A Vision & Pathway to the Intelligent Enterprise

November 2019

Written by: Tony Olvet, Group VP, Research | IDC Canada

Intelligent Enterprise Foundations

From Digital to Intelligent

What is the “intelligent enterprise?” It is a strategy that enables you to transform data into action across all lines of business — driving process automation and innovation, unlocking new areas of growth, and delivering exceptional experiences. As Canadian enterprises face the challenges of shifting customer demands, emerging global competition, a growing skills shortage, and a quickening pace of innovation, business and IT leaders recognize the value of building intelligence into every facet of business. And the foundation is digital.

The intelligent enterprise can realize value in different ways, such as faster delivery times through optimized supply chain planning, more precise resource extraction enabled through sensor data and analytics, rapid product development driven by digitally captured customer feedback, system automation made possible through digital process enhancement, and improved staff engagement through systematic employee experience programs.

One of the most compelling outcomes of the intelligent enterprise is that enhancements positively impact customer relationships and the uptake of new offerings. For example:

"We drive over 20,000 predictive recommendations to customers every week, with over a 47% conversion rate."

- Wellington Holbrook, Chief Transformation Officer, ATB Financial

"With smart meters ... we have gained better insights into our customer usage habits and patterns. And now we’re able to provide new services to them to help them better manage their electricity usage and offer potential solutions to help them reduce those costs."

- Robert Wong, CIO, Toronto Hydro

Canadian Organizations Are on a Journey to Become Intelligent Enterprises

To become an intelligent enterprise an organization must establish a formal digital strategy. Over the past four years, through IDC’s and SAP’s joint studies of digital transformation, we have observed progress in the formulation and execution of a digital strategy by Canadian organizations. In our 2019 survey we found that 85% of Canadian enterprises have established a formal digital strategy, compared with 76% in 2017, with the majority down the path of becoming intelligent enterprises. Canadian enterprises are also more confident in their digital strategy in comparison to peer organizations: 30% said they "exceed peers" or are "best in class" in 2019 versus 22% in 2017, with fewer now claiming to lag their peers.

To help illustrate this progress IDC developed a model to categorize Canadian enterprises along a four-stage scale, with the corresponding labels:
Observer: low adoption of building block and innovative technologies, disconnected line-of-business digital initiatives, limited focus on experience management

Participant: some focus on enterprisewide digital initiatives but still low use of building block technologies

Challenger: increasing focus on integrated enterprisewide digital innovation, but not all functional departments are engaged in digital strategy

Leader: advanced use of technology, integrated and continuous enterprisewide digital innovation, tight linkage between employee experience and customer experience

The Intelligent Enterprise Overall Progress Scale was developed using data captured in the SAP-IDC Intelligent Enterprise survey of 303 Canadian organizations. IDC used three key questions asking about an organization’s (1) strategic focus, (2) technology readiness, and (3) organizational readiness. The distribution of organizations is shown in Figure 1.

Figure 1: *Intelligent Enterprise Overall Progress Scale*

Source: IDC, 2019

**Technology Readiness**

Building block technologies, such as cloud infrastructure, data management, and analytic tools, and newer innovative technologies such as IoT, machine learning, and AI enable an organization to become an intelligent enterprise. In the SAP-IDC IE survey we found a clear linkage between the deployment of these technologies, as well as the related skills, and progress toward IE leadership. Executing on a digital strategy means that organizations need to be agile and have the foundation in place to sustain changes in demand for compute capacity, real-time analytics, and digital customer service.

IE Leaders were more likely to be ready across all technologies, particularly cloud server/storage and productivity collaboration solutions. Similarly, IE Leaders commonly use over three innovative technologies on average, while IE Observers use less than one (see Figure 2).
IDC interviewed several organizational decision makers to better understand what it takes to become an intelligent enterprise. A common theme was the importance of establishing a solid IT foundation. There's a recognition that technology is one of the key solutions to help drive efficiencies and cost savings, to enable automation, and to enhance customer and employee experience.

"Automation on the rig and streaming large volumes of high fidelity data from sensors allows us to gain more insights about the well that we’re drilling for the customer."

- Darren Ruhr, Chief Administrative Officer, Precision Drilling

"We have to leverage a lot of IoT, a lot of machine learning ... that's the only way we're going to be able to optimize, stabilize, and manage the grid when you have all these disparate points generating and distributing electricity."

- Robert Wong, CIO, Toronto Hydro

Organizational Readiness

Beyond the technology itself, a mindset or culture within the organization is required to become an intelligent enterprise. Specifically, the level of engagement among senior leaders and the clarity to which the digital strategy is articulated contributes to success. The SAP-IDC IE study found that 80% of IE Leaders have executive management "enthusiastically engaged" in digital strategy execution, compared with a mere 9% of IE Observers. Without that enthusiasm organizations
fail to shift the culture of teams that execute the digital strategy. Figure 3 compares the level of enthusiastic engagement across different functional groups.

