

Overcome the obstacles to digital transformation

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Introduction

This IDC InfoBrief, sponsored by **Verizon**, is intended to help organizations accelerate digital transformation initiatives with benchmarks and guidance based on the world's most current and comprehensive survey of digital leaders in action.

This IDC InfoBrief identifies the barriers to digital transformation and describes what organizations can do to address them.

Findings and recommendations are based on a global survey of digital leaders across all industrial sectors – today's senior decision makers at the cutting edge of digital transformation.





Digital leadership requires a more sophisticated understanding of the enterprise ecosystem than is typically in place today.

Digital transformation is at the heart of business strategies across all industry segments and markets.

Markets, customers, and service providers are becoming increasingly digitally accessible. Digital leaders are developing both product and operational innovations that create digital experiences that serve the needs of mobile, socially connected, and digitally transforming customers and partners. The upside is measured in extended market share and increased revenue.



But digital leaders will need help. IDC believes they will increasingly require trusted partners to fully realize the effectiveness of their digital initiatives and strategies.



It's unanimous: digital leaders agree that the network is critical.

Digital leaders agree unanimously that the network will be critical to achieving digital success. **97 percent** acknowledge at least some importance of the network to digital initiatives "today". Asked to project over the next two years, respondents make the association unanimous, with **more than two thirds (68%)** of digital leaders calling the network very important. But they also rank insufficient network resources at the top of the list of obstacles to achieving digital objectives. This is particularly alarming as digital is impacting the network even today. IDC predicts digital transformation will drive connectivity levels **50 percent higher** across all industrial sectors in 2016 alone.

Encouragingly, our study points to network leader profiles and broad plans to invest in latest-generation network upgrades such as software-defined networking (SDN) and network functions virtualization (NFV).

But the real good news is that network leaders aren't an exclusive club — with a few relatively simple choices, almost any organization can achieve network and digital acceleration.



It's unanimous: digital leaders agree that the network is critical.

Q5. How important are your organization's networking capabilities to its digital initiatives?

Very important today		52.7%
Very important in two years		67.7%
Somewhat important today	44.2%	
Somewhat important in two years	31.8%	
Not important today 2.7%		
Not important in two years 0.4%		



Crisis of confidence: digital leaders see their organizations' digital execution lagging.

IDC surveyed senior-level professionals at the cutting edge of digital awareness and action across all industrial sectors worldwide. Digital leaders' confidence is not where you would expect. Instead of the self-assuredness and confidence that comes from being in the vanguard, their attitudes convey a surprising sense of vulnerability and a general lack of confidence in their organizations' digital execution.

Over three quarters of digital leaders (77%) see their organizations' digital strategy and initiatives either lagging (39%) or only somewhat effectively aligned with broader enterprise strategy (38%). **Less than a quarter (23%)** think they are ahead of the digital acceleration curve.





Crisis of confidence: digital leaders see their organizations' digital execution lagging.

Q13. Please indicate which response below best characterizes your organization's approach to digital strategy

Digital initiatives are disconnected from enterprise strategy14.4%			
Digital strategy exists, but execution occurs sporadically		25.2%	
Digital and enterprise strategies are aligned with some effective	ctive digital initiati	ves	37.5%
Digital strategy is being executed in a coordinated way across the organization	19.3%		
We are disrupting our market by implementing new digital technologies and business models	3.6%		



Today's digital leaders are disruptors expecting to be disrupted.

Sentiments around the state of organizations' digital strategies run strong, and the feeling that one is disrupting but also reactive and vulnerable to disruption are not mutually exclusive.

Disrupting competition	57%		
Vulnerable to digital disruption		68%	

It is encouraging to see a majority (69%) saying that their organizations have implemented new business processes to support digital acceleration, but it is also clear that this support isn't sufficient to offset leaders' sense of vulnerability. Digital transformation should be disruptive by definition. It is encouraging that 57% are self-described digital disruptors. But those who see themselves as disruptors are outnumbered by those who feel vulnerable.



Today's digital leaders are disruptors expecting to be disrupted.

