IDC MarketScape

IDC MarketScape: Canadian Data Centre Operations and Management 2016 Vendor Assessment

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IN THIS EXCERPT

The content for this excerpt was taken directly from the IDC MarketScape: Canada Data Centre Operations and Management 2016 Vendor Assessment by Mark Schrutt (Doc #CA40622416). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Buyer Guidance, Vendor Summary Profile, Appendix, Learn More, and Related Research. Also included is the IDC MarketScape Figure (Figure 1).

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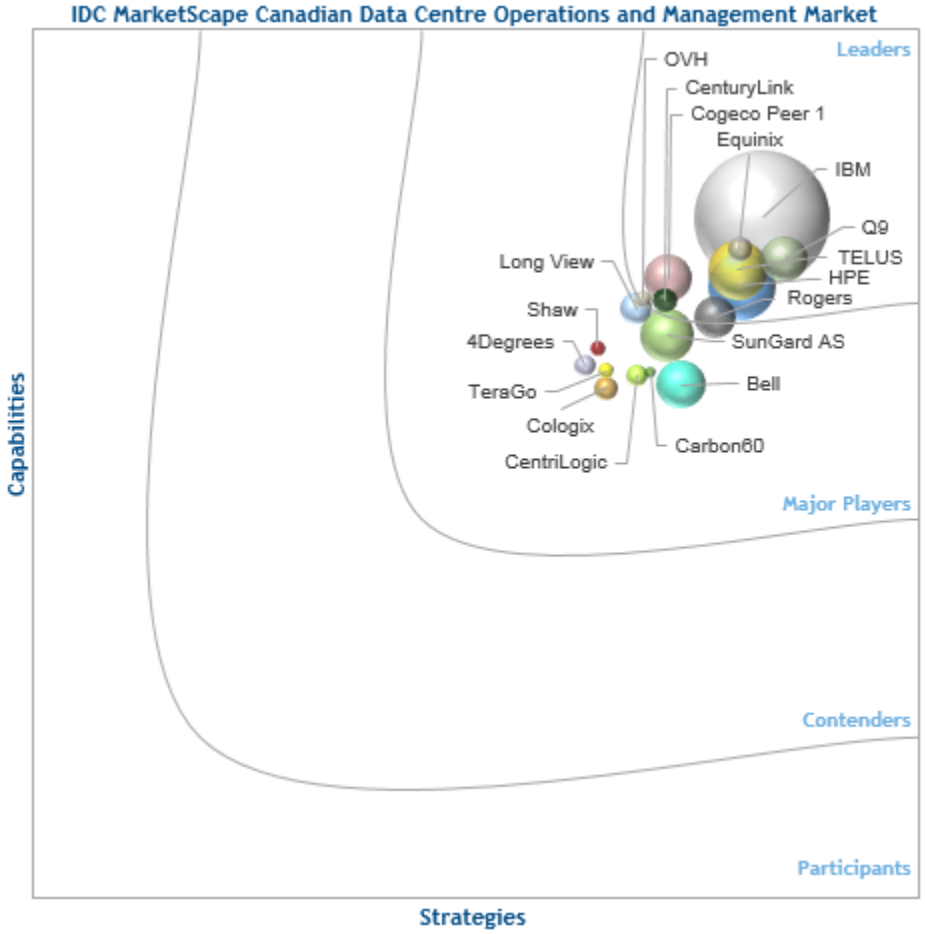
IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Canadian Data Centre Operations and Management Vendor Assessment



Source: IDC, 2016

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IDC OPINION

Since 2014, IDC Canada has published four IDC MarketScape documents on the Canadian cloud-based infrastructure services market. Collectively, these documents have been groundbreaking in their detailed vendor assessment and guidance provided to business and information technology (IT) leaders. The IDC MarketScape research also set new ground in identifying trends such as the expansion of cloud well beyond discrete public and private use cases. Canadian businesses are multisourcing cloud services and integrating the use of infrastructure as a service (IaaS) with on-premise systems to form hybrid computing platforms.

