Outlook – overcast and bright: How the cloud is transforming IT for SMBs

"Cloud computing" ranks near the top of the most floated buzz phrases in the world of IT and telecoms. While the concept has certainly taken the entire industry by storm, it is set to have a uniquely profound effect on the way small and medium-sized businesses consume IT.

For quite some time now, small and medium-sized businesses have been a relatively difficult segment for the leading IT vendors to serve, leaving this particular market to indirect channels (e.g., value-added and local resellers). McKinsey research reveals that as SMBs increase in size, they aspire to establish a closer, more direct relationship with their IT vendors. The resulting situation has generated several pain points – ones that cloud computing is exploiting in order to gain market traction:

- Lack of scale in operations, which prevents SMBs from becoming cost-competitive and from having access to enterprise-class functions and features

- Need for flexibility in deployment and scaling up or down as business evolves

- Limited financing capacity and flexibility

- Low level of internal IT capabilities to integrate and maintain IT systems and applications.

In this context, SMB has proven to be the most dynamic segment. It amounts to a two-thirds share of the total public cloud market and is growing at 25 to 35 percent per year, outpacing the growth of large enterprises in this arena (approximately 20 to 25 percent). By 2014, SMB cloud computing is expected to represent a global market of USD 30 to 40 billion (Exhibit 1).
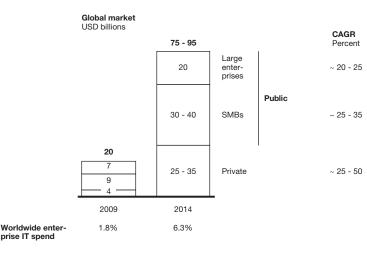
To better understand this trend, McKinsey conducted a survey on cloud computing with 1,160 SMB IT leaders in France, the UK, Germany, Spain, and Poland in October 2010. The survey revealed insights into SMB cloud users along four major themes – and these insights could prove invaluable to providers.

SMBs already adopting cloud solutions

Evidence for significant cloud adoption is apparent, with all surveyed SMBs declaring awareness of cloud infrastructure or application options and nearly half of them already having multiple solutions in use. Geographic variations can also be observed, with relatively mature countries such as the UK exhibiting a lower appetite for cloud (only 64 percent of respondents having expressly considered purchasing a cloud solution), in contrast to countries like Poland, where 79 percent of respondents indicate explicit consideration and 59 percent have adopted multiple cloud-based solutions. Regions with such leapfrogging profiles could offer providers the opportunity to hone their cloud competencies in markets that are more readily open to IT innovation (Exhibit 2).

Interestingly, survey responses also reveal that more than 80 percent of SMBs that have adopted at least one cloud solution continue to do so and become multiple adopters. This result suggests that once a company makes the decision to give cloud technology a try, the practical benefits gained – along with positive user

01 SMBs are expected to keep dominating the public cloud marketplace

Global market
USD billions

CAGR
Percent

	75 - 95		
	20	Large enter-prises	~ 20 - 25
	30 - 40	SMBs	~ 25 - 35
20		**Public**	
7	25 - 35	Private	~ 25 - 50
9			
4			
2009	2014		

Worldwide enter-prise IT spend   1.8%   6.3%

SOURCE: Gartner; IDC; Forrester; McKinsey

experiences – lead the organization to feel much more comfortable migrating subsequent applications to the cloud. Securing a successful initial adoption may, however, require more careful customer preparation on the part of the provider.
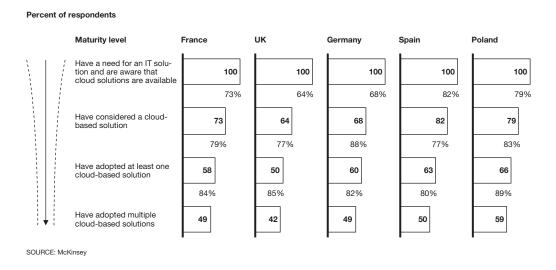
Sometimes brand-new, most often a replacement.
McKinsey's survey shows that two-thirds of the cloud purchases made by SMBs are meant to replace an existing application or solution. This pattern clearly positions the cloud as an alternative to "on-premise" IT solutions in place. The remaining one-third is geared toward market expansion, reflecting SMBs' desire to access applications they could not afford in-house (for example, CLM or disaster recovery). It also signifies their shift toward new business models, which are mostly based on collaboration across enterprise boundaries. Examples of such cloud solutions include a system for an OEM to collect inventory information from distributors and a mechanism by which different trucking companies can share capacity to reduce costs based on high-load factors. Other examples leverage various characteristics of the cloud. A large beverage retailer, for instance, provides all of its employees with "deskless" e-mail via Web mail, hence establishing a more effective way to communicate with its employees who do not work directly at a computer.

