Lifelong Learning Platforms Based on Social Networks

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Social media platforms are a growing industry and are being used in the everyday tasks by almost everyone. The purpose of this article is to explain the manner in which these social platforms can be used to enhance the efficiency of the lifelong learning process. The paper contains a review over some of the main articles in this domain and the used data was retrieved by conducting an online survey, the target population being persons with the age between 24 and 29 years old. Keywords: Social Media, Learning, Platform

Introduction

Over the past years social network platform came up with more and more ways of improving the learning process. This brand new world of social media has captured the attention of scholars, students and even the teachers adopt this new way of learning.

Writers around the world had led to the publication of a number of works about the most used social platform nowadays.

Most of these books are practical and industrybased in nature and do not consider in-depth the social media impact in audiences and communication strategies. Nevertheless, the vitality of the editorial market underlines the research relevance than social media and social networks are acquiring. [4].

Using social platforms as learning tools involve some changes that must be made by all people who intend to use them. If for nowadays children using smart technology may not be that hard for some teachers this might be a challenge. Even the children's parents have to keep up with them if they want to keep an eye on their progress at school and some other extracurricular activities.

In order to use social network platform as learning platform you need to have some technic abilities and software knowledge.

2 Literature Review

In the article on Wikipedia related to Facebook's origin (formerly known as Facemash) we can see that the most popular social network today, Facebook, is currently more than 13 years old, and initially was aimed as a social network to serve only Mark Zuckerberg and his roommates at Harvard University.

What began as a local network for students to socialize, is now the biggest social network, with more than 1.5 billion active users each day, a milestone that has changed and continues today to change the face of Information Technology.

In efrontlearning.com's 2015 article "Using social media for eLearning (a look at the top 6 social platforms)" it is highlighted that Facebook, that used to be a social network in the past, is today a component of our everyday lives, the place where we make acquaintances, communicate on the go, learn about the news, be in touch with our family, a market for commercial activities where companies can promote their products, professional activities, nonprofit organization activities, charity events, and the list goes on.

We can also learn from the same article that this ever growing market of using social-media like platforms for increasing types of services, has led to specialized social media platforms, such as the popular LinkedIn that is currently the most widely used and trusted Professional Networking Platform.

Being an important part of our lives, social media platforms, can also support eLearning activities, as edudemic.com's 2015 article "How to Use Social Media as a Learning Tool" points out, where several ways of accumulating knowledge through social media Platforms, are highlighted.

For example, a said user interested in learning, can find and join thousands of discussion groups on specific topics where that user shares

interest in similar topics. Content sharing platforms such as Youtube and Vimeo can also allow anyone, for free, to view learning content online, or even host their own content.

Major universities such as MIT, Harvard and Stanford even launched their own YouTube channels where lectors from said Universities frequently record educational videos that are shared worldwide for free.

This is what makes Social Media as the perfect platform for Life Long Learning, a concept that helps keep the mind and body of individuals healthy by continuously fueling their curiosity and having new experiences when learning new skills, throughout the entire life.

It has been observed over the years, that usually, graduates that suddenly stop learning, participating in community activities, creating projects, acquiring new skills, typically experience a fading intellectual performance that can even lead to an underperforming memory that's also related to forgetting skills previously acquired. The Life Long Learning concept has proven that by maintaining a lifestyle where you continuously learn new things and experience new activities, it results in having a positive impact on individuals' concentration, memory, creativity, adaptability and learning from mistakes. Another reason for this is that skills and knowledge acquired, especially in the IT Industry, end up being a moving target, becoming obsolete information very fast, especially by the time they are being taught in schools and Universities.

However, this voluntary, and self-motivated lifelong pursuit of knowledge, is what boosts personal and professional development and ensures an individual has skills that are marketable and is able to compete in such a dynamic society as we have today, where newer and better information reaches us faster and faster.

One characteristic of the Life Long Learning concept is that learning shouldn't be restricted to a specific location or time, this way it is encouraged to have continuous access to information wherever you are and you are not limited in any way by the time or place where you are. As the number of mobile users continuously grows and outweighs that of the desktop users, it makes sense to look into contacting individuals through large and popular social media platforms where you ensure that many people can access information.