Throughout our research, it became obvious that the majority of businesses were not shifting wholesale to cloud but were migrating toward a combination of traditional data centre and cloud technologies. On the cloud side, buyers are now leveraging both public and private IaaS from hyperscale global SIs and local Canadian providers. On the data centre side, it is clear that companies have little appetite for investing in new and existing facilities. Our research shows that there are less corporate-run data centres in 2016 than there were in 2014, and net floor space has shrunk by 7.5% over that time. Canadian data centres are getting older (7.2 years on average with over 40% more than a decade old), and the time between upgrades and expansion has increased over the past two years.

Yet, over the past 24 months, the needs of the data centre have continued to increase. Data generated from corporate systems, mobile devices, and IoT networks continue to grow at a pace of 50% per year. Digital technologies such as analytics, social business platforms, and high-performance computing put an ever-increasing stress on the best-in-class data centres. Even the best-run facilities face challenges. If it is not capacity, performance, or resiliency, it may be a shortage of skilled resources or limited security capabilities.

IDC decided to go old school and assess the providers of Canadian data centre operations and management. This IDC MarketScape covers aspects such as space, power, connectivity, and value-added services. The study also considers partner ecosystems for resale and facilitating cloud platforms. Most importantly, this IDC MarketScape assesses data centre providers' capabilities in helping Canadian companies migrate from corporate-run, on-premise facilities to third-party centres and hybrid environments.

Technology leaders have decided that instead of continuing to throw good money at their own facilities, they would begin to shift workloads to commercial hosting vendors that offer colocation, managed hosting, and cloud services. Third-party providers have been active in preparing for the market shift. IDC's research shows that:

- Over the past three years, Canada has seen a buildout of over 1 million square feet of data centre space and well in excess of 100MW of power added to the market.
- The number of commercial data centres globally will increase by 14% over the next four years. These facilities will be large, leading to more than double the space available for colocation, hosting, and cloud services by 2020.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

The scope of this IDC MarketScape included data centre providers of colocation, managed hosting, and infrastructure-based cloud services. For inclusion, IDC required service providers to have Canadian revenue of $5+ million. While not mandatory, all providers leveraged in-country data centres to deliver infrastructure services. Some vendors had only one facility and others used partner sites, while two providers managed over a dozen Canadian centres each. In total, we had 18 providers, including one of Europe's biggest providers that has built the largest Canadian data centre in history, as well as the biggest colocation provider and the number 1 outsourcer in the market, as well as the top 5 Canadian telecom carriers.

This assessment is designed to evaluate the characteristics of each firm – as opposed to a firm's size or breadth of services. It is conceivable, and in fact the case, that specialty firms can compete with multidisciplinary firms on an equal footing. As such, this evaluation should not be considered a "final judgment" on the firms to consider for a particular project. An enterprise's specific objectives and

requirements play a significant role in determining which firms should be considered as potential candidates for an engagement. IDC Canada thanks all of the vendors that were invited for their effort.

ESSENTIAL BUYER GUIDANCE

The direction of the market is very clear: CIOs and technology leaders are shifting away from corporate-run data centres and placing workloads at commercial providers and taking a cloud-first approach to new systems and software. That is not to say every organization is heading in this direction or that wholesale movement of servers and storage should happen. Like any investment, a well-thought-out business analysis should kick things off. The business case needs to incorporate corporate strategies and IT plans that support the objectives of the business. The corporate IT plan must address where, how, and who will operate and manage data centre technologies.

While factors such as availability of skills and regulatory compliance need to be considered, the decision isn't necessarily internal versus external. Instead, CIOs should think more about which model – colocation, managed, opex, or capex – and, most importantly, which compute model should support each workload. This is the point where workloads such as DevOps, remote and mobile workloads, and disaster recovery (DR), and the list goes on, instead lead to noncloud and cloud models and transitioning to cloud and hybrid environments. The business case for data centre operations and management should also include an evaluation of options and vendors, as well as a stepped plan and metrics to assess progress and make any necessary adjustments. When evaluating vendors, IDC recommends a stepped approach with the following guiding principles:

