



Photo by Aaron Birch on Unsplash

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[ (NOUN) ROAD, HIGHWAY, TRACK, STREET, AVENUE,  
METHOD, PROCEDURE, PROCESS, WAY, ROUTE. ]

# HUARAHU

- THE MANIFESTO -

WE ARE THE BRIDGE FOR  
STUDENTS TO MOVE  
FROM SCHOOL INTO THE  
DIGITAL TECHNOLOGY  
INDUSTRY.



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# BACKGROUND

The pathway for a young person to enter the workforce is changing.

Students and parents are increasingly reluctant to commit to the financial burden that formal tertiary education requires, as it often leads to debt that can take years to resolve.

Increasingly, more school leavers are looking for opportunities where they are able to enter an industry based on their acquired skills from school and build their career through experience gained and professional development given while they work. This path often leads to formal certification when they are able to afford or commit to their chosen industry and move into more senior roles.

# OUTCOMES



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## EMPLOYMENT AND SKILLS DEVELOPMENT OF SCHOOL LEAVERS

This project aims to offer trusted stepping stones to bridge the gap between the skills school leavers have developed through secondary school computer science courses and assignments, with the skills needed to enter Industry at an intern or junior developer level. This approach allows them to enter employment earlier, earning income for themselves, while gaining valuable industry experience while planning and the most relevant route to professional certification.

## TEACHER AND CURRICULUM DEVELOPMENT

Our Secondary School Teacher development workshops aim to keep School courses up to date with the skills Industry needs, while connecting the dots between teaching, skills assessment and employment readiness. A further, more systemic, opportunity is to develop consistency in what is taught across different schools which in turn will identify promising candidates for internship programmes with potential employers.

# OUTCOMES



## SUPPORTING INDUSTRY WITH TECH TALENT

The internship program promises to upskill the candidates by developing their skills and character to meet the expectations Industry seeks with the option of remote-working based at their school or on-premise with participating industry partners. Establishing nationwide industry relationships will open opportunities for participating organisations to have first access to talent while allowing candidates to be introduced to the workplace as interns as first steps to permanent employment and/or inspiration to commit to formal study.

## POSITIVE SOCIO-ECONOMIC IMPACT

We believe that with this approach to upskilling young local talent rather than relying on employing international talent, will make a lasting impact on key socio-economic challenges that exist in New Zealand. A primary target outcome is to improve the employment rate of school leavers, specifically opening transformation and empowerment opportunities to Māori while increasing the women entering the technology industry.

# OUTCOMES



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## PROVIDING OPPORTUNITIES FOR INTERNATIONAL STUDENTS

Furthermore, our programme has the potential to provide a learning pathway for students who hold student visas, once their formal schooling programme comes to an end. These students could remain registered learners at their school and through the Gateway programme, advance their skills in software development.

## CREATING FINANCIAL INDEPENDENCE

We believe that we would help uplift students who are restricted by their current financial circumstances by facilitating the development of the skills needed, at no cost, and help them enter into an industry that has high employment potential, pays a decent starting wage and offers good future job security.

# CHALLENGES IDENTIFIED



## INDUSTRY

1. There is need for skilled local developers entering into the industry.
2. Covid has made the sourcing of offshore skills challenging.
3. Government is tightening up on the ability to source offshore talent as they want to fill demand locally.
4. Industry doesn't know what level of work is being produced by school leavers

## SCHOOLS

1. Schools don't have a pathway for students to move into programming internships.
2. Digital Technology courses are not consistent across different schools.
3. Studying Computer Science at tertiary does not require students to take Digital Technology at school which impacts the number of students being exposed to it as a possible career path.
4. There are a limited number of teachers with the skills and/or experience to teach sound programming courses.

## DIVERSITY & INCLUSION

1. Industry are looking for skilled Moari developers to create a socially diverse culture.
2. Moari students have been identified as Kinesthetic learners who often don't see traditional academic pathways as meaningful/successful entry point into industry.

# PROPOSED SOLUTION

To create an internship program that will address the Industry, School and Cultural problems.

1. Identifying the skills needed for candidates to enter industry as junior/intern developers
2. Develop and deliver teaching programmes that marry what is taught at Level 2/Level 3 Digital Technology courses in schools with the skills needed by industry such as
  - a. Project Management
  - b. UI/UX
  - c. Multilingual programming that targets the key languages needed for industry's front and backend development
  - d. Database Administration using SQL
  - e. BI Solutions
3. Establish and manage relationships between School/Gateway programmes that allow students to enter internship programmes
4. Establish and manage relationships with Industry to provide a "Talent Pool" of junior/intern developers that can help alleviate their workforce demand.
5. Provide Professional Development for Digital Technology teachers that will guide them on how to create and teach programming courses that will meet NZQA assessment standards and allow students to establish a solid foundation for internship opportunities.



1. A facility or space for training to pilot the project:
  - a. Big enough for a class of interns with option of expansion
  - b. Furniture to meet the needs of collaborative project based learning
  - c. Options for Intern Accommodation
  
2. Access to technology
  - a. Financing options for student owned devices and/or devices owned by the programme
  - b. Internet Access
  - c. Other industry specific equipment
  
3. Team
  - a. Learning Facilitator(s) – tasks:
    - i. Intern Program
    - ii. School Workshops
    - iii. ECE Learning Facilitator
  - b. Human Resources Administrator – tasks:
    - i. Staff HR
    - ii. Intern HR
    - iii. Recruitment
  - c. School and Industry Liaison Officer – tasks:
    - i. Intern Placement Facilitator
    - ii. Manages relationships with both Schools (including Gateway) and Business
    - iii. Recruitment

# RESOURCES REQUIRED



# NEXT STEPS

1

Start conversations with Industry to find out if this would be a solution to meet their needs

2

Start conversations with Digital Tech Teachers and other key School contributors to find out their thoughts

3

Depending on response from both industry and schools, create a plan to pilot the project

4

Identify possible avenues of funding that could support the pilot program

# FUTURE POSSIBILITIES

- A recruitment arm that finds work placement for enrolled candidates.
- Branching into other Digital Skill based industries such as the CAD skills needed in the Engineering Industry



# FUNDING MODEL

- Corporate/Industry Financial Support
- Ministry Grants/Support
- Secondary School Workshops and Subject Specific Resources
- ECE Computational Thinking Workshops and Teaching Material
- Recruitment Fees

