

Evaluation of Educational Platforms

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ABSTRACT

This report evaluates the usability of two educational platforms i.e., Udemy and Coursera in a way that creates a complete analysis in interface, accessibility and performance of said platforms. Additionally, this report aims to uncover the essence of user experience for the purpose of capturing the key strengths and area of improvements that could be implemented. Moreover, through accessing each platform's design elements and adaptability, this report will greatly highlight the challenges users may face when interacting with these platforms. Ultimately, the ease of use and practicality is the main objective through the contributions of valuable recommendations in which enhances the appeal and educational impact of both medium.

KEYWORDS

- **Usability evaluation:** A process to check how easy and efficient a platform or system is for users.
- **Online learning platforms:** Websites or apps, like Udemy and Coursera, that offer courses and training over the internet.
- **Udemy:** An online platform with courses on a wide range of topics, often with flexible, self-paced learning.
- **Coursera:** An online learning platform, known for offering more structured courses and often partnering with universities.
- **System Usability Scale (SUS):** A survey tool used to measure how easy and satisfying a system is to use.
- **User experience:** How users feel when they interact with a platform, including ease of use, design, and satisfaction.
- **Accessibility:** How easy it is for all users, including those with disabilities, to use and navigate a platform.
- **User satisfaction:** A measure of how happy and satisfied users are with a platform.
- **Educational technology:** Technology and tools used to support learning and teaching online.
- **Online education:** Learning that happens over the internet, rather than in a traditional classroom.
- **Digital platform comparison:** Looking at the differences and similarities between two online systems or websites.
- **Usability assessment:** Checking how user-friendly a platform is, often through surveys or tests.
- **Course recommendations:** Suggestions provided by the platform to help users find courses they might like or need.
- **Payment options:** Different ways to pay for courses, such as subscriptions or one-time purchases.
- **Video integration:** How videos are used and played within the platform, which can impact learning.
- **Interactive learning:** Learning that actively involves the user through tasks, quizzes, or discussions, rather than just watching or reading.
- **Flexibility in learning:** How easily users can fit learning into their own schedules, like being able to pause and resume courses whenever they want.

1. INTRODUCTION

As online learning rapidly grown over the years, it is a matter of time that reliable educational platforms gain relevance albeit the courses offered by them. The platform such as Udemy and Coursera offer flexibility to learners in gaining new skills and for some courses, professional certifications. It is clear that these platforms provide a crucial opportunity to those who enrolled. This clearly shows the importance of usability-the ease with which users can interact with the platform and achieve their learning goals. The primary aim of this usability evaluation is to unveil both strengths and area of improvements for the two platform.

The increasing adoption of online education and the need for accessible and appropriate designs of digital learning environments informs this study. As more users increasingly engage online platforms for skill development, such platforms should be usable and effective. Usability is the key factor for success of any digital platform, and this becomes even more important in educational services, where learners are supposed to manage the learning process themselves. Comparing Udemy with Coursera-the two most used platforms with very different approaches-may shed light on how different design and usability strategies impact users' experience. This comparison will, therefore, be of utmost value to educators, developers of platforms, and decision-makers within the online education industry.

From the usability analysis, the following insights emerge about Udemy and Coursera: firstly, in general, Coursera offers more relevant suggestions through its personalized course recommendation mechanism, whereas Udemy enables an easy course discovery process through its effective filtering options. Regarding enrollment, Udemy's fast checkout with a wide range of payment options is appreciated, though there is much confusion regarding course prices, especially since courses are very often on sale. On the other hand, Coursera pricing is more transparent, especially for subscription models, but enrollment is considered slower, especially for specialized courses. In the content engagement section, the users appreciated the flexible video player in Udemy, while in Coursera, in-video quizzes enhance active learning and also disrupt the flow. These findings show exactly how different usability features on each of these platforms impact the overall user experience in each of them.

2. METHODOLOGY

This usability evaluation involves around a systematic approach, utilizing a questionnaire-based System Usability Scale (SUS) method for both Udemy and Coursera. This study aims to greatly highlight the usability differences between both applications. SUS, in turn, is a widely applicable instrument of system usability assessment. It was originally designed and developed as a simple ten-item questionnaire to reliably measure usability across systems and products. This SUS questionnaire holds an advantage especially in the gathering of subjective evaluations about users' experiences, and it helps capture overall satisfaction, ease of use, and perceived complexity. The SUS contains ten statements rated on a 5-point Likert scale, where respondents indicate the extent to which they agree with the statement or not by marking Strongly Disagree (1) to Strongly Agree (5). The items are positively and negatively worded to balance the scale and reduce bias. Questions are designed to measure aspects of the system's usability: ease of use, intuitiveness, and complexity.

