

# Comparing the Usability of Digital Game Stores: A SUS-Based Evaluation of Steam and Epic Games Store

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## ABSTRACT

This research presents a comparative usability evaluation of two major digital game distribution platforms, Steam and Epic Games Store, utilizing the System Usability Scale (SUS) as a framework to assess their user-centered design and overall experience quality. The analysis centers on three critical user journey aspects: game discovery, the purchasing process, and community engagement. Data was collected via SUS-based structured questionnaires completed by a targeted sample of users familiar with both platforms. Results reveal distinct advantages across each platform, with Steam outperforming in game discovery, purchasing process and community-centric features due to its robust social integration, while Epic Games Store demonstrates a more basic game discovery and purchasing interface. These insights contribute to a comprehensive understanding of user satisfaction factors in digital game stores, offering actionable recommendations for enhancing usability across similar e-commerce ecosystems and help in drawing comparison between the two platforms.

## Keywords

Usability Evaluation, System Usability Scale (SUS), Digital Game Stores, Steam, Epic Games Store, User Experience, User Satisfaction.

## 1. INTRODUCTION

As digital gaming continues to grow, usability has emerged as a key factor influencing user satisfaction and loyalty on game distribution platforms. Steam and Epic Games Store are two of the most prominent players in this space, each offering unique features that impact the user experience across key aspects such as game discovery, purchasing, and community engagement.

Steam, established as a pioneer in digital game distribution, provides an extensive ecosystem that includes the Steam Marketplace, Points Shop, Community Workshops, and Groups. The Marketplace allows users to buy and sell in-game items, while the Points Shop lets them redeem points earned from purchases for additional content, enhancing engagement. Steam's Community Workshops and Groups also foster user-generated content and social interaction, enabling players to share mods, guides, and participate in discussions. These community-driven features create

a strong sense of connectivity and enable a highly interactive user environment.

On the other hand, Epic Games Store, a newer yet rapidly growing competitor, leverages the power of the Unreal Engine, offering users direct access to one of the industry's most popular game development platforms. This integration allows developers to seamlessly publish their games on Epic Games Store, which can lead to a more diverse selection of titles. The Unreal Engine Marketplace also supports creators in accessing tools, assets, and resources, making the platform highly convenient and appealing to developers and users alike.

According to Noyes [1], usability evaluation is defined as "systematical process of collecting data, in order to have a better understanding of users and how user groups use the product to perform a specific task under specified conditions".

This study aims to evaluate and compare the usability of these two platforms, focusing specifically on game discovery, purchasing processes, and community features. By employing the System Usability Scale (SUS) as a standardized tool, we gather user feedback on each platform's ease of use, functionality, and user satisfaction. The goal of this analysis is to highlight both the strengths and limitations of Steam and Epic Games Store, offering insights into how each platform's unique features contribute to or hinder the overall user experience.

Through analysis it has been found that users prefer using steam's game discovery and purchasing features over Epic games store's offerings, these findings will be valuable not only for understanding user preferences but also for guiding improvements in digital game store design.

## 2. MOTIVATION OF STUDY

The motivation for this study arises from the growing importance of user experience in the success of digital game distribution platforms. With millions of gamers relying on platforms like Steam and Epic Games Store for their digital gaming needs, these platforms have become central to the gaming community and

industry. The usability of these platforms directly impacts user satisfaction, engagement, and loyalty, making it essential to understand how well they meet user expectations.

In the competitive landscape of digital distribution, platforms must continuously improve key user experience areas, such as ease of game discovery, streamlined purchasing processes, and active community engagement.

By conducting this study, we aim to identify both the strengths and potential improvement areas for each platform. The insights from this analysis could guide enhancements that better support user preferences, streamline navigation and interaction, and ultimately lead to more enjoyable and productive user experiences. This study's findings can contribute to advancing best practices in digital game store design, with potential benefits for platform developers, game creators, and the gaming community at large.

## **3. THEORITICAL BACKGROUND**

### **3.1 SUS Components**

The System Usability Scale (SUS) is one of the most widely used tools for evaluating the usability of digital platforms. Developed as a quick and reliable method to assess usability, SUS consists of a 10-item questionnaire with a 5-point Likert scale, where users rate their agreement or disagreement with statements about their experience. SUS measures three primary components of usability: efficiency, effectiveness, and satisfaction [2] These components provide insight into how well users can complete tasks, how intuitive they find the platform, and how satisfied they feel with the overall experience.

