



Digital Transformation in Canadian Enterprise

Profound Change on the Horizon

An IDC InfoDoc, Sponsored by SAP Canada | April 2016

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Executive Summary

The Future Begins Now

The digital economy is spurring the creation of new services, new products, and brand new business models. Almost every business leader is talking about industry disruption and the importance of becoming digital. CEOs of global giants like Citi, GE, Starbucks, and Caterpillar are shifting their business models using **cloud, analytics, mobility, and social technologies.**

Companies and governments are appointing **“chief digital officers” and “chief innovation officers”.** While digital transformation is a global phenomenon, it is not just for multinationals. Canada lags its international peers in productivity and level of innovation. **To remain competitive globally, Canadian companies need to embrace digital and initiate a transformation strategy now.**

IDC conducted an analysis of 200 Canadian organizations on the topic of the digital economy and the role of technology in transforming their business. Three key themes emerged that characterize the state of Canadian businesses with respect to their digital efforts.

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- » **Canadian businesses recognize the importance of digital in the future:** The most cited benefit of becoming digitally ready was the ability to quickly change, becoming faster and more agile. Indeed, 60% of organizations expect the digital economy to have a major impact on their business in the next three to five years.
- » **Few organizations have a clear strategy now:** Only 17% of Canadian organizations have integrated a digital transformation plan into corporate strategy.
- » **Less than half are investing in a meaningful way to digitally transform:** Fewer than 50% of Canadian organizations are making major investments in enabling technologies like cloud software, analytics tools, cyber security, and mobile solutions, but 84% agree that “every business is a technology business.”

Canada, like other countries, is at an early stage of maturity with regards to digital transformation. IDC estimates overall maturity levels to be on par with Europe, but behind the U.S. and Asia/Pacific. Despite the slower adoption, Canadian organizations have the ability to make progress by identifying near-term moves that will deliver value while also building experience and confidence to plot a longer-term digital transformation. Now is the time to act to avoid being left behind. This study provides insight into where digital is heading in Canada, how companies are responding today, and what this means for operating in a competitive, fast-moving environment.

60% of organizations expect the digital economy to have a major impact on their business in the next three to five years.

The Transformation Imperative

- » **Barriers are falling** as technology and globalization allow new competitors to enter markets and non-traditional competitors and upstarts to launch new offerings.
- » **Every organization in every industry is facing pressure** to reduce costs, improve service — be faster, better, and cheaper — and ultimately transform their processes and even their business models.
- » **New technologies are shaping and redefining how customers interact with all types of organizations:** customers expect a context-aware and seamless experience across virtual and physical channels.
- » **Transformation has moved beyond the consumer realm and is affecting every sector in the economy.** Positive digital experiences in leading industries (e.g., media, online retail) have created higher expectations for digital service everywhere, raising the bar for all organizations.

New technologies are shaping and redefining how customers interact with all types of organizations



Technology Trends at the Foundation of Change

Five inter-related trends in technology are spurring innovation and transformation:



Cloud computing

Scalable, elastic, and self-serve applications, infrastructure, and platforms are the foundation for business agility. Cloud includes software as a service (SaaS), infrastructure as a service (IaaS), and platform as a service (PaaS).



Cybersecurity

State-of-the-art security solutions mitigate risk and create an environment to enable digital transformation. Cybersecurity incorporates technologies such as identity and access management, network security, and vulnerability management, as well as next-generation solutions such as automated threat intelligence, fraud analysis, and user behavioural analytics.



Supercomputing

The rapid increase in compute capabilities is opening up new possibilities in the digital economy. Innovations like large-scale in-memory computing and Big Data technologies enable rapid analytical processes, delivering insight from complex data sources and applications.



Hyperconnectivity

Advancements in connectivity, particularly high-speed wireless networks, coupled with pervasive adoption of mobile devices are creating a hyperconnected digital economy. Businesses and governments are able to engage with suppliers, customers, and partners in new and more efficient ways.



Smarter World

The Internet of Things (IoT) combined with innovation accelerators such as robotics, augmented and virtual reality, 3D printing, and cognitive systems gives rise to the notion of a smarter world. These innovations will drastically transform nearly every aspect of business in the future.

About the Study

SAP commissioned a study to examine Canadian line-of-business (LOB) and IT stakeholder viewpoints on the digital economy. In December 2015, IDC Canada conducted a web and phone-based survey of 200 individuals in senior management positions.

The survey sample included 200 senior decision makers — 134 LOBs and 66 CIO/IT professionals. **Respondents included in the survey were knowledgeable about strategic plans and how technology fits into them.**

The survey comprised 150 large organizations (\$300M+) and 50 midmarket organizations (\$100M–\$300M) across a variety of industry sectors and regions in Canada.

