BUILDING INDUSTRY AWARENESS FOR SECURITY PATTERNS

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ABOUT US

At Patterned Security, we provide modern approaches to enabling security by design.

There is an over-reliance in the industry on using generic 'one size fits all' security standards to determine what good looks like. Pushing endless lists of controls and distracting staff from focusing on what really matters.

Patterned Security is focused on supporting businesses in adopting practical solutions to cybersecurity.

SECURITY ARCHITECTURE CONSULTANCY
ISMS IMPLEMENTATION
SECURITY BY DESIGN PROGRAM

INTRODUCTION

Many organisations continue to see increased complexity in identifying and mitigating cybersecurity threats and weaknesses when building new IT systems. This complexity is further increased for organisations within regulated industries, whereby auditors continue to focus on design assurance and audibility security architecture practices.

There is a growing need for more mature security architecture practices within the cybersecurity industry, which includes the use and adoption of Security Patterns. In this article, we explore why this is important and provide insights and observations on the rates of adoption.

Let's start by unpacking how we define a Security Pattern.

WHAT IS A SECURITY PATTERN

Security patterns are reusable solutions to common security risks and challenges, providing a structured approach to fulfilling security requirements across different environments, systems, and applications. These patterns incorporate best practices, industry standards, and proven methodologies for addressing specific security concerns and risks.

For example, they may cover areas such as authentication and authorisation, data encryption, secure communication protocols, and secure coding practices. By adopting these patterns, organisations benefit from established guidelines and recommendations for implementing robust security measures that align with recognised standards and frameworks such as NIST, ISO, and OWASP.

Additionally, security patterns facilitate the creation of a repository of reusable assets that can be leveraged by architects, developers, and other stakeholders involved in designing and implementing security solutions.

HOW DOES IT FIT INTO SECURITY ARCHITECTURE?

Security patterns play a vital role in creating and maintaining a mature security architecture practice for any organisation. By leveraging security patterns, organisations can establish consistent and standardised security controls, mechanisms, and processes.

This not only promotes efficiency, scalability, and effectiveness in security architecture design and implementation but also supports the overall goal of robust security. Over time, as new threats emerge, technology landscapes evolve, and regulatory requirements change, organisations can adapt and refine existing patterns or develop new ones to address emerging challenges and requirements.

This iterative process enables organisations to continuously enhance their security posture and stay ahead of evolving threats, thereby maintaining a mature and resilient security architecture practice.

"Adopting security patterns promotes efficiency, scalability, and effectiveness in security architecture design."

Overall, security patterns are essential for creating, maintaining, and developing a mature security architecture practice within an organisation.

They promote collaboration, support adaptability, and help develop robust, scalable, and effective security architectures that effectively mitigate risks and protect valuable assets in today's dynamic and complex threat landscape.

WHY IS THIS IMPORTANT?

In our highly interconnected and data-driven world, the demand for robust security has never been greater.

As cyber threats continue to evolve, it becomes imperative for organisations to adopt security measures that are both effective and adaptable. Security patterns incorporate best practices, industry standards, and proven methodologies for addressing specific security concerns and risks.

By integrating these patterns into their security architecture, organisations can benefit from established guidelines and recommendations for implementing robust security measures that align with recognised standards and frameworks such as NIST, ISO, and OWASP. This approach supports the development of a mature security architecture practice and ensures that organisations can continuously enhance their security posture to stay ahead of emerging threats.

OUR OBSERVATIONS IN THE REGIONS

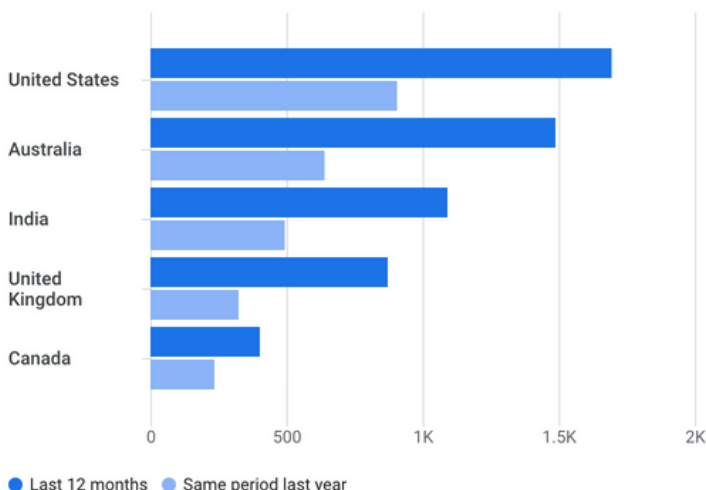Our analysis focuses on the top rates of interest across United States and Australia.

United States shows a high popularity rate for searches related to security architecture and security patterns. This interest is driven by the need to address stringent regulatory requirements, healthcare standards, and the Payment Card Industry (PCI) standards for financial institutions. The presence of major tech companies in the US also contributes to the demand for advanced security practices and robust security architecture.

In Australia, despite a general maturity in security practices due to regulatory measures such as the Information Security Registered Assessors Program (IRAP) and APRA's CPS 234, there is a noticeable gap in the interest and adoption of security patterns. This suggests an opportunity to raise awareness and drive the adoption of security patterns to complement the existing security architecture frameworks.

"The low interest in security patterns in Australia raises questions about the tech industry's engagement with best practices."

INTERESTS IN THE REGIONS

On our community website, SecurityPatterns.io over the past year, from 8 July 2023 to 8 July 2024, we've seen an incredible 104.96% increase in global engagement with our content, highlighting the rising awareness and importance of security patterns in today's digital landscape. In the United States, interest surged by 87.29%, indicating a strong and expanding audience keen to learn about securing their systems.

