Limae Phuah

Education needs effectual change for a better tomorrow and it starts with the right business model today

Helsinki
Metropolia
University of Applied Sciences

Author Title Number of Pages Date	Limae Phuah Education needs effectual change for a better tomorrow and it starts with the right business model today 108 pages + 14 appendices 28 November 2016
Degree	Master's Degree in Business Administration
Degree Programme	Business Informatics
Instructor	James Collins

Education that is meant to hone talents in young people and be forward-thinking enough to propel them well into the future with the required skills are in fact holding some of them back. Recourse is needed because the world's focus on economic achievements for the past decades have caused considerable number of youth to not achieve their full potential and this has led to immense and costly socioeconomic issues. This research explores the possibility of using entrepreneurship to expedite change in education. From the findings of this research, one approach in the natural learning process of humans was identified to be of significant importance. The future product-solution that will be developed later on will take the form of an online learning program that focusses on youths' non-cognitive skills. The success of implementing this program hinges upon a formidable business model and therefore, potential users of this program were consulted to help shape the initial model that will be used to launch this learning approach. The research will explore some of the problems in youth learning, state how the idea was conceived and most importantly the design of business model. Finland's strength in technology, research and education gives this business idea a fighting chance to go to market and change the world despite it having a less than ideal regional collaborative network to export education technologies. Education systems worldwide are in real need for effectual change for a better tomorrow and it starts with the right business model today.

Keywords	Education, learning, marginalized youth, school, psychology, non-cognitive skills, education technology, business model, social enterprise, business model canvas, young people, regional game plan

Helsinki
Metropolia
University of Applied Sciences

Preface

A few years back when I was striking up a conversation with an ex-colleague who was then completing her PHD in human resources management, the topic on how talent is squandered and lost to harmful human and economic resource processes came up. Inevitably this led to discussions about the extended problems in the local education system and how it exacerbates the problem of youth not being able to achieve their full potential.

Many countries face the problem of education not adequately matching the needs of the business world today and despite knowing its inherent problems, young people are still being put through the same education system (Richardson, 2015 & Robinson, 2011). Parents who can afford it mitigate the situation by paying for expensive private schools and after-school programs. Yet youth coming from less affluent families have more pressing need for effective education resources yet a majority of disadvantaged youth miss out on it.

Teachers who are in the field now can see and hear student concern with stress and demotivation. Novotney (2014) highlighted an increasing trend in students having study pressures and in the context of Asian families and countries this is nothing new. We educationists can only wing the situation, lend a sympathetic ear and use kind words to appease their laments. Disengaged and unhappy students will not be likely to enter the workforce in the best of minds. That is if they get a job in the first place.

Honing talent in young people is important to ensure a happy and engaged workforce of the future. Nearly all governments and businesses know the importance of such qualities in helping businesses thrive and be creative (Robinson 2011). Yet, they are facing an insurmountable challenge of delivering and implementing education policies that prepare youth for future work.

Recent conversations with some people in Finland revealed that there is a similar situation here as well. This sparked my curiosity in this area as I could not have imagined that a country renowned for its education would also have the same problems as it is in Asia.

Furthermore, Cindy Howson's book on "Successful Business Intelligence" convinced me that tools and techniques in data acquisition, transformation and analytics can be used to further social causes and this compelled me to launch my current research path.

There are many unhappy young people out there who are not living life to its fullest potential. The sad state of some young people are manifesting itself in abuses and violence that is not only affecting themselves but society too. This deep-set education dilemma appears to be the cause of some pressing socioeconomic issues that governments around the world are trying to overcome. Addiction, social exclusion and many other public health and safety challenges are increasingly costing governments amounts that are unimaginable back in our fathers' time.

I hope that with this research a solution can be developed and implemented effectively to alter the current situation for youth who are being marginalized globally.

> "Think big and don't listen to people who tell you it can't be done.
> Life's too short to think small"
>
> – Timothy Ferris

ACKNOWLEDGMENT

I would like to take the opportunity to express my utmost gratitude to all who have been in contact with my life. In my journey of doing this thesis research, I have been helped and advised by many people and this have given me the inspiration to take on this research.

I was extremely fortunate to get a study place in Metropolia University of Applied Sciences where its dedicated staff work hard to create a better future for tomorrow's generation. Thank you Erja Turunen, James Collins, Antti Hovi, Pia Hellman and Thomas Rohweder. Next, I am grateful that some experts, parents, young people and friends who took the time to contribute to this research:

Maarit Korhonen, Marisun Gajitos, Mr. Ari, Erik Pontikoski, Umesh Gauli, Tuomas Jormola, Timo Hattaja, Rachel Mäkelä, Ari-Pekka Auvinen, Bengt Forsström, Ellie El-Khouri, Jonathan Yap, Ana Pak, Nico Ng, Chris Lau, Puan Yati, Annie Chew, Mrs. Dadang, Joyce Moh, Wan Foteh, Eero Satoniity, Chai Cheng Hui, Chew Wei Aun, Anand Carensuk, Abigail Hua, Cindy Teoh, Jerlene Lee Wallenius, Angeline Kwan, Serena Chan, Ang Sio Sen, Anne-Mari Raivio, Diana Väyrynen, Devrin Jeck, Julia Moh, Wilson Tan, Joshua Wong, Onn Joo Ee, Peter Wilfred J., Nouri Mikko Werdi and all the volunteers whom I have met in the entrepreneurship scene of Helsinki.

I would also like to thank Annakaisa Rouvali, Laimes, Laura Carnicelli, Saku Tuominen, Lasse Leponiemi, Lucia Indren, Priscilla Wong, Laura Matilla, Reija Airomes-Makiperna, Anni Tyrmi, Yan Chi, Priya, Bhuvan, Edmund Liew Chien Hearn, Ross Kamarul-Baharin, Eva Pennanen, Evon Soderlund, Mei Yen, Yan Peng, Sidney Wong, Paul Selvarajan and everyone that I have met in Finland so far for making my life a little easier and blessed. Finally, my husband Kai who have to put up with my late nights and meetings while adding insight and clarity to my thinking when needed as well as our two beautiful kids Madelynn and Darius who continues to be loving, patient and supportive despite my endless hours working on this research. This thesis would not have been possible if not for them.

TABLE OF CONTENTS

List of figures:

1 – INTRODUCTION

Education systems need a better structure to make learning curriculums more effective and coherent with the needs of the future world (Ordoñez & Maclean, 2000). At present, many young people are unable to find jobs upon graduation, employers complain that they do not have the required skills for employment and more importantly, unique talents and interests of the young have gone undiscovered (Robinson, 2006). Among the raft of research and discussions of what education is now and what it should be, the underlying problem is the same. Some of the conventions and the culture of education do not promote the type of learning that is required to prepare young people to not only lead a future that they wish for themselves, but to prosper in it (Richardson 2015).

The rapid growth of youth population in Asia attributed to the problem of governments struggling to provide effective education to younger generation (UNICEAP, 2011). Being the region where 60% of the global youth population now reside, there are many problems with implementation leading to undesirable repercussions in society as a whole (UNICEAP, 2013). The African continent has started to experience similar rapid growth hence the need is ever more pressing in the near future. For highly populated areas like Asia and Africa, increasing inequality can only mean one thing: civil strife. Efficient education systems are needed to ensure a future that is right by them and for them.

In the United States, the problem has been identified since the 1980s as evidenced in "A Nation at Risk" report that publicized failings of schools in the country. Most of the education systems in Asian countries emulate the conventions of education systems in western countries such as the US and UK and governments have been battling with making changes in them, but they know little about the system they come to adopt hence the ineffectiveness (Rowden 2011).

The diagram in the next page illustrates youth population growth in different regions for the period between 1950 to 2060.
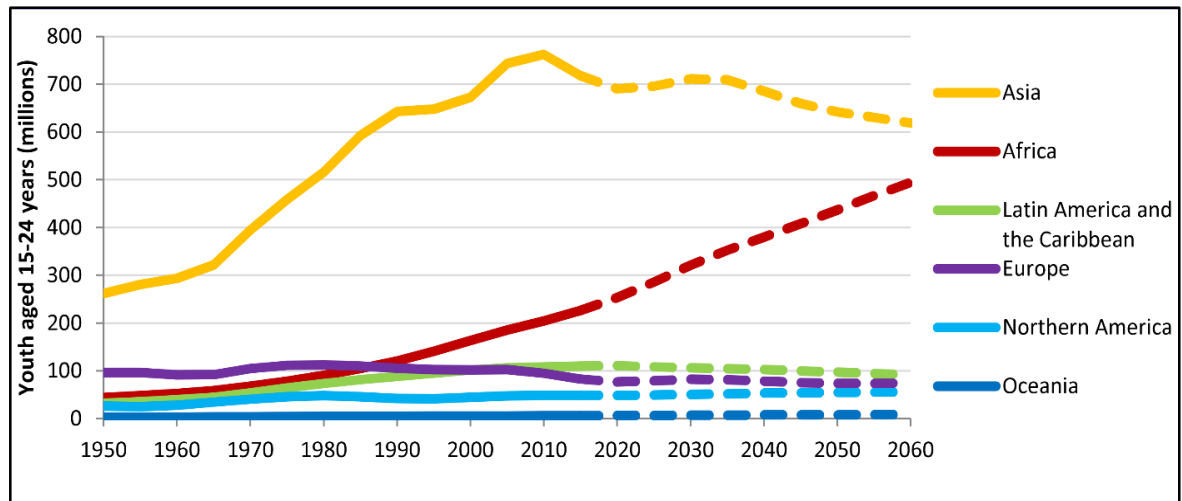
FIGURE 1: YOUTH AGED 15-24 YEARS, BY REGION, 1950-2060. SOURCE: UNITED NATIONS (2013) WORLD POPULATION PROSPECTS: THE 2012 REVISION.

Many Asian governments are earnest with fixing the problem but governments will not be up to speeds with the fast pace change in society. Schools have no choice but to continue to churn out students using the same education system despite recognizing its flaws (Robinson, 2006, Runde, 2014 & The Malaysian Insider, 2014).

Educationists can tap into technology to roll out programs on the side while governments continue to work on making policy reforms. These programs can be used as testing grounds to examine policy effectiveness as policies start to take shape. It can also provide data to drive policy development further.

As an introduction to the challenge in brief, the business problem here is to figure out how to teach non-cognitive skills to youth in an effective and widespread manner. This will be explained later in the research. With that in mind, the outcome of this research is a viable business model for a social enterprise.

The order of the information in this thesis is as follows. First, literature review in Chapter 3 will help to frame the problem and research area. Data was then collected before a review of current knowledge in business models was conducted. The business model was then designed to fit its purpose. The following section will look into the thesis' research methodology where the research design, methods and processes are discussed.

2 – Research Methodology

The research methodology section explains the approaches taken in conducting the thesis research beginning with the research design, followed by research and sampling methods and ending with the steps taken in the research process.

2.1 Research design

The thesis predominantly follows the principles in action research where research is conducted continuously and in loops. This can be seen in the customer research and analysis section and customer value proposition design. Action research encourages the use of a wide range of other research approach and methods that cuts across all disciplines making it a highly efficient approach to tackle complex problems.

Broadly, the approach here is mostly qualitative in nature as the aim is to understand the behaviour of young people towards education and life. Therefore, the choice of methods such as interviews and observations are used as it can provide rich information that is pertinent to the design phase of this research and beyond.

The research is also inherently exploratory. This thesis serves as the inroad to start the process of discovering product/market fit (Blank 2006). Little is known about the effectiveness of social enterprises and e-learning as the Internet is still in its infancy. Exploratory research attempts to investigate those areas in a more in-depth manner and gain the necessary experience with the phenomenon so as to understand the state of things. Descriptive research techniques have also helped to frame the research problem more precisely to give conviction to the subsequent task of designing the business model.

Figure 2 on the next page attempts to give a visual understanding of the approaches used in this research.
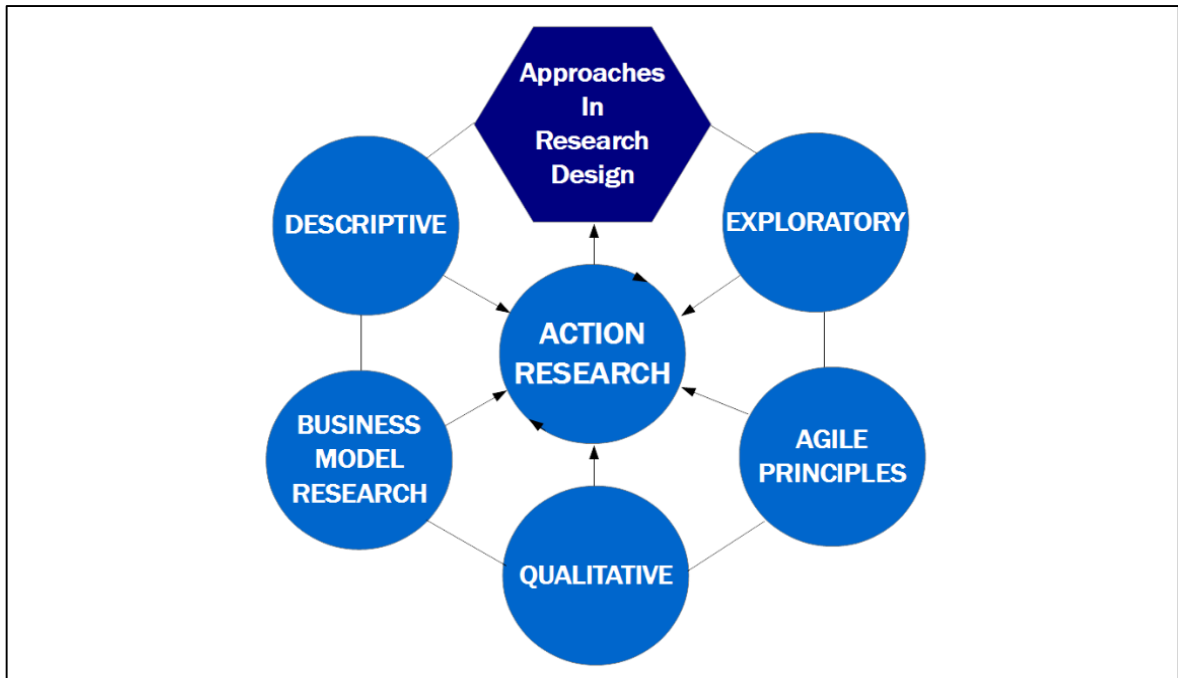
FIGURE 2: APPROACHES IN RESEARCH DESIGN

2.2 Research Methods

This section lists and explains the techniques and tools that were used to collect and analyse data in this research. The research begins with the gathering of primary data using in-depth interviews. Parents, are potential paying customers, and several young people were interviewed at length to deeply understand the realm of their education and life arrangements that shape their beliefs and way of life. Interviews were conducted with potential users to explore what they have to say about learning relative to their daily lives and what they hope of it.

Students in public places were also scrutinized over a course of two weeks. Approximately 200 young people were observed in their natural setting such as in the compounds of secondary schools, shopping malls and college libraries. Then, three former college students were shadowed in a shopping mall. A high-school student was also observed at home when using a K12 online course system. These observations help in investigating if there are any other behavioural data which can provide more insight into the lives of young people that may not be noticeable or revealed during interview

discussions. Below is a table of all the methods used in the research:

Table 1: Tools and Techniques Used in Different Phases of Research

Research phase	Research methods
Theoretical framework	Library research, online research, secondary data, commentary
Data collection in preliminary investigation	In-depth interviews, interview discussions, observations in natural setting, shadowing
Customer value proposition design in business model design specifications	Discussions, mind mapping, individual brainstorming, literature analysis, online research
Other parts of the thesis i.e. literature review and final discussions	Conceptual frameworks, mental models, speculation, commentary and case study

In the process of designing the business model, business model research methods were used. Prior to the use of business model research in business, financial models of the accounting discipline and business modelling concepts in engineering were important tools in businesses that were used to optimize returns and processes in traditional businesses.

In the phase of designing the customer value proposition and business model canvassing, some analytical methods were used to get into the heart of the user's motivations behind learning and life. The methods consisted of online discussions with users, mind mapping, individual brainstorming, literature analysis, online research, library research as well as frameworks and conceptual models to come up with the business model. Finally, methods such as speculation and commentary on secondary data and case study will be used to scrutinize the business model before putting the business model out to the real world for pivoting and testing.

The sampling population of this research comes from the Asia-Pacific region although some experts and students in Finland were also approached to see if comparisons can be made. The main respondents mainly consist of sample subjects originating from the target market segments. The type of research subjects that were targeted were parents, young people between the ages 12 to 18 who are in college or secondary school and teachers.

When selecting the research subjects, the sampling pool was designed so that the respondents represent the disadvantaged group in societies, namely people from the urban poor, folks from rural or remote areas, lower middle and working class group as well as immigrants from poor backgrounds. Diversity was the main aim so as to capture as much as possible the myriad of social-cultural background and dynamism that the Asia-Pacific region represents.   The sample size was not big but the chosen respondents cuts across the society in a fairly broad manner and covers all potential customer segments.

2.3 Steps in The Research Process

The steps in the research process explain the sub-processes involved in this thesis research. To begin, the research challenge must be defined with accuracy. The process of defining it was not a straightforward one. Conversations with hundreds of locals from Australia to South Korea gave grounds to admit that education experiences could have been better. The reading that was required to understand the problems better paved the way as to what is achievable based on the researcher's capabilities and circumstances in the marketplace. The research challenge was finally pinned down to frame the research problem. The research planning process came next. The design of the research represents an explicit inventory of all the research methodologies which best serve this research effectively. The goal of this thesis is to utilize existing scientific knowledge on business models, best management practices in technology companies and current circumstances in the marketplace to design a business model that is effective in overcoming obstacles that exists in the business environment. The processes involved are found in Figure 3 and it constitutes a comprehensive overview of the steps that are involved.
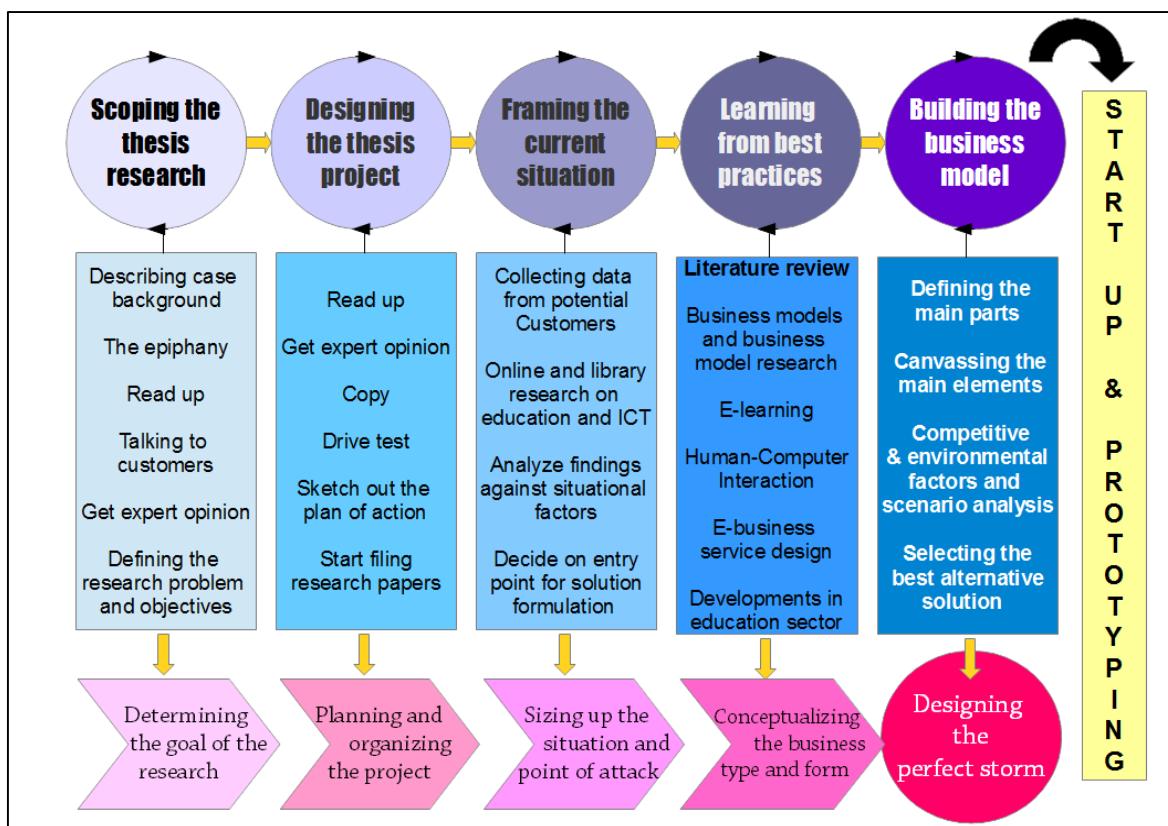
FIGURE 3: STEPS IN THE RESEARCH PROCESS

The validity and limitations of this thesis will now be examined.   From the beginning, the thesis from the beginning has had an international focus and the generalizations made transcend borders because fundamental learning and teaching principles are the same despite differences in culture and practices. The step taken to mitigate this possibility is to focus on one region first and Asia was chosen because of the large youth population and the youth's digital maturity.

The sample size for this research was small as time and resources did not permit sampling from a larger pool. Despite the small sample size, steps were taken to ensure the sampling frame is as accurate and complete given the limitations of the population sampling method.

During the course of data collection process, the selected sampling population has been experiencing difficulties coming to terms with the issues in education for some time now and this may affect the tolerance attitudes of the participants since interviews were used.

In fact, request for interviews from people working in and close to the education sector was a position of non-response due to the tense environment.

The thesis focuses on a simplified representation of the business logic of this future enterprise hence the term business model. Therefore, it does not describe the exact mechanisms of a whole business. The aspects of the model relate to important parts of the business that must be continuously monitored so as to help increase the likelihood of success. It is impossible to test the accuracy of the hypotheses made in this research without validating it against actual customer feedback hence testing the business model will not be part of this thesis. It will be left to implementation in the future when the business model is used to start up the enterprise.

3 – A Literature Review to Frame the Business Problem/Challenge

The literature review below gives background information on the angle this thesis would take. It explores the current education landscape, the importance of non-cognitive skills in youth learning processes and the information and communications technology industry (ICT herein) as the ideal medium to deploy the solution. The subsequent concepts discussed below will guide my research, help to determine what considerations need to be included in building the business and serve as a reminder on how best to approach the product development and service design when launched.

Few can deny how education plays an important role in the formation of attitudes, skills and knowledge in education (Association for Supervision and Curriculum Development, 2012). How we live will depend upon decisions we make in life and therefore, many people believe that the benefit of education lies in the fact that with careful selection of what to study ("and where" in the case of Asia), it becomes an important determinant of life conditions and is the key to personal, family and country success. However, this no longer holds true. According to studies by United Nations and Robinson (2006), education does not guarantee work is available to new graduates. In the past, young people could gain basic education and subsequently enter the workforce and continue their learning there. It is not the case now. Youth have also changed with times as they become more demanding in deciding what to learn and from where (Richardson, 2015). Rigorous and relevant learning experiences which are not confined merely to job related skills are needed as well, but the availability of it is limited.

Learning is important to young people as it helps them to seek happiness, meaningful work and gives them the opportunity to construct a world that they envision for themselves (Robinson, 2011). If we truly believe that children are our future, this can only happen with the right system in place (Skidmore & Carmichael 2013). The system must be able to create conditions for effective learning that young people can build on as they go through their lives. When effective learning is made relevant to young people on an individual level, schools can help students to discover and hone their talents which is key to nurturing future citizens that are creative, productive and happy (Robinson, 2006). However, education is not keeping pace with the changes that are happening in society and as a

result challenges we see today are insurmountable for youth to resolve.

What is being practiced in schools is completely the opposite of what is actually needed Richardson (2015) further substantiates this by reviewing some conventions such as same aged youth coming together at a particular place and time and going through the same instruction and be tested uniformly have not fundamentally changed for more than a century. Since then, these conventions transferred into education systems worldwide as many countries shape their own education systems based on the American education model (Silva 2015). The outcome of this is many young people forget what they learn in school, had little chance to hone their personal talents, the existing educational resources do not facilitate deep experiential learning and the way learning are measured is counterproductive if not harmful (Richardson, 2015 and Robinson, 2006).

Study pressures have incapacitated learning in many young people, as the pressures turn into physical pain and/or mental illness (Neighmond, 2013). From a private source in Malaysia, parents who have had painstakingly fight to get study places in good schools are also feeling the pressure as schools impose more requirements at home to ensure that students conform to certain standards or risk being asked to pull their children out of their desired school. As parental stress worsens at work and at home, young people also become stressed out as their behaviour is a product of what they see at home and society. This gravitation towards stress and pressure does not give room for effective learning (Duhigg 2014).

The effects of the above have made young people around the world feel a range of negative emotions. These effects are leading towards deeper socioeconomic problems such as youth disempowerment in societies, neglect of personal safety and rage leading to various manifestations of violence (Sheri and Halla 2015 and Incluso, 2015). It does not help either that young people who are in their period of teenage blues can be filled with emotional turmoil and adolescence issues that may cause significant and prolonged distress leading to depression and mental illness when not remedied properly (Tough 2013). In some countries like the US and the UK, there are young people who are being prescribed medications to counter the effects of stress and depression and if left uncheck, this can possibly become a standard in the near future (Gillon 2015, Null 2011 and

Robinson, 2006). As young people's lives continue to be chaotic, for some, the chaos can remain well into their adult lives (Duhigg 2014).

It is impossible for this research to solve all the problems we see in youth and education today. The ambit that I am interested to work on is one fundamental factor within the web of challenges in education (See Figure 4). I believe that young people face many pressures in life and an area which lacks clear structure and focus is the emotional well-being of the young. The keyword here is motivation.
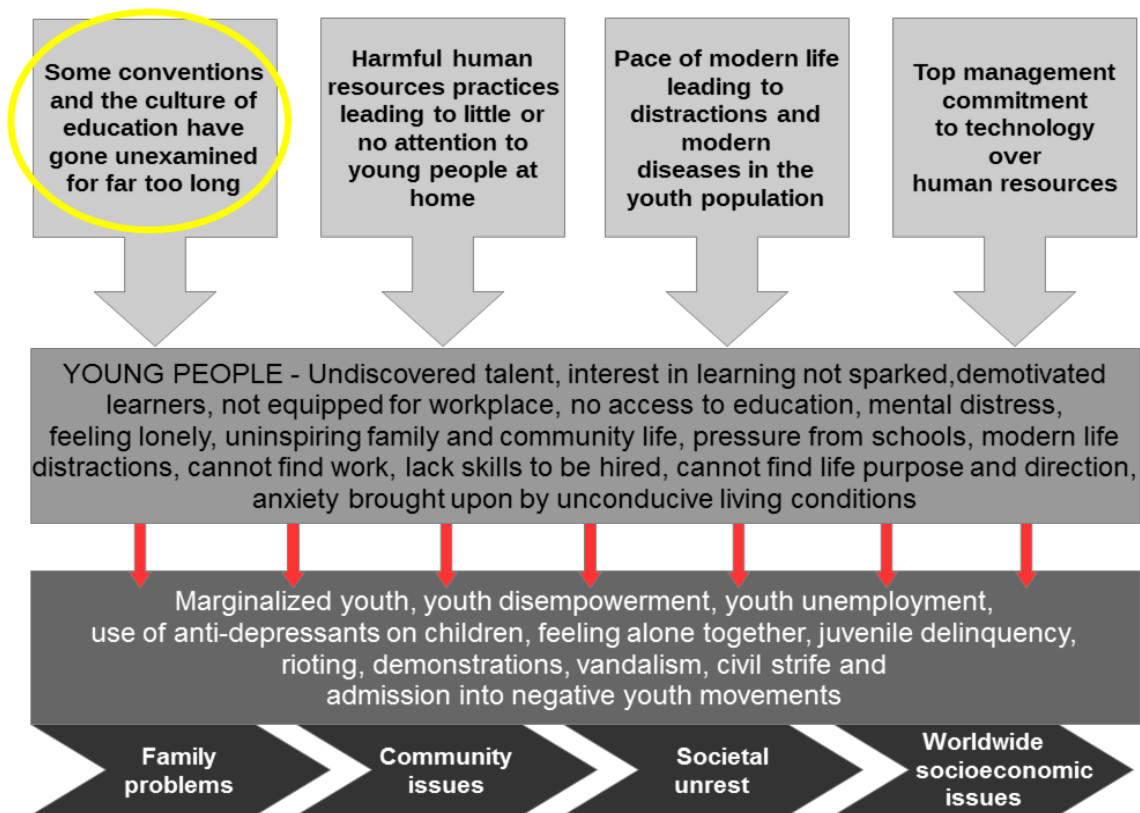

FIGURE 4: MODEL OF THE RESEARCH PROBLEM AREA

The following section will go into detail why emotional health matters in learning.

