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# AN EMPIRICAL STUDY OF DIGITAL PLATFORM FOR SKILL DEVELOPMENT IN UNDERGRADUATES

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**Abstract:**

*Digital platforms are one of the educational resources that were used in Academics prior and during Covid-19 pandemic. Digital platforms are fundamental components for sustainable education. Technological advancement have made student's life easy to accessible knowledge from anywhere and anytime. government has opened various platform through which students can achieve vocational and professional education at affordable prices. The present study aims to determine whether or not digital platforms improve learning outcomes, role of digital platforms in the student's life, Challenges faced by students while handling digital platforms. What will be the remedial actions to over these challenges? The study further focuses on student's preference for traditional education or digital education or mingle of these two platforms. What are the external factors influencing digital learning. The study suggests role of digital platform to upgrade student's education level which lead to Entrepreneurship skills. Digital platforms are key to happy and stress-free learning.*

**Keywords –** *Digital platform, Education, Role, Challenges, sustainable education, Entrepreneurship skills.*



## Introduction:

In recent years, digital platforms have become a key tool in enhancing skill development among undergraduate students. With the rise of online courses, educational apps, and virtual learning environments, students now have access to a wide range of resources that complement traditional classroom learning. These platforms support the development of both technical and soft skills, which are essential for academic success and employability. However, the effectiveness of these platforms in achieving skill development outcomes remains underexplored. This study aims to empirically assess how digital platforms contribute to the acquisition of practical skills among undergraduates, identify key factors influencing their success, and explore the challenges students face in using these tools. The findings will offer valuable insights for educators and institutions seeking to integrate digital learning tools into their curricula.

## Objectives of the Study:

- To analyse the effectiveness of digital platform for skill development in undergraduates.
- To find the challenges faced by students in using digital learning platform.
- To examine most commonly used digital platform for skill development.

## Hypothesis :

H0 – Digital platforms do not significantly enhance skill development among undergraduates.

H1- Digital platform significantly enhance skill development among undergraduates.

H0- students do not face significant challenges in using digital learning platforms.

H1- students face significant challenges.

H0- skill acquired through digital platform do not significantly impact students' academic or professional opportunities.

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H1- skill acquired through digital platform significantly impact students' academic or professional opportunities.

**Significance of the Study:**

The study on "Digital Platforms for Skill Development in Undergraduates" highlights several key areas:

1. **Enhancing Education Quality**: Digital tools make learning more dynamic and accessible.
2. **Bridging the Skill Gap**: Identifies platforms for practical, employable skill development.
3. **Personalized Learning**: Supports diverse learning styles.
4. **Adapting to Technological Trends**: Shapes future education and skill development.
5. **Policy Implications**: Guides curriculum redesign to integrate digital tools.
6. **Cost-Effective Learning**: Makes skill development more affordable and inclusive.
7. **Impact on Career Readiness**: Prepares students with in-demand skills for the workforce.
8. **Long-Term Implications**: Supports lifelong learning and continuous development.

This study aims to align undergraduate education with industry needs and technological advancements.

**Limitations of Study:**

1) The study is limited to only 51 respondents.
2) The study may be biased by respondents.
3) The sample only includes students from Thane region so it cannot be applicable to all the regions.
4) External factors could affect the study such as socioeconomic status, geographical location, and lack of necessary technology, the curriculum structure, teaching methods, and institutional support

**Literature Review:**

[1]**Yuan and Powell (2013**) emphasized that MOOCs offer undergraduates a flexible way to develop both technical and soft skills, especially for supplementary learning beyond the classroom. MOOCs are particularly effective for skills like digital literacy and industry-specific knowledge.

[2]**Venkatesh et al. (2003)** highlighted that factors like performance expectancy, effort expectancy, and social influence impact the adoption of MOOCs. Studies show that students are more likely to use MOOCs if they find them useful and easy to use, with social factors like peer recommendations also playing a role.

[3]**Jordan (2014) and Liu et al. (2016)** noted that many students struggle with motivation and support issues, while in developing countries like Nigeria, poor internet and limited digital infrastructure hinder learning.

