

A Forrester Total  
Economic Impact™ Study  
Commissioned By  
Microsoft

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# The Total Economic Impact Of Windows Tablets For Retail Execution In Consumer Goods

Cost Savings And Business Benefits  
Enabled By Windows Tablet Devices

FORRESTER®

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## Executive Summary

In September 2013, Microsoft commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) that consumer goods organizations or divisions may realize by deploying and using Windows tablet devices to sales representatives who travel to retail stores and other outlets to meet with store representatives. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the Windows tablet devices for their organization and their sales representatives.

To better understand the benefits, costs, and risks associated with a Windows tablet implementation, Forrester collected data and information from a number of consumer goods organizations currently using Windows tablets, from 13 anonymous survey respondents and two interviews. All sell consumer goods that they manufacture and have sales representatives selling directly to retail stores and other outlets. Organizations found that arming their sales representatives with a Windows tablet device helps:

- › Improve sales deal size and close rates.
- › Speed up customer meeting and in-between order management times with faster processes and fewer errors.
- › Reduce organization management, security, and device purchase costs.

Prior to Windows tablet devices, sales representatives carried at least one, often two, computing devices — a Windows laptop for personal work tasks such as email, documents, spreadsheets, and accessing line-of-business (LOB) systems. The second device was a non-Windows tablet that was not usually able to access LOB systems due to management and security restrictions — which meant that unless the organization had made significant investment in mobile access, security, and apps, these devices provided little value beyond a paper catalog in customer meetings. Even if networked, non-Windows tablets would not eliminate a device from their travel bag, as those non-Windows tablets would still not provide the full Microsoft Office and other business applications the sales reps need.

With a single Windows tablet connected to back-end systems, sales representatives can provide real-time information with one device that lightens the travel bag, reduces data rekeying, allows easier access to information, provides retail customers with real-time product and order information, improves order success and customer satisfaction, and streamlines data capture of in-store audits with Modern UI Windows 8 Apps, — all of which help increase sales and trade promotion compliance.

### WINDOWS TABLETS GENERATE VALUE FOR SALES REPRESENTATIVES AND THE ORGANIZATION

Forrester interviewed two organizations that currently use Windows tablet devices and collected 13 survey responses, and prepared a financial analysis that found a composite organization based on these companies experienced the risk-adjusted ROI, benefits, and costs shown in Figure 1.<sup>1</sup> See Appendix A for a description of the composite organization.

The composite organization three-year analysis points to risk-adjusted annual benefits of nearly \$860,000 to \$3 million for the first three years, versus implementation costs of less than \$100,000 and risk-adjusted annual costs for the first three years of around \$150,000 to \$675,000, adding up to a risk-adjusted net present value (NPV) of over \$3.2 million.

**FIGURE 1**

**Financial Summary Showing Three-Year Risk-Adjusted Results**

**ROI:**  
**336%**

**NPV:**  
**\$3,240,452**

**Security Issues:**  
**▼ 55%**

**Sales revenue per deal: ▲ 25%**

Source: Forrester Research, Inc.

- › **Benefits.** The composite organization experienced the following risk-adjusted benefits that are based on information provided by the interviewed and surveyed companies:
- **Device consolidation and reduced device purchase costs.** The composite organization selected Windows 8 tablets that provide laptop capability and can detach or transform into a tablet slate, replacing the need for two separate devices. It estimated an annual cost savings of \$252,000 in the first year.
  - **Reduction in annual device licensing, management, and support costs.** The composite organization chose Windows tablets as they can be managed like any mobile Windows laptop, and can be used to access up-to-date materials. The organization could avoid costs for third-party mobile device management (MDM) software, as well as annual brochure printing costs. It estimated risk-adjusted savings of more than \$90,000 in the first year.
  - **Reduction in device security costs.** The organization can use the same policies and software on Windows tablets as the laptops desktops it already manages, including antivirus, group policy settings, and device encryption. It estimated a 55% reduction in security issues and 75% faster resolution, saving more than \$75,000 in the first year.
  - **Improved sales rep productivity from faster access to information.** Sales reps can help input orders and provide immediate confirmation. In-between meeting time is reduced since orders are placed with the Windows tablet connected securely to the order system and confirmed. Rekeying paper forms is not necessary and fewer follow-ups are needed; in-store audits are quicker and trade promotion compliance is improved. The composite organization estimated a 40% benefit in sales productivity; sales reps can use the time gained to schedule more meetings or spend more time with more retailers, leading to more new or add-on sales opportunities.
  - **Improved deal size and close rates.** The composite organization estimated Windows tablets have helped increase sales revenue per deal by 25%. Larger deals and less indecision are enabled by secure Windows tablets connected to back-end systems, such as up-to-date product, inventory, and delivery information, as well as trade promotion tools and assets. The organization estimated nearly \$440,000 new operating margin in the first year.
- › **Costs.** The composite organization experienced the following risk-adjusted costs related to Windows tablets:
- **Device purchase costs,** including operating system, of \$750 per device or \$75,000 total upfront investment plus \$75,000 in the first year.
  - **Deployment costs.** Planning, imaging, and distributing to sales teams, which add up to \$21,000 in upfront investment plus \$21,000 in the first year.
  - **Management costs.** Device management, support, and security annual costs were estimated to be less than \$48,000 in the first year.

## Disclosures

The reader should be aware of the following:

- › Microsoft commissioned this study delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.
- › Forrester makes no assumptions as to the potential return on investment that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in Microsoft Windows tablet devices.
- › Microsoft reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.
- › The customer names for the interviews were provided by Microsoft. Microsoft did not participate in customer interviews. Survey respondent names were not provided by Microsoft.

## Market Overview

The tablet market has seen explosive growth over the past several years. Forrester forecasts that the overall tablet market (including all competitors) will grow from 327 million installed users in 2013 to 905 million in 2017.<sup>2</sup> While the consumer market is large, the enterprise-purchased, company-owned market continues to grow — from 12% of the tablet market in 2013 to 18% of the market in 2017.

Windows represents a growing proportion of the enterprise tablet market: As of Q3 2013, 28% of IT decision-makers in North America and Europe reported supporting at least some Windows tablets in their organizations, while an additional 51% had interest in doing so.<sup>3</sup> Since the release of Windows 8 in October 2012, Microsoft and its OEM partners have produced a wide array of devices. For the first time, Windows-based devices enjoyed a touch-first experience, enabling the release of tablets, hybrids, and convertibles that empower workers with mobile computing scenarios. The release of Windows 8.1 in October 2013 further refined this experience, expanding the range of devices — for example, seven and eight inch form factor devices, ruggedized industry tablets, and retail peripherals for product identification and taking customer payments.