- **Start with the business.** Assess how technology currently supports the strategy, plans, and current business environment and identify any gaps that exist. The gaps could include required technology investments as well as risk exposure.
- **What is on your server?** Infrastructure is nothing without applications. Technology leaders need to view data centre services as a portfolio of solutions to support a company's applications and systems. This includes prioritizing applications, identifying which systems are core to the business and their associated support requirements, and what delivery models are currently used. An optimized state matches applications and data with the appropriate infrastructure platform and model, on-premise or delivered by a third-party provider. IT plans should also include a migration road map that includes sunsetting, upgrading, and potentially transitioning to the cloud.
- **What are your current IT management capabilities?** This includes a review of the data centre operations, network solutions, and staffing and skills. Key in this step is the assessment of your ability to manage IT delivery and vendor relations.
- **No one right answer.** There are more delivery choices available on the marketplace than ever before, from on-premise to remote management to private and public cloud. Factors such as regulatory compliance, including data residency, and financial options, such as opex versus capex, need to be taken into consideration. Flexibility and perhaps, most importantly, provider relationship are critical in driving the greatest return from technology. It is not an all-or-nothing decision. The ideal solution is not about one platform, one vendor, or multiple vendors but leveraging the options and choices you have to maximize the value of IT.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description in this section provides a summary of each vendor's strengths and challenges.

TELUS

With more than 40,000 employees, British Columbia-based TELUS placed as a Leader in this IDC MarketScape. TELUS has been in the Canadian data centre business for over 25 years, starting with its partnership with ISM BC, which it fully acquired in 2001. TELUS is a top 10 Canadian information technology service provider. 30% of TELUS' IT services revenue is generated by hosting services. When related vertical services such as healthcare and public sector are included, TELUS' IT and associated revenue exceeds C$1 billion.

TELUS is also Canada's largest managed hosting provider, with one of the largest and widest data centre footprints in Canada. It has over 12,000 servers and 12PB of storage under management. It operates a portfolio of six facilities across Canada. TELUS' flagship sites are two super data centres, located in Southwestern British Columbia (Kamploops) and Eastern Quebec (Rimouski). Each site can be expanded to over 100,000 sq ft of space and 30MW of power. TELUS was the first Canadian service provider to have two facilities built and certified to Tier 3 specifications for both design and construction.

TELUS' secure cross-country network and portfolio of state-of-the-art data centers are the foundation for the company's IT solutions, which range from managing on-premise technologies through to private, public, and hybrid solutions. TELUS supports both legacy (including IBM mainframe) and today's state-of-the-art cloud-based technologies. Its portfolio includes client premises (facilities management) support and extends to colocation services, a limited offering that TELUS provides to its managed service clients.

TELUS has deep experience and creditability as an established data centre provider. While managed, dedicated hosting is TELUS' core strength, cloud is key to the company's strategy. TELUS Cloud Services is evolving with hybrid cloud in mind. TELUS' value proposition for hybrid cloud is to help organizations mitigate their risk of cloud transformation by providing its customers with end-to-end hybrid cloud capability with full automation and orchestration. This includes a choice of multiple deployment options – public, private, hybrid, and physical managed infrastructure — all hosted within its Canadian data centres.

TELUS has an extremely wide sales coverage and as such has experienced success across the board — from small, medium-sized, large, and enterprise accounts. TELUS' primary base of business comes from British Columbia, Alberta, Ontario, and Quebec.

Strengths

TELUS has the capabilities and drive needed to succeed in the Canadian data centre market. It has a deep and rich history in data centre operations. TELUS has invested in process and people to continuously improve its delivery capabilities. TELUS has also committed significant funds in building, upgrading, and maintaining its network and data centre assets. It also has the breadth and depth in its sales team, which are critical in promoting its data centre services to the marketplace.