Q14. Please indicate the extent to which you agree with the following statement

My organization is vulnerable to disruption from competitors' digital strategies	68%
My organization's digital strategies are disrupting our competition	57%
My organization's digital initiatives are largely a reaction to pressure from competi	tors' strategies 59%
My company has implemented new business processes to support our digital accel	leration initiatives 69%
Im of responses for strongly agree and somewhat agree with the statement	



Why today's digital leaders are uneasy: network and complexity concerns sound the alarm.

Security is always (and deservedly) the first challenge thanks to its ubiquitous requirement, including at the network level. Inadequate network resources, the second greatest barrier to digital progress, is a clear warning signal and call to action. Why?

- ✓ Digital leaders see the network as essential to digital success.
- Digital leaders are wary of their organization's digital execution and feel more vulnerable to disruption than prepared to disrupt.
- Cause and effect: The network is critical to digital, its inadequacy is a primary concern and today's digital leaders feel nervous and vulnerable.

Network and security concerns go hand in hand – like the network, network security will take on new requirements in the process of digital acceleration.



Why today's digital leaders are uneasy: network and complexity concerns sound the alarm.

Q10A. Please rate the impact of the following obstacles or challenges impacting your organization's digital strategy

All digitally-minded organizations should be concerned that a majority of today's digital leaders consider their organizations to be vulnerable digital laggards. By examining the barriers to executing on digital initiatives, we gain vital insight into why this is the case, and what steps can be taken to address the obstacles and accelerate the digital agenda.

Security concerns		3.6
Inadequate network resources	3.4	4
Complexity of tech and partner supply side	e 3.3	
Inadequate organizational structure	3.3	
Lack of skills	3.2	
Too expensive — can't show ROI	3.1	
Lack of executive vision and commitment	3.1	
Lack of pull from customers	3.1	
Poor implementation results to date	3.0	

Mean of responses to scale: 1 – Not challenging at all 5 – Highly challenging



Digital leaders are investing in new network technologies with insufficient internal and partner support.

Complexity of the technology and partner supply side and a lack of skills are also key concerns. This suggests that the enhanced organizational sophistication required to achieve digital leadership, and the complexity of technologies that will be required in most cases to support it, are currently a stretch for most organizations.

Another red flag: Highly complex network technologies such as SDN/NFV were prioritized ahead of high-profile digital and mobile enablers. It is encouraging that digital leaders understand the essential role of the network enough to prioritize investment in new networking technologies ahead of key digital enablers like IoT, mobility and analytics. But do they have the expertise to transform their networks?





Digital leaders are investing in new network technologies.

Q11. How will your organization's level of investment in the following change between this year and next year?

Investment intentions are good news, but organizations driving toward digital transformation currently lack adequate internal and external support.





% of responses indicating higher investment levels



Follow the network leaders.

Network leaders are distinguished by:

 Greater intent to invest: Self-described network leaders show greater intent than laggards to invest either to improve existing network technologies or in network technologies that are new to the organization.

Higher average top and bottom line growth: In instances where investment in new networking technologies are planned, respondents are consistently more likely to report significant growth in both revenue and profitability over the last year.

- Business outperformance where key networking technologies are in place: As with intent to invest, the same business performance trends exist in instances where specific advanced networking technologies are in place.
- Large organizations: 72 percent of respondents that classed their organization as a leader were from an organization with 5,000 or more employees.

More ambitious digital strategies: Network leaders' top indicated objective for digital initiatives is changing their revenue or monetization model — this stands in contrast

to the more conventional objectives favored by the wider respondent base and is particularly noteworthy as it is more aligned with advanced digital objectives.

- Geographic concentration of self-described network leaders: in the US (22%), Germany (22%), Netherlands (25%), the Nordic countries (~27%), and Japan (20%).
- Sector concentration: The highest concentrations of self-reported network leaders were in financial services (32%), technology (24%), healthcare (23%), and transportation and distribution (22%).



Network leaders and laggards have opposing views on networks and digital.

