



IT Audit Bootcamp

Audit Project Overview (Facebook)

HELPING YOU TO GET THAT JOB

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Project Period	May 7 th – 12 th , 2023.

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AUDIT BOOT INSTRUCTIONS



- Effective Communication/Collaboration – Be a Good Team Player
- Team Lead – Expected to Facilitate and drive the conversation
- Avoid disrespecting your peers. (open)
- Work with people available - don't chase after people.
- Always appreciate your team's effort - don't disregard any team members effort no matter how small.
- Always mute your audio/ video - only unmute audio if you intend to speak.
- Be time conscious to assigned deliverables.
- Always ask questions or you will be asked.
- Master the Three scrum questions – 1. What did you do yesterday, 2. what are you working on today & 3. are there any Blockers/challenges

Audit Bootcamp – One Week

- **Case study** - Build a scenario on the recent incident on Facebook
- **ITGC controls** – Access Provisioning, Segregation of Duties, Backup/Recovery and Incident Response
- **Develop a Detailed scoping plan** - Uche
- **Project Task & Deliverables**- Task Assignment
- **Project Lead** to create team A & B - Uche
- **Timeline/Logistics**- Half sprint (Agile Audit)
- **Final project presentation**- Present to the Clients/ Stakeholders





Case Study



Introduction

This case study is mainly focused on analyzing the Facebook outage which occurred on the 4th of October 2021, due to a routine maintenance job, a command was issued with the intention to assess the availability of global backbone capacity, which unintentionally took down all the connections within our backbone network, effectively disconnecting Facebook data centers globally. The stakeholders did an analysis to determine the critical areas affected by the incident.



Case Study

Facebook's systems are designed to audit commands like these to prevent mistakes like this, but a bug in that audit tool prevented it from properly stopping the command. This change caused a complete disconnection of our server connections between our data centers and the internet. And that total loss of connection caused a second issue that made things worse.

UOT Consulting was brought in to test key IT General controls that should protect the organization from such incidents. A test of design and operating effectiveness will be performed on the key ITGCs, and a report of any findings, process improvements and recommendations will be provided to relevant stakeholders within the organization.

<https://engineering.fb.com/2021/10/05/networking-traffic/outage-details/>



Information Technology General Controls Audit

April 2023

IT Audit Team – A & B

Executive Summary

Facebook experienced an outage that ...

Objective and Scope

The objective of the audit was to evaluate the design and operational effectiveness of IT general computer controls (ITGCs) audits to determine if the controls effectively support the confidentiality, integrity, and availability of information systems.

The Scope of the audit was the systems and applications that impacted by the outage

Conclusion

We use the results of the ITGC audit to inform the organization on recommendations to remediate identified findings, and areas of improvements to prevent another incident in the future.

In Scope – IT General Controls

The IT General controls listed below were identified from the case study as the most critical to Facebook's operations:

