

SMB Public Cloud Adoption: Opening a Hidden Market

By Douglas P. Handler, Joel Barbier, and Paul Schottmiller,
Cisco® Internet Business Solutions Group (IBSG)

Executive Summary

The size and potential of the cloud opportunity in the small and medium-sized business (SMB) segment is well documented. However, even the most positive analyses may overlook a major sector of this market—the smallest of small businesses—because it typically has little or no business IT spending. In the United States, there are 21.7 million “non-employer” businesses.¹ The firms are generally sole proprietorships, where people offer their labor or expertise independent of an incorporated company. These businesses are not part of the 6 million SMB firms covered by most opportunity analyses. The jobs in this sector provide the primary source of income for some workers, and part-time employment for others. Some of the most common positions in non-employer businesses include direct sales representatives, management consultants, engineers, school tutors, and home healthcare providers.

These micro-SMBs (non-employer businesses and SMBs with 1-4 employees) often have only a PC and an Internet connection as their IT investment, yet they require many of the same business services provided by large-company data centers. Public cloud services can be developed for these micro-SMBs to match the capabilities of large corporate data centers. In particular, software as a service (SaaS) can provide this segment with access to new and more sophisticated capabilities that will drive efficiencies. By 2015, these capabilities will enable many micro-SMBs to compete more effectively with larger corporations.

Public cloud service providers that offer SaaS capabilities to micro-SMBs will uncover a large incremental—and highly profitable—market.

¹ 2007 U.S. Census of Businesses, United States Census Bureau; Cisco IBSG analysis, 2012.



Introduction

Adoption of public cloud services gives SMBs the ability to quickly take advantage of world-class software capabilities. Many IT analysts have already written about the untapped business potential of selling cloud services to SMBs. Most SMBs, particularly those with fewer than 50 employees, are unencumbered by past IT investments and therefore have the ability to rapidly add new capabilities without the burden of linking to—or writing off—an existing data center infrastructure. But even the most enthusiastic researchers miss a very significant portion of the market: “non-employer” firms that are not counted as corporations.

The size of the SMB public cloud market is often underestimated because the smallest non-employer firms (usually sole proprietorships) are often excluded from the business population. A more detailed description of U.S. non-employer firms is provided in the next section. For public cloud services that are sold on a per-firm basis (rather than on a per-seat or per-employee basis), the inclusion of this class of businesses can *more than triple* the base population of businesses in any total addressable market (TAM) calculation.

IT product and service investments—beyond a PC and an Internet connection—are generally too costly for SMBs due to the high capital requirements. Many legacy IT service providers have either ignored this segment or been largely unsuccessful at developing an SMB customer segment. However, the economics of providing IT services via a cloud architecture fundamentally alter the cost and revenue equation for both businesses that use them and providers that sell them. In particular, SaaS services delivered via the cloud will give this segment access to new and more sophisticated capabilities that will boost efficiencies and competitiveness. These services can also open markets that were previously untapped due to high barriers to entry or other firms’ inability to exploit extremely narrow niche markets.

The rationale for including non-employer businesses in any public cloud assessment requires consideration of the actual cloud services being bought. To estimate the market size for public cloud services, it is important to examine how each type of cloud service will be transacted and used. There are two possibilities:

1. Cloud services expenditures that vary with the size of the firm (e.g., email, storage, and other collaborative applications), often purchased by seat or other unit.
2. Scenarios where only one arrangement or type of cloud service is needed per firm (e.g., tax and accounting applications, marketing or Internet search engine services, or supply chain management).

For non-employer firms, we are especially interested in the second category of cloud services. SaaS service offerings to micro-SMBs should focus on common business requirements. Internal requirements include tax, accounting, and payroll services; customer-facing requirements include list management, marketing and advertising, and invoice and payment processing.

Because of the business process nature of these “cloudable” services, IT service providers may have to compete with established business process experts as vendors of these services. Such services will be sold to SMBs based on their business value rather than their IT capabilities. This will benefit incumbent business service vendors with established brands and reputations. For example, SMBs may be more comfortable buying tax accounting

services from a tax-accounting software firm than from an existing IT or communications service provider.

Any cloud TAM calculation, therefore, must consider spending sources that are currently non-IT in nature. This may include explicit expenditures for services such as tax accounting, or the supply of personal (unpaid) labor, such as stuffing envelopes or developing email lists. Studies that ignore these spending sources will underestimate the public cloud TAM size.

