



Alumna
no bank, no problem.

Global Financial inclusion Platform

“Invest in people, invest in students and invest in global education for a great return and positive social impact”

A call to (Global) Action!

In an era of digitalization, Alumna offers an open platform with the sole objective of accelerating the evolution of our global education ecosystems. This will be achieved by leveraging all the advantages of technology that will offer a valuable and unifying ecosystem that reflects the positive (economic and social) externalities from the mass adoption of the Alumna platform. It will also allow the active engagement of more and more segments and stakeholders to the global education value chain.

Alumna is offering a new disruptive model for the global education transition, incorporated within a financial ecosystem. The Alumna Network is governed by a set of mechanisms that promote and reward the expansion of sustainable and decentralized management and uptake of globalised higher education.

The Alumna Network will be the link between global higher education services and the global digital economy; an open platform based on the first sustainable and decentralized higher education based ecosystem, designed to propel the decentralization of global education markets into the future.

In a time that the future of our education ecosystem, its resources and diversity are facing an unparalleled debt crisis and threat from the externalities of our economic and social activities...

In a time where it is public knowledge of unprecedeted warning regarding the sustainability of the future of our global economy caused by a lack of financial and socio-economic solutions.

In a time that technology is out there - feasible and 100% proven - but our governance systems pose barriers and delays in its implementation...

At this Time: our ultimate goal should be cooperation and trust; cooperation as the only way to express our common desire for change and transformation; change for creating a common and fairer global education system and future for everyone. Alumna capitalizes trust; We recognize the synergy of the community and the value of the multiple bonds between its members towards closeness, communication, support and commitment towards prosperity.

This is the Moment:

We invite all stakeholders to join Alumna, an ecosystem of cooperation, based on transparency, for the benefit of our global education systems and the future well-being of our global society.

""For all students and stakeholders who value unobstructed access to international higher education, Alumna is a new EdTech platform that aims to remove financial barriers for those that do not want their study options limited by a lack of access to reasonable capital. Alumna focuses on connecting students with impact investors and offers a full suite of creative solutions students can tailor to their personal global higher education needs".



Alumna is interactive financial inclusion platforms that connects the whole education ecosystem and creates an environment to make the ambitions of a rewarding global education experience a dream come true

Executive Summary

Through innovative funding and partnership between students, learning institutions, investors and federal institutions; Alumna creates an evolution in the global higher education ecosystem. The evolution supports higher global student registrations, takes away liabilities on higher learning institutions and leverages a new age fintech platform for a winning formula while minimizing risk.

Alumna is not a student finance house. Alumna maximizes the Global Higher Education Experience through a fintech ecosystem and the digital economy. We aim to disrupt the current financial lending system by creating a fair global crowdfunding and leasing system for unbankable learners and also rethink the global education value chain at the same time.

This paper illustrates the fundamental areas around the global education finance ecosystem towards a more evolutionary and innovative approach towards bankability of global higher learning from a financial and technical perspective.

Strategically Alumna wants to align itself with the best higher learning institutions in the world looking for more innovative ways in approaching access to their programs and structures. Alumna is looking to grow a more democratic and globalized higher education sector. Alumna is looking to support emerging markets and propel more inclusion and diversity in global education towards greater global socio economic growth and development. With the challenges which will be highlighted below in higher education finance; Alumna creates capacity and solutions for the future which supports growth and sustainability in the education sector while increasing shareholder value. Alumna traces all the pain points of the education lifecycle and develops solutions to maximize and globalize higher learning.

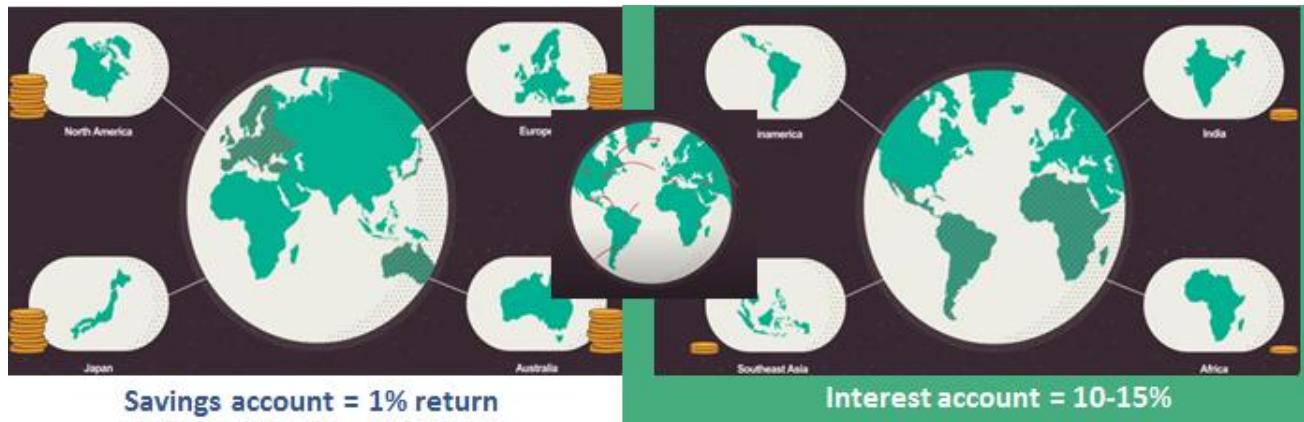
Alumna not only supports students on their future earning potential or just their credit history. It starts to change the framework to looking at students as productive (cash generating) assets and also shareholders with skin (and soul) in the game in their future that can fully leverage innovative finance packages.

Purpose

The purpose of this white paper is to position new opportunities for investors and stakeholders with interest in fintech solutions, blockchain, impact investing and platform as a service specific to the global higher education sector. The fintech ecosystem designed creates capacity, social impact and a mechanism for students around the world to access global opportunities for higher education studies. This platform will enable the evolution of global higher education experience around the world as we know it.

We started Alumna to give education stakeholders their own platform to ultimately solve for the challenges in the sector i.e. the global student debt crisis and also the looming capacity crisis in the sector. Alumna creates solutions for unbankable learners relative to financial inclusion and access to funding and credit while they are not generating income. Other platforms contain campaigns for everything making it complicated and challenging for education stakeholders to find their voice and collaborate”.

Background



Citizens in developed economies where there is an oversupply of money typically earn a 1% interest for storing their money in a bank savings account. Paradoxically in emerging nations where credit is not in high supply it is common for their citizens to pay back 10-15% interest for acquiring a loan and most times not even get access to credit as they are deemed unbankable. What if there becomes a middle way where money could travel freely around the world? Where investors could get a much higher return instead of leaving their money in bank accounts and the money could be used by emerging markets to access more affordable credit facilities?

In addition to high international bank transfer costs, there are legal and bureaucratic barriers stopping money being invested internationally.

Alumna provides a financial inclusion platform for global investors to invest in people, to invest in unbankable students and invest in the global education sector (which is in a debt crisis) for a higher return and positive social impact.



Unbankable students from emerging markets would appreciate capital investment to fulfill their dreams to get educated at the best institutions in the world so that they can bring back the necessary technical skills to grow their local economies. Students upon graduation become cash generating assets through employment and would be in a position to pay back global investors a higher return than the 1% which they currently obtain from their savings accounts. Currently these students either do not have access to cross border loans or they come at ridiculously high interest rates. Alumna makes global financial inclusion easier and cheaper, creating value for all parties through higher returns for investors and lower rates for international students. Alumna also uses an experienced specialized finance unit to evaluate credit applications for students and making sure investors get their return through Alumna's governance processes.

Alumna is also the first leasing agent that helps students raise money towards their studies on the platform to minimize student's debt and cost of capital. This platform and investment opportunities are available for you. For impact investors who care about the impact of their money and also want a good return on their savings. Starting from as little as 10 dollars and also through digital currency, everybody can get involved. Finally social impact becomes profitable through Alumna.

IMPACT INVESTING

Impact investing refers to investments made with the intention to generate a measurable, beneficial social or environmental impact alongside a financial return". Impact investments provide capital to address social and/or environmental issues.