Figure 3: **IE Organization Readiness — Level of Engagement Among Groups**

The notion of enthusiastic engagement relates to a key finding from the 2018 SAP-IDC study of digital transformation, and that was the significance of digital change agents: leaders that bring a vision and energy who are also able to gain consensus within and across teams and through different levels of the organization. This creates a clear pathway to the intelligent enterprise. This was echoed in our 2019 study.

"Spend the time up front on your process design and get buy-in from bottom up or top down, but make sure that people really understand what the new process is and that you're going to fully leverage the system."

- Darren Ruhr, Chief Administrative Officer, Precision Drilling

**Experience Management Is Connected to IE Progress**

Four critical and related elements of the intelligent enterprise are customer experience, employee experience, product experience, and brand experience. Together these are referred to as experience management — the human side of business.

Experience management is part of the capabilities required to become an intelligent enterprise; in fact our study found that 73% of IE Leaders will increase their focus on employee experience next year, compared with only 44% of IE Observers. Similarly, 59% of IE Leaders will increase their focus on customer experience versus 44% of IE Observers.
One aspect of an experience management program is the ability to rapidly assess and report insights to key decision makers on the current state of customer feedback. For example, Canada Life uses Qualtrics to deploy an enterprisewide customer experience measurement program. Results are used to inform improvement initiatives on product and service design of specific touchpoints and journeys.

"Qualtrics has allowed us to make sure that we can be nimble as needed ... We are able to provide democratized access to real-time insights based on the feedback that we get."

- Director, Measurement and Research, Canada Life

**Figure 4: Experience Management — Expected Focus in Next Year**

![Bar Chart](image)

% Expected Focus in Next Year

- **Customer Experience**
- **Product Experience**
- **Employee Experience**
- **Brand Experience**

Source: IDC, 2019

**Customer Experience**

Customer experience (CX) is a functional activity encompassing business processes, strategies, technologies, and services that companies use to provide a better experience for their customer and to differentiate themselves from their competitors. The SAP-IDC IE study found that customer experience is the second most common measure of performance of digital strategy, and that it was linked to financial performance.

Overall, 64% of organizations indicated that their CX efforts had a moderate or significant positive impact on financial performance over the previous year, and this proportion was even greater for IE Leaders.

**Employee Experience**

Digital transformation is changing the way that human resources operates. Programs, resources, and tools are being put in place to track employee engagement, performance, and well-being. HR, human capital management, and employee engagement are well established capabilities within most organizations. However, what is novel is the connection
between employee experience and customer experience. 89% of IE Leaders said that it is very important or critical to improve employee experience while improving customer experience.

Figure 5: *Importance of Linking Customer and Employee Experience*

![Importance of Linking Customer and Employee Experience](image)

Source: IDC, 2019

And the responsibility for employee experience does not just remain within the HR department; it is cross-functional, and IT can play a key role.

"I don't roll anything out personally under my direction that doesn't have some mechanism to track adoption ... User employee experience is super important."

- Andreas Liris, CIO, Maple Leaf Foods

**Pathways to the Intelligent Enterprise**

*No Single Route*

Over the past half-decade, Canadian business leaders have been hearing the message loud and clear about the need to establish a digital strategy. The challenge, and where managers need guidance now, is how. The route taken will depend on the degree to which industry dynamics and customer demand are changing, and how far along your organization is in terms of transforming to succeed in the digital economy.

Use the four-stage IE progress model as a framework to move from one stage to the next.

» **Observer -> Participant** — invest in cloud and analytics, move digital from single departments to an enterprisewide strategy, clearly communicate plans and road maps

» **Participant -> Challenger** — broaden the focus of digital plans to engage all functional areas, create talent management plan to harness new skills, e.g., AI/machine learning, establish experience management program
Challenger -> Leader — ensure experience management programs are funded and tied to digital strategy, incorporate clear measures of improvement to connect digital to business objectives, formalize change management as a core competency

**What Do IE Leaders Do Differently? Ten Key Attributes**

Understanding more advanced organizations provides insight for other businesses. In our study we found what differentiates IE Leaders from the rest of the pack.

IE Leaders have:

» Established and executed a formal digital strategy and are producing results
» Internalized the need to innovate and grow
» Focused digital technology to make incremental and continuous improvements
» Integrated enterprisewide digital innovation with operations and customer experience
» Invested in cloud infrastructure, productivity and collaboration solutions, and data management services
» Commonly deployed multiclouds and AI/machine-learning solutions
» Willingness to alter their workforce mix to ensure the skill sets needed for digital initiatives are available
» Enthusiastically engaged IT staff and senior management in the execution of digital strategy
» Plans to increase their focus on experience management in the next year
» Identified customer experience and employee experience as the top 2 metrics used to measure performance of their digital strategy

The resulting outcomes that stand out for IE Leaders that emphasize experience management are highlighted below — the most commonly cited benefit is increased profit.
Figure 6: *Experience Management Outcome Improvements Observed by IE Leaders*

![Graph showing percentage of leaders for various outcome improvements](image)

Source: IDC, 2019

**Competency Around Change Management Is Key**

As new processes are introduced and emerging technology is deployed ever faster in enterprises today, the importance of change management intensifies. There's a balancing act required to ensure rapid progress is made in executing a digital strategy, with the need to socialize and manage the resulting impacts on customers, employees, and other stakeholders. For example, Toronto Hydro has formalized a robust comprehensive change management practice.

