Telecom vendors, service providers, channel partners and enterprises across key industries, to consumers and the trends and insights influencing their decisions across the globe. With in-depth analysis, exclusive news, and highly detailed databases at your fingertips, we give you complete 360° insight into the Technology & Telecom Industry. We have decades of experience in being the trusted, gold standard intelligence provider to leading IT and Telecom vendors, service providers, and channel partners, helping them to make faster, more-informed decisions.

For further information, visit:

-  globaldata.com
-  globaldatatechnology
-  technology_gd

Introduction

Digital transformation is a broad term for changing business process with technology to positively impact customer experience.

New technology tools that take advantage of a myriad of data sources are utilized for data-driven decision making. Digital transformation must cover customer experience and engagement, business process transformation, operational efficiency and agility, and people empowerment. Digital transformation does not just simply happen; it requires transformation in processes, culture, and technology. The network connects everything together, it is the foundation for change. Success in digital transformation requires network transformation first.

The end goal of digital transformation is customer satisfaction. The focus of every digital transformation activity should be customer service. It is the thread that ties all aspects of the business together and it must be the dominant factor in every decision. There must be focus on the customer experience and curating the journey to keep them happy and engaged. They want simple, pleasant experiences and, when things do go wrong, they want a prompt and efficient response. Engaged and informed customers have a high retention rate, are more likely to recommend a company, and are also more inclined to increase spend.

Business process transformation looks at how the company does business. Many of the early digitization initiatives that have now been in place for decades were exercises in moving paper processes to a digital format. However, these changes did not fundamentally change the workflow. The next stage is to understand how they can change workflows to be more efficient and introduce automation wherever possible. Useful meta-data about processes can be gathered and analyzed to gain insights. This meta-data is not about the customer, product, or service, but measurements and broad trends on the process flow itself. These insights can be useful for further process re-factoring and streamlining to promote customer satisfaction, operational efficiency, and staff empowerment.

Operational efficiency deals with how quickly a task, such as a customer order, can be verified, shipped, and delivered to the customer. The harder part is operational agility. This is the ability of the organization to deal with change, either self-initiated or from an outside source, such as the COVID-19 pandemic. Business organizations are often rigid, either due to a fear of difficulties or due to organizational inertia because *“that’s how it’s always been done.”* Operational agility means that the first thought should not be veneration of existing business process, but on how it affects the customer. This includes making business decisions swiftly and surely to ensure that customers receive the best service. This kind of operational agility is one of the easiest things to talk about, but one of the hardest to implement.

The primary way to make operational agility happen is to fulfil the last broad tenant, which is people empowerment. For employees to be able to take positive customer service action, they need the tools they use to be flexible and available. Rigid software systems, slow application performance, lack of good collaboration tools, and downtime all hinder customer service.

The digital transformation of the business requires a sound base to operate from. Existing networking environments in both the campus and the data center lack the flexibility, security, and performance to support use cases the business requires for digital transformation. Without network transformation, the task of digital transformation becomes much harder. Rollouts of business-critical apps are slowed, response times to customers will continue to lag, and changes to business process to enable more efficient operations become much more difficult. The transformed network enables the very tools companies use to do digital transformation. The business benefits of digital transformation cannot be fully delivered in a mediocre networking environment.

“The end goal of digital transformation is customer satisfaction. The focus of every digital transformation activity should be customer service.”

The network is the solution

Every year, businesses are challenged by external factors out of their control. Natural disasters, economic conditions, supply chain issues, geopolitical consequences and workforce issues are just a few examples. The single biggest business impact event in the last twenty years is COVID-19, which has laid bare competitive and operational shortcomings, particularly when it comes to business agility. The pandemic has forced changes to nearly everyone's business model, their relationship with the customer, and how employees work. New ways of communicating with customers and delivering goods and services all became significant issues which have only been partially resolved. Many companies experienced significant difficulties making the changes necessitated by the pandemic. Many of these difficulties were exacerbated by the outdated state of the network, which was unable to rapidly adapt and, in many cases, lacked features that were suddenly important. Of course, companies that had already begun network transformation fared better overall.

The easiest example of COVID-19 enforced change is working from home. Companies struggled to get employees online in a secure and productive manner from home. In many cases this was because of antiquated VPN systems. These systems served a small portion of the employee base for years but were not implemented with scalability in mind. This on-site-hardware-based technology could not be easily replaced or upgraded when COVID-19 made in-office work

impossible. In the transformed network, employees are connected securely to a cloud solution that can be easily and quickly scaled up and down as business needs change.