The survey results were supplemented by five in-depth executive interviews conducted by telephone with Canadian firms to explore their digital transformation initiatives.

The Digital Context in Canada

Defining the Digital Economy

The digital economy transforms businesses through the implementation of new technologies and processes, reducing boundaries between customers and suppliers. Organizations are employing digital technologies along with organizational, operational, and business model innovation to create more efficient processes and revenue growth.

Some Examples of Digital Transformation Include:



Retail transformation: redefining the customer journey in digital and physical realms to create an intuitive shopping experience, e.g., using loyalty card data and mobile technology to streamline order processes.



Smart manufacturing: deploying wireless sensor technology and analytics on the factory floor to predict and prevent machine downtime, make production lines flexible, and maximize asset utilization.



Business model transformation: creating new lines of business using data as a strategic asset, e.g., an industrial products manufacturer shifting from selling capital equipment to an asset as-a-service approach (e.g., real-time remote monitoring of equipment with usage-based charging).

The Pressing Issues of Today ... and Tomorrow

To interpret the mindset of stakeholders in the digital economy, let's first understand the business pain points within Canadian organizations. The top immediate business concerns among survey respondents are:

1. Escalating costs of operations
2. Economic uncertainty
3. New or increased global competition

Looking out three to five years, costs of operations remains number 1, but changes in customer buying and consuming patterns rises to number 2 as a primary concern. This backdrop of cost concern and overall uncertainty sets a tone in the discussion of the digital economy. Moreover, the recognition that consumption models are changing necessitates a business response. Canadian organizations will look for digital initiatives to drive efficiency and bottom-line results, as well as providing tools for protecting market share and to better serve future customers.



Top immediate
business concerns:
cost, economic
uncertainty and
new or increased
global competition

CASE STUDY

Bombardier Recreational Products (BRP)

BRP has a marketing slogan that encapsulates its approach to customer engagement: It all revolves around you. **The leading recreational products manufacturer has embraced the full range of digital channels to reach its customer base, engaging through mobile apps, Facebook, YouTube, and real-time interactions.** The transformation to digital customer engagement was initiated and driven by the marketing team.

Following the success of its digital marketing strategy, the company is now looking to embrace digital to enhance other areas of the business, such as sales, manufacturing, distribution, and support functions, recognizing that digital disruption is a reality in every industry and business domain. “Digital will become an enabler to every aspect of our business,” says BRP CIO Hassan el Bouhali. “This is where the role of the CIO is — becoming transformational, facilitating and enabling business transformation.”



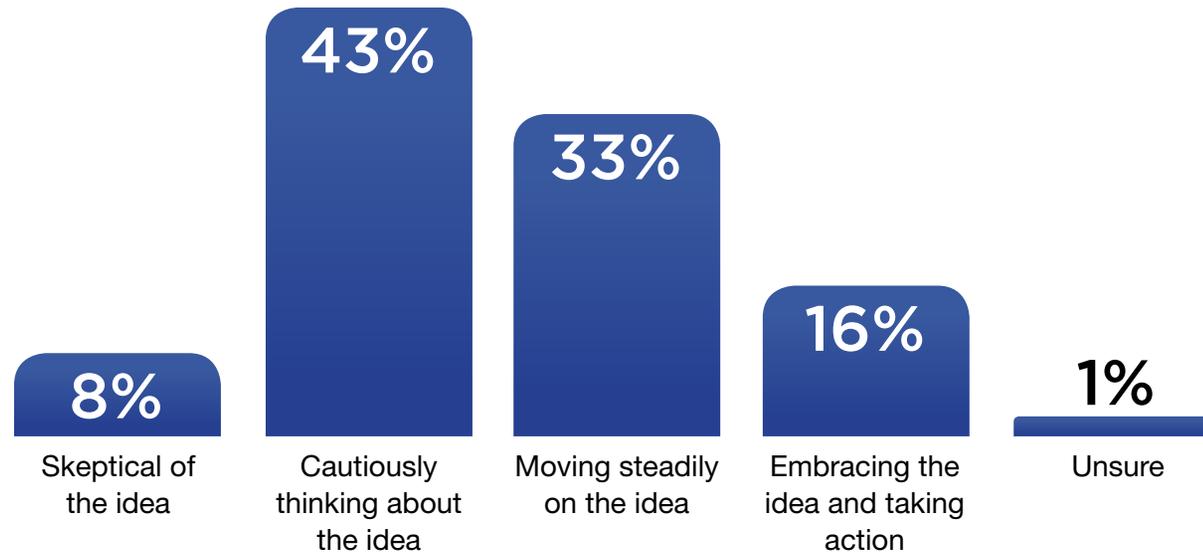
“Digital will become an enabler to every aspect of our business.” This is where the role of the CIO is — becoming transformational, facilitating and enabling business transformation.”

