

An International Peer-Reviewed ITTIES- Open Access Journal of Interdisciplinary Studies



E LEARNING APPLICATIONS – AN EFFECTIVE STARTUP AND MEDIUM OF RURAL EDUCATION

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Abstract

According to the research report conducted by KPMG online education industry will be a \$1.96 billion industry by 2021. The study reveals internet users to grow from 409 million to 735 million. India has become world's fastest growing mobile app market.

Online learning is most convenient and flexible option. Mobile app revenues in India shot up in the first quarter of 2018 across both android and iOS platforms. Though India ranked 29th in generating revenues worth US\$47 million. Nevertheless future prospectus for India's app market is dazzling.

Rethinking and revising India's traditional education system will lead our approach towards e learning. Since Government of India is promoting start up initiative learning apps can be a benefited option.

This research focus on two main aspects:-

- Study of 'Learning apps as effective startups.'
- Study of learning apps as a medium of easy access in urban area.

This is a descriptive research. One to one interview has been done for collection of data. The sample size of study is 124. Primary data was obtained by their responses. Secondary data was collected from different sites, journals, research papers, reports & internet search.

Introduction

Startup India is a flagship initiative of the government of India. The campaign was launched by Hon'ble Indian Prime Minister Narendra Modi in 2016. This mission is intended to build a strong eco system for nurturing innovations and Startups in the country that will drive sustainable economic growth and generate large scale employment opportunities.

The scheme has encouraged entrepreneurs to come up with their start up ideas and plans. The campaign was a great start for startup industry in India. As a result many new startups are started taking place.

The main objective of this research is

• To check the potential of learning apps as a great startup plan.











• To check the usage of learning apps in rural area.

Key words Online education, Learning apps, internet usage, startup, Indian government, rural education, start up India

Literature review:

<u>What is online learning?</u>

The simplest definition of online learning is learning accessible through an internet connection. The fact is there is no single definition for what online learning is all about. Online learning is increasing on a rapid speed across the globe.

Computer/ web/ internet/electronic/ mobile/ gazette based learning/ training/ education can sum up as online learning or education.

According to 'India Education' - 'online education is electronically supported learning that relies on the internet for teacher/student interaction and distribution of class materials'

According to Encyclopedia - 'online education is a flexible instructional delivery system that encompasses any kind of learning that takes place via internet'

Online education across the globe.

There is a noteworthy growth in the rate of online learning. The revenue rate of online learning is \$51.5 billion across the globe in 2016 and it is growing unstoppably.

Growth rate approx. according 2016 statistics:

- Corporate e learning has developed 900% over past 16 years.
- 77% US organizations offer web based preparation.
- For 42% organizations E learning expanded proceeds.
- 67% of organizations offer E learning in some form.
- E learning market is accepted to be \$37.6 billion by 2020.

<u>Online learning in India:</u>

As mentioned earlier in the abstract Indian education market is magnetized by online education. In terms of Indian education system learning apps are proved helpful to learners. Here are very few prominent applications which are currently available. Let's review it.

| Name of the application | Founder | Launched in year | Investment & lead investors | Learners | Ratings | Availability | Revenue |
|-------------------------|--|---------------------|-----------------------------------|---|--------------------|--------------|----------|
| Meritnation | Ritesh Hemrajani Co Founder, Pavan Chauhan | 2009 | Over 134 crore Approx | Over 8.2 million + K – 12 learners | Google play 4.3 | Paid | 21.59 Cr |





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|-------------------------|--|---------------------|--|------------------------------------|-----------------------|------------------------------------|----------------|
| | Co Founder | | Info edge is 66% stock holder | | | | |
| BYJU's | Byju Raveendran | 2011 | \$50M Approx By Chan Zuckerberg initiative | 1.5 Cr + | Google Play 4.7 | Paid | \$36 M |
| Coursera | Andrew Ng Daphne Koller | 2017 | New Enterprise Associates 49.5 M Approx | 20 million + learners | Google Play 4.4 | Free and paid both | \$140 M |
| Doubtnut | Tanushree Nagori Aditya Shankar | 2016 | \$639K Approx WaterBridge ventures | 500 K + Google play users | Google play 4.4 | Paid | 3.5 cr |
| Unacademy | Roman Saini Hemesh Singh Gaurav Munjal | 2015 | \$38.5 M Approx SAIF partners | 5 M + Google play users | Google play 4.7 | Free and paid both | \$25 - 30 M |
| Khan Academy | Sal Khan | | \$ 53 M Approx | 60 M + | Google Play 4.6 | Free Non Profit Organization | \$1.58Cr |

Table 1: Business statistics data of few of the available apps.