Challenges

TELUS' main challenge is that the company is mostly known as a telecom provider. The same network that is the basis of TELUS' reputation is also a key enabler in the company's move to becoming a leading IT provider in Canada. Managed IT services is one of TELUS' best-kept secrets. TELUS needs to promote that it has been running data centres for well over 20 years and that it has the expertise and solutions to support the cloud needs of Canadian businesses. In addition, TELUS will need to continue to invest in people (professional services) and build an even stronger body of best practices and tools as cloud and hybrid computing marketplaces advance.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis or strategies axis indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed. The Canadian data centre services market is considered to be the combination of the following categories:

- Colocation services
- Managed hosting (inclusive of managed services around data centre delivery)
- Hosted security services
- Data centre network and communication services
- Remote infrastructure management and facilities management
- Hosted private infrastructure as a service
- Public infrastructure as a service
- Data centre professional services

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants and end users. Market weightings are based on user interviews, buyer surveys, and the input of a review board of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information and end-user experiences in an

effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

This IDC MarketScape covers data centre operations and management services, including colocation, managed hosting, and infrastructure as a services. Data centre services can be found in three segments of IDC's taxonomy: hosted infrastructure services, managed (support) services, IT outsourcing and cloud services (for additional detail, see *IDC's Worldwide Services Taxonomy, 2016,* IDC #US41098116, April 2016).

Hosted Infrastructure Services and IaaS

Hosting infrastructure services include the management of servers, networking, and other infrastructure solutions in a third-party service provider data centre. Hosting infrastructure services encompass activities related to the provisioning, management, and maintenance of the infrastructure that supports businesses' applications, which include activities around application development and deployment. The specific capabilities delivered under this umbrella typically include support for associated application infrastructure platforms (e.g., middleware, databases, and application servers), comprehensive infrastructure management, and systems-level (as opposed to server-level) administration in support of these application environments. Software-centric activities (i.e., middleware/operating system [OS]/database) are often performed by service providers as part of hosting infrastructure services engagements. Hosting infrastructure services also include any hosting services delivered on virtualized infrastructure (commonly referred to as "private cloud"), in addition to services supported on traditional dedicated physical infrastructure.

HIS engagements involve discrete, standalone offerings that are often function- or application-specific in nature. Thus HIS can be distinguished from IT outsourcing by the scope of the service, the nature of the service-level agreements, the customers' responsibilities and involvement in service delivery, and the degree of service risk and operational control that is transferred to the service provider.

Given the ongoing transition to cloud models and the emergence of service providers' cloud-based hosting offerings, IDC has simplified the current segmentation of this HIS market into "traditional" or "non-cloud" hosting infrastructure services and cloud hosting infrastructure services.

The HIS market segmentation is defined as follows:

- **"Traditional" hosting infrastructure services.** These are hosting infrastructure services delivered in a noncloud fashion and, therefore, do not conform to the cloud services attributes specified by IDC. Traditional HIS include the following services: legacy shared hosting/virtual private server (VPS), dedicated hosting, and complex managed hosting. Traditional HIS typically share attributes commonly associated with cloud hosting infrastructure (i.e., the ability to rent rather than buy IT infrastructure, standardized packaged solutions) but not others (e.g., self-service, pay-per-use pricing, and elastic scaling).
- **Cloud hosting infrastructure services.** These services combine the use of multitenant (shared) resources, radically simplified packaging, self-service provisioning, highly elastic and granular scaling, flexible pricing (often pay per use/pay as you go), and broad leverage of internet standard technologies to make offerings dramatically easier, cheaper, and better to consume. The "cloud" segmentation of the HIS market covers services offered by third-party providers such as hosted private/dedicated cloud and managed public cloud. The cloud portion of HIS does not include on-premise private clouds or unmanaged public cloud/IaaS or virtual private

cloud (VPC), which IDC has forecast in *Worldwide and Regional Public IT Cloud Services Forecast, 2015-2019* (IDC #US40709515, December 2015).

- **Colocation.** This subsegment covers commercial/retail colocation services where the service provider offers colocation services and related data centre management systems. Colocation services are defined as a customer's use of a third-party data centre facilities (i.e., physical floor/cage/rack space, network capacity, and HVAC/power infrastructure) in which the customer operates its own servers/storage systems, network equipment, and other types of infrastructure.

HIS also include services above and beyond basic hosting functionality such as equipment rental and maintenance as well as integrated managed services for functions such as storage, backup/recovery, security, and broader management functions, including monitoring and help desk that may be included as part of the HIS offering.

