UMI Australia Limited
Product Development Framework

Project Scope of Work

Project Name: Product development & launch

Intended Audience

This document is for reference by UMI management, the project team and the university.

Version Control

Version	Date	Description	Authored	Distribution
1.0	06/05/2021	Initial Draft	Erin Paton	Internal only
1.1	27/05/2021	Final Document	Erin Paton	Internal only

Reviewed & Authorised

This scope of works document is to be reviewed and/or authorised by the following named individuals prior to the acceptance of the document by UMI.

Company	Name	Title	Authorized
UMI	Erin Paton	Project Manager	[signature]
UMI	Nicholas Drinkwater	Front-end Developer	[signature]
UMI	Abby Durbridge	UX Designer	[signature]
UMI	Daniel Blake	Back-end Developer	[signature]
UMI	Harrison Tang	R&D Engineer	[signature]
UMI	Mathew Dwyer	Technical Producer	[signature]

Related Documents

The scope of works is to be read in conjunction with the following related documents and their relative revisions at the time of compilation.

Version	Date	File Name	Author	Section Ref.
1.0		UMI-Risk-Assessment-Matrix.xlsx	UMI	13

Table of Contents

1 Document Summary

1.1 Document Purpose

This scope of work document has been compiled collaboratively and is to be used as a resource to facilitate the successful research, development and launch of UMI's translation applications. It is designed to provide the core framework and structure for all business units to reference throughout the planning and implementation phases of the development and launch. This document is a Scope of Works and not intended to be used as a complete Project.

1.2 Key Objectives

The scope of works identifies, focuses on and ensures that throughout the research and development process, these documented key objectives and goals are achieved.

1.3 Background

Details the essential information about the proposed business in relation to trading practises, current business units and infrastructure.

1.4 Key Stakeholders

Documents the stakeholders involved in the project and how they relate to the business. Specifically in relation to the roles that each stakeholder plays in this project and their responsibilities.

1.5 Strategy and Approach

Describes the high-level workings of how the project will be carried through and administered.

1.6 Overall Project Budget

Projects, plans and allocates budgets and expenditures related to the project.

1.7 Deliverables and Milestones

A summary of particulars of the core deliverables within the project and the critical milestones used to track the progress and success of the project.

1.8 Inclusions

An outline of items included in the scope of this project.

1.9 Exclusions

An outline of items explicitly not included in the scope of this project.

1.10 Assumptions

Describes any assumptions made by the business that are fundamental to the project's completion.

1.11 Constraints

Identifies the specific attributes that delineate the boundaries of the project.

1.12   Related Projects

Presents information on external projects that directly impact the development of the project.

1.13   Risks

Underlines any risks related to the project that could cause disadvantageous influence on its completion.

1.14   Communication Strategy

Outlines the method of communication throughout the project, including information pertaining to the frequency of information distributed to the stakeholders and the channels to be used.

1.15   Exit Checklist Form

Items to be marked off concurrent with works completed throughout the project.

2 Key Objectives

The foremost aim of the project is to enable the research, planning, development and launch of UMI Australia Limited's language translation application. It is imperative that the below key objectives are adequately communicated and comprehended by critical parties.

2.1   Develop a Market-Ready Application

The development of a viable, market-ready product is paramount to the success of this project. The development of the product will be executed in a multi-phased approach utilising Agile methodology and project management best practices throughout its life cycle. This will be achieved by following the below critical success factors:

- Conception and initiation of the project via comprehensive research and reporting around the tools and technologies required to produce a feasible product; specifying the requirements of the project; establishing organisational and communication processes to be utilised throughout the project.
- Planning and definition of the project through refining and assimilating the workflows and processes trialled in the Conception and Initiation stage of the project; documented planning of resources, scope, roles, technologies and tasks to be carried out throughout the life cycle of the project; production of artefacts demonstrating the proposed design and functionality of the end product; integration of systems, software, and tools fundamental to the tracking and management of the project's critical path.
- Execution and launch of the product by way of programming, testing and bug fixing the product; producing and executing a comprehensive marketing plan; implementation of internal operations procedures; account setup, reporting and billing processes; recruitment of staff and integration of training protocols, policies and procedures.
- Performance and monitoring of the product via continued development, testing, iteration and evolution of the product using the data collected after the product's launch.

