A Forrester Total Economic Impact™ Study Prepared For WatchGuard Technologies

The Total Economic Impact Of WatchGuard XTM For Managing Unified Threat Management

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Executive Summary

In February 2013, WatchGuard Technologies commissioned Forrester Consulting to examine the total economic impact and potential value that customers may realize by using WatchGuard XTM products. WatchGuard builds security appliances that protect corporate content, networks, and businesses. This study is designed to provide readers with a framework for understanding the potential financial impact of using WatchGuard XTM solutions in their organizations.

WatchGuard XTM appliances consolidate a number of tools that previously required IT organizations to purchase multiple, independent solutions — or point products. The capabilities for unified threat management (UTM) within WatchGuard XTM include:

- Standard firewall functionality.
- Intrusion prevention systems (IPS).
- Application awareness and control.
- Virtual private networking (VPN).
- Web content security.

UTM capabilities eliminate the potential gaps between security products that can exist when IT organizations use a collection of solutions to canvas the broad range of Internet-related threats. Using a single platform also gives security managers a single console, making it easier to quickly and effectively drill down to, isolate, and resolve emerging security problems.

This study found that one of WatchGuard's customers — a global manufacturing company — deployed WatchGuard XTM to replace the products of a leading technology vendor (LTV), resulting in a risk-adjusted, and present-value cost savings of more than $580,000 over three years. In the words of the security manager that we interviewed:

> *"WatchGuard costs less than [the LTV], and the XTM products work like they are supposed to work. WatchGuard identifies the right threats, closes the right doors, and allows me to easily pinpoint the source of security threats."*

WatchGuard XTM

Our interview and subsequent financial analysis found that the customer experienced the risk-adjusted ROI, costs, and benefits shown in Table 1. The three-year risk-adjusted total net present value (NPV) of $580,136 includes both direct and indirect costs and benefits that this WatchGuard customer attributes to using WatchGuard XTM (see details in sections about Costs, Benefits, Flexibility Options, and Risks). In addition, the present value (PV) of the customer's risk-adjusted benefits is $629,939 with an immediate payback period.

Table 1

WatchGuard Customer — Three-Year Risk-Adjusted Costs And Benefits

Risk-adjusted ROI	Payback period	Total benefits (PV)	Total costs (PV)	Net present value
1,225%	0.0 months	$629,939	($49,803)	$580,136

Source: Forrester Research, Inc.

The analysis section of this report provides the supporting detail used by Forrester to derive the financial results shown in Table 1. In addition, Forrester also identified several significant *unquantified benefits* that this WatchGuard customer attributes to using the XTM appliance; these benefits are discussed in the Benefits section.

Throughout this report, Forrester shows two sets of numbers: original values and risk-adjusted values. We find that when costs and benefits are adjusted for risk and still demonstrate a compelling business case, readers have more confidence that an investment is likely to succeed.

The risk-adjusted numbers should be taken as realistic expectations, because assuming that the variations in business, technology, and government are similar to this WatchGuard customer, the risk-adjusted numbers will closely reflect the expected outcome of investing in WatchGuard XTM.

Disclosures

The reader should be aware of the following:

- The study is commissioned by WatchGuard and delivered by the Forrester Consulting group.
- 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 study to determine the relative benefits of an investment in WatchGuard's business listings.
- WatchGuard reviewed and provided feedback to Forrester, but Forrester maintained editorial control over the study and its findings and did not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.
- The customer's name for the interview was provided by WatchGuard, but WatchGuard did not participate in the interview process.

TEI Framework And Methodology

Introduction

From information collected during the customer interview, Forrester has constructed a TEI framework for this WatchGuard customer using XTM. The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision.

Most monetary values shown in this study are rounded to the nearest dollar for simplicity of presentation. Actual financial calculations might be based on figures carried to more decimal points than shown here and therefore may not entirely match the resultant figures presented in the tables.

Approach And Methodology

Forrester took a multistep approach to evaluate the impact of WatchGuard XTM on one customer. Specifically, we:

- Interviewed WatchGuard marketing, sales, and product management personnel to gather data relative to WatchGuard XTM.
- Interviewed the WatchGuard customer to obtain data with respect to costs, benefits, flexibility, and risks.
- 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 customer interview.

Forrester employed four fundamental elements of TEI in modeling WatchGuard's business listings:

1. Costs.
2. Benefits to the organization.
3. Strategic flexibility options.
4. Risk.

Given the increasing sophistication that enterprises have regarding value-based analyses related to technology investments, Forrester's TEI methodology serves the purpose of providing a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

About WatchGuard XTM

According to WatchGuard, the XTM family of network security appliances combines advanced networking features to handle high-volume traffic securely. XTM includes a suite of management tools that allows administrators to manage security through a centralized console, command line interface, and web user interface.

