

Small and medium-sized businesses are adopting cloud heavily to build agility and resilience. Understanding what differentiates cloud provider options is critical to selecting the best fit to meet these goals.

The Definitive Buyer's Guide for Small and Medium-Sized Businesses to Evaluate Cloud Providers

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Introduction

Small and medium-sized businesses (SMBs) were already starting to adopt cloud in greater numbers before the emergence of the global pandemic. These businesses were developing more open mindsets about cloud as they became more informed about the ability to accelerate technology renewal as hardware and software approached end of life. But after the disruptions SMBs faced in early 2020, cloud adoption plans shifted into high gear and became even more mission critical.

IDC research shows that 2020 was the first time cloud spending accounted for more of the overall IT budget than hardware and traditional infrastructure as well as traditional software. This spending trend was prevalent in every size and industry segment of the SMB market, but the proportion of IT spending focused on the cloud was highest in companies with more than 50 employees as well as companies with 250 or more employees. Smaller businesses that previously had a small technology footprint have been turning to the cloud to rethink business operating models to serve customers in the new business environment. Also, many larger SMBs that had delayed replacing end-of-life hardware and applications now find that they have not just a greater need but also greater support from senior management to implement modern infrastructure and applications.

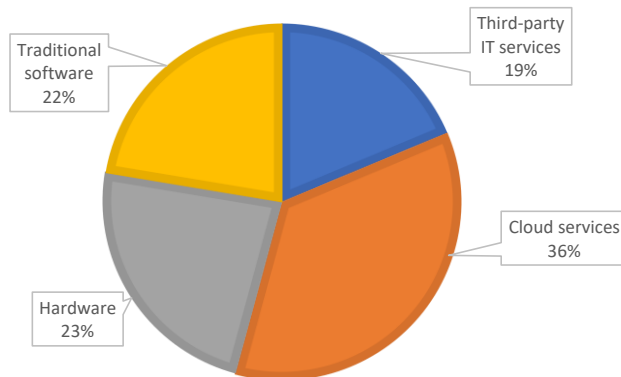
Many of the transformation programs that kicked off in 2020 will result in a permanent structural shift in how IT budgets are allocated going forward. Cloud, including software as a service (SaaS), infrastructure as a service (IaaS), and platform as a service (PaaS), is expected to continue to be the largest portion of the IT budget in 2021 and beyond. As such, cloud will account for over one-third of the overall SMB IT budget, meaning that SMBs that have "dabbled" in the cloud, or delayed moving key infrastructure to the cloud, will need to continue to shift to the cloud to meet new customer needs and business agility requirements (see Figure 1).

AT A GLANCE

WHAT'S IMPORTANT

Cloud has replaced hardware and traditional software as the top IT budget category for small and medium-sized businesses.

Growing businesses are increasingly adopting cloud for improved agility and resiliency as they replace end-of-life hardware and applications with renewed vigor following the global pandemic.

FIGURE 1: **SMB IT Budget Allocation, 2021**

n = 2,463

Source: IDC, 2021

Not all cloud options or suppliers are the same. This IDC Workbook helps SMBs better understand cloud computing options and learn what questions they need to ask to truly evaluate the option that will provide the best fit for the business, both now and in the future.

Definitions: Types of Deployment Models and Clouds

Cloud is often presented as a singular configuration/option, but there are many flavors of cloud. It can be overwhelming for growing SMBs to differentiate between types of cloud, much less to understand the strengths and weaknesses of cloud providers themselves. Establishing consistent definitions on types of cloud offerings is an important first step to building organizational awareness of the differences. Key definitions to understand are as follows:

- » **Public cloud:** Public cloud computing is based on a service composition model and on-demand delivery of IT resources via the internet with pay-as-you-go pricing. It is like a utility because it is a computing environment where unrelated customers can acquire technology such as compute power, storage, databases, and other services on an as-needed basis.
- » **Private cloud:** Dedicated IT services (located at a company site or hosted by a third-party offsite provider) are delivered on a cloud architecture where IT functionality is delivered as a service that is accessible by subscription with pay-as-you-go chargeback models; the use of such services is restricted for users within a single organization.
- » **Hybrid cloud:** Hybrid cloud is the integration and orchestration between a private environment including on-premises and private cloud and one or more public clouds.
- » **IaaS:** Servers, system management, and security services are delivered via a public or private cloud.
- » **PaaS:** Application development/deployment and middleware are delivered via a public or private cloud services model.
- » **Hosted:** Servers, system management, and security services are in an IT services datacenter versus on a business' own premises. The business may or may not also use service providers to manage different aspects of the infrastructure.

