Usability Evaluation of Gaming Platforms: A Comparative Study of Steam and Epic Games Store

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ABSTRACT

This report evaluates the usability of two major gaming platforms, Steam and Epic Games Store, focusing on game discovery, purchasing process, and community features. Employing the System Usability Scale (SUS) questionnaire-based evaluation, the study highlights each platform's strengths in user satisfaction and performance. Insights on where each platform excels, as well as areas for potential improvement, aim to enhance the overall user experience.

Keywords

Usability, Game Discovery, SUS, Digital Platforms, Steam, Epic Games Store, Community Features, User Satisfaction, Purchasing Process.

1. INTRODUCTION

Two of the most popular gaming platforms are Steam and Epic Games Store, each of which takes a different approach to the user experience, from helping users choose games to facilitating transactions and community engagement. This study assesses how well each platform satisfies user expectations in three crucial areas: community features, game discovery, and the purchasing procedure. We hope to ascertain how these factors affect user satisfaction and what each platform could do to better serve its audience by using the SUS evaluation method.

2. METHODOLOGY

The usability survey was conducted using Google Forms and analysed with the System Usability Scale (SUS) to assess Steam and Epic Games Store. Participants were asked 10 questions addressing key usability aspects on both platforms, each rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The questions covered:

- **Frequency of use**: Whether users would like to use each platform frequently.
- **Complexity**: Perceptions of unnecessary complexity in each platform.
- **Ease of use**: How easy participants found each platform to use.
- **Support needs**: Whether users felt they would need technical support to use each platform.
- **Integration of functions**: How well users thought the functions in each platform were integrated.
- **Consistency**: Perceived consistency across each platform's interface.
- **Learnability**: How quickly users believed others could learn to use each platform.
- **Cumbersomeness**: Whether participants found each platform cumbersome to use.
- **Confidence**: Users' confidence levels when using each platform.
- **Learning requirements**: The extent to which users felt they needed to learn new things to get started.

3. RESULTS AND DISCUSSION

The SUS analysis results, presented in Figures 1, 2, and 3, reveal notable distinctions between Steam and Epic Games regarding usability. Both platforms achieved an 80% conclusiveness, reflecting consistent responses from the 10 participants for each platform (Fig. 1). This high conclusiveness level suggests reliable feedback on both platforms' usability.

Steam scored an average SUS of 84.25, with a score range from 65 to 100, corresponding to the "Best Imaginable" rating and earning an "A" grade in the 4th quartile. This high score underscores Steam's superior usability performance, particularly in features like game discovery, purchasing, and community engagement. Its classification as "Acceptable" on the Acceptability Scale and "Promoter" on the NPS Scale further supports its alignment with user expectations and preferences. Steam's performance is ranked "Above Industry Standard" (Fig. 2).

In contrast, Epic Games received a lower SUS average score of 65.75, with scores varying from 50 to 85. This score range corresponds to an "OK" adjective scale rating and a "C" grade in the 2nd quartile, indicating marginal usability performance. On the Acceptability Scale, Epic Games was classified as "Marginal," and it fell into the "Passive" category on the NPS Scale, with a performance rated "Below Industry Standard." This rating reflects a less consistent user experience, particularly in aspects requiring deeper user engagement, such as community features (Fig. 2). Percentile rankings reinforce these findings, with Steam in the 94.66 percentile, placing it in a much higher usability tier compared to Epic Games at the 42.08 percentile. These results highlight Steam's stronger user satisfaction and usability, making it a more favorable platform overall. The data suggest that while Epic Games offers some satisfactory features, Steam consistently provides a more seamless and engaging user experience across key functionalities (Fig. 3).

