

## Analysis of E-learning Platforms: Comparison Between Udemy and Skillshare

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**Abstract:** Online education plays a central role in the educational environment and online learning platforms are shaping up as a crucial factor in knowledge acquisition. In this regard, the current article aims to examine and compare two of the largest online learning platforms, namely Udemy Business and Skillshare. From the user's point of view, the aspects such as design and layout, utility, areas where the platforms offer courses, accessibility, advantages, and disadvantages for acquiring relevant skills, including the price range need to be compared. This comparison could serve as a basis for choosing the most appropriate platform depending on the individual needs of users seeking knowledge and valuable information. Key points of convergence and differences between the platforms are to be highlighted to provide a clearer understanding of their respective characteristics and to help a more informed choice.

**Keywords:** *Online learning platforms, Udemy Business, Skillshare, comparison.*

### 1. Introduction

In the contemporary educational space, digital platforms are an integral part of learning [18]. With the growing global network and rapid development of information technologies, online learning platforms are utilized as a means of education by both students and professionals, as well as educators. On the other hand, the transition to online learning prompted by the COVID-19 pandemic has led to the widespread use not only of online learning platforms but also video conferencing and collaborative work platforms [4]. It should be noted that in addition to the available e-learning platforms, specialized courses are also

encountered, integrating various techniques to provide necessary information to learners. Such environments for learning and testing are found in the field of pneumatic automation [9, 24, 28], programming languages [25], the study of algorithms [10], and the study of 2D geometric shapes [5]. Mention should also be made of developed platforms used for testing acquired knowledge and skills, some of which employ gamification [8], while others rely on generating questions with varying degrees of complexity [5, 6, 7, 23].

Setting aside these specialized courses, the aim of the present article is to conduct a comparative analysis of two of the most commonly used online learning platforms. It is shown that the most commonly used platforms are Udemy (25%), and Skillshare (17%) [21]. That is why the highlights of the current study encompass their various aspects such as functionalities, user interface, availability of diverse educational materials, support for different learning formats (e.g., video tutorials, interactive assignments, discussion forums, and others), data security and privacy, presence of adaptive tools, and other important criteria. The comparative analysis aims to identify the potential advantages and disadvantages of the Udemy and Skillshare platforms. In this way, an objective assessment of their suitability for different educational purposes and audiences can be provided. The current analysis will offer objective information to potential users on how to make an informed decision when choosing a suitable educational platform.

## **2. Overview of eLearning Platforms**

There are various applications for e-learning. Knowledge management systems are most commonly used, where students can create and communicate new ideas, as well as search for information in a specific field, using various and distributed sources of knowledge [27]. Different educational aids have been developed to support the e-learning process, such as Kahoot, Socrative, Class Dojo, Clickers, Padlet, and video conferencing. Social media platforms like Facebook, Twitter, and Instagram can also be used in the e-learning process. Social media platforms are one of the best sources that help students interact with instructors and ask questions [31, 30]. E-learning enhances problem-solving skills, critical thinking abilities, and adaptability of students. E-learning platforms provide flexibility in terms of time and place for learning [14]. In general, e-learning helps overcome communication barriers, ensures knowledge and skills efficiency through easy access to a large amount of information [29].

E-learning platforms represent an important and diverse part of the modern educational landscape. They are based on the use of information technologies and the internet, enabling accessible and flexible learning for users in a virtual environment. E-learning relies on technology – hardware, software, network infrastructure. Contemporary e-learning does not have specific hardware or

network requirements, only requiring access to the internet and a computer. Most e-learning environments are accessible through web browsers (using HTTP) over a TCP/IP network like the internet or intranet (school or university networks). Many applications use client-side scripts such as JavaScript, Adobe Flash, or Java Applets. They also contain media or documents that may require proprietary software – Apple QuickTime or Microsoft Windows Media Players for videos or Microsoft PowerPoint for presentations. A review of third-party libraries, such as LinkedIn Learning, Udemy, EmTrain, and Skillshare, and how these tools can support corporate goals are shown in [19].

