Using Analytics for Better Mobile Technology Decisions

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Different Perspectives on the Mobile Business Opportunity

Adding mobile computing capabilities has been proven to drive business value by providing traveling executives, field and customer service personnel real-time access to customer data. Better information shortens response times, improves accuracy and makes the workforce more productive.

Your organization may agree that technology can improve business processes, but different stakeholders—IT management, financial and business leadership and operations personnel—often have different perspectives on the real costs and value of mobility.

The Operations group wants tools that help them work faster and better focus on the customer, Finance wants the solution that costs the least amount *this quarter*, and IT executives want projects that can succeed without draining resources from existing work.

It may not be obvious, but there are ways to achieve everyone's goals. Honest analysis can help Operations, Finance and IT find common ground by sorting complex projects into components that can be agreed upon. When teams understand the data, they can understand the logic; when they understand the logic they can support making the right decision.

Exposing the Formula

Deploying mobile technology is a strategic initiative with far-reaching consequences on the health of an enterprise. In the midst of running a project, it's easy to forget that the *real* goal of hardware-acquisition projects is to make the workforce more productive in service of improving both the top and bottom lines.

Most decision-analytics tools focus on procurement questions alone because the numbers seem straightforward and uncomplicated. But these analyses miss the point. The best analysis is one that can determine which of the solutions will provide the most advantage to the workforce at the lowest possible cost to the organization.

To achieve the best return on investment we must do more than recoup an out-of-pocket expense. Are customers better served? Are employees working better, faster, smarter? Though hard to quantify, these are the fundamental aspects that determine the ROI of technology.

It's possible to build a vendor-neutral analysis to calculate the TCO and ROI of mobile computers. Panasonic Computer Solutions Company, manufacturer of Toughbook notebooks, enlisted the services of my analytics company, Serious Networks, Inc., to develop an unbiased TCO/ROI application to help companies make better decisions.

The Panasonic-sponsored operational analysis tool provides statistically valid answers by performing a simulation of the devices as they would be used and managed in the field, generating a model that compares the costs and benefits of multiple manufacturers' laptops. Purchase cost, projected downtime, the range of wireless options, notebook features, support and other related costs are all incorporated into this analytic toolset.

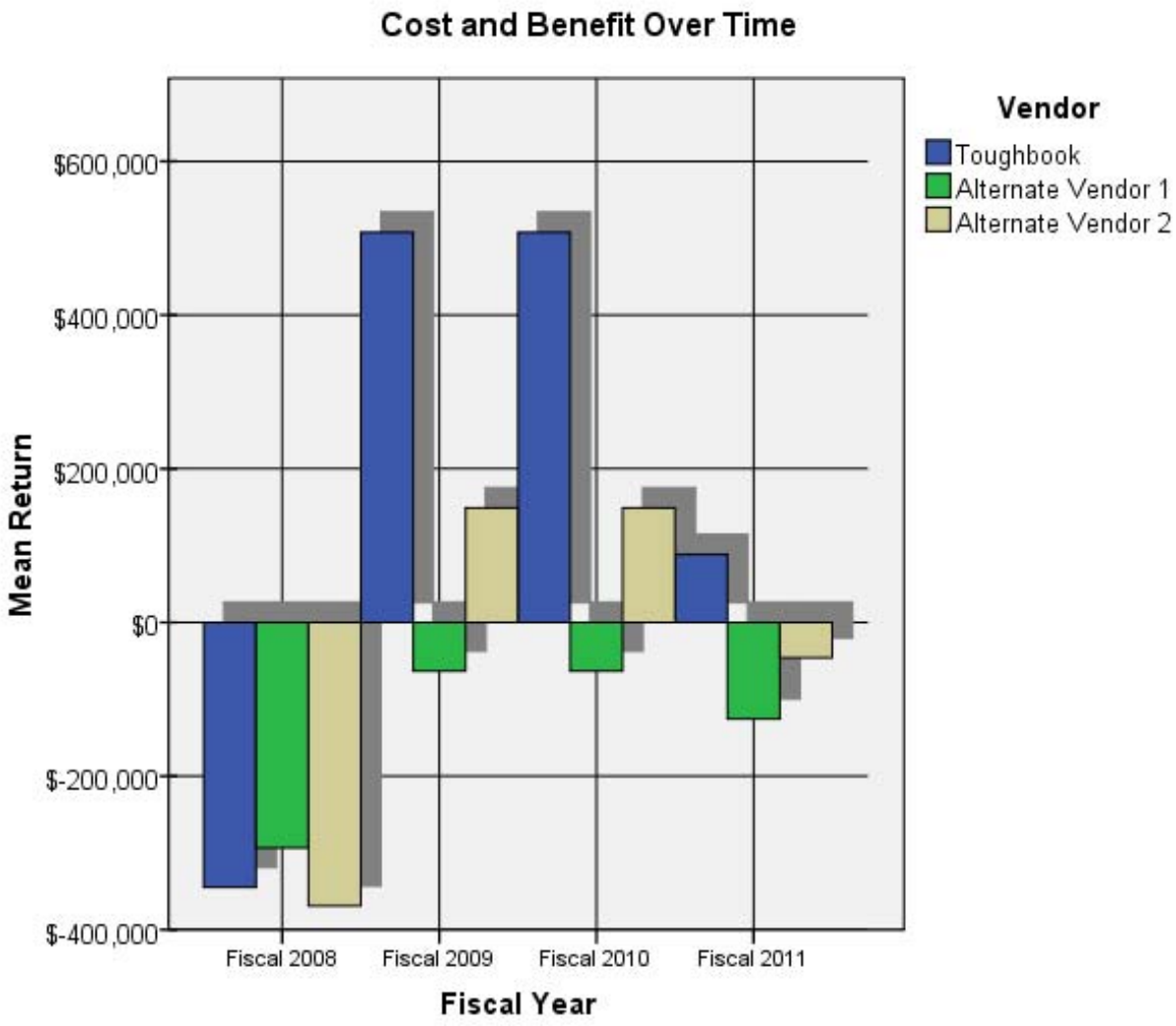
Based on over one hundred unique simulations with actual customers, four key TCO/ROI questions have emerged:

- What will it cost to buy a proposed notebook solution?
- What will it cost to own it over the life of the project?
- What will it cost to deploy and decommission the units?
- What value will be created for the organization?

Moving Beyond Guesstimates — Considering Costs and Value over a Lifetime

There is no such thing as an 'average' company, so an honest analysis uses actual corporate data instead of industry 'averages.' Just because a device is the right choice for one company does not make it the right choice for yours.

An effective simulation knows the costs of each competing device, the number of units and rate of deployment. It calculates the cost of maintaining a solution, and establishes the value of productive time using real Loaded Labor Rates or Revenue hours. It considers Buy vs. Lease questions and can extrapolate how features will be used in the field.



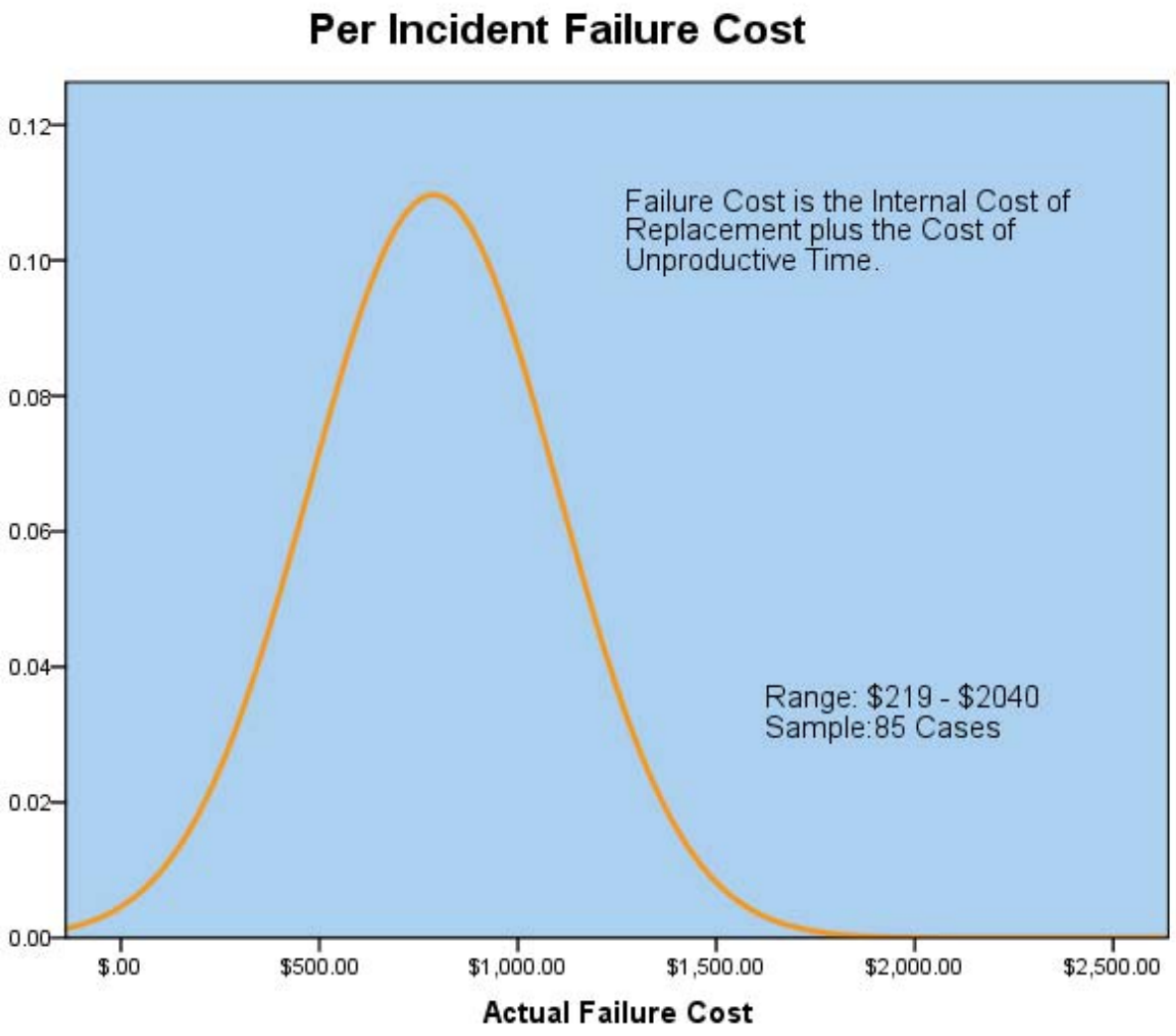
As real-world data is entered, the software determines which mobile computing solution is most likely to help the company reach its goals. Managers can perform what-if analysis by adjusting assumptions and re-running the simulation. Within this framework, managers will build a business case that forecasts the costs of each mobile device against the benefits derived over time.

Making Intangibles Tangible

The 90-minute analysis process is very granular. It's based on the industry segment–because it simulates the tasks of the workforce—and compares up to ten competing devices.

Once devices are selected, purchase or lease prices are entered, followed by value-added benefits like no-fault warrantees and on-site support. Intangible factors favoring one vendor over another, such as incumbency, are added to the data set. The size and rate of the deployment, as well as details that determine the cost of preparing the units for the workforce are also introduced.