Storage space and data backup top the list of cloud solution needs. When asked in which application areas they could see these solutions being used within their organizations, survey respondents expressed the greatest need for storage space and data backup/resiliency. Over 65 percent indicated potential demand for such cloud-based offerings (Exhibit 3). In terms of actually purchasing cloud products, storage and backup still lead the pack, with more than 20 percent of respondents currently using cloud solutions in these domains. Strong uptake can also be seen in cloud-based server capacity, information and database management, security, system management, enterprise resource management, data access, and collaboration. Location-based services and vertical-specific applications are the least favored for cloud adoption, possibly due to lower demand (in general) from SMBs for such services.

Overall, respondents claim willingness to consider purchasing cloud solutions for a broad range of IT infrastructure and business application needs. Actual consideration levels, however, remain at just over 50 percent. Beyond the comfort level of decision makers with new technological innovations, important barriers to adoption still need to be addressed by cloud solution providers – particularly concerning network security, network reliability, and data management.

02   Adoption of cloud solutions by SMBs varies across countries

Percent of respondents

Maturity level	France	UK	Germany	Spain	Poland
Have a need for an IT solution and are aware that cloud solutions are available	100	100	100	100	100
	73%	64%	68%	82%	79%
Have considered a cloud-based solution	73	64	68	82	79
	79%	77%	88%	77%	83%
Have adopted at least one cloud-based solution	58	50	60	63	66
	84%	85%	82%	80%	89%
Have adopted multiple cloud-based solutions	49	42	49	50	59

SOURCE: McKinsey

Four segments, differentiated opportunities

McKinsey asked survey respondents to rate the importance of a number of factors when considering the adoption of a cloud-based IT solution. While aspects such as superior security were seen as crucial across the board, SMBs can be grouped into four needs-based segments according to the properties they ranked highest:

- *Functionality-oriented SMBs* prioritize superior security, ease of use, ease of access, and vertical specificity when considering cloud-based solutions.

- *Flexibility-oriented SMBs* rank usage-based pricing, ease of customization/integration, and scalability of user numbers as their top concerns.

- *Support-oriented SMBs* favor quality end-user/aftersales support and maintenance, the ability to upgrade frequently, and ease of purchase.

- *Value-oriented SMBs* consider total cost of ownership (TCO) savings, deployment speed, and limited up-front capex to be the most important.
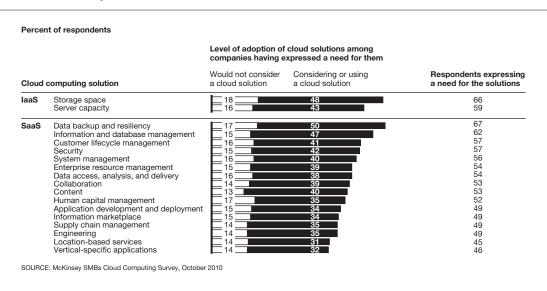
The functionality-oriented SMBs that were surveyed exhibit a number of desirable characteristics as a mar-

ket segment. These include having made more cloud purchases to date than other SMB segments. A good 58 percent of the functionality-oriented SMB segment has already purchased at least one IaaS (infrastructure as a service) solution – compared with less than 50 percent for the other segments. This segment also expressed higher levels of satisfaction with their current cloud solutions (59 percent of functionality-oriented cloud users being very satisfied compared with 45 percent of users as a whole).

When it comes to IaaS cloud solutions, functionality-oriented and flexibility-oriented SMBs show almost the same explicit consideration levels (77 and 78 percent of respondents per segment respectively). Despite this, actual purchasing levels differ dramatically between these segments (58 percent in the functionality and 36 percent in the flexibility segment). The survey did not specifically ask respondents to indicate why non-cloud-based options may ultimately have been chosen. Still, results do reveal that flexibility-oriented users are among the least satisfied with their cloud experiences overall. Only 29 percent of respondents in this segment were very satisfied on average. Furthermore, flexibility-oriented respondents stated that they are least satisfied in a dimension of greatest importance to them – the ease of customizing their cloud solutions.

