

Panasonic Executive Summary:

# Pay Now, Save Later

The Business Case  
for Rugged Devices

**TOUGHBOOK**

# Foreword

There can be no doubt that the introduction of mobile technology is driving huge productivity gains for mobile workers and their employers as first the use of notebooks, and now tablets and handhelds extends across many different industries. But the cost of this mobile revolution is, in many cases, far higher than it need be – denting the budgets of IT decision makers and ultimately impacting on their employer's profits.



Research undertaken by renowned analyst firm IDC and supported by our own analysis, shows that many organisations would significantly benefit by investing in rugged notebooks, tablets and handhelds for their workforce. Our own publicly available calculator shows that these Total Cost of Ownership savings could be as much as 15% over a five-year period using Panasonic Toughbook and Toughpad devices through reduced failure rates and extended use.



So why hasn't everyone deployed rugged devices already? Well, many are, but the challenge is in convincing IT decision makers to pay now, to save later. Due to the superior design and investment in protection, rugged devices often cost more than a traditional notebook or laptop but as the evidence in this paper quite clearly shows, the return on investment quickly pays-off – in year one for tablet and handheld devices and year two for notebooks.

We hope that the evidence from IDC research summarised in this paper, combined with our own industry ROI calculations, alongside access to the Panasonic ROI calculator, that allows you to estimate the savings for your own organisation, will help convince IT decision-makers to invest now to save later.





# Methodology

To fully understand the costs of notebook, tablet, and handheld device damage to organisations, IDC performed an IT decision-maker study of 800 organisations, across a broad range of vertical industries. For this survey, smartphones and handheld computers are combined into a single category called handheld devices. Tablets include both detachable and slate tablets.

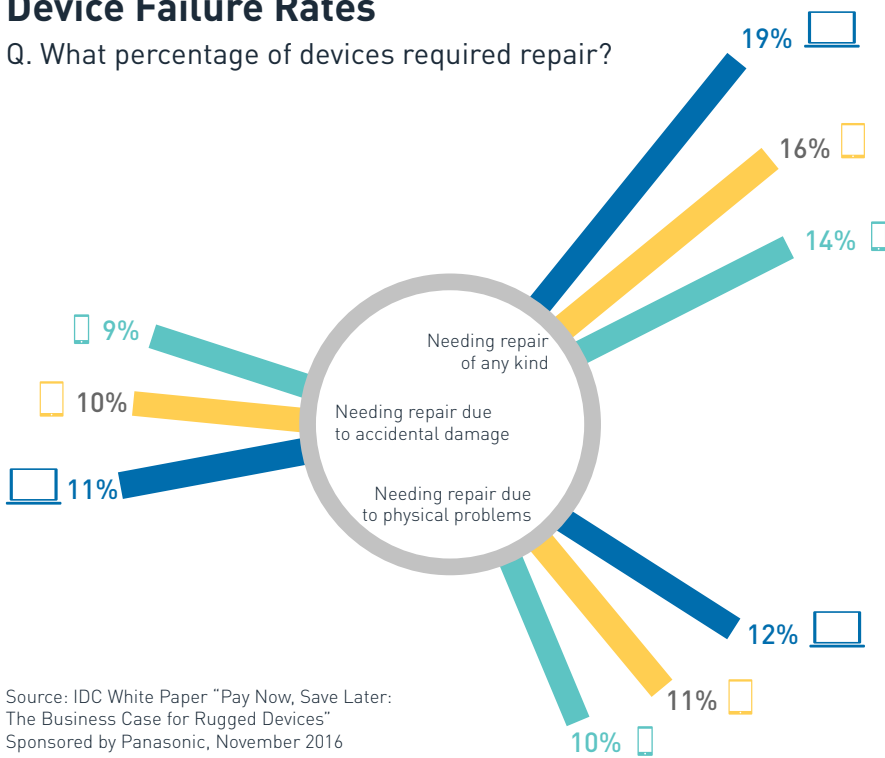
# Failure rates

An average of about 18% of a company's notebooks require repair of some kind during a year. The majority of these repairs are due to accidental damage. The numbers are slightly lower for tablets and handheld devices, but they are still material.

While 11.5% of devices are likely to fail the first year, by year five, the likelihood of failure nearly doubles to 21.3%.

