LANA-Learn Anywhere 'N' Anytime

A Massive Open Online Course Platform

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Abstract

The main objective of the project is to enhance Lifelong Learning function of universities in order to contribute to the development of human resources in Syria through providing a Massive Open Online Course (MOOC) platform. LANA platform (Learn Anywhere ‘N’ Anytime) is implemented by using an online, open-source content management system known as WordPress and its various plug-ins. The main theme of LANA is the services provided to both instructors and students and the interaction between them. Where instructors can create, upload and sell courses and where students can enroll in them to gain new knowledge.

1. Introduction

1.1 Background

1.1.1 The Current Education in Syria

The impact of the Syrian crisis on education has been severe. According to documents published by UNICEF (2018), the seven-year long conflict in Syria has caused its 2.8 million children to miss out on their education. This means that some of these children have never been to school, while others who have missed out on seven years of learning will find it extremely difficult to catch up.

"The violence and attacks has made going to school a matter of life and death in some areas. Since the conflict began in 2011, 309 education facilities were attacked and one in three schools can no longer be used because they were destroyed, damaged, used for military purposes or for hosting displaced families" (UNICEF, 2018).

Host governments in the region are overwhelmed by nearly 2 million additional Syrian school children they have to integrate in the local education systems amid an unstable economic situation. Insufficient financial resources of refugees, poor and unavailable infrastructure, lack of sufficient learning space and language barriers are blocking children's participation in effective learning.

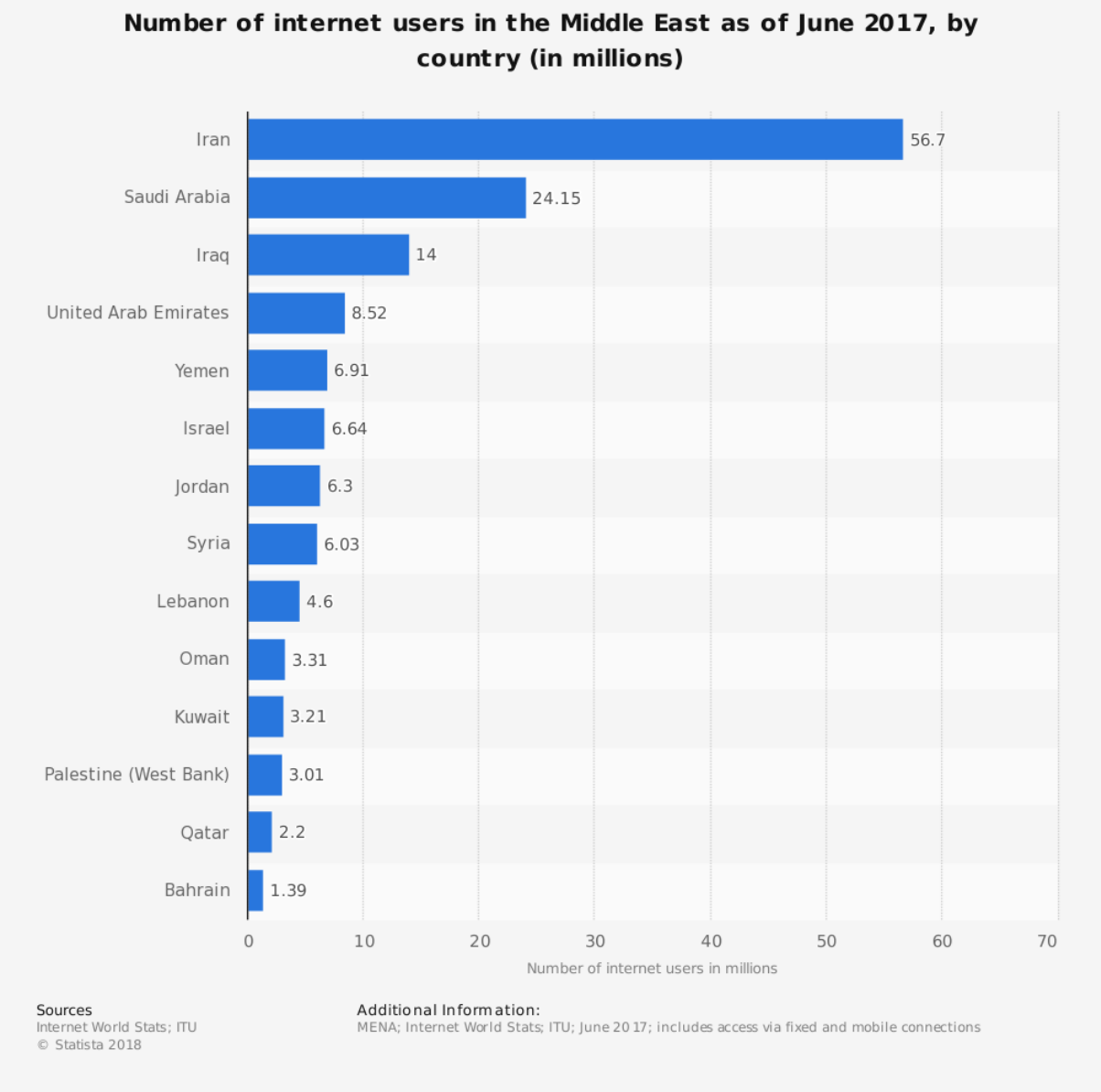
1.1.2 Internet Access in Syria

Despite the dire conditions surrounding Syria and its telecommunication infrastructure and equipment, Internet accessibility in Syria has been on a steady increase with 4.6 million in 2011 (Syria Internet Users) to 6.03 million in 2017 (Number of Internet users in the Middle East).

Syria Internet Users

Year	Internet Users**	Penetration (% of Pop)	Total Population	Non-Users (Internetless)	1Y User Change	1Y User Change	Population Change
2016*	**5,502,250**	29.6 %	18,563,595	13,061,345	2 %	106,142	0.33 %
2015*	**5,396,107**	29.2 %	18,502,413	13,106,306	2.3 %	122,917	-1.44 %
2014	**5,273,190**	28.1 %	18,772,481	13,499,291	4.2 %	210,671	-2.85 %
2013	**5,062,519**	26.2 %	19,322,593	14,260,074	4.3 %	207,662	-3.28 %
2012	**4,854,858**	24.3 %	19,978,756	15,123,898	5.2 %	242,095	-2.55 %
2011	**4,612,763**	22.5 %	20,501,167	15,888,404	7.5 %	323,598	-1.06 %
2010	**4,289,165**	20.7 %	20,720,602	16,431,437	20.5 %	731,096	0.75 %
2009	**3,558,069**	17.3 %	20,566,871	17,008,802	26.5 %	744,481	2.34 %
2008	**2,813,588**	14 %	20,097,057	17,283,469	25.9 %	579,644	3.46 %
2007	**2,233,944**	11.5 %	19,425,597	17,191,653	52.3 %	767,048	3.72 %
2006	**1,466,896**	7.8 %	18,728,200	17,261,304	43.2 %	442,734	3.28 %
2005	**1,024,162**	5.6 %	18,132,842	17,108,680	34.1 %	260,454	2.61 %
2004	**763,708**	4.3 %	17,671,913	16,908,205	29.9 %	175,712	2.12 %
2003	**587,997**	3.4 %	17,304,339	16,716,342	65.3 %	232,221	1.81 %
2002	**355,775**	2.1 %	16,997,521	16,641,746	502.4 %	296,717	1.82 %
2001	**59,058**	0.4 %	16,694,414	16,635,356	98.7 %	29,343	2.08 %
2000	**29,715**	0.2 %	16,354,050	16,324,335	49.7 %	9,862	2.39 %

Internet Live Stats (2016)



Statista (2018)

According to an Executive Summary of Syria-Telecoms, Mobile and Broadband Statistics and Analyses, Syria has a reasonably high mobile penetration and many Syrians own cheap or second hand smart phones. It has been estimated that once the country stabilizes opportunities may exist for mobile broadband growth in the medium-term and development of Syria's fixed broadband may gather pace.

1.2 Literature Review

1.2.1 Massive Open Online Courses (MOOCs)

MOOCs are online courses generally characterized by free and open enrollment, video lectures and assignments evaluated through peer or automated assessment. Although the internet functions as the platform of delivery, MOOCs are not a synonym for online education but rather a specific type of online education. The key difference is that MOOCs, unlike conventional university online courses, are characterized by scalability – usually supporting an indefinite number of participants – and, respectively, open access, allowing anyone to participate in the course for free (Glance, Forsey, & Riley, 2013).

1.2.2 Financial Aspect of MOOCs

The financial framework of MOOCs is a major issue. Although many of the MOOCs have their own business models, most of them are still under development. Developing and designing MOOCs can incur very high costs and its management process requires the commitment of time and effort. Therefore it is only natural that the course design and delivery has shifted from a solo work to team efforts. Such teams include administrators in offices of digital technology, instructional designers, instructional technologists, videographers, and project managers (Hollands & Tirthali, 2014). In the United States, Coursera, which has over 30 million registered users (Shah, 2018) offers universities 6 to 15 percent of the gross revenue generated by each of their MOOCs on its platform, as well as 20 percent of the profits generated by the "aggregate set of courses" provided by the university (Kolowich, 2013).

1.2.3 Business Models

To make MOOC courses financially viable, different monetization approaches have been implemented. Coursera listed eight potential business models to try (Daniel, 2012).

- Certification (students pay for a badge or certificate).
- Secure assessments (students pay to have their examinations evaluated).
- Employee recruitment (companies pay for access to student performance records).
- Applicant screening (employers/universities pay for access to records to screen applicants).
- Human tutoring or assignment marking (for which students pay).
- Selling the MOOC platform to enterprises to use in their own training courses.
- Sponsorships (third-party sponsors of courses).
- Tuition fees.

Currently business models for MOOCs are evolving from free to premium-based. It is the same method that other social media start-ups have adopted. The model offers services and products that are initially free, and once a consumer base has been established, a fee is then charged for advanced or additional services and products. The premium model requires the MOOC start-ups to offer additional services for fees and these can include certification, licensing of course materials, and tuition for credit-based courses (Yuan, Powell, & Olivier, 2014).

1.2.4 MOOCs in Fragile Context

MOOCs are not yet a hot issue for educational policymakers in most middle and low-income countries. To date, the MOOC movement has not paid sufficient attention to the real needs in the developing world. There are many issues and challenges that MOOC providers and policymakers have to overcome in fragile contexts. However, it has been proved that MOOCs can play an important role in fragile contexts such as war, refugee camps, etc. For example, Dr. Mahmud Angrini, a Syrian doctor, explained how the U.S.-based learning portal Coursera, initially founded by two Stanford professors, changed his life. "Nowadays, I always tell my friends in refugee life: 'It is never too late to start again,'" he continues. "Someday, the war will end, and we will come back to our homes and our former lives to contribute to the reconstruction process in our country. To do so, we need to learn new skills, and this could only be achieved through continuing education. We can take advantage of the high quality courses that Coursera offers at no cost."(Curley, 2014).

1.3 Idea/Opportunity Recognition

When our team first thought of this idea for our final project, we were taking into consideration a broader age category and students in various levels of education. The team went even as far as planning for our business idea to be inclusive of not only the Syrian market, but neighboring countries and internationally as well. However, throughout the brainstorming sessions we did together, we realized that the broader the target market, the more complicated things will be. For each customer segment, there should be an added value to offer. When it came to neighboring countries and the international market, the added value/s we wanted to bring to the corresponding customer segments was/were already offered by many similar businesses as ours. While the target group of the project is Syria, and based on the concepts of the main three competitive advantage strategies; Product Differentiation, Product Focus, and Cost Leadership; the team came to recognize that in a more focused market, Product Differentiation would stand out more. Thus, the project focuses on Syrian university-level students as the main customer segment and try to provide them high quality online courses.

1.3.1 Motivation behind This Idea

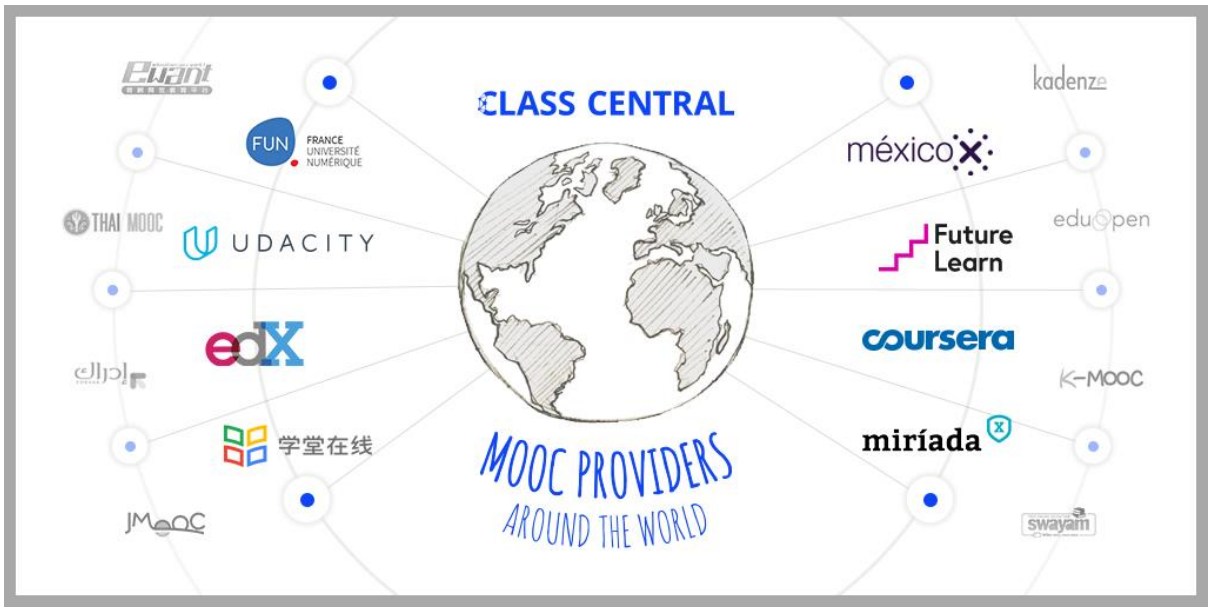
The origin of our business idea goes back to our brainstorming sessions. Our discussions revolved around many questions which intrigued our thoughts, the majority of these questions were implying exploration of what the society we live in really needs, what does it lack the most and how can we be of support to that need. A good business idea does not necessarily mean a good business opportunity. We came about discovering that our business idea was indeed an opportunity when we recognized the opportunity through studying the General Environment by applying the PESTEL Analysis, studying the Specific Environment using Porter's Five Forces, and conducting the Feasibility Analysis (Which will be discussed later on in the document in Opportunity Attractiveness Assessment).