The 10 questions are as follows:

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

3. RESULT

3.1 Objective Metric Outcome

Objective metric outcome is a necessity when it comes to effectiveness of educational platforms, as they provide quantifiable insights on user engagement, retention and platform performance. This evaluation involves around measuring individual retention rate, Application response time and average time spent on each platform. These metrics deeply reflect overall user engagements and satisfaction levels.

Participants	Applications	Learner Retention Rate (%)	App Response time(ms)	Average time spent
User 1	Udemy	78	350	1
	Coursera	82	320	3.5
User 2	Udemy	85	340	5
	Coursera	87	300	5.8
User 3	Udemy	70	360	2
	Coursera	73	330	4
User 4	Udemy	80	355	1
	Coursera	83	325	5
User 5	Udemy	90	305	6
	Coursera	92	345	2

3.2 SUS Evaluation Score

3.3 SUS Evaluation Score provides a quantitative measure of perceived usability by asking respondents to rate ten standardized statements about the system on a scale of 1 to 5, where higher scores indicate a more favorable evaluation. The scores are then converted into an overall usability score ranging from 0 to 100. For this evaluation, each respondent's SUS score for Udemy and Coursera reflects their individual experience with each platform's usability, with a sample size of 10 respondents from Microsoft Form office, offering a diverse range of feedback. Higher SUS scores for a platform suggest a more intuitive and satisfying user experience, making it valuable for identifying areas for enhancement. Below is a table of SUS scores from 10 respondents, representing their evaluations of both Udemy and Coursera's usability.

These are steps for calculating each respondent's SUS score:

Step 1: Convert the user ratings from the 10 questions into points

For odd numbered questions 1, 3, 5, 7, 9:

- [User Rating] – 1 = ___ points

For even-numbered questions 2, 4, 6, 8, 10:

- 5 – [User Rating] = ___ points

Step 2: Add up the points from the 10 questions into a user's total points

- [Question 1: ___ points] + [Question 2: ___ points] + ... [Question 10: ___ points] = ___ total points from user 1

Step 3: Multiply the user's total points X 2.5* to get an individual user's score.

*This converts the scale to be out of 100.

- [Total points from user 1] x 2.5 = User #1 score

Below are the average SUS scores for both Udemy and Coursera application:

Coursera:

$(70.0+77.5+95.0+52.5+100.0+80.0+70.0+67.5+65.0+72.5) \div 10 = 75$

Udemy:

$(57.5+45+30+47.5+65+50+35+52.5+47.5+52.5) \div 10 = 48.25$

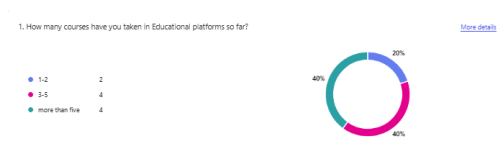
[1]

[2]

3.4 Custom Questions

Custom questions are created for the purpose of asking personal preference and overall experience of each user regarding online platform.

Question 1=



This image shows the percentage of course completion range.

Question 2=



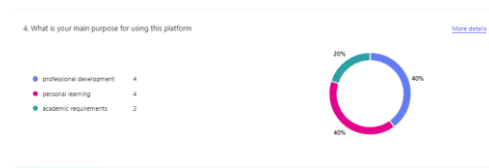
This image shows the percentage of the courses quality enrolled in general.

Question 3:



This image shows the percentage of devices used for online learning.

Question 4:



This image shows the main purpose of online learning.

Question 5



This image shows the preference of learning platform.

4. Discussion

It is important to note that in direct comparison, Udemy and Coursera have huge contrasts in their user experience as Udemy has a significantly higher SUS score. Consequently, with its SUS score of 75, the user experiences of Coursera are generally positive, and hence users find the website generally easy to use and navigate through. It reflects the professional structuring of the platform and well-organized courses that most probably contribute to higher confidence and satisfaction among learners. By contrast, Udemy scored very low - 48.25 - on the SUS metric, indicating much less satisfaction by a user. This may be because of the inconsistent quality of courses on the site, the more fragmented nature of its course offerings, and complications with the interface itself, some users mentioned. The difference in the SUS score suggests that, on the whole, Coursera is seemingly more usable, whereas Udemy has probably had some problems with reliability and ease of workability for the enhancement of its user experience

5. Summary

Following is the SUS analysis between Udemy and Coursera based on responses from 10 users, which suggests that there was a significant difference in the user experience. On one side, Coursera had a much better score of 75, thus portending it to be intuitive, structured, and hence easier for users to navigate and use. In comparison, Udemy managed to get only 48.25, which indicated certain usability problems, inconsistent quality of courses, and a not-so-streamlined interface. These results indicate that Coursera excels in maintaining a structured, easily navigable environment and that there may be some problems in Udemy regarding user interface and consistency with courses. Besides the SUS survey, specific questions were drafted in order to provide more detailed insight into the personal preferences of each user and their general experience with each platform, offering a more comprehensive understanding of user satisfaction with the platforms and the effectiveness of those platforms.

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