### **3.2 Game Distribution and Purchasing Process**

In the context of digital game distribution, the online shopping experience is fundamental to user satisfaction and engagement. Unlike traditional retail, online platforms like Steam and Epic Games Store must prioritize usability to ensure that users can easily discover, purchase, and interact with content. An effective shopping experience in this domain involves clear navigation, efficient search and discovery tools, a straightforward purchasing process, and accessible community features, all of which contribute to a positive user experience. To measure the effectiveness of these aspects, usability assessment methods are widely employed to capture and quantify users' perceptions of a platform's functionality and ease of use.

#### **3.2.1 Game Discovery**

Steam excels in game discovery by offering an extensive set of tools and options to facilitate personalized browsing. Its recommendation engine, tailored to users' previous gameplay and preferences, provides suggestions that help users find titles that suit their interests, including lesser-known games. Additionally, Steam enhances the discovery process through its Marketplace and Points Shop, where users can redeem rewards and engage with diverse content, further enriching the experience. Community-driven

elements, such as user-generated reviews, guides, and user-created mods available in the Steam Workshop, add valuable perspectives and insights from fellow players, enabling users to make informed choices. In contrast, the Epic Games Store adopts a more streamlined approach to game discovery, offering fewer filters and a simpler recommendation system. This has been perceived by some users as restrictive, particularly for those looking for specific or niche titles.

However, Epic's integration with Unreal Engine provides a unique advantage, supplying a powerful set of tools for developers and users alike, which appeals to those interested in both exploring and creating games.

#### **3.2.2 Purchase Process**

The purchasing processes on both Steam and Epic Games are designed to be secure, though each platform approaches it with different strengths. Steam's process is marked by transparency, providing detailed system requirements, extensive user reviews, and regional pricing options. This setup allows users to make well-informed purchasing decisions and supports a global audience with varied economic backgrounds through its adaptive pricing. Steam's frequent discounts and seasonal sales further contribute to affordability, while the Points Shop offers additional incentives for purchases.

Additional features, such as the ability to buy games as gifts for friends and the recently introduced Family Sharing option, which enables family members to share a game library, enhance the user experience. Steam also prioritizes security through its two-factor authentication (2FA) system via the Steam Authenticator app, which adds an extra layer of protection to both transactions and account access. On the other hand, the Epic Games Store is known for its simplified and efficient checkout process, which appeals to budget-conscious gamers through regular free game giveaways. While the streamlined approach is appreciated, some users noted a need for more detailed game information, akin to Steam's offerings, to enhance purchasing decisions.

#### **3.2.3 Community Features**

Steam has cultivated a robust suite of community features, which fosters an interactive and social environment for users. Features like discussion forums, achievement tracking, wish-lists, and the recently added Family Sharing option enable users to connect, collaborate, and engage with one another. Steam users can also add friends, browse friends' libraries, gift games, and utilize the platform's achievement system to enhance their gaming experience.

The Steam Marketplace facilitates [3] buying, selling, and trading of in-game items, while the Points Shop rewards users for their engagement, strengthening community participation. Collectively, these features create an active, vibrant community environment, where users feel connected and engaged. By comparison, Epic Games provides a more solitary experience, with limited social

interaction and community support, which some users find less immersive. However, Epic's close integration with Unreal Engine grants developers and creators' access to a powerful suite of tools for game creation and modification, making it particularly appealing to those involved in content creation and the technical aspects of gaming. While Epic Games may lack community-driven elements, its appeal to developers and creators distinguishes it from Steam in terms of its focus on game development resources.

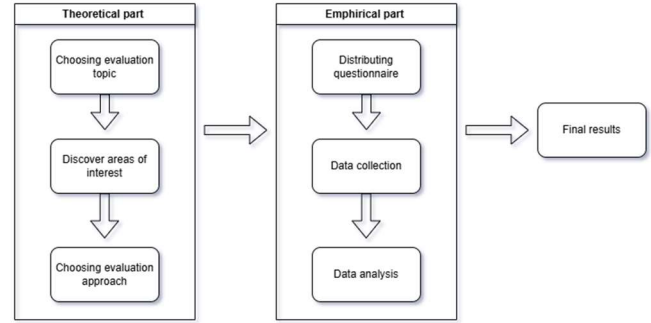
#### 4. METHODOLOGY

Usability is a core principle that determines how effective, efficient, and comfortable users feel when interacting with interfaces. The usability study seeks to determine user preferences and requirements and to measure the effectiveness, efficiency and satisfaction regarding the usability experience of Steam and Epic Games store using data collected through distributing questionnaires and analyzing them using System Usability Scale (SUS) analysis tools.

