

See differently

# Accessible Gaming Research

## **Executive Summary**

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This is the executive summary of the Accessible Gaming Report. The full report with appendices and complete result data will be published in April 2022.

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## **RNIB Accessible Gaming Research**

## **Executive Summary**

We report a major new study combining qualitative and quantitative research with over 500 blind and partially sighted users with an in-depth consultation with the games industry. The study was designed to understand (a) the experiences of blind and partially sighted people in finding, accessing and playing digital games, and (b) industry perspectives on the opportunities and challenges they consider in developing games and platforms with accessibility prioritised.

### Key findings in relation to user experience and user needs:

- 1. Blind and partially sighted people reported substantial challenges in finding and being able to play video games. When asked why, they consistently selected that 'video games do not have enough accessibility features.
- 2. Their perseverance despite these challenges, and willingness to engage with video games is a clear demonstration of their appetite for gaming, and that this appetite is not currently being served by the industry.
- 3. PC and mobile devices are the preferred gaming platforms for this user group with iOS being the most popular. Both gamers and exgamers have less experience with consoles which are still perceived as inaccessible.
- 4. When asked about the type of games that they would like to play or which games they would like to see prioritised, the general feeling is that gamers with sight loss would like access to all games after which it would be up to them to select the ones that they want to play.
- 5. People with vision impairment, including current gamers and exgamers, report accessibility issues with all types of games. From puzzle and strategy games to racing games, first-person shooter games, and massively multiplayer online (MMO) games. In general, fewest accessibility issues were reported while playing audio games, MUDs (Multi-user: Text-based multiplayer real-time games), and gambling games. However, more accessibility issues were identified in puzzle games, RPG (Role Playing Games), and shooter games.
- 6. Audio based solutions are most desired by blind and partially sighted gamers. These include screen reader compatibility, audio description, audio triggers and adaptable audio settings and sound mixes (e.g., spatial audio.) Audio features are often used in combination with other accessibility features by people with different levels of vision

impairment. For example, customisable user interface is important for those with partial sight loss.

- 7. Innovative uses of feedback such as haptics were of interest for enhancing engagement and immersion.
- 8. Most gamers with sight loss report heavy reliance on their own, adhoc coping strategies, like playing with sighted guidance, memorising button sequences and menu layout or using Be My Eyes or Seeing AI to read what is on the screen.
- 9. Many of our sample reported no longer playing video games, or playing less than they otherwise would, as a result of poor accessibility. Solving these accessibility challenges and highlighting accessibility where available will increase blind and partially sighted people's engagement with video games.

## Key findings from industry consultation:

- 1. There is a knowledge gap in the industry. Whilst 75% of developers who participated in our research reported having incorporated some accessibility features in their games, only 15% reported having sufficient understanding of the needs of gamers with sight loss.
- 2. Developers give more consideration to the needs of gamers with partial sight loss than those with severe sight loss, suggesting that the former are easier to address, and that additional focus is required on the latter. Most developers with a firm understanding of the needs of people with partial sight loss always aim to make games accessible for this group. This is not the case in relation to the needs of gamers with severe sight loss or no sight at all. This suggests greater difficulty or lower priority in making games accessible for more severe sight loss which is emphasised by the lists of features developers have succeeded in including in games.
- Key barriers cited by developers to the inclusion of access features were: (a) a lack of game engine support for accessibility features, (b) that accessibility solutions might adversely affect game play or creativity, and (c) complexity.
- 4. Developers reported that an improved understanding of how to implement accessibility (e.g., workflows, processes, solutions, resource sharing across the industry) and evidence of ROI (Return On Investment) could support them in making their games more accessible. This ROI could span direct financial returns, and reputational benefit.
- 5. Developers also recognised that publisher and platform level requirements to incorporate accessibility would be an effective lever.
- 6. There is no indication that the size of a studio has any impact on how likely they are to consider making the game accessible to gamers with sight loss.

- 7. Over 70% of developers would like to see sharing on knowledge and technology within the industry and better resources on accessibility good practice.
- 8. Developers in general expressed a very high level of interest in interacting with end users to understand their requirements, experiences and user journeys. The level of engagement however, depended on the size of the organisation with larger studios having more opportunities to make these links.

## **Recommendations:**

- A reliable and consistent level of accessibility is dependent on regulation, either internally through self-regulation or externally through legislation. Legal and policy levers should be considered to support the games industry to better address accessibility requirements of all its users. These include incentives (e.g., tax relief dependent on accessibility) and robust legal requirements. Good parallels are available in the TV industry.
- 2. There is a need for better industrywide knowledge sharing and collaboration to disseminate and embed best practice in addressing accessibility, from the earliest stages of a games development process. There is a key role here for organisations representing blind and partially sighted people, like RNIB in the UK.
- 3. Key requirements to allow gamers with vision impairments to play independently as identified by the current research should be addressed as a priority. These include full integration with screen readers, a customisable UI and audio description (or an alternative in the form of integrated narrated descriptions), adaptable sound mixes and audio settings. These solutions must be embedded consistently and be interoperable throughout the tech stack.
- 4. It is essential that blind and partially sighted gamers are better supported in finding accessible games. Accessibility feature tags at point of sale, which have already been introduced by one platform are a good way to do this and widespread adoption of this feature is recommended. Information on accessibility should be prominent on promotional trailers and marketing materials, including on the game description at point-of-sale. This communication can be well amplified and disseminated by organisations representing end users.

### **Recommended future research**

5. Measure the usage and popularity of accessibility features in games of different genres in real-world settings when played by gamers with differing levels of sight loss.

- 6. Understand the economic and reputational impact of including more accessibility features. For example, assessing the market size of gamers with disabilities and their willingness to pay for different games, the reputational boost as a result of including accessibility and the potential return on investment. This exercise would help to improve industry confidence for including accessibility features in games.
- 7. Understand the different middleware considerations and interdependencies of accessibility within the tech stack.

For more information, please email gaming@rnib.org.uk

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