Project Stargazer for the Jade Design Lab

Aiding sustainable Digital Transformation with the use of Microsoft SharePoint

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ABSTRACT

With a wide variety of technologies available for the development of software solutions alongside ready-to-use solutions on the market, a digital transformation in modern days should not be challenging. However, for large enterprises with existing Information Technologies ecosystems, firm security policies in place, and specific requirements to meet all their needs, that may not be true. This paper describes the Work Integrated Learning Project at Ara Institute of Canterbury in partnership with Jade Software Corporation. Jade Software Corporation, in particular its Jade Design Lab team, wished to undergo digital transformation to increase the visibility of their work, raise awareness of the services they provide to internal and external clients, and increase efficiency and sustainability within their team. This was achieved by implementing a Microsoft SharePoint site, which has provided the organisation with a low-cost, secure, sustainable, long-lasting software solution to meet their needs and envision new opportunities for the business.

Keywords: software development, sharepoint, microsoft, scrumban

1. INTRODUCTION

Jade Software Corporation Limited (JSCL) is an international computer software company, operating in New Zealand, Australia, and the UK, with their headquarters based in Christchurch, New Zealand (Jade Software Corporation, n.d.).

The Jade Design Lab (JDL) – the internal creative agency within the Jade Software Corporation – identified new opportunities for the business and internal process by digitalising their portfolio of work.

This paper describes the methodology and the process behind the project.

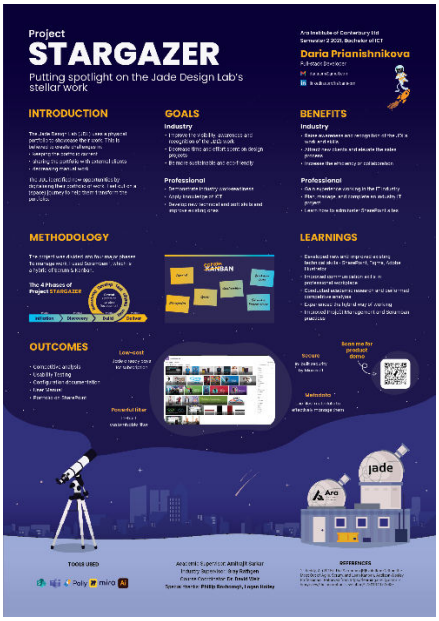

Figure 1 - Short Paper Poster

2. BACKGROUND

The motivation for the project comes from industry and academic perspectives. The author's goal for this project was to demonstrate industry work-readiness by applying knowledge of Information and Communication Technologies. To do so, the author set to problem-solve a real-life scenario in a 300 industry and 150 academic hours project.

The JDL offered an internship to the author and partnered with Ara Institute of Canterbury to complete the project. The JDL showcases their portfolio in a physical "Skite book" or electronically in PDF/PowerPoint presentations. This approach is used for both internal and external clients, showcasing their capabilities, and utilised by the Jade Marketing and Sales teams. The approach was deemed inconvenient, time-consuming, and created challenges in many aspects of their work. The challenges included:

- manual work done by the team members to update the portfolio or prepare a separate digital portfolio
- the physical book being heavy and inconvenient
- changed business environment with fewer in-person meetings due to the COVID-19 pandemic
- the book not being able to represent all types of digital items.

The JDL identified the following research questions and business opportunities:

- Adopt a sustainable digital solution that will increase the visibility and recognition of the JDL's members' work
- Accommodate to the ever-changing business environment and new hybrid way of working with COVID-19 implications
- Align with the organisation's sustainability and environment-consciousness goals
- Showcase the portfolio of work in an organised, immersive, and accessible way.

3. PROCESS

This section describes the process undertaken in the project to ensure successful delivery of academic and industry outcomes.