1.4 Existing MOOCs

It's been more than five years since online education got a massive boost when three free online courses, all taught by Stanford professors, launched in October 2014. Each of these courses has had over 100,000 students. Soon after that, Coursera, edX, and Udacity were launched and the media started calling the courses provided by these websites "MOOCs": Massive Open Online Courses.

Since then more than 700 universities around the world have launched free online courses. By the end of 2016, around 58 million students had signed up for at least one MOOC. Many countries around the world (e.g. India, Mexico, Thailand, Italy, and more) have launched their own country-specific MOOC platform (Class Central, 2018).

1.4.1 Top Ten



According to Class Central (2018) catalogue of MOOCs there are more than 7,000 of them. But as admitted by the website itself it seems to be impossible to index every one of them due to limited resources (and sometimes a language barrier, indicating the total number of MOOCs currently operating on the internet is much greater.

Below are top 10 course providers that partner with universities and offer free online courses.

1. Coursera / United States

   Coursera officially launched in January 2012, and it was started by two Stanford professors — Andrew Ng and Daphne Koller. With the largest number of students and $146.1 million raised in funding, Coursera is the biggest MOOC/online education provider in the world. It has over 150 university partners from 29 countries and 2,000+ online courses. Beyond single courses, Coursera offers its own credential, which is known as a Specialization, and it also offers fully-online Masters' degrees (Coursera, n.d.).

2. edX / United States

Founded by Harvard University and MIT in 2012, edX is a non-profit organization. It's the second largest MOOC provider in the world. It offers over 1,500 courses and boasts more than 100+ university partners. EdX offers a number of different types of certificates programs: MicroMasters (which offer a pathway to credit), XSeries, Professional Certificate, and Professional Education. Earlier this year, edX got into the degree game with a new Online Masters in Analytics degree from Georgia Tech (edX, n.d.).

3. FutureLearn / United Kingdom

FutureLearn is a UK-based MOOC provider. It is wholly owned by Open University. It was launched at the end of 2012. FutureLearn has over 100 partners creating courses on its platform. Seventy-one of those partners are universities primarily located in Europe, but it also has a few universities in other countries, including the United States, Australia, and South Korea. FutureLearn offers its own credential program, which is known as FutureLearn Programs. Last year it also announced six completely online post-grad degrees in partnership with Australia's Deakin University (FutureLearn, n.d.).

4. XuetangX / China

XuetangX is China's first and biggest MOOC platform. It was founded in 2013 by the Tsinghua University under the supervision of the China Ministry of Education Research. It's probably the fastest growing MOOC platform. Back in October 2016, the platform had over 400 courses. It's built upon a heavily customized version of Open edX. XuetangX also has a cloud LMS product that is used by universities across China (Class Central, 2017).

5. Udacity / United States

Udacity is a tech unicorn, and it partners with technology companies to create Nanodegrees that train students for a particular job. In recent times, it has launched an AI Nanodegree with IBM Watson and a Self-Driving Car Engineer Nanodegree. The co-creators of the latter include car companies like Mercedes Benz, BMW, and McLaren. These Nanodegrees cost, and they can take a few months to complete. Courses that are part of the Nanodegree are available for free, and Udacity currently has close to 200 free online courses (Class Central, 2017).

Udacity has also partnered with Georgia Tech to create and launch a low cost, completely online Masters in Computer Science degree. At this moment there are more than 4,000 students enrolled in the Master's program. Udacity was founded by Stanford professor Sebastian Thrun, the man behind Google's self-driving car project. He is currently the president of Udacity and the CEO of a flying car company called Kitty Hawk (Udacity, n.d.).

6. Kadenze / United States

Kadenze is a MOOC platform that specializes in the field of creative and arts education. It partners with some of the best art institutions and universities around the world to launch online courses. It was co-founded by Ajay Kapur, a classically trained Indian musician and computer scientist. He is Associate Dean for Research and Development in Digital Arts at the California Institute of the Arts (CalArts). In October 2013 he taught a course called "Introduction to Programming for Musicians and Digital Artists" on Coursera.

However, he soon realized that some of the things he wanted to do with arts education were not possible with Coursera, so he created his own platform (Class Central, 2017).

Kadenze has also launched its own certificate initiative, which is called Kadenze Programs. The first course in the program is free, but the rest are not. Students can also earn academic credit for many Kadenze courses/programs.

7. Canvas Network / United States

Canvas Network might not have the big names, but they do have a number of free online courses taught by community colleges and other institutions around the world. Many of their courses still offer completely free certificates (Class Central, 2017).Canvas Network is based on the Canvas LMS, which was developed by Instructure.

8. Stanford Languita / United States

Lagunita is Stanford's instance of the open-source software release of the Open edX platform, which was developed by the joint Harvard/MIT non-profit organization, and which Stanford engineers have been collaborating on since April 2008 (Class Central, 2017). Lagunita hosts many of the free, online courses that are taught by Stanford faculty and made available to lifelong learners around the world for self-enrichment. Lagunita also hosts a variety of professional education opportunities in conjunction with many of Stanford University's schools and departments.

9. Miríada X / Spain

Miríada X is a regional MOOC platform that has launched over 600 courses in Spanish and Portuguese (Class Central, 2017). These courses are created by its 100 university partners, which are located in Spain, Argentina, Peru, Colombia, Mexico, Brazil, Chile, and other Spanish and Portuguese speaking countries.

10. MéxicoX

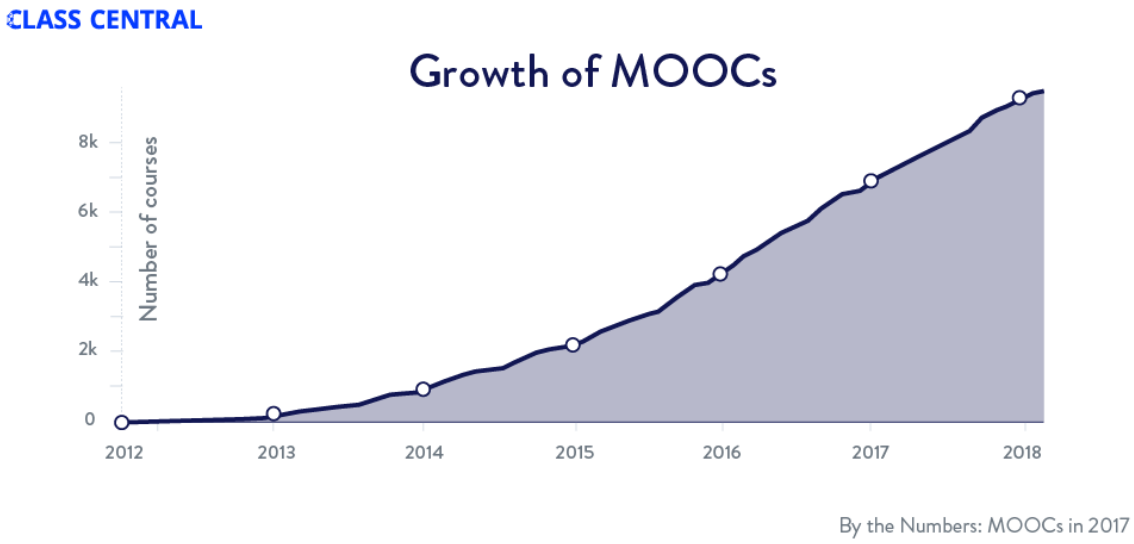
MéxicoX is a MOOC platform funded by the Mexican government, and it has more than 40 partners (universities and institutions from the Federal Public Administration). It has over one million registered learners, 85% of whom are located in Mexico.

1.4.2 Numbers

The MOOC landscape has grown to include 9,400 courses, more than 500 MOOC-based credentials, and more than a dozen graduate degrees. The total number of MOOCs available to register for at any point of time is larger than ever. In 2017 around 23 million new learners signed up for their first MOOC, taking the total number of learners to 81 million (By the Numbers: MOOCs in 2017).

Below are the number of registered users for the most prominent MOOCs:

- Coursera – 30 million
- edX – 14 million
- XuetangX – 9.3 million
- Udacity – 8 million
- FutureLearn – 7.1 million



By the Numbers: MOOCs in 2017

1.4.3 Current Services

1.4.3.1 Credentials

More than 500 MOOC based credentials are now available. Coursera's Specializations lead the pack with over 250 credentials; followed by edX with around 170 credentials split across 4 types: MicroMasters, Xseries, Professional Certificate, and Professional Education. XuetangX also launched 8 "micro-degrees". Many (if not the majority) of the new courses that were launched in 2017 are part of credentials. A few of the longer courses originally launched in 2012 and 2013 have also been split up into multiple courses and re-launched under a credential (Class Central, 2018).

CLASS CENTRAL

MOOC-based credentials

Credential	No. of credentials
Specializations by *Coursera*	257
Professional Education by *edX*	64
MicroMasters by *edX*	43
Professional Certificate by *edX*	35
XSeries by *edX*	32
Programs by *FutureLearn*	22
Nanodegrees by *Udacity*	22
Programs by *Kadenze*	21
Micro-degrees by *XuetangX*	8

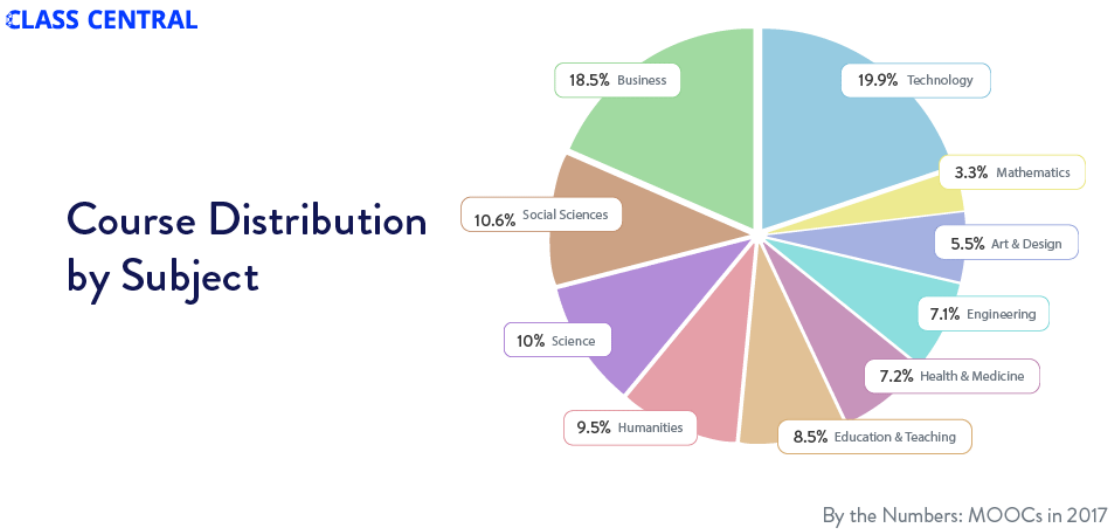
Class Central (2018)

1.4.3.2 Online Degrees

Online graduate degrees are a lucrative monetization opportunity for MOOC providers. Initial results from these MOOC-based degree programs have been good. The Online Masters of Science in Computer Science (Udacity and Georgia Tech) has around 6,000 students enrolled. The iMBA (Coursera and the University of Illinois) has over 800 enrolled students, while the Online Masters in Analytics (edX and Georgia Tech), announced at the beginning of 2017, and has 650 students enrolled (Class Central, 2018). A simple back-of-the-envelope calculation can tell that the potential revenue to be earned from these three degrees is greater than $65 million, based on the current number of enrolled students.

Coursera plans to launch 15-20 degrees by 2019, while FutureLearn has announced that they will launch 50 degrees in partnership with Coventry University. XuetangX, also announced their announced three online Master's degrees with Zhengzhou University.

1.4.3.3 Subjects



Business and Technology courses make up almost 40% of all courses. Not surprisingly, these are the categories of courses that have been easiest for MOOC providers to monetize. The target audience for these courses is a group former CEO of Coursera Rick Levin has called "professional lifelong learners". They are followed by Social Sciences at 10.6%, Science at 10%, Humanities at 9.5%, Education and Teaching at 8.5%, Health and Medicine at 7.2%, Engineering at 7.1%, Art and Design at 5.5%, and Mathematics taking the last place at 3.3%.

2. Organization

Name:	Responsibilities:
Lama Akkad	System Analysis, Feasibility Analysis, Documentation
Omar Hamwi	Website Development, Website Design
Il Chon Kang	Content Procurement, Content Editing
Mahmoud Khawam	Content Management, System Analysis
Hyong U Kim	Project Management, Website Development, Website Design

3. System Service Request

3.1 Problem Statement

It is a fact that the world of education and learning has been moving towards online learning for some time now. And Benefits such as reduced costs, flexibility and the ability to train thousands of people all over the globe at the same time has been undeniable.

However, e-learning is not without its drawbacks. Online learning comes with its own challenges, which can limit the success of the learning experience. Below are some of the problems faced by other companies and institutions.

3.1.1 Motivation Loss

Although online learning is meant to provide a solution to the boredom of classroom-based learning to students, this is not always the case. Many e-learning courses consist of never-ending texts followed by a long list of multiple choice questions that fail to engage students. More than e-learning, it would feel like e-reading.

These types of courses mean that students often get bored with online learning, and this lack of engagement and motivation is one of the main reasons e-learning courses fail. Students are simply not interested in taking the course, do not access the platform and do not complete the course. For example, HarvardX and MITx reported in 2017 that only 5.5% of people who enroll in one of their open online courses earn a certificate. (Ahearn, 2017)

3.1.2 Lack of Human Interaction

Students may sometimes get frustrated due to the lack of human contact, the absence of a teacher and an inability to discuss it with their classmates. Sometimes, the online world, no matter how enriching it may be, can become too small for the student and they may need a physical space where they can resolve their queries and practice with real tools.

3.1.3 The Quality of the Course

With the information overload of today's world, with thousands of free online courses and powerful platforms such as Wikipedia, YouTube and Google, course content must be excellent and of the highest standard. Nevertheless, many students end up frustrated when they discover that they can learn more on their own than with the simple, mediocre courses offered by many e-learning sites.

3.1.4 Offline

Although the political situation in Syria seems to show signs of improvement and the internet accessibility is on the rise, most of the population in Syria still has no Internet access. Even if the situation were to stabilize it would take a long time before all the population would have an Internet connection.