— Hassan el Bouhali, CIO, BRP

Digital Largely Seen as Tomorrow's Worry

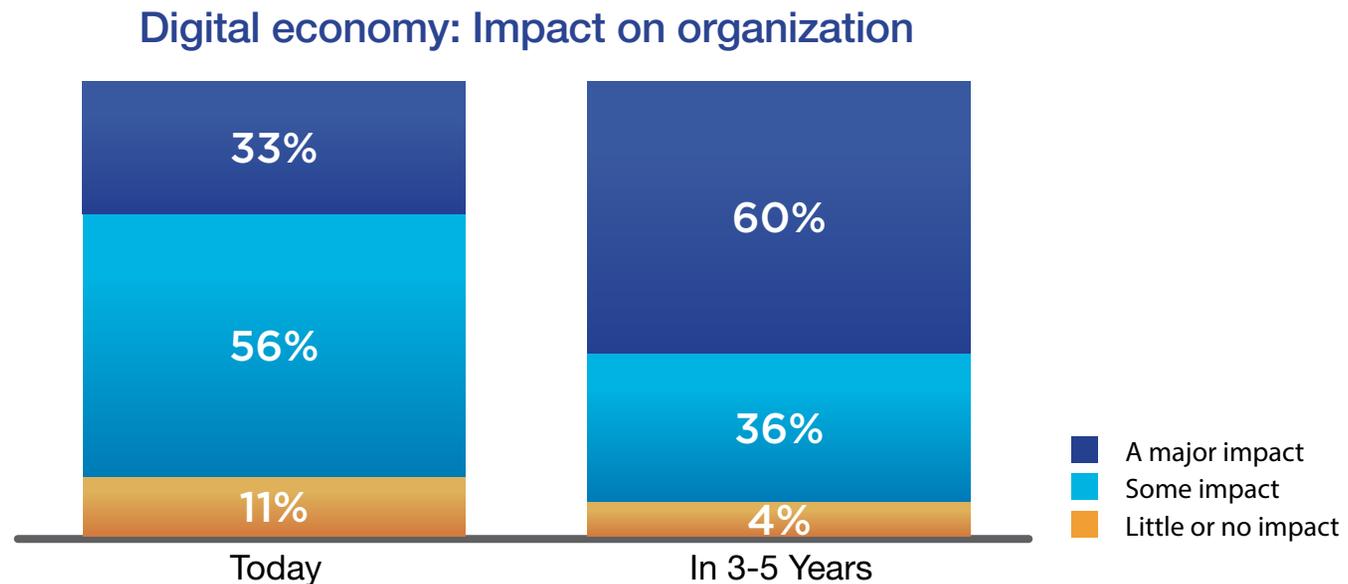
IDC found that decision makers in large Canadian enterprises have a foundational understanding of digital economy concepts and transformation, but do not have a good grasp of its implications for their organizations. This mindset extends through these enterprises, as two-thirds (63%) of respondents said the same was true for their organization's top-level management.

Top leadership views on digital transformation: Cautious and steady



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This leads to a lack of urgency, reflected in the views collected on the “impact of the digital economy on your organization.” Only a third (33%) see it having a major impact now, rising to 60% expecting it to have a major impact in three to five years. IDC believes that the remaining two-thirds are either not currently feeling a competitive threat or their customer base hasn’t radically changed. However, for many of these businesses, digital transformation is inevitable, and missing or ignoring the potential threats or opportunities is a risky position.



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To dig deeper, IDC tested a few critical attitudes of the 33% who already believe they are being affected. Respondents who reported seeing a “major impact now” are also more likely to strongly believe that:

- » “Every business is now a technology business”
- » “Early adopters of the digital economy model are winning competitively”
- » “There is more risk in not embracing than in embracing the digital economy”
- » “New competitors in my industry appear to be emerging from nowhere”
- » “Embracing the digital economy should provide a significant ROI to the organization”

IDC focused on these measures because we have found that progress around digital transformation can take place only after there is a common understanding of the concept within a business, as well as a shared goal to initiate change.

Technology and IT management play key roles, but successful transformational initiatives are a collaborative effort, driven by business leaders who recognize how the key pillars of the digital economy create opportunity.