United States
Australia
India
United Kingdom
Canada

0   500   1K   1.5K   2K

● Last 12 months   ● Same period last year

Meanwhile, Australia saw an even more remarkable increase of 132.86%, underscoring the critical need for robust security measures. These figures highlight the strong and expanding interest in security patterns, particularly in Australia, where engagement has soared.

SO WHAT'S THE PROBLEM?

To emphasise the point about awareness, it's quite challenging to ascertain precise adoption levels, but we can hypothesise the interest levels by looking into the search trends for security architecture and security patterns to indicate the growing awareness and potential adoption among organisations seeking to enhance their cybersecurity practices.

To set it into perspective, consider the below snapshot of the Google search trends (last 3 years) for the Australia region. Australia presents a paradox in cybersecurity. This discrepancy raises questions about the tech industry's engagement with best practices. The low interest could indicate either a concerning lack of awareness or, more optimistically, a highly mature industry that doesn't need to seek basic information. However, this assumption of maturity requires further investigation to confirm its validity in the face of evolving cyber threats.
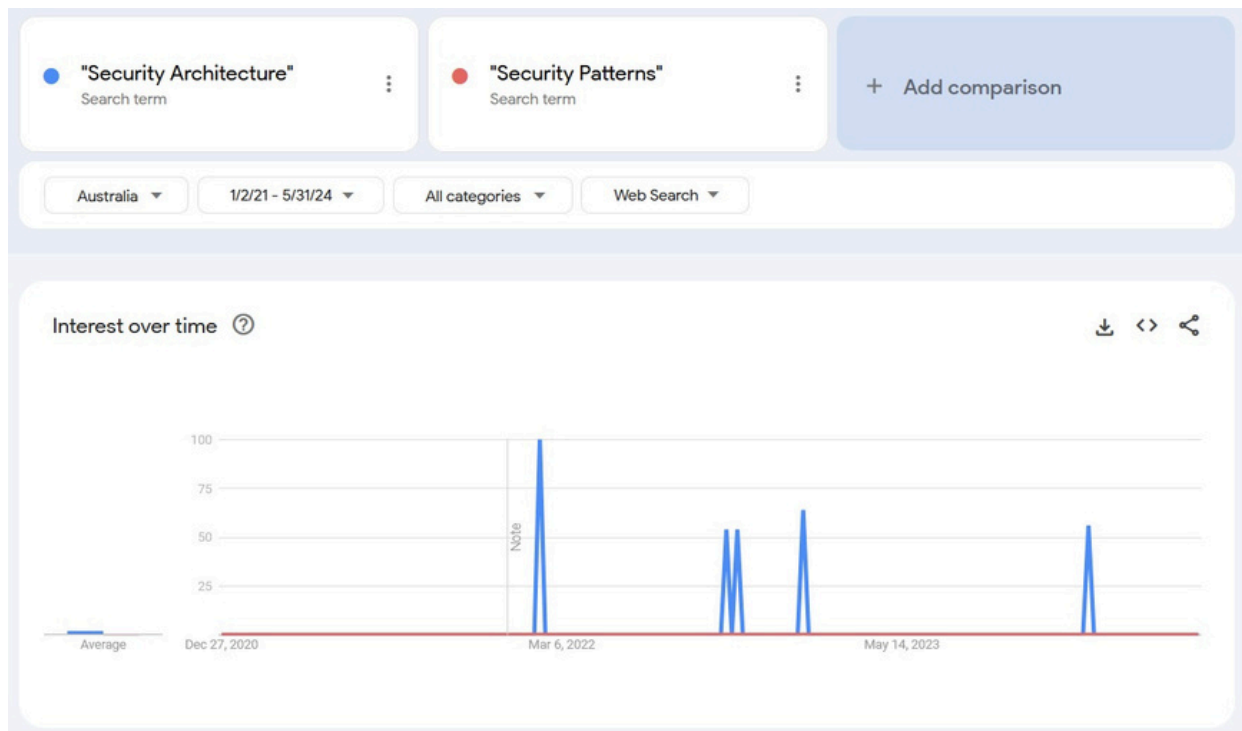
Despite of low search interest in security architecture and patterns, the government has also implemented robust programs like IRAP and standards like ISM and APRA's CPS 234 to enforce high security standards. Apart from our own website, SecurityPatterns.io — which we are proud to see at the top of Google searches — there are few other sites that explore this topic in depth.

Two notable websites that do cover security patterns are CSIRO[1] and the Australian Signals Directorate (ASD).[2] We are pleased to see that our Australian government is taking an interest.

1. *https://research.csiro.au/blockchainpatterns/general-patterns/security-patterns/*
2. *https://www.cyber.gov.au/resources-business-and-government/governance-and-user-education/secure-by-design/secure-design-foundations*

NOW WHAT?

BUILDING COMMUNITY-LED INITIATIVES

To spread the word, we need to bring like-minded folks together. Our community-driven content is all about boosting maturity and awareness of security architecture and patterns. We keep providing open and free content, promoting knowledge sharing and collaboration within the community.

HOW TO GET INVOLVED

If you're passionate about security architecture and patterns, we encourage you to jump in and get involved in our projects. Your insights and contributions can help us push for stronger security practices across the industry.

What improvements would you like to see on securitypatterns.io? How do you plan to upskill and enhance your security architecture skills?

Want to learn more?

Email us at
hello@patternedsecurity.com