3.2 Solution Statement

3.2.1 Incentives

3.2.1.1 Competition

The project proposes to promote competition by including monthly or weekly tournaments where students submit projects related to their coursework, conduct votes, and receive prizes for the winners (special badges or discounts).

3.2.1.2 Gamification

The project proposes to incorporate a gamification feature on the website in order to get the students engaged and motivated. This would include leaderboards, points system, badges system.

3.2.2 Discussion Forums

The project proposes to integrate a forum feature on the website to host forums on various topics related to the coursework where students and teachers can leave questions and comments.

3.2.3 Teachers Capacity Building

The project proposes to provide a mandatory course for any instructors registering in our website, so they can learn about the required standards of the courses and methods to achieve them. This would also be reflected in the terms of service of the website.

3.2.4 Mobile App

The project proposes to develop an app for the website in order to provide offline access to the courses. Users can download the course-related materials when online and view them anywhere, anytime.

4. Software Requirement Specification

Req. 1: This system should be able to provide user-account management

- Req. 1.1: Record name, Email address, and contact details when creating a new account on the website
- Req. 1.2: User can add, edit, and delete his/her profile information (profile picture, bio, email and password)
- Req. 1.3: Users have different authority levels (subscriber, instructor, SEO manager, SEO editor, contributor, author, and administrator)

Req. 2: This system should be able to provide course management

- Req. 2.1: Users with instructor level can add, edit, and delete courses
- Req. 2.2: Instructors can add, edit, and delete lessons
- Req. 2.3: Instructors can add, edit, and delete quizzes and questions
- Req. 2.4: Instructors can add a new category of courses

Req. 3: This system should be able to provide a gamification function

- Req. 3.1: Store user's balance of points
- Req. 3.2: Reward with badges (for the user's first login, the first course, first solved quiz, enroll (in five courses, etc.)

Req. 4: This system should be able to provide courses' forum management

- Req. 4.1: Administrator can add and delete forums
- Req. 4.2: Administrator -instructors can add and delete topics
- Req. 4.3: Administrator - instructors-students (who are already enrolled in the course) can comment on topics
- Req. 4.4: Administrator -Instructors-students (who are already enrolled in the course) can reply to comments

Req. 5: This system should be able to provide search function

- Req. 5.1: Website visitors can search for courses
- Req. 5.2: Website visitors can search instructors, pages, course category, or any desired keyword

Req. 6: This system should be able to provide security function

- Req. 6.1: The website generates warning Emails about every administrator's login and sends it automatically to LANA's main admin Email account
- Req. 6.2: LANA's main admin can block any suspect user
- Req. 6.3: LANA's main admin can see website traffic, as well as block any user activity

Req. 6.4: LANA's website has its own firewall function and it scans and denies any scam, spam, or any similar undesirable activities

Req. 6.5: LANA's security admin can do a real time IP Blacklist

Req. 6.6: LANA's security system automatically stops "Password Guessing Attacks"

Req. 7: This system should be able to provide Search Engine Optimization management

Req. 7.1: Google search indexes (indexing all pages, posts, courses)

Req. 7.2: SEO manager can edit search appearance to users

Req. 7.3: Quality of traffic; SEO manager can limit the search result to a certain geographical location (for example Project LANA is most likely to appear to those searching for LANA within Syria)

5. Technical Tools

5.1 WordPress

WordPress is a free and open-source content management system (CMS) based on PHP and MySQL. Features include a plugin architecture and a template system. It is most associated with blogging, but supports other types of web content including more traditional mailing lists and forums, media galleries, and online stores. Used by more than 60 million websites, including 30.6% of the top 10 million websites as of April 2018, WordPress is the most popular website management system in use.

5.1.1 LearnPress

LearnPress is a comprehensive WordPress LMS Plugin for WordPress. This is one of the best WordPress LMS Plugins that can be used to easily create and sell courses online. Each course curriculum can be made with lessons and quizzes which can be managed with easy-to-use user interface (WordPress, 2018).

5.1.2 GamiPress

GamiPress is a plugin that allows gamification of WordPress websites, letting the admin award the users with digital rewards for interacting with the website. More specifically it allows the admin to create achievements and points systems to use in the gamification process (WordPress, 2018).

5.1.3 bbPress

bbPress is a WordPress plugin with more than 300,000 active installations worldwide. It provides the website with the discussion forum feature which you can use to create forums and topics and manage replies (WordPress, 2018).

5.1.4 Wordfence

Wordfence includes an endpoint firewall and malware scanner that were built from the ground up to protect WordPress. Its Threat Defense Feed arms Wordfence with the newest firewall rules, malware signatures and malicious IP addresses it needs to keep the website safe (WordPress, 2018).

5.2 Programming Languages

5.2.1 HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. Browsers do not display the HTML tags, but use them to interpret the content of the page.

5.2.2 CSS

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs and variations in display for different devices and screen sizes as well as a variety of other effects.

5.2.3 JavaScript

JavaScript, often abbreviated as JS, is a high-level, interpreted programming language. Alongside HTML and CSS, JavaScript is one of the three core technologies of the World Wide Web.

JavaScript enables interactive web pages and thus is an essential part of web applications. The vast majority of websites use it, and all major web browsers have a dedicated JavaScript engine to execute it.

5.2.4 PHP

PHP: Hypertext Preprocessor (or simply PHP) is a server-side scripting language designed for Web development, but also used as a general-purpose programming language. It was originally created by Rasmus Lerdorf in 1994, the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive acronym PHP: Hypertext Preprocessor. PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks.

5.2.5 MySQL

MySQL is an open-source relational database management system. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language.

6. Business Form

6.1 Name and Logo

Picking a name for one's new potential venture is not as easy as one might think. At one point it could turn into an ongoing lists of gibberish words. When we were thinking of the best name possible for our project, we wanted it to be compatible and meaningful in both Arabic and English. For the English Language Part, the name of our LANA Project was conceived from the abbreviations of Learn Anywhere 'N' Anytime. We substituted "and" with 'N' to make the name smoother to say and consequently more likely to stick in one's mind easily. As for the Arabic Language Part, our Project's name reads "لنا", which means "for us". This also reflects LANA's social responsibility towards the Syrian society. "For us" or "لنا" indicates a heavy load of care. LANA was created for those who need it with putting into use the knowledge and skills developed through AIU's MIS major material and lecturers.

6.2 Legal Form-Syrian Business Entities

As for the legal form of our company, it will be Limited Liability Company, because compared to the other general business entities types, it is the cheapest in terms of minimum paid up share capital (the Syrian Branch Office entity is cheaper, but it is not our case). The main three business entity types in Syria are firstly, the Limited Liability Company (LLC), which is a business entity which requires at least one director and one shareholder of any nationality for incorporation process to be complete. The minimum paid up capital required in 2018 is 400,000 SYP (Doing Business, 2018), in addition to electricity and property registration with lawyer fees the amount could reach up to USD2,000 (equivalent to 880,000 SYP), which must be paid up before the company is incorporated. All incorporation documents must also be translated into Arabic and legalized. All LLCs in Syria must submit annual audited financial statement.

Secondly, there is the Joint Stock Company (JSC), in which clients are required to appoint a minimum of five shareholders and five directors who can be of any nationality and may be ordinarily resident outside of Syria. The minimum paid up capital required to complete the incorporation process is US$5,000 (equivalent to 2,200,000 SYP), of which 40% must be paid up in cash before registration and the remaining 60% must be paid up within 3 years from the date of incorporation, (Doing Business, 2018). A Syrian Joint Stock Company must also offers 45% of its shares to the public through an IPO on the Damascus Securities Exchange (An initial public offering, or IPO, is the very first sale of stock issued by a company to the public. Prior to an IPO the company is considered private, with a relatively small number of shareholders made up primarily of early investors (such as the founders, their families and friends) and professional investors (such as venture capitalists or angel investors)). The public, on the other hand, consists of everybody else – any individual or institutional investor who was not involved in the early days of the company and who is interested in buying shares of the company. Until a company's stock is offered for sale to the public, the public is unable to invest in it. Like limited liability companies, Syria Joint Stock corporations are required to submit annual audited financial statements.

Table of comparison between Syria entities

	LLC	JSC	Branch Office
How long to set the company up?	6 weeks	7 weeks	8 weeks
How long to open company bank account?	3 weeks	4 weeks	5 weeks
Legal liability?	Limited	Limited	Unlimited
Wholly foreign owned?	Yes	Yes	Yes
Minimum paid - up share capital?	US$2,000	US$5,000	US$1
File annual tax return?	Yes	Yes	Yes
Tax registration certificate required?	Yes	Yes	Yes
Recommended corporate bank account?	Byblos Bank	Bank of Syria and Overseas	Commercial Bank of Syria
Does our Client need to travel?	No	No	No
Resident director required?	No	No	No
Resident shareholder required?	No	No	No
Minimum directors allowed?	1	5	1
Minimum shareholders?	1	5	1
Tax identification code needed?	Yes	Yes	Yes
Syria resident company secretary required?	No	No	No
Corporate agent required?	No	No	No
Corporate shareholders allowed?	Yes	Yes	Yes
Corporate director(s) allowed?	Yes	Yes	Yes
Statutory audit required?	Yes	Yes	Yes

Thirdly, the Branch Office is a foreign company which may pursue business in Syria through the establishment of a branch office. The branch operates in the name of the foreign company and must therefore use the registered name of its parent company. It must also have a registered office in Syria.

Syria corporate tax rate?	10% to 28%	10% to 28%	10% to 28%
Annual financial statements required?	Yes	Yes	Yes
Regulated by?	Ministry of Internal Trade and Consumer Protection	Ministry of Internal Trade and Consumer Protection	Federation of Syrian Chambers of Commerce
Allowed to issue sales invoices?	Yes	Yes	Yes
Allowed to sign contracts?	Yes	Yes	Yes
Allowed to import and export goods?	Yes	Yes	Yes
Can rent an office space in Syria?	Yes	Yes	Yes
Can buy Syria property?	No	No	No
Total Syria business setup costs in yr. 1?	US$30,450	Contact us	Contact us
Subsequent annual costs (incl. accounting and tax fee)?	US$12,050	Contact us	Contact us

7. Business Model Canvas

7.1 LANA as a Spin-off

We have structured the process of launching LANA as a spin-off as follows. We created the business scenario (business plan) in which we offer Syrian university-level students AIU material taught by AIU lecturers. We will be making profit per each fee paid for one course registration. The total amount of course fees paid is divided among the three parties involved, AIU, LANA founders, and course instructors. Our business model canvas for LANA spin-off captures the whole scenario.

7.2 Business Model Canvas

<table>
<tr><th>Key Partners</th><th>Key Activities</th><th>Value Proposition</th><th>Customer Relationship</th><th>Customer Segments</th></tr>
<tr><td rowspan="3">AIU
(instructors & material)
Bank
(Arab Bank)</td><td>Record videos
Provide content
Website development & maintenance
R&D methods of teaching
Instructor management
Marketing
Support</td><td rowspan="3">(Statement)
"LANA offers an experience that rivals the real classroom and should prove to be a useful utility for teachers and students of all subject matters"
Online Learning and teaching marketplace
Skills development
Learning anywhere and anytime/Convenience
Marketing value for AIU
War affected individuals
Inexpensive content
Rating System</td><td>Automation
Self-service; on demand
Digital/Inline
Instructor rating system
Support Center</td><td rowspan="3">Syrian university-level students</td></tr>
<tr><td>Channels</td></tr>
<tr><td>Key Resources
AIU
Team members' skills
Infrastructure</td><td>Internet;
Website
AIU
Bank (Arab Bank)
Email
Social Network
Video: PPT, PDF, Audio, Zip files</td></tr>
<tr><td colspan="2">Revenue Structure</td><td colspan="3">Cost Structure</td></tr>
<tr><td colspan="2">Tuition fees/Sale of courses
Banner ads</td><td colspan="3">AIU ($100 a month for providing content)
Instructors (35% commission on every course they sell)
Hosting Services ($80 annually)
Course Price ($15)
Development and maintenance
Infrastructure
Support Center
Marketing</td></tr>
</table>

7.2.1 Value proposition.

LANA strives to offer an experience that rivals the real classroom and should prove to be a useful utility for teachers and students of all subject matters. LANA offers the first local service of its type, it is AIU university material available for online learning and teaching (some courses are for free and some have incurred fees). LANA focuses on skills development as well as academic development. There are short videos available for learners interested in developing certain skills (for example: "How to Create Surveys on Google Forms" by Dr. Serene Dalati). Our business name is an abbreviation and reflection of convenience, learn anywhere and anytime, which is one of the crucial values we offer our customers. Another major value we bring is directed towards Internally Displaced Persons and those who are facing hurdles pursuing their academic path. Many Syrian students have been affected by the destruction of schools and the general Syrian situation. LANA creates a marketing value for the Arab International University due to the rich material taught by the esteemed lecturers of AIU. LANA charges cheap amounts of fees for online courses in comparison to semester university tuition fees, which makes it even more convenient for

students who are affected by the Syrian situation. Our website aims to offer a classroom vibe by having our social network feature, which allows communication and interaction among students and between students and teachers. Registered individuals (students and teachers) can add "friends", conduct a one-on-one message thread, and conduct a group message thread constituting of a maximum of 30 individuals. In addition to that, our website has a teacher rating system, which allows students to see how teachers are rated by others.

7.2.2 Customer Segment

Our customer segment is Syrian university-level students who want to pursue their education in Business (Management Information System, Accounting, Finance, Marketing, and Management) INCLUDE OTHER FACULTIES MAJORS. LANA online courses also include broader and general knowledge or skills for general learners.

7.2.3 Customer Relationship

Our customer relationship depends on self-service, meaning that students register online, read the description of the preferred courses, and proceed to registering in the courses they are interested in. Our relationship with our customers is mainly digital and online. Another way to support our customer relationships is through our instructor rating system. This provides our customer (student) with the most valuable information he/she needs, in which instructors are rated by other fellow students. Moreover, we have a support center, which our registered individuals on our website (both instructors and students) can contact. One tactic we plan to use is to reward our loyal customers because they will reward us back. According to global management consulting firm Bain and Co., a 5 percent increase in retention yields profit increases of 25 to 95 percent. And on average, repeat customers spend 67 percent more than new customer. So our most profitable customers are repeat customers.