Survey Reveals Canadian Business Slow to Initiate Digital Transformation

Not surprisingly, a lack of understanding around the implications of digital has led to caution in terms of meaningful action to address it. On one hand, it is encouraging to see that the discussion of digital and its implications has started at most enterprises (86% have done so), and some formal plans addressing the issue have been made at two-thirds (63%). On the other hand, a meaningful commitment to embrace digital transformation through an integration with the overall strategy is still far away for most enterprises.

86%



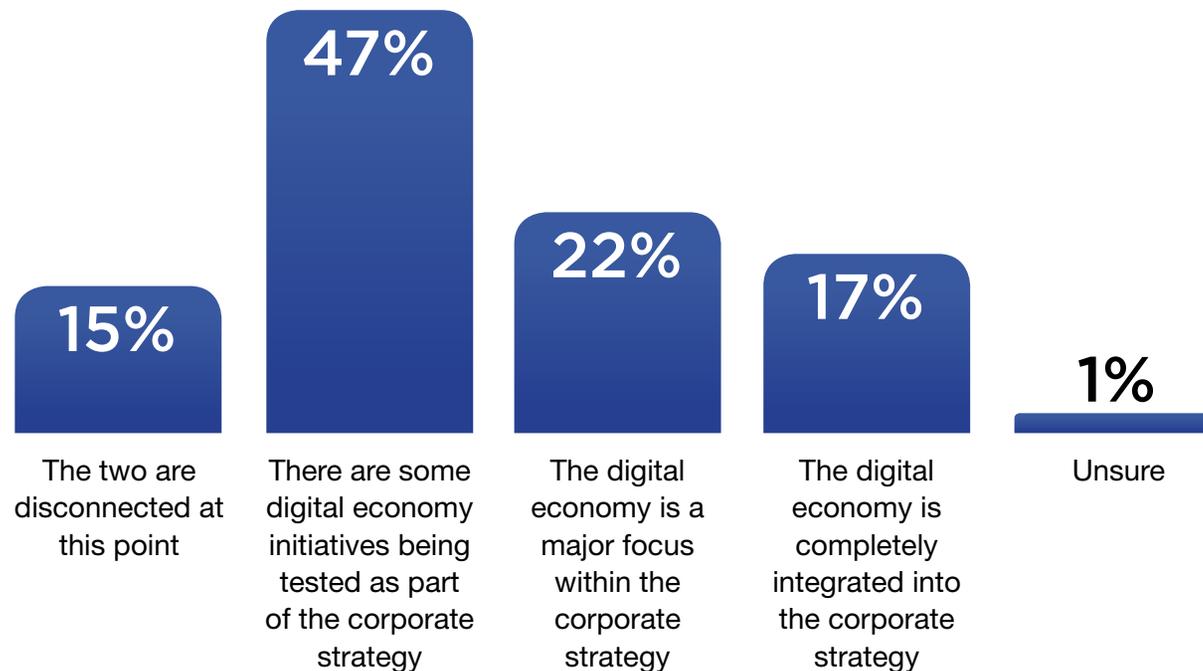
of enterprises have at least discussed digital and its implications

63% have made formal plans to address digital transformation

Just one in six (17%) respondents indicated that digital transformation initiatives were integrated into corporate strategy.

The most common stance (47%) was that some digital initiatives were being tested as part of corporate strategy. These findings are similar to other research that IDC has conducted recently looking at digital transformation in Canadian business.

Digital alignment with corporate strategy?



CASE STUDY

BELL

The popularity and growth of mobile phones in Canada has been a boon for Bell, Canada's largest telecommunications company. Mobile product innovation has quickened and customers are increasingly looking to upgrade their devices to take advantage of new features. **Bell's reverse logistics team manages the end-to-end return process for handsets.** Transforming this process is a key element of the supply chain function at Bell, and is led by Hadeer Hassaan, director of Reverse Logistics Transformation and PMO at Bell. Digital plays a critical role in automating processes. "The ability to get instant KPIs from your systems, to know exactly how many devices are back in our inventory. How did we use each and every one of these devices? All of this is enabled through systems and technology," says Hassaan.



Bell is actively working on using this data strategically — specifically the life cycle of handset, combined with predictive analytics — to more accurately create forecasts. The process of transforming logistics isn't easy, and change management is an important ingredient in ensuring digital initiatives at Bell are successful. "The wireless industry is a very fast paced and dynamic industry," says Hassaan. "Things change very fast and the competition is very fierce." The role of the PMO is to ensure the vision is implemented in a complex function like reverse logistics, without disrupting the teams that continue to work on their day-to-day responsibilities.

