



Technology Spotlight

Simplifying Telecommunications to Accelerate Digital Transformation

Sponsored by: TELUS

Adapted from research conducted by IDC's Canadian Strategic Sourcing and Cloud Services Continuous Information Service

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THE GROWING IMPACT OF DIGITAL TRANSFORMATION

Digital transformation (DX) has reached an inflection point. Over the next 3 to 5 years, Canadian businesses that have not made the necessary investments to digitally transform will fall behind, or worse, risk going out of business. Digital-first thinking has already impacted some Canadian organizations, with changes occurring in the boardroom all the way down to the shop-floor. Leading organizations have already implemented DX enabling technologies like cloud and mobility, as well as emerging technologies such as Internet of Things (IoT) to improve business operations and to generate tangible business outcomes. A strong indicator of the value of the digital-first approach is the fact that organizations spent 30% of their IT budgets (combining both capital and operational spending) on digital technologies in 2016, and anticipate spending 42% of their IT budgets on digital initiatives by 2019.

The returns on digital transformation initiatives have been noticeable for early adopters. Spending on digital-first IT investments has increased revenue by 41% and profitability by 40% compared with traditional IT investments, according to IDC research. By contrast, Canadian retailers now find themselves restructuring after experiencing the consequences being slow to capitalize on the shift to ecommerce. As one women's fashion retailer admitted in its restructuring filings, it "has fallen victim in recent years to adverse macro-trends, including a shift away from brick-and-mortar to online channels." Other industries, determined to avoid those outcomes, are taking a digital-first approach to business and technology investments to gain competitive advantage through innovation and customer engagement.

DX in the Enterprise

The successful adoption of DX is multifaceted and interconnected. Achieving desired outcomes requires a holistic approach across the entire business including:

- **Leadership Transformation:** Creating and enhancing executive positions, such as the chief digital officer, for business units and activities built on DX. Business leaders are using digital-first strategies to ensure goals are met effectively.
- **Omni-Experience Transformation:** Using interactive and digital channel experiences such as live chat and artificial-intelligence virtual assistants, to deepen relationships with customers, employees, and business partners, making interactions simple, effective, and responsive.

- **Operating Model Transformation:** Digitally connecting products, processes and assets to make business operations more reactive and tie physical storefronts and warehouses to digital operations. An example of this is the use of IoT technologies to provide visibility in the supply chain and customer shipments.
- **WorkSource Transformation:** Applying digital technologies to transform the way businesses access, connect, and leverage organizational talent and human resources to generate revenue and align effort across the entire organization. An example of WorkSource Transformation would be creating a secure VPN infrastructure allowing remote workers and field service personnel access to corporate resources and applications.

Addressing Roadblocks to DX Success

Organizations that lag in digital transformation will find themselves at a disadvantage which will increase over time. Those facing this situation should consider what might be holding them back. IDC Canada research finds the most common challenges are executive ambivalence, the level of investment required, dealing with resourcing shortages, and legacy systems that draw spending away from new investment in DX.

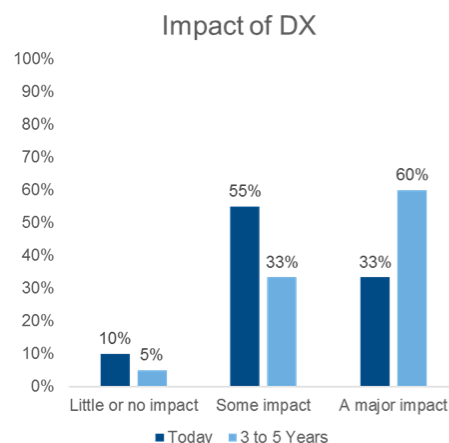
The Challenge of Executive Ambivalence Toward DX

Though there are many examples of organizations responding fast enough to market shifts driven by digital disruption, many executives do not view the challenge as serious. IDC Canada's 2016 Top Executive Survey found IT executives are more sure of the impact of DX on business performance than business executives (see Figure 1). While 33% of IT executives believe DX has a major impact on business performance today, within three-to-five years that figure rises to 60%. Business executives are less convinced of the impact, with 24% saying DX has a major impact on business performance today, and 27% expecting major impact within three-to-five years. Clearly a gap is developing that senior executives should be concerned with to avoid their organizations being digitally disrupted.

