Solutions Report

**Cluster - Innovation Project Part I - ICT50220   
(All pathways)**

TEAM PROJECT ALUMNI 2024

1. **Executive Summary**

The proposed TAFE Alumni App aims to create a dedicated platform to enhance engagement, networking, and resources among North Metropolitan TAFE WA alumni. This centralised website and mobile app will address the lack of active alumni networking channels by providing tailored features such as mentorship, events, discussion forums, and career opportunities. The anticipated development timeline for this platform is four months.

1. **Overview of the Project**

**Issue/Project Overview**

The current lack of an active alumni platform limits opportunities for North Metropolitan TAFE alumni to connect and collaborate effectively. Existing tools, like LinkedIn, do not cater to the institution's specific needs, such as connecting alumni with current students for mentoring or fostering discipline-specific networking.

**Proposed Solution**

Develop a responsive alumni website and mobile app that addresses these gaps by enabling seamless communication, a secure alumni database, and collaboration opportunities across disciplines.

1. **Business Requirements**

**High-Level Objectives/Use Cases**

* Networking Opportunities: Connect alumni, current students, and lecturers.
* Streamlined Communication: Create a secure, user-friendly communication channel.
* Alumni Engagement: Facilitate mentoring and volunteering opportunities.
* Secure Alumni Database: Maintain accurate and secure alumni records.

**Relation to Strategic Plan**

The app aligns with North Metropolitan TAFE WA’s goal to foster long-term relationships between alumni and current students, enhancing professional opportunities and institutional reputation.

**Existing Systems**

* **Current solutions:** Ad-hoc social media groups like LinkedIn.
* **Available tools:** Graduway, Hivebrite, and Personify provide functionalities but lack tailored integration for TAFE’s requirements.

1. **Gap Analysis**

**Current State vs Desired State**

* Networking: Limited options to connect alumni -> Dedicated platform for effective networking.
* Communication: Fragmented tools -> Unified, secure system.
* Engagement: Minimal alumni involvement -> Active participation through structured features.
* Database: Outdated records -> Centralised and secure database.

1. **Research on Solutions**

**Solution 1: Custom Full-Stack Development**

We will use React and React Native for the frontend, providing a responsive experience for both web and mobile platforms. The backend will be powered by Laravel, featuring a custom Content Management System (CMS) for efficient management of alumni data and content. This tailored solution is scalable and integrates well with existing TAFE systems, enhancing user experience. However, it does involve higher development costs and increased complexity in setup and maintenance.

**Solution 2: Customisable Frameworks**

Utilising frameworks such as Hivebrite or Personify can offer several advantages. One key benefit is the quicker implementation due to their predefined features. However, it's important to consider the disadvantages as well, which include limited customisation options and potential integration challenges with TAFE systems.

1. **Pre-Existing Tools or Solutions**

* Graduway: Ideal for building alumni platforms with strong engagement tools, though its high cost may deter smaller organisations.
* Hivebrite: Provides robust alumni-focused features with good ability to scale, balancing functionality and affordability for mid-sized networks.

1. **Impact Assessment**

Business

Enhanced engagement can strengthen TAFE’s brand and attract prospective students.

Team Implementation Feasibility

Frameworks like Laravel and React are within the team's expertise, ensuring smoother execution.

Project Effectiveness

The custom approach ensures solutions are directly aligned with user needs and institutional goals.

Industry Standards

Adherence to WCAG ensures accessibility compliance and use of secure authentication methods like OAuth2 or JWT aligns with best industry practices.

1. **Conclusion**

We recommend a customized full-stack solution that utilises React/React Native for the frontend and Laravel for the backend. This framework not only provides significant flexibility and customization options but also ensures scalability to accommodate future growth. Additionally, it facilitates seamless integration with existing TAFE systems, thereby enhancing overall efficiency. This proposed solution comprehensively addresses all identified gaps within the current system, ensuring a holistic approach to meeting TAFE's strategic objectives. By leveraging the technical expertise of our team, we can implement a robust system that aligns perfectly with our goals, ultimately driving better outcomes for all stakeholders involved.

1. **Supervisor Sign-Off**

Name:

Date:

Signature:

1. **Evidence of Brainstorming**