Alumna connects impact investors to a sector which is experiencing huge challenges from a financial inclusion and capacity constraints perspective. All over the world students are struggling and standing

up against historical exclusion from education due to socio economic factors. Impact investors could make a huge social impact in transforming this sector for better socio economic development in local and emerging economies while gaining a higher return on investment and creating a big social impact.



Impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return.

Impact investments are known to bring in returns that are competitive with the stock market. According to a study by the Global Impact Investing Network (GIIN), impact investments have average returns of 5.8% since their inception. The impact investment market is estimated at over 750 billion dollars in total size. Alumna creates a platform to access an avenue towards the impact investing sector through global education markets.

Introduction



There is currently an escalating student debt crisis in the world. The latest student loan debt statistics for 2019 show how serious the student loan debt crisis has become. There are more than 50 million borrowers who collectively owe over \$2 trillion in student loan debt in the U.S. alone. A summary of

The current reality is as follows:

- Due to socio- economic and financial constraints it is no secret that top worldwide learning institutions lack diversity and don't incorporate the full spectrum of nationalities around the world.
- Many emerging countries have been facing surging demand for higher education. These increases have put high financial constraints on the resources of emerging countries
- More than a billion young people live in increasingly urbanized emerging markets accounting for 90% of the Global Population aged Under 30
- The number of students around the globe enrolled in higher education is forecast to more than double to 262 million by 2025.
- Most so developed nations student funding schemes are unsustainable to maintain and a big financial burden longer term. **These Governments need help!!!**

Alumna (an online interactive edtech platform) aims to unlock the constraints to international students gaining access to the best education anywhere in the world and revolutionizes global education through inclusion and diversity.

From a lenders perspective the above information quantifies the magnitude of the student loan challenge globally and moreover highlights the big risk lenders have to bear in borrowers settling their liabilities over the years after their studies. Due to the current reality of the global debt and specifically student debt crisis financiers have become very risk averse in sponsoring traditional student loan structures.

Looking at examples of some top tier international schools their student loan facilities are advantageous only to the degree that it allows for a capital moratorium for students to service interest and thereafter loan repayments commence after studies. The structure has a favorable percent interest rate with a traditional bank partnership but even though the loan has this favorable attribute the challenge arises in accessibility of the loan. They are structured in a way that requires students to have full guarantees as collateral/security on their student loans. This product is by definition more so a “cash cover facility” and not necessarily a student loan product because a student loan is traditionally classified as an **unsecured lending product.**

Basel III is a set of international banking regulations developed by the Bank for International Settlements to promote stability in the international financial system. Basel 3 Regulations promote stability in financial markets to manage economic risks. Banking as a function serves a purpose to create capacity for socio-economic growth through financial mechanisms and therefore creating economic resources through avenues as credit. Banks are mandated to seek opportunities to deploy capital into opportunities with returns through sound credit assessment principles. Moreover Banks also have provisions for credit losses in line with Basel 3 regulations which promote responsible lending towards shareholder value creation and responsibility towards deploying tax payer's money. As it stands outside ones native country and jurisdiction there are very few provisions to set up credit products for students and stakeholders cross border without collateral or bank guarantees. The problem of unlocking this market and problem, which impacts a large number of people when solved, will greatly and materially impact the world.

There are over 1 billion people under the age of 30 from emerging markets and a great proportion of these candidates do not have the financial mechanisms to access the best learning institutions in the

world. In a globalized world the best way to alleviate poverty and create socio economic growth is through entrepreneurship and unlocking new economic opportunities. The challenge arises in that to be able to create thriving enterprise markets especially for emerging economies technical and specialised knowledge through higher education is required especially in a digitalized world where technology has disrupted modern day economic systems. The past decade has seen the rise of the largest corporations coming from the technology industry. These firms for the first time in history are reaching over 1 trillion dollar valuations when traditional growth and mature companies have maintained standard growth. The tech industry has created a revolution in modern day commerce. It is clear that the fundamental basis for thriving commerce is technical knowledge and this technical knowledge is obtained in the global higher learning arena. To be able to fulfill socio economic growth and development it is clear that the constraints slowing down higher learning adoption for emerging markets would need to be overcome and this is what Alumna aims to support.

Digging deeper into the traditional banking student Loan; what becomes a challenge is that it requires collateral via a co-signer/guarantor from a citizen of the learning institution country or a full foreign bank guarantee for foreign nationals. The conditions set up here are very rigid as top tier recognized Masters Programs could be composed of over 50 - 80 percent foreign nationals towards inclusion and diversity (nationality and gender). The current product student loans do not cater for the vast majority sample of international student requirements appropriately and this leads to the current education market demographics which lack inclusion and diversity.

Traditional bank guarantee facilities also make neither room for a credit loss ratio nor loss given default due to the full guarantee requirement. Fundamentally banking is about risk and mitigation of credit loss to create space to invest in opportunities that grow economies. If banks don't allocate capital effectively in this manner they are not being effective and efficient in their practices. This is an aspect that could be stretched to create inclusive value. By this rationale the student loan product towards learning institutions:

- Cannot be classified as student loan
- as it is a fully securitised loan it does not allow for unsecured credit
- it shrinks the capacity for leveraging finance to support students (productive assets)

- If the loan structure is largely inaccessible as is; from the Basel perspective it has the potential to become a more robust and effective instrument towards unlocking socio economic value while minimising risk

Another finance model in the market which focuses the guarantee requirement away from the students is also not sustainable because they divert the liability risk towards learning institution balance sheets. There are loan providers in the market who are highly leveraged in the market with this finance approach. The risk with this model is that these organizations are highly exposed to high debt loads and volatility when there are high economic downturns like the current pandemic and global economic recession of 2020. Moreover the risk is further enhanced in that the current global education debt crisis creates price volatility in global markets as it becomes a ballooning problem waiting to explode. This then potentially creates a possibility of a high level of default risk from the time students seeking jobs enter a contracted market and more over there is also a default risk over the life of the student loans as defaults become more predictable (through high exposure) for long loan tenures of around 8 years in volatile and uncertain markets. The biggest risk to students defaulting is not only that these finance institutions are highly leveraged and fragile to the high exposures. The biggest risk is that they also place learning institutions balance sheets under incredible risk as recourse against students failing to pay back their loans and this could harm the sustainability of education institutions mid to longer term.

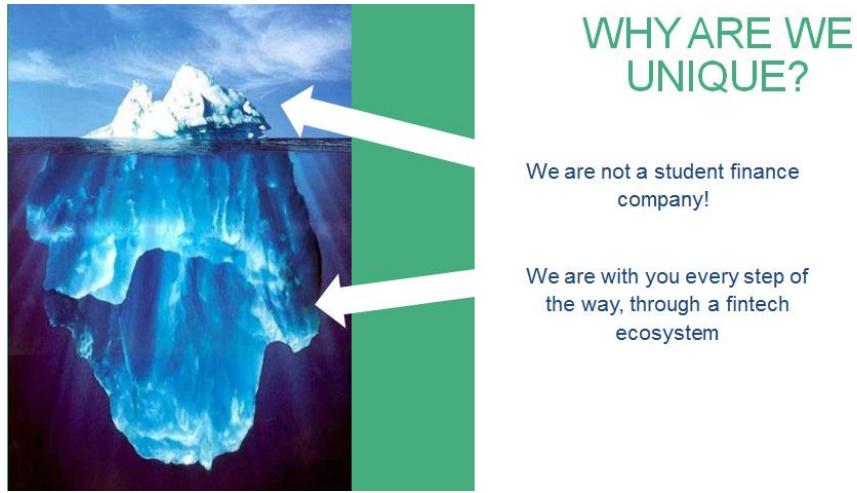
Looking deeper into federal and learning institutions it must be noted that they support higher education programs through financial aid schemes which are in essence grant funding and scholarships usually accrued through tax payer's money (federal). This is a very honorable mechanism with a high social impact value that makes a lot of student's dreams to study at prestigious institutions to come to life.