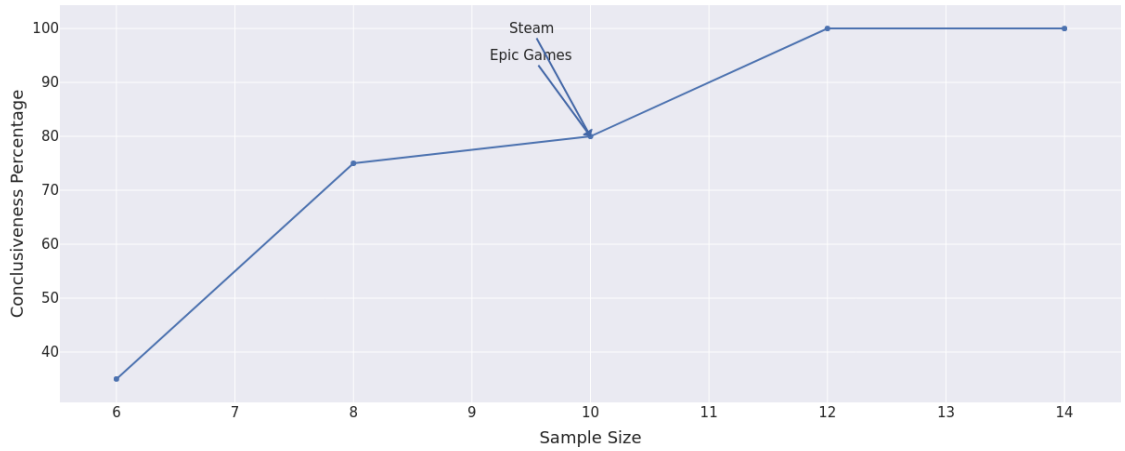

Fig 1: Conclusions Overview - This plot shows the conclusiveness of responses for both platforms, Steam and Epic Games, each reaching an 80% conclusiveness with a sample size of 10 participants. The high conclusiveness indicates that the feedback received provides a reliable basis for comparing the usability of the two platforms.

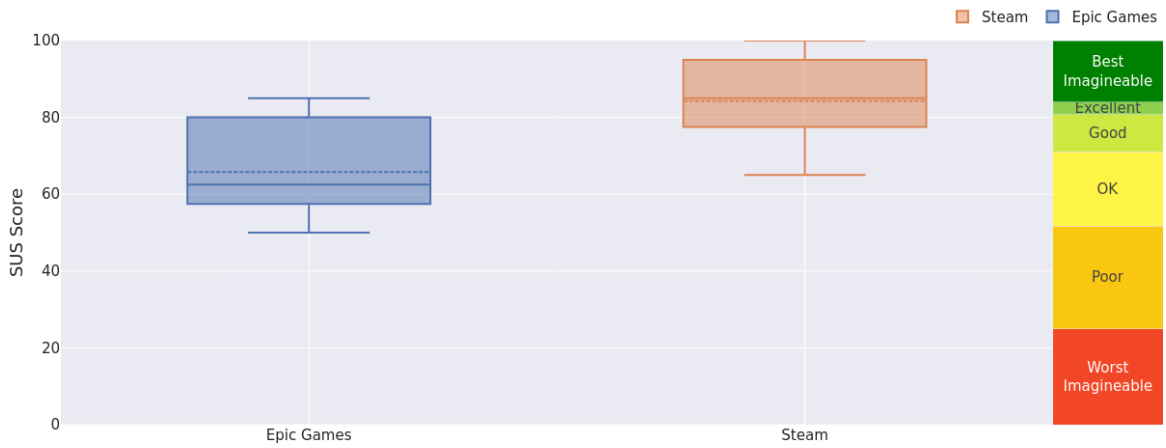

Fig 2: SUS Score Comparison - The SUS scores, displayed here, highlight Steam's superior usability with a mean score of 84.25, categorized as "Best Imaginable" with an "A" grade in the 4th quartile. In contrast, Epic Games scored a lower average SUS of 65.75, rated as "OK" with a "C" grade in the 2nd quartile, reflecting a more marginal user experience.