Benefits of the XTM appliances include:

- **Fast 10 Gbps throughput.** XTM handles network threats while keeping traffic moving with 10 Gbps firewall throughput and 2 Gbps VPN throughput.
- **Application Control.** XTM allows you to control the use of Web 2.0 and other applications on your network for tighter security, better use of bandwidth, and greater productivity.
- **Intrusion Prevention.** XTM monitors your security system for malicious activity, preventing viruses and keeping your network safe.
- **Expert Support.** LiveSecurity provides access to telephone and web support from our team of security experts.
- **Fireware XTM Pro.** The custom operating system includes active/active high availability with load balancing, dynamic routing, VLAN support, and multi-WAN failover.
- **High availability (active/active).** Manage a two-appliance cluster as a single logical unit, with high availability and load balancing features.
- **Reporting in the Browser.** Provides a web-based, customizable reports portal with direct Internet access for easy access to select and view reports.
- **Remote/External Log Server/Report Server DB.** MSSPs and larger organizations can isolate logging and reporting on a separate PC for high performance, scalability, and redundancy.

Analysis

About This WatchGuard Customer

Forrester interviewed the security manager at a global manufacturing company. This WatchGuard customer is a privately held company that designs, manufactures, and sells products related to commercial-grade air conditioning. The company has manufacturing facilities located around the globe and must provide assurance to government regulators from dozens of countries. Ensuring the availability of the environment is paramount, and malware infections must be quickly identified and remediated to prevent manufacturing downtime.

Interview Highlights

The security manager that we interviewed had used WatchGuard previously when he worked at a smaller firm. When that firm was acquired by his current company — this WatchGuard customer — company executives made a financial decision to standardize network and security products with a single LTV that competed with WatchGuard.

Over several years of using products from the LTV, the security manager observed that the LTV's "integrated" products were really a collection of point products from different divisions or acquired companies. Instead of a UTM solution, the security manager describes getting a hodgepodge of point products that feigned integration but that had gaps in features, functions, and capabilities, and that support teams spent more time pointing their fingers at other products or divisions than solving his core problem. This was a dramatic departure from his experience using WatchGuard's UTM.

Specifically, the security manager was spending 35 weeks per year (about 73% of his time) troubleshooting threats or intrusions or reacting to problems that — in the security manager's opinion — should have been addressed by the LTV. Examples from the security manager are:

- Receiving notices from broadband carriers about malware that went undetected on the customer's network.
- Encountering malware that forced the shutdown of production floors for an average of 20 hours per year.
- Enduring finger-pointing and a lack of results from customer support teams at the LTV.

When the LTV changed its licensing plan and threatened to triple the annual fees of the security manager, he persuaded management to abandon the LTV and consider alternatives. After evaluating several alternatives, the security manager selected WatchGuard, which provided better capabilities for a price that is 50% of the fees paid to the LTV. In the two years since deploying WatchGuard, the security manager emphasizes his ability to:

- Isolate intrusions immediately, including the ability to pinpoint the IP address of the device at risk.
- Receive deep technical support from WatchGuard by speaking with experienced security professionals.
- Eliminate 100% of downtime to production floor facilities due to network or security concerns.
- Reduce time troubleshooting from 35 weeks per year to about 5 minutes per day.
- Decrease overall company spend — moving from the LTV to WatchGuard — by more than 50%.

Costs

The only cost incurred by this customer is paying for Watchguard XTM.

WatchGuard XTM Costs

The customer purchased WatchGuard appliances (hardware) for $22,000 and pays an annual service fee of $8,667, bringing the total three-year cash outlay to $48,000. In addition, for the customer to transition from the LTV to WatchGuard required two weeks of the security manager's time, quantified as an indirect cost of $6,250. The present value of these costs over three years is $47,235, as shown in Table 2.

Table 2

WatchGuard's Customer — Total Costs (Original Values)

Costs	Year 1	Year 2	Year 3	Total	Present value
WatchGuard appliance	$22,000				
WatchGuard services	$8,667	$8,667	$8,667		
Deployment costs	$6,250				
Cost of WatchGuard XTM	**$36,917**	**$8,667**	**$8,667**	**$54,250**	**$47,235**

Source: Forrester Research, Inc.

Benefits

This section details the projected benefits for this WatchGuard customer. At the end of this section, we also include qualitative benefits that this customer experienced but could not quantify.