Next the analysis accounts for the likelihood and cost of failure, using your own experience as a baseline. Somewhat surprisingly, the impact of failure is given less weight than most outside observers would expect. Reliability is important, but it's not the only important thing.



What *is* given more weight are productivity and operation enhancements, which can have a significantly greater financial impact than reliability because employees spend much more of their time being productive than they do dealing with equipment malfunctions.

A matrix of features and key workforce behaviors is developed to examine the relative importance of touch screens, wireless and GPS as well as each computer vendor's ability to provide those features as standard or extra-cost equipment. The features are rated for their Time and Motion impact on your organization, and an *operations efficiency* score is applied to imitate real-world results.

During the session, the workforce is described in detail, because this information directly affects the cost and benefit. To assess the value of a technician's time, for example, the system must know the average number of daily service orders, the percentage of those service calls that require re-work, and whether techs are normally in the field five, six or seven days a week.

Once the data is collected, input data can be modified to provide instantaneous what-if, heads-ups, and break-even analysis reports (without interference from the vendor). The model is built in Excel so that anyone can assess the credibility of the analysis, and determine that there are no hidden calculations or unfair formulas skewing the result.

Conclusion

The Panasonic simulation tool can help different organizations within a company come to consensus before making a buying decision. Analysis helps to clarify whether a purpose-built rugged or business-rugged system or some other commercial notebook solution is really the right choice to minimizing the TCO and maximizing the ROI of workforce mobility.

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