3.1 The research focus

There has been a good number of well-founded research that reveals why healthy

emotional behaviour is a good predictor of a young person's success in the future. The research findings demonstrated how by increasing one's multiple intelligences on a gradual and continuous basis by teaching them important non-cognitive skills such as perseverance, empathy and hope can help in building a growth mind-set (Dweck, 2007). Growth mind-set is the precursor to positive learning and living habits that in turn influences better life outcomes for not one but many. And with that, the role of non-cognitive skills in learning is further explored as it narrows down to become the initial stages of a business idea.

Non-cognitive skills consist of positive characteristics ranging from personal attributes, traits, habits and attitudes that facilitate the culmination of healthy and positive functioning behaviour of youth in school and society. They are different from intellectual and analytical skills which are cognitive skills that schools try to impart as part of the body of knowledge that young people have to know to serve in the future workplace. While acquiring knowledge is the very reason why young people go to school in the first place, research in education and human resources have been linking learning and work success to non-cognitive skills that can be learned such as self-discipline, grit and motivation (Rosen et al 2010) (Tough 2013). In fact, non-cognitive skills have been proven to be more important than cognitive skills in determining academic and employment outcomes (Heckman, Stixrud & Urzua, 2006).

Although these skills are continuously developing throughout the course of one's life, non-cognitive skills learned at a young age have significant and lasting impact on future life success while poor non-cognitive skills internalized at the adolescence period compounds life problems for young people when they reach adulthood (Rauber 2007, Farkas 2003, Kerckhoff and Glennie 1999). Therefore, teaching non-cognitive skills to young people should come as a priority in schools over other skills and knowledge as it can play an important role in minimizing and reversing deficiencies in cognitive development and help them to develop positive learning habits that they can well bring into their future adult lives.

This is particularly important for youth growing up in destitute, violent and geographically remote areas. As in Awan (2011), it is clear that education is a game-changer for poverty reduction where youth is often marginalized. If non-cognitive skills can be effectively

taught to young people in remote, volatile and desolate parts of the world, there is hope for them to influence positive change in their own lives and community (Heckman, Stixrud & Urzua, 2006).

The conditions in life in big cities also create societal pressure on youth (National Research Council, 1993). Being surrounded by modern comforts does not mean young people can mentally cope with the constant pressure although they might be able to get used to it (Abbott 2012). The dire effects of prolonged stress in humans and the effect of stress dampens learning abilities in the young quite tremendously (Tough 2013) not to mention the physical atrophy that may follow. Stresses in life can go largely undetected, ignored or simply left to time to do its job. Like a ticking time bomb, these stresses can manifest itself into mental illness and abnormal behaviour when left unchecked. As Buckminster Fuller's saying goes "Ninety-nine percent of who you are is invisible and untouchable" and it may well be true.

Young people, regardless of their reactions, must be taught non-cognitive skills to help them overcome and manage the stress of growing up in this time of age. They must be given ample opportunity to learn living skills and develop positive learning habits to help them calm the mind, nurture the heart and lift the spirit as they are not only promoting better learning but it is the key to better living.

I believe that the best change that can happen in reforming education systems lies in the focused and continuous development of non-cognitive skills in young people. This in itself is already a tremendous task given the diversity and complexity of global education and youth population as a whole. But because of some signalling from the markets in the Asia Pacific region, I have gathered that there is market readiness for this change to occur now and hence this pursuit.

During the time spent writing this research, new studies have been published to further solidify the need to teach these skills. Jones and his team from Bennett Pierce Prevention Research Centre found that the measurement of non-cognitive skills of kindergarten-goers predicts better outcomes in adulthood with relations to behaviour towards work, life, family, substance abuse and just all aspects of life in general (Jones et al 2015). Another study

by Holbein from Duke University found that students with higher non-cognitive abilities were more likely to engage in their political voting rights indicating an active participation in a healthy society.

Some people perceive that these skills should be taught by way of parenting, after-school activities or picking it up as youth enters into society as young adults. And while many other research in the field of human resources, psychology, education, and economics seem to suggest non-cognitive skills may be an ability that is more important than any other as indication of future long term success, what science knows is not what society is practicing. A more systematic way of learning non-cognitive skills needs to be created as the teaching of such skills can no longer be left to chance.

Having said that, there has been tremendous optimism in entrepreneurship and technology to solve education challenges as demonstrated by investments that has been pouring into them in the past few years which will be explained in the next section. The following section will look into the developments in ICT and electronic learning to explore the myriad of possibilities of using technology to advance the field of education.

3.2 Technology as tool for change

Advancements in technology have been changing the teaching and learning process for some time now (McKnight 2013). McKnight further explain how the ways have changed, from how knowledge have been stored (such as ring files, textbooks, document files saved in discs and written notes) or presented (such as black, white and poster boards) to storing in the cloud and accessing knowledge through eBooks, iPad and other technologically-aided apps for learning. Also, teachers now have more resources at their fingertips to plan and prepare for lessons as educational technology evolve and improve (Public Broadcasting Service, 2013). Browse the Internet for the multitude of ways to learn new teaching methods, collaborate with other educators, share teaching materials online and design instructional resources.

The change in these teaching and learning processes is not merely confined to changes in the way knowledge gets transmitted rather the way we learn has also fundamentally

changed. Learning using electronic means has made the experience more accessible, more personalized and sometimes more meaningful than some traditional classrooms now (Adderly 2015). For example, in conducting research, the search for information no longer consumes huge amounts of time confined to information silos like the library, public archives and databases. The use of the web for research truncates the time and effort needed to locate and access research papers and secondary data hence more time can be spent on analysing information and collecting quality data. According to Lynch (2015), digital technologies have fundamentally altered the way young people collaborate and gather information while distance and time is no longer a barrier to gaining quality education.

Apart from that, what is even more remarkable is that smartphones and the Internet have proven to be a formidable learning tool (Richardson 2015). He further demonstrated how with the use of mobile apps, young people can instantly get information when needed and when ideas come to mind. Richardson (2015) further state how youth are already learning more than ever from their mobile phone regardless of the endless debate of whether this should be allowed or not. From here, we can see that learning through electronic means like mobile phones and tablets is already a phenomenon that is happening and is not slowing down and according to Aparicio, Bacao & Oliveira (2016, 292-307), the field of electronic learning or e-learning has been gradually expanding since the 1960s. Education systems by way of technology will continue to change the educational and social landscape as we know it so rather than go against the tide, it will be for the best if society rides with the change and affect it in a more positive way.

At present, many innovative forms of businesses, communication platforms and collaborative environments that were unheard of two decades ago have emerged through entrepreneurship and the academic world. ICT continue to infiltrate all aspects of our human lives and with the Internet and mobile technologies pervasively changing the global landscape, I believe the revolution in education will definitely come by way of the Internet. Just like how steam power was replaced by electricity, the process will be gradual and will cost dearly but the shift is very necessary. The use of key technologies can drive change in education. Many people have come to believe that technology can revolutionize education even though the results are unclear (Strauss 2016). However, educational

technologies must do more than what people think it can do. Whitby (2014) nicely stated in the following quote,

"If we are educating our children to live and thrive in their world, we cannot limit them to what we were limited to in our world. As things change and evolve, so must education. As educators we have a professional obligation to change as well. We must retain a sense of relevance and that requires effort. Relevance does not come to us as we sleep in the night. Educators need to employ the very skills they are passing along to their students. They need to: curate, collaborate, communicate, critically think, and create. All of this is best accomplished through the use of tools of technology. An education without technology does not prepare our students with the skills that their world will require. Technology should be ubiquitous in education. "

3.3 From business problem/challenge to business opportunity

As explained from the above sections, non-cognitive skills are an important aspect in youth learning and the teachings of it must be made more systematic, relevant and made timely to the young. With advancement in the ICT sector, I believe that it is now possible to deliver good quality experiential learning through the worldwide web as technology no longer pose barriers to such implementations. Advancement in the areas of user interface design and advanced visualization techniques may be key in delivering this program online hence the potential for a student-led data-driven learning environment delivered effectively through the Internet is highly possible. General observations have shown that young people warm up to digital devices easily and therefore targeted learning experiences through technology becomes necessary (Microsoft Asia News Center, 2015).

In the above paragraph, we can see that there is an opportunity to motivate youth to become more confident, self-directed learners using the Internet. Therefore, the business idea here is to come up with an effective learning program online that is focused on developing non-cognitive skills and subsequent research must be done to know what works best for potential users. Figuring out how to teach non-cognitive skills to youth in an effective and widespread manner from the start helps in the design of the business model.

Despite the fact that product development is crucial, it is even more important that the product can be commercialized if the solution proves to be valuable. Therefore, devising an appropriate business model will be the key to turn this business problem into a business opportunity. The next section will scrutinize the needs of potential customers in a more in-depth manner to understand the customers better, determine how we can develop this business model in later chapters and gain more insight into what may work for the users especially disadvantaged young people.

4 – Research and Analysis

The purpose of conducting research is to find out more about what potential users think of their own learning experiences and what works for them in terms of getting an education. This data collection exercise allowed the research to gain some insight into the preconceived notions on the topic as well as to gauge potential customer's openness towards learning initiatives from the web. In-depth interviews and discussions were conducted with parents of young people from the target age group as well as several secondary school and college-level students.

4.1 In-depth interviews

When discussing education, it is not always the case that users knows best. Parents have vested interest in their child's welfare hence their thoughts and perspectives must also be taken into consideration albeit it will not be the sole determinant for decisions made in this research. Thus, several parents of children and teenager from the target customer segment were selected to be interviewed in-depth to obtain more information about the target customers' learning conditions and to get their views on the situation with youth and education today. Please refer to the appendix section for the interview notes. Below is a report of the findings and further down this section some analysis is provided.

The interviews revealed that parents are the key to what young people think about their own education. All parents unanimously agree that education is important and that they will do their best to provide for their child's education pursuits. However, in terms of how much they are willing to commit in resources and time to bring about the best possible education for their children is a different story in each household. Some parents are more concerned about shaping their child's resume compared to others, hence the difference in responses. One thing that holds true in most Asian parents' minds is that they believe that the role of educating children falls sharply on the shoulders of the school hence more emphasis is placed by parents on selecting the right school for their children being the education provider for their young.

Choosing a school and financing it is the biggest priority and influence that parents can have on their child's education from kindergarten all the way to university. Therefore, many parents rely entirely on test scores, discussions with other parents and teachers as well as their own personal judgment to evaluate whether schools are delivering or not.

There has been dissatisfaction amongst parents with regards to government educational policies and the problem lies in the fact that their children did not master the basics such as the English language and other subjects of interest to help give their children a better start in career. One of their main concerns is the remedial and expensive action that they have to take to improve their children's grades. Some parents also have the perception that education has a due date and children should complete their formal studies in good time like everyone else in the same age group hence the additional pressure. Continuous learning is good but when asked if they themselves would engage in new learning experiences the answer is they'd rather not citing age being a barrier.

4.2 Discussion interviews

In the case of holding interviews with young people, discussions with them led to an interesting discovery of young people's perceptions about their educational experiences. The following paragraphs report on the feedback obtained from the students. Care was exercised to make sure the data points discovered in the in-depth interviews were not read into the discussions with them. Bear in mind, the one of the sampling criteria was to look for students who have problems with their education and learning environment hence the feedback may seem negative. Their responses were organized and rearranged based on the sub-headings listed as below:

4.2.1 Lack of time

Many young people who are studying do not find enough time in a day to do the things they have in mind. For some, managing their time is a huge challenge because of the many forms of entertainment that is out there. Others find it difficult to get organized. Also, there are some students with parents who have high expectations for their young and many after-school hours are filled with more instructional learning besides the increasing demand of formal studies. When asked about the activity of reading, young

people admit to not reading enough despite knowing its importance and attribute this to their reading material being not easy to read and teenage life distractions. Some students who are working and studying at the same time face tremendous challenges with physical exhaustion and mental fatigue leading to irritability, disorientation and extreme mental pressure. Overall, many young people seem to indicate that there is not enough time in a day for them to learn effectively.

4.2.2 Lack of purpose

A significant number of students in school and college have difficulty following what is being taught in their respective academic institution and the reasons are varied:

Learning is not interesting - Many students find that their classroom environment is not conducive for learning. Some find the content boring, there is too much theory, the teacher just reads from the textbook and it is not fun. Some topics are also hard to follow and the overall learning experience is just dull and not engaging.

Disconnection - Some students feel disillusioned in class because they are not sure why they have to learn something or be in class in the first place. Then they phase out from the learning instruction. The disconnection they feel when attending lessons can sometimes lead to positive outcomes such as asking more questions and trying to find out why the situation is happening in the first place. But for many of the students that I had the opportunity to speak with about this, they feel that their learning efforts are pretty meaningless. They feel demotivated to follow through with the entire course of their studies yet they know they would need some form of certification in order to enter the workforce. Rather than maintaining enthusiasm for their studies, many students are merely putting in the required effort to get the required grades.

Feeling pressured - Some of the students feel the competitive environment in the classroom as well as in life. The competition in school range from competition between peers, sports and test scores to vying for attention from teachers, friends and so on. For some, the stresses in life and school are counterproductive towards their learning efforts. Then there are others who struggle to find a balance between studies and other personal interests and commitments. Besides that, local news can also have a negative influence

on students and add to their worry about finding work after graduation. All these along with young people's lack of experiences in life have the propensity to make them anxious, tired and feeling sick leading to display of aloofness and other inappropriate behaviours.

4.2.3 Lack of attention

The way modern society is today gives little opportunity for people in communities to learn from one another. Therefore, it comes as no surprise that many young people feel that no one is there to listen as many people now reside in segregated living environments. They had very little chance contact with people around them and it seems that they are silently suffering from lack of attention and to a certain extent, loneliness. "It takes a village to raise a child" and there is a certain truth in that saying. However, it is not the purpose of this study to probe further into the gravity of this situation. What is known is that youth lack the attention from adults around them leading to less opportunity to learn.
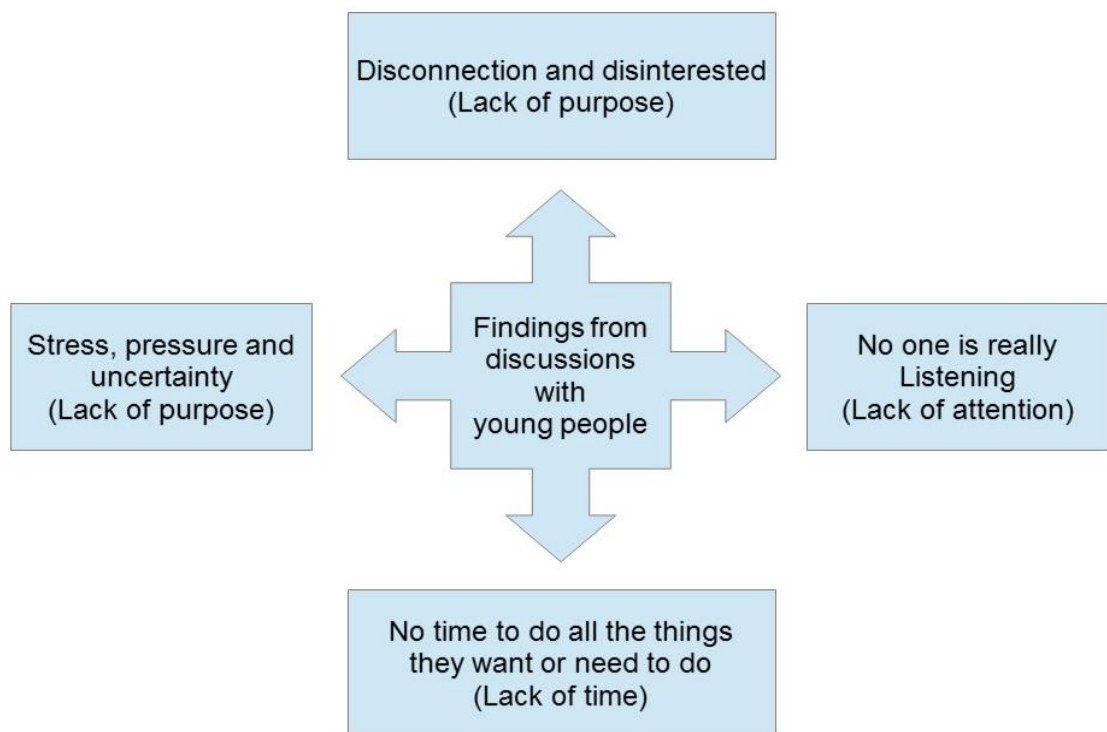

FIGURE 5: FINDINGS FROM THE INTERVIEW DISCUSSIONS WITH YOUTH

4.3 Observations

In addition, I made a point to observe young people and the availability of education resources around them. I first took to the streets to observe young people in their natural environment. In Asia, young people can be seen everywhere walking on streets, shopping malls, school compounds, cafes, libraries and sports complex. Young people tend to move in groups and from their body language, they are seeking out interesting places for play, bonding and having fun. They use their phones much more than I did as a young person, but the phenomenon is not confined to them alone as many adults and young children are also electronically-engaged when in public. Next, I shadowed (with permission) three students from my former teaching place and a secondary school girl who is doing an online K12 course from the UK at her home. While the observation of the group of students did not reveal much, the girl doing the online course showed promising signs that getting a wholesome education via the web is possible.

From the findings of this data collection exercise, some important information was obtained from potential customers and users. It will provide insight into the business model design process and help shape the value proposition that will also be used to develop the product-solution later on. The paragraphs below synthesize what is learned from the Asian markets in brief and will serve as a guideline to further this research:

- It is understood that parents are the gatekeepers for the education options of their young. Therefore, lobbying for their support is an important aspect to ensure the solution is adopted later on. Parents unfortunately use rudimentary methods of analysing the quality of the learning that has been acquired for their children hence better measurements must be used to give them a more holistic picture of what their child's current learning situation is.
- Besides considering parents as potential paying customers, it is worth exploring business-to-government approach or collaborations with non-profits and academic institutions in order to scale considerably as the financial ability and willpower of Asian parents (especially those of at-risk youth) to experiment with online learning management systems and platforms are limited.
- The ineffective education system at present has resulted in some young people who are not fully engaged and motivated to learn. They need help to make sense of the world

we live in. If the product-solution that is to be devised later could address their need for time management skills, search for life purpose and get the necessary attention for healthy mind development, then progress may be made in education.

- Observation made earlier showed that young people are pretty much the same everywhere. Peer relationships are important and opportunities to mingle are crucial for not only developing 'self' but also their well-being. The key difference that makes a difference is where they mingle and how adults react to them.

- It is confirmed that young people and their phones are now inseparable. Rather than making it an issue of whether their use should be controlled it is better to think of how best they can utilize mobile phone and Internet technologies for learning. Students are already using their phones to learn and socialize hence mobile learning and e-learning can be used more effectively to invoke positive habits in learning. Young people really warm up to these electronic devices easily and from the findings, it might be possible that the frequent and repeated use of these systems can lead to powerful learning but excellence in interface design is required as the next paragraph will explain further.

- When I had the opportunity to shadow the secondary school girl at home, seeing her use the K12 online learning program seems to give anecdotal evidence that the design of the interface has the ability to influence how students think and learn and when used over a course of time during their high-school years, makes young people take more responsibility over their own learning experience. Henceforth, the approach of using e-learning platforms to support educational pursuits looks promising as youth can gradually learn how to navigate the internet for information, collaborate online, download educational resources and monitor their own progress.

One important lesson that must be learned from the above is that youth nowadays worry a lot and are becoming lonelier.

"Loneliness has always been a part of some children's lives but it is deeply worrying that more children are contacting us about this. In the worst cases children became so desperate that they self-harm or even contemplate suicide."
                                        - Christopher Cloke of NSPCC United Kingdom (2010)

It is common that the young have higher chance of suffering from uncertainty as they have

limited awareness of many significant contextual factors in life unlike adults who have experience to help guide their actions. Young people may not show signs of distress when they face difficult situations and their worries may not seem apparent but that does not negate the possibility of it. Many young people are generally worried about the future and/or concerns around them. The stressful environment that adults may have created around youth can also add to their anxiety. While some would have it a lot harder when going through the estranged teenage blues period hence more opportunities to give young people the necessary attention and access to a listening ear help to keep the channels of communication open. Disconnection is a state that is greatly affecting young people's lives and schools should not exacerbate such problems. Below is a diagram that consolidates the main findings from the in-depth interviews and observations.
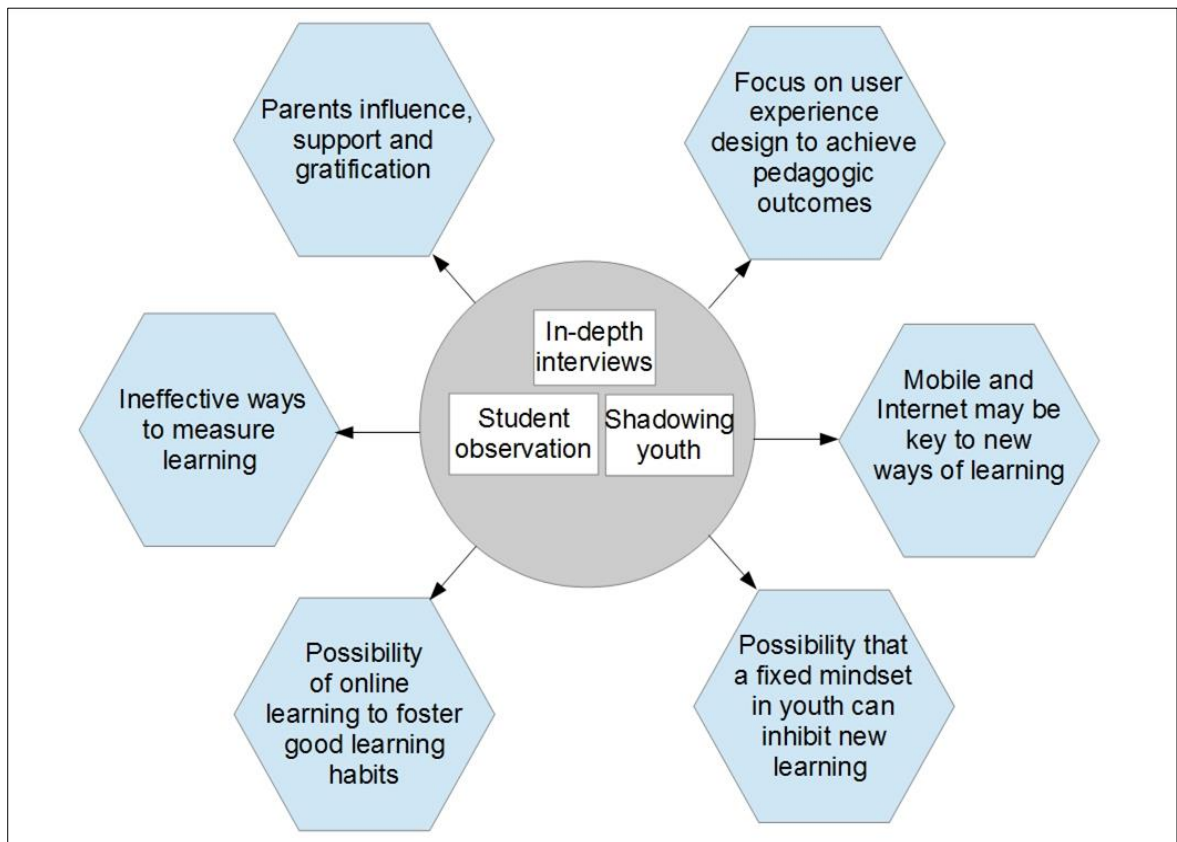
FIGURE 6: FINDINGS FROM THE PRELIMINARY INVESTIGATION PROCESS

5 – Conceptual Framework

From the research and analysis done in the previous chapter, few data points were identified that will help in creating the much needed customer value proposition. Value propositions in business models and product development are very important and will be discussed further below. Here, we look at what business models represent and tapping into the research done on them so far, we will identify a framework that will serve as the platform to build the business model to launch this business idea.

Business model is a conception of how a business works that is made explicit for the purpose of communication and profit (George et al. 2012). It helps individual entrepreneur and companies to use business models for the purpose of (Baden-Fuller et al. 2010):

- discovering and establishing new forms of businesses,
- devising plans to capitalize on business opportunities,
- challenging existing rules and conventions in the game of business and/or
- understanding their business better.

George et al. (2012) and many other similar literature and business model research papers illustrates how businesses tell a story of their methods in creating company value and profit while delivering products and services to potential customers. This is done by articulating exactly what goes into the business and how the mechanisms detailed in the model would work to bring about value for customers which in turn promises profits for the entrepreneur or company. The following paragraphs will discuss aspects and research on business models that will help with determining the business model structure for this research.

Businesses in the past used financial models and engineering frameworks such as the conceive, design, implement and operate (CDIO) process (Al-Atabi, 2014) and ICT's design science to develop new business opportunities and products for companies. As research in business models becomes more robust over the years, more rigour is applied to the process of constructing business models giving the business world a better understanding of how to study and frame business models in their companies

(Osterwalder and Pigneur 2010).

Businesses are increasingly innovating around their business models in search of competitive advantage and opportunities to seize new markets. Yet, according to Osterwalder and Pigneur (2010), the concept still suffers from vagueness and there is no clear definition for the term business models despite its prevalent use.

Bertels, Koen and Elsum (2015) explains that innovation in businesses intersects three major areas - technology, value network and economic factors. Companies toggle with these three areas in search of innovative breakthroughs for the type of business they are in and business models happen to meet the three areas in the middle making it a popular tool to clearly frame ideas. However, a more comprehensive approach is to clearly segment the more common areas of a typical business to go straight into the specifics of a business with clarity and context. To look at what main parts makes a business model is to best look at how business model works through the research of Johnson, Christensen and Kagermanns' (2008). The concept first espouses four interlocking parts that works in an interdependent manner to create and deliver value.

The first part that needs to be determined is the customer value proposition. It is the way that a company seek to help customers to solve a problem or gain pleasure from the use of its product or services. Next, the profit formula makes visible all the financial models that helps the organization visualize how they can stay alive and grow using profit as a testament of the proven quality and appeal of its value offerings. Key resources set out all that the company has available at its disposal to fully utilize in operating the business and it consist of assets such as people, technology, product, brand and etcetera resources valuable to the business. The last part is the key processes in the company. It is a series of well-thought out tasks, activities and controls that are capable of synergistically functioning like a well-oiled machine to get and grow value and profits.

The research that goes into the building of business models is what matters. Customer value proposition, profit formula, key resources and key processes must be tied together with the current realities of the customers, the markets and the business environment hence validating and getting the assumptions right is pivotal for success. Because of that,

business model research has become a field in management its own right.

Business model research is about the science of designing business models. It does not have a well-understood guidance like what other science discipline benefit from but business leaders and academic researchers are trying to nail a more systematic way to approach this field. In the next section, review of current literature in business model research is discussed to extract what is known about the study of business models now and make it applicable to this thesis research.

Customer Value Proposition (CVP)
- **Target customer**
- **Job to be done** to solve an important problem or fulfill an important need for the target customer
- **Offering,** which satisfies the problem or fulfills the need. This is defined not only by what is sold but also by how it's sold.

PROFIT FORMULA
- **Revenue model** How much money can be made: price x volume. Volume can be thought of in terms of market size, purchase frequency, ancillary sales, etc.
- **Cost structure** How costs are allocated: includes cost of key assets, direct costs, indirect costs, economies of scale.
- **Margin model** How much each transaction should net to achieve desired profit levels.
- **Resource velocity** How quickly resources need to be used to support target volume. Includes lead times, throughput, inventory turns, asset utilization, and so on.