It is essential to examine the key aspects and characteristics of e-learning platforms that make them extremely useful for students, learners, and educators. Table 1 shows the main advantages of e-learning platforms.

*Table 1. Advantages of E-learning Platforms.*

<b>Advantages</b>	<b>Explanation</b>
Diversity of Educational Materials	E-learning platforms offer a rich selection of educational resources in various formats, such as video tutorials, interactive assignments, study materials, etc. This allows learners to choose the learning approach that suits their individual needs and preferences.
Flexibility of the Learning Process	E-learning provides the opportunity for learning at one's own pace and discretion. Students can choose the time and place for learning, freeing them from schedules and geographic constraints. They can focus on challenging topics, review material, or explore additional knowledge sources, contributing to better academic outcomes.
Interactivity and Engagement	Most e-learning platforms are equipped with interactive tools and technologies that support active learning and student engagement. Embedded questions, tests, and discussion forums stimulate participation and the exchange of opinions among students, contributing to a better understanding of the material.
Personalization of Learning	Some e-learning platforms use adaptive technologies that analyze and track students' progress. This allows personalization of the educational process by providing individualized recommendations and learning materials that are most suitable for the specific user.
Global Access and Scalability	E-learning platforms are accessible from any point in the world, allowing students to learn in an international environment, interact with various cultures, and share knowledge with colleagues from different countries. This creates a unique opportunity for global education and collaboration.

It can be argued that e-learning platforms represent a powerful tool for education and learning in the digital era. The technological innovations and flexibility they offer open doors to achieve more effective and personalized learning, capable of adapting to the needs and goals of each individual participant in the educational process.

### **1.1. Types of E-learning Platforms**

There are many e-learning platforms contributing to the educational process today. Their classification can be based on two indicators – cost and accessibility. Regarding the 'cost' indicator, e-learning platforms can be divided into two groups: paid and free. In the paid group, there are licensed and patented e-learning platforms. These two terms denote different models and approaches to delivering e-learning. Based on cost, they can be further classified as:

- Licensed e-learning platforms and
- Patented e-learning platforms

Licensed e-learning platforms are typically commercial products offered by specific companies or service providers. These platforms often provide a comprehensive learning solution, including training management software, learning content, and tools for feedback and student assessment. When using a licensed platform, clients (schools, universities, companies, etc.) pay licensing fees or subscription fees to the service provider for the right to use the software and training materials. This model ensures support, regular updates, and technical assistance from the provider.

Patented e-learning platforms, also known as Massive Open Online Course (MOOC) platforms, are online educational platforms that offer many open courses on various topics from different universities and educational institutions. These platforms are not licensed to specific institutions but are instead freely accessible to the public. Students can register for free and access materials and lectures from various universities and instructors worldwide. While they may offer paid access to certificates or additional services, the essence of these platforms is to provide open access to education. Thus, the main difference between the two is that licensed platforms are paid and provide comprehensive learning solutions, while patented platforms are free or offer free access to courses provided by various educational institutions.

Patented e-learning platforms are developed for commercial purposes, selling distance learning products, such as Captera, Training Industry, eLearning Industry, and Coursera. Patented e-learning platforms have certain differences from free e-learning platforms such as a difference in educational approach.

Free e-learning platforms are offered as open-source and are based on the philosophy of 'free software' defined by the Free Software Foundation, which considers free software to be available in source code form, freely usable, and modifiable. However, free software does not imply cost-free, as professionalism and the quality of services require expertise and associated costs.

For the purposes of remote/distance/electronic learning, free and open-source software is required. According to access, they can be divided into:

- Free Software
- Open Source

Free and open-source software. Created by Richard Stallman, its main idea is that users are free to make decisions regarding the use of software code. Users are free to use programs for various purposes, inspect the software and see how it works, distribute programs to others, and are free to improve the programs.