In the consumer goods space, sales representatives often make visits to numerous retail partner sites. The range of devices powered by Windows offers these consumer goods sales reps access to new usage cases, including:

- › **Mobile usage scenarios.** IT professionals cite portability as the number one driver for tablet adoption at their organizations. Windows tablets empower new, mobile-first business processes, equipping roving sales representatives to meet with retail buyers, to discuss their new products, and to show them presentations. After sales meetings, the rep will want to walk the aisles, review locations and stock of his or her firm's products, check trade promotions and assets, and check out the competition — using the Windows tablet in-store to take pictures, make notes, collect data, and then write up a report by attaching a keyboard in their car/truck/coffee shop and a larger screen in their (home) office.
- › **Two-in-one usage scenarios.** Windows tablets can be used behind the scenes as a PC replacement when paired with a dock, keyboard, and other accessories. Sales reps can use the same Windows tablet back at their desk that was used for all retail site visits — preserving continuity of data.
- › **Product display evaluations.** Roving sales reps are often called upon to evaluate the accuracy, aesthetic appeal, and effectiveness of trade promotions, including shelf space and layout, end-cap displays, and trade assets (e.g., fridges). Instead of making subjective judgments, sales reps can take photos and complete audit checklists using Windows tablets, making those images and audits immediately available to colleagues back at the home office. This method leads to more uniformity in the way that trade promotion compliance is evaluated.

The benefits of using Windows tablets are laid out later in this TEI study. But as a general proposition, retailers aim to deploy the devices in order to:

- › **Increase sales rates.** Sales reps armed with mobile tablets can offer better service to retailer buyers. Sales reps with Windows tablets can present richly formatted materials (whether PowerPoint presentations, videos, photos, or interactive programs) to convince potential buyers of their products' excellence.
- › **Improved marketing of goods.** Sales reps armed with tablets can better communicate the value proposition of their products, helping buyers to understand what they will be selling. This leads to more effective in-store marketing and retailing.
- › **Improved trade promotion effectiveness.** Perform trade compliance audits with modern UI apps optimized for in-store data capture. Sales reps are often called upon to monitor their buyers' compliance with the trade promotions they have agreed to execute, ensuring promotional assets and products are displayed and available on the shelf in a timely manner.
- › **Drive higher productivity rates.** Sales reps can get more accomplished more quickly when armed with tablets, which can allow them to fit in more site visits on a given day. Specialized software can help them execute against a checklist of tasks quickly and effectively, helping focus customer conversation time, leaving more time for relationship-building or for scheduling more meetings.

## TEI Framework And Methodology

### INTRODUCTION

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing Microsoft Windows tablet devices. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

### APPROACH AND METHODOLOGY

Forrester took a multistep approach to evaluate the impact that Microsoft Windows tablet devices can have on a consumer goods organization (see Figure 2). Specifically, we:

- › Interviewed Microsoft marketing, sales, and/or consulting personnel, along with Forrester analysts, to gather data relative to Windows tablet devices and the marketplace for Windows tablet devices.
- › Interviewed two companies and received 13 completed surveys from consumer goods organizations currently using Microsoft Windows tablet devices to obtain data with respect to costs, benefits, and risks.
- › Designed a composite organization based on characteristics of the surveyed and interviewed organizations (see Appendix A).
- › Constructed a financial model representative of the interviews using the TEI methodology. The financial model is populated with the cost and benefit data obtained from the interviews as applied to the composite organization.
- › Risk adjustment is a key part of the TEI methodology. While interviewed organizations provided cost and benefit estimates, some categories included a broad range of responses or had a number of outside forces that might have impacted it higher or lower. For that reason, some cost and benefit totals have been risk-adjusted, and is detailed in each relevant section.

Forrester employed four fundamental elements of TEI in modeling Microsoft Windows tablet device solutions: benefits, costs, flexibility, and risks.

Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix B for additional information on the TEI methodology.

**FIGURE 2**  
**TEI Approach**



Source: Forrester Research, Inc.

## Analysis

### COMPOSITE ORGANIZATION

For this study, Forrester conducted two interviews with and collected 13 survey responses from representatives from the following companies, which are Microsoft customers operating in the consumer goods vertical:

- › One interview was with a global cosmetics manufacturer with beauty consultants selling to retail outlets in Europe.
- › The other interview was with the Asia region division of a worldwide beverage manufacturer and wholesaler.
- › The 13 anonymous survey responses are from organizations primarily in the United States, are a variety of sizes from smaller midmarket to enterprise, are current Windows tablet users, previously used non-Windows tablet devices, and were either from representatives currently in a sales associate or management role, or were in an IT team supporting those roles.

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization that Forrester synthesized from these results represents an organization with the following characteristics:

- › An international manufacturer of personal consumer goods that sells to retail outlets — department stores, pharmacies, grocery stores, salons, etc.
- › 1,000 employees in sales, who travel to retailers to discuss new products and take orders.
- › 100 sales reps have been provided Windows tablets in the initial phase, with aggressive year-over-year provisioning to more reps.
- › Have previously used or piloted another tablet platform, or evaluated another platform, before choosing Windows tablets.

The composite organization chose Windows tablets from a leading manufacturer with a “hybrid” form factor:

- › Hybrid: in which the screen can detach and operate like a standard touchscreen slate tablet, but can dock to become a full-fledged laptop with keyboard, mouse, and other peripherals. Typically provided to sales reps.
- › Slate devices were also evaluated and some reps opted for that more traditional tablet form factor, with a flat touchscreen and (usually) no included dock or peripherals, though these can be added. Available to sales reps but not typically chosen, as laptop mode requires additional hardware such as a keyboard.

The composite organization then began deployment.

- › Rollout to sales employees began in June 2013; and given the importance of computing tools to this group, a two-year refresh cycle has been assumed.

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*We have reduced stress related to issues around not being able to use Microsoft (Office) products. This has saved significant work hours.*

~Consumer goods organization survey respondent

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*Sales reps would leave their laptop in the car during sales calls. Windows 8 tablets now provide portability and use during meetings, on a platform they know.*

~IT director, beverage manufacturer

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## INTERVIEW AND SURVEY HIGHLIGHTS

The composite organization is based on interviews and survey respondents who shared a variety of experiences covering why they were investigating providing tablet devices to consumer goods sales reps, what they hoped to achieve, what Windows tablet they ultimately selected, and what business and IT benefits and cost savings they have experienced.

### Situation

Organizations identified the following opportunities and areas of improvement they hoped to change with Windows tablets:

- › Improve sales rep productivity to complete sales meetings quicker and be able to schedule additional meetings.
- › Improve sales rep productivity, leading to increased revenue-per-sale and close rate, as well as improved trade promotion effectiveness.
- › Reduce number of devices provisioned to sales reps that previously had a Windows laptop and a non-Windows companion tablet device.
- › Better manage and secure all devices, including tablets, using the same security and management tools.

### Solution

Organizations for the most part selected Windows tablets running either Windows 8 or Windows 8 RT. Both were chosen for their ability to be managed and secured with the same software and agents as on other laptops and desktops. Organizations that chose Windows 8 wanted to be able to install desktop software that ran on Windows 7; those that chose RT were able to save money on device and software costs. Devices were selected from a variety of hardware manufacturers (though RT devices were all Microsoft Surface tablets).