Logical
Access

- Access Provisioning

Change
Management

- Segregation of Duties

Computer
Operations

- Backup and Recovery

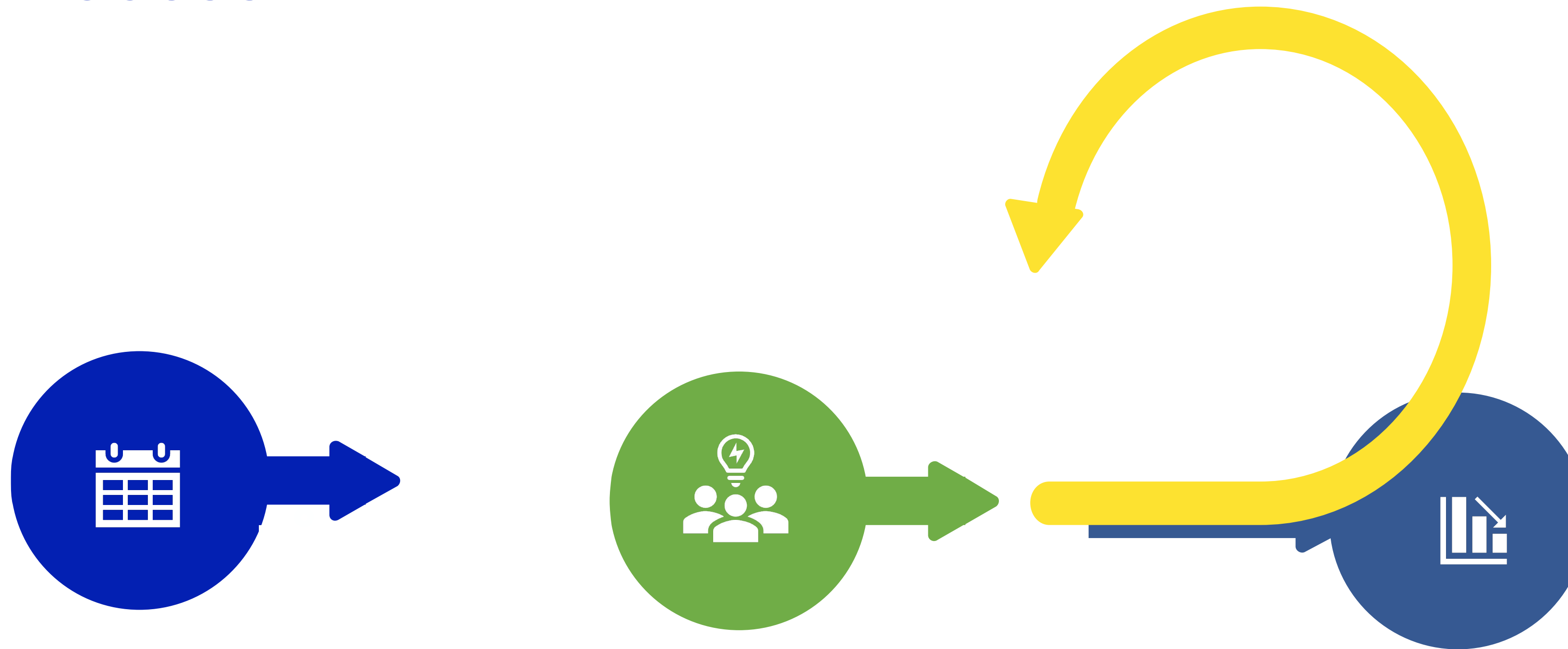
Incident
Management

- Incident Response

Purpose

This document provides a high-level summary of all the task deliverables required for an Agile Audit project. The Audit team needs to partner with the business team & key stakeholders to ensure that a more sustainable Audit process is applied in ensuring each finding is properly addressed & managed, this will enable the project team in reporting to management & making sustainable decisions towards each finding's continuous improvement. This ensures an Agile, on-time, repeatable & thorough Audit process and enables a two-way communication and transparent relationship with the different stakeholders.

Audit Process



Planning

- Initial engagement, control in scope, tools (Cloud & Jira etc.), Framework- (FFIEC & NIST), Detailed scoping plan, Engagement letter, RCM, Audit plan/program, Audit request list, Test matrix & kick off terms