Open source software created by Bruce Perens. According to its creator, open source not only signifies access but also the free use of software code. It is characterized by free distribution, the software code must be included in the distribution, freely creating derivative works, the improved works must be distinguished from the original version. Also, without discrimination against individuals and groups, no discrimination regarding the kind of effort expended, distribution of the license. The distribution of the software must be accompanied by an included license and should not have additional restrictions added. The license should not be specific to the product, should not restrict other software, and should be technologically neutral.

## **1.2. Influence of Design in E-learning Platforms**

According to Gee [17], the approach to e-learning platforms should be reconsidered in the light of a more strategic, multifunctional, and experience-oriented design [2, 20], which characterizes students in relation to educational domains (cognitive, psychomotor, and affective). According to Gee, the design of online learning processes should include technical (mechanism), content (design), and visual aspects (attractiveness). Creating a simple and functional design for e-learning requires an adequate characterization of the design [12] and parallel technical and visual implementation. The need for didactic and effective content extends knowledge transfer to the creation of efficient, integrated education.

Regarding the capabilities of e-learning platforms developed for academic institutions, Garrote Jurado et al. [16] argue that the most suitable features of e-learning platforms, adapted to the needs of higher education, are tools for distribution, communication, interactive tools, and course administration tools. These functionalities will support the design structure of the platform. In addition, Reitano's research [26] on the needs of students from e-learning platforms shows

that students are more interested in a variety of communication tools and adaptability of collaboration tools (such as Wiki and Google Docs) when evaluating e-learning platforms.

A deeper understanding of design characteristics enables educational institutions to optimize the use of e-learning platforms and increase the likelihood of integrating institutional and user culture in the digital environment. All these factors can lead to a better understanding of how participation in e-learning platforms affects educational activities and motivational factors for e-learning. The platform is closely linked to the growing trend of young people to engage in multiple tasks and educational activities [29].

Multifunctional awareness is a factor that needs to be considered in the design of platforms that bring together teachers, students, and other stakeholders in the learning process. Screen interfaces are needed that not only support learning activities but also facilitate synchronous, asynchronous interaction, and sensory engagement.

According to Al Ajlan [1], for an e-learning platform to be multifunctional, it must include three main characteristics: for learning, support, and technical tools. Implementing basic principles in the visual design of the platform, combining functional structure, influences the motivation for learning in students and users. Factors such as easy and fast access, an attractive but visually simplified graphic structure contribute to the adequate appearance of the platform. Avoiding a monotonous interface background is also important. All of this, combined with a comprehensible language for presenting information, makes learning easy, accessible, and highly motivating.

## **2. Comparative Analysis of E-Learning Platforms in the Market**

This section aims to conduct a comparative analysis of existing e-learning platforms in the market, relying on statistics from the global e-learning industry. The e-learning platform industry is extensive and provides solutions for various educational aspects, depending on the focus of the learning process [15].

To create this in-depth overview of online learning platforms, it is based on research by Ispringsolutions [22], which tests all solutions offering free trial versions. Based on the examination of their functionality and a comparison of their capabilities, user interface (including platform user-friendliness) and the adequacy of functionalities (how well each feature meets the needs of its target audience) are assessed. According to statistics from the past year, the ranking of the most popular e-learning platforms includes Udemy Business, Skillshare, LinkedIn Learning, Coursera, edX, iSpring Market, Kajabi, Podia.

For the purposes of this study, the ranking of ISpring [22] was taken into consideration, with Udemy Business and Skillshare being in the top 2. The

comparative analysis of the first two platforms in the ranking is based on the following factors:

- General characteristics of the platforms
- Positive and negative aspects of the platforms
- Similarities and differences between the two platforms
- Courses offered.
- Instructors
- Features

Each of these characteristics will be analyzed as a separate point in this section.