The transformed network also gets away from the old networking problem called "hair pinning" where all data travels through the corporate data center, which can cause significant application lag and bottlenecks. Secure, cloud-based connectivity solves those issues by ensuring only the traffic that needs to go to the corporate data center goes there. Corporate web filters and security, applied in the cloud, are still enforced.

The transformed network can also enable business productivity on-site. Edge computing, where data and processing is done near the production floor is becoming more and more common as new automation requires extremely fast response times. It also requires connectivity to a variety of IoT devices used to bring in that data. Edge computing is growing right now as automation is becoming increasingly common in production and warehouses.

Cloud-based productivity solutions such as Zoom and Microsoft Office 365 are enabled by the transformed network. Secure routing takes users directly to the best access point in the cloud for these applications, whether they are at home or in the office. Application monitoring can help ensure that employees are getting the fast and responsive applications to do their jobs.

“The transformed network can also enable business productivity on-site.”



Preparing for the future

The flexibility of a transformed network enables rapid response to unplanned events and caters to the future of work. It also removes the division between the corporate network and the remote access one, providing a network that has consistent policy, security, and reporting. The COVID-19 pandemic is real-world proof that office workers can be productive outside the corporate office. The future of work is when employees can carry out tasks in a secure and efficient manner no matter where they are.

“The future of work is when employees can carry out tasks in a secure and efficient manner no matter where they are.”

The transformed network can help the business take advantage of opportunities, such as merger and acquisition (M&A) activity. A good example of this would be faster onboarding for newly joined employees, transferring data, and assimilating acquired processes that have no counterpart. Network automation and policy ensure security is maintained during the entire M&A process.

The network can also make it easier to create data-driven solutions, not just for M&A, but

across the business. Internet of Things (IoT) devices are proliferating, and as a result visibility into business processes is increasing. IoT opens up a world of opportunities, ranging from asset tracking, to environmental monitoring, equipment monitoring, and data for predictive maintenance. Transformed networks provide not just the connectivity for devices but can be sources of information. Features like location services can be used to perform asset tracking or even perform contact tracing, ensuring that employees have the tools to be decisive and act, not on instinct, but with real information.

A top-of-mind business priority is security and compliance. Previously, security and compliance were considered an IT issue, something C-suite executives rarely asked about but relied on IT to deliver. The transformed network is secure by design, delivering security and compliance, and providing extensive data for verification/audit. This data can be used by Artificial Intelligence (AI) to take automated remediation action or to inform the actions of the security and networking teams in the event of a breach. Transformed networks rely on zero-trust security. This means that there are access controls and policies that only allow verified devices, services, and individuals to see the resources they need, and no more than that. In the zero-trust model this is applied whether the access occurs inside or outside of the corporate network. A great example of why we need zero-trust security is IoT devices, which can be insecure. Zero-trust architectures identify and isolate these devices limiting the damage they could do if compromised and quarantining unknown devices. Zero-trust also is a boon to compliance; individuals are automatically restricted from information that they legally cannot have access to, preventing accidental exposure of sensitive materials as well.



Transformed for the future

The transformed network is the basis for business success and furthering the journey with edge, hybrid, and cloud computing. With the growth of competition in the public cloud market, and the rise of hybrid and private clouds, the future is multi-cloud. Some organizations for legal or security reasons must keep various functions in corporate data centers. It is necessary that the network be the binding platform, weaving security, performance, and flexible connectivity between public, private, and hybrid clouds.

It is easy to forget that the network permeates all aspects of a business. A properly running network is by design invisible to the end user. That makes it easy to overlook the importance of the network and put off upgrades. But in order to enable digital transformation, and in order to be prepared for future business opportunity, it is important to transform your network now rather than wait until it is unavoidable. Waiting until you *must* upgrade the

network results in higher costs, less time to plan and enable upgrades and most importantly, lost opportunities that were unattainable because the foundation, the network, was not ready.

- 1 Transformation of the network is essential for digital transformation efforts.
- 2 If the cloud is the destination, the network is the yellow brick road to it.
- 3 Digital business requires a strong, agile and secure foundation and that foundation is the transformed network.

In Part 2 of this paper we will discuss what that means in practical terms for the IT team.

There are technical considerations as well as advantages for the IT organization in embracing the transformed network.



**Business
Services**