"The ability to get instant KPIs from your systems, to know exactly how many devices are back in our inventory. How did we use each and every one of these devices? All of this is enabled through systems and technology,"

— Hadeer Hassaan, director of Reverse Logistics Transformation and PMO at Bell

Commitment to Digital Linked to Technology Investment

Another way to measure meaningful action is to look at major investments in technology that support a digital strategy. IDC examined investments in 16 specific technology areas to measure progress. While it is true that some of these investments may have been made for more isolated business reasons, we find that the greater the commitment to digital transformation in corporate strategy, the higher the level of major investments in the technologies that support that strategy. The good news is that enterprises that have not embraced the digital economy, yet are likely making some of the investments, are putting themselves in good stead in the future.

Corporate digital strategy alignment vs. technology

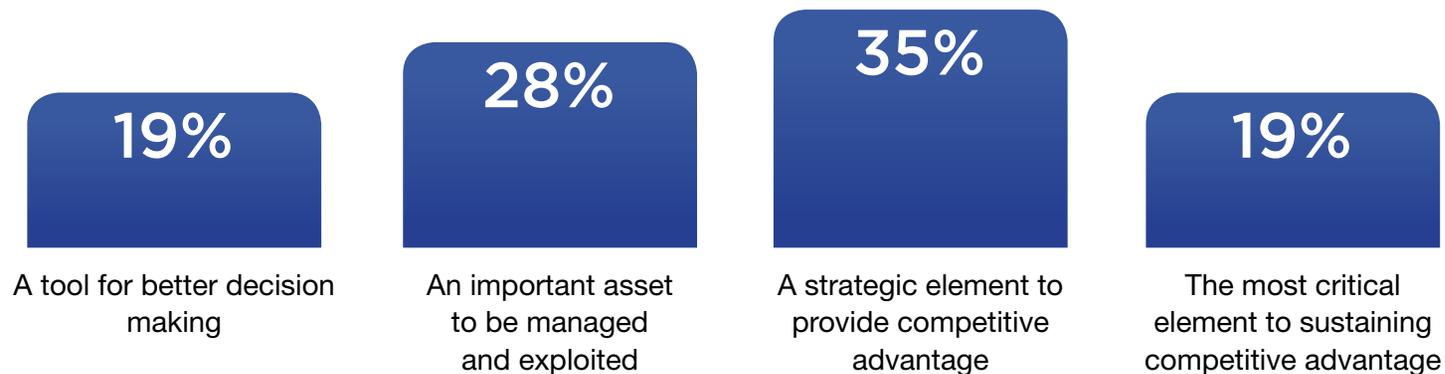
(average number of major technical investments)



The Majority of Canadian Organizations View Data as a Strategic Asset

Over the past decade, we've witnessed the rise of analytics in business and a parallel interest in Big Data. Data is an asset in any organization — big, small, or otherwise. In raw form, data has little value, but analytics and business intelligence tools turn data into insight and help drive performance improvements. The study reveals that 19% of organizations view data as the most critical element to sustaining competitive advantage, while an additional 35% viewed data as a strategic asset to provide competitive advantage.

The role of data: tool vs. strategic asset



Leaders Looking for Digital to Deliver Agility and Productivity

What are the perceived benefits of implementing a digital strategy? We found respondents generally able to articulate the benefits of becoming more digitally enabled and they aligned with the benefits that other IDC research has demonstrated. The top 5 stated benefits were:

1. **Much quicker ability to change — faster and more agile**
2. **Greater productivity**
3. **More informed decision-making**
4. **Better innovation**
5. **Simpler processes**

The notion of agility is central to the digital economy. Business stakeholders recognize the need to be able to adapt in a shifting competitive landscape. We see recognition of this in the study, as 72% of respondents agree with the statement “new competitors in my industry appear to be emerging from nowhere.”



“new competitors in my industry appear to be emerging from nowhere.”

CASE STUDY

Alberta Treasury Branches (ATB) Financial

For ATB Financial, the focus of the digital economy is to understand how to **transform banking to meet and exceed changing customer expectations and actually make banking work for people through what it terms “engaged banking.”**

Customers are rapidly embracing digital technologies but are still looking for personal relationships. Summing up ATB Financial’s challenge, John Tarnowski, vice president, Channels & Payments, said, “We’re looking at really employing and leveraging technologies that allow us to make that entire end-to-end experience really simple, yet still smart and helpful.

A critical element in meeting this objective was to bring a discipline or structure to our user design transformation. This was accomplished by engaging select users early in our design process and having them participate in partnership with ATB as we create the experiences they’ll use. This has resulted in positive user adoption of our digital tools and the successful launch of products like our new Online Shopping platform and the widely adopted Personal Financial Management solution.”



