Games Based Assessments are games which allow for the measurement of knowledge, skills, values, personality, motivation or competencies.

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Within the talent assessment space, Games Based Assessments (GBAs) have become one of the most talked about developments of recent years. Whether you believe that game design has the potential to revolutionise the recruitment and selection space or it is focussed more on employer branding than driving individual performance, GBAs are a unique addition to the assessment ecosystem. GBAs have received huge media attention and are capturing the interest of many organisations; in a recent survey of HR and talent practitioners, 75% indicated that they would consider using gamification as part of their screening and selection strategy.

In this whitepaper we outline the key considerations for deploying GBAs as part of a selection programme and provide accessible guidance for HR and talent professionals on where and how to introduce them into their human capital processes.

Games Based Assessments – an explainer

Games Based Assessments and the broader concept of gamification are often discussed interchangeably. However, these are two distinct concepts that require definition. Gamification refers to “the application of game mechanics, elements and features to non-game environments”\(^2\). Examples of gamification elements include badges, leaderboards, feedback, points and prizes. Whilst games are constructs of game mechanics, such elements can also be applied to activities that are far from being described as games, for example in medication management\(^3\).

Games Based Assessments are games which allow for the measurement of knowledge, skills, values, personality, motivation or competencies. These fall into the broader category of “serious games” i.e. games designed for purposes beyond entertainment.

Within the realm of GBAs specifically, a number of alternative approaches have been taken. Williams\(^4\) summarises these as:

1) The use of pre-existing ‘off-the-shelf’ video games,
not specifically designed for assessment, from which relevant criteria are extracted/measured

2) The creation of games specifically designed for the purposes of assessment (either custom or ready-to-use)

3) Adapted ‘traditional’ assessment; i.e. the inclusion of games design elements or features into existing assessment types, such as situational judgement tests

4) The deployment of Virtual Reality technology to create ‘game-like’ immersive assessment experiences

The most well-known providers within this space (Arctic Shores, Pymetrics, Revelian, Knack) sit within 2 above, having designed ready-to-use games specifically for the purposes of assessment.

Why use GBAs?
It has been noted that the evidence supporting the use of games for assessment is limited, and particularly biased towards vendor-led research. Whilst initial findings are positive it is clear that more research is needed to confirm the benefits of these approaches within the assessment space. In contrast, the benefits of serious games have been well-demonstrated in a variety of contexts, specifically within learning and development. Helen Routledge, from Totem Learning, one of the UK’s foremost providers of Serious Games explains:

‘By tapping into the same psychology that keeps gamers glued to Minecraft or World of Warcraft, innovative organizations are creating learning experiences that are genuinely engaging, endlessly flexible, and extremely cost effective...people learn more, learn better, and learn faster when they are emotionally engaged. Serious Games are how you leverage the power of play to create emotional engagement’

Whilst evidence is scant in some cases, there are many intuitive arguments for the benefits of games based assessment. These are summarised below:

• There is evidence that GBAs can enhance an organisation’s employer brand and value proposition, particularly with younger candidates, who can have fun and enjoy the game, whilst experiencing lower levels of anxiety and a reduced awareness of being measured.

• GBAs may help retain engagement during the assessment by adding in elements to increase immersion, such as point scoring/feedback which reduces the likelihood that candidates will switch off midway through the process and increases the length of time over which data can be collected, which should improve reliability.

• GBAs and the nature of data that can be collected within games may allow for the assessment of traits that cannot be assessed readily through other means.

• Because of the nature of games, many more data points can be collected within a game compared to a traditional ‘structured’ assessment. This may enhance the reliability and/or validity of the assessment. For example Revelian claim that they can collect over 10,000 data points from their game ‘Theme Park Hero’.

• It is likely to be less obvious to a candidate what elements of their behaviour/responses are being measured.

• GBAs are more likely to elicit genuine responses from candidates due to them being immersed in the game (Csikszentmihalyi’s ‘Flow’) thus reducing the likelihood of faking and response distortion.

• Initial evidence indicates that GBAs may also have the potential to remove or reduce certain types of bias that are present in other forms of assessment.
Starting to use GBAs in your organisation: the PSI perspective

Whilst there is some compelling evidence and arguments for GBAs, there are also some considerations which should be taken account of when deciding whether to implement them – and best practice ways of tackling these considerations to ensure that you can rely on data from GBAs to inform your people decisions. Specifically:

• The GBA market is dominated by alternatives to traditional psychometrics. Many of these are predicated on scenarios or contexts which might appear irrelevant at best and at worst miscommunicate the role requirements to potential job applicants. Where possible, use scenarios/situations which will appear relevant to applicants – ‘face validity’ of assessments has been shown to have important consequences in terms of acceptability of decisions and likelihood of offer acceptance.

• The balance of style over substance needs to be considered; GBAs may look slick but it is important to ensure that good assessment practice underpins them. The ‘black box’ nature of such assessments means that it is harder for users to scrutinise them than might the case for traditional assessments. Ensure that the underlying assessment design is rigorous and don’t be afraid to ask for more detail about how the ‘black box’ works. Working in partnership with an experienced assessment provider to truly get to grips with the ‘right’ elements to assess is critical for the success of your organisation’s assessment process.

• Some games elements might be unnecessary or interfere with selection e.g. feedback within the game. Just because you open the toy box doesn’t mean you have to take out all of the toys! Consider what is appropriate for your organisation as this will reflect on your brand. And starting small is a cost-effective way to start introducing some games elements without turning your processes upside-down.

• Users need to consider whether such tests serve to be as inclusive and accessible to all potential users. Early research in this area has been positive, but clearly the nature of such assessments presumes access to particular technology and a comfort with such a format for delivery. Providing equal opportunity for all candidates is critical: for example, ensure the game will appeal equally to men and women and there is no adverse impact; ensure it can be played on a wide variety of devices; and that visually impaired candidates or those lacking manual dexterity aren’t disadvantaged, unless of course those are job-relevant qualities.

Key Takeaways

1. Understand your business drivers for using serious games in assessment
   • Build a games based assessment that focuses on the quality of hire metrics that matter to you and your organisation including, performance in role, culture fit, candidate engagement & applicant diversity

2. Focus on identifying the highest performers
   • Any assessment process needs to focus on the drivers of performance. This provides the foundation for assessment design.

3. Recognise the tension: experience versus perceived job relevance
   • There can often be tension between candidate experience and their feelings about whether an assessment is job-relevant. Relevance will have a positive business impact and lead to higher performing employees.
References


2 Arthur et al, 2017

3 See https://www.mangohealth.com/

4 Williams, B. (2017) The Evidence Based for Games Based Assessments in Recruitment. Presentation to the British Psychological Society September 2017

5 Williams, B. (2017) The Evidence Based for Games Based Assessments in Recruitment. Presentation to the British Psychological Society September 2017


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PSI delivers 13 million assessments globally each year. Our unique blend of scientifically proven assessment content, market leading technology and our extensive knowledge and expertise, ensure we deliver selection methods that drive individual and organisational effectiveness.