# To Measure the Effectiveness of Web-Based E-Learning in India With Reference To Management Students of Ahmadabad

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#### **ABSTRACT**

As the world is going through covid-19 pandemic, the education industry has got shattered. To lift the economy and maintain the continuous process of education, many institutes have taken a rout of web-based learning. This new process has been carried out using multiple online sources. This paper will analyze the effect of web-based learning for management student. How effective online education is, and will be it more beneficial if online education is continued in future. The primary research is carried out through questionnaire method and the data has been collected of 100 management students. Students' satisfaction level adopting on the new way of learning has been analyzed in this paper.

Key words: online learning, management students, effectiveness

#### **I INTRODUCTION**

Web-based learning refers to the type of learning that uses the Internet as an instructional delivery tool to carry out various learning activities. It can take the form of (1) a pure online learning in which the curriculum and learning are implemented online without face-to-face meeting between the instructor and the students, or (2) a hybrid in which the instructor meets the students half of the time online and half of the time in the classroom, depending on the needs and requirement of the curriculum. Web-based learning can be integrated into a curriculum that turns into a full-blown course or as a supplement to traditional courses.

Non face to face, using web technologies, it is learning that occurs with lessons conducted via the internet.

Higher Education sector has witnessed a tremendous increase in its institutional capacity in the years since Independence. The number of Universities/University-level institutions has increased 18 times from 27 in 1950 to 504 in 2009. The sector boasts of 42 Central universities, 243 State universities, 53 State Private universities, 130 Deemed universities, 33 Institutions of National Importance (established under Acts of Parliament) and five Institutions (established under various State legislations). The number of colleges has also registered manifold increase with just 578 in 1950 growing to be more than 30,000 in 2011. Higher Education is the shared responsibility of both the Centre and the States. The coordination and determination of standards in institutions is the constitutional obligation of the Central Government.

According to the current report, the Indian e-learning market size was USD247 million, composing 1.6 million learners in 2016. It is expected to have an 8 times growth to reach USD1.96 billion and the recent user base will increase at 44 percent CAGR to 9.6 million learners by 2021.

In fact, India's e-learning market is the second largest after the US, which is predicted to grow by 15.64 percent and increased \$48 billion by 2020.

ISSN: 2278-4187

The E-learning in India is changing at a rapid pace unsettled to the following factors:

- (a) Growth in internet and smart phone.
- (b) Cost of online education
- (c) Digital friendly government policies

The online source that gives opportunity to get certified education is Udemy, coursera, edx, Upgrade, Jigsaw, etc.

During this pandemic, the group learning portal business has increased tremendously. The different portals like Zoom, google meet, Jio meet, Web ex, and now the university has started adopting this online portal for delivering education to the management student.

#### II LITERATURE REVIEW

- (a) Mushtaq Hussain(2018) The author has examined the relationship between student engagement and the course assessment score.
- (b) Monica Trakru(2019) The author highlights difficulties to preserve the standards of education because of limitations of finance, infrastructure, and other resources including skilled and experienced human power which can be addressed through Information Technology (IT), to some extent which also ensures high quality learning by providing necessary information at a convenient place and suitable time. They have observed that e-Learning emphasizes on quality and effective presentation of information.
- (c) Partha pratim ray(2012) The author is underlines great diversity in India and need for uniform or standardized teaching learning resources or methods with Web Based e-Learning (WBeL).

ISSN: 2278-4187

- (d) Gaurav Chopra (2019) -The author finds that E-learning has become an increasingly prevalent learning approach in higher educational institutions due to the fast growth of internet technologies in India. They have found that information available on the website may not be very useful as it's a one-way mode of communication. The researcher also found that the three dimensions (system quality, service quality and information quality) of e-learning system contribute to user satisfaction and net benefits. Students are satisfied with e-learning websites and intent to continue to use it in future as well.
- (e) **Dr.S.Radha** (2019) The author has examined the role of e-learning and digital media resources in employability of management students in Chennai city.
- (f) Mohammad zare (2016) The author investigates the impact of e-learning on creativity and content knowledge of chemistry students and concluded that e-learning is effective for knowledge and creativity acquisitions among chemistry students and the greater e-learning opportunities should be provided for wider audiences.
- (g) Shashi Kant Dhir(2017) The author has discussed the need and scope of e learning in medical education in India. The study shows that students and faculty are mostly in favor of adopting e-learning side-by-side with traditional learning, and the advantages far outweigh the likely discomfort associated with adoption of this new method.
- (h) Nidhi Phutela(2020) The author grouped the findings under two sections referred to as "themes," which include "drivers for e-learning adoption" and "inhibitors which restrict the adoption of e-learning.