“We’re looking at really employing and leveraging technologies that allow us to make that entire end-to-end experience really simple, yet still smart and helpful.”

— John Tarnowski, vice president, Channels & Payments, ATB Financial

Attitudes Toward Digital: Early Adopters Win and Technology Is Pervasive in Business

An overwhelming majority of respondents agreed with the statement “every business is now a technology business”, and nearly half (48%) **strongly** agreed. Tech is no longer viewed as an isolated sector or a set of tools that a single department deploys. There’s also recognition that early adopters of digital are winning competitively, and that not embracing digital is riskier than embracing it.



Nearly Half (48%)

strongly agreed that every business is now a technology business

Technology is a key strategic element of digital transformation

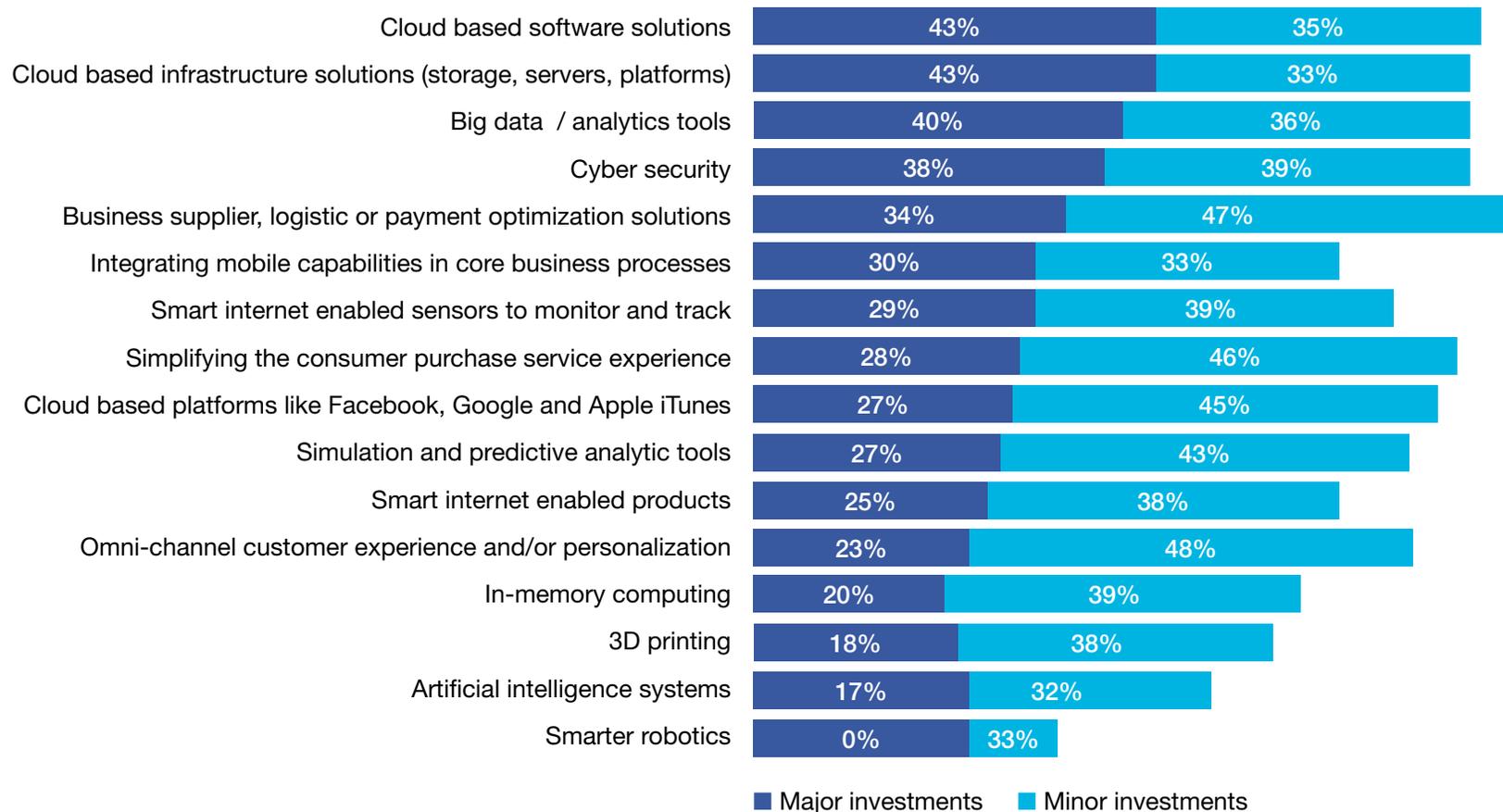
Despite the fact that most organizations don't have a cohesive digital plan, investments are being made to help enable elements of digital transformation. **68% of Canadian organizations have allocated budget on digital initiatives, and of those 79% have at least some framework to guide new technology spending.** So where are investments going? The deepest investment considerations are on cloud computing, Big Data and analytics tools, and cybersecurity.

