SMALL BUSINESSES EMBRACE TECHNOLOGY, BUT GAPS REMAIN

December 2016

Small businesses are commonly described as the lifeblood of the U.S. economy. This is more than hyperbole as SMBs account for the vast majority of the nation's business entities, while serving as a key driver of job growth and innovation. Success as a small business owner means overcoming challenges on many fronts. Increasingly, these challenges, as well as the corresponding opportunities, revolve around technology. CompTIA's latest research in this space explores the business relevance of technology to SMBs and the factors affecting their perceptions, decisions, and investments in established and emerging technologies.

KEY POINTS

SMBs place a high priority on technology

Two-thirds of SMBs indicate technology is a primary factor in pursuing their business objectives, while 31% rate it as a secondary factor. Top SMB priorities for the year ahead – customer retention, expansion into new markets, business process improvements, innovation, and workforce development, will require the right mix of people, process, and technology to ensure optimal results.

Many firms want to increase their investment in technology, but barriers exist

Not surprisingly, SMB spending is highly correlated with firm size. About 1 in 3 SMBs report spending more than \$100,000 annually, with the remainder spending a lesser amount. Forty-percent of SMBs acknowledge their investment level in technology is lower than it should be.

SMBs have mixed feelings about the perceived ROI they get from technology

SMB perceptions of the return on investment range from 16% that rate it as excellent to 7% that rate it as disappointing, with a large segment in the middle. There are a number of factors that affect perceptions of ROI.

Despite a need and desire to embrace digital transformation, most SMBs lack the necessary vision and strategy

The research indicates SMBs have made progress in identifying the key areas they should target for improvement, such as cybersecurity, data utilization, and the modernization legacy infrastructure or applications. However, disconnects remain for many in getting from point A to point B.

\$152 billion

IDC's estimate of U.S. SMB spending* on IT products and services. Gartner estimates SMBs account for 44% of global IT spending.

*Annual spending using IDC's definition of SMB, 1-999 employees



SETTING THE STAGE: SMB MARKET OVERVIEW

Using the Small Business Administration (SBA) definition of small business – those with 1 to 500 employees, there are approximately 9 million U.S. business establishments meeting this criteria. Additionally, there are another 19 million sole proprietors, many of which could be characterized as home-based businesses. Given the breadth of this market, not surprisingly, the majority of Americans work for a small or medium-size business or are selfemployed.

The market follows a classic pyramid shape with a substantial base of micro businesses (77.7% of business entities at the base, and a very narrow peak of large enterprises, accounting for less than 1% of the total. Analysis of industry sectors reveals the top four verticals – healthcare, professional services such as accounting, retail, and construction, account for 54% of all business establishments in the SMB space. As small businesses move beyond a heavy focus on managing and maintaining technology infrastructure to begin prioritizing innovation and using technology to solve business problems, their demand for industry sector-specific expertise and technology partners will only intensify. **1** MORE DATA

Other characteristics of the SMB market to keep in mind:

High rates of churn in the SMB space

 Smalls businesses are a primary source of job creation, however, small businesses also fail at high rates – only about half of startups survive five years. With 10%-12% annual turnover, SMBs also destroy a lot of jobs.

Small business owners come from many backgrounds

 Using the broader definition of small business to include sole-proprietors, women-owned businesses account for 28.8% of the total. Minority-owned businesses account for 21.5% of the total.

Scaling from small business to large business is difficult

 According to McKinsey Consulting, just 19 of 3,197 publicly traded software companies between 1980 and 2013 reached \$1 billion in annual sales. This translates to a 3% success rate for scaling to a very large size.

Underlying many strategic priorities is the desire to simplify

TOP BUSINESS PRIORITIES IN THE YEAR AHEAD



For most firms, business priorities almost always start with the customer. Losing market share or failing to build a pipeline of new prospects is never a viable formula for long-term success. Often related to the customer experience is the need to enhance work processes. For example, streamlining billing processes may have the twofold benefit of saving staff time and improving collectibles efficiency, while also creating a better experience for the customer. For medium-size SMBs, enhancing work processes was cited as an especially pressing concern.

