Usability Evaluation of Gaming Platforms: A Comparative Study of PlayStation Now and Xbox Game Pass

Wan Zafirzan Bin Wan Tarmizan UTM MJIIT, UTM Kolej Siswa Jaya Kuala Lumpur wanzafirzan@graduate.ut m.my

ABSTRACT

This report evaluates the usability of two major game streaming platforms, PlayStation Now and Xbox Game Pass, with a focus on user experience aspects including content library, streaming quality, and ease of navigation. Using the System Usability Scale (SUS) for evaluation, the report highlights each platform's strengths and potential areas for improvement to enhance user satisfaction.

Keywords

Usability, Game Streaming, SUS, PlayStation Now, Xbox Game Pass, Subscription Services, User Satisfaction.

1. INTRODUCTION

PlayStation Now and Xbox Game Pass are two prominent subscription-based gaming platforms, each providing users with access to a wide library of games and varied streaming features. This study examines how well each platform meets user expectations across key usability areas, including content accessibility, streaming quality, and user interface design. By employing the System Usability Scale (SUS), we seek to identify the factors contributing to user satisfaction and highlight areas where improvements can enhance the overall user experience.

2. Methodology

The usability survey was conducted using a SUS-based questionnaire to evaluate both PlayStation Now and Xbox Game Pass. The survey covered essential usability aspects, each rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree), with focus on:

- **Frequency of use**: Whether users would like to use the platform frequently.
- Complexity: Perceptions of unnecessary complexity in each platform.
- **Ease of use**: User assessment of ease of use.

- Support needs: Whether users felt they needed technical support.
- Function integration: How well the functions appeared integrated.
- Consistency: Interface consistency across the platform.
- **Learnability**: Ease for new users to learn platform use.
- Cumbersomeness: Whether participants found the platform cumbersome.
- Confidence: Users' confidence when using the platform.
- Learning requirements: How much learning was necessary to get started.

3. Results and Discussion

• 3.1 Conclusions Overview

This section presents a summary of the survey's conclusiveness for each platform based on participant responses.

Sample Size and Conclusiveness:

- PlayStation Now: 10 participants;
 80% conclusiveness.
- Xbox Game Pass: 10 participants;
 80% conclusiveness.

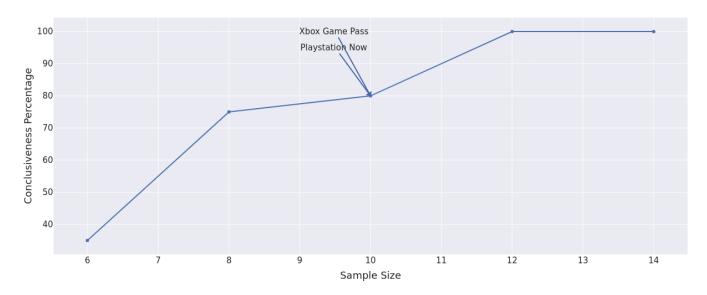


Figure 1: Conclusions Overview - This plot displays the conclusiveness of responses for both PlayStation Now and Xbox Game Pass, showing that feedback from both platforms provides a reliable basis for usability comparison

• 3.2 SUS Score Comparison

This section presents the SUS score comparison between PlayStation Now and Xbox Game Pass, evaluating mean scores, distribution, and usability classification.

Variable	PlayStation Now	Xbox Game Pass
SUS Score (mean)	49.25	62.25
Standard Deviation	17.04	18.31
Minimum Score	10	40
Maximum Score	70	100
1st Quartile	43.125	45

Variable	PlayStation Now	Xbox Game Pass
Median	51.25	61.25
3rd Quartile	63.125	73.125
Adjective Scale	Poor	ОК
Grade Scale	F	D
Quartile Scale	1st	1st
Acceptability Scale	Not Acceptable	Marginal
NPS Scale	Detractor	Detractor
Industry Benchmark	Below Average	Below Average

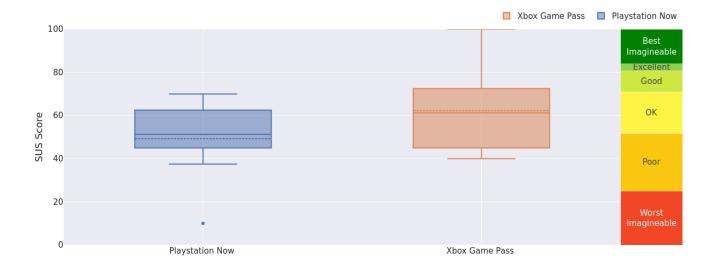


Figure 2: SUS Score Comparison - This graph highlights Xbox Game Pass's higher SUS score, with a mean rating of 62.25, categorized as "OK" and a "D" grade, compared to PlayStation Now's "Poor" rating with an "F" grade.