7.2.4 Channels

As for the channels through which we will be in touch with our customers are majorly (1) the Internet and our website to deliver our online courses. (2) AIU, as the university will provide the lecturers. (3) The Arab Bank, which is a means for paying for the course/s of interest, and for paying AIU institution and AIU lectures their share; this requires LANA to have a Bank Account at the Arab Bank. (4) Email, in order to keep contact with our customers and reply to their emails/requests submitted to our support center. (5) Social Network, which is our website's feature to keep everyone on our platform connected and interactive. This will include the ability to add friends, send one-on-one message threads, and group message threads which constitutes of up to 30 individuals. (6) Lastly, of course we will use specific tools to deliver our online courses, these tools include Videos, PowerPoint Presentations, PDF's, Audio, and Zip files. Additionally, we highly believe in our contemporary dynamic digital age where social media environment continues to grow and develop to this day, and that is why we reach our customers via social media (LANA Facebook Business Page, Instagram Business Page, LinkedIn Business Page, and Twitter Business Page).

7.2.5 Key Partners

There are different motivations behind creating partnerships. The following reasons are what motivate us to be backed up with good partnerships: optimization and economy of scale, reduction of risk and uncertainty, and acquisition of particular resources and activities.

Technologies are advancing at a very high rate which increases their risk factor. If the technology forms a significant value propositions such as ours for the business, then we can take on a partner to share the risk and cost associated with the technology in question. Our key partners will be AIU (instructors and materials) and the Arab Bank. In addition we seek for NGOs to be our key partners.

7.2.6 Key Activities

Our key activities will include assisting tutors or lecturers with video recording, material editing or processing as well as material description writing, developing the website, research and development of methods of teaching, instructor management, marketing and support. For the marketing aspect, we will be using our social media platform to promote our courses and reach our potential customers online (Facebook, Instagram, Twitter, LinkedIn). In the future when we have established some revenue flow, it is arguable that we purchase ad banners from other websites or use other forms of marketing for promoting LANA.

7.2.7 Key Resources

As mentioned earlier in this business plan, the Arab International University will be one of the biggest key resources of LANA's. Another crucial resource is our team members' skills and knowledge which were all used efficiently and effectively to come up and put together the concept of LANA. Lastly, good infrastructure is also an important resource for us, for example, our website and its hosting, our department within AIU office, our social media platforms, etc.

7.2.8 Revenue Streams

Our revenue will be mainly coming from the fees of the courses registered (number of course purchases). Another way we could make some extra revenue is selling banner ads on our website for other websites. Selling banner ads is not a greatly reliable source of revenue, therefore it is not included in the corresponding feasibility analysis.

7.2.9 Cost Structure

Cost Structure Basis: we conducted the data table method in excel to know how much our monthly break even sales should be, given that AIU earns USD 100 monthly, and tutors earn a percentage of each course taught. We divided the yearly hosting fee (USD 80) by 12 to get the monthly hosting fee. We assumed the price of a course would be USD 10, and the commission/percentage that tutors receive from each course taught is 20 percent. We then conducted the Data Table method, and entered different scenarios with course price increasing (USD 10, USD 11, USD 12, USD 13, USD 14, USD 15, USD 16, USD 17, USD 18, USD 19, USD 20) and tutor percentage of each course taught increasing (20 percent, 25 percent, 30 percent, 35 percent, 40 percent, 45 percent, 50 percent), respectively. We got the following table, in which we decided that having the minimum number of 20 purchases for each course, each course being USD 15, with 35 percent commission to the instructor of the course would be a good win-win situation to everyone involved.

	A	B	C	D	E	F	G	H	I
1	Monthly Costs								
2	AIU	$ 100.00							
3	Hosting	$ 6.67							
4	Price	$ 10.00							
5	Commission	20%							
6	Breakevn Sales	53.33333333	20.00%	25.00%	30.00%	35.00%	40.00%	45.00%	50.00%
7		$10.00	53	43	36	30	27	24	21
8		$11.00	48	39	32	28	24	22	19
9		$12.00	44	36	30	25	22	20	18
10		$13.00	41	33	27	23	21	18	16
11		$14.00	38	30	25	22	19	17	15
12		$15.00	36	28	24	20	18	16	14
13		$16.00	33	27	22	19	17	15	13
14		$17.00	31	25	21	18	16	14	13
15		$18.00	30	24	20	17	15	13	12
16		$19.00	28	22	19	16	14	12	11
17		$20.00	27	21	18	15	13	12	11

LANA pays USD 80 (equivalent to 35,200 SYP) yearly for LANA's website hosting. However, Development and Infrastructure of the website will be managed by Omar Hamwi and Kim, in order to limit LANA's costs and maximize revenue for the first six years. Our suggested future plan is that we get experts once revenue starts increasingly flowing after the first six years. Marketing will be done through LANA's social media accounts in order to limit costs (not only for the first six years but for the current plan strategy and future plan strategy). This requires posting on all social media accounts interactive posts constantly and in an active manner (for example, posting once or twice daily). This task will be handled by Lama Akkad, as the team member has experience in this field. Lastly, Mahmoud Khawam and Il Chon will be responsible for the Support Center for the first six years in order to limit costs as well. This requires the 2 team members' attendance on a daily basis at the Arab International University's office, LANA department.

8. Feasibility Study

8.1 Pre-Feasibility Analysis

8.1.1 Description

The project aims to provide online educational services exclusively to Syria for the short term. For the future the project aims to expand its coverage to the Middle East region and later the whole world. The project is to distinguish itself from other competitors by providing special features that engage students and motivate them to improve themselves.

8.1.2 Product Technical Feasibility Analysis

8.1.2.1 Technical Costs

The project will be implemented using PHP, HTML, MySQL and CSS knowledge acquired through the coursework at Arab International University (AIU), as well as the free web development platform WordPress. Therefore, no implementation costs are to be expected except for website hosting.

8.1.2.2 The Proposed Service

This will be online educational services starting with courses related to programming and coding skills but expected to cover a range of disciplines such as mathematics, economics, languages, biology, chemistry, etc. in the future.

8.1.2.3 Main Benefits

Our services will primarily contribute in educating people who lack adequate conditions for education. They will also help in preparing and developing the students, and providing them with credentials necessary for future employment.

8.1.2.4 Main Input

This will be the contents created by the instructors of the region who are up to the standards of the developing world, capable of creating engaging content and open to improving their pedagogical approaches as well. Shortages of content would be expected at first but as the project matures such concerns are unlikely to be expected. Considering the state of the Syrian economy which is suffering from the seven-year long crisis and the imbalance between prices of commodities and salaries, the proposed project would work as an extra stream of income for the regional instructors.

8.1.2.5 Main Income

This would be from commission received from courses sold. Other types of income discusses in the literature review can be considered for future implementation.

8.1.3 Market Feasibility Analysis

8.1.3.1 Target Market Segment

Since learning is a lifelong process, our target would be people of all ages, gender, income, and education in Syria.

8.1.3.2 Competitors

E-learning market in Syria has not yet been explored properly by other companies, although there are some: most notably Syrian Virtual University, Rwaq, and Massar Academy.

8.1.3.3 Competitive Edge

As explained in the gap analysis of this paper, the proposed project aims to address most of the shortcomings of other instances of MOOCs, and improving them, thus providing the students with a unique experience.

8.1.4 Organizational Feasibility Analysis

8.1.4.1 Knowledge and Skills

Concerning the knowledge and skills required, the team consists of Management Information Systems (MIS) major undergraduates from AIU. Three years of coursework has prepared the team to deal with most of the organizational problems that may arise.

8.1.4.2 Financial Resources

The financial resources required will be initially provided by the team members.

8.1.4.3 Possible Investment

It is possible to find an investor or a sponsor to fund the future expenditures of the project and manage it.

8.2 Feasibility Analysis Tool

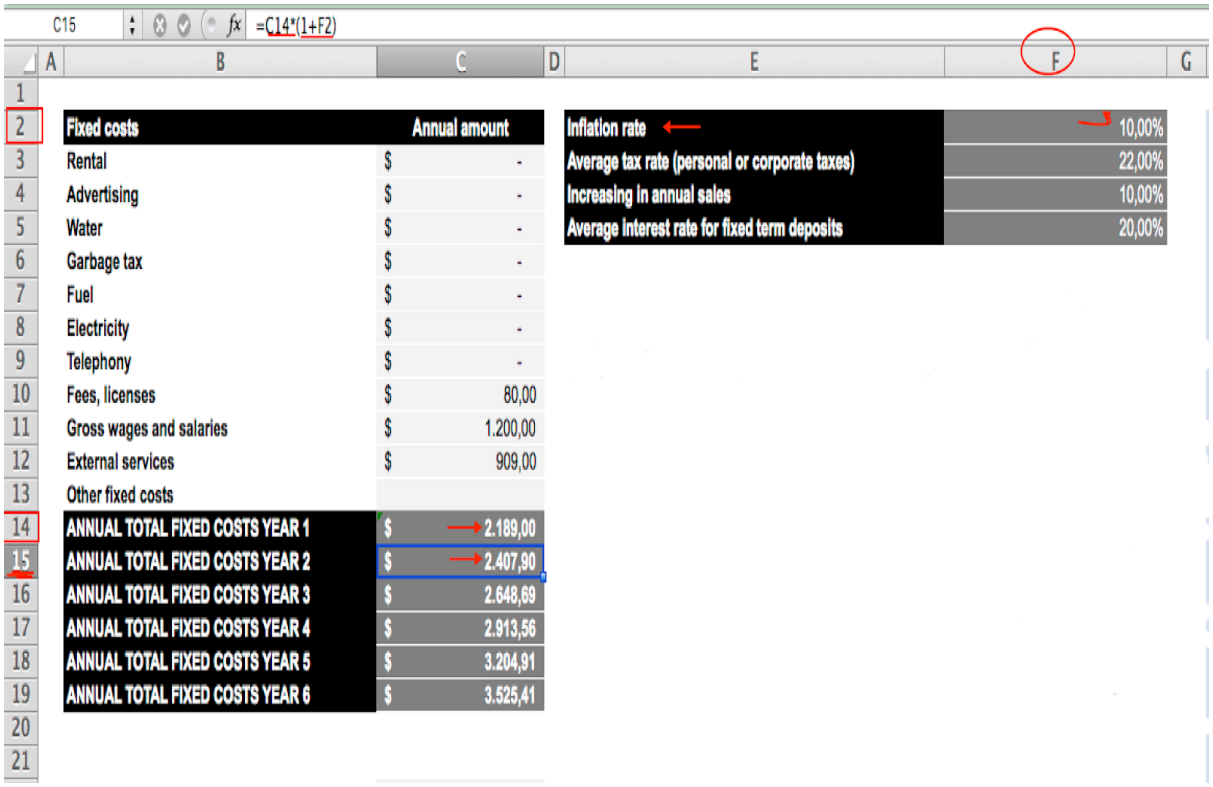
We used a tool which was provided by University of Almeria to students conducting feasibility analysis for their business projects. This tool assists get the best estimate possible to the new venture's first six year financial plan. It serves as a bigger image, or a snapshot, of core financial commitments and expenditures, as well as revenues and profits. The tool uses some fixed ratios such as corresponding inflation rate, average tax rate, and average interest rate for fixed term deposits. The tool consists of seven sheets, Instructions, Operating Data, Investment, Plan, Financial Plan, Break Even Point Analysis, Static Economic Analysis, and Financial Analysis.

8.2.1.1 Operating Data

8.2.1.1.1 Annual Fixed Costs for the First Six Years

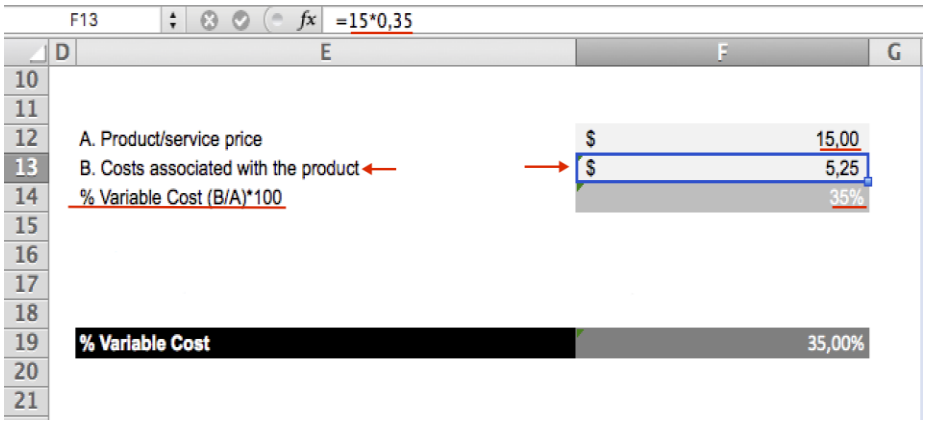
LANA's total annual amount of fixed costs for the first year is 2,189 USD (equivalent to 963,169 SYP). We have put under fees and licensing our annual payment of 80 USD for LANA's website hosting, and under gross wages and salaries we have multiplied our monthly payment to the Arab International University of 100 USD (equivalent to 44,000 SYP) by 12 months, which total the amount to an annual payment of 1,200 USD (equivalent to 528,000 SYP). Moreover, we entered 909,000 USD (equivalent to 400,000 SYP) under the external services field which is the amount LANA has to pay in order to become legally a Limited Liability Company in Damascus, Syria.