"When we adopt a new technology, as part of the whole digital transformation, we work very hard and very comprehensively with our internal users to train them, to give them awareness, to answer questions, to take their input, and embed it into the solution."

- Robert Wong, CIO, Toronto Hydro
Skills development is an important ingredient to the change management process, as new tools are needed to progress. The study found that over 90% of IE Leaders successfully or very successfully acquire the skills to execute the digital strategy, compared with just 38% of IE Observers.

**Essential Guidance**

While there may be multiple pathways to the intelligent enterprise, we see common attributes that help get organizations on the right track.

1. Take bold steps: establish a clear vision and strategy for the business and communicate that clearly throughout the organization.
2. Invest in the foundations: cloud and analytics form the basis for any organization's ability to scale up and derive business value from data — advancements in the areas of machine learning/AI and IoT will come after the building blocks are in place.
3. Deploy these technologies so that teams are empowered to use the intelligence and insights to impact the business positively.
4. Ensure experience management is included in the strategy and has a holistic view — tying CX to employee experience.
5. Finally, build agility into the talent plan as the most progressive organizations succeed by anticipating skill requirements and changing the mix of employees and training programs as needed.

**About the 2019 SAP-IDC Intelligent Enterprise Study**

In August 2019 IDC completed a survey of 303 organizational strategy decision makers and influencers with Canadian enterprises that have $50 million+ in revenue and a minimum of 100 employees. The study objective was to examine the progress of digital strategy, explore pathways to the intelligent enterprise, and examine the role of experience management in Canadian enterprises.

---

**Tony Olvet, Group VP, Research | IDC Canada**

Tony Olvet is Group Vice President of the research domains team at IDC Canada. He is responsible for managing the services and research direction of the technology market analysts in Canada. Mr. Olvet is also a member of IDC Canada’s Senior Leadership Team. The analyst team that Mr. Olvet manages helps technology vendors, IT professionals, and business executives make fact-based decisions on technology marketing, deployment and strategy. He has researched and presented on a variety of industry topics including mobility, cloud computing, and top executive technology priorities.
MESSAGE FROM THE SPONSOR

**SAP: Becoming an Intelligent Enterprise**

Originally known for leadership in enterprise resource planning (ERP) software, SAP has evolved to become a market leader in end-to-end enterprise application software, database, analytics, intelligent technologies, and experience management. A top cloud company with 200 million users worldwide, SAP helps businesses of all sizes and in all industries become an intelligent enterprise — to operate profitably, adapt continuously, and achieve their purpose.

A subsidiary of SAP SE, SAP Canada is headquartered in Toronto, Ontario. Operating in the Canadian market since 1989, SAP Canada serves customers across the country, and has a significant research and development presence with labs located in Montreal, Toronto, Waterloo, and Vancouver.

SAP started in 1972 as a team of five colleagues with a desire to do something new. Together, they changed enterprise software and reinvented how business was done. Today, the same entrepreneurial spirit continues to drive our culture of creativity, diversity and collaboration.

We believe that together we can transform industries, grow economics, lift up societies and sustain our environment. Because it’s the best-run businesses that make the world run better and truly improve people’s lives!

**What Is an Intelligent Enterprise?**

The Intelligent Enterprise is a strategy that allows you to transform data into action across all lines of business — driving process automation and innovation, unlocking new areas of growth, and delivering exceptional experiences.

Close the experience gap Listen to real-time sentiment and combine it with operational data to understand how to improve customer, employee, product, and brand experiences. Act strategically to connect with people on a deeper level.

Unlock new sources of growth Embed intelligence into processes, anticipate needs, and rapidly design, manufacture, and deliver to demand. Create new business models, products, and services to delight customers — and engage your total workforce to fuel growth.

Set the pace for your industry Innovate with intelligent technologies like AI, machine learning, blockchain, and the Internet of Things to lead your industry and define its future. Automate processes, predict outcomes, and reach new levels of efficiency and agility.

**The Intelligent Enterprise: A Strategy for Success in the Experience Economy**

With the rise of smartphones and social media, it’s never been easier for customers and employees to evaluate which companies provide great experiences, and which ones don’t. So, having the right strategy is paramount.
Bridging the Experience Gap

Eighty percent of CEOs believe their company offers a superior experience, but only 8% of customers agree. Find out how an Intelligent Enterprise strategy can give you a deeper understanding of how customers (and employees) really feel and why – so you can bridge the experience gap.

The Intelligent Enterprise: The Next Frontier

Tune into this webcast series to learn how Intelligent Enterprises can design and deliver to demand, drive engagement, automate, innovate – and so much more. Explore these webcasts.