



Security Posture Assessment for the Digital Platform of a Leading Multinational Conglomerate

Payatu Casestudy

We did it again!

Assessed, Determined, and Secured India's leading brand's digital product before its launch.



Furthermore, we received a **ten on ten performance** rating and a 'pat on our back' for **our technical excellence and overall project deliverables**.

Table of Contents

1	Project Overview
2	Scope
3	Challenges
4	Process
5	Findings
6	Recommendations
7	Takeaway
8	Bandits
9	About Payatu



Project Overview

Our client is an Indian Multinational Conglomerate which was about to launch its large scale digital platform. This MNC is a highly recognized and reputed group in a vibrant set of industries because of being built on the values of integrity, responsibility, excellence, and unity. Our client, the global enterprise, has a presence in over 100 countries spanning across 6 continents.

Keeping in mind the ethics, values, and excellence of the company, Payatu decided to be a part of their latest upcoming venture – a digital platform.

Their product incorporates all their services and products integrated into one platform to address the needs of Indian consumers and businesses.

To make their digital platform robust and foolproof from intrusions, they wanted to run a Security Posture Assessment.

The primary aim of this project was to deliver a 360-degree assessment of the company's upcoming digital platform.

This platform was about to launch soon after the deadline, making it imperative to finish it in the given time and with complete accuracy.

The project's initial scope required Payatu Bandits to cover Network VAPT, Web application VAPT, Mobile Application VAPT, and secure code assessment of its mobile application. Later on, the company and its management concluded reviewing the source code of their web application as well, but within the mentioned deadline.

Payatu Bandits took it upon themselves to finish the project with the utmost professionalism and technical proficiency by doubling their team.

The Scope

To perform 360-degree security posture analysis and identify gaps in -

APPLICATION SECURITY

- 01** Implementation of proper access control across the teams
- 02** Adequately implement authorization & authentication mechanisms
- 03** Securing API Keys during error handling
- 04** Assessing escaped user input
- 05** Evaluating whether the applications are not vulnerable to business logic flaws
- 06** Assessing if the application leaks any sensitive internal pages over the internet
- 07** Estimating if the applications handle data at rest and in transit securely

NETWORK SECURITY

01

Implementation of proper access control across teams

02

Proper implementation for Authorization & Authentication mechanism

03

Examine if any unnecessary services are exposed

04

Verify if the services installed have a vulnerable version

05

Inspect if the network traffic is encrypted

06

Review SSL/TLS certificates

04

The Challenges

1

Limited team strength and stringent timeline

2

Analysis of a large-scale amalgamation of diverse enterprises in one platform

3

Securing of large-scale network infrastructure in strict timeline

4

Delayed access to required system

5

Lengthy pre-assessment processes

6

Non Working components and technical constraints

7

Unstable and Sensitive modules (e.g. APIs, Payment Module, and so forth.)

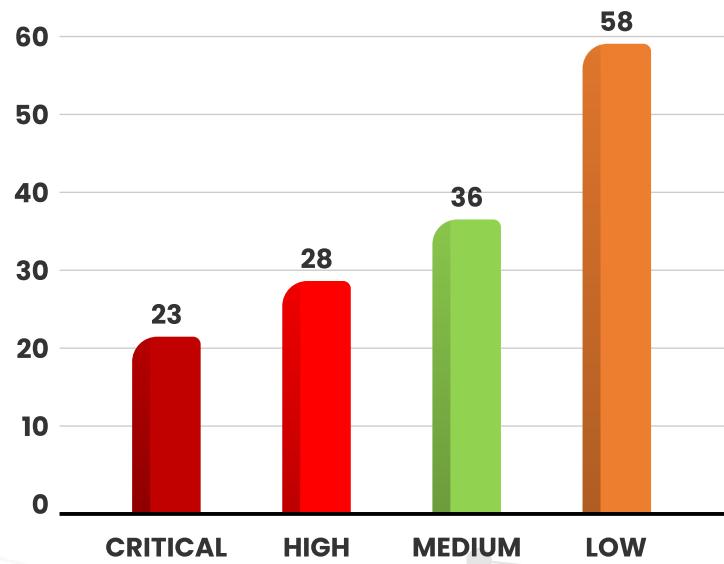
Process

As there were multiple deliverables and some last-minute additions to the requirements, Payatu decided to take up different modules, parallelly, for assessment. It helped Payatu cope with speed due to dependencies, and we overcame the stringent timeline challenge strategically and efficiently. While assessing the security posture of the network, our team found over 100 vulnerabilities in the platform, out of which a fair share of over 35% were critical severity and high severity vulnerabilities.

This assessment acted as an eye-opener for the company to fix their network security infrastructure and make it penetration-free for their customers.

This company's 'Application Security' was brought under the radar to find out vulnerabilities, and the result was again pretty severe. The application security posture of the platform was in a compromised state, and several of its modules needed to be improved.