3 Research Method

In this section are described in detail the power of social network platform used as learning tools. We'll now explore how social media platform's user base grew over time:

From 2003 on social networks reach the mainstream, and start producing audience figures we could consider "massive". Their audience growth has been explosive. In April 2009, Facebook had 200 million users worldwide: in March 2010 it had reached 400 million. By November 2010, Facebook's estimated audience is more than 547 million users. Only 26% of the users are in the United States: we are facing a genuinely global phenomenon. Twitter shows more modest audience figures (19 million in March 2009; 75 million in March 2010), and more than 44% of users are in the United States [4].

If they are used carefully, social platforms can be a useful tool rather than a distraction. In some other article, post argues that using social media not only brings current technology to the classroom, but it also helps bridge the digital divide among lower-income students. These students may not have the constant access to social media that their counterparts do and in this situation they can't be left behind.

From teachers point of view right now some of them use this brand new way of learning in their classes in order to maintain the connection with the students and in the same time bring something new in the learning process. Such as posting different announcements about some postponed classes or project deadlines might be some examples. When we think from student point of view, they can be up to date almost in real time about some changes, new information and may get easier to communicate with the teacher. Other than that, students can connect to some other classroom by social platforms, can write articles that can be accessed more easily by certificated teachers in order to publish them at scientific journals.

With this new technology progress almost every social platform can offer multiple ways of learning while navigating through the web.

Targeted Online Survey introduction

To assess and analyze what Life Long Learning means or could mean in the future, for a wider range of people with varying levels of interest in this subject, we conducted an online survey that was presented as a research we are doing for planning a Life Long Learning platform concept.

In order to ensure that the targeted individuals belong to the social categories that would be fitting for the object of this survey, the participants were reached via a social media platform, Facebook, where each participant was briefed thoroughly and was presented with the survey link once they confirmed they understand what the results will be used for, and once they expressed their consent for the results to be included in a future research paper.

Demographics of the respondents

The exact number of participants is 43, and the survey was performed over the course of one week, during 24-31 March 2017, and results were gathered and managed in a Microsoft Office Excel Spreadsheet, as soon as all respondents have finished answering all of the questions.

The targeted individuals' ages range between 24 and 29 years old, with the average age being of 25 years old. In order to rule out any bias, one of the initial goals was to establish a good balance between the genders of the participants, therefore out of a total of 43 participants, 20 participants were females. In terms of employment, 86.05% (37 of 43) out of the respondents are either employed or were pursuing employment at the time of conducting the aforementioned survey.

To optimize the conversion rate of respondents that complete the survey we avoided a long survey by asking 10 questions in the survey, with an estimated time to complete the survey of 5 minutes. The chosen way of obtaining results is through an online survey that provides tools to visualize and interpret the gathered data. Therefore, the platform that was used for this survey is <u>http://iSondaje.ro</u> because it provided the means of accessing and sharing an accessible to anyone survey that is also available on a mobile phone.

4 Survey sample

Below is the configuration of the survey used, where the participants were submitted to several types of questions: The first section's role is to establish the respondent's knowledge, familiarity and amount of time spent with social media; the purpose of the second section, after confirming weather the participants are pursuing further study, is to highlight what would be a preferred way of interacting with teachers or fellow colleagues, the ideal platform they would like to access educational content and the preferred content type. The last section is meant to get an insight on how the future of education is perceived, by asking where the participants feel that the future of education lies in the next 10 years, whether it's online only (with peer reviews, online communities, group discussions on specific topics, shareable documentation and online collaboration tools), offline only or mixed between the two.

How much time do you spend on social media platforms?

- Less than one hour a day
- 1-2 hours a day
- 3 hours or more, a day

Which social media platforms do you use more often? (Multiple answer)

- Facebook
- Twitter
- LinkedIn
- Instagram

What platform do you use more often each day?

- Desktop
- Mobile or Tablet

Do you pursue to obtain any certification or to complete any courses in the future?

- Yes
- No

Would you join a free, educational program, targeted at specific topics that audience is interested in?

- Yes
- No, I prefer general education videos

Would you be interested in using your existing social media account for such a service?

- Yes, I don't want another account somewhere else
- No, I want to create a separate account on a new platform

How would you prefer to access educational content on the social media platforms you use? (Multiple answer)

- Videos
- Audio recording of courses
- Quizzes
- Written articles
- Power Point presentations

How would you like to interact with your colleagues and/or the assigned teachers during such a course? (Multiple answer)

- Live classrooms through video conferencing
- Group chat
- Audio conferencing
- Forums with topics opened for discussing topics with fellow colleagues or teachers
- Peer Reviewed virtual classroom assignments

Would you trust education content being delivered online, that's created by known Universities? (multiple answer)

- Certified Teachers
- Speakers that have vast knowledge in the specific field
- Recently graduated students with specialized in a specific field

What do you think the future of educational institutions will look like in 10 years?