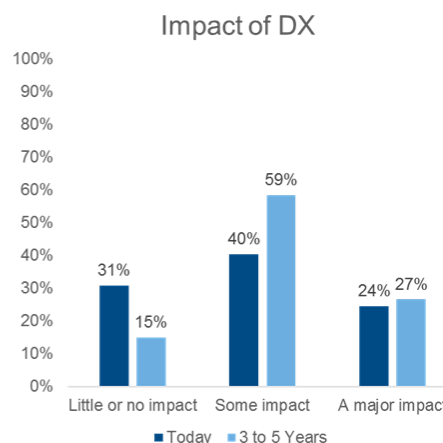
FIGURE 1

Perceived Impact of Digital Transformation

IT Executives



Business Executives



Source: IDC, 2017

IDC believes that IT executives are more certain than business executives about the impact of DX on business performance because they foresee how DX will unfold in their organizations. 78% of IT executives think DX will reinvent workflows and processes, while only 47% of business executives think the same. In addition, 65% of IT executives think DX will reinvent customer relationships, while only 43% of business executives think so.

The Complexity Challenge of Legacy Infrastructure

Canadian companies continue to rely on legacy information technology investments, some of which control key business systems. As the market moves towards greater DX adoption, legacy systems will impede the ability of businesses to respond to changing market dynamics and opportunities. This has created a situation in which the average Canadian business can only allocate 25% of its IT budget for activities that can provide meaningful and long-lasting differentiation and competitive advantage, because they are compelled to allocate 75% to just "keeping the lights on." To meet ever-increasing business demand on IT departments to support DX initiatives, CIOs need to rebalance their resources so that 50% of their budget is devoted to innovative work and 50% to baseline maintenance activity. Freed of these less productive responsibilities, IT staff can focus more time on higher value and strategic activities.

Another IT infrastructure issue is the challenge Canadian businesses have with the management of the complex relationships they have with vendors. This includes the costs and associated challenges of managing numerous vendor contracts that can result in escalating costs (integration of different solutions and processes) and decision paralysis. Even a small percentage saved in IT expense can be great as the average annual IT budget for a Canadian company with 100 to 999 employees is approximately \$2,500,000.

The Challenge of Finding Great Staff Amid a National IT Skills Shortage

Canada has an IT skills shortage. IDC estimates that there were more than 50,000 unfilled IT positions in 2016 across the country – a figure expected to increase 10% per year beyond 2019. This situation will continue to impact Canadian organizations and negatively impact business results through reduced IT productivity, delayed IT projects, increased IT cost, and restricted IT-driven innovation, creating greater road blocks for companies looking to digitally transform.

Every business leader understands that a skills gap refers to the difficulty of finding the right people at the right time and at the right price. In 2017, very few companies are adequately staffed for IT (9% per IDC research). IT operations and security are the most common skill gaps with one-third of companies having gaps in these roles. Getting qualified IT staff and the cost of staff are the primary challenges facing companies today. At a time when companies are pressured to digitally transform, the national IT skills shortage is clear constraint.

Response of Beleaguered Companies: Adopt Cloud-Based Managed Services

Managed services are well established options for delivering IT services to customers based on the economics of spreading the costs, resources, and infrastructure components across a larger base of users. The enhanced business value of managed services emerged with the development of cloud computing solutions as the underlying digital transformation platform. The value proposition of managed services shifted from the "run-it-for-me" paradigm to a value-based paradigm founded on

consumption and usage metrics. Cloud-based managed services allow Canadian businesses to exploit a variable cost structure (including a shift away from capital expense outlays), payment only for services consumed, and the adjustment of services based on usage and demand.

Benefits of managed services include:

- **Switch costs from Capex to Opex.** DX enablement will require significant capital outlays for Canadian businesses in a traditional customer-owned installation. The use of DX strategies and managed services offerings will lessen the requirements for capital spending and allow the business to pay for only the products/services it consumes.
- **Improved service levels through comprehensive monitoring and management.** Using external resources for 24x7 monitoring and incident management, service desk support, and software release management can not only improve upon internal processes and practices, it can allow businesses to re-direct resources to higher-value activities.
- **Access to new technology.** The ability of Canadian businesses to transform their organizations for digital-enablement will require the effective utilization of new technologies and services. The use of external experts is one of the best ways to access new technologies while managing internal staff and skills requirements.
- **Lower TCO with less risk.** Managing multiple services across a number of vendors and contracts can result in higher costs, vendors passing blame rather than working together to find solutions, and more oversight/governance expense. Combining services under one vendor contract with certain service quality levels, service level management guarantees, and predictable and variable costs will help lower operational expenses.