Research conducted for this IDC InfoBrief surfaced certain network leadership profiles that can be instructive. They are distinguished by certain tangible characteristics – organization, investment plans and performance results. Network leaders also have an optimistic view of both the ability of their communication service provider (CSPs) to support digital initiatives and the coordination of digital and network strategy planning. **QN1/QN6A.** % of respondents that agree/strongly agree with:

My organization's communication service providers (CSPs) are well equipped to enable our digital initiatives

Network leaders		87%
Network laggards*	47%	

Our network planning and digital strategy planning are part of the same process

Network leaders		87%
Network laggards*	34%	

*Laggards include responses for 'somewhat behind' and 'lagging behind' most organizations in their market



Addressing the obstacles

Recipe for a trusted partner

Network inadequacy and technical complexity are holding back digital progress. At the same time, digital leaders' organizations are making decisions to invest heavily in networking and technology, plus extraordinarily complex cybersecurity and cloud technologies, without adequate internal skills or partner support.

This is potentially perilous, and strongly suggests the need for a trusted partner to bridge the divide between investment and execution.

But what type of partner?

One with capabilities that span what digital leadership will require: hybrid IT that takes advantage of cloud computing; advanced network technologies such as SDN/NFV; "IoT" machines and wearable devices with optimized network connections; advanced softwaredriven orchestration of data and the policies and SLAs that surround it with optimized routing across networks; multiple cloud platforms that can integrate with onpremise and colocation services to create a unified enterprise environment; and network security, and compute resources that can be provisioned in near realtime through self-service portals. Last but not least there is performance and security that inspires confidence amid extraordinary new levels of complexity.

It only makes sense to work with a partner that understands all of these elements intimately. IDC believes that certain CSPs are well positioned to fulfill this trusted digital partner role.



Finding the right trusted partner

Ultimately, digital transformation will only be as fast, agile and successful as the network that supports it.

CSPs with certain profiles should be strongly considered as trusted partners by organizations determined to lead and disrupt with digital transformation initiatives. Today's savviest CSPs are investing in hybrid IT services, enabled by SDN and NFV, that enable digitally minded organizations to:

- Integrate multiple cloud platforms with legacy on-premises and colocation services to create a unified enterprise environment.
- Provision network, security and compute resources in near-real time through self-service portals.
- Reallocate resources dynamically, even automatically, based on pre-defined business rules.

The best among these CSP partners has a record of leading investment in the latest-generation network technologies, with support services, global reach, and demonstrated experience serving organizations at the intersection of SDN/NFV, hybrid IT, and security.





Conclusion

Digital transformation is at the heart of business strategies across all industry segments and markets. Digital leaders agree that the network matters essentially, integrally and immediately to the success of digital transformation initiatives.

However, less than a quarter of digital leaders surveyed view their organization's approach to digital as leading-edge, and more than two thirds view their organization as vulnerable to disruption from competitors' digital initiatives.

Security concerns, network inadequacy, technical and partner complexity, and lack of skills are the leading obstacles to digital strategy. Highly complex technologies such as SDN/NFV, cybersecurity, and cloud compute/storage are prioritized for investment, but organizations will struggle without the right skill sets or support from trusted partners at the intersection of digital, mobile, cloud, network, security and user-first design.

Certain CSPs offer comprehensive support across these critical, related areas and should be strongly considered as trusted partners by organizations determined to lead and excel with digital transformation initiatives.



Key takeaways

- 1. Failure to align strategy formulation, requirements definition and technology selection, investments and implementation practices between digital initiatives and network planning risks undermining the success of organizations' digital transformation... or worse.
- 2. Network inadequacy and technical complexity are holding back digital progress. While the network is targeted for increased investment, inadequate internal skills or partner support threatens to undermine successful execution.
- **3.** This is potentially perilous and strongly suggests the need for a trusted partner to bridge the divide between investment and execution.
- 4. Organizations will increasingly require trusted partner support that bridges the divide between investment and execution in order to fully realize the effectiveness of their digital initiatives and strategies.



