

# SECURITY IN FINE FINITECH

Security forms the foundation of the financial services industry

#### Why security in FinTech?

One side is the cautious, steady moving world of banks and financial institutions while the other is the dynamic, entrepreneurial environment of software and technology companies which are moving into the fintech space.

Aside from convenience, keeping customer information secure is the biggest responsibility of all fintech companies.



# 1 ABOUT

The Australia-based client develops applications and software for banks to make their internal processes easier and faster.

We were approached to help secure an application that analyses and integrates bank statements; and makes them retrievable instantaneously.

## 2 THE CHALLENGE

Client was in talks with the largest bank in Australia to get their application implemented for the bank's processes.

The bank adheres to extremely strict standards when it comes to security and compliance.

Client was asked to obtain ISO 27001 certification and strengthen their framework of policies and procedures involved in security management processes.

The framework, once updated was to be thoroughly examined by the bank before the application was deployed.



## 3 QUICK OVERVIEW



16
policies revised and implemented



processes made smoother and safer



vulnerabilities found after two consecutive penetration tests



50,000

lines of documentation analysed and improvised



ISO 27001

ready in 45 days. Tests completed in 15.

## 4 METHODOLOGY

We follow a complex and systematic approach that addresses all elements of cybersecurity, which helps organisations be better equipped and educated to battle the full spectrum of future attacks.



#### **SECURITY CULTURE ADOPTION**

Implementation of a comprehensive information security policy.

A formal review to identify vulnerabilities and assess risks, with tests conducted once a year and whenever the environment changes.

#### APPLICATION SECURITY TESTING

Year long real time cyber attacks to strengthen the apps. The following are performed proactively on a regular basis:

- MAST/WAST
- API Security Tests
- Cloud Security Tests
- Code Reviews





#### **POLICY & PROCESS**

Creation and development of security processes and policies. Build secure code with best practices in data security.

Information security practices that comply with or exceed latest standards.

#### **COMPLIANCE**

Network components, processes, and custom software are tested on a regular basis to ensure that cybersecurity measures are still effective, especially after deploying new software or making changes to the system's configuration. Through network of compliance partners, we provide required assistance to obtain the compliance/certification.



## 5 POLICIES & PROCESSES



Anti-virus Policy

Backup Policy

Email Policy

Firewall Policy

Infra Details

Internet Usage Policy

ISMS Do's and Don'ts

Laptop Policy

Password Policy

PDA Policy

Router Policy

Server Policy

Server Security Policy

Software Usage Policy

VPN Policy

Privacy Policy

Access Control Process

Business Continuity Process

Change Management Process

Client Management Process

Communication Operative Information Process

Compliance Control Process

Environmental Provision Process

Incident Management Process

IT Asset Management

Patch Management Process

Physical Environmental Process

Risk Management Process

Secure Coding Process

Service Levels and Support

## **6 EXCLUSIVE TESTS**

"Program testing can be used to show the presence of bugs, but never to show their absence." - Dijkstra (1970)

At times we operate outside our normal course of action to identify vulnerabilities that may not be visible after performing the usual tests.

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#### **DDoS Attack**



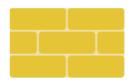


We launched a real time, small scale DDoS attack to check the resilience of the existing DDoS evasive configurations.

#### **Web Application Firewall Testing**

Client had configured a third party web application firewall which needed to be thoroughly tested for external stress.







#### Reviewing the load balancer

Hand in hand with DDoS tests, load tests were performed to validate the cloud configurations.

#### **Cloud infrastructure assessment**

OSSTMM and AWS cloud best practices were tested to ensure that compliance needs were met.





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