



# Total Cost of Ownership: Rugged Tablets vs. Consumer Tablets

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## Introduction

In order to remain competitive in a truly global economy, most companies need to consider ways to arm their workforce with the right information, at the right time, in the right manner. It is important to do this all at the right price. It is critically important to consider what type of technology you will be using. For markets such as Direct Store Delivery (DSD), Field Service, Transportation and Logistics, Healthcare, and Manufacturing and Distribution the right choice is a mobile computer.

Is your mobile computer rugged? Often overlooked due to its initial price tag, rugged tablets provide peace of mind for your mission critical information. Rugged tablets are built to withstand the demands of a mobile workforce; waterproof, dustproof, shock and drop certified. This document will bring you information on why it is important to look at rugged tablets as a requirement for your mobile computing investment.

Don't be fooled by the initial price tag.

When considering purchasing hardware for your mobile workers; decision makers most often consider:

- Initial hardware and software acquisition price
- Installation and training
- Integration, communications setup
- Functionality – does it meet your system needs?
- User feedback – does it meet their needs?

## What Is Missing?

Durability hasn't always been a key decision point when looking at computing technologies. For years computers were either placed on a desk or carried by professionals in laptop cases. Recently however, mobile computing has become more and more evident in a number of industries as the demand for real-time information has increased.

The cost to support and secure mobile wireless devices skyrockets each time a device needs attention, which can be for any number of failures including liquid spills, drops, extreme temperatures, etc. The user may be left without a device until

the IT administrator can perform the necessary fixes, further increasing the cost of non-working devices. Independent studies have shown that the ‘per instance’ cost to an organization exceeds \$3,000 and is scheduled to grow 30% in the next 3 years!

Based on research from Venture Development Corporation, a study shows that higher service, support, and downtime costs of consumer grade devices outweigh the initial lower cost of hardware purchase, resulting in a higher per unit cost over the life of the system. Rugged computers consistently provide lower Total Cost of Ownership (TCO) across all categories of industries and product type (small vs. large computers).

## How Do You Calculate Total Cost of Ownership?

Total cost of ownership (TCO) is a financial estimate designed to help enterprise managers assess costs related to the purchase of any capital investment. A TCO assessment ideally offers a final statement reflecting not only tangible, but intangible costs associated in the purchase.

Tangible and intangible costs are an important portion of any thorough TCO assessment. Tangible costs are those that are readily apparent which are considered when buying any computing solution while intangible costs are those that are not apparent.

*Tangible vs. Intangible Costs*

Tangible Costs	Intangible Costs
Purchase Price	Lost Sales
Installation Costs	Customer Service Impact
Implementation Costs	Data Loss
	Employee Down Time
	Customer Satisfaction Impact
	Employee Morale
	Time Wasted to Diagnose Issue

Failure costs are another critical portion of TCO calculations; but it is difficult to quantify. Independent research indicates that when a non-rugged mobile computer spends more than 40% of its time outside of the office (on the streets, warehouse or manufacturing floor, deliveries, etc) annual failure rates soar to more than 30% per device. That indicates that you will see at least 1/3 of your computers every year being sent in for service or replaced entirely! Rugged tablets have a much lower failure rate – less than 4% per year.

Research shows that the cost per instance of failures is over \$3,000 and is rising every year. Projected costs will increase over 30% in the next three years. With costs rising annually; it makes sense to do everything possible to reduce the failures. Rugged devices are the answer.

To look at the real impact to your organization, consider an organization with 25 mobile employees. There is a significant difference in long-term costs when using consumer grade computers versus rugged tablets.

*Rugged Tablets vs. Consumer Tablets – Initial Costs*

	Rugged Tablets	Consumer Tablets
Mobile Employees	25	25
Sparing %	5%	20%
Total Mobile PCs	26	30
Total Cost per PC	\$3,000	\$2,200
<b>Total Cost</b>	<b>\$78,750</b>	<b>\$66,000</b>

As indicated earlier; you cannot ignore the initial cost of the mobile computers while doing a complete TCO.

*Rugged Tablets vs. Consumer Tablets – Total Cost with Failures*

	Rugged Tablets	Consumer Tablets
Mobile Employees	25	25
% Annual Failures	4%	25%
Years In Service	3	3
Number of Failures	3	18
Cost per Failure	\$3,000	\$3,000
<b>Total Cost</b>	<b>\$9,000</b>	<b>\$54,000</b>

When considering all costs (both tangible and intangible), clearly rugged devices more than pay for themselves with a savings of over \$30,000. That is over \$1,000 savings per user! That savings goes directly to the bottom line of your organization; plus the time and efficiency savings of your IT staff not having to deal with your mobile infrastructure.

## Summary

Accidents happen. But what happens when you drop your tablet? Will it ever work again? Will you lose your mission critical information? If you are in the office, your IT staff can quickly access the damage and plan for a new tablet. Getting your information back will be an entirely different issue. But what if you are in the field directly interacting with your customers? Do you lose all of your day's sales? How does it impact the perception of your customer? How does your IT staff now diagnose the problem? Sometimes, they will need to drive 60+ miles just to see what happened. That lost time goes directly to the bottom line of your company in the form of lost sales, lost time, inefficiency, loss of productivity, customer service, and so on.

In other words, today's mobile computer must be rugged enough to work around the clock, regardless of the user, the environment or extreme treatment. With businesses and organizations requiring absolute, real-time visibility to information from the field, true information mobility is jeopardized by any computer downtime. The system's ability to endure the rough and tumble environment should be of principal concern.

So next time you are looking at mobile computing – is the option you are reviewing going to be tough enough?

About Mobile Demand	
<p><a href="http://www.mobiledemand.com">www.mobiledemand.com</a></p> <p>MobileDemand 1350 Boyson Road, Bldg. B Hiawatha, IA 52233 Phone: 319-363-4121 Fax: 319-363-4122</p>	<p>MobileDemand is the leader in the rugged tablet PC market focusing on assisting corporations to mobilize their workforce through superior product design, development, manufacturing, service and partnering. All MobileDemand rugged Tablet PCs are manufactured to excel in harsh environments and withstand the physical stresses of even the most demanding workers in a wide array of markets and industries. MobileDemand provides customer focused engineering and superior customer service; which drives value to our customers and partners.</p>