Innovation and new product launches are two strategic priorities that moved up the rankings slightly since last year. This dovetails with other findings confirming the ongoing transitions underway across many businesses as they seek to replace legacy or inadequate IT infrastructure, applications, or even their own products, with better solutions. CompTIA's *Building Digital Organizations* study details the steps involved in these transitions, starting with experimentation up through the final step of transformation. Because the degree of difficulty increases with each stage, there is typically a corresponding need to upgrade staff skills and/or tap new talent. **I**

ASSESSING THE BUSINESS RELEVANCE AND RETURN ON INVESTMENT OF TECHNOLOGY

In its simplest form, return on investment (ROI) is a financial measure of profitability. In most business environments, however, the term is commonly used as a shorthand in judging an action. For example, the effort required to pursue a new market opportunity may be viewed favorable (good ROI), while a marketing campaign proposal may have questionable value (bad ROI). The lines are further blurred when ROI is used interchangeably with concepts such as cost-benefit analysis, business case analysis, or even the opportunity component of SWOT analysis.

Despite the imprecise use of terminology, one point is abundantly clear: businesses of all sizes want to make smart decisions and maximize the value they get from investments of capital, time, or effort.

Given this mindset, it would seem obvious that business leaders would seek to leverage ROI analysis whenever possible. While the intent may be there, there are factors that can derail efforts. ROI analysis can be time-consuming, especially if there is a need to track down missing data points, document assumptions, or involve large numbers of staff. In some scenarios, factors on the cost side or the profit side may be completely unknown, resulting in the use of ballpark estimates at best. In situations where jobs could be stake, it introduces another variable into the mix – the challenge in maintaining neutrality. Lastly, over-analysis, also known as paralysis by analysis, can sometimes cause more harm than good.

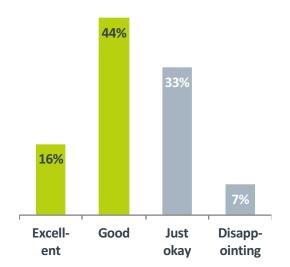
What is the state of technology ROI in the SMB space? What are small business owners doing, or should be doing, to assess the value of hardware or software purchases? How can technology partners better address questions and concerns with ROI?

To start, the majority of SMBs (83%) report using some type of formal or informal approach to assessing the ROI of their technology expenditures. These approaches include:

- 46% General cost-benefit templates/tools
- **38%** Informal assessments, such as ballpark estimates
- 34% Business plan templates/tools
- **21%** Formal tools, i.e. ROI calculators, frameworks, etc.

The largest share of SMBs rely on general cost-benefit templates or tools, which could range from the very basic to more sophisticated techniques. Only 1 in 5 report using dedicated ROI calculators, which presumably cover a broader set of variables such as staff time or opportunity costs. For technology partners, this should be viewed as an opening to engage in consultative sales practices.

SMB PERCEPTIONS OF TECHNOLOGY ROI



Perceptions of ROI roughly follow a bell-shaped curve. In the aggregate, 6 in 10 SMBs rate the ROI of the technology in use at their firm as good or excellent. IT executives gave higher ratings than owners and business executives, while medium-size SMBs gave higher ratings than micro SMBs.

The data could be viewed in two ways. On the one hand, the tech sector is unique in that it regularly delivers better, more capable products at ever-lower prices. This is easily seen in a quick comparison of first generation smartphones of just a few years ago to the models available today. Based on this alone, an argument could be made that users may be undervaluing the return they get from technology investments.

On the other hand, when accounting for total cost of ownership (TCO) factors, ROI perceptions may be more understandable. When small businesses were asked about the reasons behind perceptions of low ROI, responses were fairly evenly distributed among the options. This is a likely indicator there is a degree of nuance in "reading the tea leaves" for what drives or inhibits positive perceptions of ROI. IN MORE DATA

Reasons Cited When Tech ROI Falls Short

- 1. Ongoing maintenance costs / fees [41%]
- 2. Required upgrades / built-in obsolescence [37%]
- 3. Staff time needed to operate / maintain [37%]
- 4. Upfront cost / too expensive for what you get [36%]
- 5. Complexity / poor user experience [32%]
- 6. Insufficient features / capabilities [30%]
- 7. Reliability expectations not met [29%]

CONTINUING THE ROI THREAD

As noted previously, return on investment is a fundamental business metric often used to convey both quantitative and qualitative sentiments. SMBs acknowledge their approach to assessing the ROI of technology is most likely to be based on general business cost-benefit templates, rather than dedicated ROI tools built on more rigorous methodologies.

