|  |
| --- |
| All information submitted with this application will be treated in confidence. The information is furnished to the Institute for Adult Learning (IAL) with the understanding that it shall be used or disclosed for evaluation, reference, and reporting purposes. Please complete **ALL** sections, following instructions and reading the prompts carefully. Incomplete submissions will not be accepted. |

**1. PROJECT DETAILS & DESCRIPTION:**

|  |
| --- |
| **Project Owner (PO):** **Click or tap here to enter text** |

|  |
| --- |
| **Focus Area:** *(Check* ***X*** *where appropriate)*:  Focus Area 1: INCREASING THE UPTAKE OF ONLINE AND BLENDED LEARNING BY INDIVIDUALS.  Focus Area 2: AMPLIFYING ENTERPRISE’S ADOPTION OF INNOVATIVE LEARNING TECHNOLOGY.  Focus Area 3: DEVELOP EFFECTIVE REMOTE ASSESSMENT AND PROCTORING SOLUTIONS FOR INDIVIDUAL& ENTERPRISE-LED TRAINING.  Focus Area 4: DEVELOP EFFECTIVE PLACEMENT SOLUTIONS THAT TIGHTEN THE INDUSTRY-TRAINING NEXUS. |

|  |  |  |
| --- | --- | --- |
| **Proposal Title:** **Click or tap here to enter text** | | |
| **Budget Requested:**  S$ | **Support Period:**  xx months | **Main Applicant 1 :** Click or tap here to enter text.  **UEN:** Click or tap here to enter text. |

**List of Project Team Members** *(Please add/delete rows where necessary)*

| **Role** | **Name** | **Designation** | **Role in Project / Country** | **Email Address** | **% of time** |
| --- | --- | --- | --- | --- | --- |
| **PD 2** |  |  |  |  |  |
| **Development Team 3 (1,2, )** |  |  |  |  |  |
|  |  |  |  |  |  |
| **Adopter 4 (1)** |  |  |  |  |  |
| **Adopter 4 (2)** |  |  |  |  |  |
|  |  |  |  |  |  |

*Please add in more rows if there are more team members. Alternatively, please submit in a separate paper.*

1. Main applicant refers to the organisation (Singapore-based company) with valid ACRA company registration number (UEN), to which the PD belongs, which will be responsible for the execution and delivery of the proposed project. This organisation will be named the Main Applicant in the Letter of Award. Government Agencies and Statutory Boards are not eligible to participate in this innovSpur Grant.
2. PD refers to the Principal Developer, stationed in Singapore for the project.
3. The development team refers to the members who are going to be involved in product development of the project. To put “to be recruited” if not available at submission. To indicate whether the role(s) is based overseas or outsourced. Please also indicate the country where the role is based. (Note: Key development members should be based in Singapore, including Project Owner, Project Manager/Architect, and Full Stack Engineer/Developer.)
4. Adopter refers to any company, institution, incorporated body, or other industry or academic collaborator, that is not the employer institution of the Principal Developer but is the enterprise learning solution adopter (see Annex D) participating in the project in collaboration with the Main Applicant. The Adopter may not be eligible to receive any part of the funding for the project. **Main applicant must submit a minimum of (2) two valid adopters, with at least one Singapore-based company**.

# **TECHNOLOGY READINESS LEVELS (TRL)**

Please indicate the TRL range based on the table below:

|  |  |
| --- | --- |
| **Entry TRL** | **X** |
| **Target TRL** | **X** |

| **TRL** | | **Description** |
| --- | --- | --- |
| TRL  1 | Basic principles observed and reported | Lowest level of technology readiness. Scientific research begins to be translated into applied research and development (R&D). Examples might include paper studies of a technology's basic properties. |
| TRL  2 | Technology concept and/or application formulated | Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative, and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies. |
| TRL  3 | Analytical and experimental critical function and/or characteristic proof of concept | Active R&D is initiated. This includes analytical studies and laboratory studies to physically validate the analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative. |
| TRL  4 | Component and / or breadboard validation in laboratory environment | Basic technological components are integrated to establish that they will work together. This is relatively “low fidelity” compared with the eventual system. Examples include the integration of “ad hoc” hardware in the laboratory. (i.e., **Operability** of core components for the Prototype validated in the laboratory) |
| TRL  5 | Component and / or breadboard validation in relevant environment | Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so they can be tested in a simulated environment. Examples include “high-fidelity” laboratory integration of components. |
| TRL  6 | System/subsystem model or prototype demonstration in a relevant environment | Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in a simulated operational environment. (Prototype demonstrated in a relevant environment). |
| TRL  7 | System prototype demonstration in an operational environment | Prototype near or at the planned operational system. Represents a major step up from TRL 6 by requiring demonstration of an actual system prototype in an operational environment (e.g., in a PC-based application program, in a mobile device, or in a classroom). |
| TRL  8 | Actual system completed and qualified through test and demonstration | Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation (DT&E) of the system in its intended weapon system to determine if it meets design specifications. UAT completed. |
| TRL  9 | Actual system proven through successful mission operations | Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation (OT&E). Examples include using the system under operational mission conditions. |

**2. DETAILS OF PROPOSAL** *(Printed on 2 sides, A4)*

**DESCRIPTION OF THE PROJECT**

* 1. **Abstract** (not more than 2 page)

1. Describe the product/service or technology that you are developing.
2. What are the similar systems/ solutions in the market (if any)? How is your product different or better?
3. What are the barriers to entry (if any) that will make replication of your product/service difficult for your competitors?
4. For this product, what is the target market in terms of size, customers, market niche, and geographical coverage?
5. What are the pedagogical/andragogical underpinnings?
6. What is your pricing, promotion, sales, and distribution strategies?
7. Have you obtained any indications of interest from relevant reference customers, partners, adopters, or third-party investors for the proposed project?
   1. **Relevance to iN.LEARN2.0 and Contribution to Grant Objectives** (not more than 1 page)
8. Describe the extent of innovativeness and ecosystem disruption (i.e., are similar solutions available in the market?).
9. Expected impact on individuals, training providers, and enterprises?
10. Scalability within and beyond Singapore?
    1. **A Proposal comprising of elements of Product, Market, and Technology Plan** (approx. 25 pages)

You will need to attach a detailed plan to show how you can develop this product with a technology readiness level of at least 3 to meet the needs of the market with the fund you are seeking. The plan must include all the unique functions of the proposed system and the reasons for the development of these functions. You should plan for this product to be profitable within two years. Your plan should be cohesive and written as a separate report and applicants need to include the following in their proposal:

* + 1. Market and Competition
* Reasons/motivation to develop this product.
* Market viability study/report, ascertain potential demand & user understanding, comprising the initial market, nature of competition & impact analysis (Singapore and target country (who are my customers) data preferred).
  + - * evaluation done on the market potential of this new product for the specific market potential.
      * evaluation of adjacency market potential of this new product.
      * findings from impact study done on areas such as Competition, Value & Cost analysis (i.e. Pain points, Unique Selling Points, and Competitive Advantages).
      * findings on the advantages and improvements as compared to existing alternatives in the market.
      * justification why consumers are likely to adopt this product.
      * checks done to ensure compliance and correlations between Consumers and proposed innovative product.
      * Product Life Cycle (PLC). The PLC is the progression of a product through 5 distinct stages. You will need to explain how you can exploit the PLC to understand the profits that this new product can make and use it to explain the correlation of this new product and profits in your strategies to commercial correlation (source: Theodore Levitt, HBR, 1965).
    1. Receiver(s) / Adopter(s)
* Identify improvements to be made and how it will result in a better market.
* Identify Product-Behaviour Change factors that can improve the success of introducing this product to the market.
* Contractual arrangements with your joint adopter / receiver.
* Lead users (collaborators) and evidence of their commitment to being Early Adopters. The adopters who submitted must be willing to pay and use the completed product upon project completion.
  + 1. Area of technical application / intellectual property
* Innovativeness elements / components.
* Types of innovation, e.g. Incremental, Architectural, Modular or Radical with reasons to support it. (you can refer to Architectural Innovation: The reconfiguration of existing product technologies and the failure of the firms, Henderson R and Clark, K, 1990). Generally, incremental innovation refines and extends an established design eg iPhone 5C vs iPhone 5. Modular innovation is the improvement of a component. Architectural innovation (eg facelift of a car) reconfigures an established system. Radical innovation establishes a new dominant design with a new architectural eg solid state hard disk. You will look at the impact of architectural knowledge and the impact on component knowledge to decide.
* Explain your reason for the stipulated current & expected technology readiness level.
* Advantages / benefits & disadvantages / weaknesses of such innovation.
* Technology Position in the technology S-curve e.g. e-learning technology, pedagogy, instructional methods, tools, etc. The technology S-curve defines the technological evolution of your core technology. For a better understanding of it, read (“The rise of machine learning and AI S-curve”, Don Cowan).
* Background IP, Patent status, Ownership, etc.
  + 1. Resources
* Strategies to be implemented for the product to achieve minimum marketable product (MMP) or achieve profitability.
* Resource plan (project team composition).
* Scope and project plans.
* Costs and Duration.
* Capability and expertise of the project team. Identify the background, experiences, and competencies needed for this project.
* You shall explain the philosophical and andragogical underpinnings that define and support active learning in the project. It would be good that you also explain how it inspires this proposal how you intend to improve the learners and how you designed to activate the learning of your targeted market You will identify your expertise to support the project. (2 pages writeup in a separate paper).
* Potential funding received from private sector industry sources for this project.
  + 1. Risks
* Identify risks that could undermine the intended objectives and deliverables of the proposal, including product, business, etc.
* Mitigation Plan for all relevant risks.
* Relevant contingency plan.

With the above guidelines, a well-formulated plan should have the following:

**Chapter 1** – Description of the project (see Section 2.1)

* Clearly describe the product, service, or technology you are developing. Provide a concise and compelling overview.
* Identify similar systems or solutions in the market. Explain how your product is different or exceptional, emphasizing its unique features and advantages.
* Discuss any barriers to entry that make replication difficult for competitors. Highlight technological, regulatory, or other factors that provide a competitive edge.
* Define your target market in terms of size, customers, market niche, and geographical coverage. Clearly articulate the market’s needs that your product addresses.
* Explain the pedagogical/andragogical underpinnings of your project, demonstrating a solid understanding of the educational principles guiding your work.
* Present your pricing, promotion, sales, and distribution strategies. Showcase a well-thought-out plan for bringing your product to market.
* Provide evidence of interest from relevant reference customers, partners, adopters, or third-party investors for the proposed project.

**Chapter 2** – Relevance to IN.LEARN2.0 & contribution to grant objectives (see Section 2.2)

* Assess the innovativeness of your project and its potential to disrupt the ecosystem. Differentiate your solution from existing ones.
* Outline the expected impact on individuals, training providers, and enterprises. Clearly articulate the positive outcomes and benefits.
* Discuss the scalability of your project within and beyond Singapore. Explain how your project can grow and adapt to various contexts.

**Chapter 3** – The reason for this product.

* Provide a compelling narrative on why your project is essential, addressing the identified needs and gaps in the market.
* Background study of this product including the impacts of having a product on the society.
* Give reasons why this product (invention) is an **innovative** product.

**Chapter 4** – Description of the project plus a separate page(s) on pedagogical underpinnings/roles.

* Describe your project in detail, emphasizing its uniqueness and potential impact. Dedicate separate pages to elaborate on the pedagogical underpinnings of your innovation.

**Chapter 5** – Market Study for this project.

* Initial market study and nature of competition for this product
* Comparisons with other existing products and states the advantages and disadvantages of your product over existing products.
* Explain why consumers are more likely to adopt your products. You can use endowment effects and behaviour change and how it can affect the adoption rate of your product.