Fieldwork

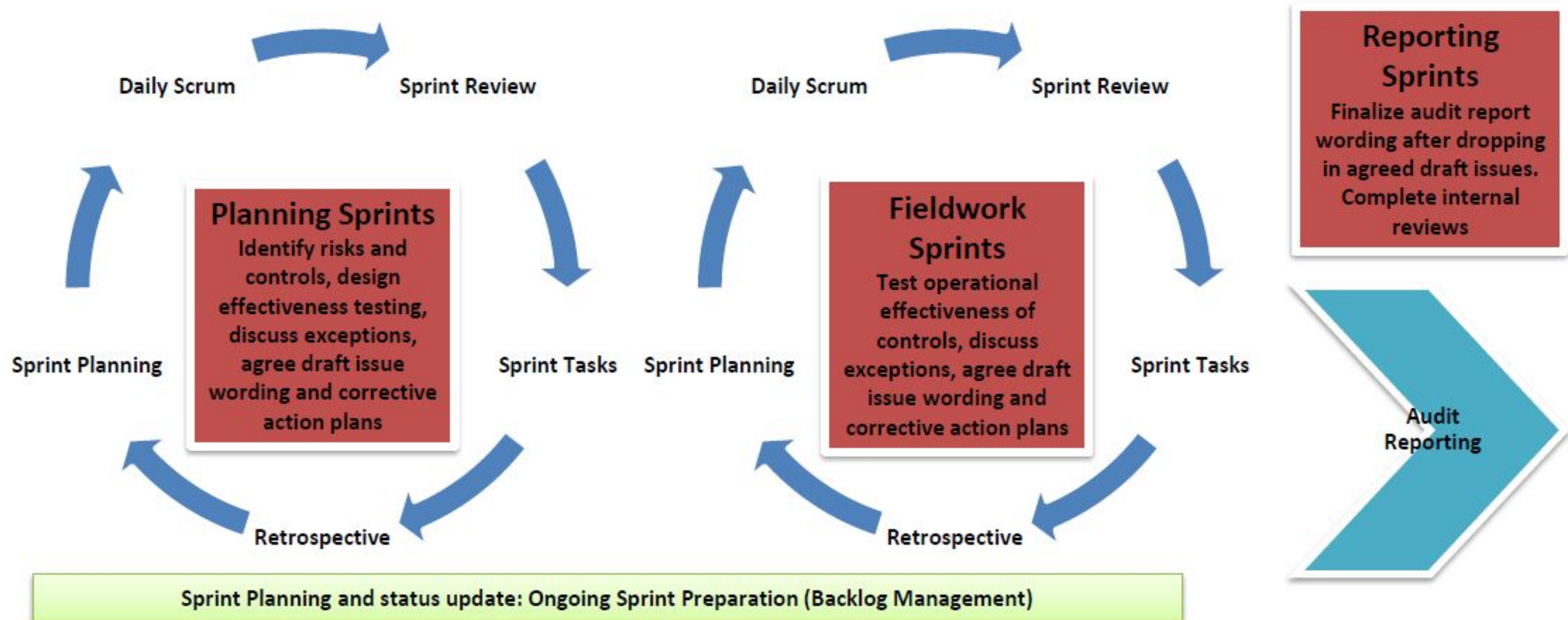
- Perform Walkthrough with control owners (Test of one sample)

Reporting

- Produce Draft report & review with the business.
- Publish final report
- Exit meeting

Facebook Adopted An Agile Auditing Approach

Agile Auditing Flexibility



Aims & Objectives

- To ensure a successful Agile Audit process
- Risk identification & mitigation
- Continuous improvement/sustainability
- Business growth & development
- Regulatory compliance
- Security purposes.
- Align with IT governance structure



Task Deliverables/Expectation

Summary of Task by %

Project Team

Audit Team

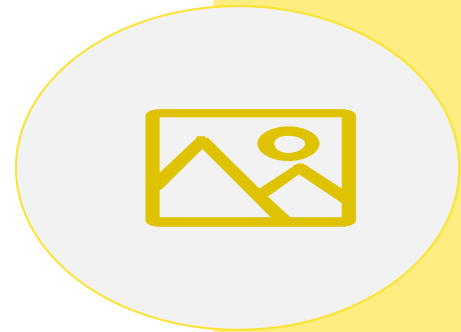
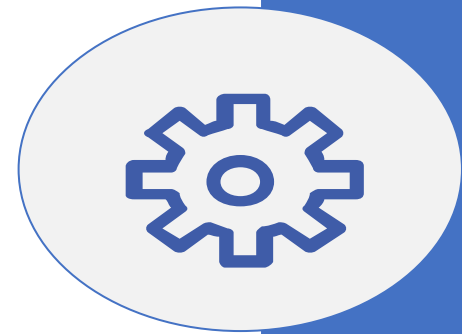
Audit Team

