Forth Coffee Corporation

Microsoft Cloud Adoption Plan

September 27, 2022

Executive Summary

According to on-premises datacenter reaches 2 limitations in supporting our business requirement:

- **Capacity limit**

  Currently our datacenter resources utilization is around 80% and cannot extend its capacity. But business planned to increase number of stores from 5,000 stores (in 2022) to 10,000 (stores in 2023). Additionally, store management department estimated number of stores in 2028 as 100,000 stores.

  By these reasons our infrastructure cannot support all 10,000 stores next year. And 100,000 stores in 2028.

- **Contacts limit**

  Maintenance agreement and rental contact for on-premises datacenter will terminated in 2026. And cost to renew the rental contacts and purchasing new hardware are very high, comparing with moving to Microsoft Azure.

Why Microsoft Azure ?

- Microsoft Azure is a cost-effective solution to support all stores and provide high available for company infrastructure. Including infrastructure in Azure can scaled to support 100,000 stores in 2028
- Our IT staffs was trained for Microsoft Azure and got certificate for Microsoft Azure in several roles e.g. Developer, Architecture and Security. They ready to managed Microsoft Azure very well.

Time Frame

Information Technology department planned to move all on-premises data center to Microsoft Azure within 4 years as descript below:

- Year 2023 – Extend store supports application and infrastructure to Microsoft Azure in hybrid cloud scenario.
- Year 2024 – Extend all corporate infrastructure including accounting, marketing, R&D, department to Microsoft Azure.
- Year 2025 – Move all infrastructure, applications to Microsoft Azure
- Year 2026 – Decommunizing on-premises datacenter due to contact end

Define Strategy

Motivations and drivers

Due to critical business that our datacenter contacts will end in 2026. It's requiring that our company need to move all resources to a new location. However, we need to move to cloud architecture to support our requirements:

- Reduce cost to purchase new hardware, software including electrical cost.
- Reduce administrative effort in managing on-premises datacenter, Our business requirement focused on PaaS solution in Microsoft Azure.
- Provide higher SLA (Service Level Agreement) infrastructure as below:
    - Business critical application e.g., store management system, including online ordering system and payment. should be available at least 99.99%
    - Internal application e.g., Human Resource (HR) System should be available at least 99.9%

Business outcomes

What are the expected business outcomes from adopting the cloud? Collect them in the corresponding table below, organized by priority.

High Priority

Stakeholder:	Customer Store Manager, Staffs	Outcome:	Customer satisfaction Increase revenue

Business Drivers	KPI	Capabilities
• Number of stores are increasing very rapidly. • Number of customers visit each store are increasing	• Store management system available at least 99.99% • Each transaction should be completed within 20 seconds	• Store management system can scale to support number of stores and number of customers increasing in each store.

Mid Priority

Stakeholder:	HR Department	Outcome:	Efficiency of time attendance and salary calculation is finished as expected.

Business Drivers	KPI	Capabilities
• Number of staffs in each store are increasing to support number of stores.	• Staff salary should be process and payment finished onetime	• Time attendance report for each staff is processed corrected and finished

