CISO Check-In With Checkmarx: Hi-Tech Manufacturing — Blog Post

Title: **Global Pulse on AppSec: Perspective for Manufacturing CISOs**

Subtitle: **As the industry embraces technological advances, our insider survey offers actionable takeaways for security teams**

Industries everywhere are powered by applications, and manufacturing is no different. Industry 4.0 has brought manufacturers into the world of cloud computing and analytics, AI and machine learning, and the Internet of Things, among other digital wonders. That has meant major advances in areas including automation, efficiency, data analysis, and customer responsiveness.

It has also pointed out one thing they all need to manufacture: a robust application security program. Industry 4.0 got a stark reminder of that necessity with Urgent/11, the discovery of 11 zero-day vulnerabilities in operating system VxWorks. Over 2 billion devices run on the OS, many of them critical tools in medical, industrial, and enterprise applications. Even worse, more than a year after that discovery, a review found that 97% of vulnerable devices had not been patched.

We've all been there, unfortunately. CISOs in manufacturing, like in any industry, get handed the task of mitigating risk in the maze of applications and devices that drive their organization's success. It's a crucial step in navigating the path to secure modernization.

Insights from a survey of CISOs, AppSec managers, and developers

So, where should manufacturing CISOs turn for guidance?

Their peers offer a wealth of experience and knowledge. It's why we surveyed 516 CISOs globally across numerous industries about their approaches to application security (AppSec) and their key concerns — including 33 from manufacturing. They touched on the need to upgrade their application security tools, with many responses pointing to the need for a fully unified AppSec platform.

From that, we pulled together some actionable insights in a quick read titled *Smart Software Decisions Empower and Secure Hi-Tech Manufacturers Worldwide.* The insights within include:

- 88% of respondents from the manufacturing sector said AppSec is a critical part of their responsibilities. 94% said it's a major focus of their organization, which is 10% higher than respondents as a whole.
  - **Takeaway:** A comprehensive AppSec program, possibly employing a platform approach, is the key to preventing adversaries from orchestrating a breach that could put your business, or even customers, at risk.
- 55% said securing the applications their developers create and deploy is a high priority; another 42% said it's a medium priority.
  - **Takeaway:** Developers need good training to stay abreast of current security best practices; consider a security solution that delivers that training in an engaging, contextual manner that enables relevant training without the usual drudgery.
- Manufacturing CISOs said 58% of their organization's apps contain open source code, but only 39% labeled open source usage as their biggest AppSec challenge.

- **Takeaway:** Supply chain security will remain an imperative in modern application development environments that rely on open source code consistently. Invest in a Software Composition Analysis tool with Supply Chain Security built in, and make sure it works seamlessly with your other security solutions.

A platform solution that unifies your various AppSec tools can address a lot of the challenges that CISOs and others raised in our full Global Pulse on Application Security report. It's the most streamlined, intuitive way to achieve the "shift everywhere" ideal that is emergent in the AppSec industry.

Why manufacturing needs to 'shift everywhere' with application security

"Shift left" used to be the ideal for software development teams, with its promise to deliver security scans earlier in the software development life cycle (SDLC). Now, as modern applications lean ever more heavily on open source packages, APIs, containers, and infrastructure as code, that's not enough. "Shift everywhere" is the new mantra, bringing fast, agile security to every part of the equation: Every application. Every team member. Every deployment. Every technology. Every risk. *Everywhere*.

Checkmarx One™, our industry-leading cloud-native application security platform, allows you to shift security everywhere by launching the various AppSec testing processes with one click. You quickly get back the fully correlated results you need to prioritize which vulnerabilities present the highest risks, along with how to remediate them. It gives your developers the tools and training to become AppSec champions within their preferred development environments, and it gives your AppSec team a holistic understanding of the risks present and the vulnerabilities that must be remediated.

Download the full CISO check-in report [LINK] to explore more insights from your industry peers and others in the world of application security.