As for the second year, we see in the figure below how LANA's total fixed costs is 2,782.22 USD (equivalent to 1,224,176 SYP). This is because cell C15 (Annual Total Fixed Costs Year 2) is processed in a function in which first year's total fixed costs is multiplied by Syria's average inflation rate of 10% (added to 1). Similarly, the third year's total fixed costs is processed through the function in which the second year's total fixed costs is multiplied by Syria's average inflation rate of 10% (added to 1), and then the same applies for the fourth, fifth, and sixth year. See the figure below:

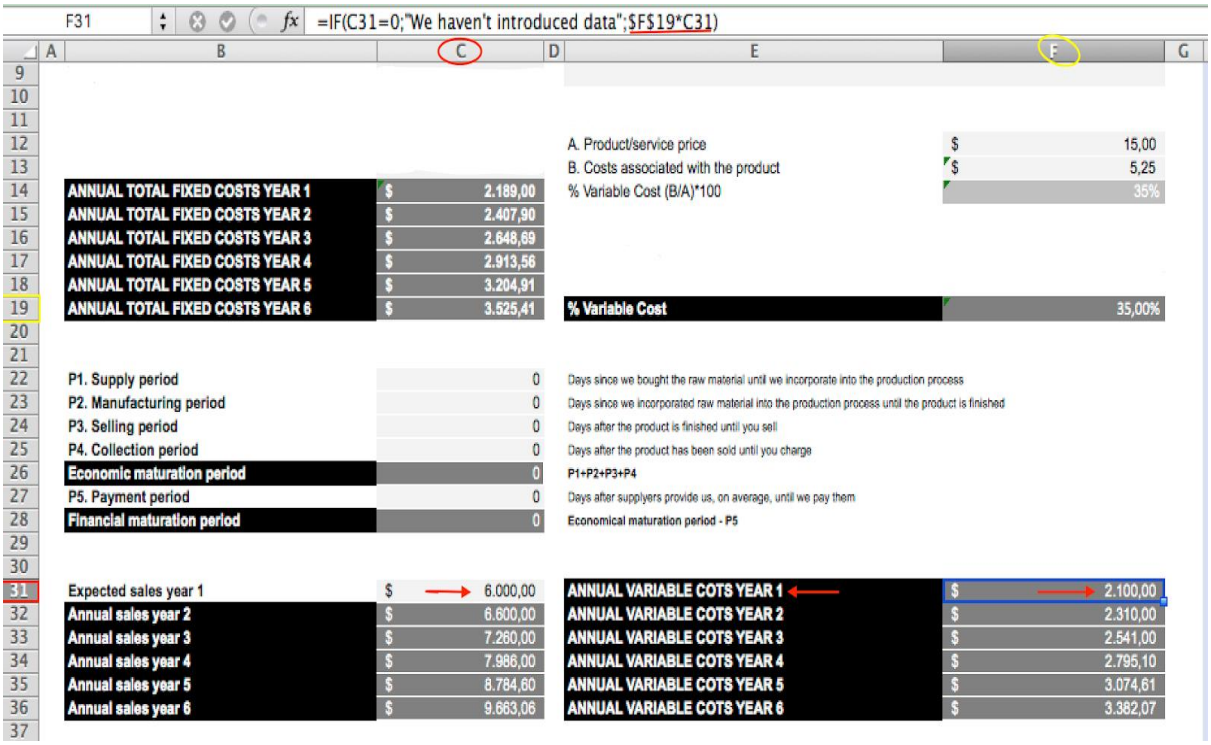


8.2.1.1.2 Annual Variable Costs for the First Six Years

LANA's average course price is 15 USD (equivalent to 6,600 SYP) -as potential customers indicated this preference of course price in the Concept Test Survey and Consumer Buyer Intention Survey. Costs associated with the course is calculated through the function shown in the figure below, given the input of 35% each instructor earns from every course purchase he/she is responsible for teaching.

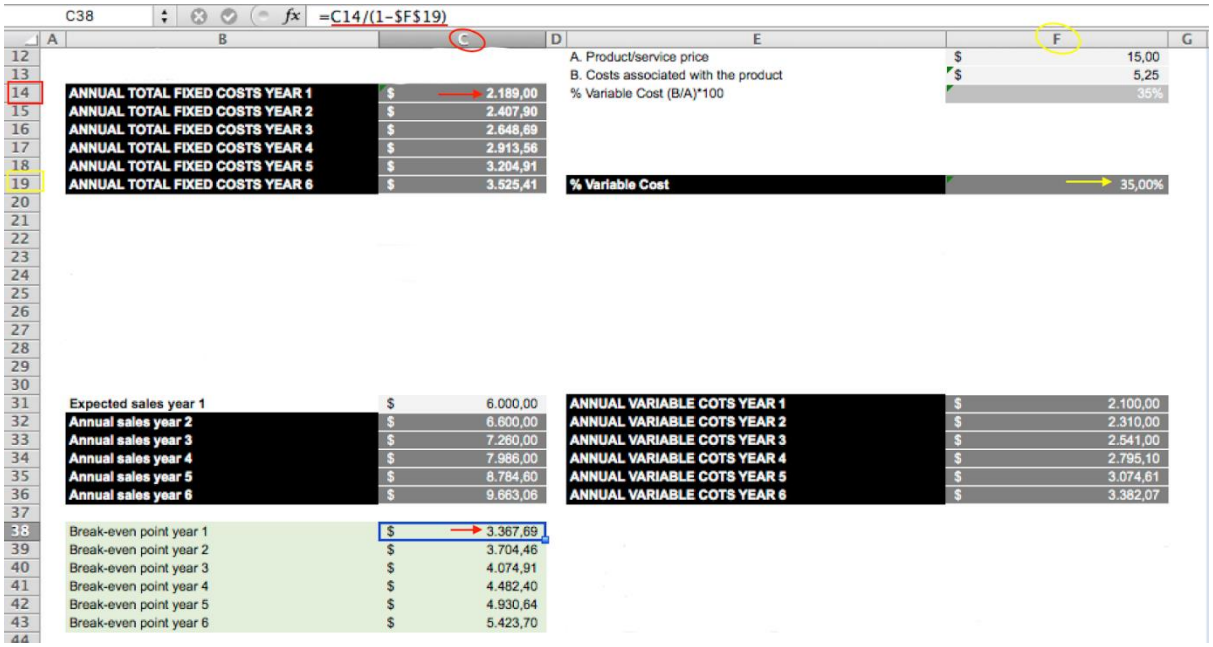


To calculate the firs year's total variable costs, the Excel tool displays a function of expected sales of year one multiplied by percentage amount of the variable cost, 35%. According to the function presented in the figure below, "$" is used before the cell letter "F" and F's cell number "19" for the reason of absolute addressing. This means when dragging cell F31 down (Annual Variable Cost Year 1) to F36 (Annual Variable Cost Year 6), cell C31 (Expected Sales Year 1) to cell C36 (Expected Sales Year 6) will all be multiplied by cell "F19" which is the percentage of the variable cost, 35%, and results appear respectively.



8.2.1.1.3. Break Even Point

The operating break-even point indicated the turnover (sales) we must reach to cover with the gross margin (difference between sales and variable cost), the fixed costs. The break-even point that provided greater information is the expanded one. Break-even point of year one is calculated as shown below in the Figure, The cell C14 (Annual Total Fixed Costs Year 1) is divided by 1 minus the variable cost, cell F19. And the same process is done for year two to six to get each year's break-even point.

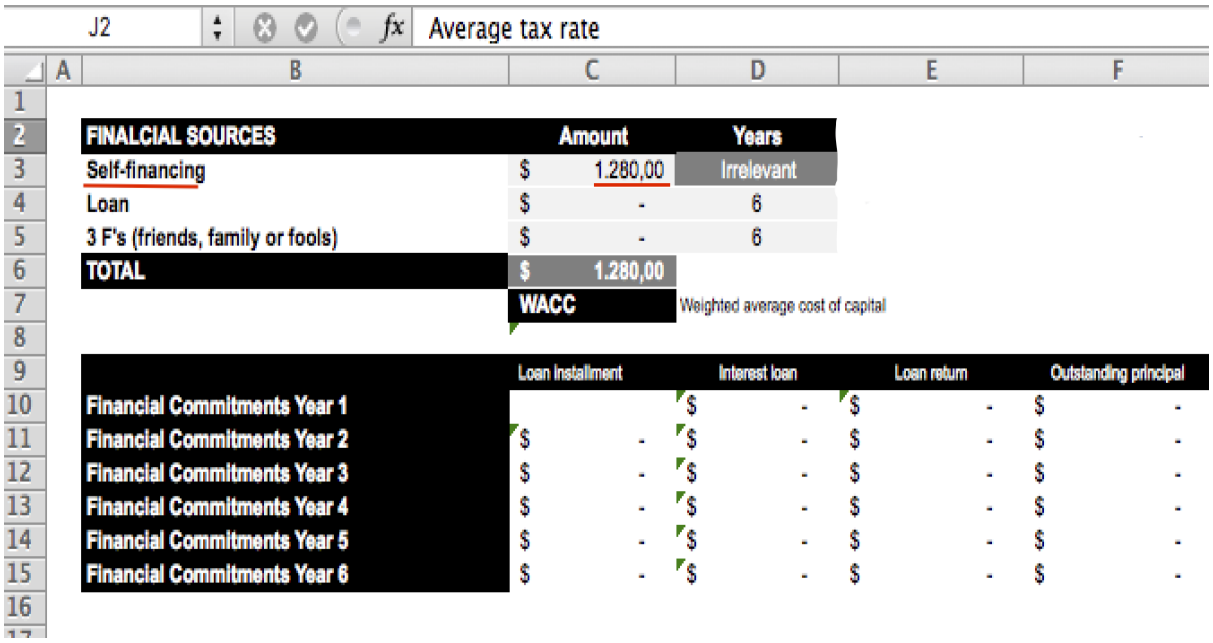


8.2.1.1.4. Investment Plan

As for the investment plan, we will be sharing the Arab International University's resources, therefore this implied a humble investment amount. Team members of the project will cover other remaining investments.

8.2.1.1.5. The Financial Plan

The financial plan in this tool displays the different sources of financing, self-financing, loans, 3F's (friends, family, and fools). In LANA's case, we will be the main sources of financing -the team members. The Arab International University does not have to provide us with monetary aid, sharing AIU's resources (lecturers and material) is the greatest help AIU could provide.

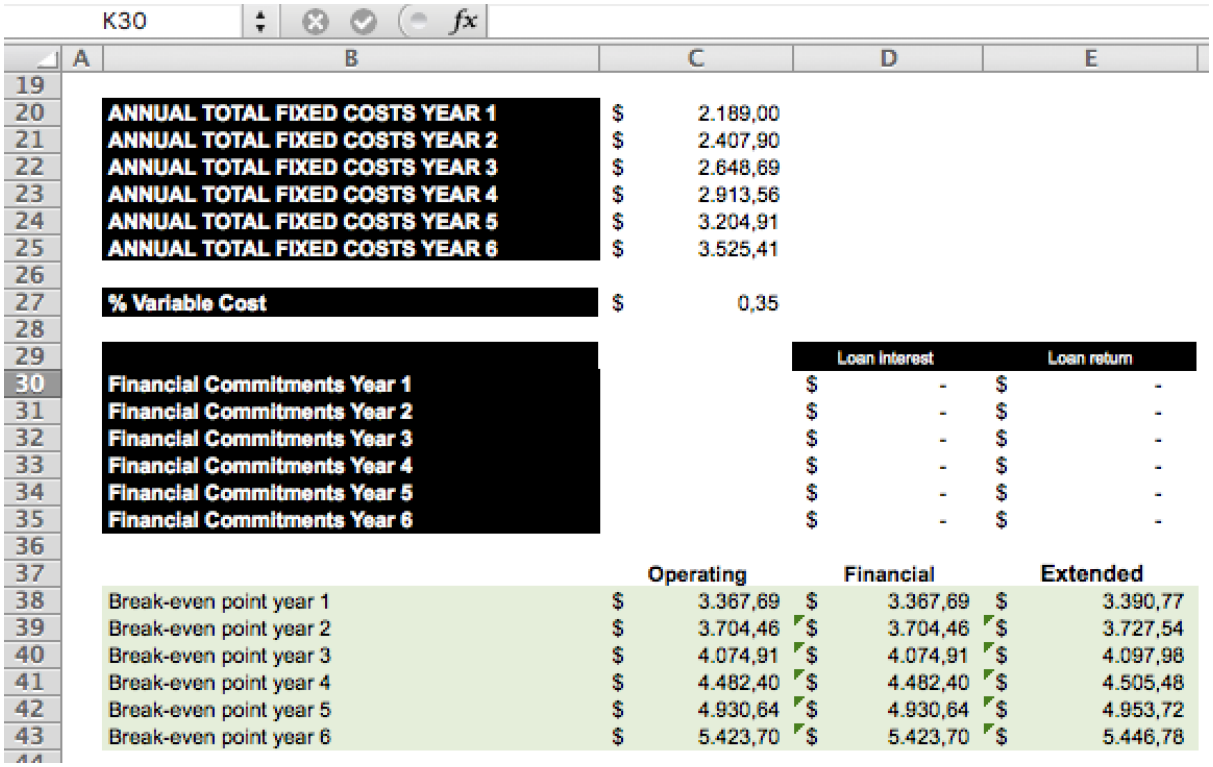


8.2.1.1.6. Break Even Point Analysis

Operating break-even point indicated the turnover (sales) we must reach to cover with the gross margin (difference between sales and variable cost) the fixed costs. It is obtained by dividing fixed costs (numerator) by the result of subtracting the percentage of the variable cost to a unit (the dominator): Fixed Cost / (1-%Variable Cost).

Financial break-even point indicates the turnover (sales) we must reach to cover with the gross margin (difference between sales and variable cost) the fixed costs and the interests involved to finance the project. It is obtained by dividing the sum of fixed costs and interest (numerator) by the result of subtracting the percentage of the variable cost to a unit (the denominator): (Fixed cost + interest) / (1-%Variable cost).

Expanded break-even point indicates the turnover (sales) we must reach to cover with the gross margin (difference between sales and variable cost) the fixed costs, the interest involved to finance the project and the loan repayment. This is the most relevant break-even point. It is obtained by dividing the sum of the fixed costs, interests and repayment of loans (numerator) by the result of subtracting the percentage of the variable costs to a unit (the denominator): (Fixed cost +interest + loan repayments) / (1-%Variable cost).