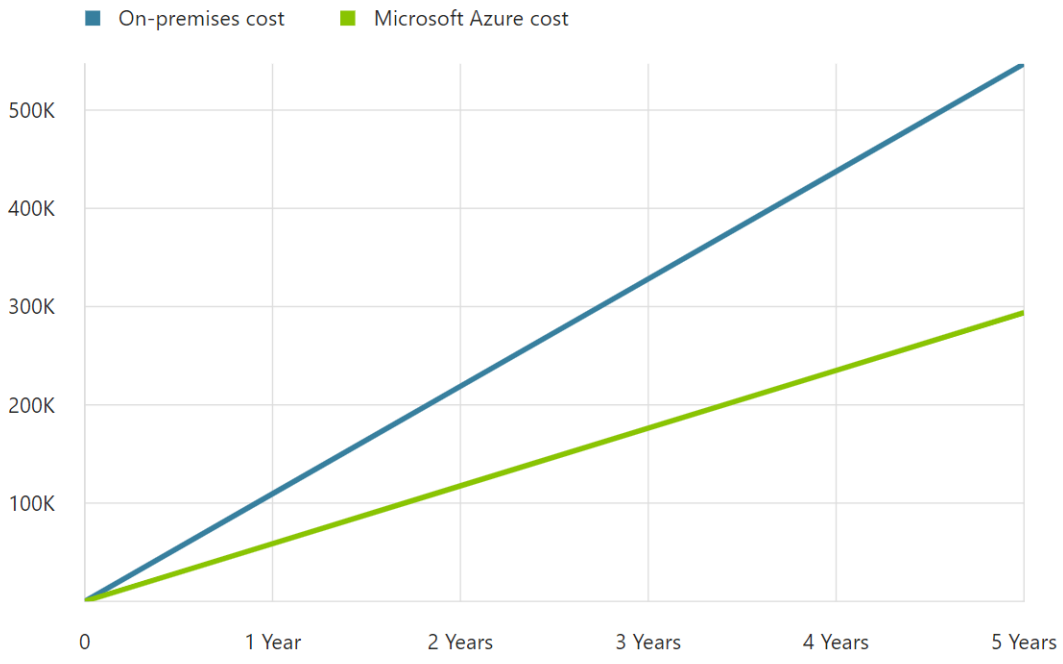
Low Priority

Stakeholder:	Front line Staffs	Outcome:	Faster Internet access

Business Drivers	KPI	Capabilities
• Staffs in some stores complain that internet access are slow and advertisement media cannot be played.	Internet access in each store should fast enough to playback advertisement media	• Increase bandwidth of internet to support advertisement media.

Business justification

Total Cost of Ownership (TCO) was calculated to compared on-premise and Microsoft Azure cost in the next 5 years. The TCO state that Microsoft Azure can safe cost $253,293 as shown in the picture below:



First adoption project – Extended Store Management System to Microsoft Azure.

In 2023, the 1st year of the cloud adoption to Microsoft Azure. Our first adoption project is to extended capacity of storage management system to Microsoft Azure. This is to reduce cost in purchasing new hardware to support new stores to be launched in 2023.

Major tasks in the project can be descript below:

- Establish express route between on-premises datacenter to Microsoft Azure. Express route provides reliability and security for communication between both network.
- Create a new Virtual machine on Microsoft Azure, And install Store Management System software.
- Configure load balancing hardware to distribute traffic to Azure Virtual Machine
- Monitoring performance of Store Management System.

Project:	Extended Store Management System to Microsoft Azure	Outcome:	Increase number of transactions processed by Store Management System.
Stakeholder:	Store Manager Store staffs	Business Unit:	Store Management Department.

Key stakeholders

Name	Business Unit/Role	Business Outcome Owner (Y/N)	Cloud Strategy Team (Y/N)
Mr. Alex Rin.	Store Management Department / Dept Head	Y	N
Mrs. Anne Oconnor	Store Management Department / Business Analyst	Y	N
Mrs. Rosemary Garrett	Cloud Strategy Department / Risk Assessment	Y	N
Mrs. Cindy Coulson	Cloud Strategy Department / Cloud VM Engineer	N	Y
Mr. Lee Gu	Cloud Strategy Department / Cloud Network Engineer	N	Y
Mr. Brooklyn Eaton	Cloud Strategy Department / Cloud Database Engineer	N	Y

Plan

Digital estate

To extended Store Management System to Microsoft Azure, it requires to implement the following technologies.

Application/Workload	Business Unit	Business Priority (high, mid, low)	Proposed Rationalization
Store Management System	Store Management Department	high	Re-architect
Store Management System Database	Store Management Department	high	Re-architect

Organizational alignment

Our organization prepared staff's capability for extended Store Management System to Microsoft Azure. Staffs mapping for cloud adoption and cloud governance as shown in the table below:.

Name of people responsible for extended Store Management System to Microsoft Azure	
Delivering technical tasks	Implementing cloud governance
Mr. Lee Gu • configuring networking and Express route	**Mrs. Rosemary Garrett** • Responsible in risks management for the project
Mrs. Cindy Coulson • creating Azure VM, and install Store Management System software on the VMs	
Mr. Brooklyn Eaton • Creating Azure SQL Database, and configure the database	

Skills readiness plans

In the project require several roles and skills for each staff. However all staffs was trained and certified shown in the following table.

Course name	Audience (Cloud Architect, IT, Admin, Ops)	Level (100, 200, 300, 400)	Source (MS Learn, Pluralsight, ESI)	Priority (high, mid, low)
Microsoft Cloud Adoption Framework for Azure	Admin, Devs, Cloud Architect, Business User, Cloud Engineer	100	MS Learn	High
Azure Fundamentals	Admin, Devs, Cloud Architect, Business User, Cloud Engineer	100	MS Learn	High
Learn the Business Value of Azure	Business User	100	MS Learn	Mid
Microsoft Certified: Azure Administrator Associate	Cloud VM Engineer, Cloud Network Engineer	200	Training Center A	High
Microsoft Certified: Azure Developer Associate	Cloud Developer	200	Training Center B	High