The TELUS Smart Workplace Solution

TELUS' Smart Workplace solution is a cloud-enabled solution aimed specifically at addressing the DX potential that resides in corporate networks, from traditional telephony to advanced Internet Protocol (IP) networks. Its core business value lies in the integration of these networks onto one integrated platform enabled by Unified Communications (UC). By using the TELUS Smart Workplace solution, IT managers are freed from the duties of managing multiple networks and network providers. They are freed from the responsibilities of procuring, installing, inter-connecting, managing, and maintaining hardware devices. And they don't have to consume valuable resources configuring software, installing patches and updates, or tracking changes to users. Transferring these responsibilities to TELUS through a managed solution moves the risk of cost overruns and poor service quality from the customer to TELUS, which backs up its commitments with a service guarantee – with penalties.

TELUS' Smart Workplace solution is a fully managed service, in which support is managed in an integrated fashion rather than separately, therefore simplifying and enhancing the customer experience in dealing with TELUS. Customers only consider if the service is working and meeting their requirements, not the underlying technology. The cloud-enabled platform integrates three key solutions:

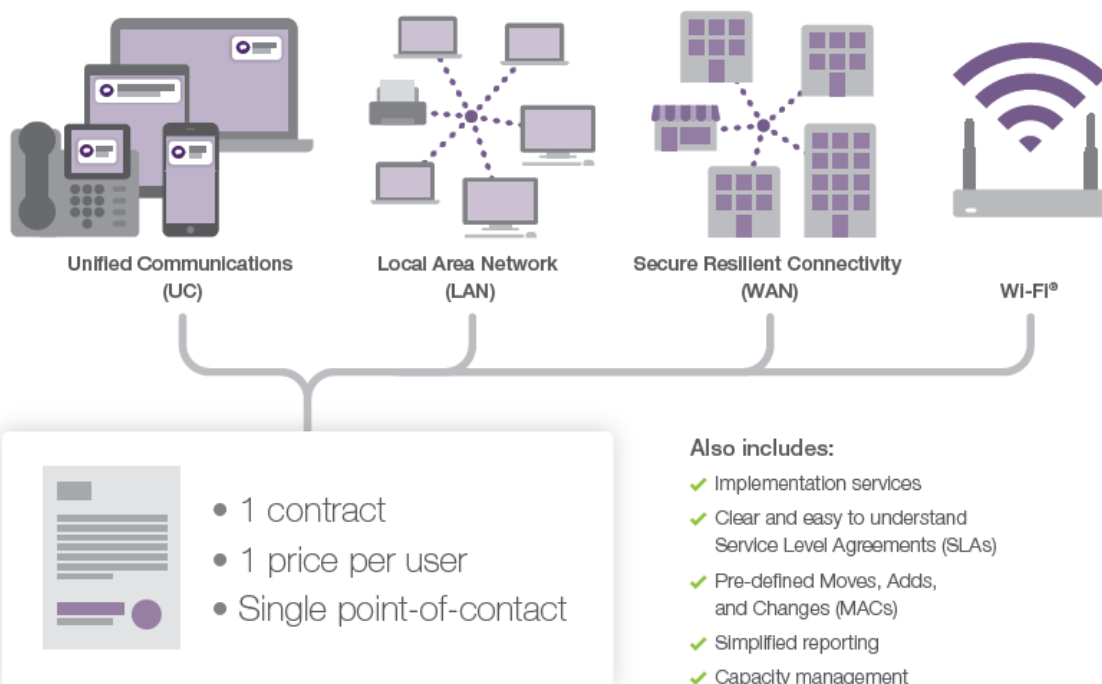
- ***Managed voice and unified communications.*** The UC component includes voice, video, voicemail, instant messaging, presence, and unified mobile communications. Telephony access (local and long distance) is provided through IP or traditional business lines.
- ***Secure resilient network connectivity.*** Secure resilient WAN connectivity is optimized to provide the best network solution for the customer, including two common configurations with wireless backup for network resiliency: 1) WAN MPLS with QoS, providing high levels of

performance and reliability for larger locations, and 2) SD-WAN, a new secure internet option allowing cost effective cloud-enabled WAN communications for smaller and remote locations.

