

# PCI-DSS Adherent – Cloud Platform for Modern Applications and Products



#WeAreTPIT



# About our Team

Our team is a dynamic ensemble of industry leaders, each possessing a distinct skill set and unparalleled expertise in their respective domains. Our collaborative efforts bring forth a formidable force that delivers innovative solutions and unleashes the true potential of modern applications in today's fast-evolving digital landscape.

**Solution Architects:** Our Solution Architects are the visionary pioneers who craft the blueprint for success. With an acute understanding of your business objectives, they design comprehensive, scalable, and adaptable architectures that align seamlessly with your organization's goals. Their strategic thinking and technical acumen ensure that every solution is tailor-made for your unique challenges.

**DevOps Engineers:** In an era where speed, reliability, and agility reign supreme, our DevOps Engineers orchestrate the symphony of development and operations. They are the maestros behind continuous integration, delivery, and deployment, ensuring that your applications are developed, tested, and deployed efficiently. Their expertise in automation, containerization, and infrastructure-as-code accelerates your time-to-market while maintaining impeccable quality.

**Security Professionals:** Safeguarding your digital assets is paramount, and our Security Professionals are the vigilant guardians of your data. With a comprehensive understanding of modern threat landscapes, they implement robust security measures that shield your applications from vulnerabilities and breaches. Their meticulous approach ensures compliance with industry standards and regulations, granting you peace of mind in an increasingly interconnected world.

**Support and Operations Experts:** Our dedicated Support and Operations team is the backbone of your application's ongoing success. With their round-the-clock vigilance, they ensure that your systems run smoothly, addressing any issues promptly and minimizing downtime. Their proactive approach to monitoring and maintenance guarantees a seamless user experience, allowing you to focus on your core business while we handle the technical intricacies.

## **Embracing Complexity:**

We thrive on challenges that push the boundaries of innovation. Complex requirements are our playground, where we combine our technical mastery with creative problem-solving to engineer solutions that exceed expectations. Whether it's microservices architecture, real-time data processing, or seamless multi-platform integration, we relish the opportunity to transform complexity into competitive advantage.

At the heart of our team lies a shared commitment to excellence. We are not just technology experts; we are strategic partners invested in your success. Collaborate with us to harness the power of the cloud, drive your modern applications forward, and elevate your organization to new heights of digital achievement.

# Objective

In the ever-evolving landscape of business, small to medium enterprises (SMEs) seek to leverage modern application development approaches, like microservices and cloud computing, to enhance their competitive edge. These approaches offer agility, scalability, and efficiency, allowing SMEs to rapidly innovate and respond to market demands.

However, amidst this technological transformation, SMEs encounter significant challenges when navigating the intricate world of Payment Card Industry Data Security Standard (PCI DSS) compliance. PCI DSS compliance is crucial for businesses that process, store, or transmit credit card information, ensuring the protection of sensitive customer data.

The problem arises when SMEs, eager to harness the benefits of modern application development, must reconcile the demands of PCI compliance with the agility and complexity of microservices and cloud technologies.



# Key Challenges

Key challenges include:

**1.Data Security in Microservices:** Microservices architecture, while enhancing application scalability and maintenance, introduces complexities in securing data across distributed components. Ensuring that each microservice adheres to PCI data protection mandates can lead to fragmentation of security protocols and potential vulnerabilities.

**2.Dynamic Cloud Environments:** Cloud platforms provide dynamic scalability and cost-efficiency, but the ever-changing cloud landscape poses challenges in maintaining consistent security controls and configurations, often leading to gaps in compliance.

**3.Continuous Deployment and Compliance:** The essence of modern application development lies in continuous deployment and rapid iterations. However, ensuring that each iteration complies with PCI standards demands a careful orchestration of security measures throughout the development lifecycle.

**4.Third-Party Integrations:** Many SMEs rely on third-party services and components, which can introduce security risks and complicate PCI compliance efforts. Ensuring that these integrations adhere to the same high security standards is a significant concern.

In essence, the challenge lies in harmonizing the dynamic nature of modern application development with the rigid requirements of PCI DSS compliance.

Our workshop and Implementation will help in Addressing these challenges which demands a comprehensive approach that combines technical expertise, robust security practices, and a deep understanding of both modern application development principles and PCI compliance mandates according to **PCI v3.2.1:2018 version**.



