FROST & SULLIVAN

CHECKMARX

2022 COMPANY OF THE YEAR

GLOBAL DEVELOPMENT AND OPERATIONS (DEVOPS) SECURITY INDUSTRY

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Checkmarx excels in many of the criteria in the Global DevOps security space.

Addressing Unmet Needs

The increasing adoption of mobile and web applications due to accelerated digital transformation has boosted demand for innovation and development among software development life cycle (SDLC) developers and coders. To meet the need for faster innovation, software developers are increasingly depending on open-source libraries or codes, which contain a minefield of security risks. The threat ecosystem is expanding and intensifying, and attackers are aggressively implanting malware into open-source ecosystems when attacking software supply chains. Thus, companies that develop software for connected devices and software-as-a-service (SaaS) look to integrate security into their SDLCs through the DevOps security principle to maintain security while pursuing innovation.

> *"Compared to market participants that offer a single-pronged approach without the integration of DevOps security technologies and do not support multiple software types or SDLC deployment options, Checkmarx's holistic, shift-left approach is more comprehensive, given that its platform easily integrates into development pipelines and covers different cloud-native architectures. As a result, Checkmarx stands out from its close competitors because its comprehensive DevOps security portfolio continues to address customers' unmet needs."*
>
> ***– Ying Ting Neoh, Research Analyst***

Headquartered in Atlanta, Georgia, Checkmarx is a global software and application security (AppSec) company that offers software exposure platforms and integrates software security technologies into DevOps. Incorporated in 2006, Checkmarx boasts more than 15 years of AppSec knowledge and continuously enhances its AppSec testing solutions. To manage and monitor security risks across all types of modern software, such as proprietary code, open source, application programming interfaces (APIs), and infrastructure as code (IaC), Checkmarx's software security technologies, including static and interactive application security testing (SAST and IAST), software composition analysis (SCA), supply chain security (SCS), API, dynamic application security testing (DAST), IaC scanning, and container security, are offered through a single AppSec testing platform, Checkmarx One.

As code volumes in SDLCs increase due to innovation, ensuring the security of the SDLC is becoming increasingly complex as customers face several challenges, including tight timelines and conflicting priorities between DevOps and security teams. If customers spend most of their time on patching, development slows down. They require a unified platform that provides visibility, integration, and a comprehensive approach to managing risks while accelerating development, delivery, and deployment timelines. Legacy security testing solutions are unable to meet this customer need due to silos and an incomprehensive approach.

Checkmarx introduced Checkmarx One in 2021. The platform is a unified, SaaS-based, or self-managed, cloud-based platform that delivers comprehensive AppSec testing services encompassing continuous monitoring, discovery, classification, and automated remediation. Through its user-friendly interface, customers can trigger code scanning or continuous service updates with a single click or a pull request. This helps developers save time and address the tight timeline issues they face. Checkmarx One was developed using container and Kubernetes stacks, which provide deployment flexibility to customers as they offer several deployment options across multiple clouds and tenants.

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Leadership Focus and Implementation of Best Practices

Checkmarx exemplifies leadership focus through the implementation of best practices wherein it offers customers the right security tools to secure their SDLCs and handle supply chain management, establishing brand value among its customers to continually adopt its DevOps security offerings.

A leader in the AppSec domain, Checkmarx develops new and advanced AppSec testing solutions that not only complement web application firewalls (WAFs) and API gateways but also offer API-level visibility and context. The company's DevOps security offerings bridge important security gaps in this space and address API security issues, including shadow and zombie API discovery, throughout various SDLC phases — from training and design to code, check-in, and build to deploy. During the design phase, Checkmarx's API

Security scans API documentation and enforces API best practices to assess misconfigurations. In the code, check-in, and build-to-deploy phase, SAST, software composition analysis (SCA), and supply chain security (SCS) provide insight and analysis that support vulnerability testing while integrating feedback or changes into the code in real time. Prior to deployment, Checkmarx's keeping infrastructure as code secure (KICS) engine scans IaC files for infrastructure misconfigurations and supports IaC platforms, including Terraform, Kubernetes, Docker, and AWS CloudFormation, while its DAST continues to reflect run-time vulnerabilities and software changes after the deployment phase.

All things considered, Checkmarx outpaced key market contenders due to its truly shift-left and automated approach that helps companies filter noise, gain real-time component visibility, and reduce patching efforts. Some of the DevOps security vendors in the market are unable to offer API-level visibility to extensively address API security issues across various SDLC phases; moreover, they are unable to provide IaC scanning and vulnerability remediation and automation capabilities. Understanding the significance of the growing number and intensity of supply chain attacks, Checkmarx strategically acquired Dustico in August 2021. Dustico was a start-up company that specializes in supply chain attack prevention and offers software that detects malicious attacks in software supply chains.

In addition, Checkmarx's SAST's ability to detect security vulnerabilities allows it to address compliance requirements, including Payment Card Industry Data Security Standard (PCI-DSS), Health Insurance Portability and Accountability Act (HIPAA), and Federal Information Security Management Act of 2002 (FISMA), requiring customers to conduct code testing for potential vulnerabilities listed in OWASP Top 10, MISRA, NIST, STIG, and SANS Top 25. The company's unique query language and adjustable queries also allow its customers to tailor their security policies based on regulatory requirements relevant to the segments they serve. In addition, Checkmarx showcases best practice implementation by establishing partnerships through its managed security service provider (MSSP) program to further expand its partnership ecosystem for the markets it serves. As a strategic partner, Checkmarx provides partnership support through different tiers of supplemented training, technical support, and materials through a scalable pricing framework. These strategic partnerships help Checkmarx expand its global market presence and foster customer ties while complying with local regulatory requirements across global regions. Thus, Frost & Sullivan commends Checkmarx's leadership efforts in providing offerings that exemplify the implementation of best practices to protect the software supply chain.