These devices were provisioned to sales reps, and little or no training was required since, for the most part, it was the same as their laptops and desktops. While some developed or deployed Windows “modern app” versions of desktop applications, they were still familiar enough to be picked up quickly.

### Results

The interviews and survey results revealed that:

- › **Device purchase costs were reduced.** The composite organization was able to reduce the number of devices provisioned since Windows tablets can provide full laptop capabilities as well as function as a light, slate tablet. Even organizations that bought more expensive Windows tablet devices saved money since they are still less expensive than a Windows laptop plus a non-Windows tablet.
- › **Desktop management costs were reduced.** For organizations that previously provided a tablet solution, overall management costs were reduced for two reasons:

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*With Windows 8 tablets, we can modernize our sales process to speed up intro to order time, provide higher quality information to customers, and not waste any of their time.*

~Director, CRM, consumer goods manufacturer

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*Our sales reps are able to spend more time with each customer: providing more information, making sure all questions are answered, and overall building trusted relationships.*

~IT director, beverage manufacturer

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- First, non-Windows tablets do not often replace the need for a laptop or desktop device, so providing and managing two devices instead of one is more time-consuming and costly.
- Second, non-Windows tablets typically require additional software to manage and secure, such as an MDM solution — which cost extra not only to license, but also to manage separate security and device policies. Ninety-two percent of surveyed organizations agreed or strongly agreed that they were able to eliminate use of some applications.

Organizations, on average, did see the management cost *per device* go up with Windows tablets, because of changes such as:

- As a new device, sales reps would be more likely to have questions related to new versions of applications or new processes related to using the new Windows tablet devices.
- Windows tablets can be managed and secured like any laptop, while with non-Windows tablets organizations often opted to restrict network or application access. Providing a fully Windows, fully mobile device with Internet access and (often) internal corporate network access does require some additional management time.

However, overall management costs have been reduced — even though the per-device management costs for Windows tablets are the same or a little higher than they were before, because there is just one device (versus some people having two devices) the total management costs are reduced.

- In addition, organizations were able to use their devices to display product information, meaning sales reps did not have to carry a set of printed brochures in their briefcase, and the organization was able to save on printing costs.

› **Security management and issue resolution costs were reduced.** The same security software installed on Windows laptops and desktops can be installed and the same encryption policies can be set on Windows tablets. Organizations that provided Windows tablets avoided costs related to purchasing and managing special endpoint security software required for non-Windows tablets. Windows tablets are enterprise-ready, with the same device encryption, domain-joining, and full asset management as with other laptops and desktops in the organization. This means any breaches can be handled using the same security processes and tools. With an encrypted, managed device the risk of data loss is much lower, even if the device is lost, stolen, connected to a public wireless network, or placed in other situations that could lead to security risks, and exposure of both company and customer data.

› **Sales reps are more productive with Windows tablets that provide faster access to information and data capture.** Sales reps can provide up-to-the-minute product catalogs, can check inventory quickly, and can either hand over the device to the retailers to input their order right into the system or help them with that task. Order errors and issues are reduced with up-to-date information — in fact, the non-Windows tablet was, for some organizations, just a glorified product catalog with no back-end system access, just as out of date as printed catalogs. On the other hand, Sales reps with Windows tablets are able to provide all necessary information during the meeting — inventory detail, produce information, order confirmation, etc. — so they can keep follow-ups and logistics (including rekeying handwritten notes and orders) between meetings to a minimum. They can spend more time with each customer or schedule more sales meetings, and spend more time ensuring trade promotion effectiveness. Sales

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*Windows 8 tablets were a huge step up for us; we replaced paper forms so sales reps could enter orders with no loss of data.*

~IT director, beverage manufacturer

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*We can use Windows 8 tablets to better collect and share order and store information — such as year-over-year key metrics for an individual store or in comparison to similar stores in the area.*

~IT director, beverage manufacturer

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reps are also able to provide up-to-date product catalogs via the Windows Tablet, at the added benefit of reduced printing costs and lighter baggage.

- › **Sales reps are able to upsell and cross-sell more effectively, and can close more sales.** Sales reps armed with Windows tablets have the potential to generate larger sales by using their tablet. Modern apps, or Windows 7 apps, running on a Windows tablet with secure, well-managed VPN access, can connect to back-end systems such as product catalogs, order databases, and CRM systems to deliver real-time recommendations with special offers, up-sale options, and cross-sell add-ons that sales reps can use when talking with retailers — or just show them directly on the tablet. The sales rep can display a report summarizing what other stores in the area are ordering and selling, and the effectiveness of promotions, leading to other cross-selling opportunities. Also, providing real-time confirmation that items are in stock and will be delivered by a certain date can help avoid last-minute confusion or worries leading to more completed transactions (and a higher close rate).

## BENEFITS

The composite organization has identified a number of quantified benefits in this case study, has experienced the up-front and first year benefits, and has estimated benefits in years two and three, compared to their previous non-Windows tablet solution, particularly:

- › Reduced device purchase costs.
- › Reduction in annual device licensing, management, and support costs.
- › Reduction in annual device security costs.
- › Sales rep productivity and information improvements, leading to higher quality meetings, the potential for more meetings with retailers, larger deal sizes, increased trade promotion effectiveness, and improved close rates.

### + Reduced Device Purchase Costs

Previously, if sales reps at the composite organization wanted to have a non-Windows tablet for sales meetings, or in-store audits, they usually had to pack a Windows laptop or desktop as well. Reps need access to Microsoft Office applications, as well as product, ordering, CRM, and reporting systems — often from a public location or at a customer's office for a sales meeting. They also want to be able to show their customer product details, order information, and current promotions on their tablet device. The Windows tablet can provide more information (as well as access to real-time information) than a paper catalog, weighs less in their luggage, and also provides the appearance of technical maturity.

However, many IT organizations find it necessary to limit deployment of non-Windows tablet devices, because of accompanying complexity and need for significant investments in mobile device management (MDM) solutions, alternative VPN, device encryption (if even available), network security, and application development — all concurrent with existing Windows-based management, security, applications, etc. This means that the non-Windows tablet device a sales rep hands to a customer is often no different than a paper catalog — with similar update schedules!

A Windows tablet can fill both roles — as a powerful, full-featured laptop, as well as a lightweight, convenient tablet device — that can be managed with the same security and device management software as already in use for laptops and desktops.

**TABLE 1**  
**Reduced Device Purchase Costs**

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
A1	Estimated number of avoided non-Windows tablet purchases		100	250	100
A2	Estimated number of avoided laptop/desktop purchases		200	500	200
A3	Average cost of non-Windows tablet device				\$600
A4	Average cost of laptop or desktop				\$1,100
Atr	Cost savings from device consolidation (not risk-adjusted)	$(A1 \times A3) + (A2 \times A4)$	\$280,000	\$280,000	\$700,000
	Risk adjustment	↓10%	90%		
<b>Atr</b>	<b>Cost savings from device consolidation (risk-adjusted)</b>		<b>\$252,000</b>	<b>\$252,000</b>	<b>\$630,000</b>

Source: Forrester Research, Inc.