# Our Services



WORKSHOP



DESIGN  
AND STRATEGY



IMPLEMENTATION

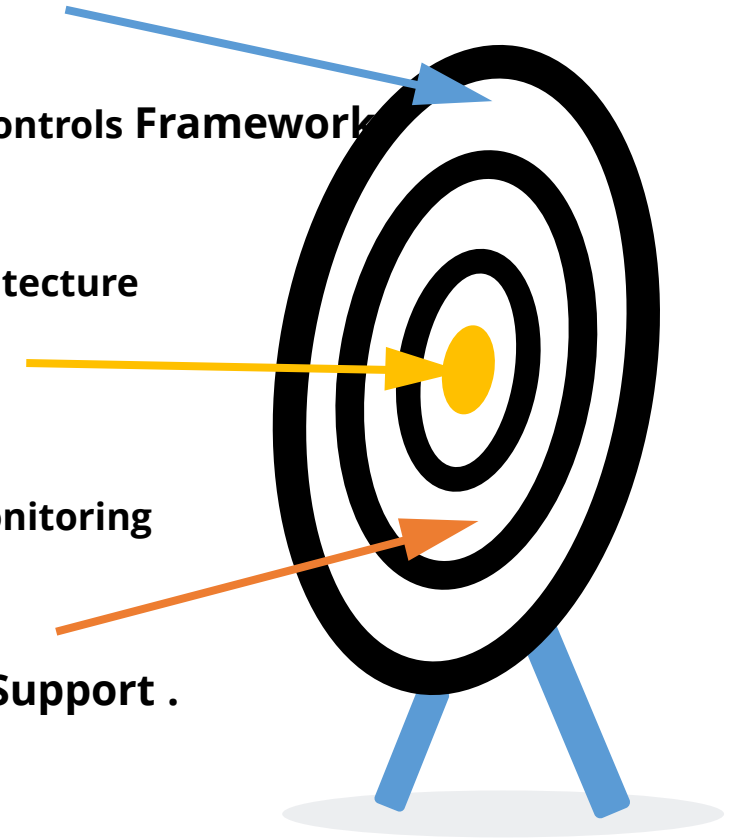


Support

# Workshop Goals



- 01** Robust Cloud Infrastructure Implementation using Infrastructure as Code Approach
- 02** Comprehensive Security and Controls Framework
- 03** Microservices , Kubernetes Architecture Guidance
- 04** Devops Culture , Automation and Automated Compliance Monitoring /Auditing
- 05** Adoption of Best Practices , Support .



## Disclaimer

- The reference architecture and implementation workshop only encompasses Guidance Workshop to better architect a landing zone to accommodate Modern applications / Microservice Products to be hosted on Cloud
- We provide a comprehensive Infrastructure as a Code solution and regulatory compliance / policy framework which is **NOT** audited by any official authority.
- The Intent of this workshop and Implementation is to provide design guidance for Small to Medium Enterprises (SME's) to swiftly scale.
- **In essence , the objective of this workshop and implementation is to abridge the gap in harmonizing the dynamic nature of modern application development with the rigid requirements of PCI DSS compliance.**
- Completing this series and deploying the code assets, you do not clear audit for PCI DSS.
- All / Any regulatory compliance attestations to be individually procured from authorized third-party auditor by Clients themselves and Teleperformance team will take no part in any such further discussions.

# Timeline Overview –Basic Plan

Scope and Planning	Design	Implementation	Documentation and Handover
Define the scope , requirements , Key considerations	Based on agreed Scope , design cloud footprint for Microservices	Create repository , IaC Terraform Code and Pipeline for the implementation . Deploy Infrastructure using IaC templates .	Provide KT over the deployment pipelines , maintenance guidelines , support and documentation . Process Handover .
PHASE A	PHASE B	PHASE C	PHASE D



## Solution Insights details

### **Phase A:** ( Expected Timeline for Basic Plan – 1 Week )

- Workshop on the Basic plan offering
- identifying requirements, define scope , Plan Identification according to client needs , Enhancement Considerations , Product design requisites.
- Discussion on Client expectations on enhancements , assessment of feasibility for such enhancements , customization

### **Phase B:** ( Expected Timeline for Basic Plan – 1 Week )

- Design of base Landing Zone structure according to product requirements (Management structure , Governance Model ,Network Segmentation , Identity and Access Controls , Data protection , malware detection etc) .
- Architectural guidance on leveraging Cloud Native services instead of third party services which will provide high resilience.
- Compliance controls , detection mode , policy framework inclusion, Web Application Firewall –Owasp ruleset configuration discussion.
- AKS Cluster Design and Configuration considerations .

