



# HULT Business Challenge - Entrepreneurship

Team 14 Research Plan

Jose Lorenzo Miguel Aguilar  
Jorn Geutjens  
Yingtong He  
Anton Rijk  
Iqra Shaikh  
Alexandru Tudor-Sima

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# Introduction

There were several projects and ideas we considered pursuing for the Hult Business Challenge - here are the top five ideas we evaluated:

1. Simplifying and streamlining the degree verification process
2. VR/AR house viewing services for the high-end home real estate market
3. Connecting empty nesters to students looking for short term accommodations
4. Establishing water purification stations in the Philippines
5. Co-working and co-learning spaces in non-metropolitan regions

After a productive brainstorming session, we have highlighted the advantages and disadvantages of each project, we choose to go towards the simplification and streamlining of the degree verification process due to the difficulties faced after the loss of a diploma.

Our goal is to increase accessibility of various degrees for graduate students by using a cloud-based system. These documents would be readily available online to all those who require them whenever and wherever.

## Key Issues

Degree verification is a crucial step in several processes ranging from applying to a post graduate educational program to screening job applicants. This step can often be frustrating, time intensive and costly for both former students and administrative staff, especially when documents are misplaced, archaic processes exist, systems are not synced, and multiple stakeholders are involved.

## Trends

### Digital Transformation

In a push for better efficiency and resource allocation, institutions are embracing digital transformations to optimize tedious tasks by reducing overall costs and administrative burdens along with increasing transparency and connectivity. Specifically, more and more institutions chose to move away from traditional paper administration to digital administration. By adopting this method, students will have a clearer overview, while the information will be sent in a more efficient and faster manner.

## Globalization

As more and more people are moving to different countries, the need for an international transfer degree has been rapidly increased. Additionally, with the rise in refugees, a verification process could increase job placement opportunities in new countries.

## Education

The world is becoming more educated with individuals pursuing higher degrees, micro-degrees, and new certifications. That coupled with the increase in job hopping creates mounting pressures on institutions to verify certifications from companies. Nowadays there are more and more online courses available. Those also have a certification that are already digital. This could also be implemented in our solution.

## Stakeholders

### Former Students

After graduating from their educational institutions, students receive their diplomas and will be able to request additional documentation for further educational opportunities as well as job verification purposes. With this in mind, graduates would expect an online process to be implemented that is more streamlined, efficient and easy to use.

### Educational Institutions

Part of their administrative responsibilities includes responding to requests from their alumni for verification purposes. Some institutions experience this as a route where they can critically influence alumni relations.

### Employers

Companies currently allocate resources towards verification of job candidates' credentials; this is either through the use of recruiters and headhunters who run background checks on the candidates.

## Competitors

Key competitors would include online platforms like [nscverifications.org/degreeverify/](https://nscverifications.org/degreeverify/), [hedd.ac.uk](https://hedd.ac.uk), [qualificationcheck.com](https://qualificationcheck.com), and other e-diploma sites. They operate locally in their geographic regions and are aimed at universities as well as corporations.

LinkedIn could be seen as a competitor should they decide to include formal verification profiles. It could instead present a unique potential partnership which could be seen as beneficial for both companies.

## Associations/ Governing Bodies

There are several governing bodies such as BAR, AMBA, EQUIS, etc whose responsibilities include regulating the distribution of the degrees in their respective fields.

## Governments

The overall process would be subjected to government regulations, this includes data privacy and protection policies. Degree credentials between countries are not yet unified, similar degrees from different countries may have different levels of credibility with certain associations over that of another country's association. This may be taken into further consideration down the line.

## Credit Rating Agencies

A credit rating agency could also benefit from the use of our blockchain solution by being able to access the student loan information to provide a credit rating to their clients who just graduated. However, this will not be in the scope of our project but could be a future extension.

## Insights

### Current Process is Painful and Costly for Students

Approximately, 4 out of 5 students surveyed revealed that the document verification process for their University Applications was inefficient and a quarter of students spent 80% of their total application time on gathering documents. Our survey revealed that nearly 1 in 5 students have lost their diploma. Furthermore, according to Diploma Frame the "fee for a new diploma can range anywhere from \$25 to \$150, the price range is dependent on the school and the type of degree you're replacing" with the entire process taking on an average of 4 - 6 weeks.

## Evident Administrative Burden on Educational Institutions

A conversation with an administrator at Hult revealed that on average they receive ten-degree verification requests from employers, a process which is quite tedious and is expected to increase as more students graduate and change jobs. At other universities, entire departments are dedicated to this and many universities charge a fee for replacing diplomas.

## Demand for Cloud Based and Mobile Friendly Solutions

Our research revealed that 70% of students would like their diploma on the cloud or accessible on their mobile devices. Additionally, a conversation with a blockchain specialist revealed that job applicants would be interested in having their information at the blockchain based on a previous project.

## Opportunities

### Former Students

Students could have an easily accessible online record that consolidates information from various degree granting authorities. Additionally, students could more easily make requests and provide complete information to desired parties without the hassle of finding all the official documents. By applying for certain degrees or jobs this way, they can focus on their own main capabilities and strengths instead of losing a lot of time with gathering the official documents.

### Educational Institutions

Degree granting institutions can reduce their administrative burden by outsourcing this aspect allowing them to more effectively allocate their resources to their respective priority areas.

For universities the opportunities are threefold:

1. Overcome the difficult and long procedure of retrieving a diploma from the database when old students ask another copy of their diploma and courses.
2. Easy to verify if student applicants have the prerequisite requirements.
3. Can easily provide the verified proof of diploma to recruiters.

### Employers

When evaluating candidates, companies will be able to visit a single source to verify information provided by applicants. This single source would be the open-source platform which is very safe

and accessible for everyone on the network, however only the institution with the authorization key can grant access the employer who requests the information. For instance, when the employer wants to have the degree information of a potential employee, they will request the information, which is in the cloud but can only be seen or given access to when the university unlocks it with its private key. Moreover, by shortening the verification procedure, they will be able to focus on different steps on the employment process.

## Ideas

### Decentralized Secure Network

Creating a blockchain platform for recruiters of companies, universities, and other institutions to quickly access and verify diplomas of applicants. This network will be decentralized which makes it less vulnerable for security breaches. This allows our different stakeholders to access their critical information needs in an efficient manner.

### Streamlined Approval Process

A transparent and clear approval process would be able to optimize efficiency, by reducing time needed from weeks to days, eventually, minutes to seconds.

### Scalable

The creation of a process that can successfully account for a large quantity of requests without the effect of exponentially increasing administrative burden is critical.

## Hypothesis

### Sharing of Information

Universities have been willing to provide third parties with information regarding their alumni list, specific dates they graduated, the specific degree received, and in which subject(s) the graduate took.

## Verification Process

Companies are currently allocating their resources towards verification of candidates, through various organizations such as the recruiters, headhunters, and or human resources staff.

## Consolidation of Information

Creating a singular online platform to consolidate educational information is desired amongst students. The online platform would be able to connect various institutions and graduated and graduating students, for an overall smoother, and easier transition.

## Potential Solution

A blockchain platform for recruiters of companies, universities, and other institutions to quickly access and verify diplomas of applicants. A secured platform for recruiters of companies, universities, and other institutions to quickly access and verify diplomas of applicants.



# Milestones

## Milestones - Blockchain your diploma