While the research confirms the presence of gaps in ROI analysis, it also highlights quite a few positives. It suggests many SMBs are correctly incorporating a range of data points into their calculations. Healthy numbers go beyond direct cost savings to include metrics such as time savings, error reduction, or customer satisfaction. While not always articulated by internal stakeholders or external technology partners, these are the types of metrics most important to affirming the business relevance of IT. MORE DATA

Quantitative-type ROI metrics used by SMBs

- **60%** Time savings from faster performance
- 56% Time savings from improved reliability / uptime
- **52%** Direct cost savings (e.g. lower fees, energy savings)
- **48%** Reduction in number of errors or incidents
- **29%** Other cost savings (e.g. travel cost savings)

Qualitative-type ROI metrics used by SMBs

- **64%** Improved functionality / capabilities
- **59%** Faster or more accurate data / information
- 53% Increased customer satisfaction
- 42% Increased staff satisfaction
- **30%** Better compliance / governance

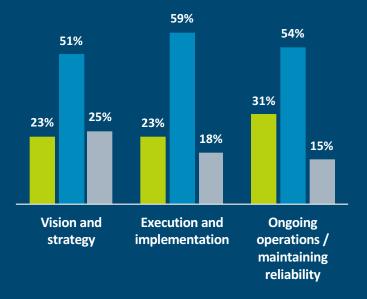
Interestingly, the results are fairly uniform across micro, small, and medium-size SMBs. Similarly, there are only minor differences across business roles. This could be interpreted as meaning owners and CEOs are not involved in the details of technology assessments as much as what is sometimes suggested in tech-buying analysis. Or, it could mean that CIOs and IT department heads, many of which have faced years of budget pressures and demands to do more with less, are well versed in the need to engage in thorough before-and-after analysis of technology investments.

Getting back to the question of factors that influence perceptions of ROI, it's worth mentioning the role of expectations. Because technology is often positioned as being capable of delivering on the seemingly impossible, expectations can become detached from reality. This can be especially problematic for small business customers that don't have a clear vision and strategy for how various components of technology come together to form a solution or solve a business problem. For technology partners, setting realistic expectations while providing both big-picture strategic guidance and tactical expertise, increase the odds of overdelivering and achieving desired ROI ratings.



SMB Self-Assessment of Tech Capabilities

- Excel in this area
- Generally proficient, but room for improvement
- Lots of room for improvement



THE PATH TO DIGITAL BUSINESS TRANSFORMATION

One of the most notable models of business lifecycle progression was <u>published</u> in The Harvard Business Review more than 30 years ago. The paper describes five stages of small business growth: existence, survival, success, takeoff, and maturity. With each stage comes added complexity, from staffing challenges and new layers of bureaucracy to regulatory compliance and having to face larger competitors. Of course, technology needs evolve as well.

In many ways, technology has never been more accessible. The emergence of cloud computing and 'as-a-service' delivery models now put enterprise-level technology in the hands of the smallest of businesses. Moreover, some of the most important tools today, such as smartphones or CRMs, are user friendly and easy manage.

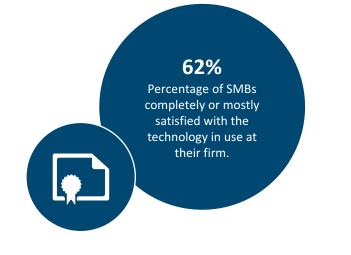
While many facets of technology management can reasonably be classified as DIY, in other ways managing an ever-expanding technology ecosystem has become more complex. Take the customer experience, for example. Customer engagement now typically spans multiple devices, operating systems, platforms, payment systems, privacy requirements, live chat support, and international borders. On top of that, customers want to seamlessly navigate physical and virtual environments, with many expecting an experience tailored to their particular tastes. Managing this ecosystem of backend and customer-facing devices and applications, along with the wealth of data generated from myriad interactions, is a heavy lift for even sophisticated, tech-savvy firms.