(i) Nanigopal Kapasia(2020) — The author finds that in West Bengal undergraduate and post graduate students 70% of learners have adopted e-learning. Most of these learners used android mobile for attending e-learning. Students were found to be facing various problems related to depression anxiety, poor internet connectivity, and unfavorable study environment at home.

# III RESEARCH METHODOLOGY AND OBJECTIVES

#### (a) Objective

- (i) To understand effect of online learning on management student.
- (ii) To analyze the sustainability of e-learning in India.
- (iii) To measure the satisfaction level of online learning on management student.

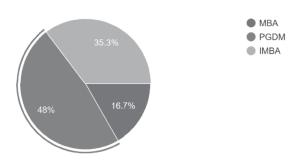
#### (b) Scope of the study

- (i) Area: Ahmadabad, Gujarat
- (ii) Sample size: 100 management student.
- (iii) Research Design: Descriptive research
- (iv) Data collection method: Primary Data
- (v) Population: Ahmadabad (Gujarat)
- (vi) Sampling Method: Sampling frame
- (vii)100 management student pursuing management degree from different B school of Ahmadabad.
- (c) Expected Contribution This study will benefit to different B school to understand the importance of online learning and its effect on student. This study will help them to analyze how much students adopting this e-learning teaching method.
- (d) Research Model Dependable Variable: Students, university Independent variable: Online platform.

#### ISSN: 2278-4187

#### IV DATA ANALYSIS

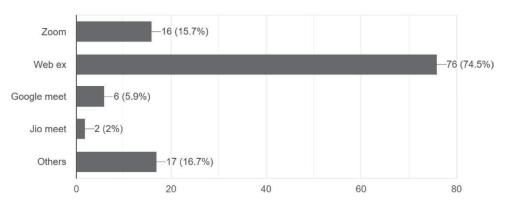
What course you are studying? 102 responses



We have categorized our research in 3 courses of management which includes MBA, PGDM and IMBA in which 48% of respondents are pursuing

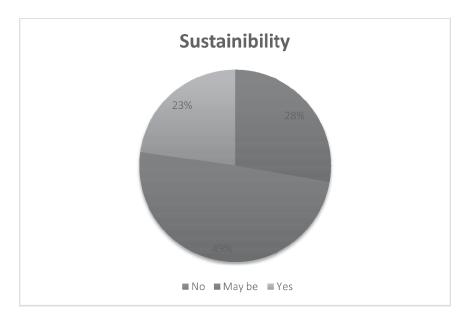
IMBA course. Out of which 48% of the student are doing PGDM and 35.6% students are from IMBA.

Which web based portal does your institute uses? 102 responses



By the research we came to know that most of the institute uses Web Ex for online education purpose. I.e. approx. 75% of the institute uses Web ex following to it 18% uses other application and 15%

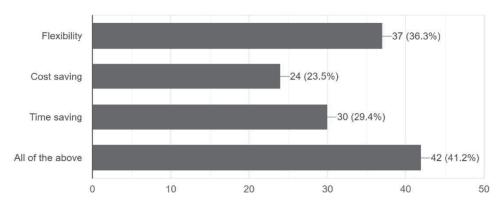
uses Zoom. Hence from the above chart it can be estimated that web ex is most popular amongst the educational institute.



During the pandemic over 4 months students are learning on web portals but still 49% of students are not sure that is it sustainable in India or not. As well 23% students said yes and 28% students denied.

Hence from the above pie chart it can be observed that the suitability of web based learning is still difficult as student do not adopt the technology and teaching methodology easily.

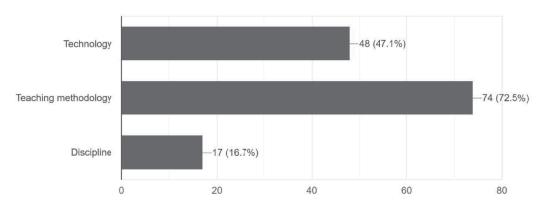
What makes online education different to offline education? 102 responses



Web based educations have many perks as students can study on their own convenience so almost 37% of students thinks that this concept is flexible and 30% students found this option as a time saving. 42% of

students found that it is flexible, cost saving as well as time saving. Hence from the chart it can be analyse that online education is flexible, cost saving and time saving.

On which factor does your university should focus for web based e-learning? 102 responses



We found one drawback that most of students (72.5%) are not comfortable with the teaching methodology of the institute and 47% students are not comfortable by the technology which institute use.

Hence from the above chart it can be assume that educational institute should change their teaching methodology and should adopt easy technology for the online education.