The Cisco Internet Business Solutions Group (IBSG) has studied the likely evolution of this market and created a view that identifies the specific areas where SaaS will most quickly evolve to a public cloud model and be adopted by these smallest SMBs. The TAM for these types of services among non-employer firms will amount to \$4 billion by 2015. Additionally, another \$6.5 billion of opportunity exists among very small, corporate SMBs with between 1-4 employees that are also often ignored by many SMB cloud analyses.

For those that recognize this opportunity and provide these SaaS capabilities (or enable other firms to provide these services), a large incremental and highly profitable market will emerge.

A New Look at SMB Demographics

According to the 2007 U.S. Census of Businesses,² excluding non-employer firms, there are 6 million corporations in the United States, with combined revenues of \$31 trillion.³ These firms are shown in the bottom five rows of Table 1. Ninety-eight percent of these firms had fewer than 100 employees, and combined revenues of \$7.8 trillion, in 2007.

Figure 1. Breakdown of U.S. Business Population.

Firm Size (employee range)	Number of Firms (millions)	Total Revenue (trillions)	Revenue / Firm (\$000s)	Employees / Firm
0 (non-employer firms)	21.7	\$992	\$46	n.a.
1-4	3.7	\$1,435	\$388	1.7
5-9	1.1	\$1,145	\$1,041	6.6
10-19	0.6	\$1,395	\$2,325	13.4
20-99	0.5	\$3,793	\$7,586	39.2
100+	0.1	\$21,979	\$205,606	282.1

Sources: 2007 U.S. Census of Businesses, United States Census Bureau; Cisco IBSG, 2012

From Table 1, it is apparent that in terms of firm size, non-employer firms outnumber all other firms by more than a 3-to-1 margin. Non-employer firms are business entities in which an individual earns income from self-employment. Most non-employer firms are sole proprietorships or simply people who made money selling their labor—often, but not always, in second or part-time jobs. Examples of non-employer firms include plumbers, eBay, retail facilitators, direct sales representatives, management consultants, engineers, school tutors, and home healthcare providers.

² This is the most recent data available with complete detail. The next complete Census of Businesses will take place in 2012.

³ Revenues exceed GDP by about 2X. GDP includes only final goods and services, whereas U.S. Census data include sales of inputs or intermediate products.

As Table 2 shows, the vast majority of non-employer firms are in services sectors. While the median revenue is less than \$25,000 (many firms have no revenue based on IRS data), nearly 2 million firms have revenue of at least \$100,000.

While many of these companies' business requirements are often comingled with their personal or household requirements, many are not, such as the need for tax and accounting services, transaction processing, and record keeping, including accounts receivable and payable records.

Figure 2. Distribution of Non-Employer Firms by Size and Industry (2009).⁴

Non-Employer Businesses	Total Establishments	Revenue: < \$25,000	Revenue: \$25,000 - \$100,000	Revenue: \$100,000 - \$1M	Revenue: > \$1M
Goods-producing (other than construction)	645,120	419,604	156,043	69,291	182
Construction	2,429,121	1,464,975	686,566	275,196	2,384
Wholesale / retail trade / transportation	3,178,372	1,983,731	793,496	395,674	5,471
Information	299,582	218,753	60,545	20,026	258
Finance and insurance	697,952	413,376	188,452	93,989	2,135
Business services	6,866,606	4,491,715	1,651,535	715,987	7,369
Consumer services	1,421,786	1,121,216	229,014	69,269	2,287
Healthcare services	1,863,430	1,391,756	366,193	103,748	1,733
Education services	558,620	491,664	58,341	8,542	73
Other services	3,130,172	2,364,964	645,219	118,755	1,234
TOTAL	21,090,761	14,361,754	4,835,404	1,870,477	23,126

Sources: 2007 U.S. Census of Businesses, United States Census Bureau; Cisco IBSG, 2012

To see how this might work in real life, consider Avonna, one of 3.2 million independent retail providers in the United States. Avonna resells cosmetics from a national brand that utilizes direct distribution channels. Avonna maintains a customer list of about 1,000 previous and potential buyers, and offers get-togethers and specials to these customers via email or social media "friend" lists. Remote access to this information is critical for Avonna's success; she sees herself as a genuine friend to each of her customers. She travels to visit customers at their homes or offices, but a quick response from her to any customer question or situation helps solidify the importance of each relationship. After all, vacations, birthdays, and other celebrations can be big buying events. Avonna's tools include an Internet-connected PC and a smartphone. She uses a spreadsheet template for billing, but mails out hardcopy invoices. Next to Avonna's desk is a pile of paid invoices and receipt copies, while several years' worth of older invoices sit atop a shelf in her garage.