With the emergence of AR, VR, AI, IoT, 3-D printing, big data, and more, the path to digital business transformation will mean navigating many more twists and turns.

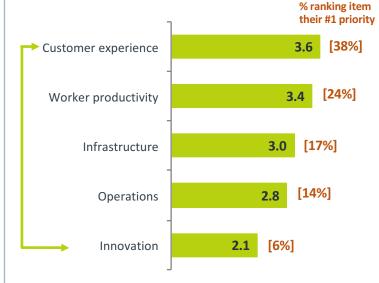
Encouragingly, SMBs rate cybersecurity and data as top boardroom-level priorities. As seen in CompTIA's extensive body of security research, there is still a wide gulf between saying security is important and taking the necessary actions to fully embrace security best practices.

Boardroom-Level Tech Improvement Goals

- 1. Cybersecurity
- 2. Effectively managing and using data
- 3. Modernizing aging equipment / software
- 4. Getting more ROI from technology
- 5. Integrating applications, data sources, platforms



Connecting Technology to Business Priorities



Asking small business owners about their technology priorities elicits varying and sometimes apparently contradictory responses. When positioned in relation to business objectives, respondents in the survey ranked improving the customer experience as the top priority. This may entail upgrades to the website, adding e-commerce or mobile commerce capabilities, or using new digital engagement platforms, such as Beacons for location-based discounts.

When positioned as a technology wish list question, SMBs tend to gravitate towards innovation and emerging technologies (See Appendix **1** MORE DATA). This highlights a key challenge: the tension between the desire to embrace innovation with the realities of running the business. Technology partners with the right mix of technology, business, and sector-specific expertise can play an important role in dissecting these many nuances and recommending appropriate solutions. Of course, it also bears repeating, technology is a means to an end and is only as relevant as the business value it supports.

SMB IT SPENDING AND PURCHASE PLANS

IDC estimates the U.S. small business technology market is worth around \$152 billion annually. Gartner posits SMBs account for 44% of the worldwide IT market. Note: both IDC and Gartner use a slightly more expansive definition of small business, 1-999 employees. CompTIA data breaks down SMB tech spending into the following buckets.

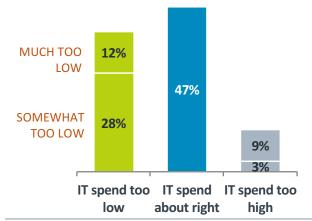
53% Less than \$50,000
12% \$50,000 - \$99,999
17% \$100,000 - \$499,999
14% \$500,000+

Because of the large variance in the data, from those spending a few thousand to those spending more than \$10 million per year, the data should be used for directional guidance only. [], MORE DATA

Another factor affecting spending estimates is the growing incidence of tech purchases made outside the IT department. Shadow purchases such as a marketing executive buying a social media analytics SaaS application or the CFO doing the same with a project management tool or a new tablet, can lead to firms underreporting their technology budget.

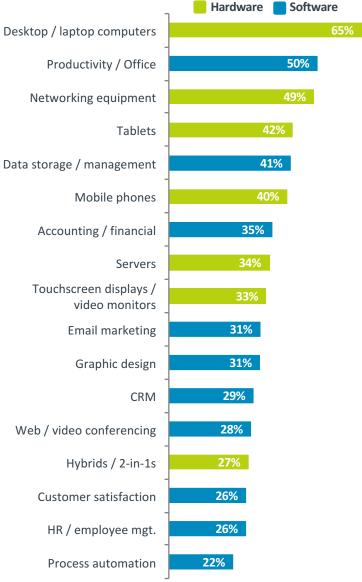
Although benchmarks exist to provide guidance for operational spending as a percentage of sales, how much to spend is always a tricky question. For 4 in 10 small business executives, the answer as it relates to technology is not enough. The study did not go into details on this, but it's reasonable to assume there are elements of uncertainty, competing budget priorities, questions of ROI or business relevance, or insufficient staff expertise to make it happen.