- Organize Daily stand-ups
 - Set up kick off meeting.
 - Overall compliance\KPI/KRI.
 - Select team leads for Team A&B, Jira Board.
 - Appoint control owners & select assistant.
 - Manage timeline, escalations & General coordination.
 - Determine Framework/Tools in scope
- Create status tracker (Gantt Chart)
 - Respond to emails and inquiries, assist with walkthrough question, evidence gathering,
 - Coordination of internal needs, organize work sessions, meeting rooms arrangement, provide information, escalations, RCA control owners' availability
 - Review Scope and Aims & objective
 - Document Audit issue, remediation plan, lessons learnt.
- Create RCM (Risk Control Matrix),
 - Create engagement letter, Test matrix, walkthrough, review policies & procedures, PBC, Audit plan & program, create set questions for control owners,
 - Prepare Audit report.

Findings

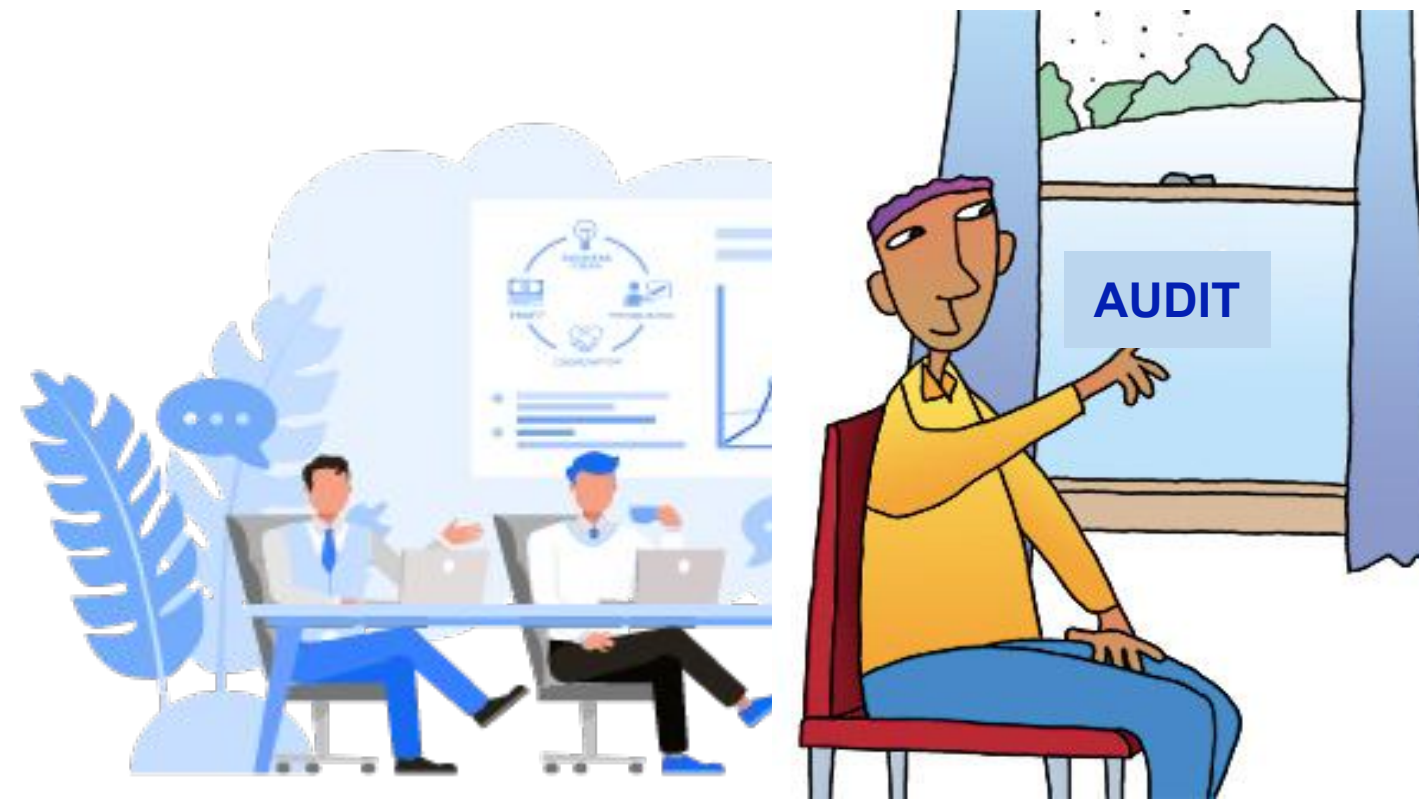
Control Number	ITGC area	Control Name	Summary of Finding	Recommendations with Timeline
IT.01	Logical Access	Access Provisioning		
IT.09	Change Management	Segregation of Duties		
IT.12	Computer Operations	Backup and Recovery		
IT.15	Incident Management	Incident Response		