KEY RESOURCES needed to deliver the customer value proposition profitably. Might include:
- **People**
- **Technology, products**
- **Equipment**
- **Information**
- **Channels**
- **Partnerships, alliances**
- **Brand**

KEY PROCESSES, as well as rules, metrics, and norms, that make the profitable delivery of the customer value proposition repeatable and scalable. Might include:
- **Processes:** design, product development, sourcing, manufacturing, marketing, hiring and training, IT
- **Rules and metrics:** margin requirements for investment, credit terms, lead times, supplier terms
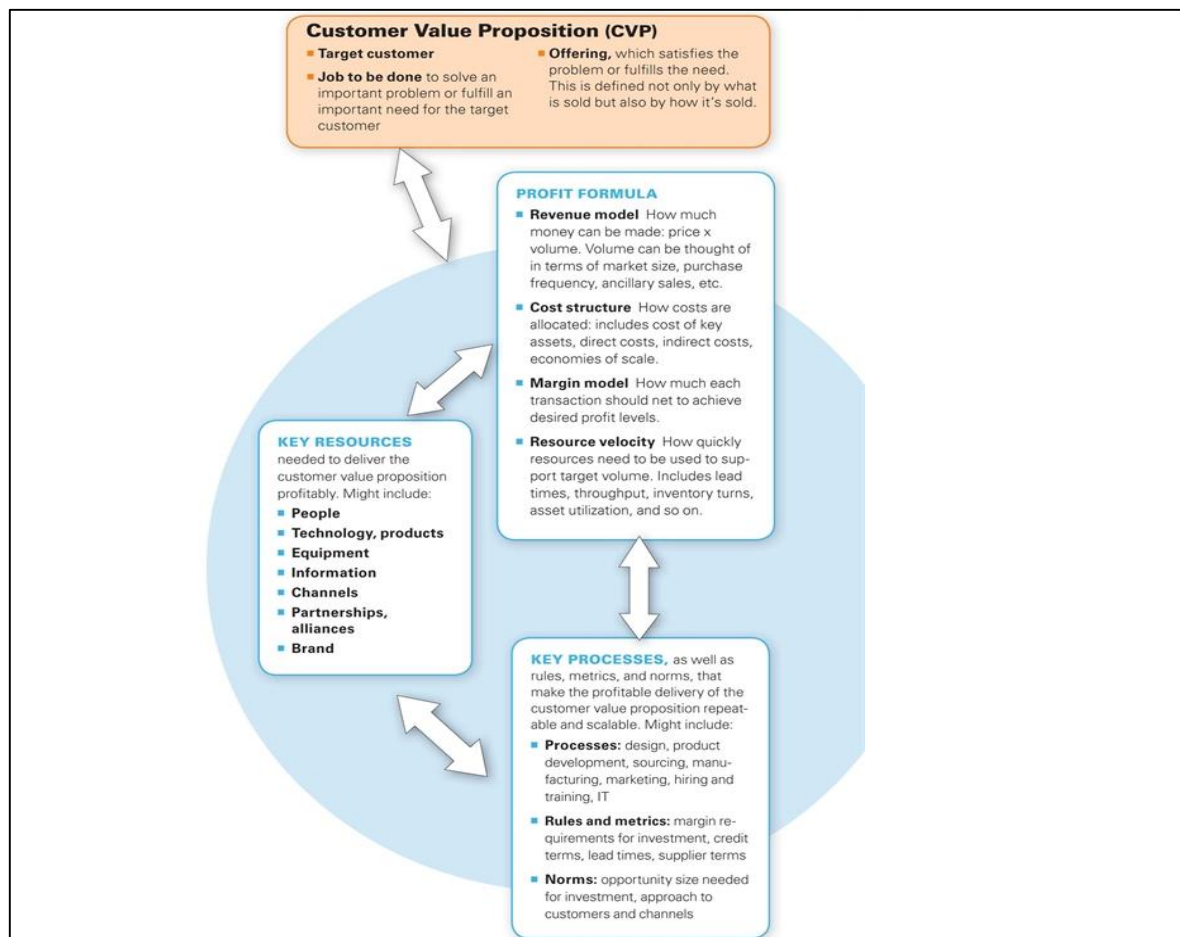- **Norms:** opportunity size needed for investment, approach to customers and channels

FIGURE 7: THE FOUR INTERLOCKING ELEMENTS OF BUSINESS MODELS. SOURCE: JOHNSON, CHRISTENSEN AND KAGERMANNS' (2008)

5.1 Business model concepts

Business model research is not a clear science. It is hard to find an exacting research

method with clear research strategies in place for this area of research although many have made attempts to do so. In reality, to live out what we know is a challenge for everyone. The hardship of pinpointing exactly what business model represents lies in the fact that the act of developing a business model actually starts with the mental process of creating abstract representation of the logic on a particular approach to business. There might be a lot of signals from the immediate environment that substantiates the idea and approaches borne out this process but there can be a lot internal conflict as to how to trust and validate it. Several challenges that are worth discussing to make this point are:

- Business model research and findings published are all research after the fact. They are studies of phenomenon that were set in a historical context. However, business model research practiced in business is more like action research. It is research in action and within the present circumstances. Therefore, the qualities of a good scientist, creative systems designer and communications specialist is required to decipher, make sense, prove and articulate the facts effectively. It can be likened to Hazzan and Tozik's (2014) agile research methodology. Because of this, care must be exercised when using existing knowledge on business models. There is much to learn from them but in no manner it should be adopted without adaptation to one's business's context.

- Research conducted on business models would depend on the researcher's motivation, objectives and purpose leading to the communication of its findings somewhat befitting what the researcher wish to highlight about their research. It is not dictated like a well-defined activity that a business model designer can follow rather it is usually served up as a written or visual representation that best explains what the researcher is trying to espouse. While it can serve as a good reminder to help with the mental conception of what the business model may be, it significantly lacks insight in providing wisdom for practical application. The high level of abstractness and generalization does not make the knowledge easily executable.

- The business model being a model means it is a simple representation of the actual desired business arrangement. If the model is made visually appealing it can be good reference model or road map to assist businesses to stay on track. However, discussions on it may render lengthy dialogues that banter to and fro between the model components and real-world factors leading to uncertainty. First, it is easy to forget that the model is what it is (a simplified representation of the business) and this can create a

septic focus where the model components are deemed the only factors affecting the business. Secondly, it can go the other way where managers consistently discount the relevance of the model components because real-world elements were not deliberately factored in. Therefore, it is recommended that a well selected combination of business management tools is used along with business model research tools to complement each other's deficiencies so as to arrive at a more accurate business model.

On the onset, the use of business models can be quite a tumultuous journey. Yet, the benefits of using them far outweighs the challenges that comes with their implementation. It creates a form of self-discipline in business leaders to continuously shape their decisions based on current facts. As technology continues to drive the collection and use of data, it is turning scores of business managers into self-directing and creative team leaders and it is hoped that the business landscape will change for the better.

The advantages of using business models as tools for innovation has been resonating in the field of management for some time now. They are known to be as disruptive as technology itself but its use has been infrequent in the business world. Many companies do not know for sure how to create business models (Johnson, Christensen and Kagermanns, 2008) and this may be attributed to the process looking more like an art work rather than a well-defined activity (Blank 2012).

Managers also find it difficult to work with assumptions made in business models even if it has been validated. It is a common fear among humans to fear the unknown, preferring to revert back to what is known such as past experiences and extrapolations from historical data. Some would even go to the extreme to think that data gathered from communication with customers and real-world signalling for business model design is clairvoyant work. In other words, businesses are not open to failure (Blank 2006). Evident is the fact that companies at present are still focusing on technological and product excellence (Skok 2014) rather than allotting more resources to building business models and business model research capabilities which in turn builds human capital. Innovating business models are often left to last resort or are avoided altogether. Viable business models and business model research are important factors of production in modern businesses and this exercise and its importance can no longer be ignored.

The current research on business models provides a wide spectrum of methods and perspectives that can be used to design and create business models. Some research papers capture the logic behind a business and discuss its design pattern that the business model designer can use like a template or recipe. Another type of method is to use visual concepts to aid readers to see causal loops and component inter-dependencies. Case studies give a rich source of information but the lack of abstraction makes it hard for business model designers to conjure up a structure that can guide them in their design work. On the other hand, taxonomies provide easy ways to see and understand different business model typologies but because of its generic categorization, it is not practical to use it to compare and evaluate firm specific details. A modular based approach makes an excellent guide as it gives focus to a set of components or elements that must be considered when designing business models. One form of the modular based business model is the business model canvas.

The business model canvas is widely used by businesses and entrepreneurs to help them to visually study the relationship between main components that make up a business. It is easy to use and understand as it maps out all the building blocks of a typical business in a single visual reference. The inherent weakness of such approaches is that it has the tendency to filter out other information that may be important to the business. When using business models for strategy formulation for instance, if information does not fit intuitively into any one of the components in the canvas there might be a chance it is omitted or dismissed as not important. This may cause some important information to be overlooked and if the said information fails to be included in analysis, wrong decisions and choices will be made. More about business model canvas will be discussed in the next section.

5.2 The business model canvas

Osterwalder and Pigneur (2010) describes a business model as the rationale of how an organization creates, delivers and capture value. Business model canvas works like a template that lists all the similar components that is found in a typical business hence it provides a visually appealing approach that universally combines all the important components of a modern business for better overall analysis and quick overview. It is a

common tool for business units and teams to better understand the business that they are in and also their competitors' businesses. The canvas consists of nine components as described below:

- ***Value propositions*** are detailed statements of what value is being offered to customers and is crafted based on what customer need is being satisfied. It can involve the product or services being offered, the expected value that customers are getting out of it and how it can resolve problems for customers.
- ***Customer relationships*** examine the cost, quality and type of relationships with customers that must be understood in order to effectively maintain and establish relationships with them.
- ***Channels*** look at the careful process of orchestrating distribution and contact points as well as other logistical methods to reach out to customers in ways that maximizes performance (such as user experience, accessibility and customer satisfaction).
- Then we have the ***customer segments*** component where the process of identifying exactly customer profiles and the target market helps the business to understand who are their most important customers and provides a way to monitor their behaviour.
- ***Key resources*** help the business to list out their assets and strengths as well as what is needed for the businesses and it may well be other components in the business model canvas.
- The ***key activities*** component describes the main tasks and implementations that need to be executed in order to manage and facilitate the processes identified in other components such as managing services, customers, finances and so on.
- The canvas also prompts the need to manage relationships with ***key partners*** to form collaborations and alliances that help foster greater value to the end-user.
- ***Cost structure*** list out the most important cost inherent in the business model and finally ***revenue streams*** look at the way the business will charge or monetize on the scheme of things that they are trying to propose in the canvas. All the components in the business model canvas cover the four main parts of a business, namely customer, offer, infrastructure and financial viability.

When using the business model canvas, each component of the model must be carefully studied to identify specific goals in them that can contribute to the success of the business

model as a whole. The goals come from assumptions made about markets and the business environment. Different research methods will be used to test the assumptions and this helps to identify the most relevant data that will make up the component elements. Priority is given to those elements that is unique and can help maximize the best outcomes for the business model. Business model canvas is an excellent visualization and self-organizing tool that can help to keep all vital data points in perspective for continuous research to keep the business model relevant. The next section looks at the types of business models that are relevant.

5.3 E-business and social enterprise business models

It is worth looking at some research done on online business models for different types of business concepts. Business and the Internet are now intertwined and thus it is crucial to decide how the business entity may and should operate right from the start as different ways of approaching a business would require different types of business model design (Blank 2012) (Santos, Pache and Birkholz. 2015).

Therefore, a vision of what the business might look like at the start sets the framework for analysing competition in the industry or market later. If it was to grow into a success, designing the right business model ensures that the business is strategically positioned towards the intended direction although real-life circumstances will most likely change the course of things. We will now look at different types of businesses to analyse and decide on what will work best for now and to what extent this business seeks to emulate.

5.3.1 Businesses defined by transaction type.

From business management textbooks, students are taught one of the many ways to define businesses in the context of its transaction partners. We often hear the term B2B, B2C and B2G2C. Sometimes, the users of the product or service may not be the paying customers and buyers of products may be institutions rather than real people hence the simplified explanation of businesses as below:

- Business - to - Business (B2B)
- Business - to - Consumer (B2C)

- Consumer - to - Consumer (C2C)
- Consumer - to - Business (C2B)
- Business - to - Government (B2G)
- Government - to - Business (G2B)
- Government - to - Citizen (G2C)

5.3.2 Business concept according to the needs of individuals

According to Blank (2012), businesses can be categorized according to the needs of individual entrepreneur. The four categories are lifestyle, small, scalable and buyable businesses. A lifestyle business is the type of business that helps entrepreneurs to make enough money to survive and fuel the pursuit of their passions and interests elsewhere. Then there are small businesses where entrepreneurs work for themselves to be profitable enough to feed the family and a maybe few more employees. Scalable businesses were designed to be big hence they grow either through the conventional venture capital funding or if lucky enough, to be fuelled by natural growth.

Lastly, buyable businesses are businesses that were conceived with a possible buyer in mind or at least when the market trend and the business incrementally arrive at a time when it is a good match then a buyout will occur. Therefore, keeping abreast with on goings in the industry and its players is crucial.

5.3.3 All businesses are now e-businesses and more

In the current business landscape, the sluggish economic performance that the world has since the late 1990s has made many people come to believe that the digital economy is the new economic paradigm and technology is the impetus for this change. The growth in the prevalence of e-businesses is a testament to that as it continues to innovate and drive market changes. This belief now holds true as no businesses can operate without a digital presence. In Rappa (2010), a good conception of the different types of online business models that exist in the market are listed and explained briefly:

TABLE 2: TYPES OF E-BUSINESS MODELS

Model Type	Brief description
Brokerage	Bring buyers and sellers together and facilitate transactions between them
Advertising	It is an extension of traditional advertising but done on the web where web pages allow the placements of it.
Infomediary	Short for information intermediaries being companies that seek to assist buyers and/or sellers understand a given market.
Merchant	Wholesalers and retailers of goods and services in which sales may be made based on list prices or through auction.
Affiliate	Financial incentives to partner affiliate sites
Manufacturer	Direct producer-buyer method of conducting businesses and thus removing the middlemen
Community	Based on user loyalty like social networks and revenue can come from various different ways
Subscription	Periodic charges of fees for continuous use
Utility	Metered usage similar to water and electricity bills. Also known as 'On-demand' or 'Pay as you go'

Source: Rappa (2010)

The type of businesses out there can also be listed as what exists out there:

TABLE 3: TYPES OF ELECTRONIC WEB COMMERCE SITES

Type of e-businesses	Description
Storefront model	Online shopping sites including online shopping mall
Auction model	A forum for online buying, selling, bidding and reverse auction methods
Portal Model	Vertical, Horizontal

Dynamic Pricing Model	Name-Your-Price, Comparison Pricing, Demand-Sensitive Pricing, Bartering, Rebates and Free goods and services
B2B Exchanges	Cross-transactions and any form of trade between 2 or more players
B2B Service Providers	Make connections and distributions easier
Online Trading and Lending Models	Online securities trading
Online Loans	Getting a loan online
Recruitment web	Finding a job online
News Services	Online Content Publishing
Travel Services	Full-service travel arrangements
Entertainment Services	High-quality multimedia entertainment
Automotive sites	Research, purchase, sell and insurance
Energy online	Communicate, buy, sell and distribute energy
Selling brainpower	Patents and intellectual property purchases
Online Art Dealers	Trade of art pieces
E-learning	Materials, courses, services and technologies
Click-and-Mortar Businesses	Online sites of traditional businesses
Source: http://software.ucv.ro/~cbadica/didactic/ce/documente/ModeleEBusiness.pdf	

5.3.4 Social enterprises

Because of the social mission of this business some considerations on how to approach this business idea also took into consideration Santos, Pache and Birkholz's (2015) research findings on the type of hybrids that a social enterprise can undertake. It is called a hybrid because of its double aim of making a profit and doing social good being that both cannot come together naturally as they are two conflicting goals:

- Market hybrids - Beneficiaries are clients that pay for a product or service directly and that strong spill overs of value to the customers and their communities are achieved through this consumption
- Blending hybrids - The same as market hybrid except that it needs additional interventions beyond its commercial activities to get the required societal value spill overs
- Bridging hybrids - The clients and beneficiaries are different parties in transactions hence their needs and the organizational resources must be balanced out between both constituencies
- Coupling hybrids - The same as bridging hybrids but the value spill over does not happen instantaneously and the commercial operations require distinct social interventions for it to work

All the different types of hybrids have their own different set of challenges and advantages. This will help to anticipate the type of manpower and management needed for the business model implementation later. The next section describes how the business model canvas will serve as the conceptual framework in developing the business model for this research.

5.4 The conceptual framework

From the literature review above, some of the points made can be analysed to see how this business can take its initial form. There is a lot of discussion on the web as to how to approach educational sites online to best deliver their goals and mission. Below are some instances and a preliminary conception of what form the enterprise's business might take:

- The "MOOC" (massive open online course) type of business model is predominantly an extension of the academic field online with no viable financial model being devised for it yet as the initial intention of it was to make it scalable and free.
- The utility type model proposed by Rappa (2004) explain models for utilities like water and energy and if the model can be adapted to espouse education, it will be ideal to elevate learning to the same level as how we perceive utilities giving it more leverage

over other human activities.

- A consumer to consumer (C2C) type of business that is monetizing on advertisements using a blend of news portal and storefront model seem to be the best option for now as the company is still in discovery mode. It allows for brand and customer relationship building and data collection way before crystalizing on a product/market fit.
- Business to consumer (B2C) vertical portal model again monetizing on advertisements which seeks to provide targeted content in the area of learning is also possible. Once the product/market fit is found the business will most likely take a form that best serve the target market hence change is inevitable. However, a vision must be set and there is more good than bad to aim high.
- When the enterprise gathers enough capabilities to become a well-networked data company, the business model can then be for an infomediary to give it a strong foothold in becoming a future authority in learning.

For the purpose of advancing this research, the initial vision and business concept determined merely serves as a starting point. It will be a news portal, C2C business that will grow into a data company later on. The business model canvas will be used as the conceptual framework in which the design work will take place. It serves as the central organizing framework to tie together the job that needs to be done in education and customer insights derived from the research analysis and literature review processes.

FIGURE 8: BUSINESS MODEL CANVAS AS THE CONCEPTUAL FRAMEWORK

In the following and final chapter, different aspects of the business model canvas will be designed and determined to fit the enterprise's purpose and mission. A few iterations of the business model canvas will be made in light of analyses done in the section.

6 – Designing the Business Model

Armed with current knowledge on business models, potential customers and an envisioned approach to education, the business model design will help to put together the best practices in action research, systems design thinking as well as business analysis. The culmination of this will be a business model that will be used as a strategic tool to launch a social enterprise start-up. The process is as below:

```
┌─────────────────────────────────────┐
│  Broad business model specifications │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│  Customer value proposition design   │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│      First business model canvas     │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│    Environmental and competition     │
│              analysis                │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│     Second business model canvas     │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│         Mapping the concept          │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│     Final specifications and output  │
└─────────────────────────────────────┘
```
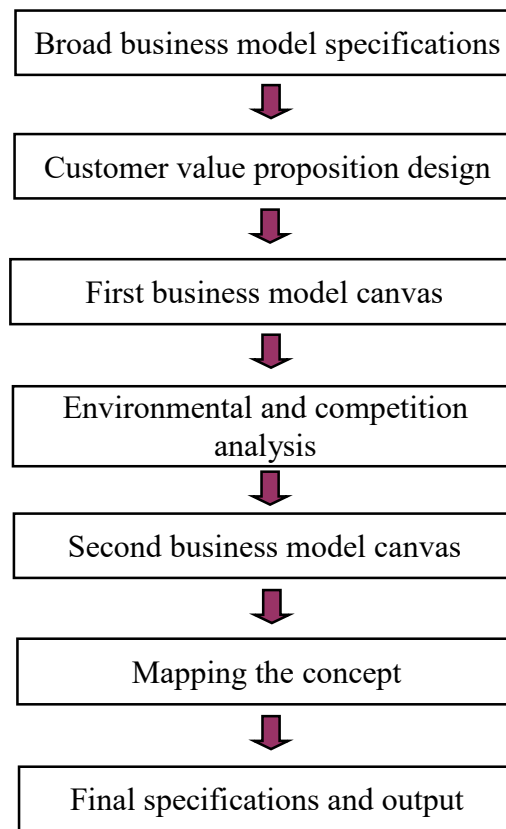
FIGURE 9: BUSINESS MODEL DESIGN PROCESS FLOW CHART

6.1 Broad specifications

The business model consists of four main parts. As explained in the previous section, the four main parts are customer value proposition, profit formula, key resources and key

processes. It constitutes the essential business issues of a company and the following paragraphs will give more information on each part.

6.1.1 Customer Value Proposition

From the research problem at hand, it seems that there is potential to create:

- Something online that help young people make sense of the world by teaching them about the human activity and nature around us
- How they can learn from it fast and navigate through the complexities so that it can help them find their position or purpose in life
- How to behave in accordance to circumstances in situations to alleviate stress and achieve maximum learning potential

The customer value proposition design section below will assist in providing the specific statement mentioned above while the business model canvassing process will see the conception of value propositions of the business made for its different customer segments.
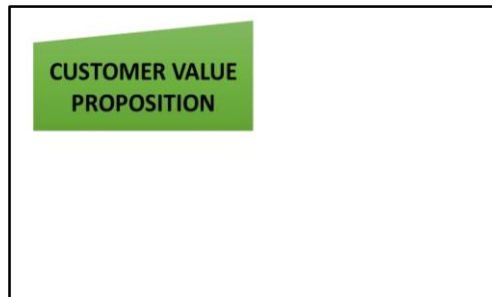
FIGURE 10: MAIN PARTS OF A BUSINESS MODEL - CUSTOMER VALUE PROPOSITION

6.1.2 Profit formula

The profit formula in a broad sense looks at the long-term economic viability of the business model and it is created based on the hypotheses made on the other parts. According to Johnson, Christensen and Kagermanns (2008) the profit formula includes discussion of the revenue model, cost structure, profit margin and resource velocity. The profit formula for this enterprise is as below:

- The revenue model dictates the central way the business will earn its cash. On the

onset the enterprise will be an ad-based revenue model. The enterprise will grow and monetize on direct sales and subscriptions later.

- Cost structure looks at the financial outlay that is needed for continuity. The cost structure involves three main areas namely the technological structure, salaries to permanent workers, cost of accessing research databases and marketing expenses.
- Profit margin is the difference between revenue and cost culminating into the desired profit levels. For now it will be set at a minimum of 20%.
- Resource velocity looks at how quickly money flows through the company when the start-up is discovering and building their business. On a per month basis the resources that need to be used to produce the content can range from 5,000-15,000€.
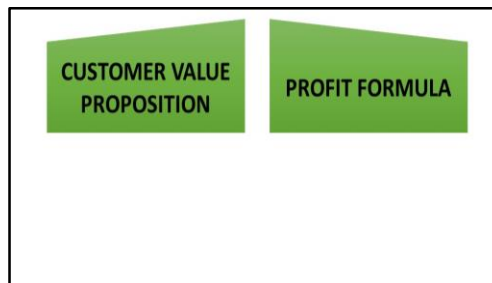
FIGURE 11: MAIN PARTS OF A BUSINESS MODEL – PROFIT FORMULA

6.1.3 Key processes

The key processes that initially makes up the main functions of the business which is required to develop and produce the business's core offerings are editorial content and visual effects production, technical delivery, business management and right touching. Being an ad-based content company at the start, the four functions involves the basic activities of research, writing, data visualization, online publishing in a website, marketing, web analytics, finance and legal.
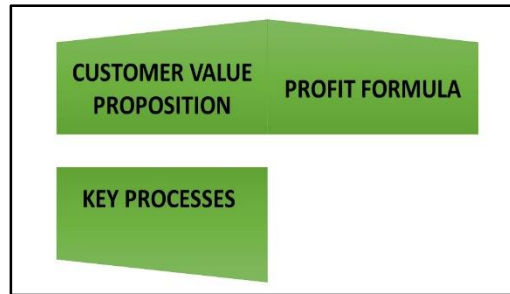
FIGURE 12: MAIN PARTS OF A BUSINESS MODEL – KEY PROCESSES

6.1.4 Key resources

Finland, as mentioned at the start, have quality research, high technology and excellent education system. Its extensive know-how in these areas give education-based start-ups an important resource to tap into. The culture of honesty of its people also gives it a trustworthy background to begin with. Product and partnerships are two other key resources which are important to this future enterprise hence it will serve as the main areas for this future enterprise to focus on when starting to build its capabilities.

FIGURE 13: MAIN PARTS OF A BUSINESS MODEL – KEY RESOURCES

The broad description given on customer value proposition, profit formula, key processes and key resources above makes up the main building blocks of this enterprise model. The enterprise will use its key resources against the key processes that have been identified to produce value for its customers according to the level it proposes in order to achieve the desired profits. How the four parts interlock will depend on the specifics that will be explored further into the business model design process.
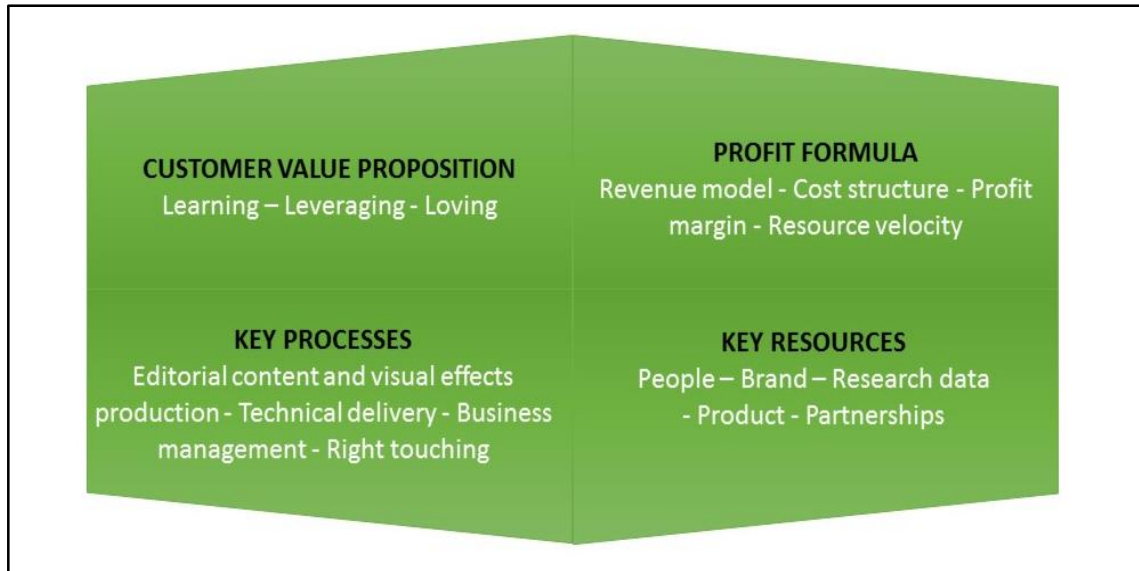
FIGURE 14: MAIN PARTS OF THE PROPOSED BUSINESS MODEL

From the four parts, the areas will be broken down to nine components that makes up the business model canvas. The canvas will be used to brainstorm the elements in each component using the four main parts determined earlier as a guideline. The nine components first begin with the customer value proposition in a more granular form. It needs to be ascertained first and this is done by merging market research with design science. It is important to ensure that the customer value proposition is determined accurately because getting the problem wrong means the solution does not matter as we will be solving the wrong problem which may not yield the required results. The next section kicks of the business model canvassing process by designing the customer value proposition.

6.2 Customer value proposition design

The education-based social enterprise will not follow the typical conventions education systems have right now. It culminates a set of value propositions that the enterprise will be producing and the best way to do it is to go back to the customers' needs and wants deeply and intuitively. This involves the use of several research techniques that will transform insights from the data into propositions that makes a good business opportunity. A brief literature review of customer value propositions is first provided.

6.2.1 Theory on customer value proposition

A business proposition of customer value is made by companies to explain precisely what they are promising to potential customers in return for payment for their product or service (Johnson, Christensen and Kagermanns' 2008). The importance of customers in business only began to emerge at the end of industrial era and in the ICT sector when businesses begin to focus on computing products and services for consumer markets (Anderson, Narus and Rossum. 2006, Slater. 1997 and Parasuraman. 1997). It may consist of a statement of benefit that is most valued by its customers, what customer problem the company is helping to solve and or any other claims that may appeal to their target customers. They are used predominantly for marketing or strategy formulation activities in business.

When done correctly, customer value propositions serve as an operational statement that can give the company the competitive edge it needs to effectively win against their competitors. That is why more emphasis is given to this process to ensure the exact job that needs to get done is identified and communicated in an effective manner. Customer value proposition is the keystone of a company's operation and policy that shapes their activities towards creating value for their potential customers.

