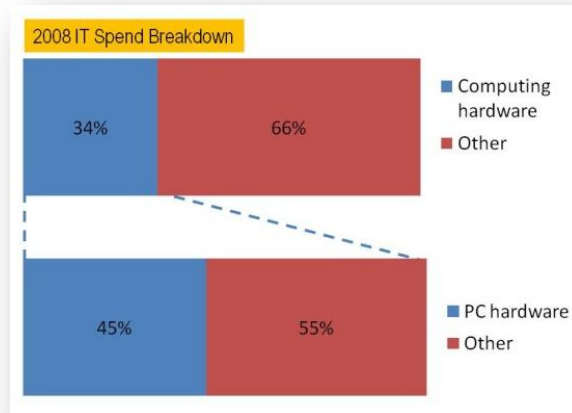# A WHITE PAPER
COST OF MAINTAINING PCS

INTRODUCTION

 The current state of the economy dictates a sharp focus on cost control and cash conservation. However, "cost" is sometimes a tricky item to nail down. Too often, business owners focus on short term costs and while in most cases this approach is absolutely valid, at times it can lead to situations that cost businesses more. The choice between maintaining existing PCs or upgrading to newer PCs is one such area.
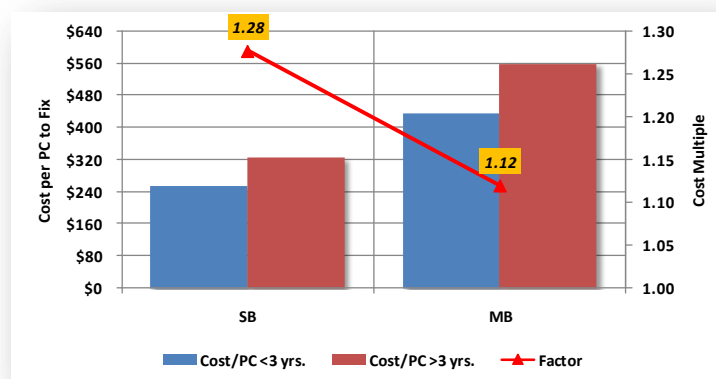

Over the last decade, IT has become an integral and increasingly important investment among small and medium businesses worldwide. Globally SMBs spend over $470B on IT, a third of which goes towards computing hardware (~$160B). Of that, 45% or $72 billion goes towards the purchase of desktops and notebooks easily making it one of the largest investments made by SMBs . It is natural therefore, in the current economy to pare down these costs by stopping purchases of new PCs and instead spending money to maintain existing PCs.

COST OF MAINTAINING PCS

A recent global survey of SMBs conducted by Techaisle exposes the true costs of maintaining older PCs along with an assessment of the most frequent types of issues encountered by PCs depending upon the age of the PC.
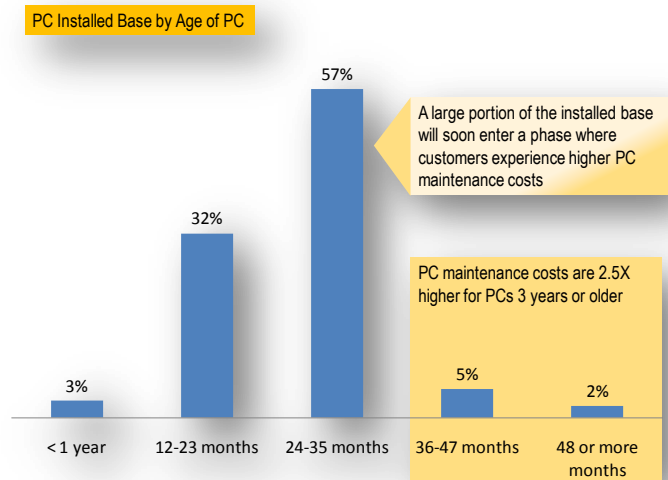