The composite organization (and virtually every interviewed and surveyed organization) selected Windows tablets with a “hybrid” form factor that performs both as a light, slate tablet but also has similar capabilities to a laptop — particularly a keyboard. They run all the Windows software they’ve already licensed, such as Office and their ERP and CRM systems. The composite organization selected Surface Pro and Dell Venue 11 Pro devices. Other Windows tablet devices selected include Lenovo Helix, Lenovo ThinkPad tablets, and HP Envy.

That meant that they no longer have to purchase two devices (a non-Windows tablet plus a laptop or desktop) and saw significant cost savings. The organization provided 100 Windows tablets to the first group of sales reps, replacing an alternative tablet device for everyone and a laptop or desktop for some (at the composite organization, about half of all sales reps carried both devices). While a small group to start, the organization expects to provision Windows tablets to 900 sales reps by the beginning of year three to give some reps time to prepare for change, line up deployment with refresh cycles, and reduce the impact of any issues or risks identified early on. Table 1 shows the estimated costs, leading to \$280,000 to \$700,000 per year in avoided costs. Note that the full avoided device purchase cost reduction is shown here. The cost of new Windows tablet devices is covered in the cost section, Table 6, and net device purchase cost savings is part of the full financial summary.

For most employees, the composite organization has a three-year device refresh cycle. However, given the high-performance needs of sales reps — long battery life, fast processor, convenient mobility — as well as the wear of regular travel, the organization expects to replace Windows tablets for sales reps every two years.

The composite organization recognizes devices come in different styles and price points; many surveyed organizations chose Microsoft Surface devices with Windows RT to save costs, and average device costs may have been higher if they had chosen non-RT devices. Some organizations that did choose less-expensive, first-generation devices may need to refresh those devices earlier than expected. For that reason, a 10% risk adjustment has been applied, as shown in Table 1. The risk-adjusted savings from reduced purchase costs \$58,500 to \$292,500 per year. See the section on Risk for more detail.

### ★ Licensing, Management, And Support Cost Savings

Windows tablets lead to reduced management and support costs for several reasons:

- › There are fewer devices to manage, as described in the previous section.
- › Windows tablets can be managed the same as other Windows desktops and laptops — the same system management

**TABLE 2**  
**Reduction In Annual Device Licensing, Management, And Support Costs**

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
B1	Previous number of devices for sales reps		300	600	1,350
B2	Average cost to manage previous device (non-Windows tablet plus laptop) per year		\$185		
B3	Number of Windows tablets for sales reps		100	200	400
B5	Annual printing cost savings		\$35,000	\$35,000	\$35,000
<b>Btr</b>	<b>Cost savings from annual device licensing, management and support (non-risk-adjusted)</b>	<b>B1*B2-B3*B4</b>	<b>\$90,500</b>	<b>\$146,000</b>	<b>\$284,750</b>

Source: Forrester Research, Inc.

software, the same group policies, the same encryption settings, and the same desktop management. However, allowing greater network access (such as VPN) does require additional management and security monitoring time, so for some organizations this category may not provide much if any savings — and the composite organization has estimated an average management cost per device a little higher than before. But even if the cost is higher, the additional access provides significant business benefits, as described in later sections.

- ▶ The Windows tablets provide a digital delivery platform for brochures and product information, avoiding significant printing costs, estimated at \$35,000 per year for the composite organization.

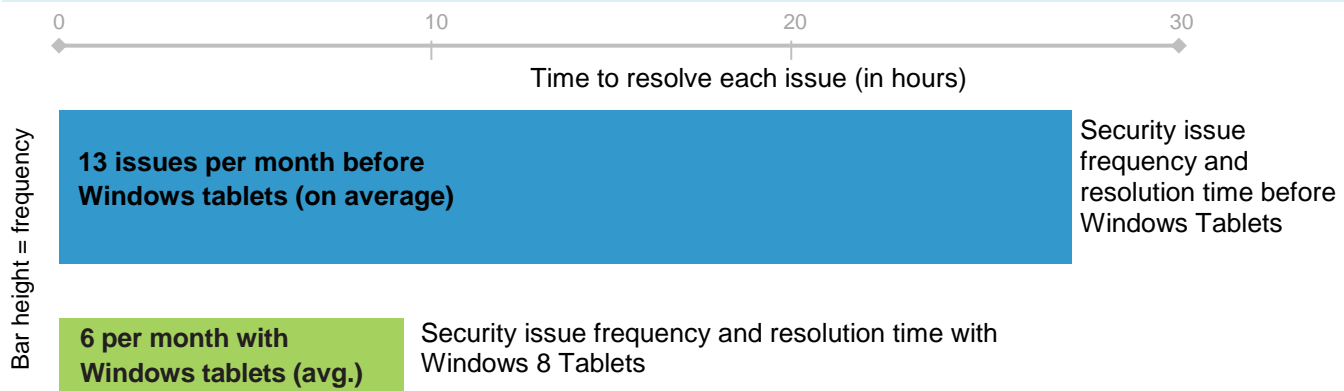
The composite organization has experienced time savings managing one device instead of the two previously provided to many sales reps. Table 2 shows that the composite organization estimates an IT cost savings of \$90,500 to \$284,750 per year. Note that the full avoided device management cost reduction is shown here. The cost of managing Windows tablet devices is covered in the cost section, Table 7, and net device management benefits are part of the full financial summary.

### ★ Security Cost Savings

Similar to management cost savings, the composite organization has also seen a reduction in security management costs, based on fewer security issues as well as faster resolution of issues that do happen — a claim validated by 83% of survey respondents who agreed or strongly agreed that security has improved with Windows tablets. For the composite organization's sales reps that received the first Windows tablets, it estimated a total of 13 security issues per month before they started using the new devices — a virus attack, a lost or stolen device, or other issues requiring a security technicians involvement to quarantine, clean, reimage, or replace a tablet, laptop or desktop device; or manage server and database security for a data breach. With Windows tablets, the number of security issues is estimated to be reduced 55%, and that each issue can be resolved 75% faster, illustrated in Figure 3.

**FIGURE 3**

**Illustration Of Security Issue Reduction And Faster Resolution Time With Windows Tablets**



Source: Forrester Research, Inc.

The devices are managed using the same security tools as laptops and desktops, providing efficiencies. For example, they can be domain-joined and have the same group policy settings that lock down outside network access as needed, Windows tablets can be encrypted like any other laptops or desktops using BitLocker or another solution, and network access can be managed granularly (again like a laptop or desktop) so that if an issue did arise the Windows tablet could be quarantined and blocked from network access until the issue was resolved.