**Research Methodology:**

The methodology adopted for the study is mixed approach that is primary and secondary data. Sample size used for this study is 51. Convenience and snow ball sampling is adopted for this study. Questionnaire is used to capture data.

**Sample size –** 51

**Research design** – Descriptive

**Sample technique** – convenience

**Sample method** - snowball sampling.

**Data collection methods** – primary method and secondary method

**Tools of data collection** – questionnaire

[1] **Yuan, L., & Powell, S. (2013).** *MOOCs and open education: Implications for higher education*. *Research in Learning Technology*, *21*(1), 1-13

[2] **Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003).** User acceptance of information technology: Toward a unified view. *MIS Quarterly*, *27*(3), 425-478

[3] **Jordan, K. (2014).** Initial trends in enrolment and completion of massive open online courses. *The International Review of Research in Open and Distributed Learning*, *15*(1), 135-160

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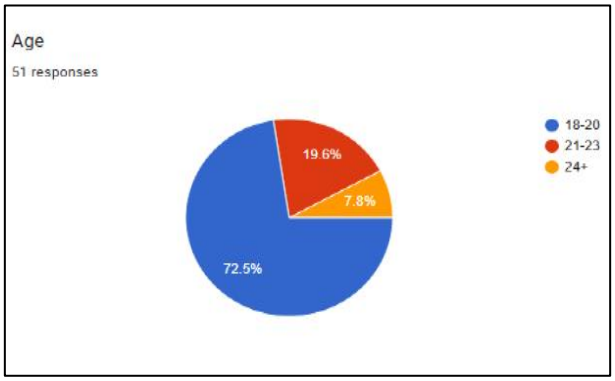
**Source of data** –

**1) Primary data**- close ended questions.

**2) Secondary data**- research papers, peer reviewed articles, different books and internet content.

**ANALYZE –**

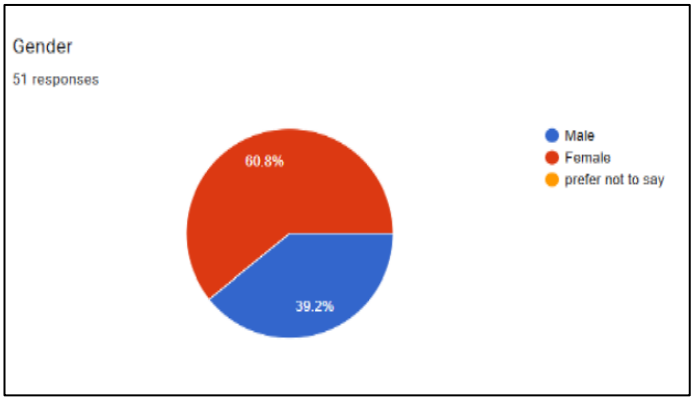
**Graph No. 1**




***Source of the Data: Primary Source***

The majority of respondents (72.5%) are in the 18-20 age group, followed by 19.6% in the 21-23 range. Only 7.8% are aged 24 and above, indicating a younger participant demographic.

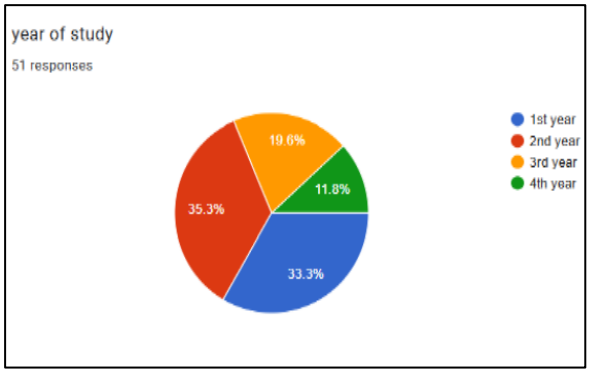
**Graph No. 2**




***Source of the Data: Primary Source***

The majority of respondents (60.8%) identify as female, while 39.2% identify as male. This suggests a higher female participation in the survey.