ANNUAL TOTAL FIXED COSTS YEAR 1	$	2.189,00				
ANNUAL TOTAL FIXED COSTS YEAR 2	$	2.407,90				
ANNUAL TOTAL FIXED COSTS YEAR 3	$	2.648,69				
ANNUAL TOTAL FIXED COSTS YEAR 4	$	2.913,56				
ANNUAL TOTAL FIXED COSTS YEAR 5	$	3.204,91				
ANNUAL TOTAL FIXED COSTS YEAR 6	$	3.525,41				
% Variable Cost	$	0,35				

	Loan interest	Loan return
Financial Commitments Year 1	$ -	$ -
Financial Commitments Year 2	$ -	$ -
Financial Commitments Year 3	$ -	$ -
Financial Commitments Year 4	$ -	$ -
Financial Commitments Year 5	$ -	$ -
Financial Commitments Year 6	$ -	$ -

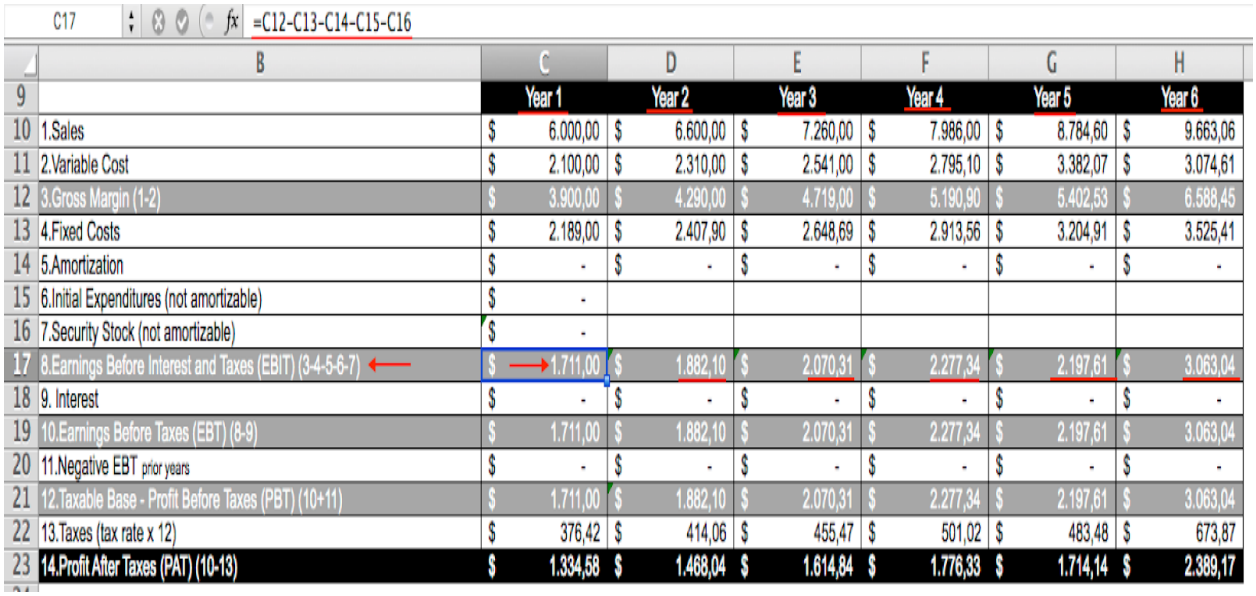
	Operating	Financial	Extended
Break-even point year 1	$ 3.367,69	$ 3.367,69	$ 3.390,77
Break-even point year 2	$ 3.704,46	$ 3.704,46	$ 3.727,54
Break-even point year 3	$ 4.074,91	$ 4.074,91	$ 4.097,98
Break-even point year 4	$ 4.482,40	$ 4.482,40	$ 4.505,48
Break-even point year 5	$ 4.930,64	$ 4.930,64	$ 4.953,72
Break-even point year 6	$ 5.423,70	$ 5.423,70	$ 5.446,78

8.2.1.1.7. Static Economic Analysis

This is an economic analysis, because it wants to give a measure of the profitability of the company, of its earnings, this analysis is static because it does not consider the different value of money over the years. It does not consider an update rate (or weighted aver cost of capital or WACC). This analysis is based on the P&L Account (profit and loss), the difference between income and expenses.

This analysis cannot conclude whether a project is profitable, or if it is definitely viable. In fact this analysis is valuable, because it allows knowing your taxable base and then calculating the tax to pay.

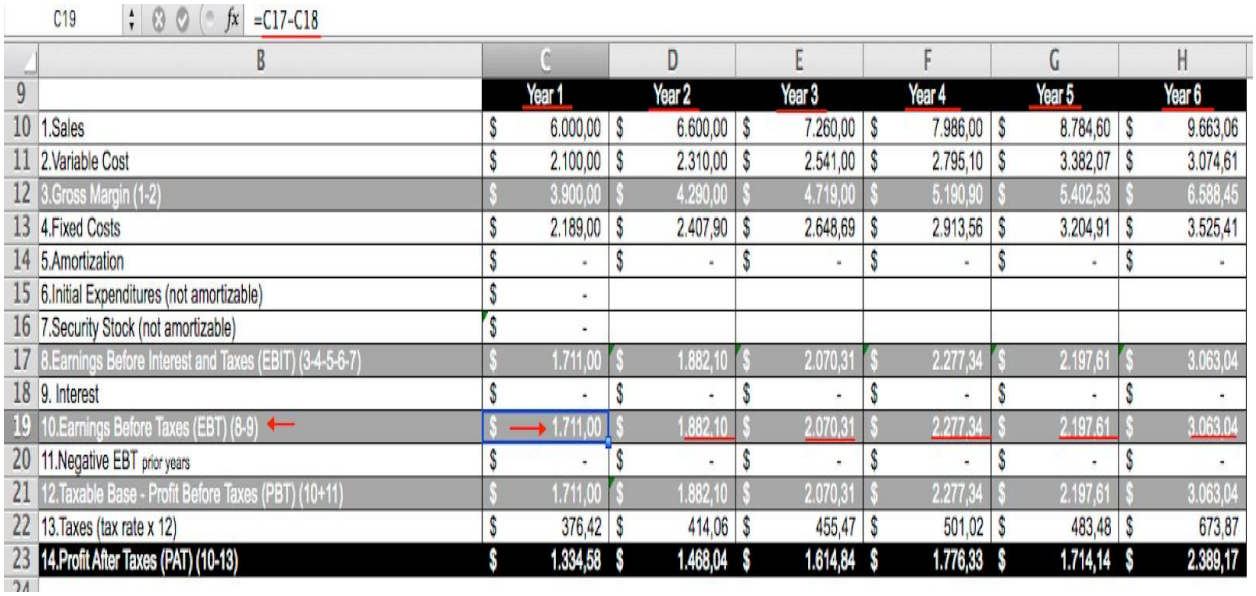
The figure below shows how Earnings before Interest and Taxes (EBIT) is calculated, the same method for all six years. We subtract Security Stock from Initial Expenditures, then we subtract the result from Amortization, then the result is subtracted from Fixed Costs, then finally the result is subtracted from Gross Margin.



C17 =C12-C13-C14-C15-C16

	B	C	D	E	F	G	H
9		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
10	1.Sales	$ 6.000,00	$ 6.600,00	$ 7.260,00	$ 7.986,00	$ 8.784,60	$ 9.663,06
11	2.Variable Cost	$ 2.100,00	$ 2.310,00	$ 2.541,00	$ 2.795,10	$ 3.382,07	$ 3.074,61
12	3.Gross Margin (1-2)	$ 3.900,00	$ 4.290,00	$ 4.719,00	$ 5.190,90	$ 5.402,53	$ 6.588,45
13	4.Fixed Costs	$ 2.189,00	$ 2.407,90	$ 2.648,69	$ 2.913,56	$ 3.204,91	$ 3.525,41
14	5.Amortization	$ -	$ -	$ -	$ -	$ -	$ -
15	6.Initial Expenditures (not amortizable)	$ -					
16	7.Security Stock (not amortizable)	$ -					
17	8.Earnings Before Interest and Taxes (EBIT) (3-4-5-6-7)	$ 1.711,00	$ 1.882,10	$ 2.070,31	$ 2.277,34	$ 2.197,61	$ 3.063,04
18	9. Interest	$ -	$ -	$ -	$ -	$ -	$ -
19	10.Earnings Before Taxes (EBT) (8-9)	$ 1.711,00	$ 1.882,10	$ 2.070,31	$ 2.277,34	$ 2.197,61	$ 3.063,04
20	11.Negative EBT prior years	$ -	$ -	$ -	$ -	$ -	$ -
21	12.Taxable Base - Profit Before Taxes (PBT) (10+11)	$ 1.711,00	$ 1.882,10	$ 2.070,31	$ 2.277,34	$ 2.197,61	$ 3.063,04
22	13.Taxes (tax rate x 12)	$ 376,42	$ 414,06	$ 455,47	$ 501,02	$ 483,48	$ 673,87
23	14.Profit After Taxes (PAT) (10-13)	$ 1.334,58	$ 1.468,04	$ 1.614,84	$ 1.776,33	$ 1.714,14	$ 2.389,17

And the figure below shows how Earnings before Taxes (EBT) is calculated for each year. Simply by subtracting Interest (C18) from Earnings before Interest and Taxes (EBIT) (C17).



C19 =C17-C18

	B	C	D	E	F	G	H
9		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
10	1.Sales	$ 6.000,00	$ 6.600,00	$ 7.260,00	$ 7.986,00	$ 8.784,60	$ 9.663,06
11	2.Variable Cost	$ 2.100,00	$ 2.310,00	$ 2.541,00	$ 2.795,10	$ 3.382,07	$ 3.074,61
12	3.Gross Margin (1-2)	$ 3.900,00	$ 4.290,00	$ 4.719,00	$ 5.190,90	$ 5.402,53	$ 6.588,45
13	4.Fixed Costs	$ 2.189,00	$ 2.407,90	$ 2.648,69	$ 2.913,56	$ 3.204,91	$ 3.525,41
14	5.Amortization	$ -	$ -	$ -	$ -	$ -	$ -
15	6.Initial Expenditures (not amortizable)	$ -					
16	7.Security Stock (not amortizable)	$ -					
17	8.Earnings Before Interest and Taxes (EBIT) (3-4-5-6-7)	$ 1.711,00	$ 1.882,10	$ 2.070,31	$ 2.277,34	$ 2.197,61	$ 3.063,04
18	9. Interest	$ -	$ -	$ -	$ -	$ -	$ -
19	10.Earnings Before Taxes (EBT) (8-9)	$ 1.711,00	$ 1.882,10	$ 2.070,31	$ 2.277,34	$ 2.197,61	$ 3.063,04
20	11.Negative EBT prior years	$ -	$ -	$ -	$ -	$ -	$ -
21	12.Taxable Base - Profit Before Taxes (PBT) (10+11)	$ 1.711,00	$ 1.882,10	$ 2.070,31	$ 2.277,34	$ 2.197,61	$ 3.063,04
22	13.Taxes (tax rate x 12)	$ 376,42	$ 414,06	$ 455,47	$ 501,02	$ 483,48	$ 673,87
23	14.Profit After Taxes (PAT) (10-13)	$ 1.334,58	$ 1.468,04	$ 1.614,84	$ 1.776,33	$ 1.714,14	$ 2.389,17

8.2.1.1.8. Financial Analysis

The financial analysis ties to check if the company is able to face the payment commitments with the receipts generated. The analysis is based on the planned cash account -the difference gives rise to cash balance. This analysis allows us to conclude definitively whether the project is viable. For this reason, cash balances must never be negative. Refer to the figure below.

C18 =C12-C13-C14-C15-C16+C17

	B	C	D	E	F	G	H
9		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
10	1.Sales	$ 6.000,00	$ 6.600,00	$ 7.260,00	$ 7.986,00	$ 8.784,60	$ 9.663,06
11	2.Variable Cost	$ 2.100,00	$ 2.310,00	$ 2.541,00	$ 2.795,10	$ 3.382,07	$ 3.074,61
12	3.Gross Margin (1-2)	$ 3.900,00	$ 4.290,00	$ 4.719,00	$ 5.190,90	$ 5.402,53	$ 6.588,45
13	4.Fixed Costs	$ 2.189,00	$ 2.407,90	$ 2.648,69	$ 2.913,56	$ 3.204,91	$ 3.525,41
14	5. Interest	$ -	$ -	$ -	$ -	$ -	$ -
15	6. Loan Repayment	$ 15,00	$ 15,00	$ 15,00	$ 15,00	$ 15,00	$ 15,00
16	7. Taxes (calculated in the Static Economic Analysis)	$ 376,42	$ 414,06	$ 455,47	$ 501,02	$ 483,48	$ 673,87
17	8. VAT Investment Recovery	$ -					
18	10. Net Cash Flow (3-4-5-6-7+8)	$ 1.319,58	$ 1.453,04	$ 1.599,84	$ 1.761,33	$ 1.699,14	$ 2.374,17
19	11. Cash Balance (sum of Net Cash Flows)	$ 1.319,58	$ 2.772,62	$ 4.372,46	$ 6.133,79	$ 7.832,92	$ 10.207,10
20							
21							
22							
23	Is the business project viable?	Yes, it presents no negative cash balance					

8.3 Opportunity Attractiveness Assessment

8.3.1 Concept Test

Concept Testing is the investigation of potential consumers' reactions to a proposed product or service before introducing the product or service to market. As businesses and organizations look to launch a product or invest in the development of an idea, concept testing is a valuable step to identify perceptions, wants and needs associated with a product or service. We have created LANA's Concept Test Survey via Google Forms. A Concept Test includes a Concept Statement and the Survey. LANA's Concept Statement covered the description of our business, the target market, why should consumers choose LANA, special feature/s, naming, and lastly management team.

8.3.1.1 Product

As written in our Concept Statement, "The net enrolment rate for primary education dropped from 92% in 2004 to 61% by 2013 (61.1% for female and 62.4% for male) and, for secondary education, from around 72% in 2009 to 44% in 2013 (43.8% for female and 44.3% for male), according to Marta Guasp Teschendorff, United Nations University. Since the conflict began in 2011, 309 education facilities were attacked and one in three schools can no longer be used because they were destroyed, damaged, used for military purposes or for hosting displaced families (UNICEF, 2018). Our to-be-established business is currently specifically for the Syrian youth who want to pursue university-level education and/or other broader knowledge, but it can also be available for other Arabic speaking countries/individuals. We will be targeting the Syrian market (Syrian university-level students). We want to offer our customers the convenience (whenever, wherever) and ease of accessing valuable material they lack or want to improve. The courses will be available online on our official website, and accessing the educational platform requires registering (for new customers) or logging in (for already registered customers). Our website supports registration for both tutors and students. Some courses are free, and some are very cheap."

8.3.1.2 Target Market

As written in our Concept Statement, "Our main focus is Syrian university-level students. Our website will have university level material available with video, audio, PPT, PDF, etc. This material serves university level students in Syria, but can surely be used as general knowledge for higher or lower age categories inside or outside Syria (Arabic Speaking countries)."

8.3.1.3 Why LANA?

As written in our Concept Statement, "LANA will be the only Syrian local website which serves the Syrian university-level students and enriches them with the material needed in Business, Pharmacy, Architecture, Arts, and Law (the Arab International University Faculties)."