Implementation Factors

Once businesses have made the decision to move to the cloud, often the next decisions are what workloads to move to the cloud and which cloud provider to use. When it comes to deciding the cloud path forward, SMBs need to consider a number of factors about the implementation itself as well as ongoing issues to plan the journey correctly.

One key factor to take into account is what workload is to be moved and why. A common misconception is that the right deployment model for one workload is the right deployment model for all workloads in the organization, but this is not always the case. Migrations must be evaluated on a workload-by-workload basis as factors such as cloud suitability, workload performance requirements, and cost feasibility must be considered. Cloud suitability means evaluating the sensitivity and complexity of the workload, as well as the current challenges with the current mode of deployment, to determine if the business case is appropriate, feasible, and within acceptable risk levels. Cloud performance is about understanding that different clouds are optimized for different applications and other workloads. It is important to assess how each workload will perform in each cloud environment to ensure a good experience for the best business value.

Other key implementation factors to evaluate include skill set access and existing application mix, including the existing technology partnerships that often help SMBs support the business. Skill set access is one of the key challenges SMBs must overcome. According to IDC's *Worldwide Small and Medium Business Survey* from October 2020, 40% of SMBs cited outdated skill sets in IT as a key barrier to meeting business and technology priorities, which is significant because many SMBs have limited to no in-house IT resources to begin with. SMBs face an even tougher challenge when it comes to in-demand skills, such as cloud infrastructure and development, because they often can't compete with larger businesses that offer more role specialization and higher salaries. They also typically must invest in more generalized skill sets in-house versus application-specific niche skills. This means technology partners often must fill the gaps, including managed service providers, systems integrators, and independent software vendors (ISVs). It may also mean that new partnerships need to be assessed as SMBs deepen their cloud architecture.

The ability to integrate workloads in a hybrid model is increasingly important when selecting a cloud provider. Many SMBs will run on hybrid environments for some time as they begin their cloud journey, potentially even indefinitely depending on their nuanced needs. So many must consider not just the workloads being examined for the cloud but also the other applications both in the cloud and on-premises that must be connected and integrated. In fact, according to IDC's research, medium-sized businesses rank integration as the most important factor overall when selecting a technology supplier because many have experienced the pain of building workarounds for difficult-to-connect systems.

Considerations for Moving to the Cloud

Public cloud offers many benefits versus on-premises and hosting options that must be considered as part of the business case analysis that is a core part of selecting any solution. The following sections summarize the benefits of public cloud versus the benefits of other options, including other public clouds.

Benefits of Public Cloud Versus On-Premises Hardware and Software

Public cloud has several flavors that offer strong benefits compared with on-premises infrastructure, including computing optimization, greater ability to act as business needs change, and better use of technology skills. Detailed benefits include:

- » **Make operational expenses more predictable:** Public cloud allows SMBs to move applications and infrastructure from being a large capital expense with a big cash outlay to a more predictable operational expense that varies as SMBs consume computing resources, allowing SMBs to pay for only resources used.
- » **Improve capacity management:** Public cloud allows SMBs to access more or less capacity as required, which is more challenging to do with dedicated servers. Many SMBs that have on-premises servers underutilize them, meaning they are paying for resources they are not using. Virtualization can help somewhat, but it still cannot provide the same benefits for scaling up and down as public cloud.
- » **Accelerate speed and agility:** When new capacity is needed, SMBs can add more computer resources with clicks, significantly reducing the time and expense to make those same resources available on-premises. Public cloud allows SMBs to get those resources faster with less capital expenditure, maintenance, and complexity, as well as less time spent on resource delivery and setup.
- » **Enable more effective use of scarce technology resources:** Public cloud allows technology teams at SMBs to focus on projects that create business differentiation not on the infrastructure to enable datacenters. IT resources at SMBs can create more business value when they couple their in-depth organizational knowledge with technology skills rather than focusing on more easily outsourced tasks.
- » **Reduce productivity loss caused by routine maintenance:** Routine patching and infrastructure upgrading bleed productivity of those scarce technology resources even further. SMBs can reduce technology investment churn and no longer need to be concerned about staying up to date when moving to PaaS services offered by cloud providers.
- » **Enable global expansion:** Public cloud makes it much easier to quickly deploy applications in multiple regions around the world and to do so without the complexity or latency of on-premises hardware and software.
- » **Improve access to innovative technology and services:** Public cloud enables SMBs to access innovative services such as artificial intelligence/machine learning (AI/ML) and advanced analytics to gain insights and improve business outcomes.
- » **Strengthen infrastructure resiliency:** Strong public cloud suppliers provide resources to facilitate well-architected reviews and recommendations to streamline back-end infrastructure to save operating costs versus just "lift and shift" cost savings.
- » **Establish simple, but effective security:** Cloud security is highly automated, and most mature cloud providers start with the principle of least privilege by default. Automated services provide detection, with preventive guardrails, so that security incidents can be addressed proactively and quickly.
- » **Provide comprehensive marketplaces:** Mature cloud providers offer a vast digital catalog of software from ISVs enabling SMBs to easily find, test, buy, and deploy software solutions in the cloud. When combined with flexible purchase plans, this deployment model can enable SMBs to test/assess new vendor solutions quickly and speed up delivery of new business capabilities.

Benefits of Public Cloud Versus Hosting Service Providers

Public cloud also has several benefits compared with hosting providers, including computing optimization, business flexibility, and cost savings. While there are still some benefits of using hosting services over on-premises options, hosting providers can't provide the level of scalability and flexibility that SMBs need. Hosting providers don't offer true secure multitenancy, nor do many of them have the global infrastructure required. Detailed benefits include:

- » **Improve flexibility:** Hosting providers typically require longer contractual obligations than public cloud providers because they need to ensure their capital expenditures are covered over the lifetime of the contract. This means that if there are service or pricing issues, the SMB may be locked in.
- » **Eliminate capacity planning:** Hosting providers typically require capacity plans to be tied into the service contract, and while they will usually let customers add capacity over the lifetime of the contract, they typically will not allow customers to scale down on computing resources without penalties or renegotiating contract terms that often prolong the contract term.
- » **Deliver cost of ownership value:** Private server hosting can add significant costs and chargebacks to keep data separate, while shared hosting has unpredictable downtime risk that impacts continuity of business. Both hosting options impact the business value equation once an SMB has decided to move infrastructure off-premises.

Considerations When Comparing Public Cloud Providers

Not all public cloud providers are the same, and not all of them truly understand the needs of SMBs. It is critical to understand the key points of differentiation between the offerings to select the right provider. SMBs should think about the following attributes when defining their public cloud requirements:

- » **Customer-centric solutions:** Look for digital innovation frameworks that both enable differentiation and facilitate the quick adoption of supporting technology.
- » **Security:** Look for solutions with a proven track record and continual investments to preserve customer data security and privacy.
- » **Uptime:** Ensure applications and workloads are available when needed, which is critical to the business functioning optimally. Look for more robust reliability and resiliency of service as well as data availability.
- » **Proven experience:** Look for providers that have a longer track record in the market than other providers. They should have experience in helping customers of all sizes and types benefit from cloud, including other SMBs. Check for public references of similar companies in your industry.
- » **Breadth and depth:** Expect to get more out of investments than a replacement for server infrastructure. Future proof IT decision by choosing a public cloud provider with the broadest selection of services and tools to benefit customers.
- » **Technology leadership:** Look for a provider that is at the forefront of cloud technology invention.
- » **Extensive support services:** Select a public cloud provider that can offer support services staffed by experts, flexible support packages/subscriptions, and self-service support resources in order to truly relieve the burden from in-house technology staff.