The unfortunate reality is that with the current structures in place a great proportion of students who are awarded grant funding still cannot afford to come and study at global institutions. Another reality is that learning and federal institutions become overwhelmed by requests for scholarships and grants and therefore cannot support a wider net of students. Alumna's model which will be explained later supports a wider net of students.

From the analysis of the current global student loan crisis it appears that it is now the suitable time to design more bespoke, effective and efficient student loan packages that could be used to unlock value not only for students but also unburden the full student learning ecosystem.

The past decade has yielded the birth and exponential growth of the fintech sector. This is due to traditional banking and finance practices not being able to keep up to the innovation age at a pace strong or robust enough for the modern age. The fintech era has ushered in new possibilities and growth in new areas and spaces like the digital and technology industries. Alumna follows in crafting more space within the fintech arena.

Enter Alumna!



Alumna disrupts the approach of traditional finance and creates capacity for the global student ecosystem. How does it do this?

- Alumna is an engaging online platform that allows students all over the world to access global quality higher education through inventive funding packages designed through the student lifecycle
- Alumna revolutionizes the way students, lenders and investors see student finance
- Students are seen as productive assets on their way to being industry professionals
- Students become shareholders with “skin and soul in the game” in their education that can fully leverage innovative finance solutions
- Alumna has designed a platform and solutions to support students around the world to maximize their student experience on their way to getting hired
- Alumna enables skill enhancement and improves student global education and knowledge to be higher value assets towards industry and global socio economic growth

Skin and Soul in the Game

In assessing the challenges in the escalating global education debt crisis Alumna has looked at ways of unlocking value to allow this market to succeed. Alumna is a bold platform that dares to disrupt old traditional banking approaches to finance new age models that look for innovative ways of transferring risk for the global education sector to thrive into the next century. One of the most important aspects of what Alumna is about is understanding the risks involved in reimagining how finance supports growth and then allocating risks to the parties best placed to handle them. Full risk mitigation may not be impossible, but understanding what risks are acceptable and what aren't is certainly one of the art forms of what Alumna is about and finding that perfect asymmetry. Risk mitigation techniques Alumna develops are one of the reasons why Alumna's model is sustainable over the long term; the risks are largely hedged over the long term.

Alumna is inspired by the critical analysis provided in the theory of what skin in the game is about. The idea of skin in the game helps the world to lead ourselves in a world of uncertainty and a world where risk is ill defined. Alumna wants to introduce a new model into the education finance market which is about backing students who have skin and soul in the game in their education and fulfilling their future aspirations. Skin in the game is about making decisions in uncertainty as no 1 can predict the future. The below figure is an example which identifies the problem we face in modern society and what slows down its progress in moving forward. The current arrangement reveals that financial services is regulated through agents such as banks who do not have skin in the game in the decisions they make. As the current bank student loan products were described above banks do not have any consequences in making wrong decisions in the student finance market. They also slow down progress in the market when they should be an active participant in risk as students are in taking on loans. Banks assume the full benefit of student returns without the downside if unforeseen challenges would occur in the student loan market. Alumna attempts to change the picture below for all stakeholders in the education sector to all have skin in the game in propelling the education markets forward for shared value, risk and reward.

NO SKIN IN THE GAME	SKIN IN THE GAME	SKIN IN THE GAME FOR THE SAKE OF OTHERS, OR SOUL IN THE GAME
<i>(Keeps upside, transfers downside to others, long a hidden option at someone else's expense)</i>	<i>(Keeps his own downside, takes his own risk)</i>	<i>(Takes the downside on behalf of others, or universal values)</i>
Bureaucrats Cheap talk ("tawk" in Fat Tony's lingo) Consultants, sophists Businesses Corporate Executives (with suit) Theoreticians, data miners, observational studies Centralized government Editors Journalists Politicians Bankers Fragilista Prof. Dr. Bernanke,... (most academics and other halfmen) Risk Vendors	Citizens Actions, no tawk Merchants, Businessmen Artisans Entrepreneurs Laboratory and field experimenters Government of city states Writers Speculators Those journalists who expose frauds (powerful regimes, corporations) Activists Traders (own funds) Fat Tony	Saints, Knights, Warriors, Soldiers, Saints Expensive talk Prophets, Philosophers (in the pre-modern sense) Artists Innovators Mavericks Municipal government Great writers Rebels Dissidents, Revolutionaries (They would not engage in vulgar commerce) Nero Tulip Taxpayers (not quite voluntarily soul in the game, but they are victims)

Figure from: Skin in the Game, Hidden Asymmetries in Daily Life

"In ancient Rome, a builder who constructed a bridge had to live right under it with his family for a certain period, therefore putting his own "skin in the game."

Alumna is also guided by the principles of the Real world risk institute whose mission statement can be summarized as the following:

- Understand model error before the use of models
- Walking the walk before talking it
- Guidance by Data Science
- Risk analysis
- Risk modeling "reality to models" and not from "models to reality"
- Taking risks we understand and not trying to understand risks we are taking
- Risk education to develop real-life competence and prosperity

Alumna's new age models incorporate skin in the game to allocate risk appropriately to all stakeholders for collective ownership of upside, downside and long term prosperity for the global higher education sector.

Market Opportunity and Vision



There are currently over 5 million international students world-wide. The figure nearly doubled in the last 2 decades and it is forecast that international students will grow to over 10 million people by 2025. Internationally the amount of students will also double to a figure of over 250 million. The student education industry is estimated to be valued over 100 billion dollars and as mentioned before the student loan market stands at 2 trillion dollars of debt with over 50 million borrowers worldwide. The world university rankings rank well over 1000 universities from 92 countries. It is alarming to note that only 6 of these countries attract well over 50% of the international student sample. It is evident from this statistic that it is not sustainable for 6 countries to absorb the big majority of global student education in a world of 197 countries. It is clear that global education needs to be diversified, democratised and more inclusive for a better world. Despite globalization North America and Europe still dominate the global higher education market and this can be seen in the figure below.

Relative to globalization it must be noted that despite popular perception of globalization only 3% of the world population lives outside their home country. The current reality facing the global economy is protectionist policies, higher trade barriers and less opportunities to work and live abroad. Alumna provides the opportunity through distant learning initiatives to facilitate a truly globalized world with globalized citizens.

Alumna's vision is to change the current picture of global higher education by decentralizing and democratizing global education. This will be done through an ecosystem with higher education institutions in delivering the best education experience through Inclusion and Diversity for all students worldwide.



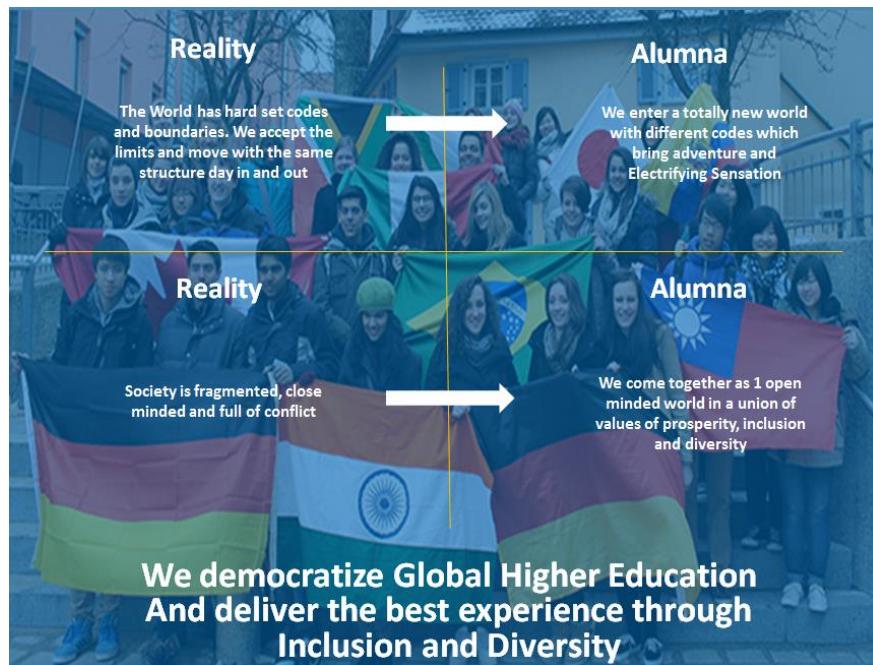
Figure: Current Global Higher learning Institution Map

Closing the Global Funding GAP

Alumna focuses on closing the funding gap for emerging markets and nation students that do not have access to aid agencies, development funds and banks, institutional funds, guarantees, collateral and security for traditional student finance. Alumna also aims to transform the current status quo on the current model of traditional student finance which is unsustainable as evidenced by the current student debt crisis. Alumna's end vision would be to see the above figure democratized with equal high quality learning opportunities globally and opportunities all over the world to access the best education through inclusion and diversity.