8.3.1.4 Special Features

As written in our Concept Statement, "As a special feature, unlike many online courses websites, LANA's website will have social networking feature. This means that registered students and tutors can add their friends, communicate and share opinion (one-on-one private

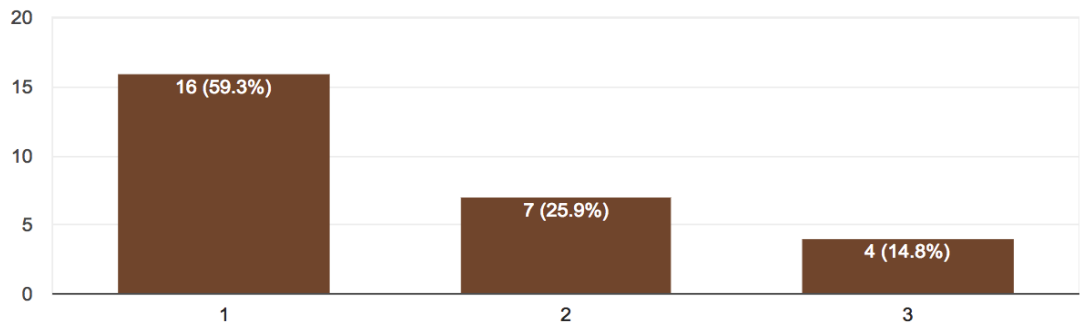
message threads, as well as group message threads). LANA strives to bring to its users courses in which the sense of connectivity and interactivity is present (many users lack the motivation to finish the whole course)."

8.3.2 Concept Test Survey

The survey questions were designed after establishing the Concept Statement.

Concept Test Survey Question 1.

How important is social networking feature for you when taking an online course?



1 being "Very Important", 2 being "Important", 3 being "Not Important"

Concept Test Survey Question 2.

List three things you like about our concept statement.

Everything
طرح مفهوم جديد نحن بحاجة له بمجتمعنا ، مساعدة الطلاب مجاناً او بمبلغ بسيط بظل الاوضاع الراهنة
contone, form local univetsy
1-its essential to our community 2-it's material derives from specialized profs
It is online thus easily accessed at any time, great to help students increase their knowledge by communicating with others, all people can access it since it is ecinomically cheape
.
Providing the social networking feature and the fact that it's focusing on Syrian students.
Consistency , organizing , objectivity
Simple, straightforward and practical.
Simplicity.. feasibility.. credibility
Interaction with others, sharing knowledge and quick infomration transfer.

List three things you like about our concept statement.

supporting child education covering all education levels The supporting courses will be available online
nice idea, type of material,
close Web , availability , security
I don't like social networking during learning
Social networking is not good at online courses
Sharing the opinions of students & tutors.
No comment
Learn Anywhere, Online, Anytime
online education is essential in the current world
Refernced numbers, the name LANA, the social networking feature
i don't like the social media during my study

List three things you like about our concept statement.

No comment
Learn Anywhere, Online, Anytime
online education is essential in the current world
Refernced numbers, the name LANA, the social networking feature
i don't like the social media during my study
Plan for improvement, Close availability, Its online and cheap, Contains important subjects.
1.The structure of concept statement , 2. It is comprehensive 3. The product
it is available for all - It have variaty of material needed in Business, Pharmacy, Architecture, Arts, and Law (the Arab International University Faculties) - It is accrediable
1- domains of study 2- Target Market
E-learning: easy reaching the course whereever you are, Cheap cost and valuable information

*note: The answer "I do not like social media during my social media during my study" may have believed that social networking was the same as social media. Social networking here implies communicative, interactive enhancement to the online course, not social media.

Concept test survey question 3.

Suggest three things to make our concept statement/product better.

Include more majors, make video chats with students, include alot of specialised people in each field and who can teach in several languages
.
I suggest that you don't require money from students for courses (even very cheap fees) especially at the begging.
Make a competitive advantage that make this website unique , look at other apps, websites and see the weakness gaps to improve your project , English and arabic courses for students with low-english levels
Add Help link, add link to courses materials and brief history why this business is.
It's perfect statement for me, but if you can link it to marketing area it would be better
The conversation should be divided by subjects, social, scientific and administrative. furthermore, it should be supervisod by a proper admin team to avoid misinforming others or transferring wrong info.
use the social media to get more support
contribute with local and international organization and university, let's your targets SMART, this project related to the budget, therefore, you should clarify the allocated budget and better to work on one specific subject in the beginning, we have to think about the online material and if the vulnerable people are able to connect to internet.
attractive news for student , updated Web , added value

Suggest three things to make our concept statement/product better.

N/A
better marketing; more visibility; more targeted products
More clarification on the targeted tutors not only students
homework,teamwork
-Choose day to day subjects, that is important for improving the level of the study. -Make levels for certain subjects, first course for beginners, then for people to go deeper, they may have advanced level/s ...etc. -Introduce the subject carefully, and put details about it before taking it, -Add test after each big session, that covers the important keys of the session, -Make a final test, that includes the whole concept of the subject, -When repeating the final test having other questions, -Give an interesting and beautiful certificate when passing the final test, describing the subject clearly.
1. you need to make it catchy , 2. Make it readable 3. give examples and make concise
have both languages arabic and english - to also cover the all ages and levels - to cover all governorate
mention the language of provided materials, mention more details about the graduation
Selfdevelopment courses in which they didn't teach them in collage

Concept test survey question 4.

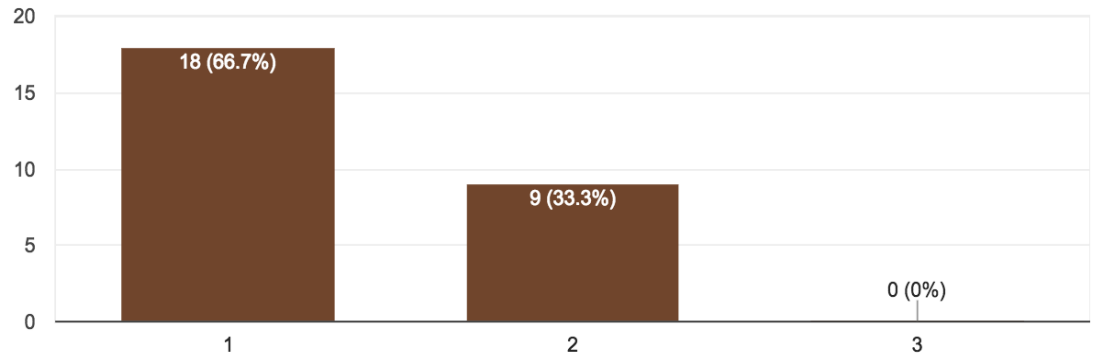
Do you think the idea is viable/feasible?

Yes (5)
yes (5)
viable (2)
feasible (2)
نعم قابلة للتطبيق
Why not,
Viable
Yes it is feasible and beneficial
not in syria
Yes indeed
Yes, surely.
Feasible

96.3% of respondents answered "Yes" to this question.

Concept test survey question 5.

How favorable is your overall reaction?



1 being "Very Favorable", 2 being "Favorable", 3 being "Not Favorable"

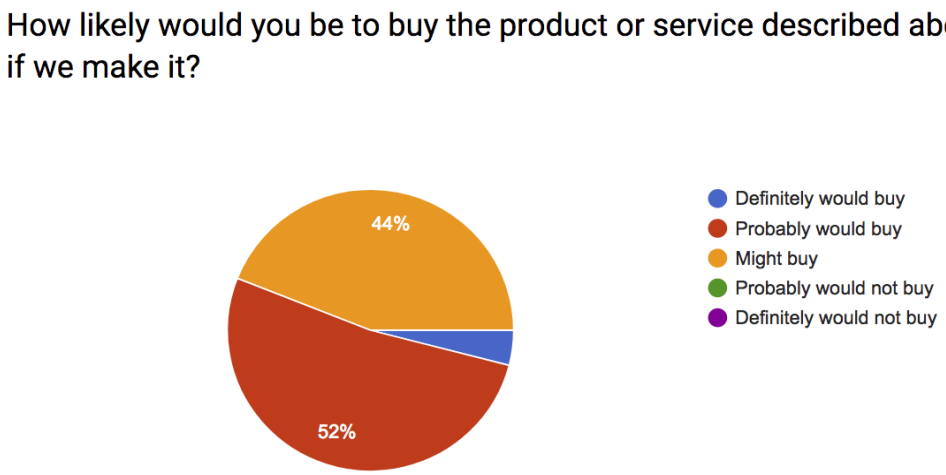
8.3.3 Buyer Intention Survey

8.3.3.1 Introduction

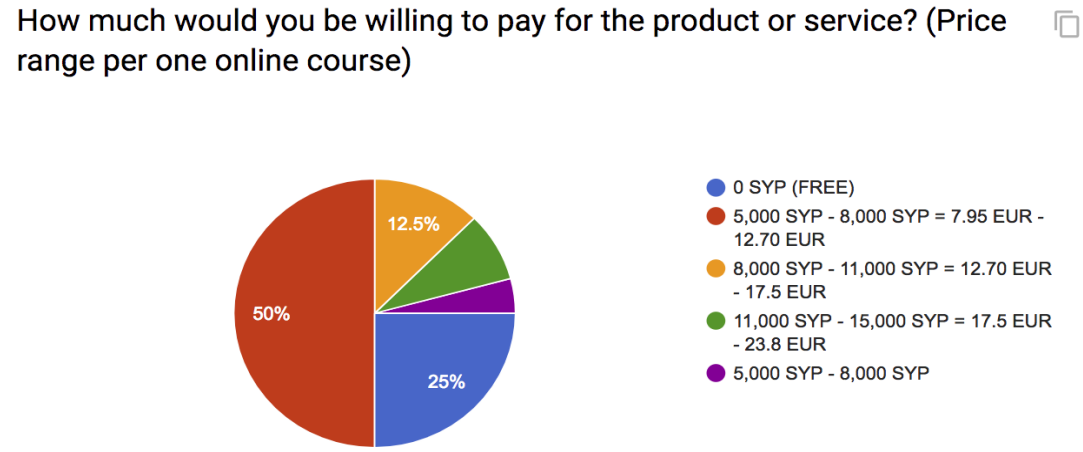
The net enrolment rate for primary education dropped from 92% in 2004 to 61% by 2013 (61.1% for female and 62.4% for male) and, for secondary education, from around 72% in 2009 to 44% in 2013 (43.8% for female and 44.3% for male), according to Marta Guasp Teschendorff, United Nations University. Our to-be-established business is currently specifically for the Syrian youth who want to pursue university-level education and/or other broader knowledge, but it can also be available for other Arabic speaking countries/individuals. We want to offer our customers the convenience (whenever, wherever) and ease of accessing valuable material they lack or want to improve. The courses will be available online on our official website, and accessing the educational platform requires registering (for new customers) or logging in (for already registered customers). Our website supports registration for both tutors and students. Some courses are free, and some are very cheap.

8.3.4 Buyer Intention Survey Questions

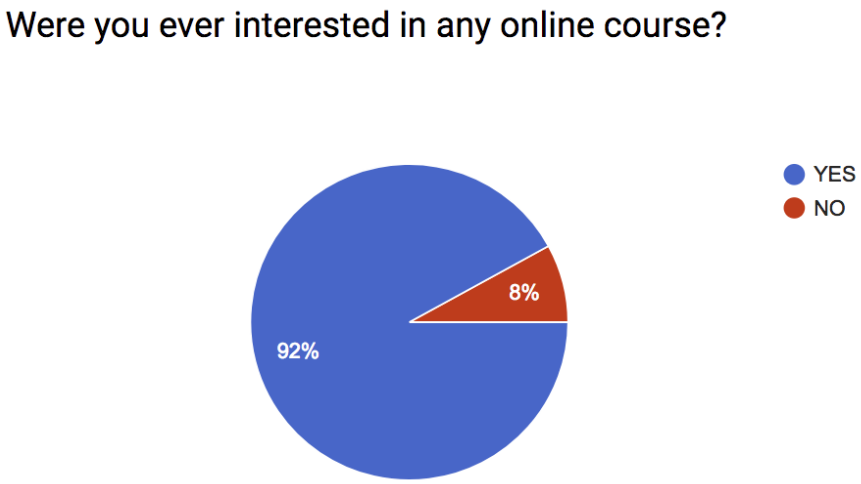
Buyer intention survey question 1.



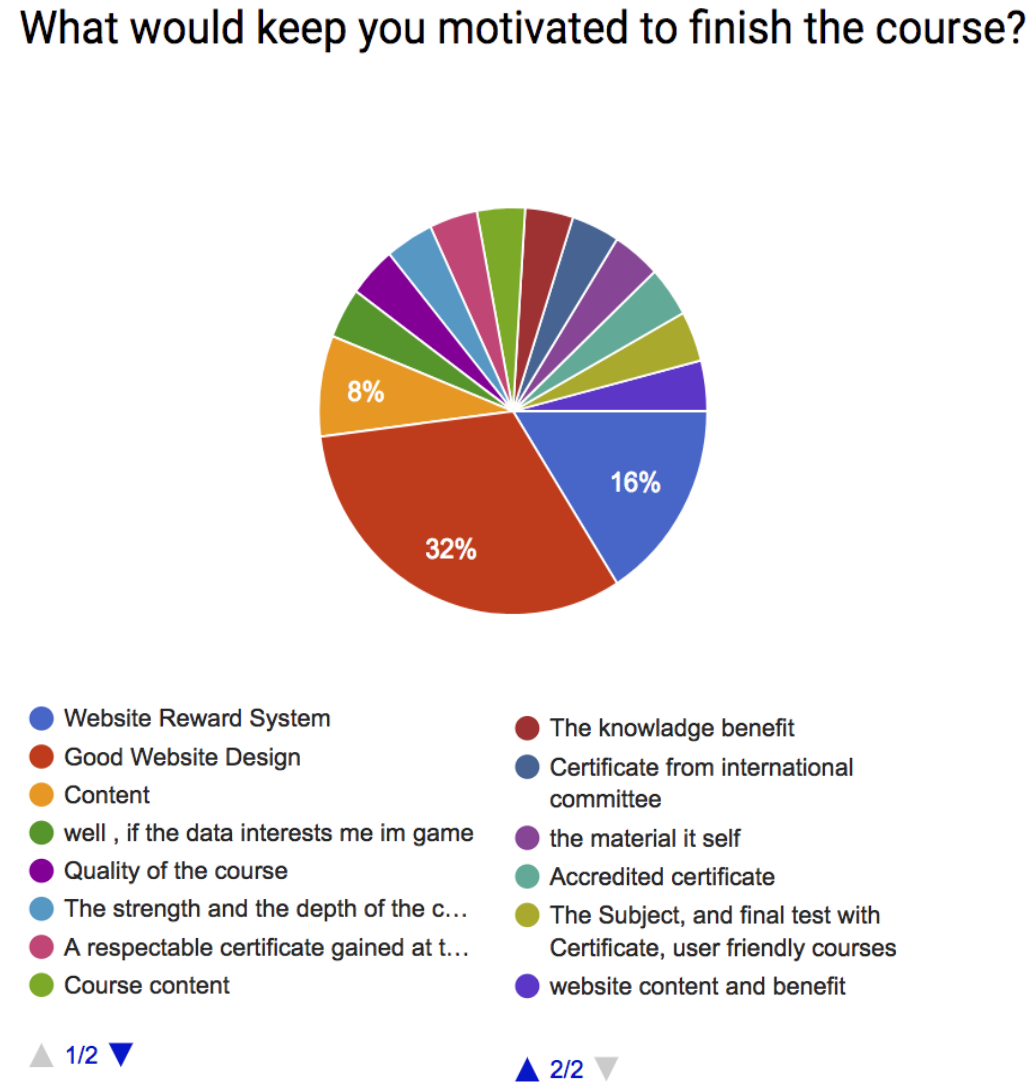
Buyer intention survey question 2.