Businesses can only make sustainable profits if they understand their customer expectations, focusing on delivering them not only for today but also to meet their needs and wants in the future. Knowing exactly what customers place value in even after their requirements have shifted is key. This is done by maintaining a good relationship with them so as to gauge their buying behaviour, personal needs and wants as well as their reaction to other on-goings in the marketplace. It is a long-term relationship.

The value expected from products and services offered to customers must match if not exceed the actual value that companies have promised to them in order to minimally achieve customer satisfaction. Robert Woodruff gives customer value an eloquent definition that can help to better understand how value is perceived in the eyes of customers:

"Customer value is customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations" (Woodruff 1997).

However, for businesses to grow they need to push boundaries as customers are already expecting it. The value received must significantly exceed what is held true in their minds. They must be blown away by the experience of its use and companies must demonstrate that they share the same beliefs about the world with its customers. Customers have grown to become highly sophisticated consumers who are always have increasing expectations when making purchase decisions as they demand more and more real value from businesses. Therefore, clear communication of value for customers is required in order to articulate the direction and strategy that is necessary for companies to organize themselves and their activities towards making those value precede for their customers before profits can follow.

In order to determine what customer value can be provided to customers through this business model is to first identify who are the target customers of this social enterprise in the context of the research problem and objectives stated at the beginning of this report. The target customers therefore are young people who are trying to overcome the daily pressures of life, follow a learning path that matters to them and provide them with information that helps them to make sense of the environment around them.

The users of this product will be predominantly made out of young people between the age of 12-18 regardless of whether they are part of any academic institution. However, the purchase decision maker and/or paying customer may actually be parents, schools, communities, non-profit organizations and government agencies. The target market is Asia because there is market readiness. Asia has the largest youth population in the world at present only to be surpassed by Africa a little more than 10 years from now (United Nation 2015). There are many reasons for this enterprise to first begin in this region:

• Youth population that is rapidly growing in a collective society indicating scalability
• Digital divide that is rapidly reducing and the extensive widening of ICT infrastructure
• Economic growth potential of the region as there is still much room for advancement

despite the lack of human capabilities in creative sustainability

- Socioeconomic environment that is relatively stable and a culture that unilaterally appreciate education although the growth in mentality did not correspond with the economic development in the region.

- Societies that are less risk averse to the changing technological landscape and an emerging trend in family institutions and group dynamics in communities which puts the environment in a conducive state for educational change

Besides that, it is also the region that the researcher is most familiar with and draws personal strengths from making the researcher an important source of user expert.

6.2.2 Customer value proposition design process

There are many ways that can be used to create customer value propositions. In this thesis, a rigorous approach will be used to examine in-depth the real job that needs to get done from the eyes of the customers. The process first looks at the research problem from a business perspective on how to turn it into a product or a service and some commentaries are included about the reality based on the researcher's experience and knowledge derived from growing up in that region. Subsequently, four analytical tools were used to examine the aspects of the customers to help unravel higher-level needs and wants of customers that may not be apparent. Finally, the underlying demands of the customers that consistently appear in the research process will be used to craft the customer value proposition.

6.2.2.1 Simple realization

From the research done on business models by Johnson, Christensen and Kagermanns' (2008), creating a customer value proposition often starts with quite a simple realization. There are many ways of arriving to a customer value proposition and if the hypotheses and assumptions that were used to formulate the idea are accurate, there is a better chance for the idea to become a success. Johnson, Christensen and Kagermanns' (2008) illustrates how Ratan Tata of Tata Group conceived the customer value proposition for the development of the world's cheapest car in the world just by standing and observing the realities of road conditions in India on a rainy day. The observation led to a series of probes which laid the foundations for a new business model for the Tata group that

garnered a lot of success.

In the case of this research, being a teacher and working with students with learning difficulties brought about a realization that a solution that can effectively communicate a possible future based on choices that the students made today may work to motivate students. It can give them inspiration to shape what they wish to become. Not long after, the idea of developing a self-education scorecard that emulate the objectives of business leaders using the balanced scorecard approach to monitor performance in a holistic manner came to mind. However, when running this idea through some students, it seems that young people are not eager to look into more education-related materials after school hours or monitor their own learning. More must be done to figure out how to get students to take responsibility for their own learning. In the meantime, the realization above can be deduced to possibly creating a customer value statement like below:

Offer a state-of-the-art online learning platform with advanced news, data and content visualization that is developed using best practices from a cross of different fields.

A more comprehensive investigation is required to delve deeper into young people's needs, wants, problems and desires. Identifying higher-order needs of youths may be able to reveal what exactly needs to be done. Enterprises must be able to demonstrate a deep understanding of their customer's needs by recognizing the pains that customers are facing and identifying the true benefits customers are looking for in a solution. While subsequent sections in this chapter will tackle the pains and gains of customers in depth, it will be beneficial to first develop the big picture for this enterprise.

6.2.2.2 Vision and commitment

Direction is important. Taking an "upstream" approach to develop a higher purpose for this enterprise is necessary as it sets the vision of what the enterprise wish to become and provides the direction for growth. A clear vision can help to describe the foresight that the founder(s) may have for the enterprise and help clarify intentions and desires in the internal decision-making process of the enterprise. The process involves rigorous examination of conscience, reflecting on some of the most significant events that impact the founder(s) and using a creative, ambitious and fun mind-set in the process to work out

what happens down under. The big picture here is to facilitate meaningful change in pursuit of greater good by realigning private businesses with public and environmental care using education technologies that drives desire for a safer and happier world.

As we move downstream, it is helpful to identify relevant organizational core values to drive team commitment. This is because personal ways of relating and taking action in this world is inevitable and influences organizational choices. Therefore, if team members do not resonate with the vision then establishing core values provides guiding principles for team members to follow.

One value that is crucial at this stage is creativity and to make a point of sustaining it is much required in this learning and discovery mode. Robinson (2011) believes that the key to an innovative workforce that can pull economies out of its decades long predicament is creativity and the source of creativity at work not only lies in an environment that fosters this value but also within the employee's self. Therefore, not only organizations must first have the support for creativity to flourish at work, they must also have self-directed learners (Duhigg 2014). This require bringing in people who can change the way work is executed and educate the employees about how to be creative in the newly created environment.

Creativity is not only a value that an organization should embrace. This future enterprise must also be committed to design educational technologies that allow for self-inducement of creativity for effective learning to occur (Duhigg 2014 and Robinson 2006). Ingraining positive learning habits is key to instilling the right behaviours that allow youth to tap into the creative flow efficiently overtime. Improving education around the world does not only mean more educated youth but it also has implications for a well-functioning society. I believe a better world is just around the corner if businesses really exist to serve people, all learning is geared towards life skills needed now and rights of every young people to have a say about the future that they will live in is allowed in systems of countries. Technology will then work its magic to efficiently remove the daily grind in life and promote better standards of living towards a collaborative economy. This will serve as the idealistic vision for now as the vision is best done together by the founding partners later as a start-up. Therefore, it can be deduced that this social enterprise may be in the business of

digital coaching and personalized learning.

6.2.2.3 Customer feedback

Up to this point, it is important to discover what potential customers have to say about the job of educating young people as well. Knowing what customers think of education can reveal their perception and mentality and this helps to shape communication with them later. Talking to potential customers early in the process of the start-up is valuable in many ways. For instance, it is not uncommon that businesses fail to take off because it lacks customers. Thus, knowing exactly what market provides the biggest demand at this stage can help to first launch the start-up in a positive direction. As Paul Graham quoted:

"The #1 company-killer is lack of market".

Interview conversations with some research subjects via WhatsApp helped to drill deeper into what aspirations they might have in terms of education and learning. A total of ten Asians living in Malaysia and Australia were asked about their opinions on getting trustworthy learning resources online and two respondents believe that traditional classroom instruction is still better while the rest is open to learning from the Internet. Learning non-cognitive skills was also deemed important by all and are flexible as to how and where the instruction should take place but three of the respondents would like to make sure the source is credible and that the benefits are undoubtedly clear.

Some of the young respondents gave feedback that Google is already their trustworthy companion for information and if there are new ways of learning knowledge online, they are open to the option. From the findings above, it can be synthesized that:

• Learning by way of electronic devices using the Internet is nothing new
• Learning non-cognitive skills is usually by way of informal means
• Some customers prefer the traditional classroom and schools. However, if it leads to Ivy-League like qualification then yes
• Trust and credibility of the online learning resource must be proven first and foremost
• Word-of-mouth is an important source of trust

• If the platform requires too much time and effort to learn then there is no motivation to frequent it

While some have their concerns over the issue of learning online, the response by the respondents was generally positive. Still, Johnson, Christensen and Kagermann (2008) asserted that the most important attribute of a customer value proposition is its precision hence more needs to be done to pinpoint exactly what jobs exactly will the enterprise be undertaking. This brings us to the next step which involves determining what customer value if they were to actively learn.

6.2.2.4 Determining the customer value

The purpose of this section is to use analysis and conceptual tools to determine what values customers are looking for when making choices about their education and learning. A careful study of all the customer data and literature analysis must be conducted to identify what young people are trying to achieve through education, what problems they are facing when in the process of getting their education and what are the benefits that they are enjoying or expecting from the process of learning. The analysis and conceptual tools used were mind mapping, visual boarding, customer profiling and individual brainstorming.

Mind mapping is a conceptual exercise that is created on a blank piece of paper focusing on one concept and expanding it using branches to illustrate associated ideas that is connected to the main concept (Buzan 1974). Using the technique, the main areas and ideas that make up the whole of this research thesis was illustrated. Coupled with other diagrammatic tools, the creative process revisits the job that needs to be done, customers' needs and learning psychology in a reiterative manner. It helps to get totally immersed systematically and creatively in the knowledge at hand.

The process first begins with a simple sketch. The most important concepts associated with education and young people that were discovered up to this point were mapped out on a piece of paper. The process was again repeated to improve the drawing for better reference. The mind mapping process provided clarity and focus while help to gain more insights when used alongside other tools. A visual board is used for the purpose as it can

help to tap into the subconscious mind to seek more insights in understanding the underlying motivations of education and learning and this comes next. The mind map is as shown below

FIGURE 15: THE MIND-MAPPING PROCESS
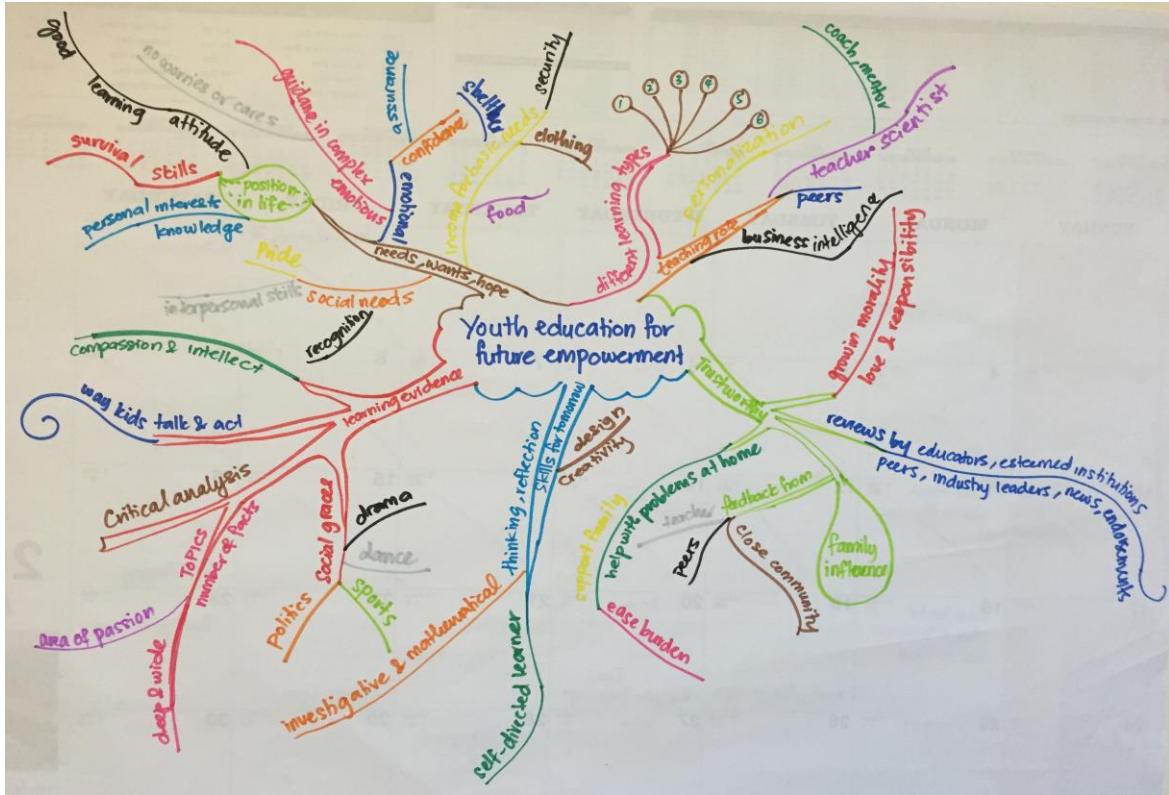
The visual board is a valuable visualization tool that helps focus the mind to critical moments and goals in our lives to influence and empower the person to make it happen (Rider 2015). A visual board can significantly increase the effectiveness of this task by visually presenting all the points in this research all in one place even if the points are made in the form of written text. Ruminating on all the data, information, and experiences with potential customers and knowledge from the literature review may possibly uncover more insights hence the exercise.

On the process, the visual board brings everything that is posted on it to life. It helps to think more deeply about the problems, the goals and the research findings and mull over some points a bit in hope of light bulb moments. The goal then would be to write them

down and analyse it as the focus expands. Some quiet time, empty space and the visual board paved the way to some insights. They were dissected and theorized using positivism, critical realism and action research principles. It was a tough exercise that required time and patience.

The process involved moments where the researcher gets transported back to the time customer interviews were conducted. In the conversations with potential customers about learning and life, there was more than just what was being said and reading between the lines:

- Some young people want to help their parents alleviate their hardship in life
- Some young people want their parents to be happy
- Some want to feel proud, cool or recognized by friends and peers
- Some would like to discover their personal talents but do not know how
- Some parents are experiencing a lot of pressure from schools that are demanding that their young gets good grades hence lessons continue well after school hours and beyond. The money that schools get hinges upon the grades obtained by students
- All of the students want a carefree life but they have a lot to worry about
- Going online is only for the purpose of entertainment
- Students increasingly use the internet to look for solutions in life
- Many have not heard of online learning tools as school is still the mainstream conception of where education is received
- All the young people interviewed felt that their English needs to improve if they want to use the Internet better. They have yet to discover what can be found online besides entertainment and news introduced by friends and their social networks

There were also moments for personal reflection on the whole research project against personal circumstances that may influence the thought and design process from this point forward. The opportunities and assumptions require further investigation. After all, the conception of the idea is from the potential entrepreneur him or herself and not of the customers (Steve 2006):

- Internationalization is possible as it is online and the enterprise conception and growth

approach is unconventional but will be an interesting one to watch.

- It is a huge risk to start this up in a foreign place being a non-EEU citizen here in Finland.
- Circumstances such as family, new to the country and setting up an A-team are huge challenges.

Part of the visual board can be found in the appendices section.

Customer profiling is the process of explicitly describing exactly what type of customers this business would intend to serve. Customer make up can be defined in numerous ways from biological, purchase behaviour, consumption methods, geographical dispersion, cultural background and many other market and demographic variables. It is also a synthesis of customer interviews, discussions and observations into specific information that makes up the perspectives and concerns of potential customers (Osterwalder and Pigneur 2010).

From the beginning of this research, research findings from psychology and education have revealed that the knowledge in young people is more malleable (Hamilton 2012). Children learn about the world since day one and they begin to perceptions about the world around the age of 12 (Wilkins 2010). Young people will be more incline to begin exploring their future vocation hence the target age range of the solution-product users will be predominantly youth between the ages of 12 – 18 and more.

From the interview reports in the preliminary investigation, parents in Asia are the gatekeepers to education of young people and there is a strong conception that education on most part is the principal responsibility of the government authorities and is administered through schools and teachers. However, in western cultures, education often leads to the role of parents as evidenced in Catechism (1995), National PTA (2015) and Cotton and Wikelund (1989). It has always been emphasized in society that proactive involvement of all parties is the way of assuring success in young people's achievements despite the common and prevalent issue of role conflicts when talking about education. Thus, parents, caregivers, family members and other education authorities will form the second customer segment of this business as their needs will be different from the users although it can be interrelated.

Drilling down to the specifics of the profiles of each customer segment, two diagrams was prepared to illustrate the customer's feedback towards what they want from an education resource. The notes were categorized into three divides. One illustrates the pain that the customers feel when reacting to or consuming an education resource, another is the fun and pleasure that they derive of it now and the other is their perspectives of what needs to be achieved through the education resource.

Using a stack of sticky notes and an A3 size paper, all the feedback and insights from customers were organized as pictured in Figure 16 and 17. In Figure 16, young people's perspectives into their current education situation are shown and in Figure 17, all the parents' concern were listed.
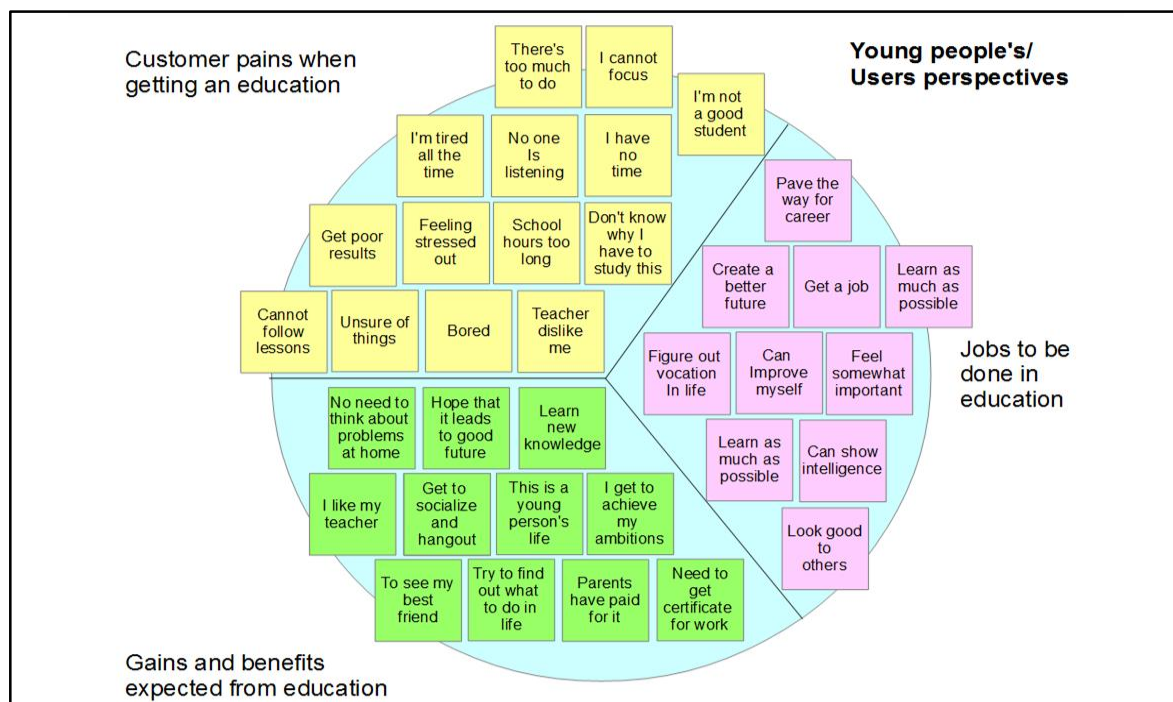
FIGURE 16: CUSTOMER PROFILE OF YOUNG PEOPLE
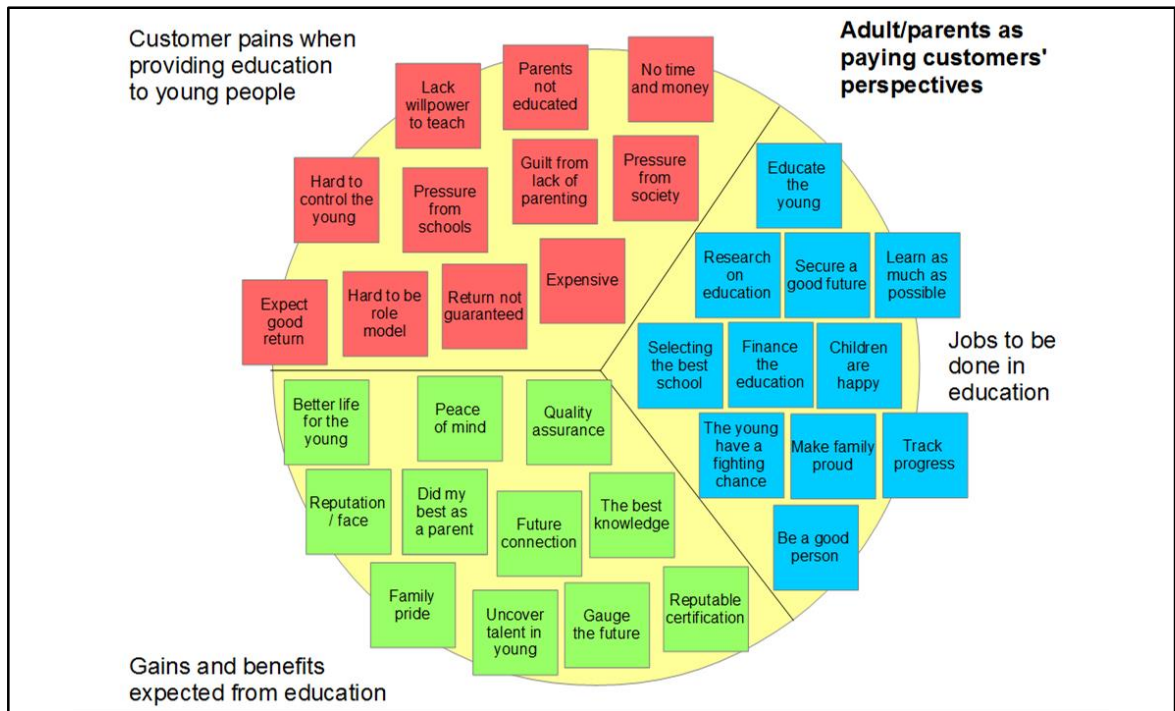
FIGURE 17: ADULT (PARENT) FEEDBACK ON JOBS TO BE DONE, CUSTOMER PAINS AND GAINS FROM EDUCATION

From the exercise, many perspectives, response and motivations from customers were compiled and put into a brainstorming session to expand on each of the perspectives to try to seek if there is higher-level of value and job to be done that customers may not be aware of themselves.

Brainstorming is a creative problem solving technique that has been used in many disciplines from business, projects to education (Toubia 2006). It is usually conducted in a group and a simple rule is applied where no members shall trump the ideas of others. All the members in the brainstorming session are encouraged to say what comes to mind as promptly as possible without overthinking things or practice personal inhibitions to voice out ideas.

For this research a variation of brainstorming was used called individual brainstorming. The technique can range from writing and speaking about a topic as freely as possible, making word association along the lines of the subject matter and taking notes visually by diagramming their thoughts as in how you would do mind-mapping. The technique has

been found to be more effective than group brainstorming on many occasions (Diehl and Stroebe, 1991 and Furnham and Yazdanpanahi, 1995). The brainstorming was conducted and the result of it was organized and explained in the table below.

TABLE 4: THE PAINS AND GAINS AND JOBS-TO-BE-DONE IN YOUTH EDUCATION

JOBS TO BE DONE (YOUTH)	
• Learning for a better future • Acquire good attitude, skills and knowledge • Learn how to solve problems in life i.e. can help family out with their burdens • Discover future career paths and find position in life • Gain confidence – look good to others, can talk intelligently and can demonstrate competence • Feel secure, cared for and somewhat important • Measures that matters • Fulfill social needs – fun, play, pride, passion, variety, mentor, interpersonal • Can explore topics and phenomenon of interests based on personal learning style – freedom, reflection	
PAINS	GAINS
• Learning not time-efficient • The pain of discipline hence need acceptable push • Tech averse • Language barrier • Ingrained behavior because of adult's response • When results are poor, most likely to think that their not intelligent or gifted enough to learn	• Positive learning experiences • Friends • Good future learning habits • Resourceful • Live good • Do good • Travel and continuous learning

TABLE 5: THE PAINS AND GAINS AND JOBS-TO-BE-DONE IN EDUCATION FOR PARENTS

JOBS TO BE DONE (PARENTS)	
• Provide for the needs of the young as defined by individual parents • Research and select school and learning resources • Finance the education • Children are happy • Make family proud • Track learning progress (Investment performance) • Build foundation to be good person/citizen • Outsource parental guidance according to parent's specifications	
PAINS	GAINS
• Expensive • Return not guaranteed • Pain of being a role model • Lack of good measurements of learning outcomes • Annoyed if education choices not delivered as promised • Guilt borne out of poor or no guidance given • Difficult not to get emotional	• Motivation to love and support • Family happiness – Reputation, pride and inheritance • Quality assurance and peace of mind • Easy to track and follow • Did my best – content

The exercises conducted in this section provided a comprehensive list of needs, wants, customer pains, benefits, jobs and hopes not only of the customers but also personal motivations of the researcher/future founder. It is hard to tell what should take priority although some points are obviously more important than others but it is best to leave this part validated when developing the product through co-creation. For now, we shall focus on the pain points and jobs to be done to help create a list of customer value that will help to explore the possibilities of what form the value proposition in the product form might take and hence turning this research challenge into a potential business opportunity.

6.2.2.5 Linking pain points to mechanisms for delivering value

The three main factors why young people are not learning effectively is the lack of time, purpose and attention. We will first address this three before moving on to customer pain points found in the section above.

Lack of time - The reasons contributing to the lack of time in a youth's life are numerous. Guidance is key, but certain habits must initially fall into place before positive results can be seen. It is not always the case that young people have someone who can teach them the required executive functioning skills in a systematic manner such as time management. When young people have the habit of searching guidance from a trusted platform and they have the urgency to address their personal learning issues, the intended guidance can be delivered at a time and place convenient to them. For example, when the feeling of uncertainty, trauma and panic grip them and someone trustworthy is not available, a single source of non-judgmental and credible help extended to them is likely to have positive learning outcome. However, more is required to direct youth to tap into controlling their own learning capabilities much quicker.

Lack of purpose - Learning which lacks connection to real world situations and what the learner is interested in lacks purpose and thus affects the desire to learn. Creative online mechanisms can be designed to drive purposeful learning and personalization can also possibly address the issue of meaningfulness in learning. For example, in the case of Jokela school shooting, taunting in school and an environment that was devoid of opportunities and avenues for sharing personal thoughts led to the information being pieced together in a manner which lead to wrong decisions. A place online where more positive connections can be made must exist as the young cannot be left alone to figure things out themselves. Young people require guidance in making sense of the world as they lack real world experience and synapses that occur can have random signaling effects. A news platform designed to nurture and inspire can be a possible creative online mechanism to consider when in product development phase.

Lack of attention – A high pressure and segregated living environment that has developed based on the sum of human activities and habits have systematically dimmed down the

voice of young people. The result ranges from feelings of emptiness within themselves all the way to depression and retaliation - either way it is not good. A platform which can reverse these effects which in turn increases positive human activities may be able to improve the natural environment and mind-sets. More room must be given to the young to experiment with societal participation without arousing fears in private businesses that they will lose competitive advantage. However, the result can only be seen in the long-term and a lifetime of commitment is required.

The list of customer value below was consolidated based on the creative processes that were used to treat research findings of this thesis done above. Turning the pain points into actionable statements facilitates the process of exploring possible approaches for this enterprise to consider, which is in the section that follows:

The customer value list

1. Fact-based content that is easy to follow, age-appropriate and timely. The management of information and knowledge is a valuable skill to acquire in order to drive positive action.
2. Students no longer feel anxious about tests and assessments and in fact welcome it or can select not to do it. A system that builds confidence and measures that do not dumb down the learner and the learning process is valued.
3. Learners with improved learning skills coupled with the opportunity for experimentation and reflection, learners eventually become confident and curious to seek knowledge into unsure areas automatically.
4. Young people can make effective learning decision for themselves given the circumstances that they are in. They become self-directed learners.
5. The freedom to choose from whom they can learn from and they have a choice of what teaching to follow and able to make risk assessments about the teaching options and learning experiences.
6. Youth can learn skills needed for life in the future and can manage stress proactively.
7. They can discover different motivations to learn from peers sharing their experiences and enthusiastically share with others what they found to be important or fascinating.
8. 24/7 access to peer support network when young people feel they want or need to talk to someone trustworthy.