### **Phase C:** ( Expected Timeline for Basic Plan – 1 1/2 Week )

- Implementation of repository creation , Infrastructure as code template modification, Continuous deployment pipeline creation , Azure Devops project creation ,Base infrastructure setup , AKS Cluster deployment ,cluster configuration , Compliance controls deployment .
- Infrastructure deployment and thorough validation .

### **Phase D:** ( Expected Timeline for Basic Plan – 3-4 days )

- Documentation and Knowledge transfer of the deployed IaC Code and further process for handover .

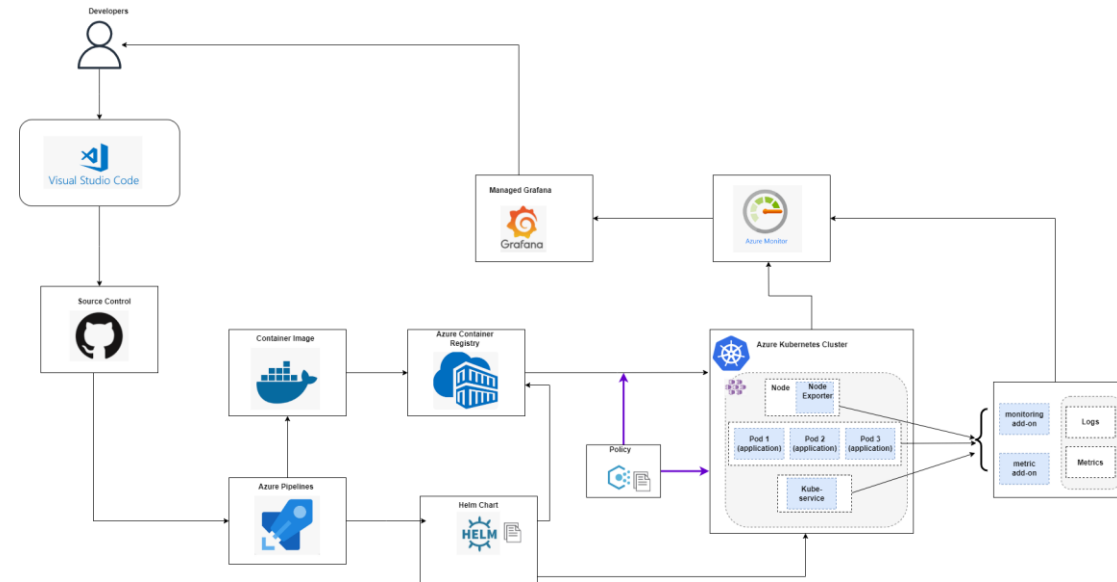
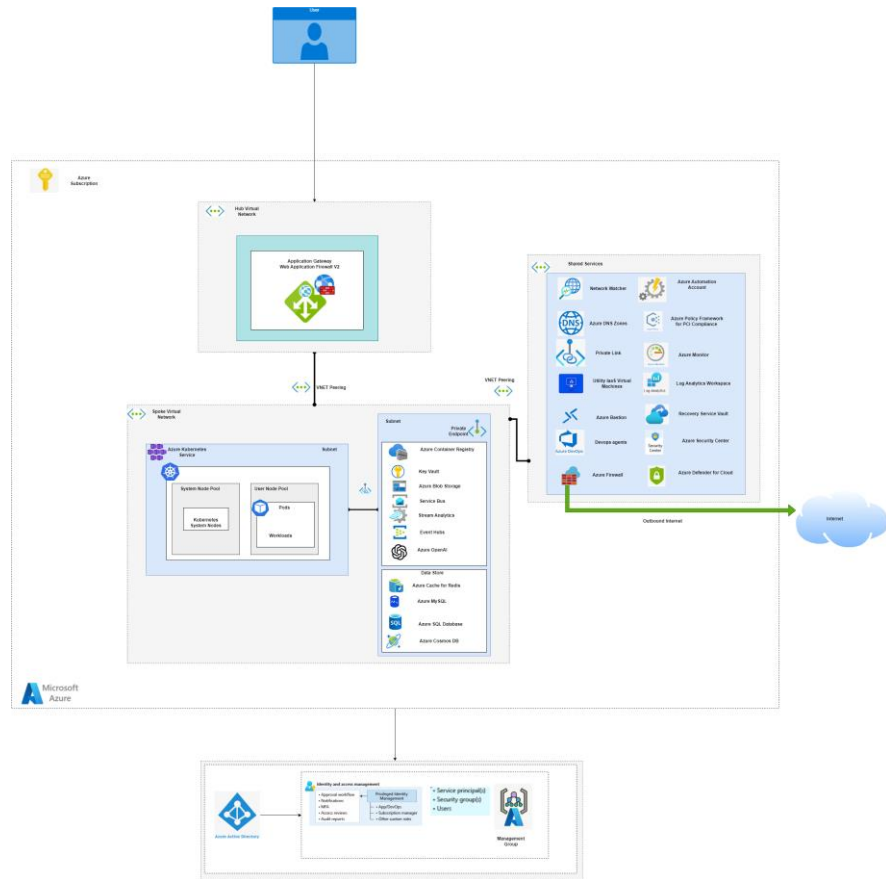
## Basic