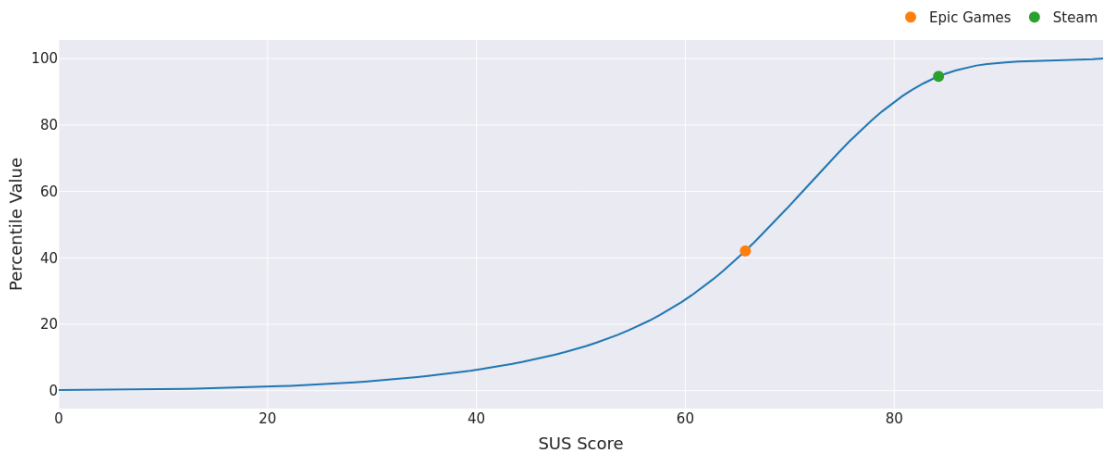

Fig 3: Percentile Ranking for Usability - This percentile chart compares the overall usability ranking of the two platforms. Steam's high percentile score of 94.66 places it in a higher usability tier, indicating strong user satisfaction. Epic Games, with a 42.08 percentile score, ranks lower, suggesting areas for improvement in usability.

4. PERFORMANCE METRICS

Based on the SUS questionnaire data, distinct differences between Steam and Epic Games have been identified, particularly in game discovery, purchase process, and community features. The SUS analysis results offer clear insights into each platform's strengths and areas for improvement.

4.1 Game Discovery

Steam demonstrated a strong performance in game discovery by offering tailored recommendations and a variety of filters that make it easier for users to find games matching their interests. Its recommendation engine suggests titles based on a user's previous gameplay, allowing for a more personalized browsing experience. In contrast, Epic Games provides fewer filters and a less advanced recommendation system, making it harder for users to locate specific or niche titles. Many users found this limiting, especially if they were looking for lesser-known games.

4.2 Purchase Process

Both platforms were well-received for providing secure purchasing experiences, though with differing strengths. Steam's purchasing process includes transparency around system requirements and detailed user reviews, helping users make informed decisions. Users also appreciated Steam's regional pricing and frequent discounts, making games accessible across various economic regions. Epic Games was commended for its streamlined checkout process and regular free game offers, which are particularly appealing to budget-conscious gamers. However, some users expressed a desire for more comprehensive information on game details within the Epic Games store.

4.3 Community Features

With features like forums, achievement tracking, wishlists, and social interactions (such browsing friends' game collections), Steam is excellent at encouraging community involvement. These components encourage a lively and engaging atmosphere. However, Epic Games lacks a lot of these social elements and offers little assistance for achievements and community engagement. Compared to Steam, some customers considered Epic Games' more solitary user experience to be less captivating.

5. ANALYSIS

The SUS analysis indicates that Steam outperforms Epic Games in delivering a cohesive and satisfying user experience, particularly for users who value community interaction and personalized game discovery. Steam's higher average SUS score of 84.25, with a narrower standard deviation, places it in the 4th quartile with an "A" grade and "Best Imaginable" rating. This consistency highlights Steam's effectiveness in meeting user expectations across different aspects of the platform. Its top percentile ranking of 94.66 further reinforces its strong performance.