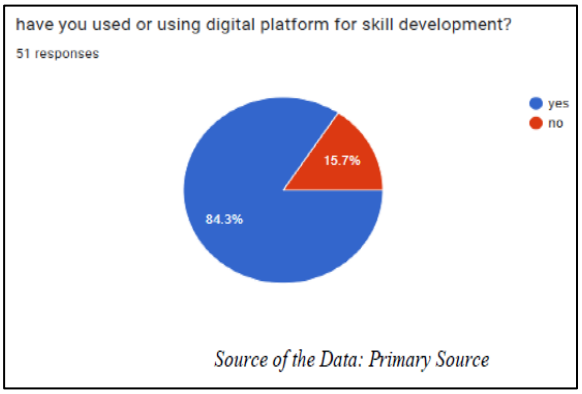
**Graph No. 3**




***Source of the Data: Primary Source***

This chart shows more first year students are respondent of this study and so on. According to sequence the data is also follows the same sequence for responses.

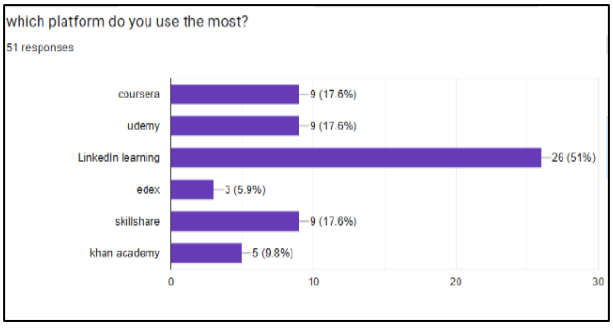
**Graph No. 4**




***Source of the Data: Primary Source***

A majority of respondents (84.3%) use digital platforms for skill development, while 15.7% do not. This indicates widespread adoption of digital learning for skill enhancement.

**Graph No. 5**




***Source of the Data: Primary Source***

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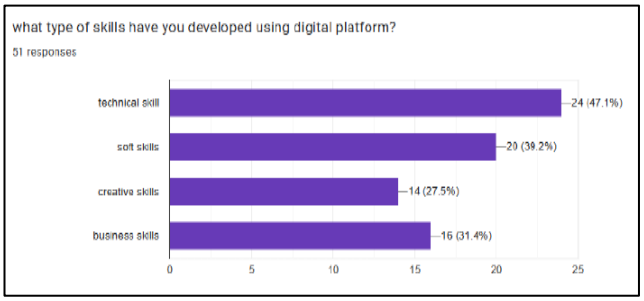
LinkedIn Learning is the most popular platform, used by 51% of respondents, followed by Coursera, Udemy, and Skillshare at 17.6%. Platforms like Khan Academy (9.8%) and edX (5.9%) have fewer users

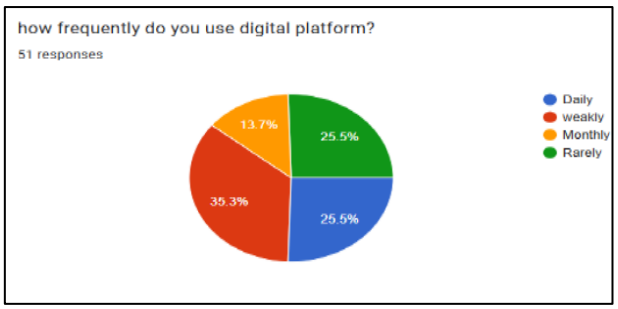
**Graph No. 6**




***Source of the Data: Primary Source***

Technical skills are the most developed (47.1%), followed by soft skills (39.2%). Business (31.4%) and creative skills (27.5%) are also common, but less prevalent.

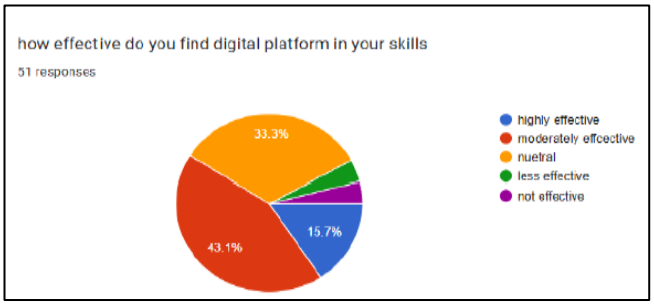
**Graph No. 7**




***Source of the Data: Primary Source***

The above pie charts shows 35.3% use digital platforms weekly, followed by 25.5% daily and 25.5% rarely. Only 13.7% use them monthly, indicating regular engagement.