Discontinue Paying Fees To LTV

Simply put, by deploying WatchGuard, the customer uninstalled the products from the LTV. Although the customer wasn't able to resell the products, it was no longer required to pay annual services charges of $98,000.

Table 3

WatchGuard's Customer — Discontinue Fees To LTV (Original Values)

Benefit	Year 1	Year 2	Year 3	Total	Present value
Discontinue fees to LTV	$98,000	$98,000	$98,000	$294,000	$243,711

Source: Forrester Research, Inc.

Reduced Troubleshooting Time

During the years that the LTV's products were installed, the security manager indicates that he spent an average of 35 weeks per year reacting to incoming threats or concerns. In other words, the security manager put out fires. With WatchGuard XTM, the security manager now spends just a few minutes each day going over reports, but in two years, has never had a crisis. Why such a dramatic shift in the security manager's time? In the words of the security manager:

> *"The WatchGuard system manager software is amazing. I can search any time frame, quickly get results back, export into Microsoft Excel, manipulate the data — sort, count, whatever I need — amazingly fast."*

> *"With the LTV product, I put in parameters, hit search, and I'd get results about 10% to 20% of the time. The LTV's products are so chatty that the appliances can't keep up and the logs have too much information to search quickly or effectively."*

In another example, the security manager described the work to isolate and identify a problem:

> *"At one point, I had an LTV product with 800 users behind it, but the info that I needed wasn't stored in the LTV product, so I'd have to manually replicate the incident to capture the right packets, taking an hour for packet capture and then sifting through several million lines to find the right details."*

The security manager also shared an example of how WatchGuard is easy to configure:

> *"Executives decided that people shouldn't access Facebook from work. In WatchGuard, I blocked social networking and it worked. When I did the same on the LTV's products, it blocked other sites such as LinkedIn, but didn't block Facebook. The LTV product never did what it was supposed to, blocked what it shouldn't, and I had problems with WCCP redirection."*

Forrester's model eliminates the cost of troubleshooting by a security manager for 35 weeks per year, resulting in a benefit of $328,125 over three years, as shown in Table 4.

Table 4

WatchGuard's Customer — Reduced Troubleshooting Time (Original Values)

Benefit	Year 1	Year 2	Year 3	Total	Present value
Time spent troubleshooting	35 weeks	35 weeks	35 weeks		
Percent of manager's year	73%	73%	73%		
Burdened security manager cost	$150,000	$150,000	$150,000		
Total savings	**$109,375**	**$109,375**	**$109,375**	**$328,125**	**$271,999**

Source: Forrester Research, Inc.

Reduced Production Floor Downtime

This WatchGuard customer must comply with international laws for the input and export of its products. Security breaches can shut down the company's ability to comply with regulatory requirements. With the LTV, the customer experienced an average of 20 hours of downtime to its production floor each year:

> *"A government auditor visited one of our international offices. He plugged into our network with malware on his laptop and our network went crazy. We had to shut down production floors until we finally isolated the cause."*

During the two years of using WatchGuard, the customer has not had a single event that required shutting down the production floor, resulting in a savings of $178,664:

> *"With WatchGuard, when the same thing happens, I can see the malware hitting firewalls, I get alerts, and I know the host site, IP address, and local time zone of the device. I can identify the local manager who can unplug devices or shut down the problem before it impacts the entire network."*

Table 5

WatchGuard's Customer — Reduced Production Floor Downtime (Original Values)

Benefit	Year 1	Year 2	Year 3	Total	Present value
Revenue per production hour	$101,803	$101,803	$101,803		
Company's average profit margin	4.5%	4.5%	4.5%		
Unrecoverable loss from downtime	35%	35%	35%		
Reduced downtime per year	20 hours	20 hours	20 hours		
Total reduced cost	**$59,555**	**$59,555**	**$59,555**	**$178,664**	**$148,104**

Source: Forrester Research, Inc.

Total Benefits

The benefits of using WatchGuard XTM instead of the previous leading vendor add up to $800,789.

Table 6

Summary Of Benefits For WatchGuard's Customer

Benefit	Year 1	Year 2	Year 3	Total	Present value
Discontinued fees to LTV	$98,000	$98,000	$98,000		
Reduced troubleshooting time	$109,375	$109,375	$109,375		
Reduced production floor downtime	$59,555	$59,555	$59,555		
Total benefits	**$266,930**	**$266,930**	**$266,930**	**$800,789**	**$663,815**

Source: Forrester Research

Unquantified Benefits

The security manager at this WatchGuard customer indicated that the additional benefits of using WatchGuard that cannot be quantified include:

- **It increased credibility of the security team within the enterprise.** As the security manager was better able to isolate, identify, and prevent intrusions, his peers within the IT organization and in business units had more respect for his point of view. The security manager told us that peers began reaching out for input into projects and for recommendations about six to nine months after he implemented WatchGuard.