This is a mark sheet of the major apps which are capturing market at present. This list can go on. <u>Hence the</u> conclusion is E learning apps can be proved as a significant business plan.

Startup policy of Indian Government:

Since the startup India scheme was launched by Hon'ble Indian Prime Minister Narendra Modi several programs have been undertaken. The mission of this scheme is to transform India as a country of job seekers to job creators. These programs have catalyzed the startup culture, with startups getting recognized through startup India initiative and many entrepreneurs availing the benefits of starting their own business in India. India ranks 3rd globally in the startup with 4200 registered startups.

We will be taking in consider learning app as an effective startup plan.







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Sampling design universe:

This is descriptive research. The universe of the study consists of learners, educators and start up founders from Mumbai.

Sampling method - snowball method

Sampling size - The sample size of the study is 124.

Data collection process:

The research process began with focused reading of various forms of articles, reports, journals, internet searches, and thesis and workshop papers from various forums from both published and unpublished sources. The research tool for primary research is prepared and tested. Then the tool was actually applied on targeted respondents. The data collection process was very carefully carried out.

Sources of data:

Both primary and secondary data was used for the study. Primary data was obtained by interviewing respondents located in the selected areas. Secondary material was collected from published and unpublished sources. Interaction with NGO's and government agencies provided a lot of valuable information.

<u>Tool:</u>

The researcher used the structured interview schedule for data collection.

<u>Technique</u>

_Research investigator conducted face to face interaction or online response collection.

The rationale behind selection of this technique as follows:

- 1. The project needs first hand and most reliable data from respondents through one to one interaction.
- 2. If the respondents were not able to understand the question, the investigator was able to interpret it effectively.
- 3. The research data was collected by respondents.

Scope of the study:

This study will be added on the existing knowledge to this field. The findings of study will help Non-Government Organization (NGOs), Non-Profit Organization (NPOs), Government Organizations (GOs) and allied stakeholders to take informed decisions, develop better interventions and policies based on the findings and the suggestions. The research will also provide a direction to other researchers to study each of their objectives in depth.

Limitation of the study:

- The sample size is not representative to the universe.
- With the reference of limited context specific literature there aren't any specific questionnaires that gauge the socio demographic variables of specific population.







- The tool used in research is not tested for its reliability and validity. Hence the expertise of the questionnaire design is limited.
- Additionally, since the study only uses representatives rural and urban in Mumbai, the findings may not be valid for other regions in India.

Findings and Analysis:

With the help of collected data & analysis from literature following are the findings on the basis of different factors.

1. Age

Age is very important factor in thinking process. Hence to understand the thinking process of respondents needs to understand distribution of age groups.

85% of the respondents are in the age group of 21 to 45 years. Hence it is a research study of young respondents.

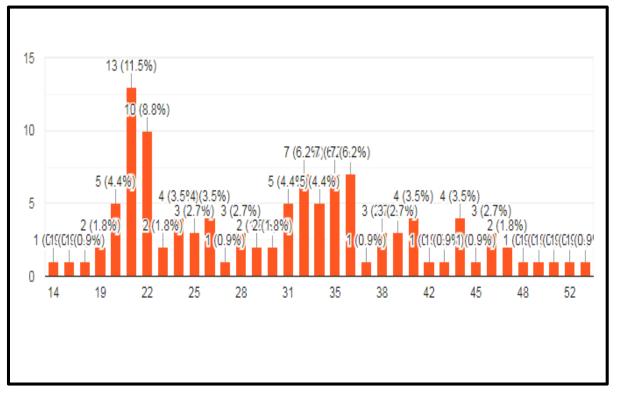


Figure 1: Distribution of age group of respondents.

2. Educational Qualification

Since this research study is related to education stream the educational qualification of respondents plays a major role. 34.5% of respondents possess bachelor's degree whereas 32.7 % of respondents have master's degree. 11.5% of respondents have their Doctorates.





