

HONEST TCO

I was somewhere in the middle of Montana when it happened, on a bitterly cold November night, 20 miles from the nearest town. My decade-old, four-door hatchback – a rusted, dented, green beast with a cracked windshield and a headlight that died every three months – began making a subtle whine that steadily grew into an angry cough. And then Rita, as I had named the car, died for the eighth and final time.

This was years before the age of the modern cell phone, and as I made my trek back to civilization, I recalled what my grandfather had warned me the last time I had taken Rita to the shop: “If you keep putting good money into a broken-down car for repairs, you’ll never have enough for a better one.”

I had rolled my eyes at the time, turned to the repairman, and told him to fix up my green beast. But walking along the highway through the Montana snow long after midnight, it occurred to me that he was right. Besides, after all the money I had tossed toward repairing Rita, I had to wait six months before I was able to afford my next car.

I still tell this story to businesses that are researching AIDC, mobile computing and printing solutions, because it underscores the importance of the long-term costs of critical technology. Buy the inferior solution in the here-and-now, and hidden repair and replacement costs will negate any savings from the purchase. And that’s why total cost of ownership (TCO) matters so much.

Understanding TCO

TCO is a comprehensive look at device-life spending – encompassing not only the upfront, direct costs but also the hidden, indirect costs. Said simply, TCO is a barometer for the best, most economical long-term technology solution. This is especially true for mobile computer solutions, where devices are categorized by their ruggedness. From least to most rugged, these categories include consumer grade, durable, smart phone, semi rugged, and fully rugged.

Most enterprises have been there: faced with that daunting buying decision between devices made specifically for their niche tasks or the inexpensive alternatives that are “technically” made for consumers.

Buy the inferior solution in the here-and-now, and hidden repair and replacement costs will negate any savings from the purchase. And that’s why total cost of ownership (TCO) matters so much.

CALCULATING THE COST OF MOBILE COMPUTERS

TCO

LINCOLN

With many mobile computers supporting mission-critical applications, the impact of failure on customer service, internal productivity, employee morale and ultimately lost revenues can be significant. Equipping mobile workers with the most appropriate device based on application and environment - and not upfront adoption cost - is absolutely critical.

- "Total Cost of Ownership (TCO) Models for Mobile Computing and Communications Platforms," VDC Research. July, 2007

And by their third round of replacements in six years, most enterprises have come to realize that, when it comes to IT, the "technical" matters. Of course, by then, the unexpected costs from replacing damaged units and productivity loss from downtime have taken their toll. Simply put, important IT investments aren't the best place to cut corners.

In these challenging times when all costs are under scrutiny and funds for new equipment are often limited, organizations can't afford to overlook the important difference in the cost of consumer grade devices and rugged devices. Despite their lower purchase price, smart phones and PDAs cost much more to own

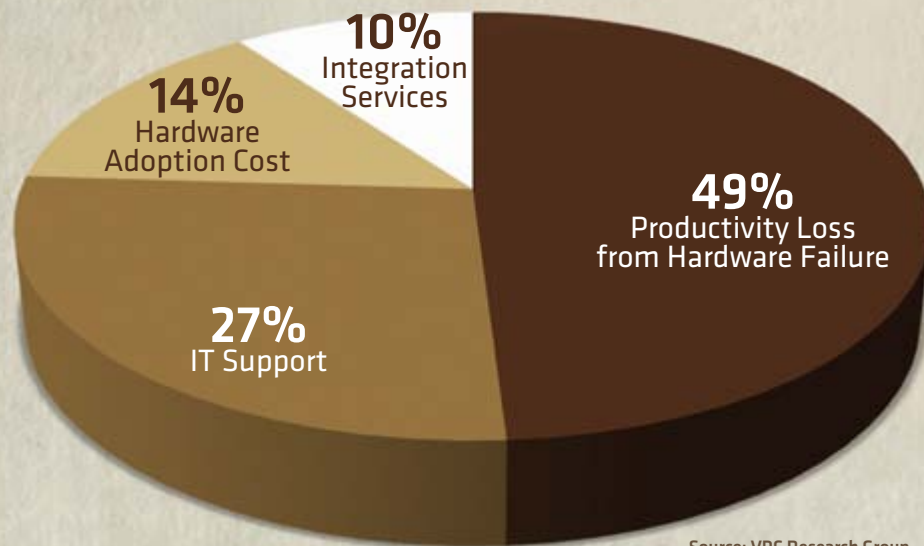
and operate than ruggedized mobile computers in service, delivery, retail, warehouse and manufacturing environments, according to independent research. A study by Venture Development Corporation Research (VDC) that compared the life cycle of ruggedized and non-rugged mobile computers used for enterprise operations found 38.5 percent of commercial grade devices had been replaced within two years of being deployed, compared to 7.8 percent of ruggedized mobile computers, and after year three, 82.6 percent of the original non-rugged devices had been replaced, compared to just 18.2 percent of ruggedized devices. That's why the majority of companies who consider TCO