3.1 Project Management

The first component to the success of the project lies in an effective Project Management approach. The project plan was divided into corresponding Software Development Lifecycle phases, and consisted of the following phases:

- **Initiation –** a phase dedicated to initiating the project and gathering requirements, defining the project scope, planning for academic and industry tasks, and estimating their length.
- **Discovery –** researching technologies, evaluating development platform choices, and performing competitive analysis.
- **Build –** several iterations of planning, incremental designing, development, and testing of the final product and supporting deliverables.
- **Deliver –** finalising and delivering the project.

3.2 Risk Management

The Risk Management was implemented by adopting a Risk Management Framework based on (AS/NZS ISO 31000:2009 Risk management -Principles and guidelines, 2009). The Risk Management Approach included the processes for identifying, assessing, treating, and reviewing risks.

3.3 Quality Assurance

Quality Assurance of the project's deliverables was implemented by adopting the Quality Assurance framework by (Virginia Tech). In addition to the Quality Assurance table, the quality of the software solution was assured by facilitating Usability Testing (Moran, 2019).

3.4 Scrumban

The author used Scrumban as the project methodology. Scrumban is a project management and software development framework in Agile and Lean software (Stellman, 2019). Scrumban combines the flow-based methods and agility of Scrum and visualisation and simplicity of Kanban (Abraham, n.d.). The implementation of Scrumban for this project consisted of Sprints, retrospectives, and a Kanban board with a set Work-In-Progress limit.

3.5 Project Delivery

As discussed in Project Management, the project was divided into several Phases.

Throughout the Initiation Phase, the author carried out requirements gathering interviews, and then analysed and validated the collected data. The data was used to develop functional and non-functional requirements, captured in the Project Proposal alongside with entry parameters for the project.

The second Phase of the project consisted of conducting research into possible development environments, evaluating choices, and conducting a competitive analysis on direct and indirect business competitors.

In the Build Phase, the author designed, developed, and tested the final solution in a series of incremental builds.

Finally, the project concluded with industry and academic deliverables being finalised and presented to the stakeholders.

4. OUTCOMES

The outcomes achieved in the project are divided into two groups:

4.1 Personal

- Developed new and improved existing technical skills in SharePoint, Figma, and Adobe Illustrator
- Improved communication skills in professional workplace
- Conducted academic research and performed business competitive analysis
- Experienced the hybrid way of working
- Improved Project Management and Scrumban practices
- Importance of completing things ahead of time

4.2 Industry

- Completed Competitive Analysis
- Created new portfolio using a SharePoint site
- Captured Usability Testing
- Developed a user Manual and Configuration Documentation for the site

5. CONCLUSIONS

The project highlighted the importance of professionalism, actively engaging with the stakeholders to manage their expectations, and dealing with COVID-19 implications in a professional and academic environments.

6. REFERENCES

Abraham, A. (n.d.). *Scrumban — The unwanted Child*. Retrieved September 9, 2021, from Medium: https://medium.com/agileinsider/scrumban-the-unwanted-child-272b18482c0b

Jade Software Corporation. (n.d.). *Jade Software Corporation*. Retrieved August 13, 2021, from LinkedIn: https://nz.linkedin.com/company/jade-software-corporation

Joint Technical Committee OB-007. (2009, November 20). *AS/NZS ISO 31000:2009 Risk management - Principles and guidelines.* Retrieved August 30, 2021, from Academia.edu: https://www.academia.edu/37206746/AS_NZS_ISO_31000_2009_Risk_management_-Principles_and_guidelines

Moran, K. (2019, December 1). *Usability Testing 101*. Retrieved November 16, 2021, from Nielsen Norman Group: https://www.nngroup.com/articles/usability-testing-101/

Stellman, A. (2019). *What Is Scrumban?* O'Reilly Media, Inc. Retrieved October 8, 2021, from https://learning.oreilly.com/library/view/what-is-scrumban/9781492074885/

Virginia Tech. (n.d.). *Project Quality Assurance.* Retrieved September 2, 2021, from Virginia Tech: https://it.vt.edu/projects/project_management/qualityassurance.html