**Chapter 6** – The Strategies to be implemented for the product to be profitable.

* Formulate strategies (to consider Endowment effect, capturing value for innovation, marketing process framework, Product life cycle, Ansoff/Porter’s generic frameworks, S-curve, etc).
* Commercialisation plan and impact on the TAE and Singapore and globally.

**Chapter 7** – Resource.

* Project Milestones (consistent with Annex A, Section 2.4.1) and Resources.
* Allocation of the proposal grant (consistent with Annex B).
* Members with relevant expertise and experience.

**Chapter 8** – Challenges, Risks, and Mitigation measures.

* 1. **Project Plan**
     1. **Schedule and Budget of Proposed Development Project** (This will be formed as your Annex 2, Milestone Table of expected deliverables of your Letter of Award).

|  |  |  |  |
| --- | --- | --- | --- |
| **Stages** | **Expected Period of Milestone (DDMMYYYY)** | **Deliverables**  **(Tangible deliverable including tech and learning aspects)** | **Amount of Disbursement**  **(Expenses incurred for each milestone)** |
| **Milestone 1**  **1st Disbursement - 50% Work Completion (TRL 7)** | DD/MM/YYYY | * Type here | $ XXX, XXX.XX |
| **Final Milestone**  **Final Disbursement**  **(Capped at Max Grant)** | DD/MM/YYYY | * Type here | $ XXX, XXX.XX |

**The total budget requested is $ and the total duration is months.**

**Please fill in the Project Budget form (excel spreadsheet).**

**3. INTERNATIONAL PEER REVIEWERS (OPTIONAL)**

To recommend 2 or more - provide Business Contact Information (BCI) e.g., Name, Title, Email)

|  |  |  |
| --- | --- | --- |
| **Peers Reviewers** | **Designation / Organisation** | **Justification** |
| Type Name here  Type Email Address here | Type Designation here  Type Organisation here | Type Justification here |
| Type Name here  Type Email Address here | Type Designation here  Type Organisation here | Type Justification here |
| Type Name here  Type Email Address here | Type Designation here  Type Organisation here | Type Justification here |

**ANNEXES**

The following documents are required for the submission. It is advised to restrict the total attachment size to be less than 25MB. Please follow the naming convention and format for labelling of soft copy attachments:

|  |  |  |  |
| --- | --- | --- | --- |
| **Document** | **Template/Guideline** | **Naming Convention** | **Format** |
| Project Proposal | Applicant to submit duly fill up Application form, with a Proposal and include those below. | *R*P\_ *[Cat 1/2/3/4\*] Project title* | PDF |
| Annex A – Project Implementation  Schedule | Applicant to provide. Template is given as a guide, (max 12 months) | Schedule\_ *[Cat 1/2/3/4\*] Project title* | PDF/MS Excel |
| Annex B – Budget | To use the given excel file. | Budget\_ *[Cat 1/2/3/4\*] Project title* | MS Excel |
| Annex C – Curriculum Vitae | Applicant to provide (for those seeking funding). | CV\_ *[Cat 1/2/3/4\*] Project title* | PDF |
| Annex D – Letters of Intent | Applicant to provide (State commitment to pilot and intention to adopt upon successful UAT & TRL 9). | LOI \_ *[Cat 1/2/3/4\*] Project title* | PDF |
| Annex E – Entity Details (copy of latest ACRA BizFile) | Applicant to provide. | NA | PDF |
| Annex F – Audit annual / financial report(s) details | Applicant to provide. | NA | PDF |
| Annex G – Declaration by Applicant | (Applicant to tick and sign) | NA | PDF (authorised signature/stamp) |

\*Note: To delete where applicable

**All documents including all forms and supporting documents are to be printed and stored in a flash drive and hand delivered in-person to the Programme Manager, Selyn Chen,** [**selynchenqw@ial.edu.sg**](mailto:selynchenqw@ial.edu.sg)**, or Ivan Lee,** [**Ivan\_Lee@ial.edu.sg**](mailto:Ivan_Lee@ial.edu.sg) **by stipulated due date & time.**