Conclusion



Lessons Learned

This summarizes the key relevant take lessons from the Audit project and areas that can improve subsequent project deliverables more effectively.



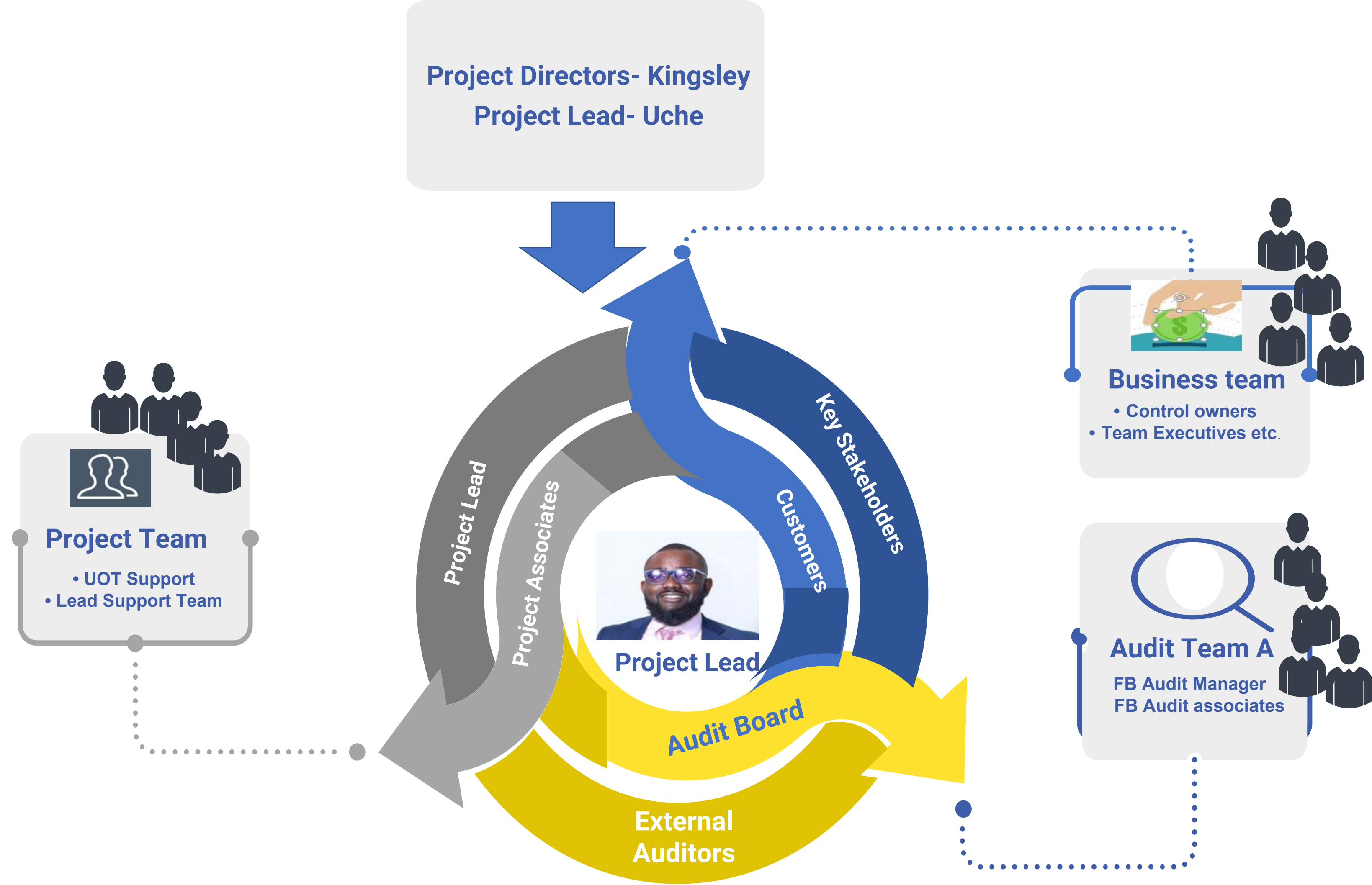
Generic lessons learnt are as follows:

- Business Resilience
- Operating effectiveness
- Process documentation
- Control development
- Testing & assessment
- Cyber Reporting metrics
- Risk management Regulatory compliance

Appendix

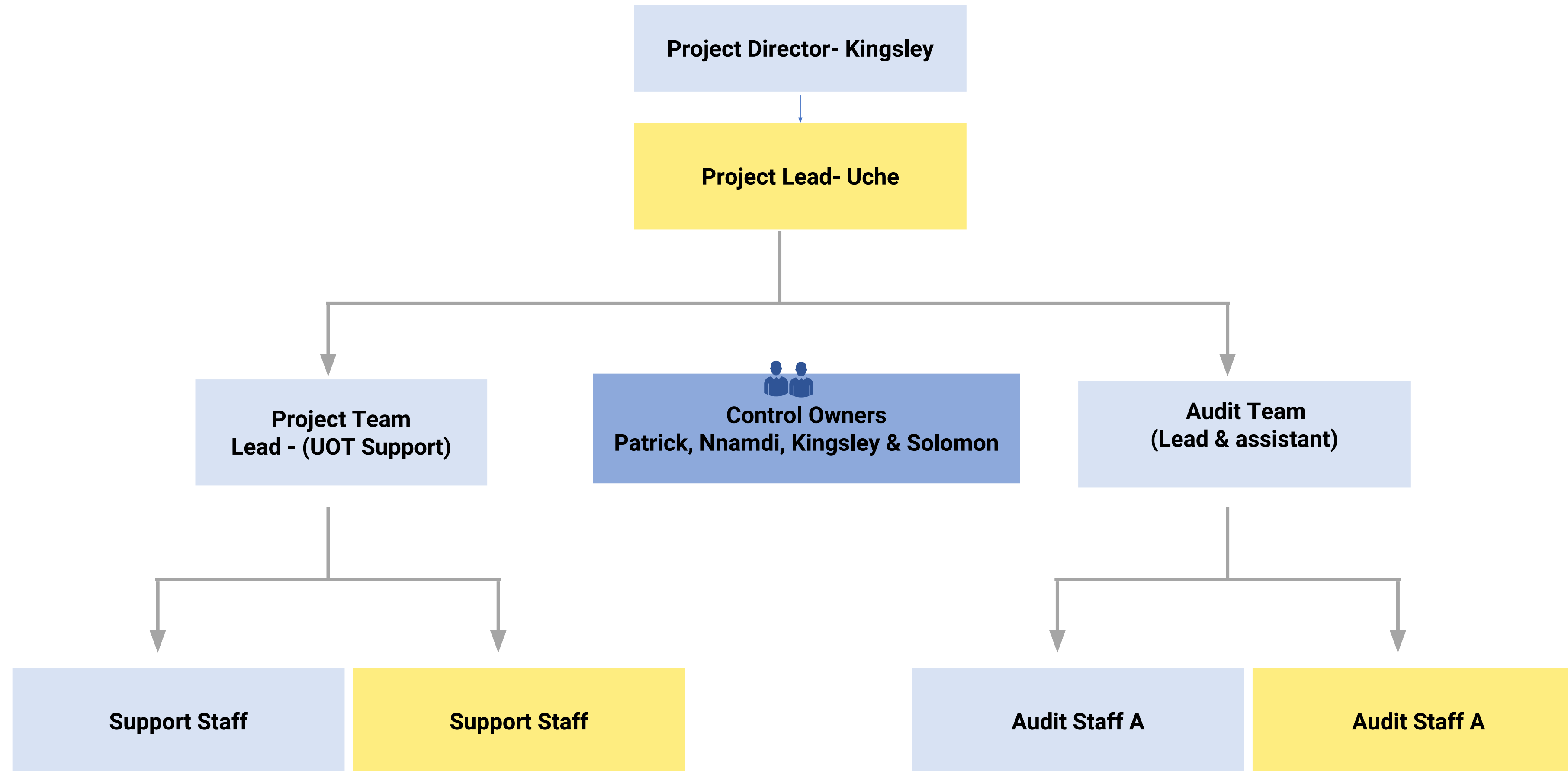
Organizational Chart

(Enterprise level)




Organizational Chart

(Business level)



Timeline & Logistics

This Audit project will apply an Agile Auditing approach which will last for a total period of two weeks of Planning & Fieldwork & reporting (**May 7th – 12th, 2023.**). The project lead will determine daily standup schedule. set and manage task responsibilities and expectation using Jira.

Sun- May 7 th	Mon 8th May	Tues 9th May	Wed 10th- May	Thurs 11th May	Friday 12th May	Sat-Mon May 13th -15th
						
Sprint Planning	Daily Scrum	Daily Scrum	Daily Scrum	Daily Scrum	Daily Scrum	Interview Prep week
3-5.30 PM CST	7-9 PM CST	7-9 PM CST	7-9 PM CST	7-9 PM CST	7-9 PM CST	7-9 PM CST

Friday May 12th : Showcase and Retrospective: Client Presentation- (7-9 PM CST)

IT Audit Bootcamp – Sprint Outline



Daily Scrum: Standups are important and it ensures transparency and team collaboration.

Attendance: Attendance/Participation is important. The key to this is the concept of **SELF ORGANIZING TEAM**.

Duration: 15 Minutes, Occurs Daily, Same Time, Format and Cadence.



Sprint Planning: Occurs on the first day of every sprint and is crucial for alignment on the sprint goals.

Attendance: All Team members. This session will include task assignment, ownership and task prioritization

Duration: 120 Minutes.



Showcase: Presenting the result of your findings to stakeholders.

Attendance: Client, External Stakeholders and Other project Team members

Retrospective: Feedback from the stakeholders/Panel of Experts.



Jira: Jira will be our project management tool. Task assignment, ownership and status will be reported and updated in Jira. This tool will be used as an information radiator for all team members

Roles & Responsibility

<u>Names</u>	<u>Title</u>	<u>Team</u>	<u>Role & Responsibility</u>
Kingsley	Project Director	Project Team	Perform general guidance, oversight & advisory
Uche	Project Lead	Project Team	Auditor in charge of the project
Project Team	UOT support Team	Support Group	Assist the project team in ensuring a smooth Audit project.
Business Team	Business Associates	Business Team	Perform task deliverables for the Business.
Audit Team	Audit Associates	Audit Team	Team responsible for ensuring a smooth Audit project



Comments / Questions?