## 2.1. General Characteristics of the Udemy and Skillshare Platforms

The general characteristics of the three platforms can be reviewed in the following tabular form:

*Table 2. Key Features of Popular E-Learning Platforms*

<b>Platform</b>	<b>Target Audience</b>	<b>Pricing</b>
Udemy Business	L&D professionals or business owners who don't have the time or budget to create their own online courses.	<b>Team</b> (5-20 users): \$360 per user per year <b>Enterprise</b> (21+ users): please contact the sales department for a personalized quote.
Skillshare	Design and visual arts professionals	<b>Beginner</b> (2-19 users): \$159 per user/year <b>Enterprise</b> (20+ users): contact sales for a personalized quote <b>Revive</b> (51+ users): contact sales for a personalized quote.

**Udemy** started in 2009 with the mission to improve lives through learning. It enables anyone to create and offer high-quality online courses on its platform, although many of its instructors are accomplished professionals. It now has over 46 million registered users and offers 185,000+ courses in 12 categories. Udemy is a universal provider and offers courses for both professional and personal development. Courses are purchased individually on the platform, each with an individual price, and are led by instructors practicing the discipline. Purchasing a course provides lifetime access to it and all its resources. Some courses are completely free. Udemy also offers a monthly subscription called the “Individual Plan”. This provides unlimited access to a curated collection of 6,000+ top courses while the subscription is active. It is the largest Ed Tech company of its kind, and

80% of Fortune 100 companies trust Udemy to enhance employee skills, including Apple, Unicef, PayPal, Accenture, Samsung, Unilever, Instacart, and Okta.

**Skillshare** has become the world's largest community for online learning for creators. It offers over 40,000 courses and has more than 12 million users. Skillshare is known for its classes in creative disciplines such as photography and sketching, but it also provides courses in areas like business and productivity. Many of its courses are taught by industry experts. However, Skillshare is an open platform where ordinary people engaged in creative pursuits can upload classes, become instructors themselves, and earn income. Udemy has significantly more users, courses, and categories than Skillshare. Courses can be purchased individually without requiring learners to commit to a subscription (although a monthly plan is available). Similar to Skillshare, Udemy is an open platform allowing anyone to upload courses. Unlike Skillshare, it provides shared certificates upon course completion.

Unlike Udemy, Skillshare is a subscription-only platform that allows creative experts to upload courses and share their skills. It has fewer courses but a stronger emphasis on creative disciplines.

*Table 3. Comparative Analysis of the Positive and Negative Aspects of Udemy and Skillshare*

<b>Platform</b>	<b>Udemy</b>	<b>Skillshare</b>
<b>Positive Aspects</b>	<ul style="list-style-type: none"> <li>- Access to regularly discounted courses</li> <li>- Accessibility (subtitles, languages, offline learning)</li> <li>- Free courses are available.</li> <li>- Lifetime access upon course purchase</li> <li>- 30-day money-back guarantee if you are not satisfied with your purchase</li> <li>- Massive catalog of nearly 200,000 courses</li> <li>- Certificates for completing paid courses.</li> <li>- Easy and convenient payment</li> </ul>	<ul style="list-style-type: none"> <li>- Extensive library of courses in design, illustration, and other creative areas.</li> <li>- Courses are led by instructors who are leaders in their field.</li> <li>- Short, practical courses with a significant impact.</li> </ul>
<b>Negative Aspects</b>	<ul style="list-style-type: none"> <li>- Certificates are not accredited and sometimes are not accepted by employers.</li> <li>- Course quality is inconsistent.</li> <li>- Instructor support is not always available</li> </ul>	<ul style="list-style-type: none"> <li>- No certificates or official documents</li> <li>- Requires a high annual subscription fee.</li> <li>- Not all courses are led by qualified instructors</li> </ul>

The main differences between the two analyzed platforms (Udemy and Skillshare) are shown in Table 4.