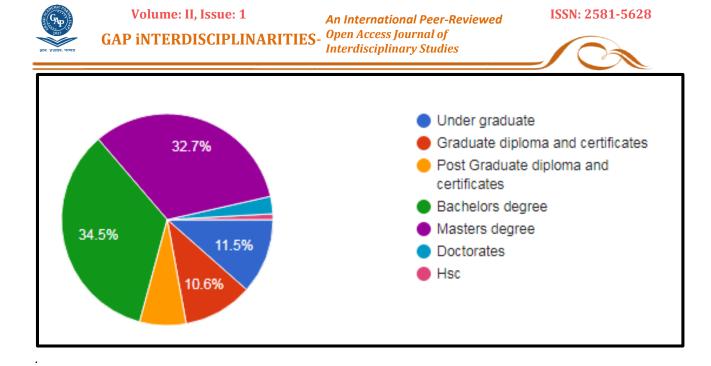


Figure 2: Distribution of educational qualification of respondents.

3. Status/ Position

The status of respondent is key factor.44.8% of respondents are learners. They stand between HSC to Master's degree education. 31.2% of respondents are Educators. 12.8% of respondents are founder of different startup plans. Definitely representative of these three groups have different perspectives.

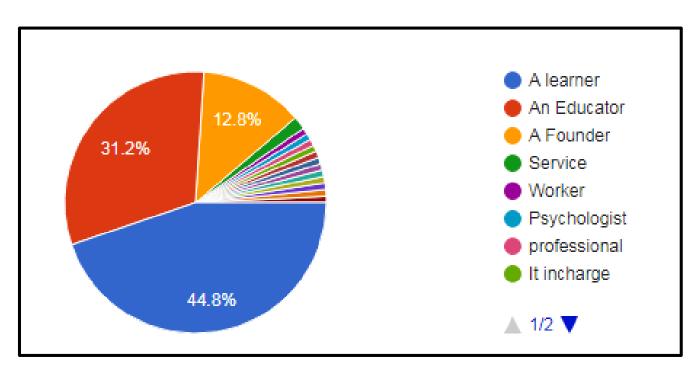


Figure 3: Distribution of learners, educators and start up founders.









4. Usage of apps:

2.34% of respondents are not users of any kind of app. On the other hand rests of all respondents are frequent users of different kind of apps. The number of apps may vary from 2 - 90.

62.1% of respondents are in the favor of free available apps. Whereas 29% of respondents prefer paid app as well.

Point to be noted here is as mentioned in above statistics (table no.1) Coursera and Unacademy provides paid as well as free courses. Still their revenue is remarkable. Khan academy is Non Profitable Organization which provides free of charge service to learners. Still manage to maintain attractive revenue.

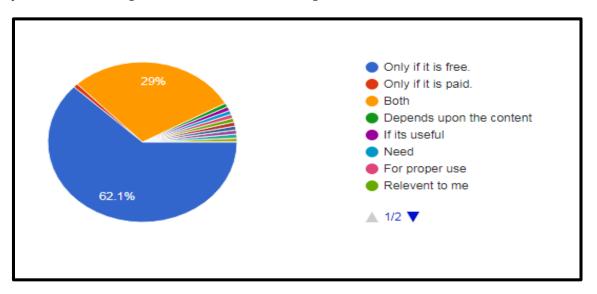


Figure 4: Distribution of percentage of respondents according to usage of apps.

5. Learning app usage:

55.6% + 4.8% of respondents have positive approach towards learning apps. 19.8% respondent's approach may change into positive. This is attractive number.

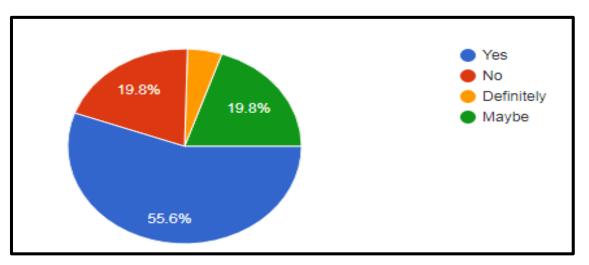


Figure 5: Percentage of respondent's approach about learning apps.