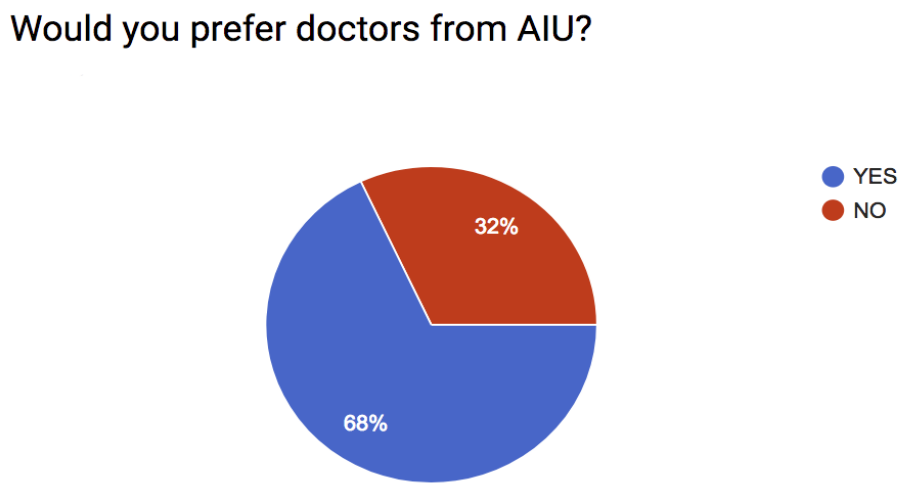
Buyer intention survey question 3.



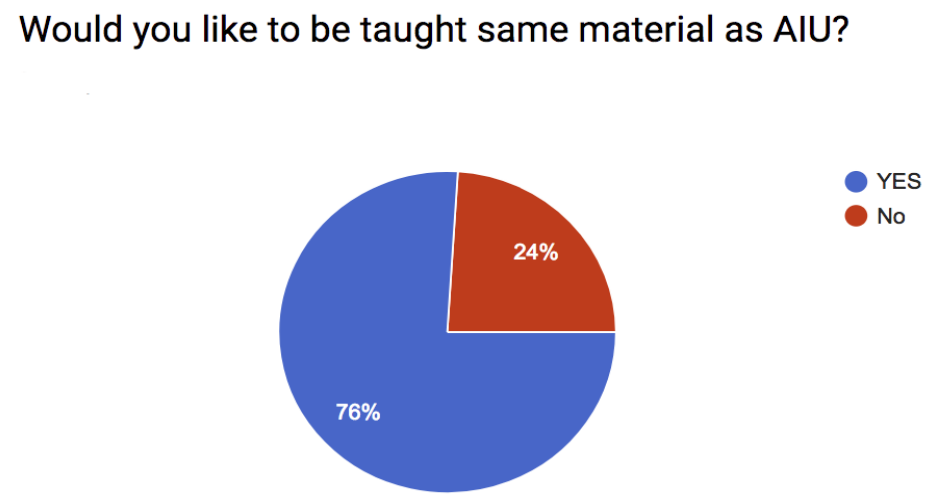
Buyer intention survey question 4.



Buyer intention survey question 5.



Buyer intention survey question 6.



9. Environment Analysis

9.1 General Environment Analysis (PESTEL)

PESTEL Analysis is a concept in marketing principles. Moreover, this concept is used as a tool by companies to track the environment they are operating in or are planning to launch a new project/product/service etc. PESTLE is a mnemonic which in its expanded form denotes P for Political, E for Economic, S for Social, T for Technological, L for Legal and E for Environmental. It gives a bird's eye view of the whole environment from many different angles that one wants to check and keep a track of while contemplating on a certain idea or plan.

9.1.1 Political

The Political aspect of this analysis looks into the political situation of the country and how it can affect the industry. In our case, Syria's political situation has been deteriorating since 2011, which led to many negative occurrences some of which are school destructions and IDPs. This consequently plays a huge role in our favor, in which we strive to work out our social responsibility towards individuals who suffered and continue to suffer from lack of access to education.

9.1.2 Economic

The Economic aspect of this study focuses on the prevalent economic factors. For-profit companies, Syria has had several business start-up reforms over the past decade, and still ranked low in the Doing Business Annual Report performed by World Bank Group, moving down from 165th rank on Ease of Starting a Business 2014 list to 174th rank on Ease of Starting a Business 2018 list. Business start-up in 2018 in Damascus, Syria requires seven and a half procedures, reportedly, fifteen and a half days, 7.9% cost of income per capita percentage, and a minimum capital of 84% of income per capita percentage. Moreover, in getting credit, Syria is ranked 173rd in 2018.

SYRIAN ARAB REPUBLIC		**Middle East & North Africa**		**GNI per capita (US$)**	**1,037**
Ease of doing business rank (1–190)	**174**	**Overall distance to frontier (DTF) score (0–100)**	**41.55**	**Population**	**18,430,453**
Starting a business (rank)	133	**Getting credit** (rank)	173	**Trading across borders** (rank)	176
DTF score for starting a business (0–100)	80.43	DTF score for getting credit (0–100)	15.00	DTF score for trading across borders (0–100)	29.83
Procedures (number)	7.5	Strength of legal rights index (0–12)	1	*Time to export*	
Time (days)	15.5	Depth of credit information index (0–8)	2	Documentary compliance (hours)	48
Cost (% of income per capita)	7.9	Credit bureau coverage (% of adults)	0.0	Border compliance (hours)	84
Minimum capital (% of income per capita)	84.0	Credit registry coverage (% of adults)	7.1	*Cost to export*	
				Documentary compliance (US$)	725
Dealing with construction permits (rank)	186	**Protecting minority investors** (rank)	89	Border compliance (US$)	1,113
DTF score for dealing with construction permits (0–100)	0.00	DTF score for protecting minority investors (0–100)	53.33	*Time to import*	
Procedures (number)	no practice	Extent of disclosure index (0–10)	7	Documentary compliance (hours)	149
Time (days)	no practice	Extent of director liability index (0–10)	5	Border compliance (hours)	141
Cost (% of warehouse value)	no practice	Ease of shareholder suits index (0–10)	3	*Cost to import*	
Building quality control index (0–15)	0.0	Extent of shareholder rights index (0–10)	6	Documentary compliance (US$)	742
		Extent of ownership and control index (0–10)	5	Border compliance (US$)	828
Getting electricity (rank)	153	Extent of corporate transparency index (0–10)	6		
DTF score for getting electricity (0–100)	51.99			**Enforcing contracts** (rank)	161
Procedures (number)	5	**Paying taxes** (rank)	81	DTF score for enforcing contracts (0–100)	42.58
Time (days)	146	DTF score for paying taxes (0–100)	73.97	Time (days)	872
Cost (% of income per capita)	247.3	Payments (number per year)	20	Cost (% of claim)	29.3
Reliability of supply and transparency of tariffs index (0–8)	0	Time (hours per year)	336	Quality of judicial processes index (0–18)	4.0
		Total tax and contribution rate (% of profit)	42.7		
Registering property (rank)	155	Postfiling index (0–100)	92.20	**Resolving insolvency** (rank)	163
DTF score for registering property (0–100)	46.88			DTF score for resolving insolvency (0–100)	21.44
Procedures (number)	4			Time (years)	4.1
Time (days)	48			Cost (% of estate)	16.0
Cost (% of property value)	28.0			Recovery rate (cents on the dollar)	10.8
Quality of land administration index (0–30)	10.5			Strength of insolvency framework index (0–16)	5.0

LABOR MARKET REGULATION DATA

Economy	Hiring					Working hours								
	Fixed-term contracts prohibited for permanent tasks?	Maximum length of fixed-term contracts (months)[a]	Minimum wage for a cashier, age 19, with one year of work experience (US$/month)[b]	Ratio of minimum wage to value added per worker	Maximum length of probationary period (months)[c]	Maximum number of working days per week	Premium for night work (% of hourly pay)	Premium for work on weekly rest day (% of hourly pay)	Premium for overtime work (% of hourly pay)	Restrictions on night work?	Whether non-pregnant and non-nursing women can work the same night hours as men	Restrictions on weekly holiday work?	Restrictions on overtime work?	Paid annual leave (working days)[d]
Syrian Arab Republic	No	60.0	35.2	0.2	3.0	6.0	0.0	100.0	37.5	No	No	Yes	No	21.7

9.1.3 Social

These factors scrutinize the social environment of the market, and gauge determinants like cultural trends, demographics, population analytics etc. Internet usage has been on the rise in Syria despite the struggles Syria has been facing since 2011. Moreover, we think the most crucial social aspect that affects our business is the amount of individuals in the population who have received sufficient knowledge and skills to interact with a computer and work with the Internet. In other words, how big is our potential customers circle is in the Syrian society, and what requirements should the customers have to be able to use and benefit from our online services? Our potential customers circle is very large, as the majority of the Syrian population knows how to operate and interact with a computer and work with the Internet. However, the real challenge is making the society aware of the existence of our business.

9.1.4 Technological

These factors pertain to innovations in technology that may affect the operations of the industry and the market favorably or unfavorably. This refers to automation, research and development, and the amount of technological awareness that a market possesses. LANA surely and clearly employs numerous technological aspects, not only in terms of the website itself and its features, but also searching and developing teaching techniques and course material. LANA strives to embrace, adopt, and develop innovativeness in technology.

9.1.5 Environment

Factors of a business environmental analysis include but are not limited to climate, weather, geographical location, global changes in climate, environmental offsets in general, etc. The environment we need is highly dependent on Internet usage and computer driving skills. LANA has this aspect covered through website development processes, and our potential customers have it covered by having Internet access.

9.1.6 Legal

There are certain laws that affect the business environment in a certain country while there are certain policies that companies maintain for themselves. For example, consumer laws, safety standards, labor laws etc. An example in the Syrian consumer law is Syrian Arab Republic Law No. 2/2008 on Consumer Protection, which includes 10 chapters regarding the needs of the consumer, warranties, guarantees, and compensations.

9.2 Specific Environment Analysis (Porter's 5 forces)

Porter's 5 forces model identifies and analyzes five competitive forces that shape every industry and helps determine an industry's weaknesses and strengths. Porter's model can be applied to any segment of the economy to search for profitability and attractiveness.

9.2.1 Competition in the Industry

The number of competitors and their ability to threaten a company. The larger the number of competitors, along with the number of equivalent products and services they offer, dictates the power of a company. In LANA's case, there is no much competition locally, in Syria, as LANA will be the first in its kind in the Syrian market (especially that LANA focuses on both university level material (Business, Architecture, Pharmacy, Law, and Art) as well as general knowledge and skills development). However, there is a huge competition going on in this market (online courses) internationally speaking (in various languages, including English and Arabic).

9.2.2 Potential of New Entrants into the Industry

A company's power is also affected by the force of new entrants into its market. The less money and times it costs for a competitor to enter a company's market and be an effective competitor, the more a company's position may be significantly weakened. We do not think it is quite as easy for competitors to enter this market. Our main competitive advantage is our social network with the university and the lecturers at the university. Potential competitors may have the money to recruit website programmers to develop an online course website, but may not have access to university level material. It may feasible, but not very easy to conduct, as competitors need not only to pay for website development (which we did on our own, due to our team's variety of skills) but also for tutors and for universities to provide them with the material. Our social position is strategic, we are able to spread word of mouth and we are able to have access to valuable material and lecturers.

9.2.3 Power of Suppliers (Bargaining)

This refers to how easily suppliers can drive up the price of goods and services. It is affected by the number of suppliers of key aspects of a good or service, how unique these aspects are and how much it would cost a company to switch from one supplier to another. The fewer number of suppliers, and the more a company depends upon a supplier, the more power a supplier holds. LANA's main supplier is the Arab International University -material and lecturers. This makes the power of our supplier fairly high.

9.2.4 Power of Customers (Bargaining)

This specifically deals with the ability customers have to drive prices down. It is affected by how many buyers, or customers, a company has, how significant each customer is and how much it would cost a customer to switch from one company to another. The smaller and more powerful a client base (a company's primary source of business, which are the current customers and potential customers), the more power it holds. We have realized that indeed, our client base is big, but LANA will be one of its kind in the market. Meaning that Syrian individuals looking to learn Syrian university level material will have one option only, which is LANA.

9.2.5 Threat of Substitute Products

Competitor substitutions that can be used in place of a company's products or services pose a threat. For example, if customers rely on a company to provide a tool or service that can be substituted with another tool or service or by performing the task manually, and this substitution is fairly easy and of low cost, a company's power can be weakened. For example, in LANA's case, one substitute could be Arabic Online, and other available online courses.

10. SWOT analysis

The SWOT analysis is often considered a more macro review, as it can give a sense of whether an objective is attainable. Users often go through a SWOT exercise simply to identify their own competitive advantages and disadvantages.

10.1 Strengths

- Time and Location flexibility
- Combines different approaches to learning science in a method that should we widely accessible
- Celebrates the role of non-faculty educators as key players in pushing a learner-centric education
- Learner-centered and self-placed
- Effective communication
- Comment their feedbacks and see other user's rating
- Dedicated community for answering your questions

10.2 Weaknesses

- Bad courses and communication
- Not diversified
- Can't afford instant answers
- Imitation among students and teachers possible
- Increased preparation time for instructor

10.3 Opportunities

- New technologies can allow for a more enhanced learning environment for students
- Possibility to dominate the regional market
- Potentially available to global audience
- New pedagogical methodologies can be discovered

10.4 Threats

- Increasing costs to maintain and host website when traffic increases
- Difficulty recruiting and keeping quality instructors.
- Difficulty engaging students in a manner that is conducive to learning
- Numbers of enrolled students is declining in recent years despite
- Completion rates of enrolled students is stagnant
- Competition

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