- Online / Offline mixed
- Online only
- Offline only

5 Obtained Results

The purpose of the question is set is to isolate multiple tendencies in today's profile of education pursuers. In the first part of the question set, we would like to establish how actively is the person responding in the quiz, using social media and how involved they are in the various major social media networks. This is where we would like to first see where the respondent falls in the major categories of users based on the amount of time spent daily on any of the social media networks used.

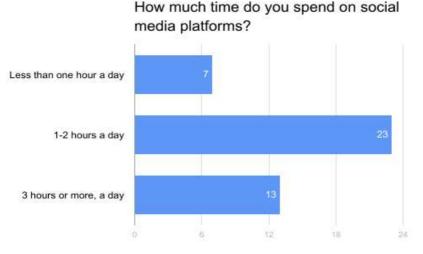
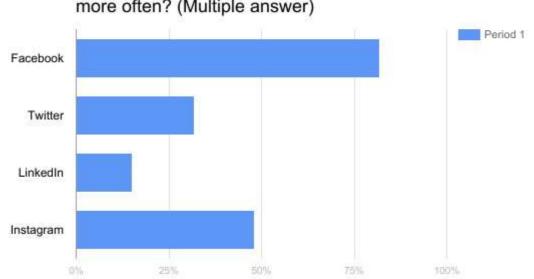


Fig. 1. Question meant to establish the degree of social media familiarity

The following section helps establish a hierarchy among the major social media networks used today, it can be observed that Facebook holds the majority with more than 75%, while the rest of the social media networks, in descending order are Instagram (a Popular image based sharing social media network) followed by Twitter and LinkedIn.



Which social media platforms do you use more often? (Multiple answer)

Fig. 2. The above question is meant show which social media platform is more popular, among the major social media platforms available right now

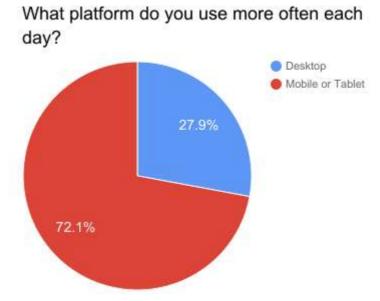
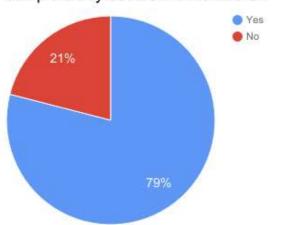


Fig. 3. Answers to this question confirm that the mobile and tablet is more used than a desktop

Following the ascending trend of mobile devices since the year 2011, when the number of mobile devices accessing online content, started rapidly increasing (Dave C., 2017).

It can be observed that this situation is also reflected in the respondents' results, with more than 27% using a mobile device to access content daily.



Do you pursue to obtain any certification or to complete any courses in the future?

Fig. 4. Fourth question, where we outline weather or not the majority of respondents currently pursue the completion of a course or the obtainment of a certification

This question is meant to establish the future plans of the respondent, how likely it is for the respondent to pursue further education or to apply for certifications in the future. This is to isolate the demand of such an activity across all of the respondents. It can be observed that the majority of 79% would like to continue their education either through courses or through certifications.

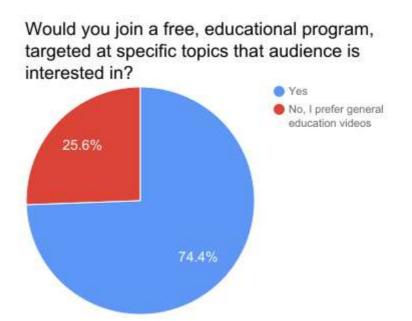
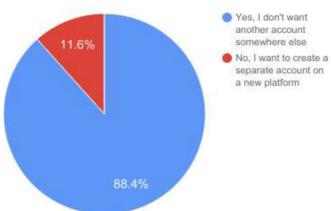


Fig. 5. Fifth question, meant to highlight the preferred type of content that will be accessed for educational purposes



Would you be interested in using your existing social media account fur such a service?

Fig. 6. Sixth question shows that the 88.4% of respondents would prefer to link their existing accounts instead of creating a new account

After the conclusion that can be observed by the answers to the previous questions, where it becomes clear that targeted education would suit most people as opposed to a more general approach, we can now see that most audience would prefer using one of the existing social media accounts that they possess, instead of creating a new account on a new platform.