Financial Performance

Due to the growing number of high-profile security incidents, such as software developer SolarWinds' security incident and subsequent supply chain security incidents, customers are placing greater emphasis on DevOps security frameworks to achieve security and comply with security mandates while focusing on product innovation. Checkmarx has benefitted from this demand and shown consistent growth in the global DevOps security market due to its ability to leverage demand through strategic partnerships and a customer base that goes beyond the North American market, which is a key differentiator lacking in some of its competitors. Based on Frost & Sullivan's estimates, the company's DevOps security offerings have successfully captured outstanding business performance growth across the world, with an estimated high double-digit year-over-year (YoY) growth rate of more than 25% in 2021. As a strong global DevOps

Security participant, Checkmarx also established its presence in multiple Asia-Pacific countries, including Australia and India, in 2021.

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Despite stiff competition in the market, Checkmarx continued to achieve solid growth across verticals in 2021, including banking, financial services, and insurance (BFSI), government, and service providers. The company's 1,800+ customers across 70 countries include Fortune 500 companies. Frost & Sullivan praises Checkmarx's ability to successfully differentiate itself from other key market contenders by offering a holistic set of DevOps security capabilities through a one-click approach and securing an extensive global market presence, which allows it to further solidify its leadership position and remain the top choice for enterprises across the world.

Customer Purchase Experience and Customer Service Experience

Checkmarx offers a simplified licensing model for customers to purchase its Checkmarx One platform in addition to the standard services included in the license to support customers' adoption of its product. To make its platform services available to different business sizes, Checkmarx created 2 tiers of AppSec platform service packages, the Standard Service and the Premium Service.

Backed by more than 800 employees that include security research teams with industry-leading security expertise, Checkmarx's platform service packages provide end-to-end support — from deployment and onboarding to integration and automation to support customers at different stages of secure software initiatives, thereby accelerating the integration of its platform into development pipelines and maximizing return on investment (ROI). Competitive standard services, such as onboarding, eLearning, integration consulting, AppSec program best practices and assessment, customer success and technical support, optimizer samples for 2 projects, and concurrent scanning, are included in Checkmarx's free-of-charge AppSec platform standard service package. The company's premium service package offers value-added services, including premium assessment, concierge services, AppSec helpdesk, and premium technical support. Checkmarx's free standard service package makes AppSec platform standard services accessible to all companies, regardless of size, while its premium package provides more extensive coverage and supports customers that require value-added services.

Checkmarx also provides the AppSec Accelerator for customers that want a holistic product. The Accelerator offers end-to-end managed services and brings in experts, industrial best practices, and Checkmarx's methodology to execute AppSec testing processes and enhance customers' security maturity. While some of the services available in the market are offered as a separate license package from the product license, the orchestration of Checkmarx's services and security technologies through Checkmarx One reports shortened sales cycles (by 33%) and the delivery of faster time to value to customers while increasing the company's win rate against competitors that offer standalone AppSec testing solutions by 25%. This array of support services has inarguably provided customers with world-

class expertise and a positive experience. Frost & Sullivan recognizes Checkmarx's customer service and its ability to continuously incorporate customers' feedback into its business strategy and offerings. This has helped Checkmarx establish trusting relationships and loyalty among its customers in the global DevOps security market.

Conclusion

In 2021, Checkmarx succeeded due to its stellar business performance, its vigorous global sales and marketing program, and its strong vision and market strategy to achieve continued growth. Through its broad range of offerings, the company captured high share in the global DevOps security industry. Checkmarx has successfully addressed software developers' pertinent challenges by ensuring prompt SDLC security, mitigating open-source risks, and resolving potential IaC vulnerabilities. Most importantly, Checkmarx offers software developers accuracy, coverage, and automation to securely develop software products.

For its strong overall performance, Checkmarx earns Frost & Sullivan's 2022 Global Company of the Year Award in the DevOps security industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends: Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first-to-market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™

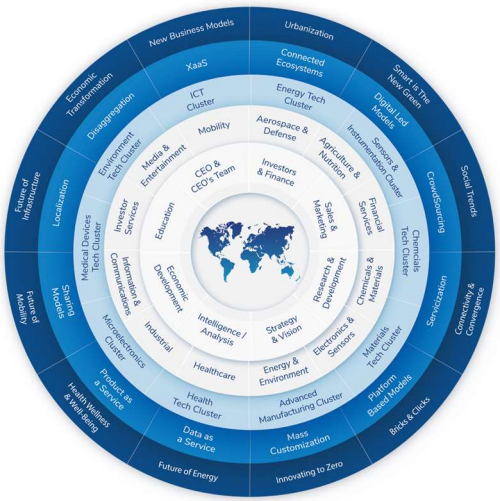
Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.
Learn more.

Key Impacts:

- **Growth Pipeline:** *Continuous Flow of Growth Opportunities*
- **Growth Strategies:** *Proven Best Practices*
- **Innovation Culture:** *Optimized Customer Experience*
- **ROI & Margin:** *Implementation Excellence*
- **Transformational Growth:** *Industry Leadership*

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.



Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)