Public cloud services can easily handle Avonna's requirements. Because Avonna's customer list is her most valuable asset, she could benefit from database management and remote capabilities that enable her to access customers' purchase status from a smartphone or tablet PC. Backup and storage utilities must also be part of the service. In addition, a smart market research and segmentation plan would greatly help Avonna increase her revenues; a quickly developed analytical application can discover that customers in certain

⁴ Please note that Table 2 contains 2009 data versus Table 1's 2007 data.

neighborhoods have an average spend per purchase that is 50 percent higher than in other areas. Birthday alerts can be sent to Avonna a couple of weeks before the actual date so that she can alert the celebrant's friends.

Avonna needs to monitor and address inventories, billing and payment info, and delivery issues from her supplier. She can use other cloud services that offer credit card clearing capabilities and link the ordering, payment, and fulfillment process to Avonna's business account. Each transaction generates some profit for Avonna, for which she will need tax and accounting services, too. This cloud service also accumulates information about these transactions so that when tax time rolls around, the necessary information is pre-compiled into the correct forms. Avonna takes for granted that the cloud services she uses contain the necessary security, connectivity, ordering, and compliance services she requires. Hypothetically, if just 10 percent of retailers like Avonna spend \$100 month for these cloud services, total expenditures in just the United States would be \$384 million.⁵ By offering this high level of personalized services, Avonna effectively competes with the in-store cosmetic counters at the mall.

Public Cloud Spending Measurement

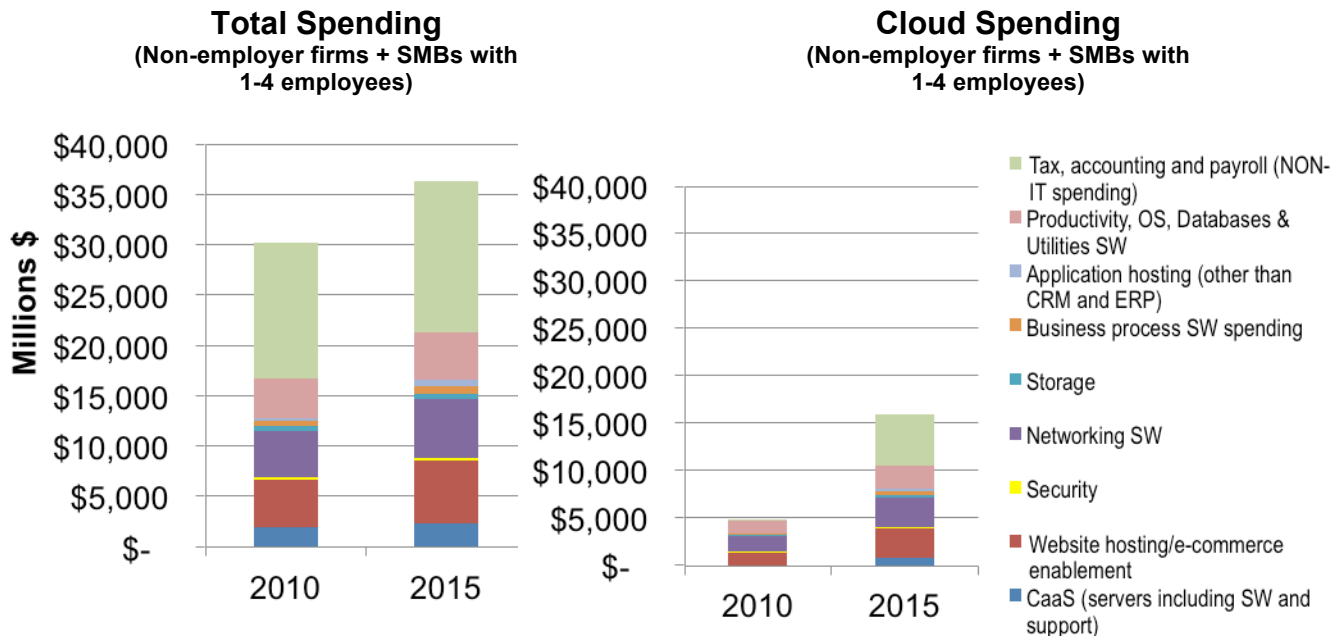
With this expanded SMB definition in mind, Cisco IBSG completed an analysis of the SMB spending that is "cloudable" (addressable by cloud services). The legend of Figure 3 lists the sources of this SMB spending, and includes most cross-vertical SaaS applications, compute-as-a-service (CaaS) spending, and IT infrastructure spending, such as storage, security and networking. Figure 3 also includes one source of non-IT spending: tax, accounting, and payroll applications.