Alumna looks to target potential higher education students applying for higher education internationally who have a track record or experience working in industry. Here the ideal candidates would not be able to raise the full fees of higher learning institutions depending on their individual situations.

The below figure embodies what Alumna is about. Through restrictions, hard set codes and boundaries, the world is currently accepting the limits set in a mundane reality day in and out. Alumna wants to enter a new world with different codes which brings adventure and real world diversified and inclusive experience. The reality is our society is fragmented, closed minded and full of conflict. Alumna wants to create an ecosystem where we come together as 1 open minded world in a union of values of prosperity, growth and development through inclusion and diversity and this can be done through democratizing global higher education.



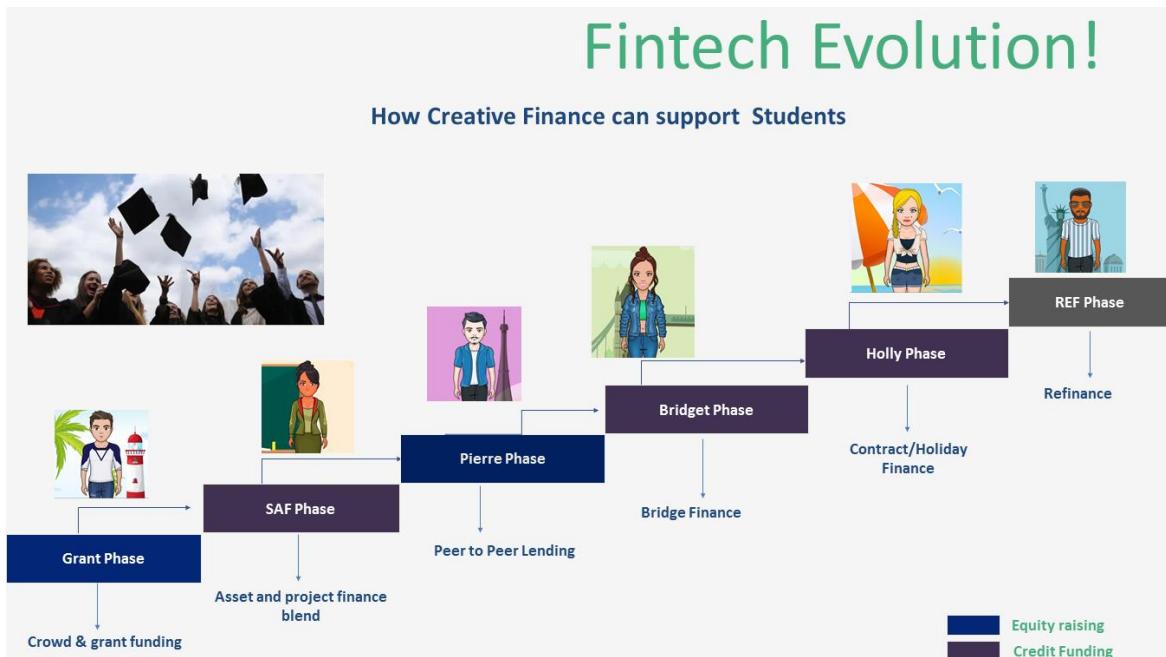
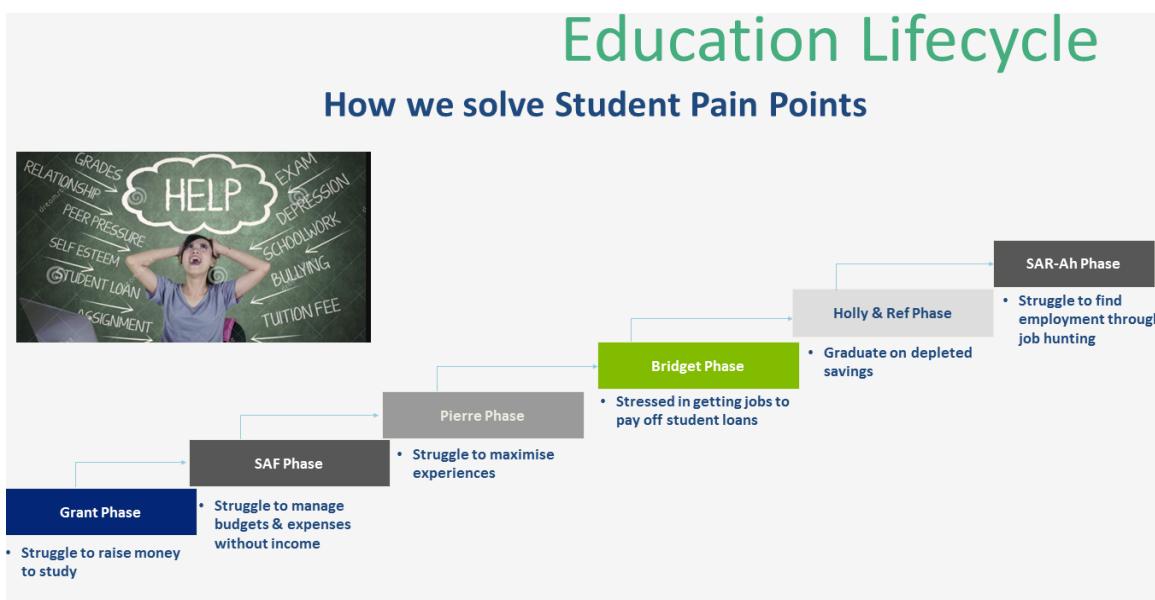
Opportunity Description

Alumna has investigated the education lifecycle pain points to create value. The below figure depicts the global student lifecycle. According to studies finance is 1 of the top 5 challenges student face on their way to graduation. Alumna has taken a deeper dive to identify what are the true pain points for students in order to develop and tailor solutions in the student customer experience. We have identified the key areas as follows:

- Finance packages for tuition while maximising student experience
- Getting hired and becoming cash generating assets to pay off student loans and grow ones earning potential

Education Lifecycle

The figure below illustrates the student lifecycle and identifies the key phases that Alumna aims to play a key role. Each phase describes the challenge students have to overcome and introduces the super heroes designed to help them along the way. The super heroes are designed to help in understanding how the finance solutions work. The super heroes are in essence finance products and catalysts in solving student pain points and also subsequently propel the platform towards high value usage and student registrations to build an ecosystem that competes with the biggest platforms in the world.



The above figure illustrates the student lifecycle and how Student's could access a variety of finance products to make the challenges of being a student go away. The finance products take many forms and the key is pushing high volumes of students through inventive new age finance technologies.

The finance technologies also help in solving the problem of access to global quality education for those who do not have access around the world especially from emerging nations. The finance products support students to have a rewarding and fulfilling student experience they will cherish for life.

Alumna's primary mission is to create an ecosystem on the primary education cycle. Alumna recognizes though that this will not alleviate all pain points experienced by students and so has a secondary focus when scaling up to be a platform to support student recruitment as it will already have the users on the platform and this would be an additional value add service.

Recruitment

Another frustrating challenge students generally face is getting a job which occurs at the end of the student lifecycle process. In the current status quo students aim to get employment after completion of their studies and aim to settle their student loan liabilities through earnings acquired through employment.

It is forecast that the Covid-19 pandemic induced recession will cause over 200 million job cut backs. It has become the most challenging times for students to enter the job markets; moreover opportunities will be restricted to those with specialized skills. Alumna's higher education focus aims to support career specialized students with scarce skills.

