

Digital transformation is easier than you think.

It's not without its hurdles, but all you need is the right strategy.

verizon[✓]



Digital transformation (DX) is a little like going to the dentist. You need to do it, but it is tempting to keep putting it off. The problem is, just like a cavity, you still need to change what you're doing to resolve the issue.

Digital transformation is easier than you think.

Just because you haven't fully embarked on a DX initiative doesn't mean that your competitors haven't. By the end of next year, an estimated one-quarter of all organizations will have lost their market position due to digital business incompetence¹. That's worse than any toothache.

As with any business program, particularly one involving change, obstacles exist. IDC's recent white paper: Digital Transformation Obstacles and How to Overcome Them, revealed nine main challenges to digital initiatives at medium and large organizations.

Here, we tackle five of the most universally relevant challenges.

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In the world of DX a fortress approach is no longer enough.

1. Security: feeling insecure

In the past, security was a relatively straightforward process. The network perimeter was fixed, or was at least expanded one carefully-managed installation at a time. Security consisted of building a wall around the network and attempting to make sure nothing breached it. A fortress mentality.

In the world of DX, a fortress approach is no longer enough. Today's network perimeter expands and contracts in real-time as new users, new services and new locations are added or removed. The shape of the network constantly changes adding additional layers of complexity. Cloud is one example. Today, 53% of enterprises are already using 2 to 4 cloud providers² but expect to expand to 6 to 10 in the coming year³.

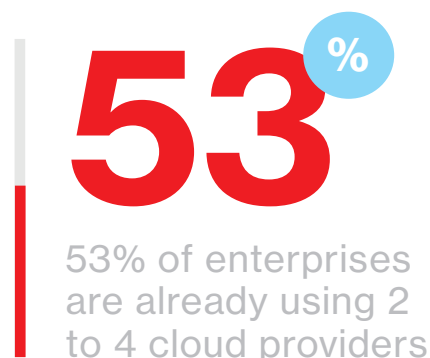
The fundamental takeaway? Traditional approaches to security no longer work. But change is not always easy, helping explain some of the security fears around DX.

This trepidation is unnecessary. Properly implemented, new technologies underpinning digital transformation can help to improve network security. Future networks are not a single product but a collection of products, each with security built in as standard. For example, in a Software Defined Networking (SDN) environment you would have a controller, an orchestrator, a transport layer, all of them with security built-in at every stage.

SDN can provide much greater control over the network. Security policies can be set for individual applications or individual users, allowing your network administrator to define the specific path taken by data.

All this is done in near real-time based on centrally-defined policies that are pushed out to all corners of the network instantaneously, in contrast to more traditional networks where policies (or at least compliance) can vary across territories and even individual offices.

It's true that digital transformation requires new ways of looking at the network, but the journey will ultimately lead to better security.



2. Inadequate network resources: lacking the right stuff

In older networks, almost any change required new hardware to be purchased and installed in a process that could sometimes take months.

Future networks eliminate that problem by virtualizing these functions. In an SDN environment, security, a firewall or a new routing layer can all be added on the fly with no need for new hardware. Required functionality is requested via a portal and up-and-running in near real-time.

New technologies help an enterprise get more out of the hardware and resources they already have. SDN can help reduce bandwidth consumption by intelligently routing traffic via the most appropriate path based on its importance. As an example, essential traffic travels over MPLS, while YouTube videos are automatically sent over public internet (or anywhere else, subject to the rules you set).

Bandwidth can also scale automatically up or down on demand, helping to maintain performance during peak times and freeing you from the burden of excess capacity costs when you don't need it.

The result is better use of resources, reduced implementation time, and lower capital expenditure.



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SDN can help reduce bandwidth consumption by intelligently routing traffic via the most appropriate path based on its importance.

3. Complexity: wondering where to start

Technologies involved in DX may be relatively new, but they don't have to be overly complicated. When functions are virtualized, additional functionality can be requested via a portal, rather than through the purchase and installation of new hardware.

SDN separates the data and control planes, making it easy to change one layer without affecting others. When a faster technology comes along – think switching from copper to fiber – an upgrade can be done without affecting the higher layers. Future network technologies can actually make management less complex, and choosing an experienced service provider such as Verizon helps make it easier still.

New network technologies enable greater choice. Solutions can be purchased purely for their effectiveness and value for money, with vastly reduced concern over how it will integrate with your existing infrastructure (or whether it will be compatible at all). SDN protocols such as OpenFlow not only enable the creation of a vendor-agnostic network, but allow it to be managed in a unified manner, eliminating the need to use different tools and protocols to manage different components.

With more vendors comes the challenge of managing multiple suppliers. Many companies are now turning to companies with global managed service experience such as Verizon to either orchestrate an entire solution, or provide oversight by managing the vendors on the client's behalf.

In the longer term, network transformation can help to significantly simplify network management.

4. Lack of skills: “But we’ve always done it that way”

Concerns over a lack of skills broadly fall into two categories: how future network technologies work, and how DX initiatives are changing the role of IT.

