

# Datamonitor study finds that notebook robustness is very important

In 2004, Toshiba commissioned Datamonitor to investigate which product features – particularly ones that address reliability and durability – matter most to business users. How do users define and value reliability and durability? What features are differentiators when comparing various products and making a purchase decision? These are some of the questions the study set out to answer.

Datamonitor surveyed 300 IT strategy and procurement executives in small, medium, and large-sized European companies. They also conducted in-depth, follow-on interviews with 20 of the surveyed executives to gather more qualitative, contextual information. This article summarises the key findings and conclusions.



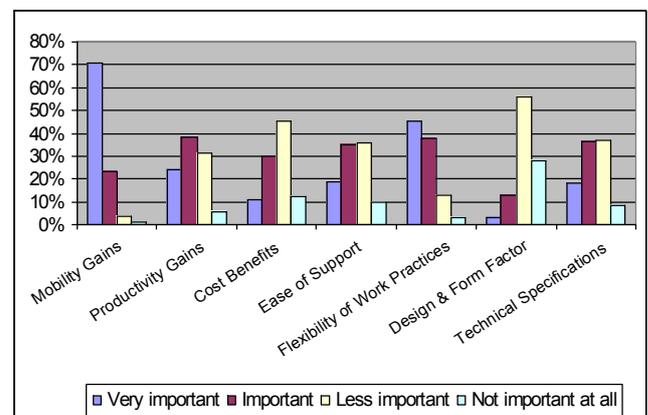
## Key findings about notebook usage and important features

- ▶ 95% state that mobility is an important or very important priority feature.
- ▶ 85% regard flexible working as an important or very important factor.
- ▶ Nearly 70% of respondents cite robustness as important or very important.
- ▶ Companies are not generally willing to spend more to get toughness features.
- ▶ Nearly 30% of those surveyed are not familiar with semi/ruggedized notebook features.
- ▶ Nearly 70% of respondents carefully scrutinise extended warranty options and 63% look carefully at extended service options.
- ▶ Systems and data security, easy connection to networks, advanced power management, and system accessories are among the very important notebook considerations.

## Key notebook features

Most respondents were clear that the chief reasons to purchase notebooks for their employees were to realise gains in mobility, flexibility and productivity.

Mobility characteristics were more important considerations in selecting hardware than cost; respondents were conscious of notebook costs, but significantly did not see it as a critical factor. In other words, the respondents were generally happy to pay “the cost of entry” where notebooks were concerned.



Where cost did become an issue was on the specific form-factors and features that were to be bought. The interviews suggest that the greatest factors involved in notebook purchases are mobility and security features, weight, and battery life. Extended service and warranty options also have very strong appeal as this allows companies to better handle the notebook failures when they do occur.

**Tough enough?**

**What the respondents have to say...**

Traditionally, there is a niche market for rugged notebooks, including the maritime industry, public safety, utilities, mining and the military. For these sectors, the



notebook needs to be tough enough to survive extreme environmental conditions or harsh environments— including a wide temperature range, dust, water vibration and shock. These “fully rugged notebooks” typically incorporate an ultra-strong, alloy case to cope with water, dust, vibration, and shock. They are tested to stringent military standards and often provide extra shock-absorbent packing for internal components (especially hard drives) to guard against drops onto hard surfaces.

While most users are not looking for military-strength machines, the study found that robustness is important to very important for 68% of users. What these users are looking for is a semi-rugged or toughened notebook – these are tough, shock-resistant and yet light machines. Toughened notebooks are generally designed to withstand use while travelling and to protect against accidents so they might also incorporate a spill resistant keyboard and track pad, and shock protection for the hard-drive.

Industry feedback indicates that ruggedized notebooks are an order of magnitude more reliable than general-purpose computing equipment (2% annualized failure rates versus 20% for ordinary equipment). Reduced service time and costs are not the only benefits. Easy and reliable mobility,

data protection, the assurance of anti-accident design and other benefits are to be gained from a notebook that can withstand the shock of being dropped, coffee or water spills on the keyboard and the other hazards of normal mobile usage.

**► One third of respondents are not familiar with semi-rugged notebook features**

“The important thing for us about semi-ruggedized notebooks is that we’re not going to compromise on spec ... it doesn’t matter if something is rugged and sand can’t damage it, if takes 10 minutes to boot and has an old chip in it ...”

(IT manager responsible for procurement in one UK council)

“...in a notebook environment the company rates having a spill-proof keyboard, drop tested device, advanced hard disk protection, and ruggedized case as very important functionalities.”

(IT manager at French manufacturing plant)

“...after going deeper into the buying criteria, it became apparent that the factors of robustness, weight and durability are sufficient differentiators. These criteria are considered very important for the company since it has engineers based out in the field who take notebooks with them in their cars to and from work. These are often taken out of their bags, leaving them vulnerable to damage. For this reason, the company is looking to invest in new notebooks that are fitted with spill-proof keyboards, are droptested devices, have advanced hard disk protection, privacy screen filters, ruggedized cases, and bright durable screens for outdoors – these factors were all considered to be very important.”

(IT manager at a French property and casualty insurance division)

While 68% of respondents think that robustness is an important or very important feature, a third of the respondents were not familiar with semi-rugged notebook offerings. Anecdotal comments gathered from the interviews



showed a general perception that semi-rugged offerings are perceived as larger, heavier, slower and more costly than general-purpose offerings and not necessarily more reliable. Whether such perceptions are accurate is another matter.

## Looking toward the future

What might we conclude?

Given the results of this report it seems unlikely that special “semi-rugged” or “durable” product offerings will meet with much success in the marketplace if they are more expensive than or lack the technical features found in their general-purpose siblings.

On the other hand, durability and reliability are seen as key differentiating factors; if “durability features” can be incorporated into the general-purpose notebook offerings, they could be favourably received. Also, using these features to extend the useful operating life of a notebook, thus contributing to the value of an extended warranty/service plan, could also be favourably received by the marketplace.

Durability features can increase the reliability and build quality of the notebook. If these features are available at no extra cost and without compromising the key attributes that business users value in notebook performance, then there is likely to be a great deal of interest in a tougher notebook system.