## Device Failure Rates

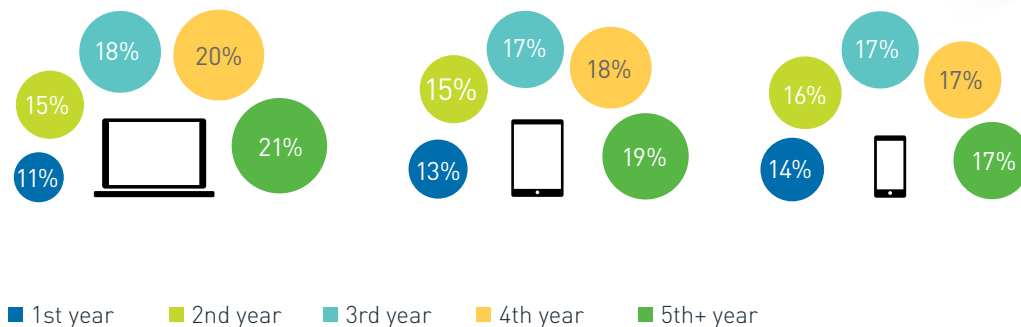
Q. What percentage of devices required repair?



Source: IDC White Paper "Pay Now, Save Later: The Business Case for Rugged Devices" Sponsored by Panasonic, November 2016

## Device Failure by Year

Q. What percentage of each device has a failure during each year it is used?



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# The rugged factor



As companies look at ways to address the issue of repairs, it's important to understand that not all devices are created equally. Broadly, there are often differences between traditional and commercial notebooks, tablets, and handheld devices. Beyond the normal commercial versus consumer distinction, however, is another level of products known as ruggedized.

Rugged systems are notebooks, tablets, and handheld devices built to comply with the military standard MIL-STD-810G, which incorporates specific testing parameters for durability, endurance, and strength. While such specifications are a handy benchmark, they tell only part of the story as truly rugged devices must also be highly usable in the conditions where employees need to use them. This includes displays that are highly viewable in bright sunlight, swappable batteries that ensure a device is always powered when needed, and rugged ports and connectors that don't wear out over time.