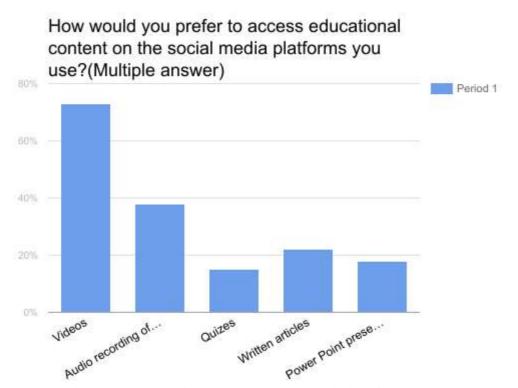


Fig. 7. Seventh question, where we outline weather or not the majority of respondents currently pursue the completion of a course or the obtainment of a certification

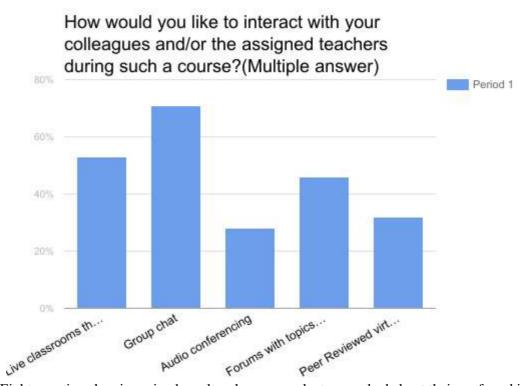


Fig. 8. Eight question showing mixed results when respondents are asked about their preferred interaction with their future colleagues or teachers, group chat being the most popular choice

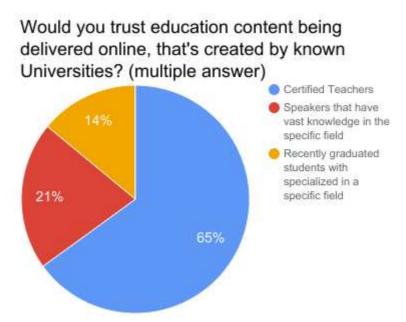
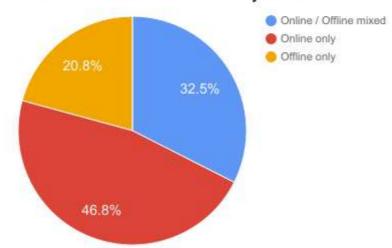


Fig. 9. Ninth question, showing that certified teachers are currently being the most trusted source of information

As seen in figure 9, 65% of respondents prefer certified teachers as source of information. Far behind, at second place, we have knowledgeable speakers as the next source of information with 21% of the participants saying they would prefer speakers with a vast knowledge in a specific field



What do you think the future of educational institutions will look like in 10 years?

Fig. 10. Last question, showing that 46.8% of respondents estimate they will be accessing educational content online within the next 10 years.

Further analysis of the results will follow in the next section where we will examine conclusions in detail

6 Results Observation

The first section of the survey (beginning with **Fig. 1**) has the role to establish the amount of social media activity each respondent has. This helps as it allows for a better analysis within the next section of questions, where we establish the participant's eagerness to access educational content through Social Media, this way also observing the incline towards maintaining a lifestyle of continuous learning which would be a main goal that future users of a Life Long Learning platform would have.

An example of such a calibration could occur if most participants would have answered that they don't use social media regularly, followed by the majority of answers to the question where they are asked if they would rather use a dedicated platform instead. This would be a case where it would be indicated that a dedicated Life Long Learning service would be more desired.

Another observation is that 88.40% out of the total number of respondents expect a Life Long Learning platform to be integrated in social media, as the most popular answer being that they would use their existing social media profile, instead of creating another account on an

emerging Life Long Learning platform. This would also be in the benefit of the Life Long Learning platform, as Facebook's active user base, according to Wikipedia, is of 1.5 billion users each day, making it an ideal location to grow a Life Long Learning community where users can communicate, share, and access learning content.

Another interesting conclusion is that is confirmed by questions No. 10 and by several scientific publications is that there is a growing tendency for internet users to access educational content. "The usefulness of the Internet for learning purposes is also reflected in Eurostat data. In 2009, an average of 31% of the EU27 population (aged 16 to 74) already use the Internet for seeking information with the purpose of learning, up 8% from 2007. This figure shows little variation across Member States, ranging between 20% and 50% in the majority of European countries." [10].