9. The opportunity to learn how to manage time and executive functioning skills that can help them feel more certain, confident and clear about what needs to get done to achieve learning goals.

10. Help to figure out direction in life by using planning and mapping tools and techniques designed by the business.

11. Access to a wealth of knowledge in all areas concerning modern life, human organizations and systems.

12. Make self-improvement, experiential learning and doing meaningful work a learning and living habit.

From the above list, some broad assumptions were made to form hypotheses that the business model components were built upon. They will be accepted as highly probable for the purpose of this research and when the model is put into execution later on, the hypotheses will be tested against factors in reality. Therefore, from the research findings insofar it is believed that:

• If youth are taught non-cognitive skills from an early age, they become adept to manage life's daily pressures making them happier more successful adults.

• If support for informal learning is in place, they can learn a lot from people around them and have the opportunity to discover their own talents.

• If they realize the potential they have inside, they become inspired to devote themselves to the learning by doing experience, making them self-directed learners.

• If the learning program can be done online, it can scale considerably to reach youth that need it most as mobile and internet technology continue to grow its infrastructure globally.

It is worth mentioning again that the hypotheses may well change repeatedly based on factors that come to light such as market realities, feedback from customers and much more as the business model enters into different phases of execution. It is also important to be fluid with the way and be fixed in the outcome as knowledge is after all malleable (Robinson 2011) and contrary to popular belief that most things move in a linear fashion, people in research and entrepreneurship can testify that the task of searching and discovery is more like a Brownian motion. With this, the process of turning the research

problem into a business opportunity now lead us to explore the possibilities that are out there based on personal preferences, capabilities and location.

6.2.2.6 Exploring the possibilities

Up to this point we know that a different education system is required. Ideally, it is an efficient, streamlined and all-accessible knowledge acquisition alternative for the younger generation that can effectively change according to not only their personal needs and situation but also the needs of its immediate community and society at large. With technology no longer posing a barrier to what can be conceived online, it is interesting to explore the possibilities and imagine what would happen when the start-up begins to gain positive momentum in growth as it activities and markets start to crystallize. This is not set in stone. A mental conception of how it might begin and what it will end up to be helps to put an outline over the business model now. The model will certainly change in time.

Gamification of the content - Like the game Monkey Island (and Grim Fandango), playing the game will allow young people to pick-up what to do and ways to think and learn how to positively respond to them in a journey-like manner. As informal learning has been identified as the principal method of actual learning in life, being able to immerse oneself into the game and interact with the elements in it can be a powerful learning experience as it gives the character the opportunity and time to think and reflect while playing in a safe and controlled environment. No impatient parents, no rushing through the learning experience and no traveling cost.

FIGURE 18: A SCREENSHOT OF THE GAME MONKEY ISLAND 2

Developmental work on-site - Education is a long-term endeavour and if you think of education in its traditional framework then operating it as a non-profit initiative or government project geared towards developmental work is the logical answer. However, developmental work in education is nothing new and if the efforts now were sufficient, education would not be so far off from its mark in the first place. If non-profits were supposed to do the job that governments failed to do, then both sectors are still inherently inefficient in making education effective. However, this is not to say developmental work is not efficient. In fact, it has liberated many places from illiteracy and is still very important in bringing universal primary education to places that need it most. Anyhow, developmental work usually involves a series of complex activities and relationships that promote intervention on site. It is hoped that the product of this social enterprise is very suitable to be deployed as a service complementary of developmental work and government policies.

E-magazine format to display content – An informative news and media platform that is presented in a magazine or tabloid style. Like a McKinsey for youth,it is a news intelligence for young people where data is gathered and analysed, developed insights, and helped youth make sense of their learning and environmental issues coupled with some apps and tools. An illustrative example of how the homepage may look like can be found in the appendices.

Tie ups with Finnish education companies - It makes sense to develop a proposal based on this thesis and pitch it to education and learning technology companies in Finland so that a bigger game plan can be rolled out more effectively to sell education from here. The shape of this business model would need to fit or match into the vision and mission of other companies or risk fallout in strategy.

An environment decision-making app – An app that is informative and uses numbers to drive action that works intuitively to radically realign economy and enterprise activities towards a healthier and safer living environment. The app helps people to learn about the environment and their activities and how it shapes the safety and health measures in their living areas. The aim is to provide real-time information that communities can work with that promotes learning and facilitates positive environmental initiatives to get to net zero carbon footprint. Overtime, continuous use of this app instils responsibility and drive for

better more progressive societal living.

A mobile app business and approach is ideal but the launch must be orchestrated carefully with other interventions such as educational services, teaching support and building strategic alliances. Therefore, planning of the core activities for this business model is important and to contemplate what form it may take is to delve into the works of others.

The number of mobile apps are growing very rapidly as pictured in the graph in the following page.

FIGURE 19: INCREASING NUMBER OF MOBILE APPLICATIONS OFFERED IN STORES. SOURCE: WWW.STATISTA.COM. 2015 - HTTPS://WWW.STATISTA.COM/CHART/3530/APP-STORE-GROWTH/

6.2.2.7 A comparison of what is out there

This section studies some products from current high-performing educational technology companies to make a comparison of its features, benefits and learning approaches. The process involves rigorous scanning of the environment in a multidisciplinary manner and trying out applications online to study unique selling points to gain signals and insights of what works and vice versa. Analysing all the information in hand, a mental picture of what may work begins to crystallize and the potential benefits of the envisioned solution gets clearer with time.

A number of Internet sites were used to read reviews about education products and some apps were examined at length. The goal here is to look at what other people are doing and make a better product. Some programs that are worth mentioning are such as:

Adobe Captivate Prime

Originally a screen casting tool which is usually used as a software demonstration tool, it is also common to use it for marketing purposes on websites and tutorials making it a versatile tool for e-learning. Adobe Captivate Prime positioned themselves as a comprehensive yet easy to use e-learning authoring tool and have received good market feedback for its good design. The user-friendliness is very appealing as much thought have been put into understanding how educators and teachers design, curate and put together a lesson plan.

CLICK Magazine

Click is a digital entertainment magazine published in Ireland that covers gaming, technology and movies. The digital magazine used to be popular in terms of content, design and good overall interface but somehow they have reverted to more content on paper recently. Nevertheless, the website looks crisp and clean and this will be the tone and manner which the future product of this business will adopt.

SAP Fiori

SAP Fiori is a business tool that serves as a porting platform for all apps that are commonly used by employees according to their roles but there are apps that usually fall under the category of Transaction, Analytical and Fact. The setback is that is not free, requires training and setting up but once you get familiar with the use, it is a powerful dashboard. The takeaway is the design and it being a dashboard comes close to some features of this future business model.

Skype and Google Classroom

Communication for collaboration. Another technologically focused tool to facilitate classroom collaboration.

DoSomething.org

After studying this NGO, how this organization works is very suitable for this business model although not all parts of it. The purpose of going out and discovering things to do shares a common goal that this social enterprise would want to achieve. How it can be applied to this business model still needs some rethinking because of the different target market and consumer behaviour.

National Geographic Kids

To check out what National Geographic have for kids came to me in an instant and unfortunately the website was designed to get you to subscribe to their magazine. The basic facts presented about world and nature were not interesting. Also, there was no interactivity, but there was a section that looked at different moments in nature and that brought me back to the time when I was just a kid being fascinated by the real vivid pictures of nature. The lesson learned here is to incorporate more interactivity, offer some paid features based on product design and use vivid visuals.

PBS Kids

The wholesomeness of its program is commendable and while there is good interactivity it is again not very informative and does not age well with its audience.

Time for kids

The website brings current affairs down to kids-level in terms of readability. Despite it being a good idea in general, the news lack components that can make it more relatable to young people's immediate environment.

HuffPost Live

Huffington Post always has the X-factor for news. It does not rely entirely on well-written articles but also videos and overall presentation that do what the tagline says: inform, inspire, entertain and empower. To emulate the effects that they evoke through the way they deliver their content is in itself inspirational.

https://cartodb.com/

This site can be a potential partner to this future enterprise. I really like this service to become a product feature of this enterprise. Business intelligence and location-based data analysis will be part of this social enterprise and their service provides pretty good visual insights that can drive empowerment and action.

http://www.missedinhistory.com/

This science-based content website has a good appeal to huge segment of people and coupled with good write ups, visuals and design that fits the function, I like the way information is presented – a good and light read yet with interesting visuals and intuitive flow and navigation.

6.2.2.8 The business opportunity and its customer value proposition

As mentioned, we know that there is an opportunity to develop a product that teaches young people what is out there in their immediate environment and how they can learn from it to help them find their position in life more quickly. The opportunity here can be further understood as youth have a need for educated guidance to discover meaningful work path that matches their talent and personality while also promoting greater good. What this does is inspire them to monitor their own learning and take action when necessary. Part of the learning process is that they need encouragement to deal with difficult situations in life. Also, young people need to develop learning habits to become self-directed learners who are creative and responsible. In reality, many young people need those competences more than other skills in their personal learning sphere (Duhigg 2014). A performance tracking system that gives a sense of progress may be the bridge that can close this gap

By making informal learning more focused, young people can possibly utilize this self-education platform to complement their learning in school, nurture personal growth and help discover the living knowledge of its current community and society in a trustworthy and safe manner. This is already a phenomenon that is happening on its own (Richardson 2015) and the goal here is to make it more targeted and personalized. As the education landscape continue to change with the developments in ICT, young people are gaining more knowledge and culture through screen-based Internet technologies on their own yet

there is not one high-quality fact-based platform that young people can refer to, to assist and teach them to make analysis and decision-making on their own with regards to their learning goals.

And as many young people admit that their immediate concern for education and learning now is to bring about a better future for themselves and for some, the people that are around them as well, the critical job to be done here is:

Helping young people to fulfil their need to address life concerns and seek answers to personal questions about learning and planning for life in a reliable and credible manner.

Different youth look for different things in life. Regardless of their motivations, all young people have the right to be happy and if access to quality information about themselves and their environment becomes effortlessly available, frequent access to such information can help to build strong minds and activities that make them lifelong learners who are creative, pro-active and develop an appreciation for mother nature and humanity.

On the onset, listing all the benefits that customers can possibly derive from a learning product alone can make a fairly extensive customer value proposition. However, it was not enough. It lacks depth and believable factor and hence the research digs deeper into the real issues and factors to understand the needs and wants of customers on a more profound level. Based on the precepts that potential users and customers have on education and life, some mental conception of what the product may become and what type of business it should be starts to form. With this information and by comparing what is out there as done above, some favourable points of difference and user experience information will be used to design the business model. All this and with the customer value proposition formulated above, we now move on to designing the business model using the business model canvas technique.

6.3 Business model canvassing

We now know that the customer value proposition is to help young people fulfil their need

to address life concerns and seek answers to personal questions about learning and planning for life in a reliable and credible manner. The main parts of the business model namely customer value proposition, profit formula, key resources and key processes (Johnson, Christensen & Kagermann 2008) can be further broken down into smaller components and as we are using the business model canvas method of conceptualizing the business model, there will be nine. The process of business model canvassing will look into creating important elements for all nine components with non-cognitive skills, informal learning, awareness and technology forming the central organizing feature in the design work.

The business model canvassing starts with a brainstorm of elements that may go into all components of the canvas. Next, the points made were thought-out in a more systematic manner and the interplay between each element were carefully examined like cogs in a wheel. The elements were then placed under the appropriate components. The exercise was done to put in the initial ideas conceived about the enterprise and the first business model canvassing exercise outcome is shown in Figure 20.

Key partners	Key activities	Value propositions	Customer relationships	Customer segments
Drivers of change: -Governments -Developmental nonprofits -Early adopters (parents, educators, community leaders environmental advocators, education institutions) -Funding angels	Key functions across all staff: Marketing, Sales, R&D, ICT Key processes: - Customer acquisition (CU) - Product development (PDT) - Customer service (CU) - Financial management (FIN)	*Helping young people to* *seek answers to personal* *questions about learning and* *planning for life in the most* *reliable and credible way* USERS -Effective learning anywhere anytime -Minimum effort maximum benefits	Online platform design: -Social media -Website chat -Services and design	DRIVERS - Governments - NGOs - Other private persons (Parents, educators and advocators)
Content enablers: -Experts in various fields, -Database companies, -Map API providers, -Journalists -Technology partners	Start up focus area and corresponding activities: - Content production PDT,CU[writing,publishing,SFX] - Technical delivery PDT,CU[tech in office,web,mobile,BI] - Business management FIN,CU [cash flow,legal,sales, office] - Right touching CU[Branding,market research, service design,business model]	-Can see performance and track progress -Good topic of conversation with peers DRIVERS -Trustworthy education partner	Community activities: -Co-creation -Consulting -Events	USERS - Young people between 12-18 years old - Poor, at risk and/or stressed

Key resources	Value propositions (cont.)	Channels
-People (Team) -Product and -Information (Finnish culture and research quality) -Brand -Technological platform -Partnerships	-Positive results and ease of mind -Institution's performance is supported and enhanced -Teachers and parents gain pride and passion	Mostly digital: -Mobile app -YouTube Channel -Website

Cost Structure	Revenue streams
Technological structure Salaries to permanent workers Cost of accessing research databases Marketing expenses	Advertisement sales Direct sales – seminars, training, workshops, tours and conventions Subscription per user – Individual sales and Bulk sales to schools, governments and B2B

FIGURE 20: THE FIRST BUSINESS MODEL PRODUCED USING THE BUSINESS MODEL CANVASSING FRAMEWORK

The process is an iterative one hence the exercise was done repeatedly for several times to refine the points and incorporate other forms of analysis as well. Because of the inward focus of the canvas tool, the following business and analytical tools were used to enforce the business model design elements and design.

6.4 Environmental and competition analysis

Designing a business model which incorporates current operating realities provides this possible future enterprise a more reliable and customer data driven starting point if it was to survive the real world. Therefore, taking stock of some environmental factors is crucial hence a SWOT analysis was first conducted followed by several other business analysis methods.

6.4.1 SWOT analysis

SWOT analysis is a tool to analyse a business situation on the inside-out in a more organized way (Humprey, 2005). The abbreviation stands for Strengths, Weaknesses, Opportunities and Threats. Strengths look at the plus points and internal advantages that a company has and weaknesses is vice versa. Opportunities are external factors in the market and business environment that the company can benefit or take advantage of while threats analyse the obstacles that exist or perceived that is in its operating environment that needs to be strategized for in order to overcome or avoid the threats. Below is the SWOT analysis of the current business situation of this enterprise:
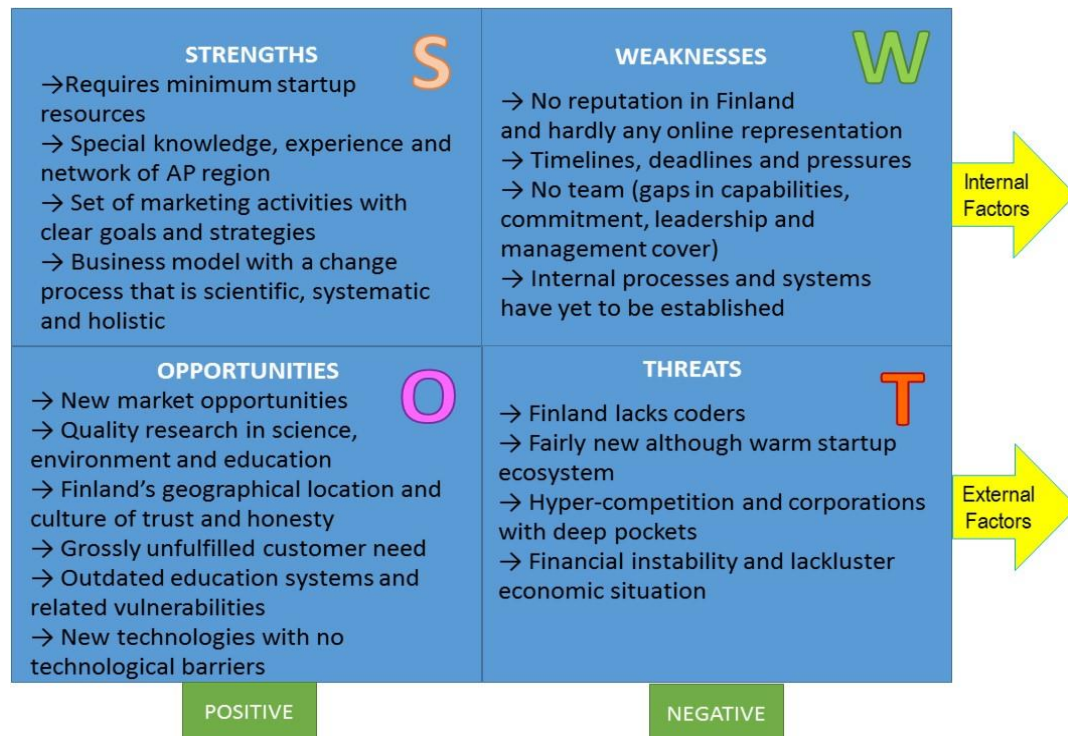
FIGURE 21: THE SWOT ANALYSIS

- We start with an analysis of the strengths. The initial strength of this enterprise is Finland and its quality research in education and the freedom that teachers possess in influencing learning in classrooms. The researcher, the business model and access to Finnish research and entrepreneurship ecosystem constitute a delicate interplay of environmental elements that when used correctly can lay the foundations for a startup with strong potential to revolutionize education.
- There are inherent weaknesses as well whereby the founder's lack of Finnish and local knowledge makes it difficult to immerse into the local network well enough to connect to like-minded people here who wish to better this world through software and education in a creative manner.
- However, there is tremendous opportunities in the market due to structural changes in some industries and desperation in Asian societies in calling for better and more effective learning at schools.
- Nevertheless, there are concerns with setting up a talented team from Finland and coming up with a good competitive strategy that enables it to grow organically without being in a position that is vulnerable to attack.

In the next section, Michael Porter's competitive forces model will be used to determine what sort of forces this business may need to go against in order to succeed and whether if there are any danger points that can be tackled or avoided ahead of time to increase the likelihood of success.

6.4.2 Analysing the competitive forces that shape industry

Porter's (1991) 5 forces analysis is a tool that helps to see the lucrativeness of an industry by understanding the nature and scope of the competition in the industry better. It can help companies to strategize their business among the ongoings of the industry and help seek competitive edge. As a start-up, there are many pre-startup organizational choices that need to be made upfront in order to design the business model that can serve the long-term goal of this enterprise. The five forces analysis can pinpoint a suitable strategy that help pave way for a smoother roll out for this enterprise.

As an introduction to the tool, Michael Porter's five competitive forces model analyses an industry from five different angles (Porter 1991). Firstly, the ease of new entrants entering into an industry is analysed. Then, other businesses with differing products and services that can become a substitute to the business's offerings is studied. Thirdly, the bargaining power of buyers of the product is examined followed by the bargaining power of suppliers to the business. Finally, the intensity and nature of all direct and indirect competition's feuds and battles are scrutinized. Together with all the other competitive forces that are playing out simultaneously in the market, strategy is formed to help companies carve a way out of the conflict and in to a better position of survival and profitability (Porter 2008). The diagram in the next page illustrates the five forces mentioned earlier.

The business will first model itself to become a low-risk, low-threat quality content provider business. Therefore, the initial conception of the business is that of an online magazine platform which will ground itself first in the online publishing industry. Below is a short study conducted online to get a broad picture of where the publishing industry stands now. By no means the section below represents a complete and exhaustive study of the said industry hence the information was handpicked to give an overview of the industry with

relations to the business model design task at hand. It begins with print media before moving on to online content space.
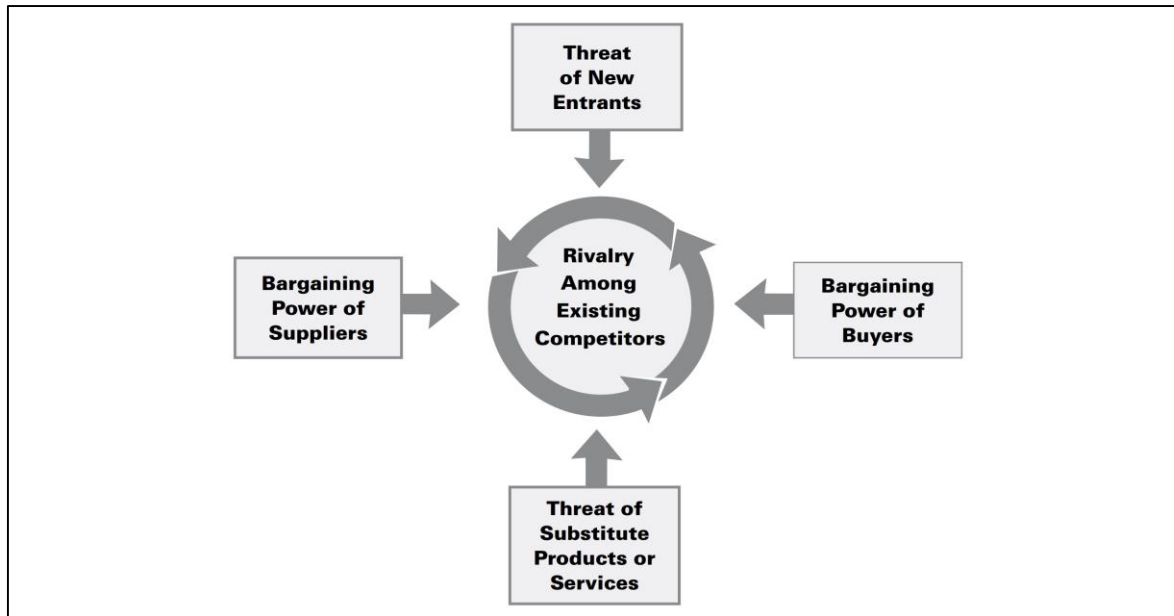
FIGURE 22: THE FIVE FORCES THAT SHAPE INDUSTRY COMPETITION. SOURCE: PORTER, M., (2008)

6.4.2.1 Brief study of publishing industry

Publishing was a very stable industry not too long ago as print media used to be the main source of information of interests (Wharton et al. 2007), entertainment and communication. In Wharton et al. (2007), it was found that few large companies have come to dominate all market segments of books in Europe, US and now globally as they established themselves well within the segments using disparate forms of strategies. Wharton et al. (2007) further explained that consumer behavior and retail have been changing lending to some changes in the industry but it was not enough to cause structural changes in the publishing world until the advent of the Internet and Amazon. Coupled with the lacklustre business climate and other economic factors, the change has caused a whirlwind of mergers, acquisitions and the disappearance of a large number of publishing companies in which some used to be dominant players in the market (Wharton et al. 2007). New digital publishing platforms targeting new online publishing channels and self-publishing authors have emerged to take advantage of the situation giving authors and creative talents more authority over

their own work (Rich 2010 & Wharton et al. 2007). Wharton et al. (2007) further discussed that in the past, publishing companies have the upper hand when contracting authors in many segments of the book industry. We will now look at the overall industry structure to see what was in the past, what is it now and create some possible scenarios of what may be in store for the future of publishing and this will be used to help create the entry and positioning strategy for the design of the online magazine platform business model.

In every segment of the publishing market, there is intense rivalry between the firms operating in it (excluding the film and media industry for now). Despite the fact that there are thousands of publishing companies, only a handful of big players come to dominate the industry - 50 largest companies having 80.3 concentration ratio (Wharton et al. 2007). In traditional publishing, big players were only concerned of those who move into their space hence niche publishing can still be profitable albeit niche. But with self-publishing and e-business models the number of competitors are rising sharply as anyone can publish more easily than before and this have affected both big and small publishing houses as the nature of rivalry has changed but to no clear direction. The shape of things is vague and have been continuously shifting for now for many reasons but mainly because of Internet technologies (Brown 2016).

The motivation behind reading can range from entertainment, education, timely access to cutting-edge knowledge and directory type business and legal information. However, the source of information and entertainment has expanded with the advent of the Internet which is a converging place for different medias and this has been fundamentally changing the way knowledge and information is attained especially in Asia (Internet World Stats 2016). Thanks to Google and millions of individuals who post rich information and videos about virtually anything one can think of, going online to search, research, source and get linked to things and people have been made much easier than in the past. E-commerce have also allowed Internet users to buy information, products and services online and the convenience of it has made people spend more time online than before (Go-Globe 2015). Besides that, print media publishers have also been facing the threat of used books, print on demand, electronic reserve systems, return books and Amazon (which will be discussed below) making the situation challenging but contrary to what people's perception, where traditional publishers will die off soon, a shift in strategies on different

fronts have been happening and publishers have remained profitable if not improving according to Howey (2014) and DBW (2014).

Bookstores are publisher's biggest customers although you can find books in convenience stores, libraries, supermarkets and so on. Bookstores have relatively high bargaining power over the publishers because only books that are on the shelves gets sold. Nevertheless, according to Wharton et al. (2007), the publishing industry have all along been very inefficient and when Amazon came in with Kindle for e-books in 2008, things took a turn in which almost everyone believed then that print is dead. Amazon have effectively built an e-book reading culture by building an ecosystem around its Kindle e-book reader and in the process of doing so, educated the public about e-books better than when the publishers tried selling directly to consumers online as a strategy against book retailers. E-book reading soared between 2008 and 2010 but recently physical books made a comeback and e-book sales which used to account for a good 40% of publisher's revenue is now back to the industry average of 20% (Alter 2015).

Printing plants are one of the suppliers to the publishing industry. Printing plants were never much of a threat because printing plant historically, have and has been on overcapacity for decades (Wharton et al. 2007). Wharton et al. (2007) further explained that cheaper overseas printing plants and now, with 3D printing technology well under way (Cummins 2010), the bargaining power of print is as benign as before if not weaker. However, the comeback made by print media has given the industry a boost but the threat to print industry is still low (DBW 2014 & Harvey 2016).

Authors of books are also suppliers to the publishing industry. Wharton et al. (2007) clearly illustrates how agents of renown authors who can write blockbusters used to be a threat to the industry but authors themselves are fast becoming a celebrity and brand where printing books are just one of the channels for their fans to reach them and with a computer, website and self-publishing platforms, agents are fast turning into managers, publicity agents and secretaries. That is why Amazon has shifted from a business model that sells books to a service that connects suppliers and customers to find each other like Alibaba and now a strong technological infrastructure that supports services which serve

multiple customer value propositions (Crawford 2014). Since then, authors have gained a significant position for themselves as thought leaders and creative talents and they no longer rely on books as the only revenue stream hence shifting the publishing industry threat from medium to high. Publishers need to spend significant amounts of time and resources to integrate their factors of production to make it more effective and operating in real time.

Barriers to entry for publishing industry has always been low since all you need is an idea, computer, a small capital and a freelance team of editorial-production personnel hence the intense competition. What differs now is that there is potential for worldwide audience and with the long tail of distribution on the Internet, there is a lot of potential for niche publishers to become very profitable if they get their business model right that will serve their target market. The nature of content consumption in modern times have been in the form of multi-channelled and/or multimedia hence the substitute for this are libraries, archives and other knowledge repositories which also have been transitioning into the web. Low barriers to entry means the threat is relatively high but because business is global now and there are many international markets to explore in the world of Internet technologies, niche publishers online have a lot of room to grow, possibly with profitability and creatively.

Overall, there is a lot of room for the publishing industry to improve. Publisher's competencies were never built to sell directly to customers (Wharton et al. 2007). They lacked sales knowledge, customer purchase data and understanding of the retail selling process hence the inefficiency but print is far from dead and as market sentiments towards Amazon dies down the publishing industry remains profitable and thriving. There have been signs that the publishing is revamping itself (Alter 2015). As publishing house's confidence spike after the sales of e-books slowed down, they are spending more time and money to improve their capacity (Alter 2015) and have been collecting pertinent information on how content is being consumed by their customers (Harvey 2016). They are now using more data analytics and business intelligence to understand their customer's behaviour as well as the business that they are in rather than using technology to keep track of their publishing content and finances alone. Next, we analyze the attractiveness

of entering the market as a digital magazine service by using the five forces model.