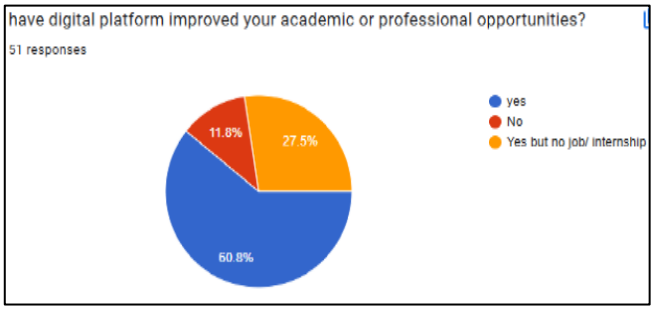
**Graph No. 8**




***Source of the Data: Primary Source***

The pie chart illustrates 43.1% of respondents find digital platforms moderately effective, and 15.7% consider them highly effective. A majority have a positive perception, with 33.3% remaining neutral.

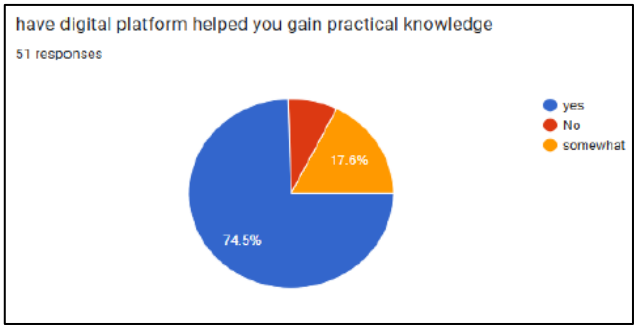
**Graph No. 9**




***Source of the Data: Primary Source***

The pie chart illustrates 60.8% of respondents reported positive improvements in academic or professional opportunities. 27.5% acknowledged benefits but without securing a job or internship, while 11.8% felt no improvement

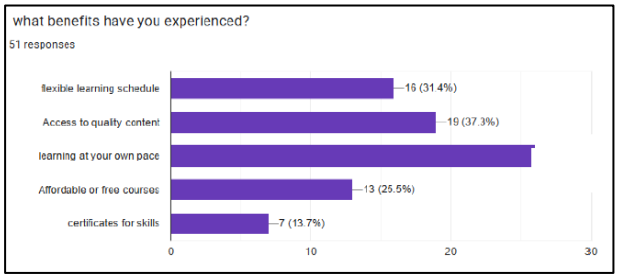
**Graph No. 10**




***Source of the Data: Primary Source***

above diagram shows 74.5% of students felt digital platforms helped them gain practical knowledge, while 17.6% disagreed. Around 8% gave negative feedback

**Graph No. 11**




***Source of the Data: Primary Source***

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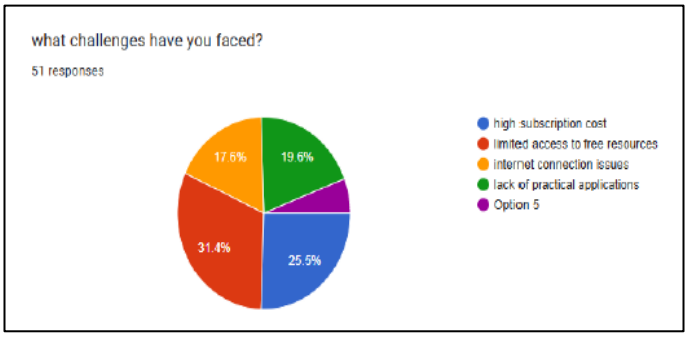
The above diagram shows benefits Experienced: The most common benefits included learning at their own pace (52.9%), access to quality content (37.3%), and flexible schedules (31.4%).