This also means that portable devices connected to the internet, that are becoming more and more part of our everyday life, can also act as a gateway to learning content, without being dependent on a specific location.

7 Conclusions

As the results of the survey show, when talking about the perfect Life Long Learning platform that has to be developed based on the profile of the respondents, we can outline the following characteristics and observe the following find-ings:

- 1. The ideal Life Long Learning platform has to be developed using a responsive design that can adapt to mobile devices such as smartphones or tablets, an alternative is to use a development environment that can accommodate the major mobile operating systems iOS 10.x and Android 6+. This is to ensure that it can be accessed on the go, especially being given that any Life Long Learning service (often times abbreviated as LLL) has to be available any day, anytime and anywhere.
- 2. For the best results when developing a Life Long Learning platform we have to take into consideration the integration with the major and popular social media accounts, because most users would use the quicker way of signing in with their existing account instead of creating a new one.
- 3. Attractive content would be, of course, mandatory for a successful Life Long Learning platform, where a percentage of more than 74% responded that they would be attracted by targeted content, that's ideally into categorized into specific topics for easier access. On this topic, more than 65% have also responded that the ideal learning material would be Video recordings, followed by Audio recordings and other types of written materials.
- 4. It can also be observed that building a community has multiple benefits, as more than 45% of the respondents said that they would make use of collaboration tools where both course participants and trainers could be able to connect, discuss and share ideas.
- Following the trend where education content is less and less tied to a specific institution or a specific country, major universities such as Stanford (available at https://www.youtube.com/user/Stanfor-dUniversity/videos), Harvard and MIT (available at https://www.youtube.com/user/Stanfor-dUniversity/videos), Harvard and MIT (available at https://www.youtube.com/user/Stanfor-dUniversity/videos))))))))))))))))))))))))))))))))))

platforms such as YouTube. Another example is given in the scientific paper called "The role of social media in higher education classes (real and virtual) – A literature review" "Social media are increasingly visible in higher education settings as instructors look to technology [...]quote continued from last page[...] to mediate and enhance their instruction as well as promote active learning for students.

Most of the existing research on the utility and effectiveness of social media in the higher education class is limited to self-reported data (e.g., surveys, questionnaires) and content analyses." [8]. Comparing this with the fact that most survey participants also see the future of education becoming globally available to everyone and with Social Media Platforms having approximatively 2.5 billions of users worldwide, with more than 68% of Adults in the US [9], it becomes clear that this would be the ideal way to reach most of the Earth's population when creating a Life Long Learning platform.

References

- [1] <u>https://en.wikipedia.org/wiki/His-</u> tory_of_Facebook
- [2] <u>https://www.efrontlearn-</u> ing.com/blog/2015/06/using-social-mediafor-elearning-a-look-at-the-top-6-socialplatforms.html
- [3] <u>http://www.edudemic.com/how-to-use-so-</u> <u>cial-media-as-a-learning-tool-in-the-class-</u> <u>room/</u>
- [4] Pérez Latre, F. P. (2011). Social Networks, Media and Audiences: A Literature Review. *Communication & Society*, 24(1), 63-74. Accessed on 08 April 2017
- [5] Dave C. (2017). Statistics on consumer mobile usage and adoption to inform your mobile marketing strategy mobile site design and app development. Available at: <u>http://www.smartinsights.com/mobilemarketing/mobile-marketing-analytics/mobile-marketing-statistics/</u> Accessed on 09 April 2017

- [6] The Stanford Youtube Channel. Available at: <u>https://www.youtube.com/user/StanfordUniversity/videos</u> Accessed on 05 may 2017
- [7] The MIT Openware Youtube Channel. Available at: <u>https://www.youtube.com/user/MIT</u> Accessed on 05 may 2017
- [8] Tess A. P. (2013). The role of social media in higher education classes (real and virtual)
 A literature review. Available at <u>http://www.sciencedirect.com/science/article/pii/S0747563212003743</u> Accessed on 05 April 2017
- [9] Perrin A. (2016) Social Media Update 2016
 Pew Research Center. Available at: http://www.pewinternet.org/2016/11/11/social-media-update-2016/ Accessed on 09 April 2017
- [10] Redecker, C., Ala-Mutka K., and Punie Y. (2010) Learning 2.0 - The Impact of Social Media on Learning in Europe - European Commission Joint Research Centre, Available at: <u>http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.460.2564&rep=rep1&typ e=pdf</u> Accessed on 05 may 2017



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