The left-hand side of Figure 3 measures the total spending of SMBs that is potentially cloudable. The right-hand side applies cloud penetration rates to the spending on the left. The penetration rates were derived from a Cisco IBSG survey of SMB firms.

In applying the penetration rates, note that the right-hand graph implicitly applies cloud price and service volume assumptions to the spending on the left-hand side. The question is often raised about what fraction of each dollar of spending of today's IT services will eventually move to a public cloud. This question cannot be answered because the contractual purchase arrangements for clouds are often not comparable to a business-as-usual scenario. Comparing a cloud on-demand expenditure with a fixed contract ignores the value derived from the flexibility that on-demand services afford. The fixed contract may actually not be meeting an SMB's current (and future) needs fully, while public cloud services are more likely to meet the SMB's requirements adequately. Cisco IBSG research shows that the consideration of public cloud migration is high among SMBs, and that current usage of Internet-delivered services varies comparatively little among SMB firms of all sizes.

⁵ Not including any additional revenues that are transaction-based, such as credit card charges, handling fees, etc.

Figure 3. Between 2010 and 2015, U.S. SMB Cloud Spending Will Increase from 16 Percent of Cloudable Spending to 44 Percent, or \$16 Billion, Driven by Tax and Accounting Applications and Web Hosting.



Source: Cisco IBSG, 2012

Moreover, an SMB may not currently be purchasing some aspects of its IT services requirements at all; its spending on public clouds may be entirely new. As could be the case for Avonna, boxes of customer invoices stacked in a garage might be replaced by an on-demand storage utility. Or, more commonly, tax and accounting services that are done by the non-employer firm owner with no compensation may now move to a paid cloud service. The quality of the service will most likely improve, and the business owner can redirect his or her time to more productive endeavors.

Figure 3 shows that total SMB spending (non-employer firms and SMBs with 1-4 employees) on cloud-addressable services will grow from \$31 billion in 2010 to \$36 billion in 2015, a 4 percent annual rate. Spending on actual SMB cloud services is projected to grow from \$4 billion to \$16 billion over the same period—a 26 percent annual rate. The ratio of cloud spending to cloud-addressable spending increases from 16 percent in 2010 to nearly 44 percent in 2015.

The largest components of SMB cloud spending are tax, accounting, and payroll services, which are generally not provided via cloud services at this time. Cisco IBSG estimates that micro-SMBs currently spend about \$13 billion on these services, which include preparation of tax and payroll tax returns, payroll processing and tax compliance, and accounts receivable management. IBSG has estimated that each non-employer firm spent about \$550 in tax and accounting services in 2010—excluding the value of labor used in place of hiring tax and accounting professionals. Many firms, such as Intuit (QuickBooks) or FinancialForce.com, have entered the market.

Figure 1 shows that other significant opportunities for public cloud services include:

- Desktop productivity tools, operating systems, and utility software
- Storage and compute as a service
- Networking and security software

Conclusion

“Non-employer” businesses represent a hidden market with a large incremental opportunity for cloud services. This market is mostly unserved by traditional cloud service providers.

SMB public cloud spending is much more driven by the value of the application being offered than by the value of the underlying IT infrastructure providing the service. Additional uptime and processing speed certainly are valuable, but not nearly as much as the ability to offer new business functions to firm owners and their customers. This implies that a selling strategy must be focused on business success and tangible business value rather than on IT capabilities.

Branding and existing SMB customer relationships become important selling points. Public cloud service providers will need this *primatur* to be successful. Many new public cloud service providers that do not have an IT vendor background will enter the public cloud market looking to capitalize on their reputation as industry or business process specialists. For example, Intuit offers public clouds for virtually all the tax and accounting services a buyer of QuickBooks might need; ADP offers payroll and tax tools; and McKesson offers healthcare review tools to support payment decision making.

Companies interested in the cloud micro-SMB market need to support these potential public cloud service providers with the IT infrastructure, communications tools, and selling experience needed to let them reach their existing customers. At the same time, traditional telecommunications service providers who wish to offer platforms on which others can base their public cloud services also must consider the business needs of potential customers.

More Information

Cisco IBSG (Internet Business Solutions Group) drives market value creation for our customers by delivering industry-shaping thought leadership, CXO-level consulting services, and innovative solution design and incubation. By connecting strategy, process, and technology, Cisco IBSG acts as a trusted adviser to help customers make transformative decisions that turn great ideas into value realized.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

 Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)