**TABLE 3**  
**Reduction In Security Issues, Resolution Time, And Total Security Costs**

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
C1	Number of current issues related to tablet devices per month		13	26	52
C2	Reduction in issues with W8 tablets		55%		
C3	Number of issues with W8 tablets per month		6	12	23
C4	Time to resolve each current issue in hours		27		
C5	Reduction in resolution time with W8 tablets		75%		
C6	Time to resolve each issue with W8 tablets in hours		7		
C7	IT employee hourly rate		\$48		
Ct	Cost savings from improved security (non-risk-adjusted)	$(C1-C3)*(C4-C6)*C7*12$	\$80,567	\$161,135	\$333,779
	Risk adjustment	↓5%			
<b>Ctr</b>	<b>Cost savings from improved security (risk-adjusted)</b>		<b>\$76,539</b>	<b>\$153,078</b>	<b>\$317,090</b>

Source: Forrester Research, Inc.

The composite organization estimates that it reduced issues even more significantly given its expected Windows tablet growth in the next several years. That adds up to an estimated annual security cost savings of more than \$80,567 to \$333,779 per year, as detailed in Table 3.

However, the composite organization recognizes it could have experienced more issues without already-well-defined security policies and processes. This benefit was reduced by 5%, for an updated risk-adjusted security cost savings of \$76,539 to \$317,090 per year. See the section on Risk for more detail.

### ★ Improved Rep Productivity And Sales

With Windows tablets, sales reps were able to complete orders and audits, speed up meetings with retailers, and handle follow-ups faster. Windows tablets enable this benefit by meeting security and device management requirements, making it possible for some or all back-office application data to be available. So during sales meetings with retailers, product information and inventory can be looked up in real time, avoiding any confusion if products are not available or delayed, and the rep can save time after the meeting copying order information into the online system. The composite organization estimates a 40% reduction in time required to conduct sales meetings and handle post-meeting tasks. Some of the time saved can be used to schedule additional retailer meetings (in addition to travelling to more meetings), which can lead to more sales opportunities. The composite organization estimates 15% of saved time can lead to direct new meeting times.

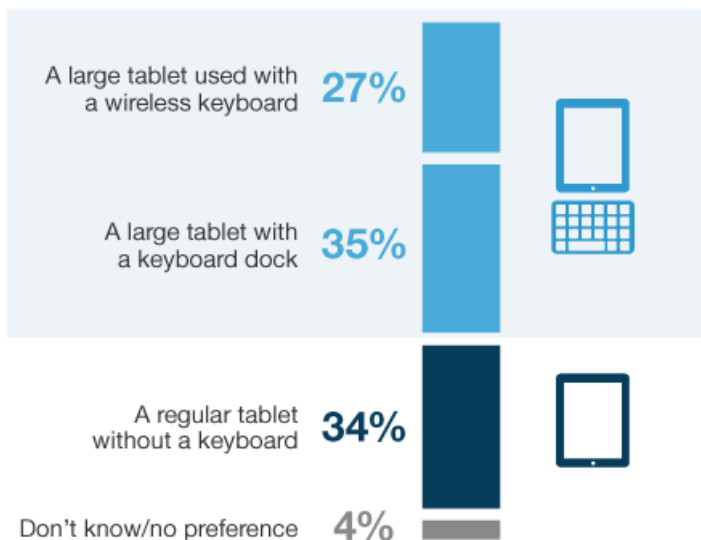
As highlighted in a recent Forrsights survey, it's no surprise that most information workers — 62% — would prefer a wireless or attached keyboard.<sup>4</sup> The composite organization recognized this need for its sales reps and made sure to provide hybrid devices that can convert to laptop mode or slate devices with a light, portable keyboard.

In addition to more or better sales meetings, the composite organization has seen larger deal sizes and deals close more often for all meetings with retailers. Sales reps can use Windows tablets to connect securely to back-end systems, input order information directly into the system, check stock and shipping details, and most importantly:

- › Use the connected Windows tablet to identify and remind the customer and the rep about cross-sales options to potentially increase deal size by highlighting complementary products, new products or product models, current promotions, or even what other similar stores have been ordering and selling.
- › Use the Windows tablet with touch-optimized modern UI apps to reduce time taken to conduct in-store audits and improve trade promotion effectiveness.
- › Use the Windows tablet to identify and highlight upsell opportunities such as service add-ons or higher quality products.
- › And, because the Windows tablet is connected and collecting order information during the meeting, that also means (with a standard wireless connection, or through a cell connection for organizations that might choose to add that functionality), the customer receives immediate order confirmation and shipping estimate. Now eliminated or greatly reduced is the

**FIGURE 4**  
**Sales Reps Need Devices With Keyboards**

**62%** of information workers who use or would like to use a tablet, would prefer to use it with a keyboard



Base: 1070 Information workers in the US and EU who use or would like to use a tablet for work  
Source: Forrsights Devices And Security Workforce Survey, Q2 2013

Source: Forrester Research, Inc.



conversation that ends with a customer's final statement: "I'll place my order when you get back to me."

As a result, more information is provided during the meeting, there are fewer follow-up questions to handle after the meeting, and customers are confident and comfortable placing their order. The composite organization estimates that larger and more frequent deals have led to a 25% increase in sales revenue. Based on an industry average 9.0% profit margin, that adds up to \$877,500 to \$3,510,000 per year in increased operating margin.

However, it is unlikely that all the time saved would or even could be used for richer and more frequent sales meetings — if nothing else, retail store managers have things to do or may keep the sales rep waiting, and it takes time to travel from place to place. A realization adjustment of 15% has been applied to compensate for this factor.

Furthermore, there are likely a number of other process changes not related to the Windows tablet implementation that have helped improved sales results. For this reason, sales rep productivity benefits have been risk-adjusted by 50% to better and more conservatively model the impact of Windows tablets. The risk-adjusted annual benefit is between \$438,750 and \$1,755,000 per year, as shown in Table 4. See the section on Risk for more detail.

**TABLE 4**  
**Sales Rep Increased Profit From Improved Sales**

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
D1	Average revenue generated per sales representative per year		\$300,000		
D2	Improvement in sales productivity with W8 tablets		40%		
D3	Percentage of productive time gained used for new and/or higher quality sales calls		15%		
D4	Additional sales revenue per year per rep with W8 tablets from improved and additional sales meetings	$D1 \times D2 \times D3$	\$18,000		
D5	Improvement in sale size/close with W8 tablets		25%		
D6	Additional sales revenue per year per rep from larger and more closed sales with Windows tablets	$(D1 + D4) \times D5$	\$79,500		
D7	Total new sales revenue from W8 tablets per sales rep per year	$D4 + D6$	\$97,500		
D8	Number of sales representatives		100	200	400
D9	Estimated profit margin		9.0%		
Dt	Sales rep increased profit from improved sales (non-risk-adjusted)	$D7 \times D8 \times D9$	\$877,500	\$1,755,000	\$3,510,000
	Risk adjustment	↓50%			
Dtr	<b>Sales rep increased profit from improved sales (risk-adjusted)</b>		<b>\$438,750</b>	<b>\$877,500</b>	<b>\$1,755,000</b>

Source: Forrester Research, Inc.