03 SMBs express strongest need for storage space along with data backup and resiliency cloud solutions

Percent of respondents

Cloud computing solution		Level of adoption of cloud solutions among companies having expressed a need for them		Respondents expressing a need for the solutions
		Would not consider a cloud solution	Considering or using a cloud solution	
IaaS	Storage space	18	48	66
	Server capacity	16	43	59
SaaS	Data backup and resiliency	17	50	67
	Information and database management	15	47	62
	Customer lifecycle management	16	41	57
	Security	15	42	57
	System management	16	40	56
	Enterprise resource management	15	39	54
	Data access, analysis, and delivery	16	38	54
	Collaboration	14	39	53
	Content	13	40	53
	Human capital management	17	35	52
	Application development and deployment	15	34	49
	Information marketplace	15	34	49
	Supply chain management	14	35	49
	Engineering	14	35	49
	Location-based services	14	31	45
	Vertical-specific applications	14	32	46

SOURCE: McKinsey SMBs Cloud Computing Survey, October 2010

Savings expectations don't always materialize

Regarding post-sales aspects, the survey results highlight a critical area where improvement is clearly needed. SMBs were asked to compare the actual capture of TCO savings with their expectations, and more than 40 percent of respondents report that they never saw even half of the expected savings. Some 27 percent did indicate that they captured at least 50 percent of the savings they expected. Respondents – primarily IT decision makers – attribute the lower levels of savings capture largely to labor, integration and customization, and transaction-related costs.

What the survey also revealed is that this "savings disappointment" does not result from outsized or unrealistic expectations. SMBs whose TCO savings fell far short of expectations in past cloud implementations did not necessarily have the highest savings aspirations. This feedback has a number of important implications:

■ Both providers and users need to work harder on managing integration and customization costs.

■ Usage-based pricing arrangements should be revisited after deployment to adjust for unpredictable changes in transaction volumes.

■ Providers need to work closely with users to more accurately estimate post-deployment costs and avoid disappointment.

■ Users must be especially realistic about attainable savings on internal labor costs.

Large independent software vendors preferred

Comparing different classes of vendors, SMBs from all segments prefer working with large incumbent independent software vendors (ISVs) the most when rolling out new cloud deployments – 19 percent of respondents selected ISVs such as Microsoft, Oracle, or SAP as either the most or second-most preferred cloud solution providers, while 15 percent chose large integrated software businesses such as EMC or IBM. Some 13 percent decided on IT services companies such as Capgemini, HP-EDS, or Atos Origin. Web-based service providers such as Google and Amazon came in next at 12 percent. The preference bias in favor of larger providers may reflect SMBs' fears of entrusting their data over the longer term to potentially unstable solution partners.

To delve deeper into SMB perceptions of potential solution providers, respondents were also asked to comment on their awareness of and willingness to buy offerings

from a wide range of cloud vendors. Across the board, the survey finds that 20 to 25 percent of respondents who are aware of a cloud provider's offerings have purchased one of their solutions, regardless of vendor scale or brand strength. A few providers with particularly strong reputations do stand out – particularly Microsoft, Huawei, and TietoEnator – with purchasing rates nearing 30 percent of offering-aware respondents. The survey results also demonstrate that overall awareness of cloud product and service offerings varies dramatically from one player to the next. With awareness being a key driver behind purchasing, it is crucial for vendors to get their brands linked to the cloud in the hearts and minds of the SMB segment.

In terms of willingness to consider, a slight preference is given to those vendors having more established brands, namely those enjoying a higher overall awareness of their cloud offerings. At equivalent awareness levels, willingness to consider and actual past purchasing rates are similar to a large extent.

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The cloud is rapidly becoming the destination for SMBs to source their IT. Given their dynamic nature, smaller scale, and often limited financial and IT resources, small and medium-sized businesses are looking to the cloud with a unique set of needs, expectations, and preferences. Cloud service providers will have to become well attuned to the nuances of the SMB segment in order to build a new, fast-growing, and lucrative customer base in a segment that historically has not been well served by the major IT providers.

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