Table 4. Key Differences between Udemy and Skillshare

Indicator	Udemy	Skillshare
Number of Users	46+ million	12+ million
Number of courses	185,000+ in 12 categories	40,000+ in 3 categories
Instructors	Anyone can create and offer an approved course	Anyone practicing or creative can design and offer a course
Price	<ul style="list-style-type: none"> <li>– Individual courses starting from \$12.99.</li> <li>– Monthly subscription \$29.99</li> </ul>	\$32 for a monthly subscription or \$14 for an annual subscription
Free content	500+ courses	Brief examples of some courses
Feature	<ul style="list-style-type: none"> <li>– High-quality video content and downloadable resources</li> <li>– Extensive selection of courses across a wide range of disciplines</li> <li>– Shareable certificates upon course completion</li> </ul>	<ul style="list-style-type: none"> <li>– High-quality video content with transcripts and subtitles</li> <li>– Extensive selection of courses, focusing on creative disciplines</li> <li>– Curated learning with Skillshare picks and recommendations to guide your education</li> </ul>
Specialization	<ul style="list-style-type: none"> <li>– Anyone can create and offer courses</li> </ul>	<ul style="list-style-type: none"> <li>– Practicing creators can share skills online</li> </ul>
Professionals	<ul style="list-style-type: none"> <li>– Passionate instructors with high-profile contributors</li> <li>– Impressive range of courses</li> <li>– Frequent sales, along with over 500 free courses</li> <li>– Teaches sought-after professional skills, as well as many creative and fun courses</li> </ul>	<ul style="list-style-type: none"> <li>– Passionate instructors with high-profile contributors</li> <li>– Skillshare perks: discounts for Adobe, Canva, Freshbooks, etc.</li> <li>– Active community of like-minded individuals</li> <li>– Diverse range of courses</li> </ul>
Drawbacks	<ul style="list-style-type: none"> <li>– The quality of the course varies.</li> <li>– Most completion certificates are not accredited.</li> </ul>	<ul style="list-style-type: none"> <li>– Quality of the course varies.</li> <li>– No course certificates.</li> </ul>
Suitable for	<ul style="list-style-type: none"> <li>– Anyone looking for access to a wide variety of content, from work-related to entertainment and creativity.</li> <li>– Those seeking a one-time course on a specific topic.</li> <li>– Business managers looking to enhance their team's skills</li> </ul>	<ul style="list-style-type: none"> <li>– Creators and enthusiasts looking to enhance their skills.</li> <li>– Creative businesses hoping to expand.</li> <li>– Anyone wanting to learn new creative skills.</li> <li>– Those who can benefit from the advantages of Skillshare</li> </ul>

The next Table 5 provides a comparison between the types of courses offered on both platforms.

*Table 5. Types of courses on Udemy and Skillshare*

	<b>Udemy</b>	<b>Skillshare</b>
Categories	<ul style="list-style-type: none"> <li>- Development</li> <li>- Business</li> <li>- Finance and Accounting</li> <li>- IT and Software</li> <li>- Office Productivity</li> <li>- Personal Development</li> <li>- Design</li> <li>- Marketing</li> <li>- Lifestyle</li> <li>- Photography and Video</li> <li>- Health and Fitness</li> <li>- Teaching and Academics</li> </ul>	<ul style="list-style-type: none"> <li>- Creation, Building, Development</li> <li>- There are 16 subcategories, each of which is divided into skill levels: beginners, intermediate, and advanced</li> </ul>
Free Courses	500+	Excerpts from some courses

Based on the derived data, the following information about Skillshare can be summarized:

- Courses typically last 1-2 hours with short lessons of around 10 minutes each.
- Combination of lessons.
- Accessible format with translations in various languages.

Udemy courses are usually in a pre-recorded video format. They can range in duration from one hour to over 20 hours in total and are divided into digestible lessons. They are led by an instructor who guides learners through ideas and skills relevant to the specific discipline and can be used on demand. It should be noted that the courses are shorter on Skillshare than on Udemy, where instructors' incomes are proportional to the number of registrations [13].

Despite being a publisher of original content, Skillshare is an open platform where any qualified creator can upload and share their course. This means that the quality of teaching may vary on Skillshare. Most courses also include additional learning resources, such as texts, articles, and other materials that can be downloaded and are related to the course content.