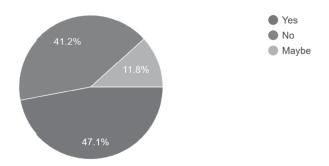
Through which electronic gadgets do you frequently attain your lecture? 102 responses



Most of the students attend online classes on the smart phone and laptops. There are 53% of the student uses mobile for their online education.

Whereas 45% of them uses laptop. The rest of them prefer desktop for the online lectures.

Do you face any problem while having online lectures 102 responses



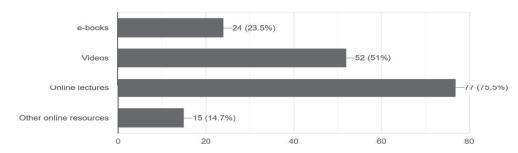
Students may face few problems like internet connectivity and audio or video cracking so here 47% students face problems while online lectures and 41%

students are not facing any problem while online lectures.



From the respondents 37 respondents have moderate review and 31 students are satisfied where 6 students are highly dissatisfied and 11 students are highly satisfied.

Which is the best resource for online learning? 102 responses



From the research we get to know that by online lectures 75% of students can connect more on same

side by learning from e-books only 23% students can connect.

Rate your satisfaction level of e-learning. \* Course \* What is your specialization? Cross tabulation

| What is your specialization? |   |                     |     | Total |      |    |
|------------------------------|---|---------------------|-----|-------|------|----|
|                              |   |                     | MBA | PGDM  | IMBA |    |
|                              |   | Highly Satisfied    | 1   | 0     | 2    | 3  |
|                              |   | Satisfied           | 4   | 1     | 4    | 9  |
| Γ'                           | Rate your satisfaction level of e-learning. | Moderate            | 4   | 4     | 3    | 11 |
| Finance                      | or e-rearning.                              | Not satisfied       | 5   | 4     | 5    | 14 |
|                              |   | Highly dissatisfied | 2   | 0     | 1    | 3  |
|                              | Total                                       |                     | 16  | 9     | 15   | 40 |
|                              |   | Highly Satisfied    | 1   | 0     | 1    | 2  |
|                              | Rate your satisfaction level of e-learning. | Satisfied           | 5   | 0     | 0    | 5  |
| Marketing                    |   | Moderate            | 16  | 0     | 5    | 21 |
| Marketing                    |   | Not satisfied       | 8   | 3     | 6    | 17 |
|                              |   | Highly dissatisfied | 0   | 2     | 2    | 4  |
|                              | Total                                       |                     | 30  | 5     | 14   | 49 |
|                              | Rate your satisfaction level                | Highly Satisfied    | 0   | 0     | 1    | 1  |
| Human Resource               |   | Satisfied           | 0   | 0     | 2    | 2  |
|                              | of e-learning.                              | Moderate            | 0   | 1     | 0    | 1  |

|       |   | Not satisfied       | 1  | 0  | 0  | 1   |
|-------|---|---------------------|----|----|----|-----|
|       |   | Highly dissatisfied | 0  | 0  | 1  | 1   |
|       | Total                                       |                     | 1  | 1  | 4  | 6   |
|       | Rate your satisfaction level                | Moderate            | 1  | 2  | 2  | 5   |
| Other | of e-learning.                              | Not satisfied       | 0  | 0  | 1  | 1   |
| Other | or c-rearring.                              | Highly dissatisfied | 1  | 1  | 0  | 2   |
|       | Total                                       |                     | 2  | 3  | 3  | 8   |
|       |   | Highly Satisfied    | 2  | 0  | 4  | 6   |
|       | Determined in Continue to all               | Satisfied           | 9  | 1  | 6  | 16  |
| Total | Rate your satisfaction level of e-learning. | Moderate            | 21 | 7  | 10 | 38  |
|       | of c-rearming.                              | Not satisfied       | 14 | 7  | 12 | 33  |
|       |   | Highly dissatisfied | 3  | 3  | 4  | 10  |
|       | Total                                       |                     | 49 | 18 | 36 | 103 |

Cross tabulation is a method to quantitatively analyse the relationship between multiple variables. Here three major management courses have analysed (MBA, PGDM and IMBA). Also, with three major specialization fields we have analysed (Finance, Marketing and Human resources).

We have measured student satisfaction level according to their specialization field.

From the total 40 Finance students only 3 students are highly satisfied with the eLearning method, 11 of

them have moderate satisfaction level and 3 students are highly dissatisfied with eLearning method.

ISSN: 2278-4187

From the total 49 Marketing students only 2 students are highly satisfied with the eLearning method, 21 of them have moderate satisfaction level and 4 students are highly dissatisfied with eLearning method.