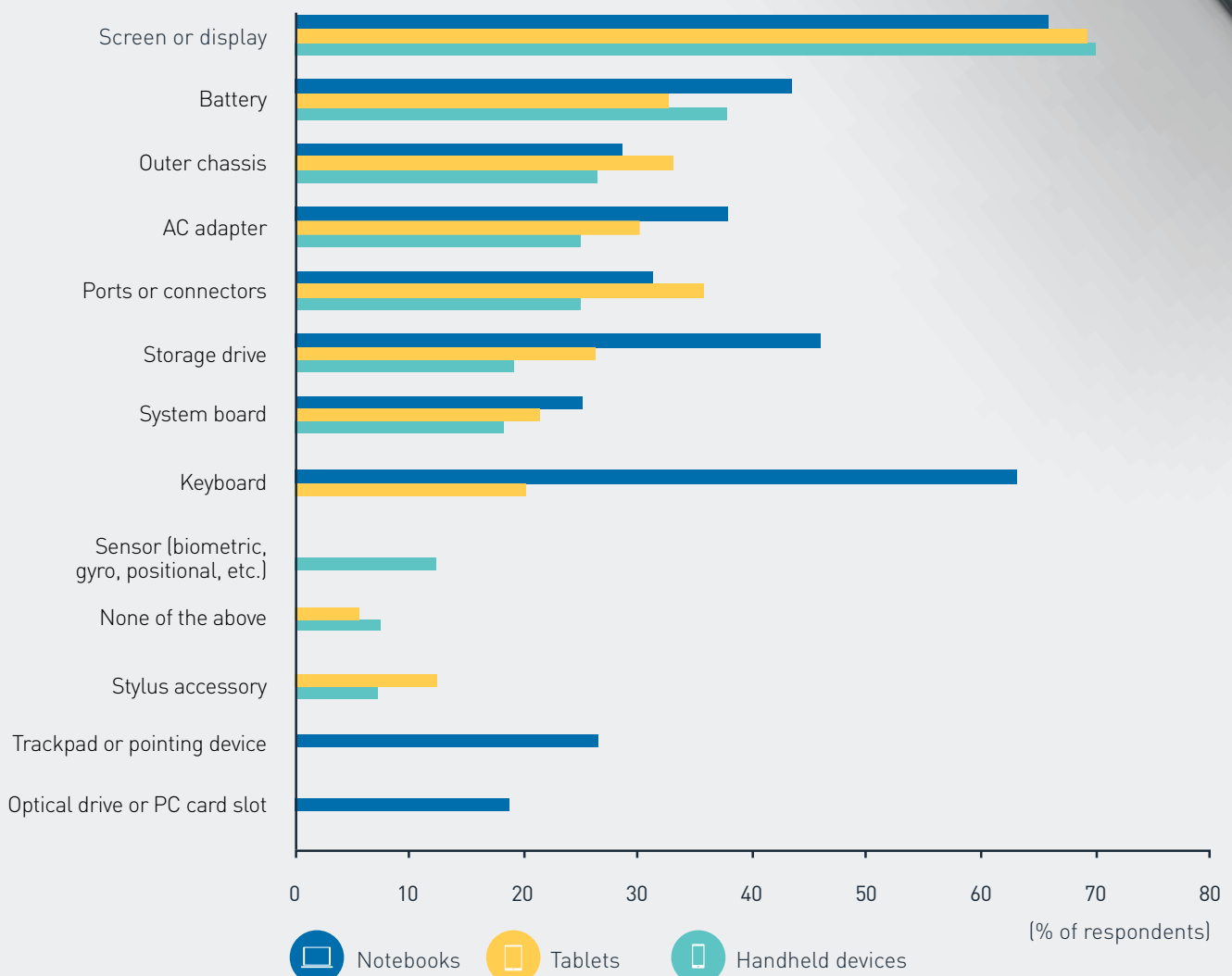


# Components most likely to suffer damage

When we surveyed ITDMs about the components most often damaged in their notebooks, the top selection was the screen, followed by the keyboard and then the storage drive (HDD or SSD). For tablets, the most damaged component was the screen, followed by ports or connectors and then the outer chassis. For handhelds, the top component likely to be damaged was the screen, the battery, and the outer chassis.