The required information has been collected through using ten-item attitude Likert scale, the questionnaires have been categorized separately for Steam and Epic games Store in order to draw comparisons between them. The questions used in this study includes the following,

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.

Ten students participated in this study with each participants having prior experience in using both platforms. Figure 1 depicts the research and data collection process [4] used in this research.



**Figure 1: Research and data collection process**

The assessment was based on users' opinion and provided insights on the particular platform which included frequency of use, complexity of the platform, ease of use, integration of system functionalities, inconsistency in the system, how fast participants could learn to use the system, user confidence and things users required to learn before using the system properly. The collected data have been compiled and analyzed through Mixality's SUS analysis toolkit.

#### 5. ANALYSIS AND DISCUSSION

Table 1 presents the results of the System Usability Scale (SUS) scores for two variables: Epic Games Store and Steam. The data includes the SUS score, the corresponding percentile, and the industry benchmark classification.

**Table 1. Results based on SUS Score**

Variable	SUS Score	Percentile	Industry Benchmark
Epic Games Store	65.5	41.34	Below Average
Steam	69	52.42	Above Average

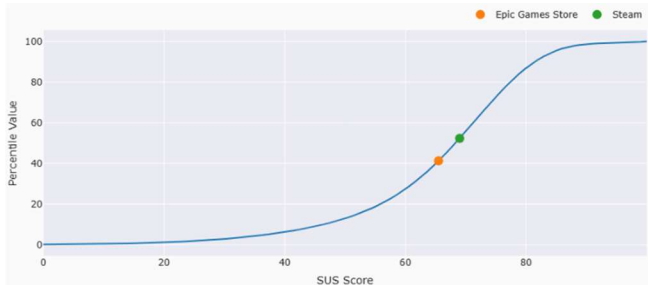
The SUS scores indicate the perceived usability of each system. The Epic Games Store has a SUS score of 65.5, placing it in the 41.34th percentile, which is classified as below average in the industry benchmark. On the other hand, Steam has a higher SUS score of 69, placing it in the 52.42nd percentile, which is considered above average [5]. A more accurate depictions have been made using the box point plotting and by using the percentile curve which have been included in figure 2 and 3.



**Figure 2: SUS Score Comparison using boxplot**

For the Epic Games Store, the SUS score distribution in the box plot reveals that most user scores are concentrated between the 1st quartile (50) and the 3rd quartile (75.625), with a median score of 70. This spread suggests a moderate level of variability, as reflected by the relatively high standard deviation (13.27). The minimum and maximum scores of 42.5 and 80, respectively, indicate a range of responses, with some users experiencing a lower level of satisfaction.

Steam's SUS score distribution shows a narrower spread of scores compared to the Epic Games Store, as indicated by a lower standard deviation of 11.68. The central box in the box plot for Steam would span from Q1 (60) to Q3 (76.25), with a median score of 68.75. The minimum and maximum scores, 50 and 90 respectively, demonstrate that Steam has a relatively consistent level of user satisfaction, with fewer extreme low scores than the Epic Games Store. Steam's higher quartiles and median suggest that, overall, users found Steam marginally more usable than the Epic Games Store. [6]



**Figure 3: SUS Score Comparison on a percentile Curve**

These results suggest that users find Steam to be more usable compared to the Epic Games Store. The percentile rankings provide a clear comparison of how each system performs relative to others in the industry. [7]

Table 2 presents the data for the Epic Games Store and Steam, evaluated using the Grade Scale, Acceptability Scale, and Net Promoter Score (NPS) Scale.

**Table 2. Data based on Grade scale, Acceptability scale & Net Promoter Score (NPS) Scale**

Variable	Grade Scale	Acceptability Scale	NPS Scale
Epic Games Store	C	Marginal	Passive
Steam	C	Marginal	Passive

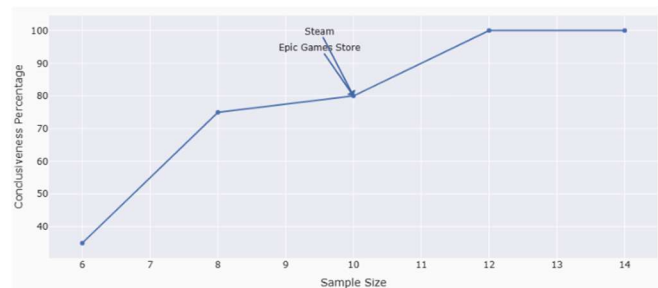
Both the Epic Games Store and Steam received a grade of C on the Grade Scale, indicating an average level of usability. On the Acceptability Scale, both systems are rated as Marginal [8], suggesting that their usability is just acceptable but could benefit from improvements. The NPS Scale classifies both systems as Passive, meaning users are neither highly enthusiastic nor highly critical about recommending these platforms to others.