### Total Benefits

Table 5 shows the total of all benefits across the areas listed above, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of about \$3.5 million.

**TABLE 5**  
**Total Benefits (Risk-Adjusted)**

Ref	Benefit	Year 1	Year 2	Year 3	Total	Present value
Atr	Cost savings from device consolidation	\$252,000	\$252,000	\$630,000	\$1,134,000	\$910,684
Btr	Cost savings from annual device licensing, management, and support	\$90,500	\$146,000	\$284,750	\$521,250	\$416,871
Ctr	Cost savings from improved security	\$76,539	\$153,078	\$317,090	\$546,707	\$434,326
Dtr	Sales rep increased profit from improved productivity and sale	\$438,750	\$877,500	\$1,755,000	\$3,071,250	\$2,442,628
	<b>Total benefits (risk-adjusted)</b>	<b>\$857,789</b>	<b>\$1,428,578</b>	<b>\$2,986,840</b>	<b>\$5,273,207</b>	<b>\$4,204,508</b>

Source: Forrester Research, Inc.

## COSTS

The composite organization has estimated the following costs associated with purchasing, managing, and supporting Windows tablet devices, and has experienced costs associated with deployment and year one across:

- › Windows tablet device purchase costs.
- › Provisioning and deployment costs.
- › Annual management, maintenance and support costs.

### 💰 Windows Tablet Device Purchase Costs

The composite organization estimates an average of \$750 for each new Windows tablet device, and estimates an initial deployment of 100 sales reps, then 100% growth in deployment of Windows tablets year-over-year. The total purchase cost is estimated to be \$75,000 at implementation time, plus \$75,000 to \$375,000 per year for new device purchases to accommodate growth, as shown in Table 6. Because sales reps require fast, portable, and reliable computers to conduct their work, a faster-than-average refresh rate (two years) is assumed, so that in Year 3, not only has growth doubled, but the initial group of sales reps receives a new Windows tablet as well.

Keep in mind that Windows tablet devices come in a variety of sizes and styles with a variety of technology options. The modeled costs per device has been used as a conservative estimate — there are similar hybrid devices that can be found at a higher price, and many new slate tablet devices (including new, smaller versions) are often less expensive.

**TABLE 6**  
**Device Purchase Costs**

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
E1	Estimated annual growth rate		100%			
E2	Annual tablet device refresh rate for sales reps (in years)		2.0			
E3	Number of new sales reps using Windows tablets each year		100	100	200	500
E4	Average cost of Windows device		\$750	\$750	\$750	\$750
Etr	<b>Windows tablet device purchase costs</b>		<b>\$75,000</b>	<b>\$75,000</b>	<b>\$150,000</b>	<b>\$375,000</b>

Source: Forrester Research, Inc.

**TABLE 7**  
**Provisioning And Deployment Costs**

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
F1	Deployment costs		\$10,000	\$10,000	\$20,000	\$50,000
F2	Training costs		\$10,000	\$10,000	\$20,000	\$50,000
F3	Other deployment costs		\$0			
Ft	Windows tablet device deployment costs (not risk-adjusted)	$F2+F1+F3$	\$20,000	\$20,000	\$40,000	\$100,000
	Risk adjustment	↑5%				
<b>Ftr</b>	<b>Windows tablet device deployment costs (risk-adjusted)</b>		<b>\$21,000</b>	<b>\$21,000</b>	<b>\$42,000</b>	<b>\$105,000</b>

Source: Forrester Research, Inc.

### 💰 Provisioning And Deployment Costs

Table 7 shows that the composite organization estimates deployment and provisioning costs, including desktop imaging and sales rep training on new devices, to be \$20,000 upfront plus \$20,000 to \$100,000 per year, and have been risk-adjusted by 5% to accommodate any unexpected issues. See the section on Risk for more detail.

### ➡ Annual Management, Maintenance And Support Costs

The composite organization estimates an annual cost of \$200 per Windows tablet device, covering management, support, and annual maintenance costs of \$45,000 to \$189,000. Again, the composite organization assumes very little required for support even after deployment, but this category has been risk-adjusted to compensate, by 5%. The risk-adjusted cost of annual maintenance over the three years is estimated to be about \$48,000 to \$200,000, as shown in Table 8. See the section on Risk for more detail.

**TABLE 8**  
**Annual Management, Maintenance, And Support Costs**

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
G1	Number of tablet devices			200	400	900
G2	Desktop/tablet management costs per device			\$200	\$200	\$200
G3	Additional support costs per device			\$25	\$0	\$10
Gt	Windows tablet device annual management and support costs	$(G2+G3)*G1$		\$45,000	\$80,000	\$189,000
	Risk adjustment	↑5%				
<b>Gtr</b>	<b>Total (risk-adjusted)</b>			<b>\$47,250</b>	<b>\$84,000</b>	<b>\$198,450</b>

Source: Forrester Research, Inc.

### Total Costs

Table 9 shows the total of all costs as well as associated present values, discounted at 10%. Over three years, the composite organization expects total costs to total a net present value of a little less than one million.

**TABLE 9**  
**Total Costs (Risk-Adjusted)**

Ref	Benefit	Initial	Year 1	Year 2	Year 3	Total	Present value
Etr	Windows tablet device purchase costs	(\$75,000)	(\$75,000)	(\$150,000)	(\$375,000)	(\$675,000)	(\$548,892)
Ftr	Windows tablet device deployment costs	(\$21,000)	(\$21,000)	(\$42,000)	(\$105,000)	(\$189,000)	(\$153,690)
Gtr	Windows tablet device annual management and support costs	\$0	(\$47,250)	(\$84,000)	(\$198,450)	(\$329,700)	(\$261,474)
	<b>Total costs (risk-adjusted)</b>	<b>(\$96,000)</b>	<b>(\$143,250)</b>	<b>(\$276,000)</b>	<b>(\$678,450)</b>	<b>(\$1,193,700)</b>	<b>(\$964,056)</b>

Source: Forrester Research, Inc.

## FLEXIBILITY

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for some future additional investment. This provides an organization with the “right” or the ability to engage in future initiatives but not the obligation to do so. There are multiple scenarios in which a customer might choose to implement Windows tablet devices and later realize additional uses and business opportunities. Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix B).

The composite organization, based on responses from interviewed and surveyed organizations, reasonably expects future Windows tablet benefits in two areas:

- › First, increased benefits from expanding their deployment to other groups. They can expect additional management, security and printing cost savings. If the current total cost savings of about \$500,000 in year three is based on 800 total Windows tablet users, then doubling or tripling that population in future years could lead to a similar gain of an additional \$500,000 to \$1 million in cost savings per year.
- › Second, benefits in other areas of the business — such as increased meeting productivity with tablet note-taking features, or improved operations management using tablets to display key manufacturing line metrics on a convenient, portable device. These are highly dependent on organization needs and should be investigated once a broader Windows tablet deployment is discussed.