- Workshop on identifying requirements, define scope
- Deployment using Infrastructure as Code approach and Deployment Pipelines
- Design Cloud foot print with appropriate network isolation
- Leverage all cloud native services , tools and technologies including network devices
- Applicable for Day 1 Cloud Journey and new Cloud Foot Print
- Default Network controls to be provided with the templates for the approved RFC ranges
- Default Policy framework to be included
- Compliance Control leverages Built-in policies and manual remediations

## Premium

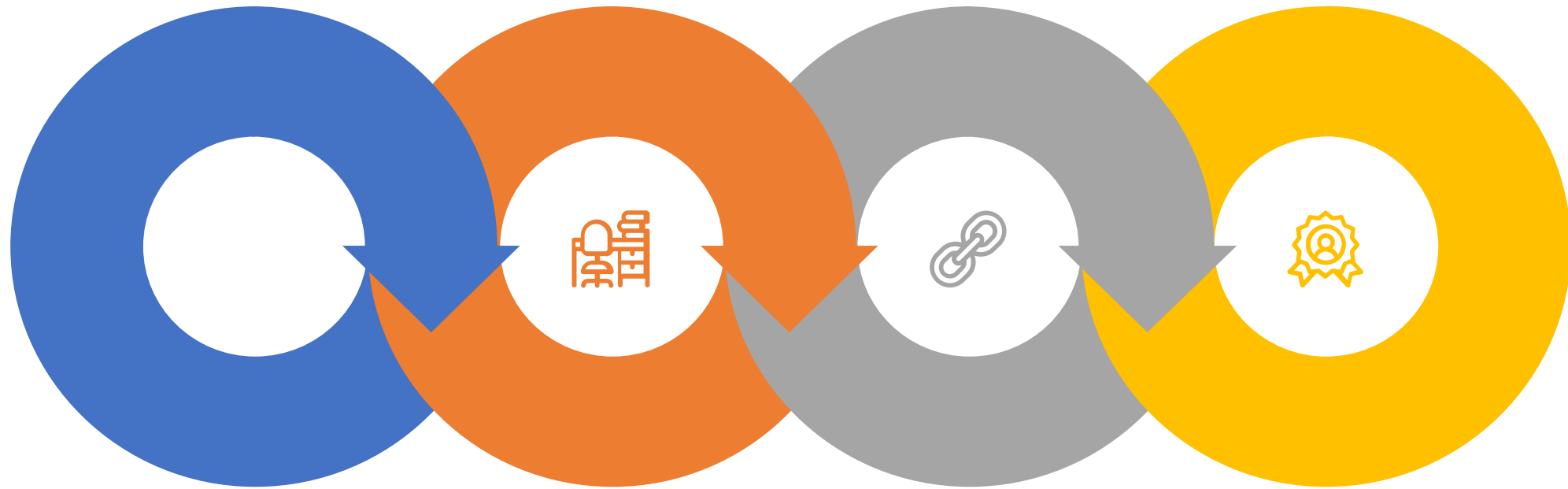
- Workshop on identifying requirements including third party service integrations , define scope , network reconciliation guidance
- Deployment using Infrastructure as Code approach and Deployment Pipelines , Source Control . Optional features such as selection of Deployment strategy (Blue-Green , Canary etc)
- Design Cloud Foot print and additional support on on-premise / Multi-Cloud connectivity setup .
- Leverage all cloud native services and feasibility to include third party services as applicable based on detailed consulting considerations.
- Applicable for any phase during the Cloud Journey
- Feasible of customization in policy framework and automated compliance remediation

# Basic Plan- Design



# Premium Plan Advantages

Inspired to be *the best*<sup>™</sup> |  **Teleperformance**



## Consulting Service

Premium Consulting service which enables clients to deep dive into achieving Compliance adherence

## Architecture Guidance

Deep dive into Network segmentation, Best practices customized policy framework and solutions , Architecture guidance on third party service adoptions

## Data Protection and Compliance

Tailor made compliance and auto remediation controls for modern applications

## Support

Quintessential support and maintenance provided

# Thankyou!