The data indicates SMBs will allocate their tech spending pretty evenly across four primary purchase channels: local retailers (22%), online-focused retailers (25%), direct from vendors (30%), and resellers or technology partners (22%).





Drill-down: SMB IT Spending Plans



Hardware purchase drivers

- 40% End of life / refresh cycle
- 32% Organic growth / need additional equipment
- 28% New tech / first time purchase

Software deployment expectations

- 45% On-premise
- 34% Cloud (SaaS)
- 21% Custom software development

With office productivity, such as Microsoft Office applications, and accounting cited as two priority software items, it may help explain the relatively high on-premise figure. The macro trend points to greater adoption of SaaS applications and perhaps when the evaluation of options is underway, segments of SMB buyers will opt for the cloud.

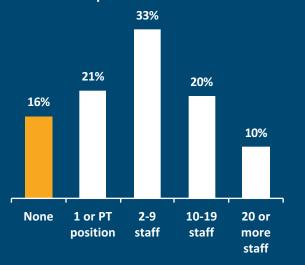


MANAGING THE IT FUNCTION

As the role of technology expands, so do the decisionfactors related to how it is managed. While most small business owners would love to have a deep bench of highly skilled IT professionals, the reality is few are in a position to do so. While a strong majority – nearly 8 in 10 – have at least one full-time IT employee on staff, many SMBs operate in "just trying to get by" mode, whereby tactical and strategic roles are fluid.

As expected, IT staff size is highly correlated with firm size. Averages range from about one IT staff person employed by micro SMBs, to eight for small SMBs, and 15 for medium SMBs.

SMB IT Department Size Distribution



To address bandwidth constraints or skills gaps, small businesses routinely turn to outside expertise. Seventy-five percent of respondents report using a technology partner, such as a solution provider, VAR, or MSP, at least occasionally during a typical year. Among this segment, 20% are frequent users of technology partners, while 23% are regular users.

It should be noted, among the segment of SMBs most satisfied with their IT, there is a much higher utilization rate of technology partners. This should not necessarily be interpreted as causation, but it is reasonable to assume that businesses that recognize when they need help, and are willing to pay for it, tend to be in a better place with their IT than those that underinvest.

Top Ways SMBs Use Technology Partners

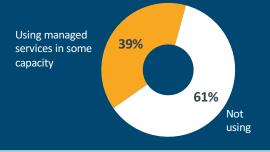
- Repair / troubleshooting / break-fix
- General IT consulting / advisory
- Web design or e-commerce related
- Deployment, installation or integration
- Cybersecurity related
- Procurement of hardware / software
- Cloud related



Beyond the need for additional expertise, SMBs cite another key reason for their use of technology partners – help with innovation and digital business transformation. Even though break-fix IT services consistently tops the list of SMB technology partner engagements, opportunities exist to elevate the conversation to emerging areas.

On the managed services front, 4 in 10 SMBs report using managed services in some capacity. Despite the best efforts to control for the definition of managed services, there tends to be a degree of misinterpretation among survey respondents, leading to some margin of error.

Looking ahead, another 38% of the respondents indicated they have considered managed services, but had reservations with cost, trust, or execution. These are all sales objections that can be addressed with the right approach to customer education. In MORE DATA



CompTIA

RESEARCH METHODOLOGY

This quantitative study consisted of an online survey fielded to small and medium business executives and professionals during August 2016. A total of 600 small and medium businesses based in the United States participated in the survey, yielding an overall margin of sampling error proxy at 95% confidence of +/- 4.1 percentage points. Sampling error is larger for subgroups of the data.

As with any survey, sampling error is only one source of possible error. While non-sampling error cannot be accurately calculated, precautionary steps were taken in all phases of the survey design, collection and processing of the data to minimize its influence.

CompTIA is responsible for all content and analysis. Any questions regarding the study should be directed to CompTIA Research and Market Intelligence staff at research@comptia.org.

CompTIA is a member of the Market Research Association (MRA) and adheres to the MRA's Code of Market Research Ethics and Standards.

ABOUT COMPTIA

The Computing Technology Industry Association (CompTIA) is a non-profit trade association serving as the voice of the information technology industry.