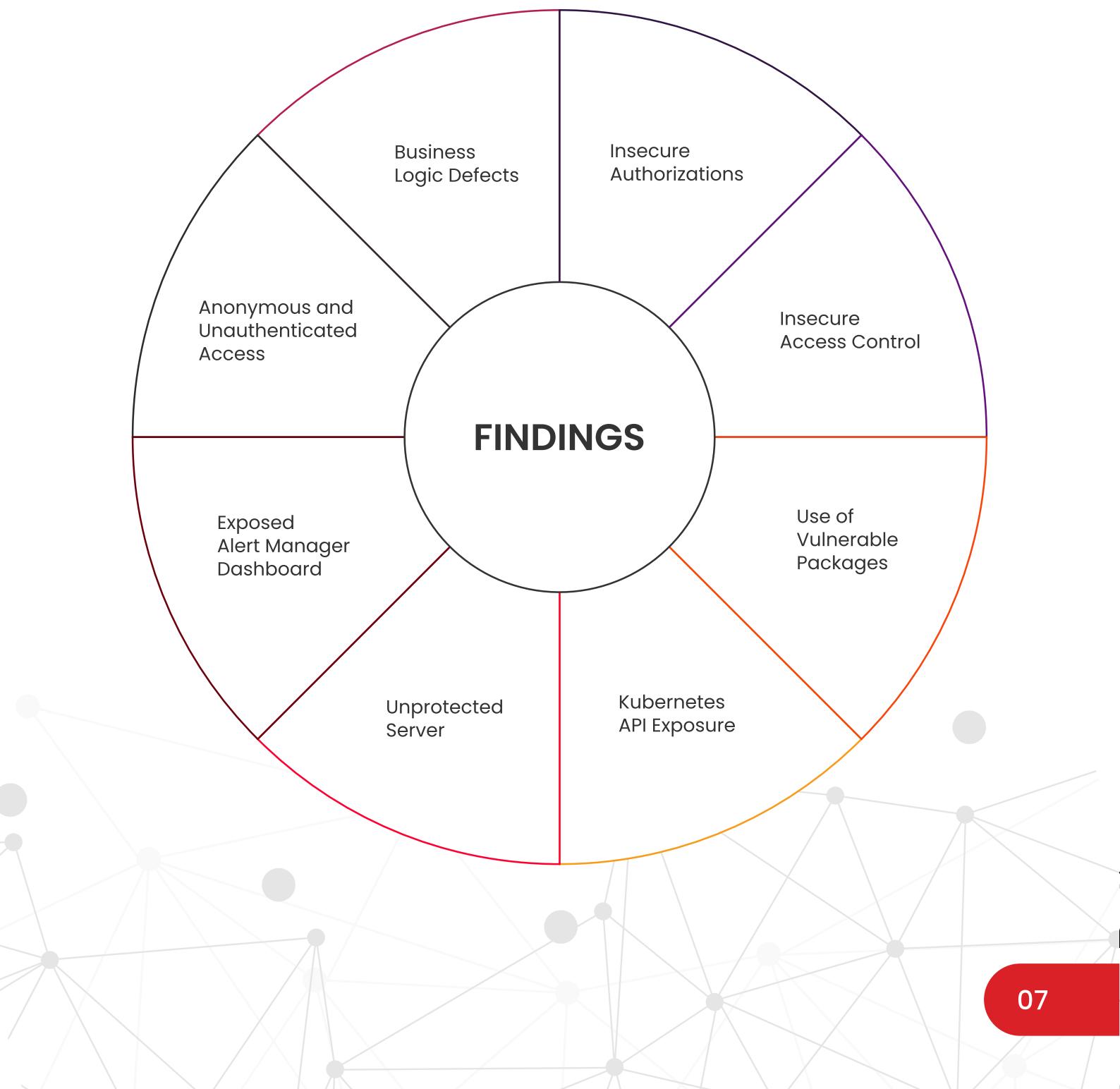
VULNERABILITY DISTRIBUTION BY SEVERITY



Findings

Our findings were based on several assessments and their analysis to identify the actual security posture of the platform, before rolling it out to the general public.

It was critical for us to identify all the existing and possible vulnerabilities to help our client secure the platform and maintain the goodwill of their brand name.



Our Recommendations

Utilizing our vast experience and expertise in the cybersecurity sector, we were able to make certain actionable recommendations that would help our client in safeguarding their assets and critical information.

- To implement proper authentication to the applications even if the access is through VPN.
- To perform red team assessments for their entire infrastructure.
- To conduct periodic evaluations of their cloud infrastructure.
- Subnet testing for Large networks.
- To provide the developers with secure coding training to enhance their secure coding practice.



The Takeaway

With the help of our expertise and on-time service, India's Leading Digital Conglomerate was aware of its security loopholes and was intrigued to make its security posture robust.

Our recommendation, professionalism, and on-time service helped the top management understand the criticality in their code and gave them enough time to work on it before the launch.