From the total 6 Finance students only 1 student is highly satisfied with the eLearning method, 1 of them has moderate satisfaction level and 1 student is highly dissatisfied with eLearning method.

## Do you agree web based e-learning is better substitute of offline learning \* Course Cross tabulation

| Count   |                   |       |      |      |     |
|---|-------------------|-------|------|------|-----|
|   |                   | Total |      |      |     |
|   |                   | MBA   | PGDM | IMBA |     |
|   | Strongly Disagree | 2     | 0    | 6    | 8   |
| Do you agree web based e-                         | Disagree          | 9     | 2    | 6    | 17  |
| learning is better substitute of offline learning | Neutral           | 24    | 6    | 11   | 41  |
|   | Agree             | 12    | 5    | 10   | 27  |
|   | Strongly Agree    | 2     | 5    | 3    | 10  |
| Total   |                   | 49    | 18   | 36   | 103 |

Here we have measured from the student's perspective that is web-based eLearning is better substitute of offline learning from different management courses. We get to know that 10

students are highly agreed with the eLearning method. 41 students have moderate opinion with the eLearning method, 8 students are strongly disagree with the eLearning method.

### Through which electronic gadgets do you frequently attain your lecture? \* Course Cross tabulation

|        |   |    |   | 4  |
|--------|---|----|---|----|
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|                           |             | Course |      |      | Total |
|---------------------------|-------------|--------|------|------|-------|
|                           |             | MBA    | PGDM | IMBA |       |
| Through which electronic  | Desktop     | 0      | 2    | 0    | 2     |
| gadgets do you frequently | Laptop      | 18     | 6    | 23   | 47    |
| attain your lecture?      | Smart phone | 31     | 10   | 13   | 54    |
| Total                     | _           | 49     | 18   | 36   | 103   |

By the research through which electronic gadgets do you frequently attain your lecture, so here majority of students (54 students) attend from the smartphone and laptop (47 students). Hence this data shows that

smart phone is most popular among the student when it comes to online lecture. Laptop stands second which is approx. 48% student attain their lecture through laptop.

**Chi-Square Tests** 

| <b>1</b>                        |                    |    |                 |  |  |
|---------------------------------|--------------------|----|-----------------|--|--|
|                                 | Value              | df | Asymp. Sig. (2- |  |  |
|                                 |                    |    | sided)          |  |  |
| Pearson Chi-Square              | 9.327 <sup>a</sup> | 6  | .156            |  |  |
| Likelihood Ratio                | 8.134              | 6  | .228            |  |  |
| Linear-by-Linear<br>Association | .835               | 1  | .361            |  |  |
| N of Valid Cases                | 103                |    |                 |  |  |

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is .17.

The level of statistical significance is often called p value. Depending on the statistical test we have chosen, we have calculated the probability of observed sample. The significant P value, which is 0.156, which is greater than 0.05, hence it has a

statistical relation between effectiveness and the online education. Hence this test proves that there is huge effect of online education on management student.

**Symmetric Measures** 

|                      |                      | Value | Asymp. Std.        | Approx. T <sup>b</sup> | Approx. Sig. |
|----------------------|----------------------|-------|--------------------|------------------------|--------------|
|                      |                      |       | Error <sup>a</sup> |                        |              |
| Interval by Interval | Pearson's R          | 090   | .093               | 913                    | .363°        |
| Ordinal by Ordinal   | Spearman Correlation | 102   | .097               | -1.033                 | .304°        |
| N of Valid Cases     |                      | 103   |                    |                        |              |

- (a) Not assuming the null hypothesis.
- (b) Using the asymptotic standard error assuming the null hypothesis.
- (c) Based on normal approximation.

**Statistics** 

|                |       | Do you agree<br>web based e-<br>learning is<br>better substitute<br>of offline<br>learning | Rate your<br>satisfaction<br>level of e-<br>learning. |
|----------------|-------|--|---|
| N Val          |       | 103  | 103   |
| Mas<br>Mean    | ssing | 3.14   | 3.24  |
| Std. Deviation |       | 1.058  | 1.024   |

Above table signifies the relationship between two variable namely students adoption towards online learning and course where they are pursuing the education and it shows negative relationship between these two and research conclude that there is negative relationship between adoption/satisfaction level and in which course they are pursuing their management education.

#### **V CONCLUSION**

From this study it can be concluded that the satisfaction level of the students is quite low in the matter of online education. Hence the sustainability of web based learning is in doubt. The technology, teaching methodologies are the two key point's university should focus on. With this study it can also be assumed that online learning has a different effect

on management students and shortcoming need to be addressed.

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