Respondent agreement with key statements about the digital economy



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Technology investments tied to digital transformation



Why Do We See So Much Caution Around the Digital Economy?

Generally, caution around adoption of new approaches, strategies, or technologies is driven by one of two issues: a lack of understanding of the benefits, or fear that the benefits are not worth the cost. In this case, the top real or perceived challenges in initiating a digital transformation strategy are:

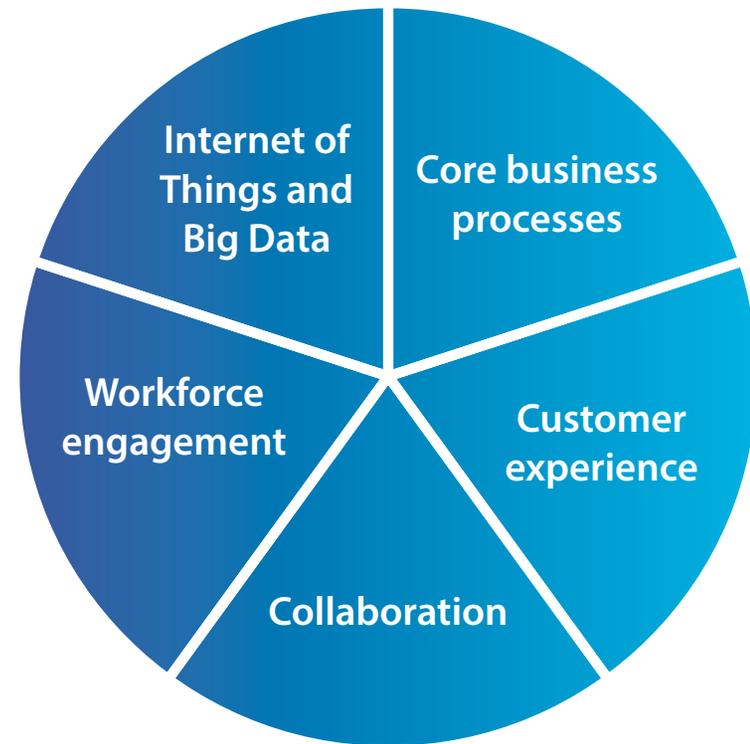
1. Costs to implement
2. Increasing complexity of technology
3. Increasing complexity of business processes
4. New work force skillset needs
5. Need for better analysis of data

IDC examined these issues in more detail. Respondents who see digital having little to no impact on their enterprise now are also unsure of the ROI going forward. The issue of complexity may stem from lack of awareness and exposure to new digital technologies, coupled with a scarcity of experienced employees who have “hands on” involvement in digital transformation initiatives.

Regardless of the underlying reasons for caution, it’s clear there’s a need to break down the concept of digital transformation into manageable pieces to better understand the benefits and potential costs in a tangible way.

Business Can Initiate Change in Five Key Pillars of Digital Transformation

There are five inter-related areas where business leaders can take action. These are pillars all organizations share, and they provide a simple framework for how to break down a digital transformation into manageable components and more clearly understand benefits and costs:



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Core business processes or the “digital core” are the systems that are central to a business — finance, supply chain, R&D, and manufacturing, for example. Agile companies are embracing digital technologies to transform core functions, shorten cycle times, and radically improve responsiveness — operating on live data in real time.

Customer experience or omni-channel initiatives blend physical and online experiences. Great strides have been made in recent years to ensure that customers’ expectations are met whether they are served in store or through virtual channels. It’s about context and creating a seamless and responsive customer journey integrated with core business processes.

Collaboration beyond the walls of the enterprise enables game-changing efficiencies. The ability to share relevant data and forecasts and to transact directly through trusted networks of suppliers collapses traditional processes, turning suppliers into extensions of your business.

Workforce engagement transforms how talent is accessed, developed, and leveraged. Whether managing the growth of employees or engaging contingent labour or specialized service providers, matching the needs of the business with the right pool of skills in a changing workplace is increasingly a source of competitive advantage.

Finally, the **IoT and associated Big Data** are allowing companies to realize the potential of linking physical and digital assets. Radical automation and flexibility, intelligent systems, and entirely new business models are emerging as IoT data is brought together with transactional and core operational data.