3 Key Stakeholders

The below stakeholders must be identified, conferred with, and regularly updated throughout the duration of the project.

3.1 UMI Stakeholders

- Research and Development
  i) Oversee Research & Development endeavours relating to the project
  ii) Identify strategic technology opportunities and implement appropriately
  iii) Ensure all technological processes align with the project objectives

- Operations Manager
  i) Plan and implement all operational processes within the project
  ii) Calculate and document risks associated with the project
  iii) Formulate adequate risk management protocols to mitigate possible threats to the project
  iv) Liaise with the Project Manager to ensure all key objectives of the business and the project are aligned and continuously adhered to

- Managing Director
  i) Manage negotiations and decisions relating to the project
  ii) Internal communications to UMI and stakeholders
  iii) Profit and loss budgeting

- Project Manager
  i) Project planning and implementation

- UMI Project Team
Execution of the UMI project plan.
Consists of:
  1) Agile Team
     i) Product development roadmap
     ii) Develop, test and deploy working prototypes and application components

  2) Production
     i) Marketing content planning and production
     ii) Stakeholder content planning and production, including videos and presentations

  3) Design and Branding
     i) Develop brand kit and digital assets (logos, typeface, brand guidelines)
     ii) Produce interface design elements with UX and UI best practices in mind
     iii) Develop company website

UMI Australia Limited

4) <u>Marketing</u>
    i)   Market research, persona groups and demographics
    ii)   Devise marketing strategy and subsequent funnels
    iii)   Devise, execute and track marketing campaigns and promotions

5) <u>Business Information System (BIS)</u>
    a) Business Operations
            i)   Desktop, Server and User integration
    b) Application Development
            i)   Data integration
    c) Network
            i)   Data Communications

6) <u>Human Resources</u>
    i)   Payroll and Remuneration

3.2   *External Stakeholders*

- Security Personnel & cloud server security
- SaaS, PaaS, and IaaS platforms
- HR company
- Customers
ii)   Businesses
iii)   Consumers

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4 Overall Project Budget

Upon approval of expenditure, The Project Manager is accountable for guaranteeing that the budget is maintained and monitored throughout the project's life cycle. All disbursement will be funnelled through the Project Manager and they will employ the necessary documentation to manage these expenses and outgoings.

4.1   Project Expenditure Workings

Figure 5.1.1

Budget Component	Amount
Capital Expenditure	$
Marketing	$
Travel & Accommodation	$
Hardware & Equipment	$
Research & Development	$
Product Testing	$
Temporary Labour	$
Contingency	$
Insurances	$
Total	$

5 Strategy and Approach

The below information outlines the blueprint the project team will follow to realise the project.

Phase 1

Commence: 30th March 2021
Deadline: 23rd April 2021

5.1 Team formation

The success of the project is contingent on the formation of the core team. These parties will be responsible for the conception and initiation of the project; the research, planning, and definition to be conducted; viability testing and proof of concept; market research and analysis; systems, software, and infrastructure setup and administration; development and iteration of the product suite; successful execution and launch of the business and business offering; ongoing performance and monitoring; and any other areas fundamental to the project's completion. The below critical success factors are to be followed:

- Assemble 6 students within the Introduction to Information Technology unit
- Compare IT experience, skills and interests
- Build a team profile
- Assign a team name

5.2 Investigation of the IT Job Market

A key component of preparing for the operations of the project is a comprehensive understanding of the current IT job market, as well as future job prospects, required skills, and necessary training needed by individuals within the team. This will be achieved by following the below critical success factors:

- Discuss career goals within the team
- Compare and analyse ideal jobs
- Collect, collate and analyse industry data
- Conduct an interview with an IT professional

5.3 IT Technology Research

A component in the success of the project is proficiency in researching, understanding, and reporting on existing and emerging technologies in the IT field. Aptitude will be demonstrated by following the below critical success factors:

- Research and reporting on Automated Vehicles
- Research and reporting on Cryptocurrency and Blockchain Technology
- Research and reporting on Natural Language Processing
- Research and reporting on Raspberry Pis

5.4 Conception and Initiation of the Project

Well executed conception and commencement of the project is imperative to its long-term success. The team will follow the below critical success factors to establish the foundations of the project:

- Nominate a project from the group's previous individual's project concepts
- Investigate the tools and technologies required to deliver the chosen project
- Produce a detailed description of the project

5.5 Establish Internal Processes

In order to maintain adequate communication, organisation, efficiency, transparency and administration of the project, the team will establish and continually maintain documented processes and workflows using a number of tools and reporting methods. The following critical success factors are applicable to this item:

- Setup MS Teams to conduct video meetings and communicate transparently
- Setup Github to ensure satisfactory version control and website development and maintenance
- Setup Trello for collaborative task management, documented workflow, and activity logs
- Reflect and report on the aforementioned tools, how they were implemented, and areas to be refined as the project evolves
- Setup Google Drive to store and collaboratively contribute to files and docs
- Setup Figma for transparent, collaborative design and prototyping

Phase 2

Commence: 27th April 2021
Deadline: 28th May 2021

5.6 Project Management Methodology

Imperative to the ongoing success of the project is establishing a suitable project management methodology and applying the necessary tools to track and manage the associated processes. The following critical success factors are to be followed:

- Research and integration of Agile Methodology to the project
- Comprehension of the planning, execution and management of Sprints
- Integration of Monday's Gantt chart to plan, schedule and simplify tasks within the project, as well as determining the associated resources, time, and dependencies
- Understanding of Kanban and continuation of this methodology via Trello
- Integration of Google Docs into project management framework

5.7 Formulate Project Plan

- The Project Manager will develop a detailed project blueprint using Gantt scheduling methodology plotting all tasks within the scope and their dependencies.
- Allocate resources, designate tasks, determine durations and set key dates
- Examine all documented information and attain approval from the Managing Director

- Assign roles to the team relating to individual skills, expertise, and interests
- Establish weekly Sprint planning and progress meetings
- Produce Scope of Works document and determine the project's critical path
- Document and track deliverables and milestones

5.8   Execute Project Plan

- Oversee and regularly report on the status of the project concerning the core objectives and deliverables
- Closely track and report on budgets and expenditure
- Ensure that all works are accomplished within the specified parameters

5.9   Definition of Project Objectives

Specific objectives and subsequent aims drive the project to a clear goal and as such, the following critical success factors are required:

- Distil and document the core objectives of the project
- Produce a granular report outlining the aims of the project
- Continually readdress these goals throughout the completion of tasks to ensure the project remains on track

5.10 Product Testing Plan

Being a commercial business, the product will need considerable testing preceding market release. As such, the below critical success factors are imperative:

- Distil and document the key areas requiring testing
- Investigate existing testing methods applicable to the project
- Determine best methods to store and interpret the feedback and results gathered

5.11 Risk Assessment

Identifying, prioritising and planning for the mitigation of risks is essential to delivering the project in a timely manner and preventing circumstances that may have a detrimental impact on the project's outcome. The following critical success factors are required:

- Distil and document potential risks to the project (See *13. Risks*)
- Investigate appropriate insurances
- Conduct SWOT analysis (See *13. Risks*)

5.12 Prototyping

Interactive interface prototypes are required to facilitate user testing and provide insights into the application's functionality to key stakeholders. As such, the below critical success factors are to be followed:

- Produce paper mock-ups of mobile and web application pages
- Produce a written map of mobile and web application pages and their relationships
- Design mobile and web application pages to a professional standard
- Produce interactive user interface prototypes using Figma

5.13 Present to Investors

The investors will provide capital resources to fund to development of the project, and as such will determine the project's progression from a siloed plan to a live enterprise. The team will present the Project Scope of Works and deliverables to the investors. The following critical success factors are to be followed:

- Produce comprehensive report of the project in its entirety
- Produce a 5-minute video highlighting the features, functionality and value of the product
- Present interactive prototypes
- Present website

Phase 3

Commence: 31st May 2021
Deadline: 6th August 2021

5.14 Conduct Operations Mapping

- Evaluate, refine and map internal processes, workflows and operations to be integrated into the business infrastructure
- Develop a protocol for assimilation of any undocumented processes that may need to be incorporated in the Scope of Works and the business

5.15 Front-End Development

- Produce a working Android prototype
- Produce a working Apple prototype
- Develop the Company's website running Javascript form

5.16 Back-End Development

- Develop rudimentary web server
- Setup trial account with AWS or Microsoft Azure for the application server, SQL database and storage of data
- Coding for the servers
- Develop API to ensure the web servers can communicate with the application servers, and that user data can be extracted from our database
- SQL coding

Phase 4

Commence: 9th August 2021
Deadline: 9th February 2021

5.17 Beta Testing

Beta testing is required to gather feedback from users and fix any bugs that arise throughout the development of the project and to maintain continued support from investors. The following critical success factors are applicable to this item:

- Implement test plan developed in Phase 2
- Relay issues to development team

5.18 Ongoing Development

Continuous improvement is imperative to the long-term success of the project. Customer feedback and user behaviour will be stored, collated, and acted upon promptly to maintain the project's viability and stay ahead of competitors. The following critical success factors re applicable to this item:

- Incorporate improvements into the code
- Track issues and bugs using Jira
- Refine and iterate produce in preparation for market release

5.19 Marketing

Strategic marketing is crucial to the growth and profitability of the project by raising brand awareness, generating leads and conversions, and maintaining customer engagement and relationships. The following critical success factors re applicable to this item:

- Conduct market research and analysis
- Complete digital assets audit
- Establish top level marketing strategy
- Produce comprehensive marketing content plan
- Build martech stack
- Allocate marketing budget
- Setup digital marketing channels (Google, Facebook, Instagram)
- Setup SEO

5.20 Exit Checklist

- Verify all items in the checklist have been met to the specification
- Certify that the project objectives have been achieved

5.21 Launch

The launch of the product must be well-planned and seamless to ensure user adoption and business growth. The following critical success factors re applicable to this item:

- Develop and document positioning statement and ensure it aligns with the overall project objectives
- Develop and document marketing campaign strategy
- Plan and produce marketing collateral and promotional content
- Brief marketing team, account managers and account executives

6. Phase 2 Deliverables and Milestones

The below delineates crucial deliverables and milestones to be met by the end of the Phase 2 life cycle and before Phase 3 tasks can be commenced. The following will be marked as complete and signed off by the Project Manager and the Managing Director before the project is deemed complete.

6.1 Phase 2 Commenced

6.2 Reporting and Written Content Completed

- o Project overview
    - i. Topic
    - ii. Motivation
    - iii. Landscape
- o Tools used

6.3 Project Plan Completed

- o Aims & objectives
- o Plans & progress
- o Roles
- o Scope & limits
- o Tools & tech
- o Testing
- o Timeframe
- o Risks
- o Group process & comms

6.4 Artefacts Produced

- o Scope of Works document
- o Gantt chart via Monday
- o Paper mock-ups for mobile and web application pages
- o Wireframing
- o Interactive prototypes via Figma
- o SWOT analysis
- o Context diagram
- o VC Pitch deck (maybe)
- o Team profile

6.5 Recruitment Advertisements

- o Marketing Manager
- o Account Manager
- o Front-end Developer
- o Back-end Developer

6.6 Group Reflection
- o Individual & group reflection
- o SparkPlus feedback

6.7 Professional Marketing Video
- o 5-minute video outlining the features, functionality, motivations and value of the product

7. Phase 3 Projected Deliverables and Milestones

The below delineates deliverables and milestones to be met by the end of the Phase 2 life cycle and before Phase 4 tasks can be commenced. The following will be marked as complete and signed off by the Project Manager and the Managing Director before the project is deemed complete.