These areas have not been thought through in any detail, but are expected to be areas of future opportunity once Windows tablets are deployed across the organization.

## RISK

Forrester defines two types of risk associated with this analysis: “implementation risk” and “impact risk.” “Implementation risk” is the risk that a proposed investment in Windows tablet devices may deviate from the original or expected requirements, resulting in higher costs than anticipated. “Impact risk” refers to the risk that the business or technology needs of the organization may not be met by the investment in Windows tablet devices, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for cost and benefit estimates.

Quantitatively capturing investment risk and impact risk by directly adjusting the financial estimates results provides more meaningful and accurate estimates and a more accurate projection of the ROI. In general, risks affect costs by raising the original estimates, and they affect benefits by reducing the original estimates. The risk-adjusted numbers should be taken as “realistic” expectations since they represent the expected values considering risk.

The following impact risks that affect benefits identified as part of the analysis are:

- › Some early adopters of Windows tablets have found that the devices they purchased at that time do not completely meet speed, memory, and power expectations, and those organizations expect to make an additional hardware purchase sooner than their standard two- or three-year refresh cycle.
- › Security management cost savings were risk-adjusted as interviewed and surveyed organizations realize that they benefited from knowledgeable and conscientious employees.
- › Sales benefits were reduced considerably since improvements could come from a number of factors, including Windows tablets. Even though the benefit is based on the estimated impact of Windows tablets, a considerable risk-adjustment was still applied to ensure a credible and conservative estimate.

The following implementation risks that affect costs identified in the analysis are:

- › Deployment costs could have been higher had the composite organization selected more higher-end hybrid tablets.

- › Annual management and support costs were also risk-adjusted, as the composite organization experienced no additional support or training costs (based on interview and survey results). However, the new Windows does provide a new interface, and many organizations could expect to provide some training and/or plan on a bump in help desk support calls.

Table 10 shows the values used to adjust for risk and uncertainty in the cost and benefit estimates. Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

**TABLE 10**  
**Benefit And Cost Risk Adjustments**

Benefits	Adjustment
Device consolidation and reduced purchase cost savings	↓10%
Security management cost savings	↓5%
Sales rep sales benefits	↓50%
Costs	Adjustment
Deployment costs	↑5%
Annual management and support costs	↑5%

Source: Forrester Research, Inc.

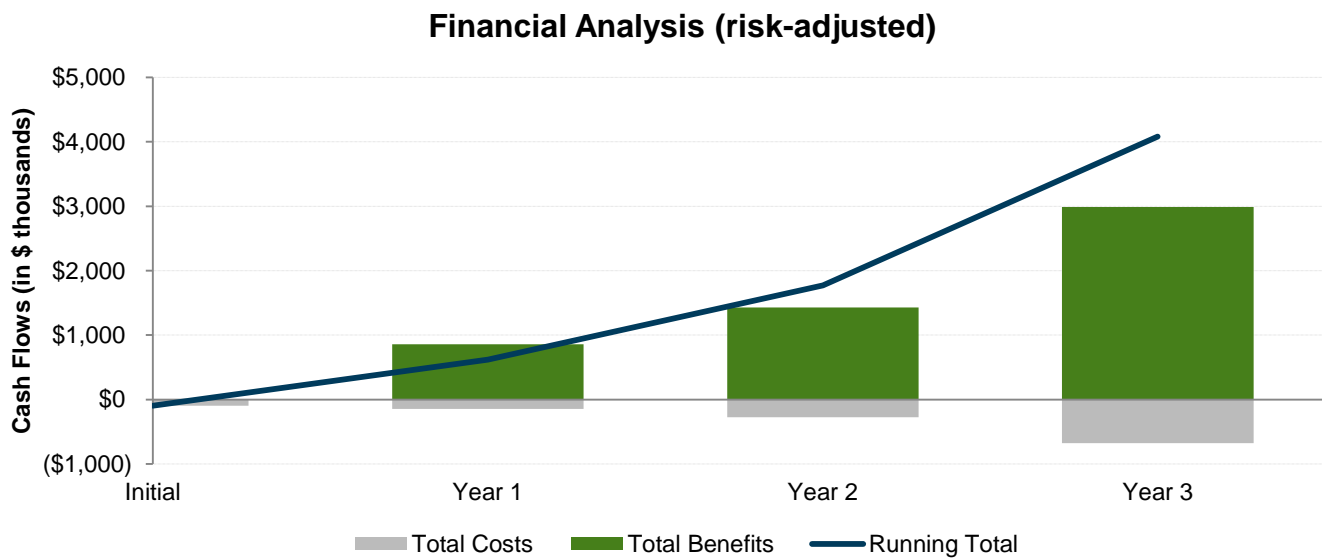


## Financial Summary

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI and NPV for the organization's investment in Windows tablet devices.

Figure 5 and Table 11 below show the risk-adjusted results. These values are determined by applying the risk-adjustment values from Table 10 in the Risk section to the unadjusted results in each relevant cost and benefit section.

**FIGURE 5**  
**Cash Flow Chart (Risk-Adjusted)**



**TABLE 11**  
**Cash Flow: Risk-Adjusted**

	Initial	Year 1	Year 2	Year 3	Total	Present value
Costs	(\$96,000)	(\$143,250)	(\$276,000)	(\$678,450)	(\$1,193,700)	(\$964,056)
Benefits	\$0	\$857,789	\$1,428,578	\$2,986,840	\$5,273,207	\$4,204,508
Net benefits	(\$96,000)	\$714,539	\$1,152,578	\$2,308,390	\$4,079,507	\$3,240,452
ROI	336%					

Source: Forrester Research, Inc.

## Microsoft Windows Tablet Devices: Overview

The following information is provided by Microsoft. Forrester has not validated any claims and does not endorse Microsoft or its offerings.

Windows 8 brings together the potential of a tablet with the power of a PC, offering a new user interface that people love, while supporting the requirements of an IT organization.

Until the arrival of Windows tablets, businesses have had to choose between convenience and productivity when selecting devices for the enterprise. Laptops and desktop PCs offer enterprise-grade security, full processing power, and productivity software, but are inconvenient for mobile computing. Consumer-grade tablets, while convenient for mobile computing, don't integrate easily into existing enterprise IT architecture, and aren't ideal for complex computing or productivity tasks.

Windows tablets offer touch and stylus interaction along with full support for mouse and keyboard, allowing users to choose the interaction method that suits their task. Users have connected experiences with apps from the Windows Store, while they also can use all their desktop line-of-business and productivity applications they use today on Windows 7. Windows tablets offer users the convenience of touch and mobility as well as the reliability of enterprise grade processing power. IT departments benefit from the simple integration of Windows devices into their existing IT infrastructure. Windows tablets are as secure as Windows laptops and desktop PCs, and are managed using the tools that the IT department already uses.

A wide range of new tablets, convertibles, and other innovative devices, and retail peripherals for scanning products and taking customer payments are available from a variety of manufacturers, with more on the way. Many customers will benefit from new Windows tablets or touch-enabled devices like convertibles.