With approximately 2,000 member companies, 3,000 academic and training partners, 80,000 registered users and more than two million IT certifications issued, CompTIA is dedicated to advancing industry growth through educational programs, market research, networking events, professional certifications and public policy advocacy.



USEFUL RESOURCES

RESEARCH

CompTIA publishes 20+ studies per year, adding to an archive of more than 100 research reports, briefs, case studies, ecosystems, and more. Much of this content includes segmentations or analysis by company size, providing insights on the small business market.



CompTIA Research Library

EDUCATION & CHANNEL TRAINING

CompTIA has an extensive catalog of Quick Start Sessions, Executive Certificate Programs, Playbook Workshops, and Vender & Distributor Education. Many aspects of the training focus on sales and solutions for the SMB market.



CompTIA Training Catalog

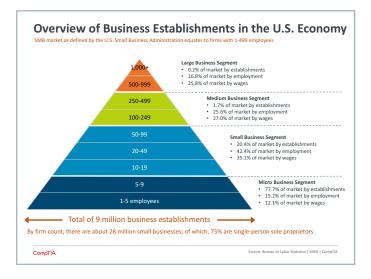
COMMUNITIES

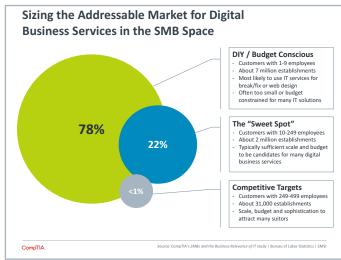
CompTIA member communities are forums for sharing best practices, collaborative problem solving, and mentoring. Discussions frequently revolve around the SMB market.

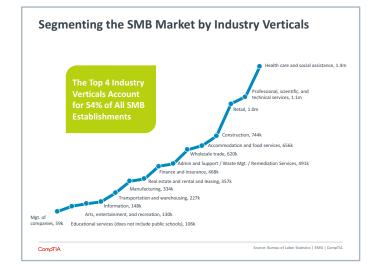
CompTIA Communities



APPENDIX I









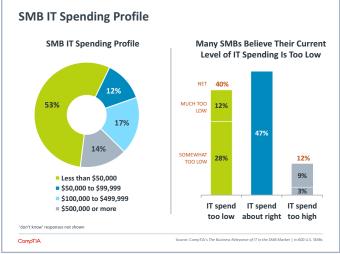
SMB Business Priorities Segmentation SMB SIZE CATEGORY Medium Micro SMB Small SMB SMB Implementing new systems or work processes to enhance efficiencies Renewing / maintaining key customer accounts Renewing / maintaining key customer #1 accou Successfully launching new products dentifying new customer segments / Implementing new systems or work processes to enhance efficiencies #2 Identifying new customer segments / new markets Innovation / cultivating new ideas and putting them into practice Identifying new customer segments / new markets #3 Successfully launching new products Innovation / cultivating new ideas and Renewing / maintaining key customer #4 putting them into practice or service account Successfully launching new products or Innovation / cultivating new ideas and putting them into practice Implementing new systems or work processes to enhance efficiencies #5 CompTIA Source: CompTIA's The Business Relevance of IT in the SMB Market | n=600 U.S. SMBs



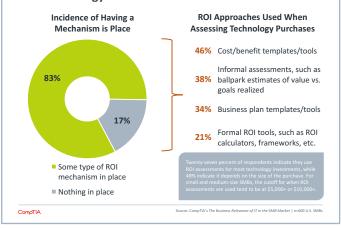
62% of SMBs (NET) report satisfaction with their IT.

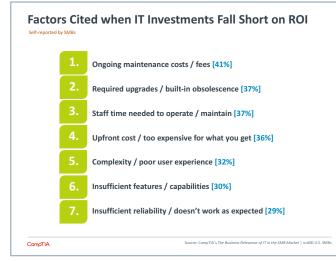
Satisfaction rating	SMB SIZE CATEGORY			INDUSTRY SECTOR					
	Micro SMB	Small SMB	Medium SMB						
NET Satisfied	54%	63%	68%	69%	62%	57%	61%	72%	
Completely satisfied	6%	15%	18%	11%	19%	11%	13%	18%	
Mostly satisfied	48%	48%	51%	57%	43%	46%	49%	54%	
Somewhat satisfied, somewhat dissatisfied	36%	30%	26%	27%	29%	34%	33%	25%	
Mostly dissatisfied	8%	7%	6%	4%	9%	9%	6%	39	
Completely dissatisfied	1%	0%	0%	0%	0%	0%	0%	09	