ANNUAL HARD COSTS & SOFT COSTS FOR HANDHELD/PDA COMPUTERS

Device Type	Hard Costs	Soft Costs	Total TCO
Consumer Grade	\$472	\$3,758	\$4,230
Durable	\$654	\$3,309	\$3,963
Smart Phone	\$943	\$2,547	\$3,490
Consumer device average	\$690	\$3,205	\$3,895
Semi Rugged	\$863	\$2,005	\$2,868
Fully Rugged	\$895	\$1,697	\$2,592
Ruggedized device average	\$879	\$1,851	\$2,730

* Annual TCO based on five-year deployment; average of all usage environments. Source: VDC Research Group

WHAT ACCOUNTS FOR TCO FOR MOBILE DEVICES?



Source: VDC Research Group

analysis when planning a mobile deployment bought ruggedized mobile computers instead of consumer-grade devices.

As noted in VDC's 2007 TCO report: "Device failure remains a critical issue for mobile computers with annual failure rates often exceeding 30 percent. With many mobile computers supporting mission-critical applications, the impact of failure on customer service, internal productivity, employee morale and ultimately lost revenues can be significant. Equipping mobile workers with the most appropriate device based on application and environment - and not upfront adoption cost - is absolutely critical."

The Cost of Inferior Technology

The costs associated with mobile computers that are easiest to identify, such as purchase price, maintenance contracts and so on, are referred to as "hard costs," and they make up only a small portion of total cost of ownership. "Soft costs" such as support time, lost productivity and device maintenance account for a

much higher percentage of TCO. Interestingly enough, VDC found that productivity loss from hardware failure makes up 49 percent of the total cost of ownership for mobile computer solutions. Addressing this variable presents the best opportunity for organizations to keep costs under control and maximize the value of mobile computing investments.

Because rugged devices last longer, the costs associated with productivity loss and other soft costs are not as high as those associated with consumer grade devices. In fact, when combining hard costs and soft costs VDC found that the annual average TCO for a consumer grade device was \$3,895 per device, compared to an annual average TCO of only \$2,730 per rugged device. In other words, enterprises that implement rugged devices in their operations save an average of \$1,165 per device each year.

Lowered TCO applies to all rugged devices - not just rugged mobile computers, but also rugged mobile and fixed printers.

By using devices and applications purpose-built for specific enterprise operations, organizations benefit from improved ease of use, reduced training and support requirements, and optimized device management.

Making the Right Decision

Even among rugged devices, some options are better than others. Beyond ruggedness, by using devices and applications purpose-built for specific enterprise operations, organizations benefit from improved ease of use, reduced training and support requirements, and optimized device management. For example, applications can be locked down so that mobile workers can only access the screens and features necessary for their job function, which prevents crashes and potential data loss. Wireless devices can also be locked down to prevent non-business phone calls, e-mailing and Web browsing.

Device management can be a significant factor in TCO. Device management tools for enterprise-class mobile computers can remotely administer devices and automate software distribution, patch management, upgrades and security updates. Other features let administrators monitor device and user performance, and isolate a lost or stolen device to disable access to the network. For example, the new Intermec CN50 rugged mobile computer and CN4 series fully rugged mobile computers are all supported by SmartSystems management system, which provides enterprise-wide device management, configurations and deployment. This kind of functionality can help enterprises significantly lower their administrative and technical support costs, which account for 27 percent of the TCO for mobile devices.

Equally important is having a reliable service agency that knows how to help enterprises build any necessary custom applications, make modifications, provide long-term service, and monitor equipment.

The decision of which rugged device is right for your enterprise depends upon: (1) the environment in which you work, (2) the probability of dropping the device, (3) how long you need the device to last, and (4) whether you really want to pay more for productivity loss, maintenance, repair and replacement.

Between the decision to invest now or regret later, enterprises need to look at the big picture, understand the real TCO, and buy smart. Buying based only on upfront costs just isn't enough. |

To learn more, watch the on-demand webinar: "The True Cost of Mobile Computer Ownership."

Watch the Webinar »



TCO Calculator

Calculating the total cost of ownership for your mobile computer investment isn't always easy.

That's why Intermec has developed a simple TCO Calculator based on data from VDC Research Group.

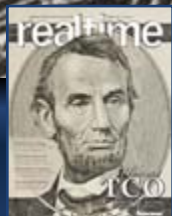
Enter the number of consumer-grade, durable, smart phone, semi rugged, and rugged devices in your enterprise, and the calculator will assess the average TCO savings enterprises across all usage environments have seen with more rugged devices.



Access the TCO Calculator »

CALCULATING THE COST

TCO



Read the Full Issue »