The conclusiveness chart provides a visual representation of how definitive the SUS (System Usability Scale) study scores are for each system, based on the sample size of participants. [9] This chart is crucial for understanding the reliability of the usability scores obtained from different platforms. Table 3 summarizes the conclusiveness of the SUS study scores for two systems: Epic Games Store and Steam.

**Table 3. Results based on conclusiveness**

Variable	Sample size	Conclusiveness
Epic games store	10	80%
Steam	10	80%

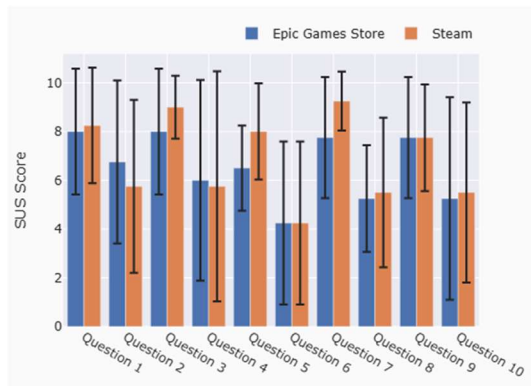
Both the Epic Games Store and Steam have a sample size of 10 participants, resulting in a conclusiveness score of 80% as shown in table 3 and figure 4. This indicates that the usability scores for these systems are reliable, given the number of participants involved in the study. Figure 4 depicts the conclusiveness chart and provides understanding of the reliability of the usability score obtained from different platforms.



**Figure 4: Conclusiveness chart**

The per item chart in figure 5 visualizes the impact of participants' answers to specific System Usability Scale (SUS) questions for the Epic Games Store and Steam. Each question is represented by a pair of bars, with blue bars for the Epic Games Store and orange bars for Steam. The y-axis ranges from 0 to 10, showing the

normalized contribution of each question to the overall SUS score, rather than the original Likert scale values.



**Figure 5: SUS score based on individual questions answered by users**

The per item chart (see figure 5) provides a detailed comparison of the usability of the two platforms across multiple dimensions. Steam generally scores higher on questions related to ease of use and integration of functions, while the Epic Games Store shows more variability in its scores.

## 6. RESULTS

The System Usability Scale (SUS) assessment reveals that Steam has a higher perceived usability than the Epic Games Store, with a SUS score of 69, placing it in the 52.42nd percentile ("Above Average"), while the Epic Games Store scored 65.5, landing in the 41.34th percentile ("Below Average"). Box plot analysis in figure 2 shows that Steam's narrower score range and higher median suggest more consistent user satisfaction. The percentile curve in figure 3 highlights that Steam's SUS score of 69 places it above the industry average, while the Epic Games Store's SUS score of 65.5 falls below the industry average, indicating a relative usability advantage for Steam. Both platforms received a Grade Scale rating of C [10] and a Marginal Acceptability rating, indicating acceptable but improvable usability, with users being "Passive" in their likelihood to recommend. The conclusiveness of these scores is moderate at 80%, based on a sample of 10 participants, supporting the reliability of these findings.

Overall, Steam's slightly better usability and consistency indicate that it currently offers a better user experience in terms of game discovery, purchasing, and community engagement.

## 7. CONCLUSION

The usability evaluation of the Epic Games Store and Steam using the System Usability Scale (SUS) reveals that while both platforms provide an acceptable user experience, Steam demonstrates an edge in perceived usability. Steam's higher percentile ranking and narrower spread of user satisfaction scores suggest a more consistent and reliable user experience compared to the Epic Games Store, which exhibited greater variability and lower

satisfaction for users. Both platforms are rated as "Marginal" in terms of usability acceptability and classified as "Passive" in terms of user recommendations, indicating that while users find them usable, neither platform generates strong enthusiasm or loyalty. Overall, these findings suggest that improvements in usability for both platforms could enhance user satisfaction, with the Epic Games Store especially benefiting from refinements to bridge the usability gap with Steam.

## 8. ACKNOWLEDGEMENTS

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