

# The Business Approach to Vulnerability Management

## Abstract

Vulnerability detection alone does not enhance the security of an organization. Rather it is the remediation of known vulnerabilities and the development of reliable, realistic processes for assuring vulnerabilities are kept in check that supports a more secure posture. Therefore, vulnerability scanning is not a panacea but rather a catalyst for the changes necessary to address security issues within an enterprise. Technology alone will not bring about such changes—but technologies that support business requirements for ease of deployment, administration and use, scalability, long-term manageability and cost effectiveness, and genuine customer care will go far toward winning the confidence of the business in making the necessary investment. Qualys has led the charge for such efforts through a *solution* focused delivery model that aligns itself directly with business needs.

This ENTERPRISE MANAGEMENT ASSOCIATES® (EMATM) brief explores these values in light of the evolution of the vulnerability management market. The foundations of vulnerability management are discussed, with some perspective on how maturing vendors maintain their lead against emerging competitors. The approach of Qualys and its distinct advantages are highlighted as an example of a vendor that has played a significant role in defining vulnerability management, and continues to maintain strong loyalty and new wins in the face of both new challengers and today's economic realities.

## Background

In the early days of the vulnerability scanning market, competitive differentiators ranged from having the best research and development teams to producing the least number of false-positives in scans. In that environment, multiple vendors thrived by producing some of the security industry's most recognizable products. Unfortunately, while vendors thrived, customers struggled to produce meaningful strategies that changed the culture within enterprises to act on what these tools discovered, and to be more cognizant of the impact of system-related vulnerabilities.

Much of this struggle can be ascribed directly to the product focus of leading vendors in the vulnerability scanning market. With few exceptions, these products were engineered specifically to allow customers to realize greater efficiencies in penetration testing, in terms of both effort and cost. Penetration testing was, and inherently still is, not a scalable process for producing large enterprise configuration management process changes. The direct result was customers were left with complex products that did not line up with business needs. Many were difficult to implement and maintain, requiring significant resources in terms of personnel involvement.

It was at this time that Qualys rocked the vulnerability scanning market with an intelligent approach to the business needs of their customers. In particular, Qualys directly aligned their capabilities with emerging compliance standards such as the Payment Card Industry Data Security Standard (PCI DSS). Furthermore, Qualys focused its product delivery model via Software-as-a-Service (SaaS) on reducing the Total Cost of Ownership (TCO) of vulnerability scanning capabilities through reducing implementation, administration, and maintenance costs. This was not an easy task for Qualys, since when the company embarked on this mission in 1999-2000, investors were shying away from Web-based solutions after the Internet bubble. Today, this persistence has paid off in a full SaaS offering that still represents not only a pioneering and thought-leading approach to vulnerability management, but one which gives Qualys a distinctive advantage in the market as well.

# The Business Approach to Vulnerability Management

The Qualys approach signified the end of the vulnerability scanning market and the beginning of the vulnerability management market. The key difference is that the vulnerability scanning market was focused on the capabilities of the scanner while the vulnerability management market focuses on enabling organizations to leverage vulnerability scan results. Ever since, Qualys has established and maintained its leadership in vulnerability management.

Today, this market is at a crossroads. As customer vulnerability management strategies have become more mature, the business needs of those customers has shifted. Many mature organizations no longer need to leverage vulnerability management as a catalyst for cultural change—the change has already occurred. Those organizations are now searching for a sustainable model for maintaining or enhancing their vulnerability assessment capabilities at the lowest cost, as well as bringing IT security and compliance closer together.

---

The Qualys approach signified the end of the vulnerability scanning market and the beginning of the vulnerability management market.

---

## Pitfalls to Avoid

On the surface it would seem as though the market shift is in the favor of Qualys' competitors, as Qualys is vulnerable to competitive pricing. However, if one digs a bit deeper it can easily be recognized that evaluating a product on price alone—particularly in the current climate—is a pitfall that should be avoided. In order to try to gain an edge, Qualys competitors have been forced to make a heavier investment in producing better models for enterprise vulnerability assessment capabilities. In many cases this investment has come at the cost of those areas that produce better customer satisfaction and product flexibility.

Furthermore, competitive pricing focuses directly on the initial cost of the purchase and not on TCO benefits, where Qualys thrives. To date, few vendors have an enterprise platform that can readily meet the constantly evolving needs of enterprise organizations. Vendors may be capable of producing a reduced cost product that meets the exact specifications of an enterprise product at a given time. However, those reduced costs are based on a one-time implementation. The adaptation of the technology to the requirements of the organization, to changing compliance requirements, and of course to the threat landscape, will often come at a heavy cost to those adopters, and can add up over time far more than many may anticipate.

## The Qualys Advantage

- *More Effective Implementation:* Simple deployment, administration, and management of the company's flagship QualysGuard product—these have long been primary focus areas for Qualys. The direct result has been a reduction in the time and resources necessary to implement and maintain vulnerability management capabilities. This, in turn, allows decision makers to delegate resources towards developing a more effective vulnerability management strategy.
- *Enterprise Scalability:* Qualys is capable of delivering an enterprise wide vulnerability management infrastructure in a matter of minutes. Businesses specifically looking to scan their perimeters from an external vantage point can do so in the time it takes Qualys to set up access rights. Organizations seeking deeper

---

Simple deployment, administration, and management of the company's flagship QualysGuard product: these have long been primary focus areas for Qualys.