- **It shifted the security team from reactive to proactive.** Because security team members no longer spend their time reacting to as many problems, they shifted their focus to eliminating internal vulnerabilities, deterring inappropriate browsing by employees, and helping prevent mistakes by technical teams globally.

Risks

Both risk-adjusted and non-risk-adjusted costs and benefits are discussed in this study. The costs and benefits in tables 2 through 6 are quoted in non-risk-adjusted (best-case) terms and before risk adjustments are made. The assessment of risk provides a range of possible outcomes based on the risks associated with web-related projects in general and specific risks relative to WatchGuard XTM. In our research, we saw that using WatchGuard was a very low-risk endeavor.

Measurement of risk is a way of incorporating the levels of confidence and uncertainty regarding the cost and benefit estimates of a given investment. Higher confidence that the cost and benefit estimates will be met implies that the level of risk is lower and that the variation between the risk-adjusted and non-risk-adjusted outcomes is minimized. The following general risks were considered in this study:

- Variation in the price of the appliance and ongoing services provided by WatchGuard.
- The impact of using WatchGuard on the productivity and headcount for network security teams.
- How intrusions or malware might affect the ongoing business operations of companies.

For this study, Forrester applied a 15% risk adjustment (reduction of 15%) to the benefits to reflect the risks.

If a risk-adjusted benefit still demonstrates a compelling business case, it raises confidence that the investment is likely to succeed, as the risks that threaten the project have been taken into consideration and quantified. The risk-adjusted numbers should be taken as "realistic" expectations, as they represent the expected value considering risk. Assuming normal success at mitigating risk, the risk-adjusted numbers should more closely reflect the expected outcome of the investment.

Table 7

Risk Adjustments To The Three-Year Totals For Customer Benefits

Risk	Original	Risk adjustment	Risk-adjusted
Discontinued fees to LTV	$294,000	1%	$291,060
Reduced troubleshooting time	$328,125	6%	$308,438
Reduced production floor downtime	$178,664	13%	$155,438
Total benefits	**$800,789**		**$754,935**

Source: Forrester Research, Inc.

Readers are urged to apply their own risk ranges based on their own degree of confidence in the cost and benefit estimates.

Financial Summary

The financial results calculated in the Costs, Benefits, and Risks sections can be used to determine the risk-adjusted net present value of benefits, ROI, and payback period for this WatchGuard customer. These are shown in Table 8 and 9.

Table 8
Cash Flow, ROI, And Payback Period (Ordinary Values)

Category	Year 1	Year 2	Year 3	Total	Present value
Costs	($36,917)	($8,667)	($8,667)	($54,250)	($47,235)
Benefits	$266,930	$266,930	$266,930	$800,789	$663,815
Net benefits	$230,013	$258,263	$258,263	$746,539	$616,580
ROI	1,305%				
Payback period	Immediate				

Source: Forrester Research, Inc.

Table 9
Cash Flow, ROI, And Payback Period (Risk-Adjusted)

Category	Year 1	Year 2	Year 3	Total	Present value
Costs	($36,917)	($8,667)	($8,667)	($54,250)	($47,235)
Benefits	$251,645	$251,645	$251,645	$754,935	$625,804
Net benefits	$214,728	$242,978	$242,978	$700,685	$578,570
ROI	1,225%				
Payback period	Immediate				

Source: Forrester Research, Inc.

Study Conclusions

As the data in this study indicates, this WatchGuard customer has experienced a very good return on investment. In addition, the risk-adjusted ROI of 1,225%, along with a payback period that is immediate — less than one day in mathematical terms — raises confidence that the investment is likely to succeed, as the risks that may threaten the project have already been taken into consideration and quantified. In this study, risks have been modeled conservatively in the hope of showing realistic expectations.

We make no assumptions regarding the effects of WatchGuard at other organizations. This study examines the potential impact attributable to the WatchGuard customer that participated in our examination. The underlying objective of this document is to provide guidance to technology and business decision-makers seeking to identify areas where value can potentially be created by investing in WatchGuard XTM.

Appendix A: 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, risks, and flexibility.

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 forms 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 a 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 B: 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 net present value of cash flows.

Payback period: The breakeven point for an investment. 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.	Category	Calculation	Initial cost	Year 1	Year 2	Year 3	Total

Source: Forrester Research, Inc.