6.4.2.2 Porter's 5 forces analysis

As mentioned earlier, this enterprise is most likely to take the initial form of an online magazine business. The core product or service that this startup will offer is fact-based content for the purpose of education. The target region is Asia-Pacific region starting with some countries in South-East Asia. Indonesia is likely to be the first entry point as it has an ideal population size to launch a scalable business (Blank 2014) and is a market quite like Malaysia, my hometown. We will now identify the participants in the analysis namely the buyers, suppliers, competitors, likely substitutes and potential entrants to facilitate the analysis later and they are as listed in the table below:

Table 7: Participants of analysis using Porter's 5 competitive forces model

Segments of competitors	Participants of analysis
Buyers	Young users, parents, academic institutions, developmental and non-profit organizations, governments, corporate sponsors
Suppliers	Research partners, technology providers, freelance writers and designers
Competitors	Print magazines, local youth media channels, local television programs, Facebook, local chat forums, K12 online schools
Likely substitutes	Google, YouTube, Ted Talks, Radio shows, local newspapers, relationship networks
Potential entrants	Webpages of competitors using websites as distribution channels, anyone with strong editorial production team and understand the local market behaviour

Rivalry

All online businesses provide content to persuade customers to buy. Because online products and services lack tangible aspects such as physical touch and human interaction,

online businesses rely on content and interactivity to drive trust and buy in from customers (Steimle 2014). Therefore, anything found online can be a form of competition as the enterprise will have to fight with other sites for attention. For example, search engines and mobile browsers are competitors because doing a search online will yield immense result in which customers gets to choose who and where they want to obtain their information from. Then there are news portals like MSN and Yahoo which are already adept to keeping news readers hooked with entertaining content. Blogs, click-and-mortar businesses and online articles and postings are also competitors.

Content that are published online can take the form of written articles, podcasts, visual graphics and other ways of communication and instruction posted through any mobile and websites hence the intensity of rivalry is high. Content is not so easy to sell because it is so widely available and is often free. But people are always on the lookout for quality read and if the message is compelling, demonstrates that it understands the customers intuitively and the delivery is highly targeted to the audience's taste, the prospects of publishing online are still very attractive and through the right differentiation strategy, money can be made. For instance, if the niche market is school-going youth and the magazine is positioned as such, giving targeted quality information that cannot be found elsewhere then the magazine will most likely to garner fans.

As for Asian youth publications, there are community, state, school or mainstream media company-funded youth channels in the form of radio shows, TV shows, school magazines, websites and newsletter but most content is created to drive young people to learn about multimedia production rather than targeted research-based content that drive youth to prepare for their own future through specialized knowledge.

Substitutes
An online magazine platform can be substituted by good reads and videos found on other sites, print magazine, other multimedia learning resources like television, radio and K12 programs and course syllabus in schools. It might require some work to gather the same information from Google, YouTube, Ted Talks, local newspapers, school magazines and other information source but it is not impossible. Good internet search capabilities will certainly yield the same result as turning to this online magazine platform for similar

information hence the focus, branding and service design must be tight and spot on for this social enterprise to work.

The main learning experience from the platform are centred-around non-cognitive skills and this can be obtained from informal learning from immediate environments but the opportunity to learn these skills systematically from a single comprehensive source is yet to be available hence there is not a similar substitute that is out there for this service conception. Therefore, despite the myriad of potential substitutes out there all of them require significant amount of work to obtain the skills mentioned and hence there is no perfect substitute as yet. The threat is moderately high though, as online authors can be quick to shift their content production similar to the idea on hand. This would require an extraordinary business model that builds an ecosystem around the content to fend off competitors and make it more attractive than the potential substitutes.

The bargaining power of customers

The buyers of this service have strong bargaining power because they must have very concrete reasons why they would pay for content. The buyers will most likely be educationists, parents, developmental organizations and governments as positive learning outcomes are in their interest. It will not be easy to balance between the needs to parents, young people and institutions as they all have different motivations as to why youth require education in the first place.

Young people are the actual users of the product and services and the brand experience must create cravings for them to continuously engage with the platform and frequently visit the platform enough to reinforce their learning experiences. They have relatively low bargaining power as other people are paying for the use of the service hence attention needs to be paid that the business do not lose sight of the needs of young people. If the site demonstrates visible progress in responsibility and positive behaviour, users can then influence the availability of the service.

Advertisers are one of the possible buyers of this business. The internet offers many new ways to reach customers in a cheap and traceable manner hence making it a very

attractive marketing channel must be one of the goals in service design. Online magazine publishers must offer some form of service or format that no other sites can easily replicate. Selling content alone is not a viable long-term plan even if the product and service is exceptionally good. Effective service design is needed to ensure other forms of revenue streams such as advertisements do not get in the way of young people's learning and can actually add value to their learning experience. For example, approaching the right corporations to sponsor or advertise must include a detailed analysis of the value that they can add to the social enterprise's mission hence research is necessary. Customers who are paying for the content may not be too happy when the advertising content and space that is being taken up is in conflict with the actual mission. Also, advertisers have bigger bargaining power because there are many other cheap substitutes to market effectively online hence a strong online marketing sales plan is needed.

The bargaining power of suppliers

Suppliers to the online magazine publishing business are such as technology providers, research partners, freelance writers and designers. They form the team of editorial-production that is crucial yet easily replaceable hence their bargaining power is benign for now. Journalists and designers compete for the same business hence they do not have much influence unless they themselves are a brand like Stephen King. While suppliers can integrate forward to become an industry participant giving them equal foothold with the business, replicating a business model and team is hard hence they do not form a threat to the business and switching to another supplier is fairly easy and inexpensive.

The threat of the entry of new competitors

Online publishing in general has very few barriers to entry and therefore the threat of entry is huge for online magazine publishing especially if it is small. This would not concern large publishers as much as they have multi-channeled distribution with total circulations in the millions hence their worry is much more about existing competitors who want to move into their space rather than the niche players or number of new entrants. The web space poses many other bigger challenges as all online sites uses content to market themselves lending to many free information that can be found on almost anything.

Positioning the enterprise as an online magazine platform is better than being a blog which has casual connotation or in print. A print magazine has to and can be quite localized in terms of content as the distribution is small compared to the vast distribution of what the Internet can offer not to mention their dwindling circulation. As for blogs, the initial conception of it was a simple chronological record of topic of interests and people's thoughts giving it an informal feel to the term. But since then, many businesses have incorporated a blog page in their websites to journal and post less formal information they wish to dispense about their business and more sophisticated blogs have begun to take the form of magazine-style formatting such as having multiple contributors, traditional print magazine sections and feature articles and thus blurring the distinction between them. Therefore, for branding and functional purposes, an online magazine will give the correct conception that the content will be more specialized and sophisticated than a blog and its interactivity and links makes it go a notch higher than traditional print magazine. As publishing companies increase their knowledge about consumer behaviour online, more and more creative publishing and content e-business will emerge and this has a potential to change the course of things for the enterprise in the absence of unlimited financial resources.

Overall assessment

The online magazine publishing business faces some strong challenges in terms of substitution and competitive rivalry but despite the intensity of the challenges, they may not be the factor limiting profitability. Customer development, business management and branding are the core activities that will affect how profitable the business will be. Buyers at this point seem to be the biggest threat and getting buy-in from them is to work the brand up early into the start-up and make a case by proving value instantly to the users. It is imperative that the enterprise work hard to delineate their focus on content, context and audience and thus, a differentiation strategy where the magazine organizes itself around its core messages, audiences and branding is imperative in order to succeed in its larger goal of educating global youth.

6.4.3 Scenario Analysis

Scenario analysis represents the process of analysing possible future events by considering some likely outcomes based on present available information (Linneman &

Kennell 1977). In this research, existing circumstances surrounding this business idea is analyzed in an attempt to forecast some possible observable outcomes signaling the long-term direction this enterprise should take in order to get to its desired position in the industry.

In the past 10 years, the Internet have come to change all aspects of our lives. It also has changed the way we get information about the world around us and the Internet give many young people more learning and creative opportunities when used correctly. This process of informal learning through digital devices have given sporadic success stories of youth building character and engaging in deep learning (Richardson 2015 & Rampton 2014). Therefore, if this learning can be made more systematic, targeted and real time through design and analytics, young people can benefit tremendously regardless of whether it is used for cognitive or non-cognitive learning. However, given the current state of things, there is an urgent need to deliver non-cognitive learning to youth to alleviate stress, build confidence and reward emotional learning. There is strong demand for change in this sector but at the same time, strong forces are working against it hence a better conception of what education may be must be created in leaps and bounds.

From the above we can see that societal trends, industry structure that make up economies, political pressure and technological levels are all positively working for this business idea to be launched. However, the uncertainty here lies in whether a formidable team can be created to create this learning platform which involves measuring learning using the right performance metrics that leads to knowledge and emotions being internalized positively and get translated into action and positive learning habits. Therefore, the most ideal scenario is when brand management, team culture, product excellence and goal-oriented metrics can meet to dynamically work towards the desired result.

Another area of uncertainty is the acceptance rate leading to adoption. Many people have preconceive ideas about education, and that it should come by way of schools with teachers as learning facilitators. No doubt the role of teachers is irrefutable but the quality of teaching ride heavily on individual teachers hence opportunity for human error is high.

Technology must be used to complement teaching and more importantly this platform must prove value to the users first, namely young people and students and hence pave the way for learner-centred education for real.

This analysis begins with an attempt to paint possible scenarios and decide on the most likely of situations so as to facilitate strategy formulation. From the above, the uncertainties mentioned will be linked together by two variables. First, the level of design as the uncertainties can be resolved with design thinking skills hence the degree of design work that goes into the product and business is important. The second variable measures the level of performance and in this case, positive learning habits that have been internalized and the level of trust customers have for the program will be used to measure the success of this enterprise. Four possible scenarios are represented by the plots in the grid.
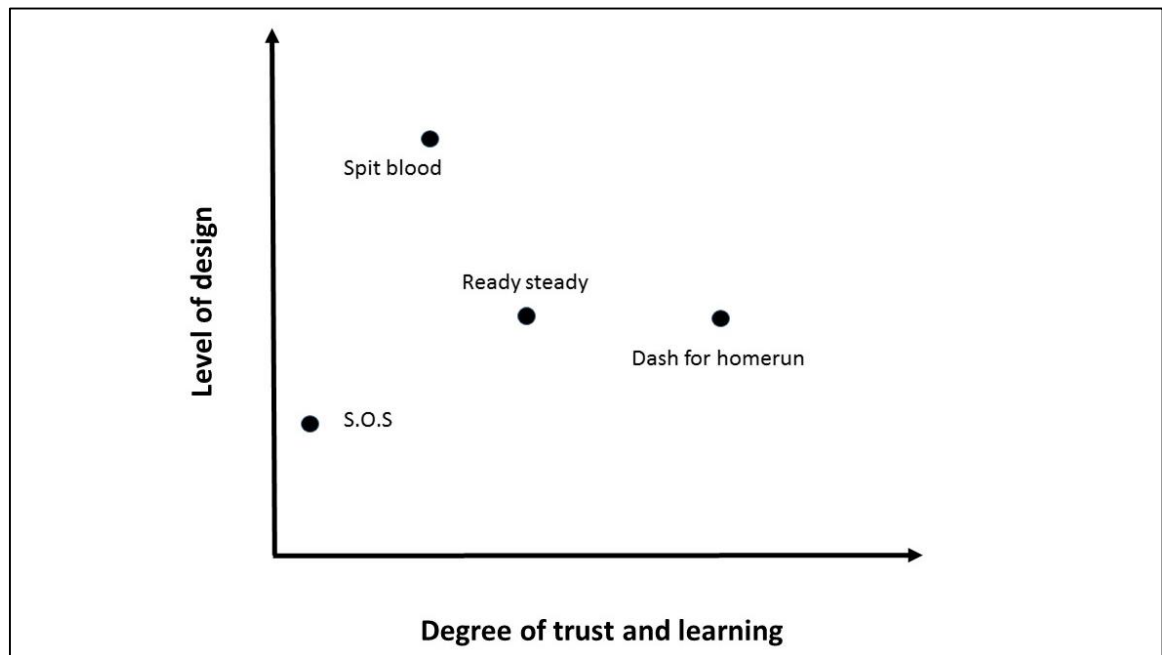
FIGURE 23: SCENARIO ANALYSIS DIAGRAM

Scenario 1: S.O.S

An undesirable situation to be in is when the business and product design is weak and not in tandem with customers' needs and wants leading to poor learning performance and no buy in from buyers. The likely reason behind this would be a poor interface and content,

underperforming teams and/or problems with leadership.

Scenario 2: Dash for homerun

Another scenario would be when effective initial design work based on accurate conception of customer problem, strong business model resulting from solid research, excellent design being a mesh of good teamwork and listening to customers well and buyers see significant value in the service leading to impressive sales. In this scenario, it is then vital to react quickly to gain competitive advantage to position the business better amongst direct competitors and a well-designed business model helps.

Scenario 3: Ready steady

A good scenario would be the level and quality of design coinciding with the growth in trust and learning result. The response to product design and business model incrementally improves with customer base leading to gradual trust for the brand emulating a natural growth process is ideal as the start-up is growing healthily and goes undetected by fiercely competitive companies.

Scenario 4: Spit blood

It will be an unfortunate situation if high commitment into a start-up meets poor performance and this situation is very common in start-ups. Extensive amount of time, energy and resources have gone wasted and there are many reasons why this could happen from getting the problem wrong, lack marketing efforts, negative group dynamics, unfavourable market conditions or industry structure is working against the business strategy indicating lack of organizational learning. In this case it is either pivot or death is imminent in the near future.

The third scenario is the preferred scenario for how the start-up should play out. Not all entrepreneurship pursuit should be fast and furious especially when the product is education-based. There is a lot for start-up founders to do at the beginning stages of starting up as the business is still discovering markets, learning the business, pivoting the business model and finding the product/market fit. Therefore, a good pace must be discovered along the way which has a long-term focus rather than aiming for short-term benefits.

From the analysis above, a team of like-minded people come together and work with some youth to develop the business and program in a low-cost manner and in a pace suitable for all is ideal. Beginning with youth in Finland, the enterprise will work together will local at-risk youth to co-create the program. When the start-up gains traction and garner a large local network, the solution can then be brought to Asia for further market testing.
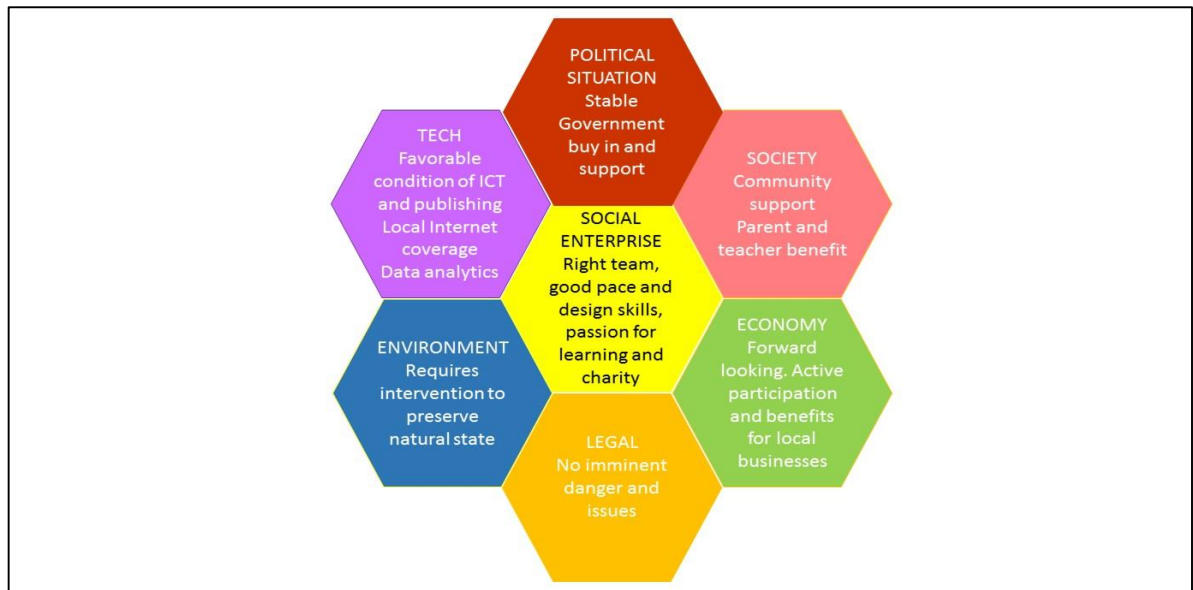
FIGURE 24: THE IDEAL SCENARIO

When the enterprise gains traction towards the right product/market fit, the start-up will then go into execution mode and the enterprise will be on full throttle. If the start-up takes a significant upturn in events leading to fast growth, then the start-up will look more like Scenario 2 and a team decision needs to be made as to what pace the business should take. There are many ways that the start-up will begin to show cracks and take a downturn approach as in Scenario 1 hence caution must be exercised to ensure persistent management of the business is maintained to prevent things from deteriorating.

6.4.4 Outcome of analyses of business environment and competition

After taking into consideration some of the forces existing in the environment, and the nature of competition in the education, publishing and online services industries, the

second iteration of the business model canvassing exercise was conducted. It was clear that the existing business model canvas components fail to holistically capture external forces that can shape how this future enterprise may operate. The components were also defined for more conventional business operations contrary to what the new-age social enterprise concept is trying to espouse.

Before making the third and final attempt to design a business model that is appropriate for this future social enterprise, existing market conditions require some strategies to be laid out beforehand. First, some strategies must be made explicit from the start prior to starting up (See sub-section 6.4.4.1). After that, a regional game plan must be created to plan out the efforts of all Finnish and Nordic institution that supports education export as a whole as presently, there is none in this region. The following page depicts the diagram of the second business model canvassing exercise which lacks in the areas mentioned in the earlier paragraph.

6.4.4.1 Strategy blueprint

Along with the initial business model canvas and analyses from SWOT, five forces and scenario approach, some tentative strategies were formulated to form a blueprint to kick start the enterprise set up:

1. Develop a scalable business and a human organizational structure that can support a widespread network of business units operating glocally.
2. Use a branded differentiation strategy and customizable aspects to fit local culture, systems and factors of production
3. Develop positional advantages by focusing on specific niches such as learning areas with wide application or match situational needs
4. Formulate excellent controls for finances, costs, operations and technology management to become a top value-creation enterprise of public benefits.
5. Partner up with other companies to stay focused on core activities yet build alliances to develop a regional game plan whilst be close to best practices of partnered business areas such as mapping, content localization and much more.

The business model's second iteration can be seen in the next page.

Key Partners ? Insert

Early Partners and Adopters
Education institutions
Nonprofit-Education developmental work
Parents and other individual campaigners

Content enablers
Editorial production team
Graphics and user interface designer
Subject matter experts and access

Technology providers
Map API providers
Backend developer
Data science specialist

Drivers of change
Governments
Educators
Environmental scientists

Key Activities ? Insert

BRAND BUILDING
Editorial content production
Technical delivery
Business Intelligence
Human ecology network

CUSTOMER ACQUISITION
Market research
Marketing campaigns
Relationship sales events
Establishing the market

PRODUCT DEVELOPMENT
Customer data analysis
Agile development and business modeling
Product/Market Fit
Creating the ecosystem around the app

FINANCIAL MANAGEMENT
Financing strategy
Cashflow, legal and sales management
Resource allocation
Risk assessment and budgeting

Key functions across all staff: Marketing, Sales, R&D, ICT, Design

Key Resources ? Insert

HUMAN
Team members who love people, have systems and design thinking skills and are self-directed learners

TECHNOLOGICAL PLATFORM
UX, UI, BI and data science

Value Proposition ? Insert

EDUCATION IS NOT PREPARATION FOR LIFE; EDUCATION IS LIFE ITSELF: LET LIVE

Helping young people to seek answers to personal questions about learning and planning for life in the most reliable and credible way.

Online education platform
-Aggregation and presentation of best education tools, resources and best practices in teaching
-Youth learning experience cultivation and sharing for skills mastery, life direction and developing positive learning habits
-Environmental health and safety as central organizing feature

YOUNG USERS
-Get skills for tomorrow's world
-Convenient and integrated real-time learning that supports formal education
-Discover own talent and purpose for learning in own pace and time
-Supported by family and friends

DRIVERS OF CHANGE
-Low priced trusted education partner
-Ease of mind for parents and educators
-Governments get positive results
-NGO job is supported and enhanced
-Community gains passion with improved living standards

Customer Relationships ? Insert

Online interactivity and communications
Social networks
Live chat application
Web services
Skype calls

Communities
Co-creation
Consulting
Events
Intermediation services

Channels ? Insert

Digital Deployment
Mobile app
YouTube channel
Website

Customer Segments ? Insert

Drivers of change
Schools, nonprofits, governments and individual advocators

Young users
Young people between 12-18 especially at-risk youth and underserved students

Cost Structure ? Insert

Technological Infrastructure

Salaries to permanent employees

Launch events and marketing expenses

Revenue Streams ? Insert

Grants and sponsorship
Tie-ups with relevant nonprofit projects, grants from youth foundations-development banks, and sponsorship by local businesses-community leaders

Subscription per user
Bulk sales - schools, governments, B2B
Direct sales online

Direct Sale
Online and offline events - Seminars, workshops, educational tours and conferences
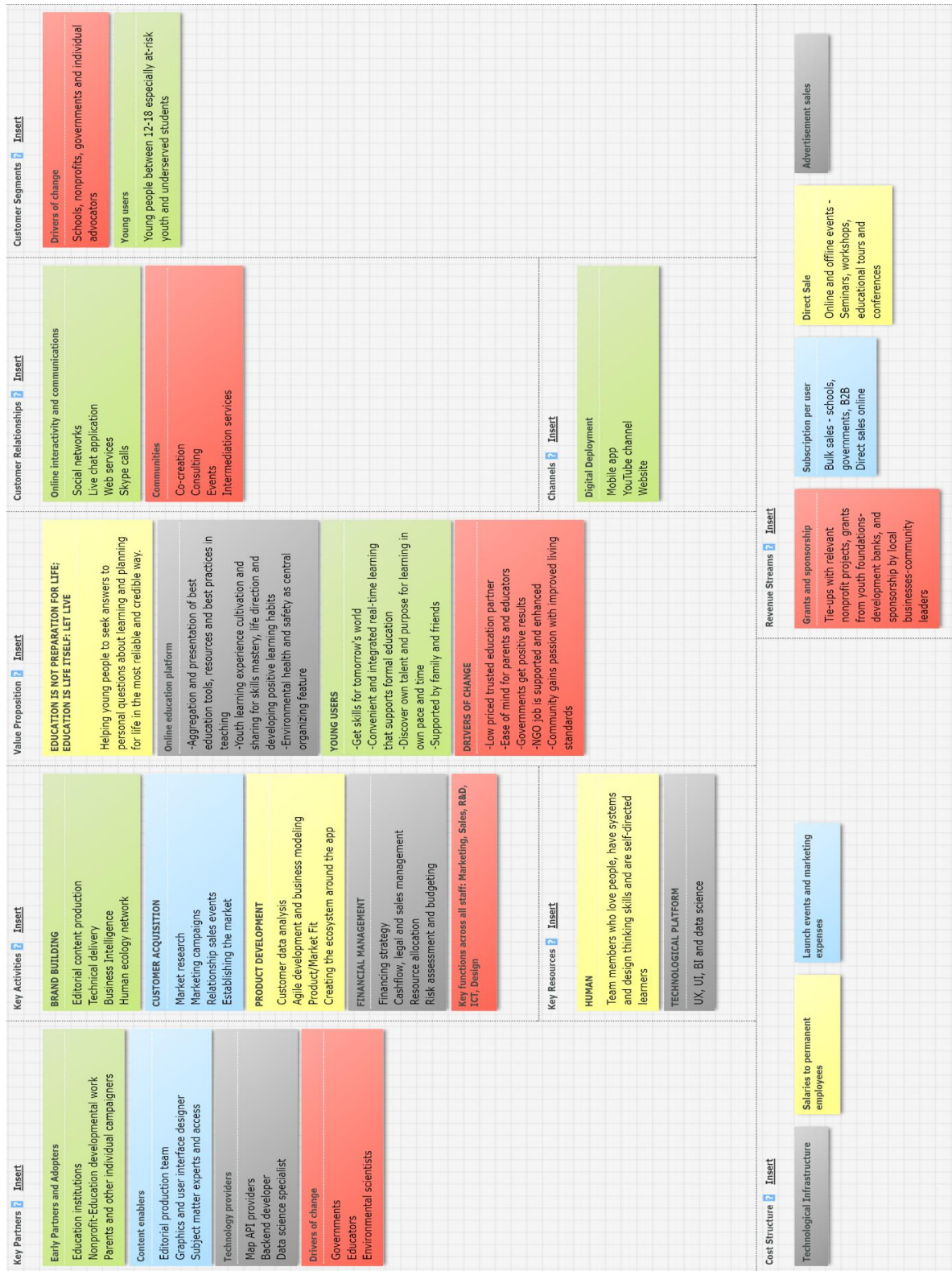
Advertisement sales

FIGURE 25: THE SECOND BUSINESS MODEL CANVAS

6.4.4.2 Regional game plan

A regional game plan is similar to Steve's (2014) regional start-up playbook. The game plan will help to position the company as a globally focused enterprise with scalable capabilities not only because the business model is designed as such but the chain value of this loose yet collaborative businesses can create a strong synergistic effect that other standalone businesses or regional business network cannot replicate (Steve 2014). For all the Finnish education start-ups regardless of whether they are in school systems, learning management systems, education technology, equipment, consulting, web and mobile solutions, vocational training, educational developmental work, universities, research centres and national education organizations, a game plan or playbook to synchronize and map out the direction of the collective efforts can help to build a vertically oriented regional ecosystem for Finland to effectively export education. Below is the recommended playbook in which this business model will be based upon. According to Steve (2014), when a playbook is shared through collaborations, and in the cased here the Finnish or Nordic network for education technologies and other education-based initiatives, start-ups can jump straight into their work and share their experience rather than inventing the wheel each time a new start-up is launched. When interviewing some people working in education technology businesses in Finland, all companies in Finland are actually working in competition with one another, which is counterproductive if Finland was to successfully export education to make an impact. Therefore, steps to build capabilities in a start-up to support the developing of the regional game plan is as below:

1. Build minimal viable product and test product/market fit in Finland
2. Identify activities/resources/partners locally and then globally
3. Get seed funding from family and crowdfunding
4. Trip to a few South-East Asian countries to understand production landscape, potential partners and rough cost of sales
5. Trip to the China to understand education and distribution channel landscape, potential partners and rough cost of customer acquisition
6. Test product/market fit in the first South-East Asian country
7. Trip to Malaysia, pick production partner, start low volume production
8. Test channel and demand creation activities in the South-East Asian countries
9. Trip to the top revenue South-East Asian country to establish first sales office

10. Trip to China to get first round of funding

11. Establish in Asia, Europe, Middle East, South America then Africa

Up to this point, it is now clear that external analyses helps to identify a multitude of ways to enter into business. It is better to have a plan even if it turns out bad than to have no plan at all. A strategy to enter into business is crucial although it is more likely to change but it helps to maintain the process of continuous monitoring of external environment. Another aspect which requires attention as well is brand positioning. The process is covered in the concept mapping section below.

6.5 Concept mapping and final business model canvas

The concept mapping section here consist of developing a brand through the brand position mapping process followed by graphically modelling all components that are deemed important for this enterprise to help formulate the right components for the business model canvas.

6.5.1 Brand position mapping

In this thesis, the main purpose of developing the business model is to determine the actual customers for the intended product and service offering and outline the activities and resources needed to make it happen. However, it is also important to discover what is the motivation and guiding principle for getting into this business to tell a better story to customers which is coherent with the branding of this future enterprise. Therefore, mapping out a brand concept and how it sits between the big names in educational technologies now helps with communication strategies and the process is called brand position mapping.

Brand position mapping is the practice of studying the brand story and strategy of market competitors to help look for the perfect angle how this future enterprise can tell their own story better to build a name for itself through well-orchestrated branding efforts.