## Most common components in devices that suffer damage

Q. Which of the following components of your organisation's devices have suffered damage or breakage?

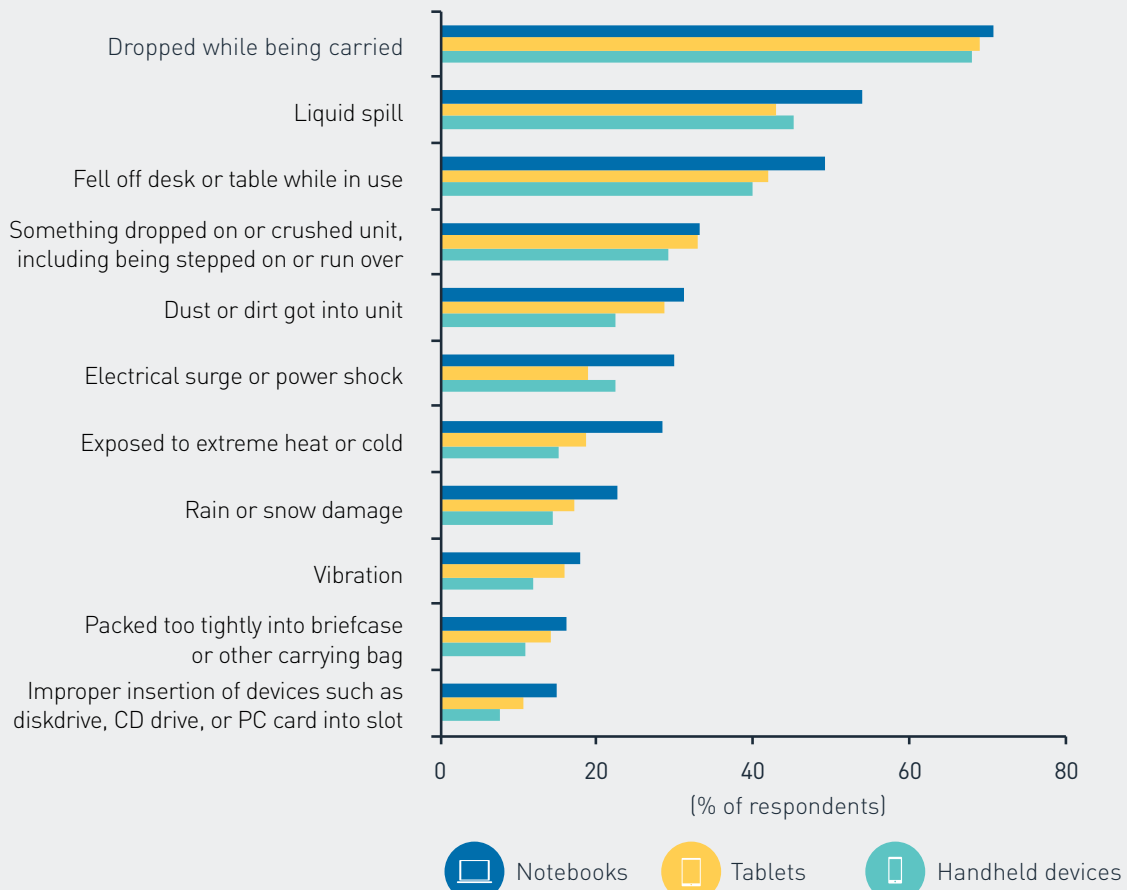


When we asked ITDMs to estimate the top ways employees damage devices in their company, the overwhelming top choice across categories was simply dropping the device. The number 2 issue was spilling liquid on the device, and the number 3 issue was the device falling off a desk. It's important to note that many of the issues outlined here reflect situations where a ruggedized system would continue to work when a standard device would require repair.



## Types of Device Accidents

Q. Which of the following types of accidents have caused damage to your organisation's notebook PCs/tablets/handheld devices?



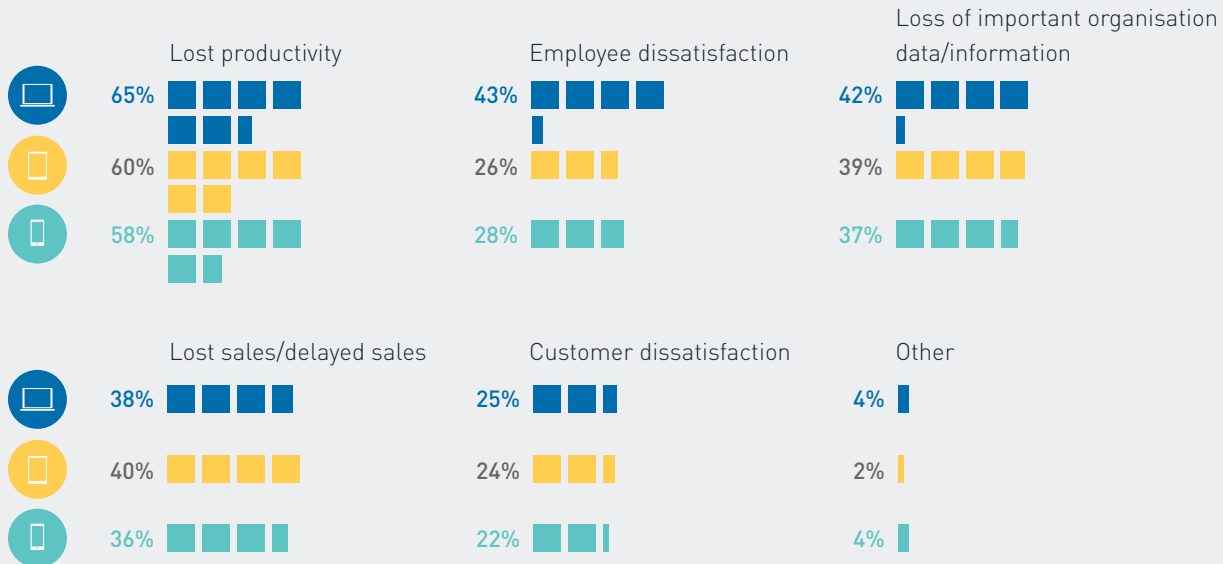


# The costs of downtime

Nobody is happy when a device goes down. But among most respondents, the biggest problem is lost productivity, followed by employee dissatisfaction and then lost data.