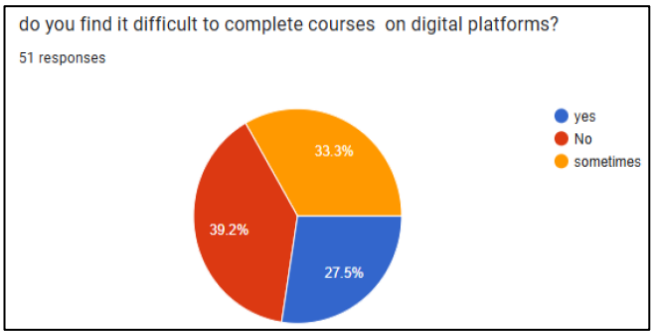
**Graph No. 12**




***Source of the Data: Primary Source***

Challenges Faced: The major challenges included high subscription costs (31.4%), internet connection issues (25.5%), and limited access to free resources (19.6%).

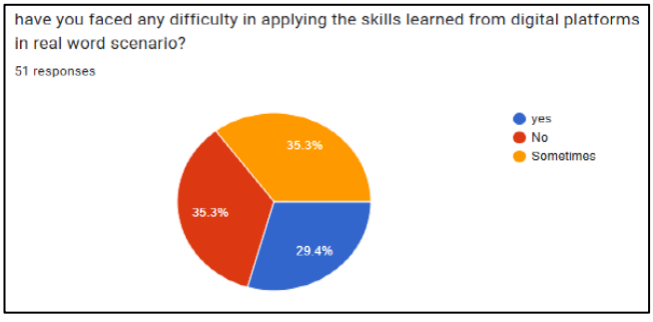
**Graph No. 13**




***Source of the Data: Primary Source***

The above pie chart shows Course Completion Difficulty: 39.2% found it difficult to complete courses, while 33.3% sometimes struggled

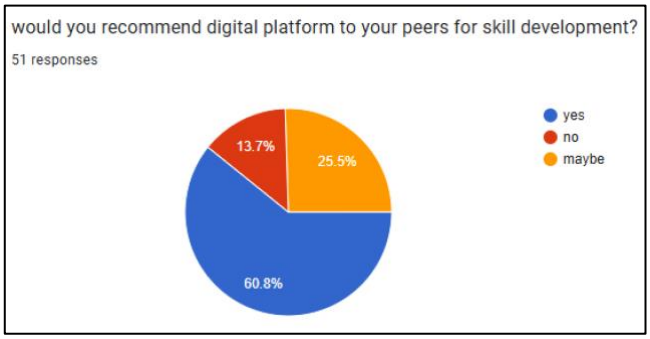
**Graph No. 14**




***Source of the Data: Primary Source***

The above chart represents 35.3% of respondents faced difficulty applying learned skills, while another 35.3% experienced occasional challenges. 29.4% had no issues applying the skills).

**Graph No. 15**




***Source of the Data: Primary Source***

Above pie chart shows 60.8% of respondents are willing to recommend digital platforms for academic and professional improvement, while 25.5% are unsure and 13.7% would not recommend them.

**Chi-Square Tests**

| | Value | df | Asymptotic Sig. (2-tailed) |
|---|---|---|---|
| Pearson Chi-Square | 6.63 | 3 | .085 |
| Likelihood Ratio | 6.83 | 3 | .078 |
| Linear-by-Linear Association | 1.02 | 1 | .313 |
| N of Valid Cases | 33 | | |

1. Pearson Chi-Square Test: $\chi^2(3) = 6.63$, $p = 0.085$ (no significant association).
2. Likelihood Ratio Test: $\chi^2(3) = 6.83$, $p = 0.078$ (similar conclusion).
3. Linear-by-Linear Association: $\chi^2(1) = 1.02$, $p = 0.313$ (no significant trend).
4. Valid Cases: 33 observations.

**Conclusion:**

Since all p-values are above 0.05, no significant relationship exists between variables, though the p-value of 0.085 suggests a weak trend requiring further investigation.