• 3.3 Percentile Ranking for Usability

This section compares the percentile ranking of SUS scores for both platforms, indicating their relative usability in the broader context.

Percentile Scores:

PlayStation Now: SUS Score 49.25, Percentile 12.28.

Xbox Game Pass: SUS Score 62.25, Percentile 32.54.

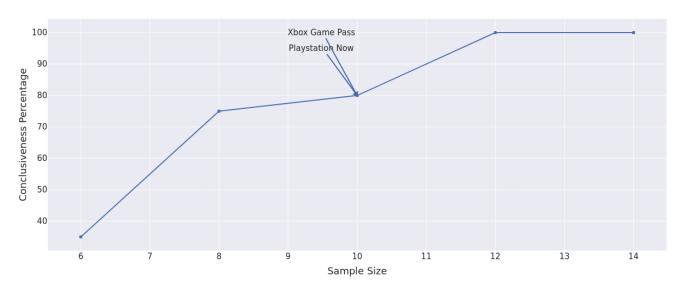


Figure 3: Percentile Ranking for Usability - This chart shows Xbox Game Pass ranking higher on usability with a percentile score of 32.54 compared to PlayStation Now at 12.28.

• 3.4 Detailed SUS Question Analysis

In this section, we analyze user responses to each individual question in the SUS survey, focusing on specific areas of strength and weakness in both platforms.

Ouestion	PlayStation Now - Mean (SD)	Xbox Game Pass - Mean (SD)	Question	PlayStation Now - Mean (SD)	Xbox Game Pass - Mean (SD)
Q1	2.5 (2.74)	5.75 (4.04)	Q6	4.25 (2.51)	5.75 (2.25)
Q2	4.75 (2.08)	5.5 (2.18)	Q7	5.75 (2.75)	7.0 (2.45)
Q3	6.0 (2.0)	7.25 (2.08)	Q8	4.5 (2.45)	5.25 (2.61)
Q4	6.5 (2.78)	7.0 (2.92)	Q9	5.25 (2.36)	6.5 (2.29)
Q5	5.0 (2.24)	6.75 (2.51)	Q10	4.75 (2.08)	5.5 (2.69)

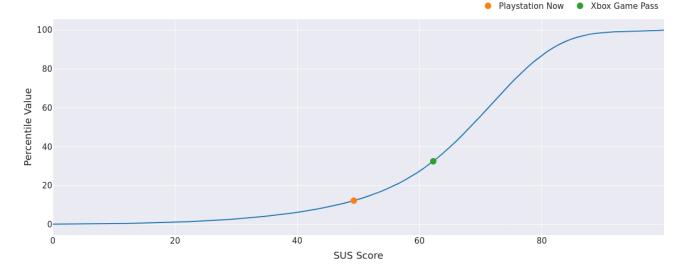


Figure 4: Question-by-Question SUS Comparison - This graph illustrates user feedback on each question, highlighting Xbox Game Pass's relatively higher scores across individual usability aspects.

4. Performance Metrics

Using SUS results, we compare each platform's performance in several critical usability areas:

4.1 Content Library

Xbox Game Pass offers a broader selection and frequently updates its library with new titles, while PlayStation Now provides some exclusives but a more limited selection.

5. Analysis

The SUS analysis suggests that Xbox Game Pass outperforms PlayStation Now in usability, with a higher mean SUS score, a broader content library, and better overall navigation. While both platforms scored below the average industry benchmark, Xbox Game Pass shows strengths in accessibility and content updates that enhance user satisfaction.

4.2 Streaming Quality

Both platforms generally perform well, though Xbox Game Pass tends to have fewer lag issues, particularly in network-heavy games.

4.3 User Interface and Navigation

Users find Xbox Game Pass more user-friendly, with a smoother interface and more intuitive navigation compared to PlayStation Now, which has been noted to have a steeper learning curve.

6. Conclusion.

This analysis of PlayStation Now and Xbox Game Pass reveals significant differences in usability and user satisfaction. Xbox Game Pass offers a moderately better experience, with a higher SUS score, broader library, and improved streaming stability. PlayStation Now, while

functional, may benefit from enhancing its library and interface to align better with user needs. For both platforms,

focusing on user-centric improvements could bridge the usability gap with higher industry standards.