Epic Games, with an average SUS score of 65.75, falls in the 2nd quartile with a "C" grade and an "OK" rating, suggesting a more varied user experience. Its lower percentile ranking of 42.08 indicates areas for improvement, particularly in game discovery and community features. While Epic Games appeals to budget-conscious users with its frequent sales and straightforward interface, its limited social and discovery tools may not satisfy users who prioritize engagement and personalization.

Overall, these results underscore Steam's strengths in usability and user satisfaction, especially in areas that involve deeper user interaction. Epic Games, while efficient in its purchasing process, may benefit from enhancing its community and discovery features to offer a more competitive experience.

6. CONCLUSION

This usability analysis reveals significant differences between Steam and Epic Games, two of the most popular gaming platforms. Based on SUS scores, Steam stands out as the preferred platform, particularly for users who value personalized game discovery and strong community features. Steam's higher SUS score, "A" grade, and top percentile ranking highlight its consistent, well-rounded user experience. Features like robust game recommendations, interactive community forums, and transparent purchasing options contribute to its high usability rating and user satisfaction.

Epic Games, while appealing in terms of frequent discounts and a straightforward purchasing process, shows room for improvement in areas such as community engagement and game discovery. With an average SUS score in the "C" range, Epic Games provides a more basic user experience, making it a better fit for budget-conscious users or those who prefer a simpler interface. However, its lower percentile ranking suggests that the platform could benefit from enhancements to better meet user needs in discovery and interaction.

In conclusion, the findings suggest that while both platforms serve distinct user preferences, Steam offers a more comprehensive and satisfying experience overall. For Epic Games to close the usability gap, investment in more advanced discovery tools and community features could help it meet the expectations of a wider audience. This analysis highlights the importance of tailoring features to user needs, underscoring the critical role of usability in enhancing user satisfaction on gaming platforms.

7. REFERENCES

[1] B. Shneiderman, "Designing the User Interface: Strategies for Effective Human-Computer Interaction," 6th ed., Pearson, 2015.

[2] J. Nielsen and H. Loranger, "Prioritizing Web Usability," New Riders, 2006.

[3] K. Hornbæk, "Current practice in measuring usability: Challenges to usability studies and research," Int. J. Hum.-Comput. Stud., vol. 64, no. 2, pp. 79–102, 2006. doi: 10.1016/j.ijhcs.2005.06.002.

[4] R. Vermeeren, E. Law, V. Roto, M. Obrist, J. Hoonhout, and K. Väänänen-Vainio-Mattila, "User experience evaluation methods: current state and development needs," in Proc. Nord. Conf. Human-Computer Interact.: Extending Boundaries, 2010, pp. 521–530.

[5] C. H. Lewis and J. Rieman, "Task-Centered User Interface Design," 1993, Univ. of Colorado, Boulder. [Online]. Available: https://hcibib.org/tcuid/

[6] J. Brooke, "SUS: A quick and dirty usability scale," in Usability Evaluation in Industry, P. W. Jordan, B. Thomas, I. L. McClelland, and B. Weerdmeester, Eds. London: Taylor & Francis, 1996, pp. 189–194.

[7] B. B. Bederson and B. Shneiderman, "The craft of information visualization: Readings and reflections," San Francisco, CA: Morgan Kaufmann, 2003.

[8] J. W. Creswell, "Research design: Qualitative, quantitative, and mixed methods approaches," 3rd ed., Thousand Oaks, CA: SAGE Publications, 2009.

[9] A. Holzinger, "Usability engineering methods for software developers," Commun. ACM, vol. 48, no. 1, pp. 71–74, 2005. doi: 10.1145/1039539.1039541.

[10] ["Movavi," Video Editor 2024 and Other Cool Programs from Movavi – Download for Free, https://www.movavi.com/learning-portal/steam-vs-epic-games.html (accessed Nov. 8, 2024).