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**Chi-Square Tests**

| | Value | df | Asymptotic Sig. (2-tailed) |
|---|---|---|---|
| Pearson Chi-Square | 17.37 | 12 | .136 |
| Likelihood Ratio | 22.41 | 12 | .033 |
| Linear-by-Linear Association | 3.17 | 1 | .075 |
| N of Valid Cases | 51 | | |

**Key Findings:**

1. Pearson Chi-Square Test: $\chi^2(12) = 17.37$, $p = 0.136$ (no significant relationship).
2. Likelihood Ratio Test: $\chi^2(12) = 22.41$, $p = 0.033$ (suggests a significant association).
3. Linear-by-Linear Association: $\chi^2(1) = 3.17$, $p = 0.075$ (no strong linear trend).
4. Sample Size: 51 valid cases.

**Conclusion:**

The Pearson test shows no significant association, but the Likelihood Ratio test suggests a possible relationship. Further analysis and adjustments may be needed to confirm findings.

**Chi-Square Tests**

| | Value | df | Asymptotic Sig. (2-tailed) |
|---|---|---|---|
| Pearson Chi-Square | .61 | 2 | .737 |
| Likelihood Ratio | .61 | 2 | .737 |
| Linear-by-Linear Association | .17 | 1 | .677 |
| N of Valid Cases | 51 | | |

**Key Findings:**

1. Pearson Chi-Square: $\chi^2(2) = 0.61$, $p = 0.737$ (no significant association).
2. Likelihood Ratio: $\chi^2(2) = 0.61$, $p = 0.737$ (no significant impact).
3. Linear-by-Linear Association: $\chi^2(1) = 0.17$, $p = 0.677$ (no linear trend).
4. Sample Size: 51 valid cases.

**Conclusion:**

All p-values are above 0.05, indicating no significant relationship between the variables. The factors analyzed do not have a meaningful statistical impact in this sample.

**Key Findings:**

- Majority of respondents (72.5%) are in the 18-20 age group.

  Female respondents (60.8%) outnumber male respondents (39.2%).
- 84.3% of respondents use digital platforms for skill development.

  LinkedIn Learning is the most popular platform (51%).

  Other popular platforms include Coursera, Udemy, and Skillshare (17.6% each).
- Most respondents develop technical skills (47.1%) and soft skills (39.2%).

  A smaller proportion focus on business (31.4%) and creative skills (27.5%).
- 35.3% use platforms weekly, with 25.5% using them daily and another 25.5% using them rarely.
- 43.1% find digital platforms moderately effective for skill development.

  33.3% remain neutral, while 15.7% find them highly effective.
- 60.8% report positive improvements in academic or professional opportunities.

  74.5% believe digital platforms helped them gain practical knowledge.
- 31.4% face high subscription costs.

  25.5% experience internet connection issues.
- 39.2% struggle to complete courses; 35.3% find applying skills challenging.
- 60.8% are willing to recommend digital platforms to peers for academic/professional improvement.
- No statistically significant relationships were found between variables in most tests ($p > 0.05$).
- Weak trends were observed in some tests, suggesting the need for further investigation.

**Conclusion:**

The study indicates that digital platforms are widely used by undergraduates for skill development, with LinkedIn Learning being the most popular platform. The majority of students develop technical and soft skills, with a significant number reporting positive impacts on their academic and professional

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opportunities. Despite challenges such as high subscription costs and internet connectivity issues, most students find digital platforms moderately effective in enhancing their practical knowledge. There is no statistically significant relationship between most variables, but some weak trends suggest potential areas for further investigation.

**Recommendations:**

1. Educational institutions should integrate digital platforms into curricula to enhance skill development.
2. Efforts should be made to provide students with more affordable or free access to digital learning tools.
3. Technical support should be improved to address internet connectivity issues that hinder learning.
4. Platforms should focus on increasing engagement and motivation through interactive content and peer collaboration.
5. Further research with a larger sample size is necessary to explore potential relationships and trends.
6. Platforms should be diversified to cater to different learning styles and subject areas.
7. Educational policies should encourage the adoption of digital learning tools for both technical and soft skills.
8. Universities should offer training sessions to familiarize students with the best uses of these platforms.

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