Our Bandits, Our Pride

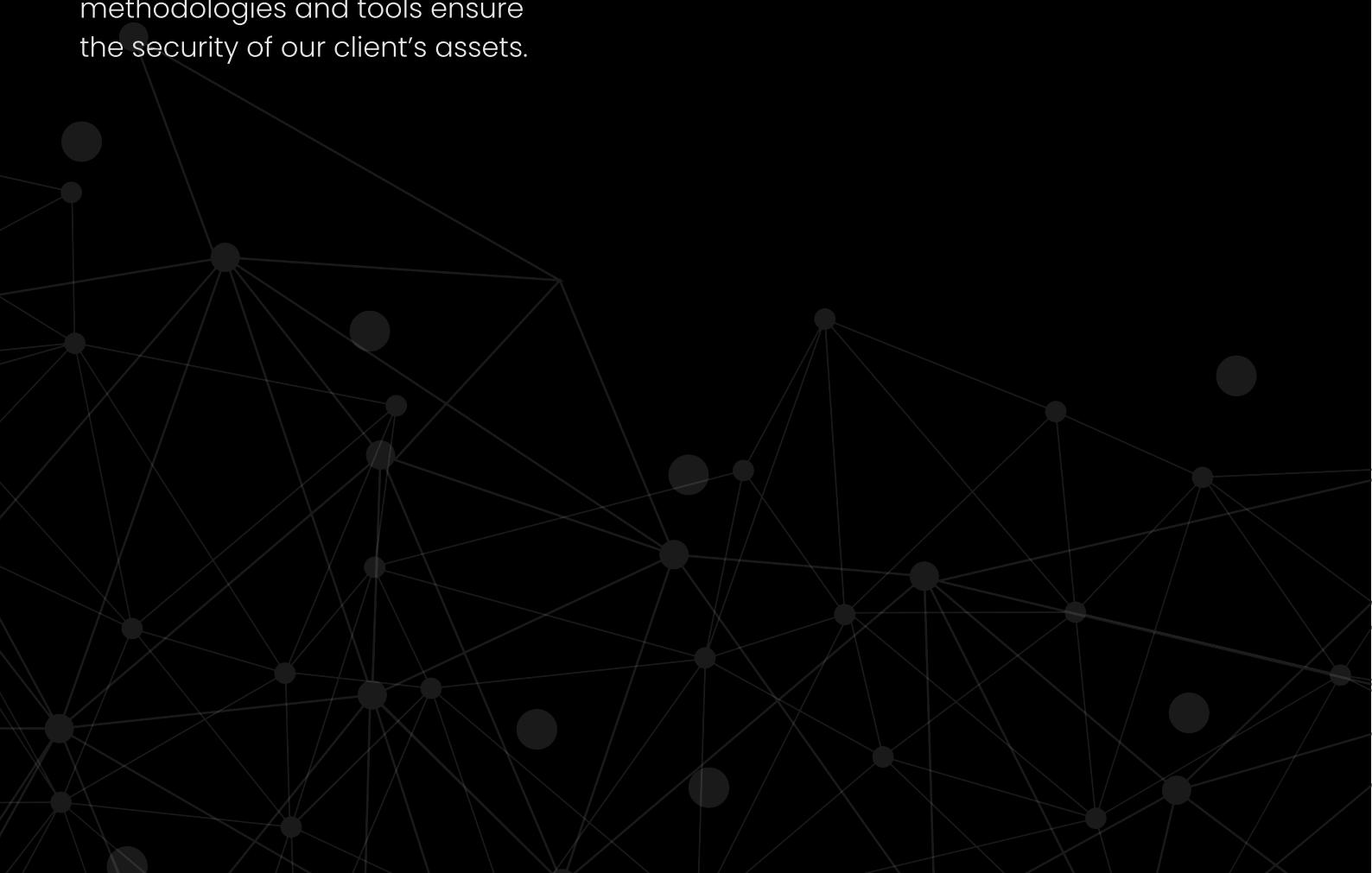
At Payatu, we believe in following one's passion. With that thought, we have created a world-class team of researchers and executors who are willing to go above and beyond to provide best-in-class security services. We are a passionate bunch of folks working on the latest cutting-edge security technology - **Known as Bandits**

- Tech-led Security Services
- Vibrant Skillset
- Proven Security Analysis Techniques
- Community Outreach
- Research-based Intelligence
- Lean Organization
- Flexible Team

About Payatu

Payatu is a Research-powered cybersecurity services and training company specialized in IoT, Embedded Web, Mobile, Cloud, & Infrastructure security assessments with a proven track record of securing software, hardware and infrastructure for customers across 20+ countries.

Our deep technical security training and state-of-the-art research methodologies and tools ensure the security of our client's assets.



At Payatu, we believe in following one's passion, and with that thought, we have created a world-class team of researchers and executors who are willing to go above and beyond to provide best-in-class security services. We are a passionate bunch of folks working on the latest and cutting-edge security technology.