In concordance with IDC's demand-side methodology, HIS only include services consumed by end users (including service providers where the services provider is an end user) and explicitly do not include HIS that are simply resold by service providers, value-added resellers (VARs), or other entities.

Managed Support Services

Managed support services refer to high-end or mission-critical support services. Under the terms of a managed support services offering, the provider is responsible for proactively alerting customers about events or situations that are occurring in their environment or on discrete technology assets. Under the terms of a managed support agreement, the provider's legal liability is limited to providing an alert to the customer. After the alert has been sent, the provider may have additional responsibilities under the terms of a traditional support agreement. For example, the provider may be bound by response or resolution times as described in a support agreement. Examples of alert types for events are as follows:

- Down system or device (which refers to a device that is no longer functioning)
- Poorly performing system or device (which refers to a device or technology environment that is not performing optimally)
- Potential problem (which refers to alerting a customer regarding a situation that could result in a down system)

Once the vendor has alerted the customer, the customer can then decide how to address the alert. Typical customer decisions would be to do the following:

- Address the alert internally
- Have the vendor that provided the alert address the problems under the terms of a support agreement
- Have another third party (i.e., a vendor that did not provide the alert) address the alert
- Ignore the alert

The customer may preselect the method of reacting to the alert. For example, a customer may instruct the provider to resolve all system down alerts in accordance with the terms of the support agreement.

IT Outsourcing

IT outsourcing services involve a long-term, contractual arrangement in which a service provider takes ownership of and responsibility for managing all or part of a client's IS infrastructure (including the data

centre) and operations based on a service-level agreement. Typically, IT outsourcing engagements involve contracts for which a large portion of the IS environment is outsourced, usually over a 5- to 10-year period, though the length of these engagements can be much shorter.

At the core of an IS/data centre outsourcing contract is the taking over of management for the day-to-day operations of a data centre and its systems infrastructure (either mainframe based or through a "server farm") that supports an enterprises business application environment (e.g., ERP, SCM, CRM, and messaging).

At minimum, these engagements involve the ongoing management of the systems infrastructure, which could include providing just RIM (remote infrastructure management) but usually also includes providing ongoing management (24 x 7).

IT outsourcing contracts can also include related consulting, development, testing, and systems integration activities. This can also include the design and build of a "dedicated" data centre facility for the client, whether located at the client site or at the provider's hosting facility. Along with activities performed by the outsourcer's employees, an IT outsourcing contract can include (though does not always include) ongoing capital spending for new equipment and facility needs.

Strategies and Capabilities Criteria

IDC factored participating vendor offerings, strategies, and approach to hybrid cloud services in our IDC MarketScape ratings. Tables 1 and 2 provide an explanation and weightings for these elements.

TABLE 1

Key Strategy Measures for Success: Canadian Data Centre Operations and Management Vendors

Strategies Criteria	Criteria for Success	Subcriteria Weighting
Offering strategy		
Functionality or offering road map	Projected evolution of data centre portfolio, including expanding colocation services, managed hosting options, connectivity, value-added services, and cloud computing	2.50
Delivery model	Assessment of operational capabilities, management, and value-added services and the ability to transition and charge on an as-a-service model	3.00
Cost management strategy	Analysis of ongoing ability to provide cost-effective sales, onboarding, and operations	1.50
Portfolio strategy	Vision and ability to match services with trends in the marketplace, including cloud services, hybrid computing, and value-added services to enable clients to optimize their data centre portfolio	2.00
Other or additional criteria	Additional services including consulting and integration, application development, and management and infrastructure support for legacy systems	1.00

TABLE 1

Key Strategy Measures for Success: Canadian Data Centre Operations and Management Vendors