The problem that needs to be solved for students in the recruitment process is the frustrating application and onboarding process. With so many applications for few roles the probability of getting jobs irrespective of the student's talents, qualifications and abilities is very low. Applications for roles are so high that recruiters are even using algorithms to screen candidate CV's without reviewing them. This process decreases the probability of students being hired into their dream roles. Alumna aims to change the paradigm of students having to follow the current status quo of aimless job hunting to being head hunted on the Alumna platform. It must also be kept in mind that Alumna focuses on supporting higher learning in the education sector on science, technology, engineering and mathematics students where there is a huge need in the market from a skills gap perspective. Currently in the market there is a huge demand for Software Engineering, Web development, Data Science, user experience and interphase design, Digital roles, Cyber security, Product management, Block chain and other digital and

technology management. Alumna also supports other disciplines on a different risk management methodology and approach

Meet the Team

The team represents products and services on the Alumna platform that solve the challenges of the higher education ecosystem.

1. Student Lifestyle Team

The below figure illustrates the bouquet of Alumna finance packages designed throughout the student lifecycle. A detailed breakdown of the entire Alumna ecosystem is described in the pitch book for investors. The products from Grant and Pierre are geared towards simple solutions towards incubating and supporting the finance solutions designed. They are also geared towards social media engagement. They succeed in generating traffic for the Alumna platform which is key to high value usage and student registrations to build an ecosystem. The ecosystem will create network externalities for the platform to sustain itself going into the future. The character ads may be accessed on the Alumna platform under the student guide webpage. These will describe in summary what the fintech products are about.

A deeper dive into the student lifestyle team is described follows:



Meet Grant

. Donors on the Alumni platform are Grants who support students in raising money for their studies. Grant is the common social media page that allows students to collect money through grant or crowd funding. The service provides tips, resources, and tasks to students to help fundraising. Students are supported in running a campaign with media content i.e. photos and videos. Students can share pages on social media like twitter, instagram and linkedin. Online crowd funding is successful because it allows family, friends, and other people in student networks to support. It maximizes fund raising potential due

to awareness. Students gain points for resharing and engaging their profiles and this puts them in contention to win grant or scholarship prizes towards studies.



Meet Pierre (Peer to Peer Lending)

Pierre represents the ‘peer to peer’ lending platform. It allows digital borrower’s (Pierre’s) to lend students money on the platform. Pierre is unlike other peer to peer lending networks, it allows students to borrow from their peers under their own loan conditions. Alumna facilitates the transaction, its transparency and its record. Pierre can support students who require money during their studies to maximise their experiences or if required for other reasons like temporary emergencies. Pierre is different from Alumna as student peers can borrow money to students whereas Alumna members invest on the platform itself.



Meet Ref and Holly

The Alumna Ref and Holly products work on a contract & refinance basis. They are designed to refinance portions of student tuitions already paid to free up cash flow for students living expense or experience. Alumna has identified that students generally struggle towards the end of their studies to maintain living expenses without an income. Alumna has also identified that after long studies students would prefer a vacation before starting work commitments but generally don’t have the funds. The credit lines could be extended to students relative to collateral or released upon job offer and grad certificate submission as proof to pay back the facilities.



Meet SAF – Student Asset Finance

SAF is the heart of the Alumna value proposition. **SAF** shifts the paradigm of looking at a student loan and fundamentally disrupts the higher education sector. As mentioned Alumna moves away from and transcends the traditional loan financing approach. SaF revolutionizes the way students, lenders and investors see student finance. The product solution looks to not only support students on their future earning potential or just their credit history. It starts to change the framework to looking at students as productive (cash generating) assets and also stakeholders and shareholders with 'skin in the game' in their education that can fully leverage asset finance packages.

In practice what does **SAF** translate to?

Fundamentally SAF is about closing the gaps in uncertainty, risk, knowledge, and fairness between students, learning institutions, financial grants, scholarships and investors towards a winning risk mitigated partnership. SAF is also about unlocking more capacity to allowing diversity in international students gaining access to international postgraduate education. As mentioned earlier SaF is a fintech product created from a blend of project finance, portfolio finance, asset and supply chain finance.

SAF's Approach

Asset finance is a finance category used by traditional banks and businesses to obtain equipment they need to grow. The principle is that banks finance businesses who acquire equipment (assets) which support in generating revenue. If banks can look at financing equipment solutions off the premise of them becoming cash generating assets in future why not the same approach for human capital? SAF is fundamentally about seeing students as potential future generating assets like power plants as an example capable after commissioning (studies) to generate cash and become productive assets. It is through this principle that the approach of Alumna was adopted. Alumna adopts several financial product fundamentals to invent a new finance solution towards the future of post-modern finance.

Students become majority shareholders in their education and start being seen as productive assets able to generate income over time after their studies. SAF introduces the concept of viewing students as productive assets like any asset which requires a certain amount of time to be built but when commissioned is guaranteed to be a cash generating asset like a power plant for example.

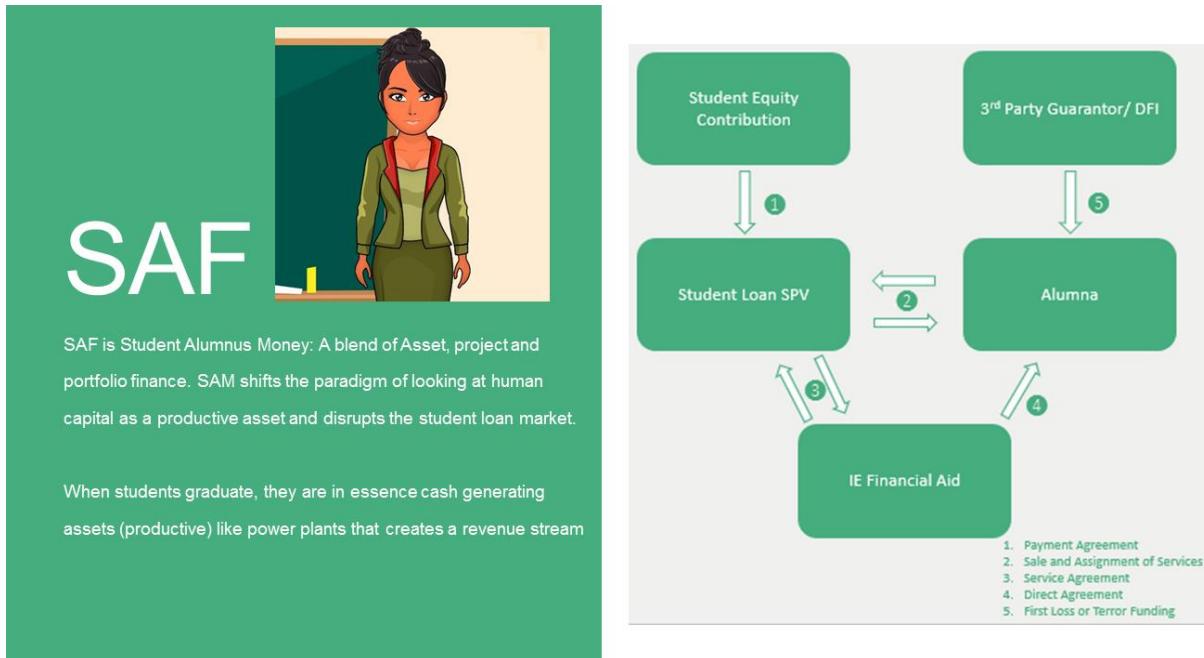
SAF principally relies on the student putting in more “equity” into their studies that will be utilized to leverage grant finance and student finance. This methodology is beneficial as unlike traditional student loans which can finance up to 100% loan the risk and loss through failure is primarily with the student who will be the majority shareholder in their studies.