7.1 Phase 3 Commenced

7.2 Development Tasks Completed
- o Java programming for Android & iPhone
- o Websites completed (HTML, CSS, Javascript)
- o Web server (C or Python)
- o User Database completed (SQL)
- o API built (JSON)

7.3 Testing Completed
- o Horizontal, high-fidelity user prototypes via Figma
- o Vertical prototyping
- o User Acceptance Testing using Test Flight

7.4 Working Capital Finalised
- o Seed financing secured
- o VC pitch completed
- o VC investment secured
- o Bank loan approved
- o Financial tables & budgeting complete

7.5 Marketing Plan & Execution
- o Marketing budget complete
- o Marketing content plan complete
- o Preliminary marketing collateral complete

8. Inclusions

This below outlines items that are in scope.

8.1   Multi-Language Translation

- Language translation facilitates multiple language paths from any origin language to the designated translation language

8.2   Brick-and-Mortar Businesses

- UMI will service food and beverage businesses that offer a dine-in or takeaway experience to customers including cafes, eateries, fine and casual dining restaurants, fast food and takeaway venues, food trucks, coffee shops, and pop-up restaurants

8.3   Training

- Adequate training resources will be documented in the UMI Wiki and access provided to internal teams

9. Exclusions

The below outlines items that are out of scope.

9.1   Online Businesses

- UMI will not facilitate language translation for ghost restaurants or dark kitchens that offer a delivery-only service
- UMI will not facilitate language translation for third-party delivery services such as Uber Eats, Deliveroo, Menulog

10 Assumptions

This Scope of Works assumes the below to be true.

10.1 Access to Resources

- The Project Team has access to the necessary resources, including adequate working capital and sufficient time to carry out the required tasks

10.2 Dedicated Team

- The Project Team is individually and collectively committed to seeing the project through to completion
- The Project Team members have allocated 36 hours exclusively to project works
- The Project Team members will invest an average of 10 hours of consistent work per week from 28th May 2021 to 6th August 2021

10.3 Travel Restrictions

- The project assumes that international travel restrictions will have eased sufficiently by the project launch date

10.4 Commercial Feasibility

- The project assumes the application has a legitimate and veritable market to sell to
- The project assumes the application provides a unique and valuable service

10.5 Open Communication

- All stakeholders commit to sharing information to the benefit of the project in an open and forthright manner

11 Constraints

The below items delineate known limits to the project.

11.1 Timeframe

- Limited time allotted to complete the project
- The Project Team are

11.2 Budget

- Limited working capital
- Preliminary stages of the project require minimal expenditure

11.3 Limited Tech Knowledge

- The Project Team hold limited experience in their respective fields

12 Related Projects

The below lists projects that are directly related to and will impact the success of the project.

12.1 Figure 12.1

Project Name	Project Manager	Email
Assessment 5	Mathew Dwyer	s3807459@student.rmit.edu.au

13 Risks

The below outlines potential risks identified that could have a negative impact its success if not adequately prepared for. The Project Manager and the Project Team are responsible for developing the appropriate contingency plans to mitigate these risks should they occur, with reference to the document–UMI-Risk-Assessment-Matrix.xlsx

13.1 Security Risks

- User information leak
- Financial information leak
- Malicious attack

13.2 Timeframe

- Unforeseen setbacks causing delays in task completion
- Changes to deadlines or allotted timeframe
- Miscalculations in Gantt plotting
- Scope creep

13.3 Budget

- Over-expenditure of working capital
- Budget not adequately allocated across tasks

13.4 High Customer Demand

- Too many users accessing the application during launch causing system overload

13.5 Human Resource Issues

- Poor team management
- Inadequate or improper training; insufficient resources and tools provided to employees
- Lack of cross-department communication

14 Communication Strategy and Plan

The below schedules will be following by the Project Manager to maintain adequate dissemination of information to the appropriate parties.