At the same time, Udemy is a platform that allows anyone passionate about what they know and willing to share it to create and offer a course on its platform. There are guidelines on what is allowed on the site. For example, each course must include at least 30 minutes of video and at least five separate lectures, and there are restricted topics, such as anything related to dating or sexuality. However, it

is not necessary for every instructor to have officially recognized teaching experience. Many Udemy instructors are professors, award-winning artists, or technical executives.

It is necessary to identify the available features of each platform, namely:

- Skills sharing features:
  - 40,000+ courses on almost every creative topic you can imagine.
  - Over 12 million registered users.
  - High-quality lessons with available transcripts and subtitles for each class.
  - Curated learning with selections and recommendations from Skillshare to help guide your education.
- Access to a community forum for collaboration, asking questions, and sharing successes among fellow learners.
- Monthly and annual subscription options available.

According to the derived technical specifications, identical values are observed for each indicator on both desktop platforms.

*Table 6. Technical Specifications and Requirements of Computer Platforms*

	<b>Udemy</b>	<b>Skillshare</b>
Browser	The latest version of Chrome, Firefox, Safari, Edge, or Opera for desktop or laptop. Broadband connection with a minimum speed of 5 Mbps.	The latest versions of: Google Chrome, Mozilla Firefox, Safari
Platform	Windows 8.1 or a newer version with the latest updates installed	Windows 7, 8, or a newer version with the latest updates installed
RAM	4 GB or more	4 GB or more
Video	Graphics output capability	Graphics output capability *1080p, with 4K as recommended values for video uploads.
Audio	Audio output capability	Audio output capability

Ultimately, by comparing Skillshare with Udemy, the following can be summarized:

- Udemy offers more diverse courses, while Skillshare focuses on creative disciplines.
- The quality of teaching is slightly more consistent on Udemy, as it has a stricter participant verification process—although both platforms have expert instructors.

- The monthly subscription cost is generally similar, but the annual subscription for Skillshare is significantly more affordable.
- The Skillshare subscription provides access to everything the platform offers, whereas the Udemey plan grants access to a smaller selection.
- Courses on Udemey are individually priced, and with frequent sales, this can be an economically effective way to purchase course content.
- Udemey is more oriented towards serving businesses—especially larger teams, but Skillshare is considerably more cost-effective.

#### **4. Conclusion**

Both platforms provide a vast array of courses and accessible information in the online space. They cater to a wide range of knowledge-seeking users and offer a rich spectrum of opportunities for enhancing learning and skills. Skillshare, based on its company claim that "Anyone can learn anything, at any age, at an affordable price, anywhere in the world," targets primarily creators and small business entrepreneurs. Since its inception in 2010 by Michael Karnjanaprakorn and Malcolm Ong, the company has seen significant growth in the number and quality of courses offered, user base, and instructor support on the platform. Skillshare has Android and iOS applications, but the ability to create one's own course is lacking. On the other hand, Udemey is the largest Ed Tech company to date. Its primary philosophy is to be an environment where everyone can create and receive content, with courses supporting users' desire for additional information. Aligning with the company's claim that life can be improved through learning, Udemey boasts the largest collection of offered courses in the online space. Additionally, the platform offers a mobile Android application, which became the most used and profitable one in India in 2020, along with an iOS version.

Users are free to explore the options offered by both platforms, considering their personal motivation for learning, and make a choice based on the field, level of knowledge, and, not least, the price they are willing to pay for knowledge.

The choice of a learning environment depends on the user's awareness and specific knowledge needs. Factors influencing their informed choice include accessibility or adaptability, an easy and enjoyable interface with attention to graphic design, security, speed, and last but not least, price and the quality of individual courses. The platforms examined in this study have their points of intersection and, accordingly, differences not only in their structural content but also in their fundamental policies toward users. Each of them is valuable and preferred by a diverse audience, recognizing the specific platform as a reliable source of knowledge online.

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