SAF will decrease the risk of banks’ lending and exposure to student finance deals. Traditional student finance solutions are very risky and also overly expose the banks due to loan cycles being quite extensive and so the risk is not only on initial pay back but also probable default over a long pay-back period. SAF’s product approach is of performing a higher volume of student loans with lower leveraging of student loan finance. Here what is envisioned is that SAF could go up to a maximum of 20-40% per loan applicant with students raising up to 51-70% of equity into their studies. The grant finance portion could then play a minor role in between as a gap filler of up to 10-20% finance to students. This approach will also put less strain on the financial aid grants and scholarships that could play a role more of facilitation in the finance process as a type of “**mezzanine finance**” grant facility.

Equity into finance from students gives credibility and robustness into the will of completing their studies because they can lose. With the SAF special purpose vehicle all stakeholders of student finance have a lot to lose if unsuccessful and so the partnership allows the model to succeed.

The transactions will be structured as special purpose vehicles (SPV’s) as shown below. SPV’s are structures that generally provide a hassle free and off-balance sheet solution. The SPV’s translate into smart contracts. The flow of capital will be facilitated through 3rd party escrow and trust accounts. SPV transactions provide another way of restructuring student loans away from the current co-signer/guarantor process. The above approach to facilitating transactions provides a better risk mitigant for all stakeholders as their leveraging ratios of student finance are lower and moreover they would be facilitating a lot more transactions which would diversify risk. The product above also is a better risk mitigant for financial grant schemes which could translate into better management of grant treasuries. Most importantly the product would provide an alternative solution for students who can’t obtain co-signings or have access to big balance sheets which would translate into higher registrations, a higher

reach of a diverse global student body and also higher shareholder value creation for higher learning institutions.



Explaining Figure:

1. Service Agreement is entered into between Portfolio SPV, student, financial aid, SAF and potential DFI/federal institution
2. Student SPV mandated to finance student fees and assigns related security to SAF
3. SAF enters into a Direct Agreement with the student
4. Student fees are paid through to learning institution from SAF
5. Upon graduation student pays back for student loan through work contract

A student loan transaction could be envisioned as following:

- Student is accepted to study at higher education institution
- They present their financial plan incorporating them raising minimum 51% of fees and living expenses

- Grant finance and scholarship could then under its discretion award student's scholarships from 10-20%. Here SPV could also use Development finance institutions in supporting in the grant or loan finance category and potentially setting up partial guarantees.
- SAF is used to leverage the students equity portion through allocating up to 40% of finance (**on a traditional non-recourse basis***) to reach financial close on deals. This is the risk SAF would be taking away from the full guarantee option which would then classify it as an unsecured lending product i.e. a real student loan. Other forms of collateral could also be looked at as security away from full co-signing or full bank guarantees.
- Here every candidate would be analysed on a case by case basis for merit and risk appetite perspective whether to proceed with the transaction or not and appropriate gearing levels. Here technical requirements to assess students would be used as a benchmark
- The cash waterfall from grants and scholarships and also SAF would only kick in after the student has transferred their equity portion for fees on a capital first loss basis. This means that the grant finance scholarship would kick in after the student has paid their portion of fees. The grant scholarship fund would then be introduced to decrease the student fees and then after the grant scholarship SAF would be the 3rd lever drawdown to support in paying for the student fees. This grant scholarship mechanism would be meant to be able for financial aid to be able to pull out of commitment of grant fees if the student has not settled their portion of fees. Here financial aid and grant schemes sometimes could be losing a lot of money because they allocate scholarships and funds to students who don't complete their studies. This manner would give the financial aid office room to support transactions and also able to back out of cases where some students would not be able to meet their obligations and finish their studies. This is in essence a smart contract
- Another aspect that could be looked at in the above structure is also setting up partial guarantees to support in gearing the student loans from SAF even further for diversified collateral

Blockchain & DeFi Value Proposition

Alumna's motto is global citizens for global education. Alumna utilizes blockchain technology to fulfill the Alumna platform network requirements. Blockchain is necessary as a mechanism to record the transactions and facilitate the payments. Here there will be an option for use of digital currency or fiat currency for users on the platform..

Why Blockchain, Why DeFi?

Secure efficient payments



Transparent Digital Records



Smart Contract Execution



Digital Asset Leasing

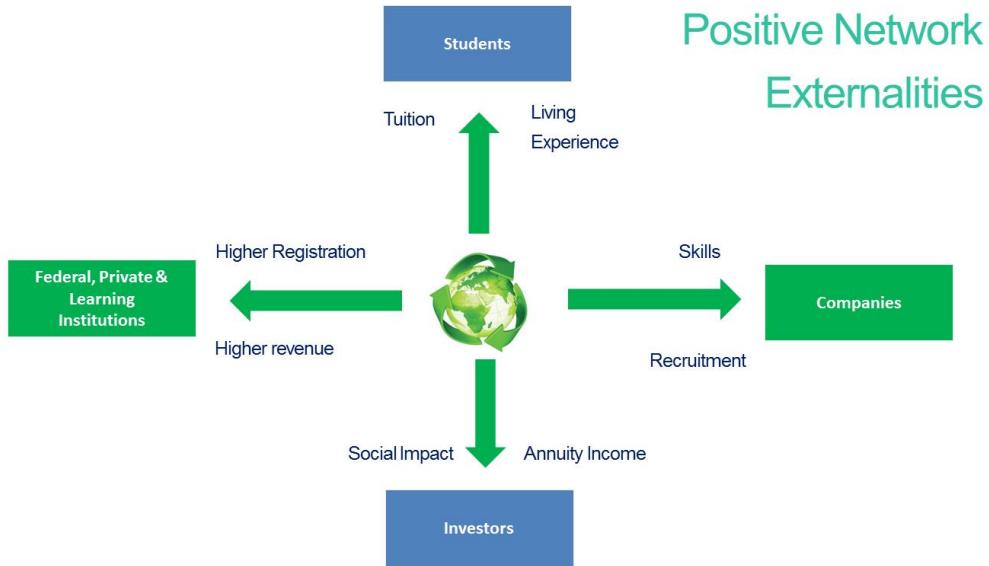


In essence Alumna has identified a material problem, which impacts a large number of people and when solved will materially impact the world. In a nutshell blockchain is necessary and will be utilised as a technology application relative to:

- the mechanism to record the transactions and facilitate payments.
- the mechanism for tokenisation and smart contracts to deliver this
- the mechanism for trust and verification of digital records which can be sanctioned legally
- the mechanism to lease digital assets to students to settle their tuition and living experience allowances through credit products SAF, Ref and Holly.

Value Creation

The value created as well as the positive social impact to the education sector can be seen as follows:



IMPACT Investor Relations

Alumna has a comparative advantage in the social impact and conscious capital market. Although crowd funding and peer lending platforms exist, its unique revenue model, approach and technology enable Alumna to offer direct ownership of the platform assets themselves. Alumna is purpose built for crypto currency payments, significantly simplifying global transactions and reducing administrative costs.

Most education finance providers focus on developed nations, while Alumna focuses on increasing the volume of capacity in emerging markets where there is a critical demand for finance and economic solutions. Our focus also on global higher learning institutions is unique; moreover the crowd sale approach of fundraising makes direct Alumna asset ownership more accessible and affordable. By reducing the entry cost to project stake investment to 10 dollars, Alumna reduces the barriers to enter global education transformation investment and finance and ownership.