## Significant problems caused by device damage or failure

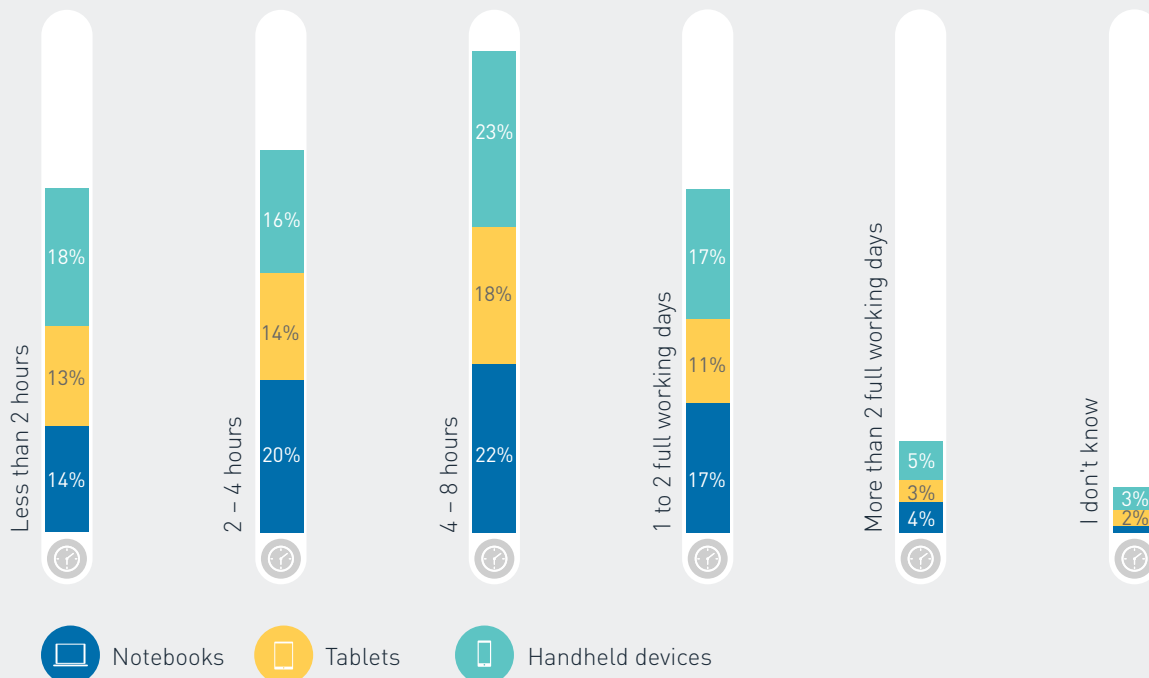
Q. In the past 12 months, which of the following problems has your organisation experienced due to incidents caused by physical damage to a notebook/tablet/handheld device?



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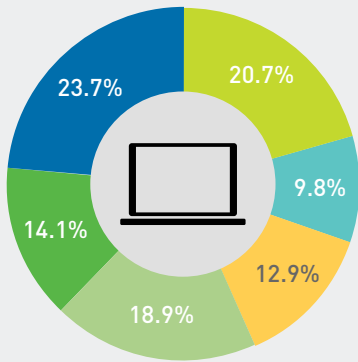
## Employee downtime due to device repair

Q. In your organisation, how long is a user typically without a notebook/tablet/handheld device after he or she reports the need for repair?

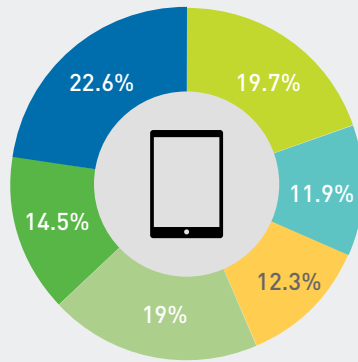


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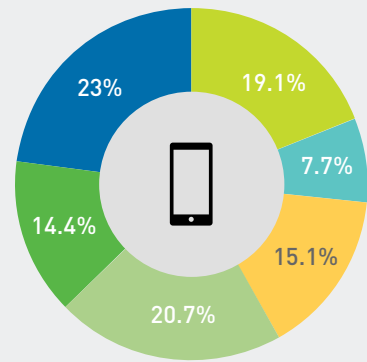
### Notebooks



### Tablets



### Handheld devices



- Annual break/fix support costs
- Out-of-pocket costs
- Lost end-user productivity time
- IT time to fix the incident
- End user time to replace data
- IT time to replace data

On average, workers lost about 5.8 working hours for notebook repairs, 4.2 hours for tablet repairs, and 6.0 hours for smartphone repairs — so at best, half a working day; at worst, three-quarters of a working day.

IDC estimates that the average cost associated with a notebook repair is \$4,840 , a tablet is \$3,493, and a handheld device is \$4,380.