CASE STUDY

Hatch Unlimited

Hatch — based in Mississauga, ON — is a global supplier of engineering services, project and construction management services, process services, and business consulting and operational services to the mining, metallurgical, energy, and infrastructure industries. It plays in a fiercely competitive market with few national boundaries. **To stand out, Hatch focuses on delivering better value to customers through innovation — and technology drives that innovation.**

John Pearson, global managing director, Energy, said, “The digital economy is how you use these technologies to make your clients’ businesses more effective and allow you to do things you could never do before.” It focuses on the ability to be “virtually there” anywhere in the world, to the point of effectively taking control of its clients’ facilities if needed. The challenge for Hatch today is in fusing its extensive domain expertise to the tremendous stream of available data, and contextualizing that into value deliverable to clients.



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— John Pearson, global managing director, Energy, Hatch Unlimited

Canadian Businesses Are at Varying Stages of Digital Transformation

How businesses understand and act on digital transformation varies by organization size, industry sector, and region. The impact digital transformation is having on business now is a strong indicator of this. The survey shows the larger the business, the more likely it is that digital transformation is having a major impact now.

Businesses in the West and Atlantic Canada are more likely to see the digital economy having a major impact now compared with businesses in Ontario and Quebec. Among industry sectors, a major impact is most felt in financial services and retail, while the public sector and transportation lag.



Businesses in the West and Atlantic Canada are more likely to see the digital economy having a major impact now compared with businesses in Ontario and Quebec

Catching Up with the Digital Economy

Five Approaches to Get Moving

The digital revolution is underway and Canadian organizations are falling behind. Companies should be taking a hard look at their industry position and identifying areas of potential disruption and opportunities to win.

Organizations that want to kick-start their digital transformation should keep five key tips in mind.

1. Change starts at the top.
2. Tackle “digital transformation” using the five pillars.
3. Create strategic partnerships and focus on what you do best.
4. Foster collaboration across business and IT management.
5. Highlight the small wins.

1. Change starts at the top

Executive leadership plays a critical role in any transformation. Successful leaders foster a culture of change by sharing vision and by leading a cross-functional team that builds a culture of support for digital transformation from the C-suite down. A shift in the organization's mindset is critical to translating strategy into action. Leaders who have a more positive view when creating the business case are able to share a vision of digital transformation where business outcomes outweigh the investment costs.

2. Tackle “digital transformation” using the five pillars

Our study found that a large part of the struggle with digital strategy is gaining agreement on what it means and what can be done. Breaking it down into areas for action is a great first step, and will help provide specificity around the benefits — a key concern. The five pillars — core business processes, customer experience and omni-channel, supplier collaboration, workforce engagement, and IoT/Big Data — provide focus for an organization to assess each area given its own unique starting point and to ask questions like: What are the quick wins in this pillar that would make a meaningful impact? How are we vulnerable to digital disruption here? What does a digital target state look like in 5, 10, or more years? How can capabilities in other pillars (existing or potential) enable advantage here? Ideas across the five pillars can then be collected and prioritized for business value across the enterprise to inform the overall digital roadmap.

3. Create strategic partnerships and focus on what you do best

Not everything can be done in-house, which is why most successful organizations create strategic partnerships with technology vendors. Suppliers must be willing to invest time and resources to truly understand your business, bring industry expertise as well as technical knowledge of what's possible, and become trusted advisors that operate as an extension of the digital team. Experienced vendors should help an organization move swiftly from an ad hoc approach to IT investment to a value-based digital roadmap embedded in corporate strategy, where businesses remake existing markets and create new ones to their advantage.

4. Foster collaboration across business and IT management

Bring the best leaders to the table across business and IT. Unlike traditional corporate strategy, digital strategy requires expertise and market knowledge that is constantly evolving within the five pillars of an organization. Experts from different disciplines and levels must be brought together to deliver digitally enabled product/service experiences on a continuous basis. Consider strategic platform investments holistically, as cloud, analytics, and mobile technologies brought together (rather than viewed as separate initiatives) offer greater potential for business benefit. Embrace the notion that technology is part of every area of the business, not a siloed department. Organizations that embed IT resources throughout the company are more likely to identify where technology and data will create new opportunities.

5. Highlight the small wins

While sustained digital transformation requires an organization wide approach, using pilot projects and highlighting successful “small wins” can create momentum and build confidence. It also lowers the cost barrier to get started. Whether it is the rollout of a dynamic mobile customer app, a novel IoT application, or new immersive digital training program, use these to learn and transfer knowledge to adjacent functional areas and to inform the roadmap.



For more information on digital transformation in your industry, please visit <http://discover.sap.com/canada-digital-transformation>