Some of the big start-ups in education technologies from Finland and globally becomes

the source of competitive brand aspirations for this business model. This future enterprise will be given a fictitious brand name to help paint a better picture. It will be called Headway and it will aspire to position itself to be an exceptionally innovative company which uses different approaches to learning which seek to complement the offerings of mainstream education technology companies. Most education technologies are clustered around the areas of learning management systems and content for cognitive skills. Learning management systems facilitate the teaching and classroom learning processes and it is not exactly a unique proposition although it does make the current way education is being administered more efficient than ever before. The more aspirational ones are the ones that have high intervention with the learning process such as General Assembly and cognitive skills development enterprises like Khan Academy taking the lead. They help to hone cognitive skills in the most compelling manner.
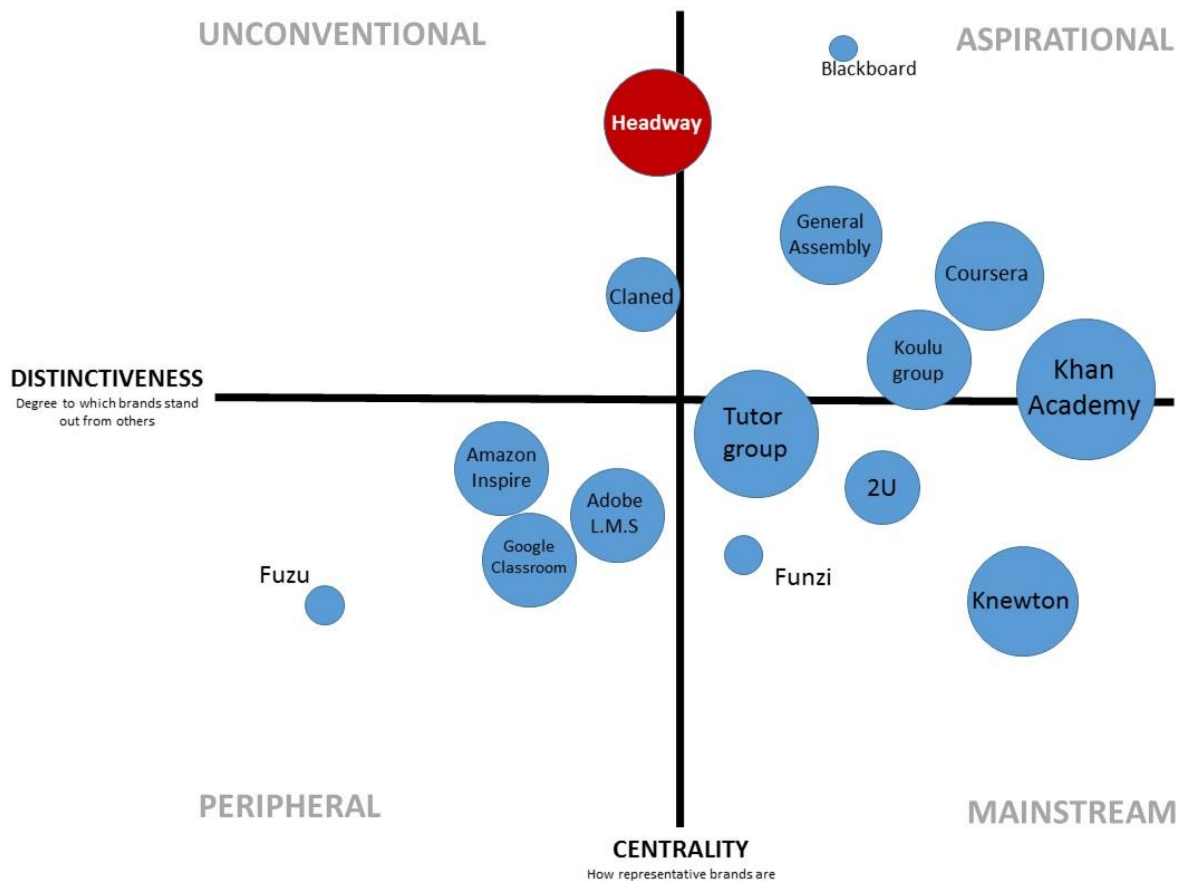

FIGURE 26: BRAND POSITIONING MAPPING

Headway however will be born out of the teaching experience itself. Every teacher knows that children from poor backgrounds learn very differently from young people who are brought up in much calmer and secure living conditions. Their role is more of a social activist rather than teaching cognitive skills but because of efficiency reasons, the teachers are torn between entertaining the kids that get what is taught easily and spending more time to make weaker students more confident of their own learning ability. Headway is in the business of selling non-cognitive and executive functioning skills in real-time so that young people can take responsibility of their own learning and discover their own talent. It is an unconventional route compared to other digital learning enterprises and may not represent the mainstream offerings of what is out there but it is no less important if not more. Education means more to the poor and those living in remote areas than those who have access to modern comforts and resources.

6.5.2 Modelling Graph

To help reorganize business model components so that it is more relevant to this research outcome, the modelling graph method was used to put all the required elements in one place to help construct the final business model canvas. Customer relationships are now relabelled as "Support and buy-in" to better reflect the social mission nature of this enterprise and channels were relabelled as "Deployment" as it denotes the systematic delivery of learning elements which enforces one another better than what the divisive connotation that the "channel" label represent. Customers are now beneficiaries.
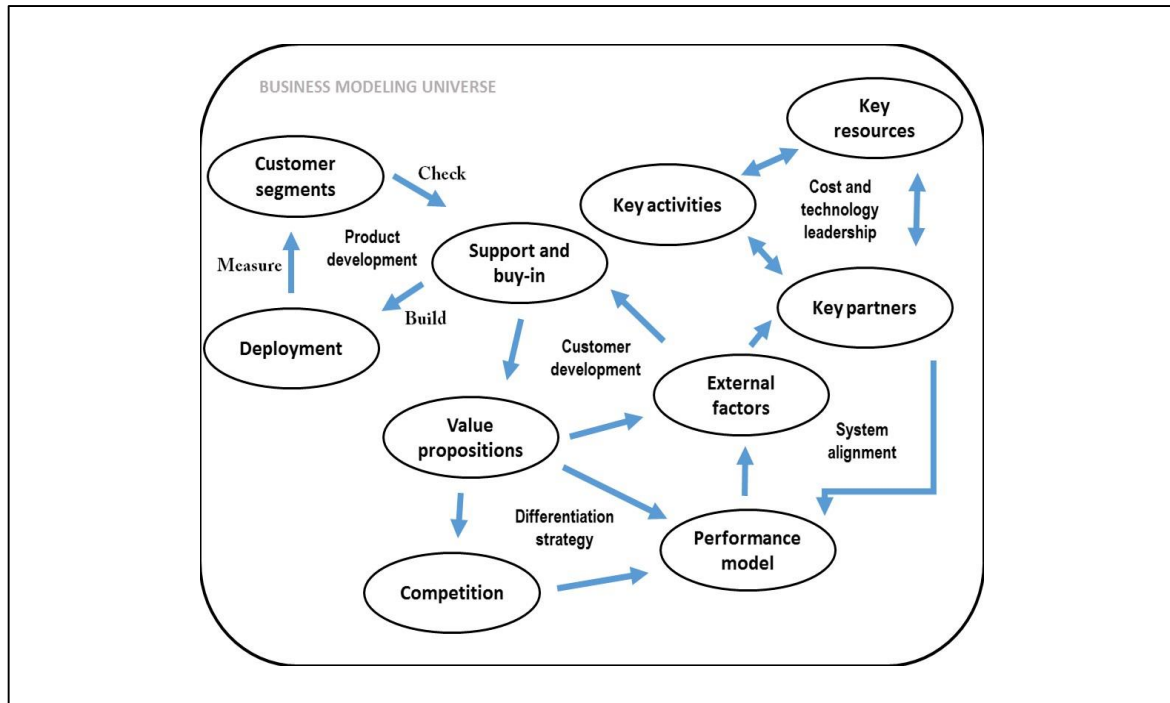
FIGURE 27: GRAPHICAL MODELING OF THE RELATIONSHIP BETWEEN BUSINESS MODEL COMPONENTS AND ENVIRONMENTAL FACTORS

A component to list elements from the external environment is also created. Broad factors and external forces that may have an impact on the future enterprise will be constantly updated in this section to reflect the current state of affairs in the operating environment. Cash flow is important to help the enterprise manage its meagre resources at the start but performance must also include other areas hence the cost structure and revenue stream is labelled as performance model. The coloured bubbles serve as a reminder for the need to test element's validity through continuous action research to reflect changes in the operating environment internally and externally.

In the business model design process, a significant portion of this section was dedicated to getting the business problem right through extensive work that was required to determine an accurate customer value proposition. This helped to reveal exactly the real job that needs to be done before we can start unravelling other problems that young people have with their learning.

Then a series of business analysis was conducted to define the enterprise's initial strategy and the idea here is to kick start the program to first deliver quality content to young people in the form of digital magazine and offer the correct knowledge, tools and techniques to acquire the right attitude, mastery and personal learning direction to help them define their own meaning of success in life.

Next, business activities and organizational functions that can support these strategies as well as product development later on are created based on current knowledge of best practices in education, business and creative online resources. The outcome of this is the design of the final business model that was crafted using the canvas method. The following page depicts the said business model.

Operating environment

Business information and decision composite | environmental audit | competition analysis | social progress measures | industry standard and market positioning

Beneficiaries

Users
Young people between 12-18 years old especially at-risk youth and underserved students

Drivers of change
- Schools
- Nonprofits
- Governments
- Individual advocators

Support and Buy-in

Online interactivity and communications:
-Platform design
-Live chat application
-Web services
-Social networks

Community activities:
-Co-creation
-Consulting
-Events
-Intermediation services

Deployment

Mostly digital:
-Mobile app
-YouTube Channel
-Website

Value propositions

Helping young people to seek answers to personal questions about learning and planning for life in the most reliable and credible way

Online education platform
-Aggregation and presentation of best education tools, resources and best practices in teaching
-Youth learning experience cultivation and sharing for skills mastery, life direction and developing positive learning habits
-Using the natural environment as a central organizing feature

USERS
-Get skills for tomorrow's world
-Convenient and integrated real-time learning that supports formal education
-Discover own talent and purpose for learning in own pace and time
-Supported by family and friends

DRIVERS
-Trustworthy education partner
-Positive results and ease of mind
-Institution's performance is supported and enhanced
-Teachers and parents gain pride and passion

Key Activities

BRAND BUILDING
-Editorial content production
-Technical delivery
- Business Intelligence
- Human ecology network

CUSTOMER ACQUISITION
-Market research
-Marketing campaigns
-Relationship sales events
- Establishing the market

PRODUCT DEVELOPMENT
-Customer data analysis
-Agile development and business modeling
-Product/Market fit
-Creating the ecosystem around the application

FINANCIAL MANAGEMENT
-Financing strategy
-Cash flow, legal and sales
-Risk assessment and budgeting

Key functions across all staff:
Marketing,
Sales,
R&D,
ICT,
Design

Key Resources

-Human
Team members who love people, have systems & design thinking skills and are self-directed learners

-Product
-Quality content
-Brand design
-Technological platform

Key Partners

-Early adopters and champions

-Content and research enablers

-Technology providers (Map API, data scientist, systems engineer)

-Drivers of change (Governments, educators & environmental scientist)

Performance model

MAIN PARTS:
-*Risk assessment*
-*Financial portfolio*
-*Balanced scorecard*
-*Exit barriers*

Time-specific metrics:
customer acquisition cost, viral coefficient, customer lifetime value, average selling price/order size, monthly burn rate, Revenue growth, net income, gross margin, Contribution margin, sales efficiency, break even

Cost structure:
Technological structure
Salaries to permanent workers
Cost of accessing research databases
Marketing expenses

Revenue streams:
Subscriptions and advertisements
Professional services,
Ancillary sales – data revenue drivers, brand revenue drivers, sponsored content

FIGURE 28: THE BUSINESS MODEL FOR LAUNCH OF THE HEADWAY EDUCATION PLATFORM

6.5.3 The final business model canvassing exercise

The business model was created to launch an education platform that can benefit young people between the ages of 12 to 18 years old. The value proposition here is to help youth to seek answers to personal questions about learning and planning for life in the most reliable and credible way. The education platform will be deployed mostly online and it aggregates the best of education resources that is intuitively delivered to cultivate non-cognitive skills that will help in the development of positive learning habits. The platform will complement formal education that youth are obtaining from education institutions and educationists gain from it being a trustworthy partner of information that is pertinent to young people's learning.

The main functions that govern the activities in this future enterprise is brand building, customer acquisition, product development and financial management, with all staff having responsibilities in areas of marketing, sales, research and development, information communication technology and design. Human resources, the platform being a product, quality content, brand design and the technological platform are key resources that the enterprise must focus on and capabilities in those areas but be incrementally developed. Strong relationships must be built earlier on with potential key partners to drive a faster time to market, support and strengthen each other's offerings holistically and seamlessly integrate with technological and educational providers to create the intended social benefits.

Finally, the future success of this social enterprise depends on the health of the business. Therefore, the business model has two components to ensure the enterprise stay relevant. The operating environment component sets out the position of the business based on the happenings of the bigger environment and what strategy must be in place now to best harness the current situational factors. Performance model then show the efficacy and lucrativeness of the business pursuits under this enterprise. Specific elements of this business model can only be determined once the start-up is launched and therefore, the business model will definitely change once it meets the business world.

7 - Conclusion and Reflections

7.1 Conclusion

This thesis has been set out to explore ways that society can best facilitate learning that is effective for young people to create a future that they can call their own. Research points to education systems not being adequate in facilitating successful learning outcomes for the younger generation (Robinson 2011) and from the analysis, one reason for this is that there is no clear direction where their learning experiences should aspire to. The difficulty that comes with searching for a life direction has created anxiety in many young people and those that are in worse off situations face even more stress and barriers to learning. Therefore, there is a need to find an intelligent approach to teach non-cognitive skills to youth as research have shown that acquiring the right mind set can be a strong impetus for youth to become self-directed learners that are responsible and can drive success (Dweck 2007). A targeted program that can impart non-cognitive skills intuitively is crucial. Given that Asia and soon Africa is experiencing astronomical growth in youth population in the least nurturing and dangerous kind of environment, the need is clear.

The key in ensuring success of the program is to first develop the right business model (Teece 2010, Skok 2014 & Kubzansky 2012). Specifying the best combination of product, deployment, sales, pricing and other important resources is often more important than the specific solution itself (Crawford 2014). Customer value proposition design proved to be a challenging task but the process was valuable in revealing the real job that needs to be done. Canvassing the business model helped to design the business model elements that can help to achieve a wide market reach, recover costs efficiently and manage the current factors surrounding the enterprise and continuing with this exercise is important to keep the business in perspective.

7.2 Practical Implications

When conducting this study, the research demonstrated that it is worthwhile to utilize a combination of methods and tools that cuts across different disciplines to develop or research on business models. In this study, creative conceptualization methods were used to design the business model but many other ways drawn from disciplines such as

engineering, finance, medicine and information technology can also be utilized provided the use helps to develop a better and accurate model. Besides that, there is potential for this business model to create a social enterprise that can further research on non-cognitive skills. One of the core activity of this future enterprise is to study and collect data from youth over their most important phase of the critical learning period. The interwoven nature of the use of non-cognitive skills can be studied in detail and this in turn will support the academics in their research on non-cognitive skills which in turn improve the program (Gutman & Schoon 2013). Also, it is with hope that this research will inspire social entrepreneurs to develop well-formed scientific thinking skills. Good business models need constant rework (Johnson, Christensen & Kagermann 2008) hence testing assumptions accurately and keeping it relevant in an honest and effective way increases the potential for success.

7.3 Afterword

Education is changing and I believe Finland is in excellent condition to take the lead. The country is at the forefront of education, technology and social progress set in a close-knit society that is adept to change and honours aspects in life that really matters. Along with a youth population that cares for the world and is highly-skilled, they are in the best position to affect education for the world in a positive way. However, there are some challenges that are impeding this. First, it does not have a regional game plan that enable all organizations that are working in the learning and technology sector to collaborate towards promoting Finnish know-how in education worldwide. Moreover, the intense competition amongst its players are impeding growth of the industry as a whole. Rather than focusing energy on coordinating their efforts to make their offerings complementary and holistic for export, more time is spent on guarding knowledge and resources. Finally, business models for social enterprises typically takes a long time for its social benefits to reach societies on a large scale. Finland at this moment do not get the concept of social enterprise and there are many obstacles to implement business models that have a long-term vision. Nevertheless, the need is clear despite these setbacks. Young people need very little encouragement to spring into action so long as it comes at the right place and time hence a digital magazine which serves as an interactive learning platform may be key to effect change for the better. Therefore, the pursuit is now on.

8 - REFERENCES

Abbott, 2012. *Stress and the city: Urban decay*. [Online] Available at: <http://www.nature.com/news/stress-and-the-city-urban-decay-1.11556> [Accessed on 31 January 2015]

Abdollahi, G., & Leimstoll, U., 2011. *A Classification for Business Model Types in Ecommerce.* [Online] Available at: <http://www.fhnw.ch/ppt/content/pub/business-model-types/pdf-zum-amcis-artikel> [Accessed 15 May 2015]

Adderly, C., 2015. *How Technology Has Changed Education*. [Online] Available at: <https://2u.com/blog/how-technology-has-changed-education/> [Accessed 15 March 2016]

Al-Atabi, M. 2014. *Think Like an Engineer: Use systematic thinking to solve everyday challenges & unlock the inherent values in them*, CreateSpace Independent Publishing Platform

Alter, A. 2015. *The plot twist: E-book sales slip and print is far from dead*. [Online] Available at: <http://www.nytimes.com/2015/09/23/business/media/the-plot-twist-e-book-sales-slip-and-print-is-far-from-dead.html?_r=0> [Accessed 31 May 2016]

Amit, R., & Zott, C., 2012. Creating value through business model innovation. *MIT Sloan Management Review*, 53, 41-49.

Anderson, J.C., Narus, J.A., & Rossum, W.V., 2006. Customer Value Propositions in Business Markets. *Harvard Business Review*. 84(3), p. 90-99

Aparicio, M., Bacao, F., & Oliveira, T., 2016. *An e-Learning Theoretical Framework. Educational Technology & Society*, 19(1), 292-307. [Online] Available at:

<http://www.ifets.info/journals/19_1/24.pdf> [Accessed 15 March 2016]

Asian Development Bank, 2014. *Key indicators for Asia and the Pacific 2014: Framework of inclusive growth indicators, special supplement.* [Online] Available at: <https://www.adb.org/sites/default/files/publication/42813/ki2014-special-supplement.pdf> [Accessed on 31 May 2016]

Association for Supervision and Curriculum Development, 2012. *What is the purpose of education?* [Online] Available at: <http://www.ascd.org/ASCD/pdf/journals/ed_update/eu201207_infographic.pdf> [Accessed 31 August 2015]

Awan, M.S., et al., 2011. *Impact of education on poverty reduction* [Online] Available at: <https://mpra.ub.uni-muenchen.de/31826/1/MPRA_paper_31826.pdf>[Accessed 17 April 2015]

Baden-Fuller, C and Morgan, M. 2010. *Business Models as Models*. Long Range Planning. 43 (2/3): 156–171.

Bastien, S and Holmarsdottir, H.B., 2015. *Youth 'At the Margins': Critical Perspectives and Experiences of Engaging Youth in Research Worldwide*. [Online] Available at: <https://www.sensepublishers.com/media/2384-youth-at-the-margins.pdf> [Accessed 26 December 2015]

Bernama TV, Helo Malaysia, 2012. *Ernie Chen speaks about Malaysia's Education System*. [Online] Available at: <https://www.youtube.com/watch?v=yc31ouLHeMQ&ebc=ANyPx Kq0VdKVnx_tw4zjWsmKpNZg4ZbjnteVcyZEOLEYYDJBjewg0kE8MRGb-jWeRzdxnuLCZaOG7FMPwWTDUweFcWdfuRIebg> [Accessed 17 March 2015]

Bertels,H.M.J.,Koen, A.P., & Elsum, Ian., 2015. Business Models Outside the Core: Lessons learned from success and failure. *Research Technology Management* 58(2)

Blank, S. 2014. *Born Global or Die Local – Building a Regional Startup Playbook* - https://steveblank.com/2014/10/31/born-global-or-die-local-building-a-regional-startup-playbook/ [Accessed 22 March 2016]

Blank, S., 2012. *Steve Blank on Customer Development: The Second Decade*. [Online] Available at: <https://www.youtube.com/watch?v=6t0t-CXPpyM> [Accessed 2 December 2015]

Blank, S., 2006. *The four steps to epiphany: Successful strategies for products that win*. [Online] Available at: < http://web.stanford.edu/group/e145/cgi-bin/winter/drupal/upload/handouts/Four_Steps.pdf> [Accessed 2 December 2015]

Brown, Eric. 2016. *Who Needs the Internet of Things?* [Online] Available at: <https://www.linux.com/news/who-needs-internet-things> [Accessed 20 October 2016]

Buzan, T., 1974. *Use your head*. London: BBC Books.

Crawford, K. 2014. *Amazon innovates with its business model, not drones*. [Online] Available at: <https://www.wired.com/insights/2014/01/amazon-innovates-business-model-drones/> [Accessed 20 October 2016]

CB Insights, 2015. *Funding To VC-Backed Education Technology Startups Grows 503% over 5 Years*. [Online] Available at: <https://www.cbinsights.com/blog/ed-tech-funding-on-pace-record-year/> [Accessed 31 December 2015]

CDIO Initiative. *History of the CDIO Worldwide Initiative*. [Online] Available at: http://www.cdio.org/ [Accessed 16 January 2016]

Cotton,K, & Wikelund, K., 1989. *Parent Involvement in Education.* [Online] Available at: <http://educationnorthwest.org/sites/default/files/parent-involvement-in-education.pdf> [Accessed 16 January 2016]

Cummins, K. 2010. *The rise of additive manufacturing*. [Online] Available at: <https://www.theengineer.co.uk/issues/24-may-2010/the-rise-of-additive-manufacturing/> [Accessed 20 October 2016]

DBW, 2014. *How Much Money the Biggest Publishers Actually Make*. [Online] Available at: <http://www.digitalbookworld.com/2014/how-much-money-the-biggest-publishers-actually-make/> [Accessed 16 January 2016]

Diehl M., & Stroebe W., 1991. Productivity Loss in Idea-Generating Groups: Tracking Down the Blocking Effect. *Journal of Personality and Social Psychology* 61 (3): 392–403.

Duhigg, C., 2014. *The power of habit: Why we do what we do in life and business*. US: Random House

Dweck, C.S., 2007. Mindset The New Psychology of Success. Ballantine Books US

Eurich, M., Breitenmoser, P., Boutellier, R., & Weiblen, T., 2013. *A 'Networked Thinking' Approach to Business Model Design*, ISPIM Conference Proceedings: 1-13. Manchester: The International Society for Professional Innovation Management (ISPIM).

Farkas, G. 2003. Cognitive skills and noncognitive traits and behaviors in stratification processes. *Annual Review of Sociology*, 29, 541–562.

Furnham, A., & Yazdanpanahi, T. (1995). *Personality differences and group versus individual brainstorming*. Personality and Individual Differences, 19, 73-80.

George,G and Bock AJ. 2012. *Models of opportunity: How entrepreneurs design firms to achieve the unexpected*. Cambridge University Press

Gillon, E,. 2015. *Childhood depression is on the rise, but we must be wary of misdiagnosis.* [Online] Available at: <http://www.theguardian.com/healthcare-network/2015/sep/01/

childhood-depression-rise-wary-misdiagnosis> [Assessed 01 December 2015]

Go-Globe. 2015. *Digital Landscape in Asia*. [Online] Available at: <http://www.go-globe.com/blog/digital-landscape-asia/> [Accessed 20 October 2016]

Gutman, L.M. & Schoon, I., 2013. *The impact of non-cognitive skills on outcomes for young people*. [Online] Available at: <https://v1.educationendowmentfoundation.org.uk/uploads/pdf/Non-cognitive_skills_literature_review.pdf> [Accessed 17 February 2016]

Greco, A., Rodriguez, C., and Wharton, R. 2007 *The Culture and Commerce of Publishing in the 21st Century*, US: Stanford University Press

Hamilton, J. 2012. Teenage Brains Are Malleable And Vulnerable, Researchers Say [Online]. Available at:http://www.npr.org/sections/health-shots/2012/10/16/162997951/teenage-brains-are-malleable-and-vulnerable-researchers-say. [Accessed 26 October 2016]

Harvey, E., 2016. *How Top Media Companies Are Making Data a Part of Their Culture*. [Online] Available at: <http://www.pubexec.com/article/how-top-media-companies-are-making-data-a-part-of-their-culture/> [Accessed 1 June 2016]

Hazzan, O., & Tozik, S., 2014. *Agile Research Methodology*. [Online] Available at: <http://www.infoq.com/articles/agile-academic-research> [Accessed 15 May 2015]

Heckman, J. J., Stixrud, J., & Urzua, S. 2006. The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. *Journal of Labor Economics*, 24(3), 411–482.

Howey, H., 2014. *Two Important Publishing Facts Everyone Gets Wrong*. [Online] Available at: <http://www.hughhowey.com/two-important-publishing-facts-everyone-gets-wrong/\> [Accessed 16 January 2016]

Humphrey, A. 2005. *SWOT Analysis for Management Consulting*. [Online] Available at: https://www.sri.com/sites/default/files/brochures/dec-05.pdf [Accessed on 26 October 2016]

ILO Study, 2014. *Lack of higher education leaves millions of young people out of decent work in developing countries*. [Online] Available at: <http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_329108/lang--en/index.htm> [Accessed 5 February 2015]

Incluso. *Social exclusion of marginalised youth.* [Online] Available at: <http://www.incluso.org/manual/social-exclusion-marginalised-youth> [Accessed 27 June 2015]
Internet World Stats. 2016. *World Internet Users and 2016 Population Stats*. [Online] Available at: <http://www.internetworldstats.com/stats.htm> [Accessed: 20 October 2016]

Johnson, M.W., Christensen, C.M. & Kagermann, H., 2008. Reinventing Your Business Model. *Harvard Business Review*, 86, 57-68.

Jones, D.E., Greenberg, M., & Crowley, M., 2015. *Early Social-Emotional Functioning and Public Health: The Relationship Between Kindergarten Social Competence and Future Wellness*. [Online] Available at: <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2015.302630> [Accessed 15 August 2015]

Kerckhoff, A., & Glennie, E. 1999. The Matthew effect in American education. *Research in the Sociology of Education*, 12, 35–66.

Kubzansky, M., 2012. *The importance of business models.* [Online] Available at: <https://www.brookings.edu/wp-content/uploads/2016/06/10-business-models-kubzansky.pdf> [Accessed 19 April 2015]

Lewis, M., 2014. *In The New, New Thing*, W. W. Norton & Company

Linneman R.E., Kennell J.D. 1977. *Shirt-Sleeve Approach To Long-Range Plan.* [Online] Available at: <https://hbr.org/1977/03/shirt-sleeve-approach-to-long-range-plans>[Accessed 1 April 2016)

Lynch, M., 2015. *4 Ways Digital Tech Has Changed K-12 Learning.* [Online] Available at: <https://thejournal.com/articles/2015/05/20/4-ways-digital-tech-has-changed-k12-learning.aspx> [Accessed 15 March 2016]

McIntyre, E., 2015. *Ed tech investment hits $1.85B high in 2015.* [Online] Available at: <http://www.educationdive.com/news/ed-tech-investment-hits-185b-high-in-2015/411215/> [Accessed 31 December 2015]

McKnight, K., 2013. *Top 12 Ways Technology Changed Learning.* [Online] Available at: <http://www.teachhub.com/how-technology-changed-learning> [Accessed on 27 January 2015]

Microsoft Asia News Center, 2015. Are education and technology inseparable? [Online] Available at: <https://news.microsoft.com/apac/2015/11/18/are-education-and-technology-inseparable/#sm.00000pszcz1o6mfkrs0yvl5u6tlee> [Accessed 23 January 2015]

National PTA, 2015. *Family Engagement in Education Act.* [Online] Available at: <http://www.pta.org/advocacy/content.cfm?ItemNumber=3921> [Accessed 16 January 2016]

Neighmond, P., 2013. *School Stress Takes A Toll On Health, Teens And Parents Say.* [Online] Available at: <http://www.npr.org/sections/health-shots/2013/12/02/246599742/school-stress-takes-a-toll-on-health-teens-and-parents-say> [Accessed on 18 March 2015]

Novotney, A., 2014. *Students under pressure.* [Online] Available at: <http://www.apa.org/monitor/2014/09/cover-pressure.aspx> [Accessed on 27 January

2015]

Null, G., 2011. *The Drugging Of Our Children*. [Online] Available at: <https://www.youtube.com/watch?v=26e5PqrCePk> [Assessed 01 December 2015]

On Demand News, 2010. *Riots mugging victim Ashraf Haziq speaks out*. [Online] Available at:<https://www.youtube.com/watch?v=W8KSOV2Hyd8&index=13&list=PL97A69AA077B8 BD0E> [Accessed 27 June 2015]

Ordoñez, V., & Maclean, R., 2000. *Education in Asia: some current issues, concerns and prospects.* [Online] Available at: <http://www.ibe.unesco.org/fileadmin/user_upload/archive/Publications/Prospects/Prospe ctsOpenFiles/pr115ofe.pdf> [Accessed 27 January 2015]

Osterwalder, A., & Pigneur, Y., 2010. *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, Hoboken, NJ, US: Wiley.