The first can be addressed with education and understanding. While SDN and SD-WAN do work differently from legacy equipment, they radically simplify what were once complex tasks. SD-WAN allows you to automatically and intelligently build a network using whatever connections you like. More traditional methods typically demand more complex manual configuration.

While there is a learning curve, it is not as steep as may initially be imagined. Your learning curve can be accelerated by choosing the right partner to help architect, orchestrate and manage your network and digital transformation efforts.

For example, Verizon offers complimentary workshops on both SDN and SD-WAN to help you build your knowledge and confidence. Designed specifically around your business, these sessions are a great way to understand the potential of these new technologies in your unique environment.

The second category stems from changing roles and charters. Businesses are increasingly turning to data to gain a competitive advantage, with IT considered a key enabler of new revenue streams. IDC predicts that by 2018, 35% of IT resources will be spent to support the creation of new digital revenue streams⁴.

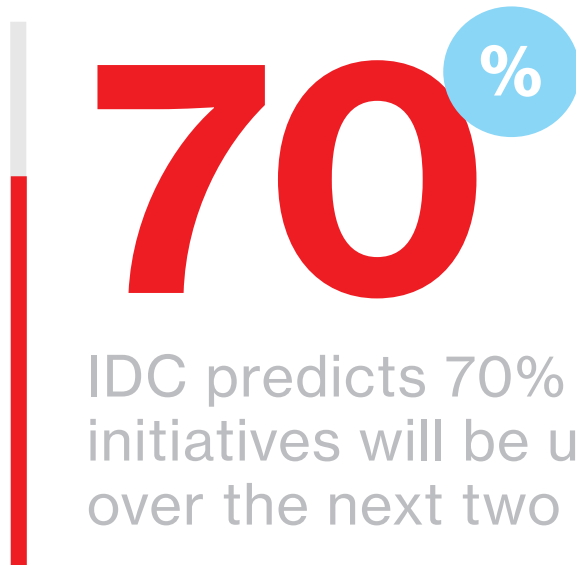
From its previous business support function, the IT department is increasingly finding itself on the frontline in a fast-paced battle for market share.

In this new environment doing everything in-house is no longer feasible. Finding the right partner is important.



35%

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IDC predicts 70% of siloed DX initiatives will be unsuccessful over the next two years.

5. Poor results: we tried it

Before deciding on solutions it is important to understand current architecture, applications and business challenges.

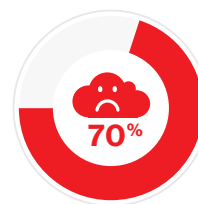
In IDC's white paper a large disconnect was found between network planning and digital transformation planning. Network planning typically involves all traditional business decision makers from the Chief Network Officer or CIO to CEO and CFO. In contrast, digital planning is now being run by newly created roles spanning digital, strategy or marketing, sometimes without full consideration for the impact on network resources. According to IDC, poorly coordinated projects will inevitably lead to redundancy, inconsistency and an inability to create interoperable solutions. To such a degree that over the next couple of years, IDC predicts 70% of siloed digital transformation initiatives will be unsuccessful⁵.

Business leaders must ensure collaboration across departments and business units, while IT suppliers need to be able to address multiple stakeholder requirements in a single organization. For many this will mean venturing into uncharted territory. Again, choosing the right partner is essential.

Where to start?

According to the respondents in IDC's research⁶, digital transformation is synonymous with customer experience. At the heart of DX is the secure transfer and storage of data that allows your business to function, deliver a great customer experience and grow.

Safe, secure transportation and storage of data throughout its lifecycle is critical and should be built into your strategic architecture from the ground up. This is why your enterprise network is fundamental to digital transformation efforts. DX efforts should start with your data lifecycle, looking at data from creation, initial storage and transfer to the time when it becomes obsolete and is deleted.



By 2018 70% of siloed digital transformation initiatives will be unsuccessful.

Steps to build your Digital Transformation plan

- 1. Where and how is your data created?**
Map out data creation, collection and storage points.
- 2. How important is that data?**
Classify the importance of that data based on its value to your business and level of criticality.
- 3. How time sensitive is that data?**
Create a classification that uses time sensitivity, criticality and required speed for effective business decision making.
- 4. What applications are delivering that data?**
Map the apps delivering your data and prioritize based on the classification matrix.
- 5. Define security policies, standards and controls**
around your classification matrix and build these into your strategic architecture from the ground-up, starting with your network.
- 6. Select the right partner** with the right network, application and security experience and partner ecosystem to help you architect, orchestrate and manage your network and digital transformation efforts.



Sooner or later the excuses run out and we finally force ourselves to go to the dentist. Digital transformation offers far more than just a whiter smile. It can help you compete better, respond faster and create entirely new revenue streams. And even better, there are no needles involved. For an entirely painless consultation on your network, contact a Verizon specialist or visit [verizonenterprise.com](https://www.verizonenterprise.com) today.

Learn more

Contact your account manager about our complete portfolio of network solutions.

[VerizonEnterprise.com](https://www.VerizonEnterprise.com)

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