Based on maintenance costs including the cost of repair, ongoing maintenance, number of issues/problems, the cost of maintaining PCs more than 3 years old is between US$326 to US$401 per PC. Across SBs of all sizes the cost of owning and maintaining a 3 year old PC can be as high as 1.3 times that of a PC less than 3 years
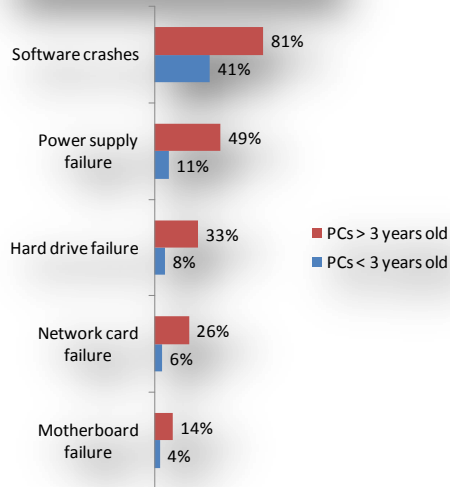
old. Even among MBs who are more proactive about managing their PCs than SBs, can end up spending higher for a 3 year old PC than for a PC less than 3 years old. Cost implications vary widely for firms of different sizes.

The research also shows that over half of the installed base is about to age and enter a phase where customers will soon experience higher maintenance costs.

In other words, in trying to save costs by not upgrading in the short term, SMBs risk incurring higher costs/PC by trying to keep repairing an aging PC.

PC Installed Base by Age of PC

A large portion of the installed base will soon enter a phase where customers experience higher PC maintenance costs

PC maintenance costs are 2.5X higher for PCs 3 years or older

	< 1 year	12-23 months	24-35 months	36-47 months	48 or more months
	3%	32%	57%	5%	2%

Leading causes of failure by PC Age

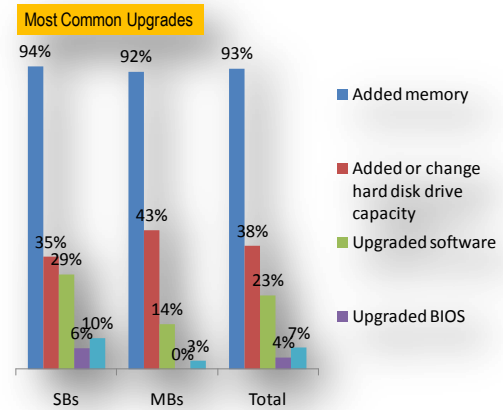|	PCs > 3 years old	PCs < 3 years old
Software crashes	81%	41%
Power supply failure	49%	11%
Hard drive failure	33%	8%
Network card failure	26%	6%
Motherboard failure	14%	4%

The most common age related issues leading to failure are software crashes and PCs greater than 3 years old are more likely to be plagued by hardware failures than PCs less than 3 years old.

The resulting impact on firms takes the form of both direct and indirect costs. The indirect costs are largely related to productivity lost due to downtime. Desktops tend to have higher downtime than notebooks, in part because the notebook installed base among SMBs (particularly among small businesses) is relatively new. Overall, SMBs report an average of 5 hours of downtime with desktops older than 3 years compared to 3.5 hours for desktops less than 3 years old.

SMB UPGRADE POLICIES AND MAINTENANCE BEHAVIOR

Given the costs of keeping PCs longer SMBs should carefully review their current upgrade and replacement policies. Over a third of SMBs have put in place a policy of extending the lives of their desktops and notebooks. While the majority report replacing PCs on an as needed basis, they may already have incurred higher costs by the time these PCs are replaced.

Approximately a third of SMBs state that they will upgrade a PC before replacing it. The primary cause of upgrades is **degraded performance of the PC**, followed by the **need to improve software performance** due to low memory. **Running out of storage capacity** is another reason given for upgrades. It follows then that the most common upgrade performed is that of adding memory and replacing failed hard drives.
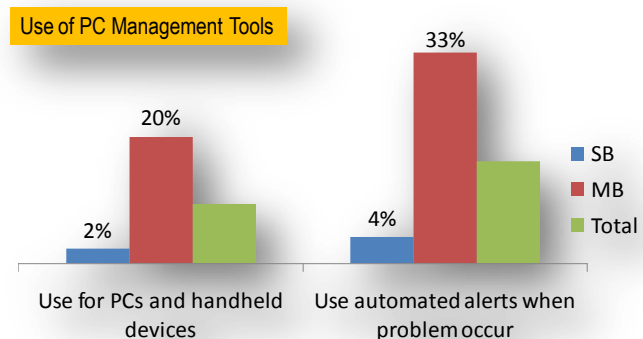
Aside from upgrading and replacing PCs, what sort of maintenance actions are SMBs taking? How are their PCs supported? In other words who are the participants in the decisions related to upgrading or replacing PCs?