Investor Member Credit Facility Lifecycle Comfort Criteria

Alumna is a platform with stakeholders from all over the global education value chain. Alumna sees all its stakeholders as equal partners with a common vision for the future prosperity of global socio

economic growth and development. Alumna aims to make all stakeholders perfectly comfortable with its model in partnership with its stakeholders. As impact investors bear a risk with investing on the platform Alumna has developed a risk management model specifically tailored towards the security and safekeeping of investor member interests on the platform through a mutual enrichment framework. Alumna has performed investor surveys to understand the appetite for investors to invest on the platform and get profit returns. The investor expectations and requirements to be implemented through Alumna are as follows:

- Alumna has setup an assurance facility for investors for insurance in case there is any form of default from facility holders. The assurance facility aggregates a % of all transactions from the Alumna platform onto the assurance facility
- Alumna will look to set up performance insurance and warranty on facilities sanctioned on the platform. As borrowers will be predictable cash generating assets through their income contracts. These contracts will require a performance warranty and/or an unemployment insurance in case there is a potential loss of employment contract or payment interruption
- All borrowers will need to be adequately insured when lease contracts commence
- Impact Investor members will bear a maximum 6 month moratorium on investments upon which they will start to be allocated a return. The 6 month moratorium is tied to the maximum period that borrowers will have a moratorium through their formal course work and graduation periods. The capital would be deployed upon verification of academic performance of the students mid-way through the studies through special purpose vehicle smart contract
- Alumna will enter into lease agreements with borrowers which will be legally included in facility agreements. Here Alumna will have recourse directly to employers or income contracts of borrowers. This would reconcile access to principal payment pay back directly to cash flows and not through students. This would also assist income contractors and employers to be able to access tax write off's or deductions which are deduct taxable income. This would also take away the liability from students and also a headache for Alumna and its investor members to collect principal

- Alumna is a platform with diverse revenue streams. Alumna is not like traditional finance companies which rely solely on fees and interest payments. Alumna has diverse revenue streams to cushion and buffer and potential credit losses
- Alumna is hedged unlike traditional finance companies who are overleveraged. Alumna demands a 51% down payment from borrowers to have skin in the game. Alumna also has lower risk through lower facility amounts which allow larger volumes of capital allocation and also much shorter facility tenures. Alumna's tenures are 3 years when other companies in this market are 8. Alumna hedges against market volatilities and minimizes student interest expense liabilities
- Alumna will price its facilities adequately as a hedge against default risks throughout the life of Alumna's exposure
- With more volumes of facilities Alumna will look to pool all facilities together in a portfolio finance approach. Alumna will also attempt to securitise the contracts through sale to players like banks to hedge collection risks through invoice discounting

Alumna Assurance Facility

Despite Alumna's experience and thorough approach to due diligence assessments for all potential stakeholders, when working with stakeholders over 3 years contracts, it is impossible for Alumna to entirely eliminate all risk. While Alumna's business model is robust, reliable, allocates risk and reward in the right areas the company strives for continuous innovation to create the most secure financial environment possible.

The Alumna Assurance facility is a key enabler in the company's efforts to bridge the funding gap. Cash proceeds from capital raising (discussed later) will provide initial Assurance facility seed funding (geared to buffer both Alumna and investor members). This will create a dedicated collateral pool to protect investor's against SPV defaults during their 3 year contract lifetimes. In addition to the fiat currency collateral Alumna will solicit token stakes, and additionally allocate a number of reserved tokens to a buffer bonus pool, which together can be additional sources for insurance claim expense payments , and can replenish the Assurance fiat currency collateral pool.

Proceeds also from initiation fees of candidate finance will be used in the assurance facility. Once a critical mass of users is reached in subscribing to the Alumna platform, each proceed will contribute proportionally to generate a guarantee fund to protect the investors, who in case of default, will recover the invested amount (principal), so they would only assume the exchange rate risk. The debt will become property of the guarantee fund, which will manage its collection by different means, even legal, but always aligned with our good practices policies and confirming that such collection does not deprive debtors from their basic means of life. The asset pricing will take into account the degree of risk in transactions.

Another avenue that will buffer the facility will be grants which will be sought by 3rd party institutions which Alumna will be supporting in launching the facility and the platform. This includes federal institutions which will be relieved from the burden of the student debt crisis by the commercialization of the student debt market. The assurance facility will also be backed up by 3rd party guarantors like development finance institutions supplying partial guarantees to Alumna facilities and also export credit agencies whereby Alumna will partner as Alumna will be supporting in the attraction of export revenue via global student registration intakes. This will be developed into the model over time in scaling.

Other support structures include companies investing in the Alumna platform who could look for tax benefits and potential write offs from education sector tax incentive allocations in respective jurisdictions around the world. Other security measures as buffers against defaults will be exhausted in the governance and risk management framework section below.

Alumna will develop an ethereum smart contract from token sale proceeds that will accept Alumnus as stakes against the assurance facility. This will function as insurance against possible defaults and unexpected costs on the Alumna platform. The smart contract will also manage the assurance claims process which will reinforce automation and transparency of the insurance claims process.

The next section of the white paper focuses on the global enablement of Alumna through technology. Alumna will utilise distributed ledger technology to implement the global higher education evolution. Blockchain technology will be used as a catalyst to propel Alumna forward and integrate global stakeholders in realizing its full potential.

Alumna's is looking for investors including individuals and organizations around the globe who are interested in impact investing along with a healthy return in potentially disrupting a trillion dollar industry. The only requirement to buy into the Alumna network is an internet connection and approximately 10USD in a project stake making ownership more affordable and inclusive than previously imagined.

In the first phase of Alumna's development the focus will be on lease contracts for project stake digital assets to fulfill crowd raising for the platform and transfer of asset to learning institutions. The leasing of digital assets will allow the leasing of the assets (ethereum infrastructure network) to fulfill the lease contract obligations.

Alumna performs evaluations on a best efforts basis to provide attractive growth opportunities to its platform. It is important to understand that each investor makes an independent purchase decision and bears the associated risks as described in the SAF model. All stakeholders in the Alumna model have the adequate allocated risk with the candidates bearing the biggest risks.

Future Encounters to Overcome

Currency exchange risk

Exchange rate risk should be assumed by investors because they are more capable to analyze them (properly managed can even turn into opportunity for them by investing in countries where they consider there are better macroeconomic conditions for the exchange rate factor to improve profitability instead of reducing it). In fact, investing through Alumna is a way to diversify investor's asset portfolio with high yielding manageable risk investments through digital currencies. In addition, insurance services of the exchange rate will be offered to investors who do not want to assume this risk, in exchange for sacrificing part of their profitability.

Digital Currency Volatility

Digital currency volatility through large fluctuation could only be a risk during crowdfunding period; to prevent from it, the Smart Contract will automatically call off the process if a decreased value means borrower does not receive at least 80% of requested amount. During loan's period, such fluctuations are not relevant since crypto currency will only be used to transfer money between investor and borrower, and each of them will receive it in their respective currency, i.e. dollars and Euros: the parity between Euro and the crypto currency will always be very similar to the

parity between borrowers currency and the same crypto currency. Alumna chooses to hedge the risk of this volatility by subscribing to 5 digital currencies and fiat currency which could be used for exchange namely Bitcoin, stable coin and ethereum, to mitigate risk. Here users have the choice to either deposit and withdraw in fiat or digital currency. It is possible to transact only through fiat currency for members who do not want to transact in digital currency.

Finally, the following table contains risks that can be hedged in order to mitigate them:

Foreign Exchange (FX) Risk	Hedging of FX
Interest Rate Risk	Hedging of Base Rates
Currency Risk	Currency swaps, offshore reserve accounts, PRI investments (guarantee, made by a foundation in pursuit of its charitable mission rather than to generate income)

Trust

We focus on trusted relationships to provide transparency and solutions that constitute the whole education value chain to come together. We leverage Block chain technology and Smart Contracts for their ability to establish safe and firm conditions to transfer securities subject to compliance of such conditions. Alumna will present regular reports on the progress of its platform through a dedicated Telegram channel for all its members.

Privacy

An individual's credit profile and financial history are extremely sensitive data. Protecting the privacy of borrower's is a critical element for the Alumna Network. It must also be noted that investors also need surety that this essential data is dependable for their investment decisions. In order to protect both the privacy of users and the security of the system we provide a certification mechanism which will not contain borrower's identity details. Debtor's identity will be unveiled only in the event of defaulted loan and will be registered in the platform's Defaulting Debtors record, accessible only to registered credit institutions. The Alumna network also has a mitigated loan process which only deploys capital

after borrowers have deployed theirs on a capital first loss basis. Alumna also has partial guarantee facilities in place along with partnerships with institutions to protect the integrity of the processes.

Anti-Money laundering

In accordance to the ethics code we are promoting, we want to comply with all AML (anti-money-laundering) regulations, adhering to KYC (Know your client) standards, applying filters like Norkom (database for client filtering used by banks) and working exclusively with Exchanges that comply with these regulations.