14.1 Project Communication Schedule

Figure 14.1.1

| Name	Title	Mode	Frequency	Contact Details
Erin Paton	Project Manager	Meeting	Bi-weekly	s3910930@student.rmit.edu.au
Nicholas Drinkwater	Front-end Developer	Meeting	Bi-weekly	s3508178@student.rmit.edu.au
Abby Durbridge	UX Designer	Meeting	Bi-weekly	s3794613@student.rmit.edu.au
Daniel Blake	Back-end Developer	Meeting	Bi-weekly	s3910924@student.rmit.edu.au
Harrison Tang	R&D Engineer	Meeting	Bi-weekly	s3908223@student.rmit.edu.au
Mathew Dwyer	Technical Producer	Meeting	Bi-weekly	s3807459@student.rmit.edu.au

14.2 Announcement Communication Schedule

Figure 14.2.1

External Party	Mode	Timing	Responsibility	Contact Details
Investors	Meeting	Week Prior	Managing Director	As per Database
Suppliers	Email	Week Prior	Managing Director	As per Database
UMI Internal Staff	Email	Week Prior	Operations Manager	'All Staff' Email Group
Beta Clients	Email	Week Prior	Account Manager	'Beta Clients' Email Group

14.3 Escalation Plan

Figure 14.3.1
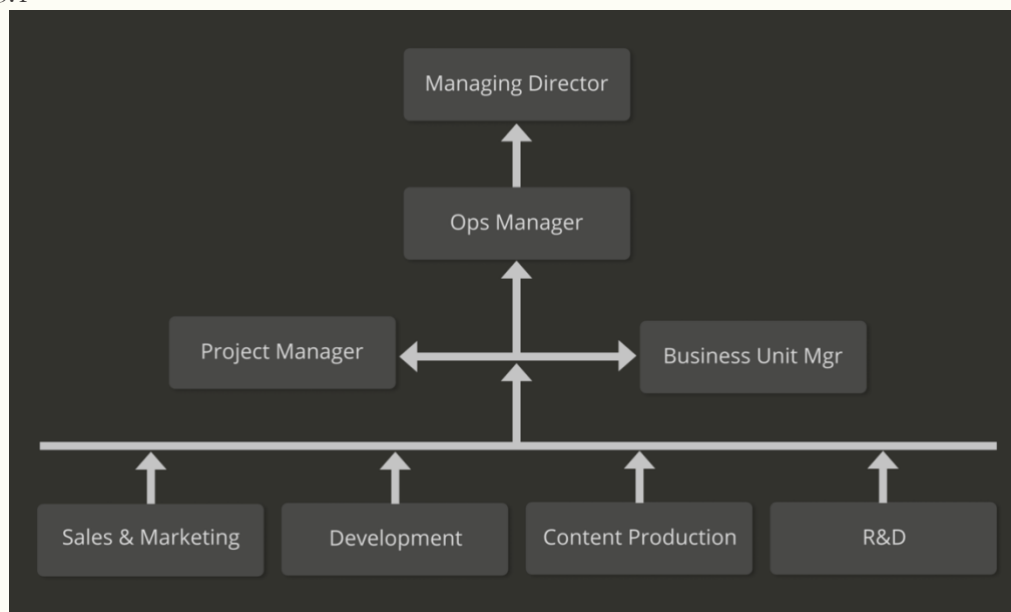
15 Exit Checklist Form

The following checklist verifies that all listed deliverables included in the Scope of Works have been finalised.

Figure 15.1

	ITEM	INITIAL /DATE
1	Team Formation Complete	EP –
2	Investigation of IT Job Market Complete	
3	IT Technology Research Complete	
4	Conception and Initiation of the Project Complete	
5	Establish Internal Processes Complete	
6	Project Management Methodology Complete	
7	Formulate Project Plan Complete	
8	Execute Project Plan Complete	
9	Definition of Project Objectives Complete	
10	Product Testing Plan Complete	
11	Risk Assessment Complete	
12	Prototyping Complete	
13	Present to Investors Complete	
14	Operations Mapping Complete	
15	Front-End Development Complete	
16	Back-End Development Complete	
17	Beta Testing Complete	
18	Marketing Strategy and Content Plan Complete	
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Project Manager: _____   Managing Director: _____