Most Common Upgrades

TIME TO REVIEW MAINTENANCE POLICIES AND PROCEDURES

How IT maintenance is handled is a function of the size of the business. Small businesses tend to rely on third party providers, while larger businesses have an internal IT staff to handle most issues. For SBs in particular, these external entities can play a significant role in advising SBs owner managers as to when to upgrade or replace a PC. For example, 46% of SBs rely on local PC experts to fix their PCs. Nearly a quarter also have managed services contracts to maintain their PCs. External consultants along with internal IT staff are also influential in setting upgrade/replacement policies among MBs.

How IT is Managed	SB	MB	Overall
We have an in-house IT staff that fixes the issues	14%	73%	38%
We have external consultants who come in to repair	6%	6%	6%
Our reseller takes care of all breakdown issues	19%	9%	15%
PC manufacturer takes care of the problems	12%	16%	13%
We call local PC experts to fix problems when they occur	46%	14%	33%
We have managed services contracts who monitor our PCs	24%	41%	31%
We get our PCs fixed through friends and family	7%	0%	5%

However, SMBs lag significantly in the use of proactive tools and methods to prevent PC problems from cropping up. Further, ongoing PC maintenance such as making backups or applying OS patches are largely left to the individual PC user particularly among SBs.

While the use of such tools will likely help reduce the number of failures, buying a new PC could still likely be the safest and simplest course of action.

Use of PC Management Tools

CONCLUSION

A third of SMB customers report extending the life of their PCs. These customers should re-evaluate this decision given the higher cost maintaining older PCs. In light of the hardware issues faced by PCs more than 3 years old, replacing, rather than upgrading is a much more prudent course of action than expending time and money in upgrading PCs. The key to this is to consider both direct and indirect costs resulting from PC downtime.

Additionally, SMBs should adopt a proactive approach to managing their PCs and other IT assets. Small businesses in particular should adopt proactive management tools or engage a managed services provider to proactively monitor PCs. Nearly every major PC manufacturer offers tools and utilities for proactive PC management. Some are pre-installed on newer PCs but rarely do they factor into the purchase decision.

Most importantly, SMBs should re-think their PC purchase criteria and include the useful life of a PC as strong criteria in the purchase decision. Nearly every major PC manufacturer offers tools and utilities for proactive PC management. Many such tools and utilities are pre-installed on newer PCs but rarely do they factor into the purchase decision. Doing so will greatly help contain runaway PC management costs and help SMBs build a more secure, robust and up-to-date IT infrastructure, that keeps pace with the times and improves employee productivity.

ABOUT THE STUDY

Techaisle's study on cost of maintaining PCs was conducted across Small, Medium and Large businesses spanning 8 countries including US, UK, Italy, Brazil, India, China and Australia. The survey was conducted in February-March 2009. The margin of error for the survey was +/-2.9% at the 95% confidence level.

ABOUT TECHAISLE

Techaisle is a market research and consulting company providing actionable data and lead generation for emerging markets. Techaisle believes that companies need a consistent source of normalized market intelligence data on emerging markets Techaisle's core premise is that data is inherently more valuable when it can be aggregated, made available in real time and delivered as an answer to a specific question. Techaisle has pioneered a business model, very different from the traditional market research organizations, providing flexible data delivery, sales & marketing data Integration to manage opportunity vs. planning, online slicing-dicing for all market opportunity data analytics, customer segmentation that is easily understood, easily deployable and drives actual sales.

Survey data and analytics referred to in this release are available for purchase. For more information on Techaisle or our global products, please visit www.techaisle.com or call 408-914-2989.