Regulatory Risk

In our modern digital age, the pace and growth of technology has left regulation lagging and many countries regulation like traditional business models are playing catch up to the disruptive digital age. There is a significant level of undefined space regarding international crowd lending and the digital currency market and this situation will most likely change in the future. Regulations compatible will support Alumna's business model to become more robust but our system would make the required modifications to adapt to resulting legal frames within each jurisdiction we add value around the world.

Political Risk

An unexpected risk associated with the success of this digital system approach will possibly be found in some governmental resistance to change. Some countries may exert their political power to prevent funds outflow or even declaring exchanges as illegal, impeding borrowers from repaying their requested loans despite their best intentions; selecting countries remains investor's liability but doing it wisely prevents largely from this kind of risk. Alumna will provide investors with quarterly reports of risk situations in the countries where the platform operates.

KYC, AML and Multiple User Risk Management

The Alumna Platform utilizes robust business processes to manage risk. We will utilize these business processes for the risk management of the operations. Alumna 1.0 will control risk identification facilitated through the learning institutions we work with globally for KYC and AML. We will utilize the nodes methodology (Alumna employees) in member countries that will have an approval and due diligence process to onboard global institutions in process similar to how banks onboard technology suppliers. We have finalized the best institutions around the world to partner with for Alumna 1.0.

With the evolution of blockchain risk management protocols Alumna 2.0 could move to partnering with data integrity blockchain organisations. Here Alumna will partner with a blockchain provider for an easy way for enterprises to add data integrity and trust to existing processes using the power of blockchain. The provider will supply API to chronologically link enterprise data, documents, and transactions on the blockchain for immutable record systems. It will enable the enterprise business to build data integrity and trust capabilities into existing apps to support compliance, auditing, and collaboration initiatives.

This is why our ecosystem approach is better than competitors because in our model everybody gets value. From that perspective the risk will be eliminated. Alumna 1.0 will be a first launch phase carefully before a big roll out to the market. We have experience in traditional corporate banking as a team has launched finance products in traditional banking environments. We are a very risk averse organization and understand Basel Banking Regulations. We envision Alumna 1.0 taking 2-3 years to ramp up until capitalizing on the trillion dollar industry.

Sybil Attack

Sybil Attacks (one person with multiple identities) are harmful to the extent that one borrower may obtain several loans under different identities. Lending money to strangers through peer-to-peer on-line platforms is fairly risky. In 2014, fraud was responsible for 12% of online lending industry losses. The risk assessment associated with identity fraud within a decentralized-international context is even more problematic. This is one of the main reasons why Alumna promotes an institutional framework and looks to deploy capital with participating learning institutions or the adequate collateral in place from borrowers. This practically eliminates Sybil risk by personally identifying borrowers and geolocalizing their ecosystem. Alumna's approach also works on a capital first loss basis for borrowers with smart contracts enforced to deploy capital after conditions are met. Alumna will continually look to improve its product risk mitigation framework with adequate process checks and controls.

Auditing and Assurance

Process compliance, integrity and corporate governance are necessary to make the system designed to work. Preventing any fraudulent testimony relative to the Alumna platform. This risk factor must be controlled by an adequate accountability and qualification mechanism aimed towards the detection of fraudulent certification. It is imperative to maintain a verification and supervision process by auditors of the Alumna book and also public audits on Alumna's global governance processes.

Legal

Alumna will utilize legal advisors and council in growing its platform through different jurisdictions

Timing

Crowdlending platforms grow over 100% annually thanks to directly connect investors and borrowers without financial intermediation. Blockchain allows a new level for crowdlending development by improving security and transparency, facilitating international transactions between strangers. We subscribe to this new global economy concept because we are persuaded it is an ideal solution for the present day.

This is all made possible by Blockchain technology:

Cryptocurrencies are already globally accepted as reliable means of value transferring. They can be transferred without intermediaries, from anywhere on the planet between people with a Wallet, without borders, safely, at a low cost. In addition, thanks to SmartContracts based on Ethereum's Blockchain network, these transfers are subject to prior compliance of conditions established and approved by the participants. Digital natives now form the majority , and their familiarity with online transactions shapes what we define as a matured investing market, fully prepared for this technology which will revolutionize the way we perceive trade.

Alumna Product Offerings

For Private/Retail Investors: Access to a portfolio of investment opportunities all over the world allowing diversified opportunities and revenue streams. A great balance between profitability and managedrisk no other platforms can match.

Institutional Investment: Access to a new type of asset to diversify your investments, with an attractive return product and high liquidity.

Investor Referrals: An investor who is already a member at Alumna , will receive an economic incentive for each new investor they refer to the platform, benefiting from their successful investments and thus motivating them to share their satisfactory user experience.

Financing product: Students get access to products and services which allow them to fulfill their future ambitions. We support to build an online reputation and credit history for our users; facilitating their

access to credit from other suppliers and even improve their networking and relationships for upward career mobility.

New jobs Generation: We build a platform which supports employment for better livelihoods and well being.

DataMining services for Business: The database generated through operation will allow many companies, financial institutions, service providers, e-commerce, etc. to increase their client base and to foment their own knowledge of their needs.

Insurance marketing: Insurers and evenindividuals aligned to Alumna may offer default and exchange rate assurance services to investors.

Alumna Blockchain Choice

Alumna utilises Ethereum as a distributed ledger technology (DLT). Alumna chooses to start the project on Ethereum due to several key strengths:

- **Developer community:** Due to a growing number of developments, best practices and tools maturing Ethereum is the right choice to build the platform with
- **Future core developments.** The Ethereum blockchain itself is still maturing and evolving, with current efforts directed to improve the volume of and allow sidechains. In the unlikely event operating in Ethereum becomes unfeasible, we will study migrating the functionality and tokens to another blockchain
- **Philosophy:** Alumna will be an increasingly decentralised platform and Ethereum is the best in blockchain application in this regard
- **Alumnus ETX tokens** will be the currency to operate within our platform. We also plan to modify the SmartContracts that will manage the assurance/guarantee fund

While finalising this white paper it has been announced that Ethereum 2.0 will be made available from July 2020

Epilogue

Alumna aims to innovate and transform the current global financial education ecosystem and improving global inclusion and diversity. Alumna succeeds in implementing the United Nations Global Goals (SDG's) relating to quality education, gender equality, decent work and economic growth, innovation, reduced inequalities and partnerships. These form the principles of socio economic development and global prosperity.

Alumna Values

- **Equal Opportunities**

Alumna ascribes to a world with equal access to opportunities and we want to contribute to make equal rights to every citizen of the world a reality. Correcting misallocation of global capital is our project's main motivation, but also correcting many of the unfair aspects of the current financial system.

- **Cooperation**

We believe in the community's synergy and its members' multiple ties and bonds value. We see our community to be of people whom interact and generate value through communication, trust, support, reference and commitment. For this reason, unlike other platforms, our risk assessment is carried out by technical specialists who personally understand the sector and its dynamics.

- **Integrity**

Aiming to transform the global education finance sector needs courage and investor will and confidence. Facilitating money between people of different places and customs requires the project to be seen and understood to be about trust between different people. We are confident in the fundamentally disruptive nature of Alumna's new age fintech products and blockchain technology with respect to the current financial paradigm. We want to be one of the principal contributors to this decentralization process and transformation of the status quo to a better world.

We also encourage students and stakeholders who benefit from the platform to commit to the platform longer term and come back to invest and grow this new approach for global prosperity.

Acknowledgements

We wish to express our gratitude to all the people which at different times have made this reality possible. To all the anonymous developers who have believed in the great synergy of open source code and thus have laid the groundwork for the development of Blockchain's wonderful technology, the likes of Satoshi Nakamoto and Vitalik Buterin and the real world risk institute; to those who guided us to this fantastic world with endless possibilities. We salute you for opening the doors to allow us to revolutionise the global education ecosystem.

For further details please reach out to info@alumna.eu

Yours Sincerely,

The Alumna Team