Buyer Evaluation Worksheets

When evaluating the many available cloud configurations, SMB buyers must compare categories such as reliability, resourcing, solution capabilities, security, and cost differentiators to ensure they understand the differences between providers and realize optimal benefits. The worksheets shown in Tables 1–5 focus on the previously mentioned categories and the key questions that SMB cloud buyers should ask potential suppliers.

TABLE 1: **Reliability**

What are the solution's uptime metrics? Uptime is a measure of service reliability that is critical to business continuity.	
Is the solution flexible to meet the lowest latency requirements? How does this latency compare between regions? While a 1ms difference may not seem important, each activity an end user does may require several hundred to several thousand requests.	
Does the solution offer the ability to shift workloads to other geographic regions for greater global resiliency? Smaller public cloud vendors and hosting providers often can't provide consistent service in other regions.	
What are the customer responsibilities with respect to backup? Many customers assume that the supplier will take care of all the management and administration of the environment, but this is not always the case.	
What assurances/warranties are provided after upgrades are applied to the solution? Some cloud providers and hosters do not provide aid if upgrades and updates cause issues.	

TABLE 2: **Cost Differentiators**

Is cost based on consumption that can scale up or down without incurring penalties? Many providers will let you scale up but will charge you additional fees to scale down.	
What types of notifications and/or approvals are provided when capacity is approaching tier limits? Ensuring transparency of service tier limits helps SMBs' control costs.	

What is the average length of the contract term with customers? Hosting providers and some cloud providers try to lock customers into long-term contracts, making it difficult to make technology decisions that match business agility needs.	
What type of compensation is offered for excess downtime? Typically, there is a threshold for "allowed" unplanned downtime, but some suppliers will try to avoid compensation if they are not meeting their obligations.	
What is total cost of ownership versus the initial "lift and shift"? It's important to look at not only the sticker price of the migration but also the cost over the contract period versus on-premises costs.	
What is the true value of "free" promotional offers?	

TABLE 3: *Resourcing*

What types of technology skills are required to <i>migrate</i> to new infrastructure or cloud-based infrastructure?	
What types of technology skills are required to <i>administrate</i> cloud infrastructure and applications?	
How large is the network of partners available to support the solution? Suppliers that have more partners give the SMB more choice for day-to-day support if needed.	
What types of training are offered to upskill existing technology resources? Given the shortage of skills, look for suppliers that want to help your technology teams learn the technology models.	
Are there any other "quick start" programs included to help customers be more successful?	
What type of support services does the cloud provider offer?	
Are there options for 24 x 7 support and quick response times for critical issues/support needs?	

TABLE 4: *Security*

What security compliance standards does the solution meet?	
What are the security obligations of both the service provider and the customer following implementation? SMBs need clear delineation of their responsibilities in safeguarding their environment. d	

TABLE 5: *Solution Capabilities*

What are the most important core functions that are included in the solution?	
What advanced features differentiate the solution?	
What is the size of the application marketplace available to extend the solution? Does the marketplace include prebuilt applications created by implementation partners, such as ISVs, to speed up implementation?	
Can the provider include relevant customer stories and references? Do the customer stories feel applicable to the organization's business challenges? Are the references SMB specific?	
What is unique about the cloud provider?	

Next Steps for SMB Cloud Buyers

1. Review the questions provided and eliminate any that are not applicable.
2. Pose the questions to your suppliers and compare answers between competitors.
3. Ask for any references on answers that are incomplete or responses that are suboptimal.

About the Analyst



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Shari Lava is Research Director, Small and Medium Business (SMB) research program within the Digital Transformation space. Ms. Lava's core research coverage includes identifying and supporting the unique, evolving needs of very small, small, and medium business technology buyers. Based on her background in the customer applications and data analytics space, Ms. Lava's research also includes an emphasis on understanding the persona and journey of SMB buyers. She is based in Toronto, Canada.

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