## Appendix A: Composite Organization Description

For this TEI study, Forrester has created a composite organization to illustrate the quantifiable benefits and costs of implementing Windows tablet devices. The composite company is intended to represent a consumer goods firm with 10,000 employees and is based on characteristics of the interviewed customers.

The composite company has the following characteristics:

- › A primarily United States-based consumer goods manufacturer.
- › 10,000 total full-time employees.
- › 1,000 full-time sales reps that have been or will be provided Windows tablets. At the start, 100 sales reps had Windows tablets, expanding to all sales reps by the third year.
- › Estimate an average 9.0% sales profit margin.
- › Expect a 100% annual growth rate in sales rep Windows tablet use.
- › Have previously used or piloted another tablet platform, or evaluated another platform before choosing Windows tablets.
- › Chose Windows tablets from a leading manufacturer primarily with a “hybrid” form factor — in which the screen can detach and operate like a standard touchscreen slate tablet, but can dock to become a full-fledged laptop with keyboard, mouse, and other peripherals. Some sales reps chose “slate” form factors, with a separate keyboard.
- › Rollout to retail employees began in June 2013.

In purchasing Windows tablet devices, the composite company has the following objectives:

- › Increase sales.
- › Increase sales rep productivity.
- › Reduce number of devices provisioned to employees.
- › Manage all devices, including tablets, using the same security and management tools.

For the purpose of the analysis, Forrester assumes that there are no additional operating system costs, though many organizations may include Windows in their enterprise agreement with Microsoft for upgrade rights, as well as additional support and benefits — but the business case for volume licensing was not considered in this study.

## FRAMEWORK ASSUMPTIONS

Table 12 provides the model assumptions that Forrester used in this analysis.

The discount rate used in the PV and NPV calculations is 10% and time horizon used for the financial modeling is three years. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult with their respective company's finance department to determine the most appropriate discount rate to use within their own organizations.

**TABLE 12**  
**Model Assumptions**

Ref.	Metric	Calculation	Value
H1	Hours per week		40
H2	Weeks per year		52
H3	Hours per year (M-F, 9-5)	52*5*8	2,080
H4	Work days per month		22
H5	Average hourly IT salary		\$48
H6	Average hourly sales rep salary		\$22

Source: Forrester Research, Inc.

## Appendix B: Total Economic Impact™ Overview

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

The TEI methodology consists of four components to evaluate investment value: benefits, costs, flexibility, and risks.

### BENEFITS

Benefits represent the value delivered to the user organization — IT and/or business units — by the proposed product or project. Often, product or project justification exercises focus just on IT cost and cost reduction, leaving little room to analyze the effect of the technology on the entire organization. The TEI methodology and the resulting financial model place equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization. Calculation of benefit estimates involves a clear dialogue with the user organization to understand the specific value that is created. In addition, Forrester also requires that there be a clear line of accountability established between the measurement and justification of benefit estimates after the project has been completed. This ensures that benefit estimates tie back directly to the bottom line.

### COSTS

Costs represent the investment necessary to capture the value, or benefits, of the proposed project. IT or the business units may incur costs in the form of fully burdened labor, subcontractors, or materials. Costs consider all the investments and expenses necessary to deliver the proposed value. In addition, the cost category within TEI captures any incremental costs over the existing environment for ongoing costs associated with the solution. All costs must be tied to the benefits that are created.

### RISK

Risk measures the uncertainty of benefit and cost estimates contained within the investment. Uncertainty is measured in two ways: 1) the likelihood that the cost and benefit estimates will meet the original projections, and 2) the likelihood that the estimates will be measured and tracked over time. TEI applies a probability density function known as “triangular distribution” to the values entered. At minimum, three values are calculated to estimate the underlying range around each cost and benefit.

### FLEXIBILITY

Within the TEI methodology, direct benefits represent one part of the investment value. While direct benefits can typically be the primary way to justify a project, Forrester believes that organizations should be able to measure the strategic value of an investment. Flexibility represents the value that can be obtained for some future additional investment building on top of the initial investment already made. For instance, an investment in an enterprisewide upgrade of an office productivity suite can potentially increase standardization (to increase efficiency) and reduce licensing costs. However, an embedded collaboration feature may translate to greater worker productivity if activated. The collaboration can only be used with additional investment in training at some future point in time. However, having the ability to capture that benefit has a present value that can be estimated. The flexibility component of TEI captures that value.

## Appendix C: Glossary

**Discount rate:** The interest rate used in cash flow analysis to take into account the time value of money. Although the Federal Reserve Bank sets a discount rate, companies often set a discount rate based on their business and investment environment. Forrester assumes a yearly discount rate of 10% for this analysis. Organizations typically use discount rates between 8% and 16% based on their current environment. Readers are urged to consult their respective organization to determine the most appropriate discount rate to use in their own environment.

**Net present value (NPV):** The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made, unless other projects have higher NPVs.

**Present value (PV):** The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.

**Payback period:** The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

**Return on investment (ROI):** A measure of a project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits minus costs) by costs.

### A NOTE ON CASH FLOW TABLES

The following is a note on the cash flow tables used in this study (see the example table below). The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1. Those costs are not discounted. All other cash flows in Years 1 through 3 are discounted using the discount rate (shown in Framework Assumptions section) at the end of the year. Present value (PV) calculations are calculated for each total cost and benefit estimate. Net present value (NPV) calculations are not calculated until the summary tables and are the sum of the initial investment and the discounted cash flows in each year.

TABLE [EXAMPLE]  
EXAMPLE TABLE

Ref.	Metric	Calculation	Year 1	Year 2	Year 3

Source: Forrester Research, Inc.

## Appendix D: Endnotes

<sup>1</sup> Forrester risk-adjusts the summary financial metrics to take into account the potential uncertainty of the cost and benefit estimates. For more information see the section on Risk.

<sup>2</sup> This survey was fielded to 2,306 IT executives and technology decision-makers located in Canada, France, Germany, the UK, and the US from SMB and enterprise companies with two or more employees. This survey is part of Forrester's Forrsights for Business. 20% of respondents say they "currently support" or are "expanding support" for Windows 8 tablets, while 51% say that they plan to support or are interested but have no current plan in place. Source: Forrsights Hardware Survey, Q3 2013, Forrester Research, Inc.

<sup>3</sup> Forrester's Forrsights Hardware Survey, Q3 2013, was fielded to 2,306 IT executives and technology decision-makers located in Canada, France, Germany, the UK, and the US from SMB and enterprise companies with two or more employees. This survey is part of Forrester's Forrsights for Business Technology and was fielded from June 2013 to August 2013. 20% of respondents say they "currently support" or are "expanding support" for Windows 8 tablets, while 51% say that they plan to support or are interested but have no current plan in place. Source: Forrsights Hardware Survey, Q3 2013, Forrester Research, Inc.

<sup>4</sup> Source: Forrsights Devices And Security Workforce Survey, Q2 2013, Forrester Research, Inc.