APPENDIX II



Most SMBs Use Some Mechanism to Assess the ROI of their Technology Investments

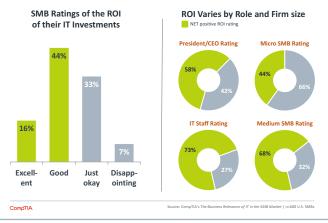


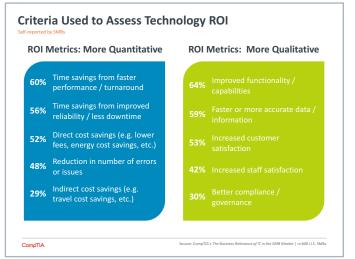


SMB IT Spending Profile Segmentations

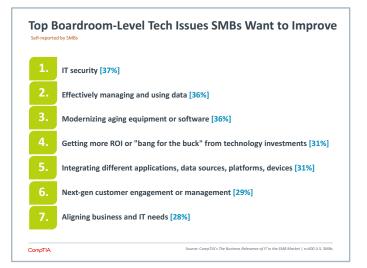
Self-reported Annual Spending on IT	SMB SIZE CATEGORY			INDUSTRY SECTOR				
	Micro SMB	Small SMB	Medium SMB					
Less than \$25,000	87%	38%	12%	33%	50%	41%	43%	30%
\$25,000 to \$49,999	3%	15%	12%	12%	13%	9%	9%	18%
\$50,000 to \$99,999	4%	13%	15%	16%	13%	10%	13%	10%
\$100,000 to \$499,999	2%	17%	31%	24%	14%	21%	14%	17%
\$500,000 or more	1%	14%	25%	14%	9%	12%	18%	22%
Estimated annual average	\$29,400	\$505,700	\$687,700	\$344,700	\$340,800	\$228,200	\$465,000	\$711,800

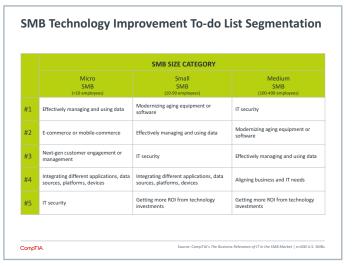


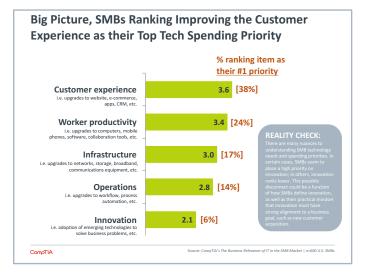


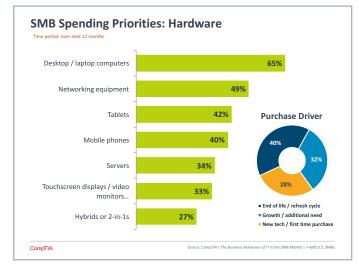


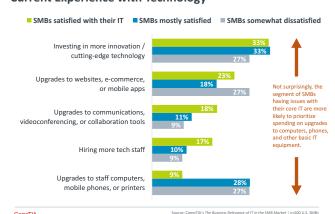
APPENDIX III

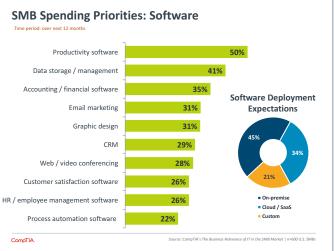




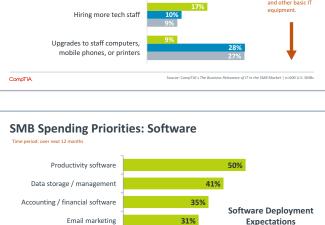








SMB 'Wish List' Spending Priorities Influenced by their Current Experience with Technology



APPENDIX IV