6. Learner's Goal:

We ask our respondents whether a learning app can help a learner to achieve their goal. We have received very fascinating feedback. The result is 65.3% (Yes) 29% (Maybe). This is very satisfactory figure. This is the aspect which can attract startup ideas. This is the example of how mankind is relying on artificial intelligence.

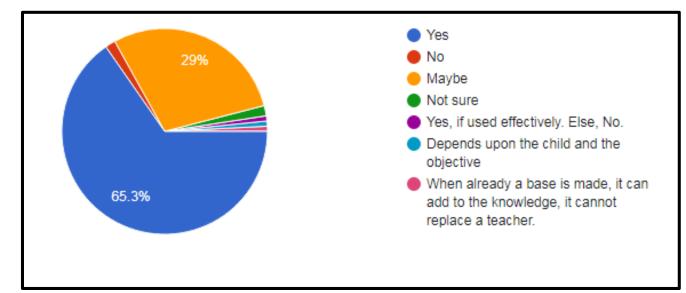


Figure 6: Distribution of response from the perspective of fulfilling learner's goal.

7. Skills:

We tried to understand which skills our respondents expect from learning app to inculcate in learners. The spotlight of the data we collected is:-

Knowledge beyond curriculum. Understand and learn what's happening in the world

Where they don't find human touch useful. I mean where classroom teaching becomes less interactive.

Improve practical knowledge and relate theoretical knowledge

Self motivation

understanding the concepts

Practically applying skills.

Listening skills

Problem solving skills









Yes, our respondents do talk about basic and common skills which are expected in learners. But this is something they are seeking for.

8. Purchase of promoted products:

Only 18.3% of respondents recommend buying products which are promoted by mobile apps. Whereas 38.9% of respondents are denying to buy promoted products. But we need to consider other to response percentage. That is - Maybe (26.2%), Not sure (16.7%). If the company targets this customer and fulfill their requirements a great revenue can be generated.

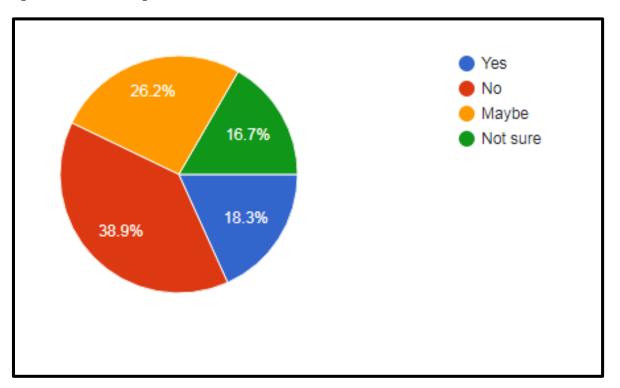


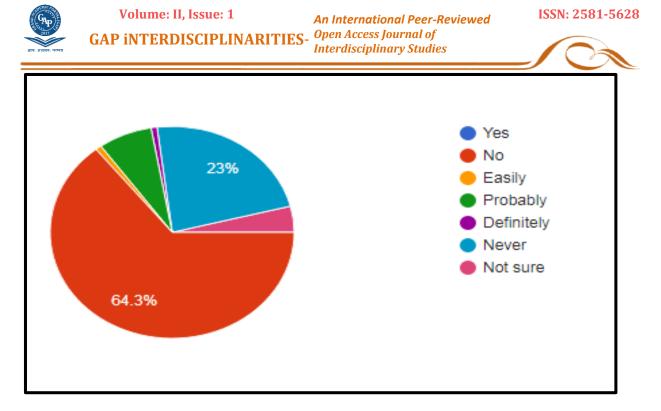
Figure 7: Percentage of respondents who are willing to buy promoted apps.

Replacement of teachers:

If the learning apps are satisfying most of the needs of learners, is there any requirement of teachers? As an educator we were eager to know the answer of this question. To our gratification approx. 85% of respondents have rejected this thought. TEACHERS CAN NOT BE REPLACED. Teachers are different or superior to artificial intelligence because of the emotional quotient, adversity quotient. No machine can realize, manage or satisfy emotional and sentimental needs of learners.