- **LAN management.** LAN services are fully managed and include installation services, configuration, maintenance, ongoing monitoring, and service management. TELUS can provide and manage new equipment (LAN switches and WiFi equipment). Alternatively, TELUS can manage customers' existing equipment.

TELUS Smart Workplace*

We take care of technology so you can take care of business.



*TELUS Smart Workplace will evolve to include additional services.

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The defining feature of the TELUS Smart Workplace solution is that all of these infrastructure components and solutions are fully integrated and managed through one contract (through either per-user or per-site options), administered through one invoice, and subject to one service level agreement (SLA). Buyers do not have to manage multiple contracts and vendors; governance and vendor management is simplified and the per-user pricing and cloud-based delivery model means that the

solution is uniquely tailored to individual customers and their specifications. Buyers of the TELUS Smart Workplace solution will be able to concentrate their internal IT workforce on higher value DX projects to become competitive and enjoy the benefits of higher revenue and profitability generated by digital investments.

TELUS plans to continue to enhance its offering by expanding the scope of services offered, and to include best-of-breed technologies to meet client needs and technology shifts.

Challenges

Cloud-enabled managed services are rapidly becoming mature markets, but there are still niche markets that are in an early-adopter phase and will be challenged, at least in the short-term, based on the following issues:

- **Little understanding of how DX changes the organization, and underlying IT infrastructure.** Business executives are less certain than IT executives on imagining how DX will change business operations. Operational workflows, processes, customer and employee engagement are all subject to change, placing a huge demand on legacy IT infrastructure. DX investments that are unsupported by a resilient, current, and fast UC/LAN/WAN infrastructure will be like throwing good money away if legacy IT infrastructure acts like an anchor on digital initiatives.
- **Disconnected solutions in client environments.** In many cases, Canadian companies may still view UC, LAN, and WAN as discrete solutions, subject to their own provisioning and maintenance requirements, investment cycles, and internal and external support relationships. Buyers wanting to take advantage of a cloud-enabled IT platform that integrates UC/LAN/WAN managed services into a single offering may need to accept changes. However, the TELUS Smart Workplace offers clients choices, so the changes may be minimal.
- **Vendor Lock-in / Switching costs.** Many traditional communications services and equipment contracts are locked up in long-term deals which will make switching to an integrated managed service offering challenging.

Guidance

IDC highlights the following guidance for Canadian businesses in their consideration of an integrated UC/LAN/WAN managed service:

- **Prioritize IT spending for digital transformation.** IP telephony and hosted cloud services have reached a stage of maturity that now equals or surpasses traditional voice communications in terms of cost, quality, and reliability. There are now options for Canadian businesses to transform office-based communications systems, but it will require a shift in thinking and a concerted effort to prioritize this part of the business infrastructure as a component of digital transformation enablement.
- **Align investments for DX technologies and solutions.** Digital transformation is, at its core, a cloud-enabled economy and Canadian companies need to extend their cloud infrastructure to support both internal and external IT and communications operations. While there may be more impressive DX initiatives, enabling UC/LAN/WAN and WiFi will help set the foundation for long-term success.
- **Secure the organization.** The number-one networking technology for Canadian organizations is security, and it is always top of mind with managed services and cloud. Mitigate your firm's technological and reputational risk with a provider that has the financial, operational and human resources to maintain your business at the forefront of network security.

- **Simplify relationships and governance.** The use of managed services and external providers introduces a layer of complexity in managing and maintaining services. Utilizing solutions that integrate multiple services into one solution will help to streamline vendor management, collaboration, and governance structures and allow buyers to concentrate on achieving key performance metrics.
- **Future-proof your IT infrastructure.** Mature Canadian businesses are rapidly moving to an IP-enabled environment. Increasing the utilization of IP networks with LAN, WAN, and UC communications services can be a significant opportunity for cost savings, enhanced services capabilities, and a reduction in technology obsolescence. Future-proofing these solutions can be further enhanced with externally-sourced, managed services where technology investments are the responsibility of the external provider.

About IDC

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