Parasuraman, A., 1997. Reflections on gaining competitive advantage through customer value. *Journal of the Academy of Marketing Science*, 154-161

Porter, M.E., 2008. The Five Competitive Forces That Shape Strategy, *Harvard Business Review*, January 2008, pp. 79–93. [Online] Available at: <https://mgmt4001winter2012.wikispaces.com/file/view/The+Five+Competitive+Forces+ That+Shape+Strategy.pdf> [Accessed 16 January 2016]

Porter, M, 1991. Towards a dynamic theory of strategy. *Strategic Management Journal* (1986-1998); Winter 1991; 12, SPECIAL ISSUE; pg. 95. [Online] Available at: <http://ecaths1.s3.amazonaws.com/fernandoserra/Porter%20(1991).pdf> [Accessed 17 March 2016]

Public Broadcasting Service 2013. *PBS Survey Finds Teachers are Embracing Digital Resources to Propel Student Learning*. [Online] Available at:

<http://www.pbs.org/about/blogs/news/pbs-survey-finds-teachers-are-embracing-digital-resources-to-propel-student-learning/> [Accessed on 1 August 2015]

Rampton, J. 2014. *What you can learn from 8 kids already making a million dollars.* [Online] Available at: <https://www.entrepreneur.com/article/241189> [Accessed on 10 November 2016]

Rappa, M., 2010. *Business Models on the Web*. [Online]. Available at: < http://digitalenterprise.org/Models/Model s.html> [Accessed 15 May 2015]

Rappa M. 2004. Utility business model and the future of computing services, *IBM Systems Journal*, 32-43

Rauber, M. 2007. *Noncognitive skills and success in life: The importance of motivation and self-regulation*. Unpublished manuscript. [Online] Available at: <http://www.ub.uni-konstanz.de/kops/volltexte/2007/3789/> [Accessed 15 August 2015]

Rich, Motoko. 2010. *Math of Publishing Meets the E-Book.* [Online] Available at: <http://www.nytimes.com/2010/03/01/business/media/01ebooks.html?_r=1&pagewanted=all&> [Accessed 9 May 2015]

Richardson, W., 2015. *The Surprising Truth About Learning in Schools*. [Online] Available at: <https://www.youtube.com/watch?v=sxyKNMrhEvY> [Accessed 2 December 2015]

Rider, E., 2015. *The Reason Vision Boards Work and How to Make One*. [Online] Available at: <http://www.huffingtonpost.com/elizabeth-rider/the-scientific-reason-why_b_6392274.html> [Accessed 16 January 2016]

Robinson, K., 2011, *Out of Our Minds: Learning to be Creative*, US: Capstone

Rosen, J.A. et al 2010. *Noncognitive Skills in the Classroom: New Perspectives on Educational Research*, [Online] Available at:

<https://www.rti.org/pubs/bk-0004-1009-rosen.pdf> [Accessed 15 March 2015]

Rowden, R., 2011. *Impacts of IMF Policies on National Education Budgets and Teachers: Exploring Possible Alternatives and Strategies for Advocacy.* [Online] Available at: <http://download.ei-ie.org/Docs/WebDepot/EI%20Study%20on%20IMF%20 Policies%20and%20Alternatives.pdf> [Accessed 16 January 2015]

Runde, D., 2014. *Why the U.S. Should Worry About the Global Education Problem* [Online] Available at: <http://foreignpolicy.com/2014/10/15/why-the-u-s-should-worry-about-the-global-education-problem/> [Accessed 15 March 2015]

Santos, F, Pache A.C. & Birkholz, C.,2015. Making Hybrids Work: Aligning Business Models and Organizational Design for Social Enterprises, *California Management Review*, Vol. 57 No. 3, Spring 2015; (pp. 36-58) DOI: 10.1525/cmr.2015.57.3.36

Silva, E., et al. 2015. *The Carnegie Unit: A Century-old standard in a changing education landscape.* [Online] Available at: **<**https://www.luminafoundation .org/files/resources/ carnegie-unit-report.pdf> [Accessed 26 December 2015]

Skidmore, C., and Carmichael, N., 2013. *'Education reform is not only necessary, it is essential'* [Online] Available at: <http://www.telegraph.co.uk/education/educationopinion/9839334/Education-reform-is-not-only-necessary-it-is-essential.html> [Accessed on 28 January 2015]

Skok, M.J. 2014. *Game Changing Business Models.* [Online] Available at: <http://mj skok.com/resource/game-changing-business-models> [Accessed 2 December 2015]

Slater, S.F., 1997. Developing a customer value-based theory of the firm. *Journal of the Academy of Marketing Science*, 162-167

Steimle J. 2014. *What Is Content Marketing?* [Online] Available at: http://www.forbes.com/sites/joshsteimle/2014/09/19/what-is-content-

marketing/#711c2f831d70 [Accessed on 24 February 2016]

Strauss, V., 2016. *Big data' was supposed to fix education. It didn't. It's time for 'small data.* [Online] Available at: <https://www.washingtonpost.com/news/answer-sheet/wp/2016/05/09/big-data-was-supposed-to-fix-education-it-didnt-its-time-for-small-data/> [Accessed 10 May 2016]

TED, 2006. *Do schools kill creativity?* [Online] Available at: <https://www.ted.com/talks/ken_robinson_says_schools_kill_creativity?language=en> [Accessed on 28 January 2015]

Teece, D.J., 2010. Business Models, Business Strategy and Innovation. *Long Range Planning*, 43, 172-194.

The Malaysian Insider, 2014. Low quality Malaysian education more alarming than household debt, says World Bank economist. [Online] Available at: <https://sg.news.yahoo.com/low-quality-malaysian-education-more-alarming-household-debt-084125402.html> [Accessed on 28 January 2015]

Toubia, O. 2006. *Idea Generation, Creativity, and Incentives*.[Online] Available at: <http://www.ams-inc.com/pdf/Toubia_MarketingScience.pdf> [Accessed 28 April 2015]

Tough, P., 2013. *How Children Succeed: Grit, Curiosity, and the Hidden Power of Character*. USA: Mariner Books

UNESCAP, 2011. *Regional Overview: The State of Youth in Asia and the Pacific.* [Online] Available at: <http://social.un.org/youthyear/docs/ESCAPFinal5.pdf> [Accessed 27 January 2015]

UNESCAP, 2013. *Regional overview: Youth in Asia and the Asia Pacific* [Online] Available at: <http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-regional-

escap.pdf> [Accessed 27 January 2015]

United Nations, 2014. *The Power of 1.8 Billion: Adolescents, Youth and the Transformation of the Future ASIA.* [Online] Available at: <http://www.unfpa.org/sites/default/files/resource-pdf/SWOP%202014%20fact%20sheet%20-%20Youth%20in%20ASIA.pdf> [Accessed 27 January 2015]

United Nation Population Facts, 2015. *Population Facts*. [Online] Available at:<http://www.un.org/esa/socdev/documents/youth/fact-sheets/YouthPOP.pdf> [Accessed 27 January 2015]

United States Catholic Conference, 1997, *Catechism of the Catholic Church*, US: Image Books

Whitby, T., 2014. *Learning Without Technology*. [Online] Avaiable at: <https://tomwhitby.wordpress.com/2014/01/04/learning-without-technology/> [Accessed 30 April 2016]

Wilkins, A. 2010. *Children and adults see the world in fundamentally different ways*. [Online] Available at: http://io9.gizmodo.com/5637134/children-and-adults-see-the-world-in-fundamentally-different-ways [Accessed 26 October 2016]

Woodruff R.B., 1997. Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25:139

Zott, C., & Amit, R., 2010. Business Model Design: An Activity System Perspective. *Long Range Planning*, 43(2-3), 216-226.

9 - APPENDICES

9.1 – Market research and analysis records

In-depth interview guidelines

- Interview goals:

1) Gauge the importance of education from a parent's point of view

2) Understand a parent's perception about learning and education

3) Get insight into issues that parents are facing in terms of managing their children's learning

- Keep it open ended. Question areas:

Education in general

Perception about local education system

Choice of education and learning points

Price they are willing to pay for good education

Level of participation in the education of their young

- Observe and probe to find out the strength of:

Parent's role in shaping what their children learn

less important | medium influence | more important | maximum push |

- Take short notes and space out meetings to write out interview report

Interview Reports

Jonathan Yap
Date: 6/5/2015

As part of my research for my thesis paper, I interviewed Jonathan Yap, who's a business owner. Jonathan is in the video production business and his free time is spent with his two young sons, Aiden, 7 and Jaqob, 3. He has a very good understanding of the education options in and around Kuala Lumpur and is a passionate hands-on father. Even though his children are still very young, planning for their studies is a must as the cost of

good education is high in Malaysia. Jonathan has already begun to monitor the performance of different types of higher education institute that may interest his children and begin to budget for it. With his children's future education being an issue close to his heart, he is an excellent candidate for me to interview to gain insight as to what middle class parents consider beneficial in terms of planning for their children's education.

The interview began with me sharing my thesis idea and a brief discussion about what the idea may entail once it becomes a start-up. The conversation led to Jonathan talking about a recent trip he made to a nearby tropical island called Pulau Rawa which slowly transited into the topic of parenting and what he wants for his children in terms of living and learning.

Jonathan believes that life should not just evolve around school[1]. Although his children with be obtaining a formal education from an established local education institution, he is prepared to occasionally break this routine once in a while. According to Jonathan, he still believes that the traditional school system is important for the purpose of socializing but he is determined to prove a person is not entirely defined by the educational background and grades alone and he is determined to do this in his own way.

He further explain that he intend to apply for time off school from his son's primary school to bring both Aiden and Jaqob for some adventure and travel that has some lesson in mind. He aspires to teach his sons that life is more than just math and literacy skills. He himself is into superbikes, tropical island living and spiritual growth and deliberately pulling them out of their daily school routine is his personal way of demonstrating the importance of having a well-rounded life rather than emphasizing too much on academic excellence. He believes that nurturing the heart is equally important to nurturing the brain.

He and his wife, Jennifer, are also interested in the many enrichment and after-school lessons which have grown steadily with demand for after-school activities in and around the city. At the moment they have enrolled Aiden for capoeira lessons. It is one of the ways they chose to explore, develop and hone talents and skills in areas which they might not have known. They admitted that these so-called extras are expensive but seeing that the traditional school setting is not covering those learning they deem essential, Jonathan and his wife is prepared for the added pressure to earn the money required to give their children better opportunities in Kuala Lumpur. By then, Jennifer has sat down with us to join in the conversation and the conversation begin to move towards

financing family matters and personal characteristics of Jaqob and Aiden.

Jonathan and Jennifer shared a perspective they both share where they believe their responsibility as a parent is beyond tending to the children's basic needs alone. Giving Aiden and Jaqob life lessons and guidance in love, life and religious matters is important for their spiritual well-being. This is enabled by the way they arrange their own work time.

Finally, Jonathan admits that his children is using smartphones and tablets more than he would like. Although it is not a wanted situation, he also understands that the reality of it is, it is a technology of times for his kid's and their demand for it is just natural. His time was more about television, Walkman and games console. He is now in the process of controlling the amount of time they spend on these devises as well as the content.

Overall, the interview went smoothly and it will be interesting for me to track the developments in the Yap family till Aiden and Jacob enters the workplace.

1 Many Malaysians have a preconception about education being central to childhood and kids from 2-20 years old spend most of their time in school and after-school activities. School days starts from 7a.m. and can last up to between 8 and 10p.m. Children not going for extra classes and after-school activities are often considered neglected or too financially poor to participate

Nico Ng Jia Wei
Date: 15.5.2015

Nico and her husband own a car workshop and have two daughters Crystal, 9 and Cindy, 16. Many years back when I first met Nico, she detailed her own struggle from getting married right after completing secondary school and coming to the big city with empty pockets, to their first daughter struggling with cancer which placed them in a financial struggle for a good number of years. I occasionally swing by her place to pay her a visit and during the recent trip back to Malaysia; I decided to call her up to ask for an interview because her family is exactly the type of people the product of my thesis intend to help.

The interview was conducted late in the evening at Nico's house because she finishes up at her workshop at 8 p.m. every day.   She is now 5 months pregnant and although I know that she and her family members are accustomed to the late night routine and I was still a little held back by it and only asked what I think I needed to know for now.

Her concern for her children's education only came about when her eldest daughter Cindy approached her one day to relate her experiences that she is going through in school. Nico did not think much of their studies before that because her daughters were doing okay as reflected in their test results. She proceeded by sharing with me the moment her daughter came to highlight the matter to her.

Cindy was going to a government school back then. She was bored, lost and uninspired when she started secondary school. She did not grasp what was taught to her and too much emphasis was placed on the Malay language. She was bored and uninspired and her grades started to slip. That propelled her to discuss the situation with Nico and she hurriedly sprang into action.

The conversation naturally led to the discussion about the education system and seeing that such news has plagued the media for a good number of years now, it is nothing new and the situation has not changed. I was not surprised when she brought up the English language literacy concern because most parents (who are poor or were not born with parents who are fluent in the language) that I have spoken to on education bring up the same concern.

Nico's options were limited because besides government school, the other option was the Chinese vernacular schools which do not emphasize the use of English either or expensive private international schools. Although not a Christian herself, she finally enrolled her children into a home-school centre.

Cindy's enthusiasm for school and the sciences flourished and she expressed to Nico her interest in pursuing medicine leading Nico to contemplating hard whether to push herself further to earn more money to help her daughter realize her dream. Seeing that her son is on his way, she is a more concern than ever and hopes her daughter do well enough to perhaps fund part of her own studies through scholarships and help from friends and relatives.

The political climate in Malaysia now is worsening and this gives Nico added pressure to send her daughters overseas for studies in view of them not coming back. Like many parents who have concerns for their children's future, she feels helpless when

thinking about how the government is running the country.

The conversation did not end very well because I too was not able to provide any positive insight into her concerns. However, I did promise to keep in touch with her two daughters to serve as a distant aunt who they can consult on whatever matters that comes to mind.

The conversation may not have ended well but overall, it shed light to the many stresses that youth have when faced with personal family problems and it will be beneficial for me to communicate more with Cindy and Crystal to help me understand their situation better as the social enterprise business model takes shape.

Chris Lau
Date: 16.5.2015

Chris started the interview by asking me what research idea I was working on so I took some time to explain to her the purpose of our conversation. She engaged me in quite a conversation about Finland and is very interested in what and how I was doing there. Chris also is very interested in what goes on in the world of politics because her interest in current affairs is strong. This has been a strong interest of hers since she was very young, enhanced because she is extremely concerned about the direction and way of life that she has been subjected to due to poor citizenry. She is also particularly interested in her children's immediate needs such as education and food safety and has keep in touch reading much in both areas.

The interview slowly led into the area of education but very often, the conversation gets side tracked to many other things before I lead the conversation back into education. She was shrieking with annoyance when we started to talk about the situation where Islamic teaching was being preached during school's morning assembly. She is a Buddhist and her children of two goes to a Chinese vernacular primary school in the city and the Muslim preaching finally got introduced in her child's school just recently. She was mortified and was asking me what she could do about it. I could only suggest more active parenting, place them in the home schooling centres despite it being opened by Christians or retreat to the countryside in towns where Chinese is a majority. I further shared my view that all ways mentioned above have their own dire consequences because having the teachings to permeate the students daily lives essentially is the loss of one's right to

choose their own religion, the home schooling centres have been under a lot scrutiny by the government and "regular visits" on this centres might traumatize kids with effects that no one knows for sure. Schooling in the countryside however, means the standard of education is deplorable and no way will it match the standards in the big city which is resource-rich.

Chris was working as a secretary when I met her and she came from an unstable family background. Her determination to get herself and her mum out of poverty was so great that she worked 3 jobs prior to getting married. Things got better after marriage and after she and her mum rid themselves of her father who has been a very negative force in their lives. She now lives in a low-cost flat close to her mum's place. Her children Bryant, 9 and Gabriel, 7 goes to a semi-private Chinese vernacular school and the reason she got them in was because the school offers a few school places annually to the poor families living around the area and her children qualifies for those study places. She is now unemployed and money is tight hence she feels determine to go back out to work again yet she now feels extremely stressed out trying to figure out how to overcome her children's education problems.

For Chris education is just as important as her children's happiness. She makes sure that she spends enough of quality time with them and there are no long-term plans to save money for their future education simply because they do not have the capabilities to do so at the moment.

One of the other aspects of the interview I want to note is throughout the whole thing; she kept reiterating how bad the situation is in Malaysia. Although her sentiment is shared by almost all my interview participants, her response was more profound as she was clearly disturbed by the situation with no one else to turn to hence the conversation with her gave her great relieve that she able to share her worries with someone else much to my detriment because I am really new at doing interview research thing and I was being pulled to many directions when the participant seem to be at many different places all in one time. However, this is good insight for me and I now know I must be more organized and mentally prepared to face more interviews like this because working with youth from poor backgrounds in the future means I will see more of their struggles and daily stresses in life and one may be easily get drawn into the situation and lose the focus of trying to gather information.

Finally, Chris also provided some insights into the social enterprise that I intend to

work on at the end of our conversation. She does not see Malaysia as a good place to kick off this idea rather she reckons that Singapore may be a better place. What is true about the statement is the Singaporeans will pay whatever the price for such products and the Malaysian market will quickly catch on soon afterwards if it proves to be sensational.

She further added that conglomerates like YTL has begun to tinker with e-learning by working with the government to launch a new online platform for schools. It is a big project and it was launched soon after they launched their own internet service (go figure!). However, I do not see any similarities there because the concept YTL has introduced is similar to Wilma in Finland and it is fundamentally different from what I am proposing.

For now, I reserve to comment on her viewpoint and discussions with Chris led me to believe that Malaysian's preconception about education is still strongly rooted to traditional classroom methods and the public is still relying much on the government to initiate positive change in the education system.

Yati
Date: 13.5.2015

I started by asking Yati about her interest in her child's education and the response was yes but she further explained that she is not educated so she cannot do much to help her daughter in her studies. Yati's daughter is now 12 years-old. Her daughter sometimes came home to her with questions about things she did not understand in school but unfortunately she could not do much to help.

Yati works as an occasional cleaner in my parent's place. She comes to their home once a week and she regularly services a few houses in a week around my parent's neighbourhood. She is a humble and honest person and she hails from Sumatera, Indonesia. Yati had not much comment about the education that her child is receiving other than telling me that her daughter goes to a nearby government school.

Yati's interest in her daughter's education lies in the fact that it can give her daughter more career opportunities. She further elaborates that she cannot afford additional tutoring or out-of-school lessons hence if she has the opportunity to get more help for her daughter's studies she will be very happy about it.   Yati used to bring her daughter around with her when she is doing her cleaning job before her daughter entered school at seven. A house that she used to clean belonged to an Indian family of four and the family used to play and teach her daughter math and English and she could see how

much it helps children to get good learning instructions. However, bad luck struck the family and both the mother and father of this family died in an accident. Their two daughters moved away soon afterwards and Yati did not hear from them anymore.

I asked Yati if she could get more help for her daughter's studies from the Internet will she try? From her facial expression, I could see that she was very interested, curious and eager to learn more about what I was talking about and I asked her if her daughter had email and she said yes hence I requested for it but has yet to get it.

The most surprising thing that I learn from this interview is that her daughter is in government school. I have seen news about immigrant children from Bangladesh and Myanmar being helped by NGOs who set up makeshift classrooms in the city centre to teach the children basic reading, writing and math skills because they do not have support from the government in terms of going to school. I did not probe further because I am happy that her daughter is getting an education.

Gathering from the previous conversations that I had with her prior to this, being able to keep safe, having enough money to fulfil basic needs and send money home to family members are also big concerns and even though Yati finds her daughter's education equally important to those concerns; hence her choice to come to Malaysia because the government have very friendly policies for Indonesian immigrants, really she feels she does not have much choice. This made me realize that she is not informed of what options she has and has yet to gain the support of someone who can point her to the right direction.

From this interview, I learnt that I must learn a better way to elicit information from people like Yati because she represents a large segment of the population who is poor and/or not literate (regardless of origin and ethnicity) and having a set of right research question may help me to understand their life and their struggles a little better.

Annie Chew
Date: 20.5.2015

Annie Chew is the younger sister of my husband. They come from a Thai/Chinese fishing village and their grandfather was the richest man in the village umpteen years ago but when my husband and his siblings were born, all the wealth depleted and their grandmother struggled a lot to keep the large family of 30 persons in a household fed and

dressed.   Annie's parents could read Chinese newspapers and could only make out simple roman letters but comprehension was zilch. Annie's (and my husband) generation could read Chinese and Malay but English comprehension was a minimum due to lack of exposure and use.

Annie moved to the big city of Kuala Lumpur in search of a better life. She started a motorbike repair business with her husband and the business is doing okay but she could see what the big city requires of her children and feels that her children's education is not adequately providing for the future needs of her children hence I knew she was an excellent candidate for me to interview.

Before I interviewed her, we have spoken many times on the topic of education because she was undecided on the many options that the city has to offer. The basic education that the schools offer does not prepare them enough for the real world. There are many other learning options that a parent can get their children enrolled in but for Annie most of the options are either too pricey if it is good or too far as some good options requires a considerable amount of travelling per day. She was not willing to sacrifice both because her husband is not supportive of her decisions as they simply cannot afford the time away from the business and he is quite content to have their kids go to nearby schools and nearby tutoring help if needed. Therefore, Annie has resorted to leave her husband back in Kuala Lumpur and she moved back to their hometown to ease their financial situation and hopefully give the children more quality time and care compared to when she had to work day and night when living in Kuala Lumpur.

Because we have kept in touch on this area for some time now, the interview started with an update on how her kids are doing in school in Pantai Remis. They are much happier because they have more support of friends and family members. Schooling is the same except that the children have more energy and freedom to do much more now that they are not cooped up in a small confined area like when they were living in ever expensive Kuala Lumpur. While Annie has more time to tutor her kids herself, she finds it difficult to manage her own time and space for them now that all four kids are with her. Finally, her concern for their English literacy is still a challenge because her hometown does not have as many options as the big city has.

When I asked her about education system and government support in general, she admits she does not know anything about it other than what she observes from her children's own schools and other parents. She realized that she is seriously

disadvantaged by not coming from a more financially affluent family. Annie read some books about parenting and she immediately recognized her own shortcomings as a parent and she admits to lacks the skills and knowledge to guide her kids the way she wants so as to have the outcome she wants. Well-mannered, thoughtful and smart little English-speakers. She loves her children but becomes very impatient because she is able to compare her kids with others and see what they have lacking like manners and English literacy. She ends up yelling and screaming at them over things that she shouldn't.

I find it very hard not to lecture her or intervene when she talks like this about my little nephew and nieces but for the sake of this interview which sole purpose is to gather rich information. All must be taken into account hence I restrained my thoughts and just let the conversation flow. It was very hard to do that as I was already annoyed. But somehow it was a relief that she realizes that all this are actually going on!

Therefore, from this interview, I find it most interesting that even if someone has the knowledge or conscience about what is going on in their lives, it does not mean it get translated into action or behavioural change. I do not have psychological knowledge or am well-read about this sort of thing but this would be an important area to explore because I saw this sort of behaviour in some of my students back in the time I was teaching in a college and could not understand it either.

Her experience as a parent who is concern about her children's education yet not having all the money in the world to resolve the problem and not having the parenting skills to take the lead in the situation (like some has) is pretty much the same concern that many parents have back in Malaysia.

Ana Pak
Date: 16.6.2015

Ana Pak lives on Taipa Island of Macau and she has two kids which she lovingly call Bubu (14y.o.) and Dalian (12y.o.). We started the conversation with an introduction to the formal schooling system in Macau. It is quite similar to the Hong Kong System except that schools are not segregated by bands or categories and queuing for a school place is not as competitive and challenging. However, based on word-of-mouth, schools with better performing students become highly sought after by parents and gaining entry into such schools inevitably becomes harder. There are many avenues which helps with school fees

hence school fees is not an issue. Schooling in Macau is relatively less stressful compared to their neighbour Hong Kong and China.

I first asked Ana about what she thinks about formal education aka classroom teaching. According to Ana, education outside of the formal education system is hardly heard of and being able to complete their formal education is highly deemed as rite of passage in life hence this preconception about formal classroom teaching and government education system is deeply rooted in every Chinese if not Macanese alone.

She moved on and talked about what she thinks education is about. She believes education purpose is to gain knowledge and she always advise her children that knowledge can change one's destiny hence getting an education is of utmost importance. She is not so concern with what the school teaches so long they do not teach them to be bad. For everything else Ana as the parent guides her kids on her own being a full-time mum.

While her own experience in school in her younger days were not as pleasant, she remains positive by trying to keep up with what is being thought at schools and make sure that her kids get the best of their schooling years.

I asked Ana about her opinion on knowledge not being to put into action after acquiring them. She says that it is absolutely right but she has no insight on that. However, she mentioned that she believes that if one can articulate his or her point well enough to convince others aka can having the skill to influence others by talking then that will be indeed a powerful skill to have hence she has been focusing on getting her kids to be better speakers.

I also asked her what she thinks about using the Internet for learning purposes and she reckons that online for children has always been play and entertainment and they will not seek out knowledge or advice on how to improve themselves online.

Field Notes Summary

Observation of young people in colleges, shopping malls, parks, streets and library in Malaysia

Date : 3-4/5/2015   **Time** : Varies

L-Listening, **B-**Browsing, **P-**Using the phone, **S-**Socializing, **SD-**Student disengaged, **Ind-**Individual thinking, **Y-**Yawning, **Ans-**Answering questions, **IW-**Individual work, **GW-**Groupwork, **Prd-**Predicting, **SP-**Student present, **TQ-**Test/Quiz, **W-**Waiting, **O-**Other

Ave min	Young people doing (Average per person)														
	L	B	P	S	SD	Ind	Y	Ans	IW	GW	Prd	SP	TQ	W	O
0-2			○								○				○
2			○			○		○						○	○
4		○	○		○									○	
6			○									○			
8			○			○									○
10	○		○		○	○									
15		○	○	○						○				○	
20			○	○	○		○		○				○		
30				○					○	○					○

Observation Protocol

Observation of students in natural environment

Date: 12 May 2015

Student names: Chai Cheng Hui, Anand Carensuk, Chew Wei Aun

Location: Suria KLCC

1.   Description: College students in shopping mall
2.   Spending time talking and engaging one another in conversation.
3.   Occasionally stopping at some places of interest like cinema, cafe and park area.
4.   Using their mobile phones to check for information
5.   No shopping done

It seems that the young people observed is the same as how most young people would have it everywhere else. Meeting their friends and peers involves socializing and seeking fun and comfort from one another. Discussions between themselves were mostly on their personal lives and their personal interests while the source of most of their discussion topic is centered around what they stumbled upon in the Internet using Google and postings in Facebook.

Observation of youth going to home-school centre

Date: 9 May 2015

Student name: Cindy Teoh Tze Qi

Location: Home in Cheras Batu 9, Kuala Lumpur

Description: Student from homeschooling center at home

1.   Socializing with friends on social media

2.   Completing tasks from school online

The young girl was pretty much home on her own most of the time as both her parents work till late daily. She spends considerable amounts of time on her mobile phone and she keeps her private online life a secret. After shadowing her for a whole day, she showed me how she uses her K12 online learning program to complete her tasks after attending lessons at the center. She demonstrates keen interest in her school work and could take responsibility for her own studies pretty well and when I probe further, the young girl gave three reasons why she is doing well academically. The continuous use of the online program helps her grow in confidence and understanding of her course requirement and content hence she became a self-directed learner. Her previous learning experience in a local school gave her a basis for comparison and the opportunity to view her personal learning from a different perspective made her realize that education can be meaningful, relevant and enjoyable too. Finally, the freedom and respect that she is getting from this online learning program greatly supports individual learning and this is evident in her contact hours with the home-school centre where there is less competitive behaviour in the classroom and more collaboration between students.

Number of research respondents by type:

Respondent type	Numbers
Lower middle-class	2
Urban poor	2
Immigrant	1
Rural folk	1
Teachers	2
College students	4
High-school student	1
Finnish student	2
Finnish parent	2
Industry expert	7
Total	24

9.2 Part of the visual map used