Strategies Criteria	Criteria for Success	Subcriteria Weighting
Offering strategy subtotal		10.00
Go-to-market strategy		
Pricing model	IDC survey data on current buyer perception of pricing; assessment of the evolution of the service provider's pricing model and how it will bundle associated services	2.50
Sales/distribution strategy	Anticipated improvements to the direct and partner distribution channels and how the strategy will resonate with the targeted market	2.50
Marketing strategy	Changes to the capabilities of the vendor in promoting and marketing its data centre services and evaluation of whether this will match the needs of the market	2.00
Customer service strategy	Evolution of operational capabilities including the use of automation in data centre management, as well as projected future state of account management and governance processes	1.50
Other go-to-market strategies	IDC survey data of buyer perception of the service provider's road map for colocation, managed hosting, and cloud services	1.50
Go-to-market strategy subtotal		10.00
Business strategy		
Growth strategy	Growth targets; expansion of facilities; what hurdles and competitive pressures will the vendor face; what will the vendor do to meet these challenges	2.00
Innovation/R&D pace and productivity	How will the service provider enhance its capabilities to assist its clients' transition to third-party data centre operations and the technologies and tools it is investing in to advance their services	1.00
Financial/funding model	How will the vendor fund data centre investment; potential risk in this model; cost of capital versus competitors; operational cost model	3.00
Employee strategy	Ability to hire and retain talent in the areas of sales, channel, product marketing, and operations	2.00
Other business strategies	IDC perception data on the most critical factors in data centre decisions: quality, data centre locations, security, and certifications	2.00
Business strategy subtotal		10.00

Source: IDC, 2016

TABLE 2

Key Capability Measures for Success: Canadian Data Centre Operations and Management Vendors

Capabilities Criteria	Criteria for Success	Subcriteria Weighting
Offering capabilities		
Functionality/offering delivered	Assessment of data centre offerings including colocation, managed hosting, and infrastructure-based cloud services	2.00
Delivery model	Evaluation of operational and delivery capabilities	3.00
Cost competitiveness	Review of the pricing received during the research as well as IDC survey on buyer perception of the vendor's pricing for colocation, managed hosting, and public IaaS	1.50
Portfolio benefits delivered	Consideration of connectivity solutions, breadth of infrastructure capabilities, service levels, and security services	2.50
Other offering capabilities	Professional services such as consulting and integration, transition services, value-added offerings, application services, and support for legacy environments	1.00
Offering capabilities subtotal		10.00
Go-to-market capabilities		
Pricing model options and alignment	Assessment of the pricing models provided during the research as well as consideration of IDC buyer perception of service provider's pricing and pricing models	3.00
Sales/distribution structure, capabilities	Choice between self-serve and using channel or sales forces; presales technical sales support	2.50
Marketing	The priority data centre marketing has in the overall marketing efforts; funding and ability to target the appropriate audience	1.50
Customer service	Account management and governance processes, self-serve management tools, and first- and second-level support responsiveness and capabilities	1.00
Other go-to-market capabilities	References provided as well as IDC survey data on the awareness and consideration prospective buyers have of the vendor	2.00
Go-to-market capabilities subtotal		10.00
Business capabilities		
Growth strategy execution	Evaluation of the recent investments, builds, and additions in data centre facilities and services; recent financial performance and the perceived competitive risk the vendor faces	1.50
Innovation/R&D pace and productivity	Facility design, tools, use of automation, and use of partner technologies	1.50

TABLE 2

Key Capability Measures for Success: Canadian Data Centre Operations and Management Vendors

Capabilities Criteria	Criteria for Success	Subcriteria Weighting
Financial management	The need for and the ability to raise capital as well as the cost of financing	3.00
Employee management	Ability to hire and retain talent in the areas of direct and channel sales, operations, and product development	2.00
Other business capabilities	IDC perception data on the most critical factors in data centre decisions: quality, data centre locations, security, and certifications	2.00
Business capabilities subtotal		10.00

Source: IDC, 2016

LEARN MORE

Related Research

- *The State of the Canadian Data Centres, 2016* (IDC #CA40622316, August 2016)
- *Canadian Infrastructure Outsourcing Forecast, 2016-2020* (IDC #CA40624616, May 2016)
- *Buyers Guide: Canadian Datacenter Services* (IDC #CA40624215, December 2015)
- *IDC MarketScape: Canadian Hybrid Cloud Services 2015 Vendor Assessment* (IDC #CA10SSC15, November 2015)

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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