9. Exposure for rural learners:

Source of information and technology is easily available in urban area. It is rural area we need to reach. Companies need to target rural learners. Though apps are available worldwide, download or usage of mobile apps is totally a matter of internet connection. Entry of technology in education is proved to be a game changer. In terms of India education would revolutionize only if technology reaches rural schools. Our respondents also agreed on the same point. According to approx. 87% respondents learning apps can give more exposure to rural learners.

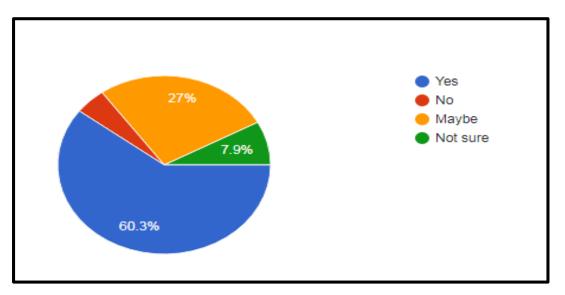


Figure 8: Exposure to rural learners through learning apps.







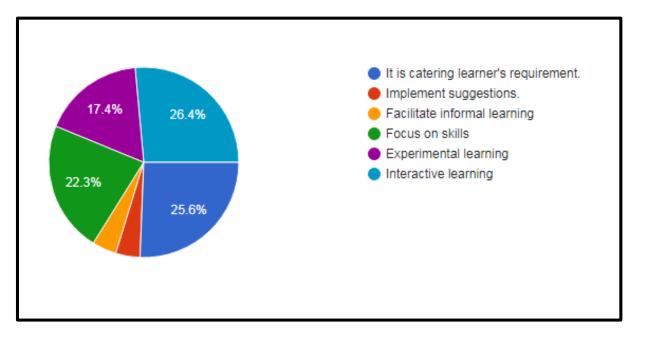
Startup idea:

The statistics explained above (table 1) speaks about well-established learning apps. As a result the huge numbers are involved in terms of investment and revenue.

Considering the need of the time, expansion of online education, artificial intelligence E learning app is definitely excellent startup idea. Our 94% of respondents agreed the same.

Now let's concentrate on the money affairs. Kind attention entrepreneurs! Our respondents are willing to pay for learning app if –

- It is catering learner's requirement. (25.6%)
- It promotes interactive learning. (26.4%)
- It focuses on skills. (22.3%)
- It promotes experimental learning. (17.4%)





Prof Sugata Mitra - Hole in the wall experiment

Hole in the wall – the famous experiment by Prof Sugata Mitra is a great example of outcome of technology exposure in rural area. Prof Sugata Mitra and his team did this extensive experiment and the results were astonishing. Using the hole in the wall set up with single PC children has learnt many things by themselves. Children seemed to learn computer without any assistance. Neither language nor education could create an obstacle for them. This experiment was huge success then and now it is a great example.

The major need of an hour is to give easy technological access to rural learners. E learning apps can be effective medium for that. In rural parts of India where there are no facilities or infrastructure is available internet plays









major role. Setting an incubator can be the next step to give exposure to hidden and upcoming talent. But E learning apps can play basic and major roles in rural area.

Recommendation

Startup India is a remarkable initiative by Modi Government. Now young entrepreneurs should take startup ideas seriously.

Online education is not future thing. It is a present big thing. Rural learners should get facilities of online learning. Our approach towards rural education should change.

Support system for online learning. Assistance to institution to provide e learning.

Knowledge and skill based education should be our motto. Learners, parents and educators should avoid marks centric approach.

Encourage, facilitate and support young entrepreneurs and research scholars.

Support system for E learning apps in rural area.

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Annexure

• E learning apps survey

https://docs.google.com/forms/d/14QnnCNT8qhLDBfzQMV-2A6-Hcii6hiZYFbXdbTaSltU/edit

• E learning apps responses

https://docs.google.com/forms/d/14QnnCNT8qhLDBfzQMV-2A6-Hcii6hiZYFbXdbTaSltU/edit#responses

Response sheet

https://docs.google.com/spreadsheets/d/1mYlBSkwoTgOsGXf65pvaSVvvNtnnAz9uVrfrHdWfsds/edit#g id=1131378208