# Industries that benefit from rugged

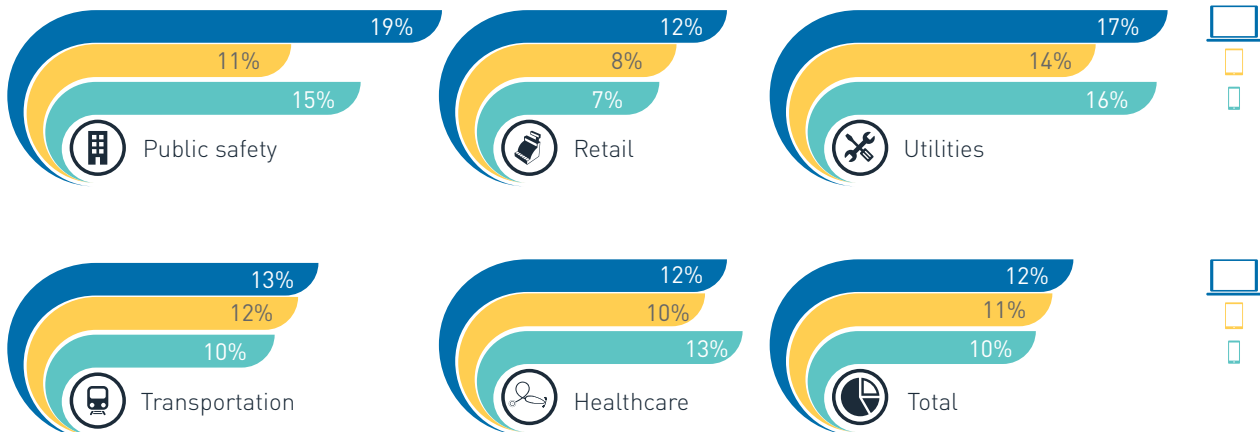
Industries with highly mobile workforces or where the workplace includes harsh environments are likely to experience a greater benefit from the deployment of rugged devices to their mobile workforce.

In these key industries, we typically see that users experience issues with their devices that require repair at higher rates than the market as a whole. This is especially the case for public safety and utilities. In the retail industry, we see rates somewhat below the market; however, as POS devices move from traditional standalone devices to mobile devices on the sales floor, we'd expect to see these rates increase, especially for tablets and handheld devices.



## Device failure rate by industry

Q. In the past 12 months, what percentage of your notebook/tablet/handheld device users had a unit that required repair or replacement because of a physical problem such as a cracked screen, failed home button, and so forth, whether by accident or through normal wear and tear?





## The ROI calculations

In our survey, respondents report spending an average of \$1,875 per non-rugged notebook and \$2,818 per rugged notebook. A look at the annual device failure rates and the average per-incident repair cost of \$4,840 shows that the ROI for rugged devices is achieved by the second year of the non-rugged device. This schedule is well within the two – year eight-month average PC refresh cycle for respondents in this survey.

For tablets, the premium for rugged devices is less than for notebooks and the cost benefits of rugged devices are easily achieved. Respondents report paying \$1,772 for non-rugged tablets versus \$1,988 for rugged devices. Given an average repair cost of \$3,493, the ROI is achieved after the first year.

For smartphones and handheld devices, the average price paid for non-rugged devices is \$1,149 and for rugged devices is \$1,329. Given an average repair cost of \$4,381 for these devices, the ROI can be expected to be achieved after the first year.

# Conclusion

Smart companies have utilised rugged notebooks for many years, and an increasing number are beginning to explore obtaining the same benefits from rugged tablets and smartphones. In some verticals, such as retail, rugged devices are bringing increased functionality and durability into settings where they have until now not played a large role.

Rugged devices do cost more to purchase up-front, but based on the amount of money saved in terms of employee downtime, IT servicing time, and other related costs, the investment in a high-quality rugged device could pay dividends for years. And the latest crop of devices are sleek, fast, and well suited to the needs and desires of today's mobile workforce.

IT organisations looking to maximise their hardware investments would do well to take a long hard look at rugged devices the next time a hardware refresh is in due. If you are still not convinced, Panasonic has developed a TCO Calculator to allow organisations to determine for themselves how much they could save long-term by investing in rugged devices.

Speak to our [team of experts](#) to find out how much your organisation could be saving.

And as always, our Panasonic Team will happily provide you with a tailored TCO calculation that incorporates the difference in TCO and ROI between your current devices and buying Panasonic – including specific financial costs and savings.





Speak to our [Toughbook team](#)  
for more information.

<http://panasonic.com.au/toughbook>

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