---

# The Business Approach to Vulnerability Management

capabilities for internal scanning can set up an enterprise vulnerability management infrastructure in the time it takes Qualys to deliver their internal appliances to the proper locations.

- *Customer Focus:* Minor details with major implications are by no means overlooked at Qualys. The company's service oriented approach to vulnerability management gives customers the benefit of a business model that aims at producing the best vulnerability management *solution* available. This includes a focus on details such as exclusively utilizing the United Kingdom and the United States for customer support call centers for US customers. While this may seem like a minor detail to some, for customers it means they will have access to Qualys representatives on a 24x7 basis who speak English as a first language. Not only does this exemplify Qualys' willingness to invest in a better customer experience, it also speaks to the company's investment in quality (as its brand may suggest) since call centers in these geographic locations are typically more expensive to Qualys than alternatives. The company's success in delivering a model well accepted by the market not only helps it justify such investment, it also helps it maintain its edge by keeping a focus on the factors that matter to success.
- *Speed to market:* The SaaS delivery model lends itself to faster development than traditional enterprise software. It also allows vendors to add new services at a much faster pace and at an order of magnitude cheaper than enterprise software solutions. For example, Qualys leveraged its SaaS architecture for vulnerability management to deliver an IT policy compliance service to customers using the same infrastructure and interfaces. This gives customers a substantial cost advantage as well as a better approach for managing risk and documenting compliance.

## EMA Perspective

As the pioneer of confidence in vulnerability management as a service, Qualys recognized years ago that it had to demonstrate to skeptical prospects that they could be trusted with an enterprise's most sensitive information—the specifics of its security vulnerabilities. The company knew full well that, in order not only to succeed but to provide its customers with a flexible and scalable means for adapting vulnerability management strategy throughout the life of the customer's investment, it had to commit to core capabilities that meet business expectations for delivering on this level of trust.

Today, Qualys' farsighted vision has given it a position of leadership not only in vulnerability management, but in enterprise security generally. While the capabilities of Qualys technology remain competitive, the company's success has come directly from its business-focused approach to vulnerability management. Qualys incurred the risk of a heavy initial investment to create a vulnerability management offering with an ideal business model. As a result, not only does Qualys now run lean and highly profitable, it is reaping the benefits of that investment with a solution that has set the pace of the market. The relative low cost of adding additional customers allows Qualys to benefit from high profit margins while also continuing to explore and invest in areas that will directly increase customer satisfaction. Today, Qualys claims to have 42% of the Fortune 100, with customers that include GE, Daimler, Microsoft, DuPont, Goldman Sachs, Oracle and others. Qualys also excels in the

---

As the pioneer of confidence in vulnerability management as a service, Qualys recognized years ago that it had to demonstrate to skeptical prospects that they could be trusted with an enterprise's most sensitive information: the specifics of its security vulnerabilities.

---

# The Business Approach to Vulnerability Management

Small- to Medium-sized Business (SMB) market, which represents 30% of the company's annual revenues, with its Express Suite that is tailored for smaller organizations with limited IT resources.

In addition to being on the leading edge of SaaS delivery models, Qualys has been an early adopter of several technologies that were meant to enhance the end-user experience. Furthermore, Qualys has focused their efforts on delivering better services to customers. This includes several opportunities to access training material, including free workshops, an online training library, and several training webinars. The total package of a product with enhanced services allows Qualys to deliver a *solution* without incurring the high costs of consultants.

Although Qualys now has several competitors in the market, they are forced to invest in areas where Qualys has defined a high competitive standard. The required investment makes it more of a challenge for them to focus on areas directly relating to customer satisfaction. Specifically, many of Qualys' competitors have been forced to create additional platform options to better counter Qualys' SaaS solution. Furthermore, emerging competitors must delegate a higher portion of their resources towards marketing.

Due to these substantial requirements, it makes sense for several of these competitors to engage in short-term competitive pricing in order to win sales and snipe customers away from Qualys. Qualys customers and potential customers should be cautious of these vendors as their products may offer similar capabilities; however, these capabilities may come at a heavier cost in longer-term administration and support. Furthermore, these competitors likely do not hold similar perspectives on the need to invest in customer satisfaction. The end result may be a product that lacks the simple *solution* capabilities that make a vulnerability management product an effective catalyst for implementing and maintaining a vulnerability management strategy.

Looking ahead, Qualys' commitment to delivery as a service has high and obvious alignment with the values of cloud computing. Because Qualys pioneered security assessment as a service, it is already well positioned to assess the security of cloud computing environments. The market leadership Qualys has won based on this model gives it credibility—as well as a marked head start—in this domain. Validating this position are the number of recognized providers such as Cisco/WebEx, eBay, Google, MSN, Savvis and many others that use QualysGuard to audit their service offerings. The strength of these achievements gives Qualys a very strong position going forward to lead in the audit and assessment of cloud computing environments—a testimony to the company's thought leadership and persistence with a pioneering vision that still resonates, years after Qualys first emerged with a novel approach that transformed the nature of practical security assessment for enterprises and small- to mid-sized organizations alike.

## About EMA

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that specializes in going “beyond the surface” to provide deep insight across the full spectrum of IT management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise IT professionals and IT vendors at [www.enterprisemanagement.com](http://www.enterprisemanagement.com) or follow EMA on Twitter ([http://twitter.com/ema\\_research](http://twitter.com/ema_research)).

2020.012110