

TASK BASED REPORT

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Mummy, I Want a Pony

- **Genre:** Creative Dress Up game with Online Multiplayer elements
- **Platform:** Nintendo *Switch*; PC - *Windows*; Mobile/Smartphone – *iOS & Android*
- **Target demographic:** predominantly female, young children and young teens
- **Revenue model:** in-app purchases and recurring revenue methods

Justifications

Why This Game?

- Most adaptable design
- Potential for widest appeal

Market Research Relevant to the Game

- Visible avatars and leader boards feed in to the social and competitive aspects of games.
- Fashion element should broaden the appeal with younger audiences who already play dress up games
- Nintendo Switch is the fastest selling gaming console in the US (Bradshaw, 2018)
- Two most popular platforms for UK studios during 2015 were iOS and Windows, combined 41% share, with 17 per cent of games also appearing on Android. Marketplaces on these platforms (*Steam*, *GooglePlay* and *Apple*) with arguably the most open stores available to developers, each offering a large consumer base. (TIGA, 2016)
- Equal distribution of regular female players 18 and under (ESA, 2017)
- The purchase of in-game currency that is used to purchase perks or cosmetic items is usually done with free games as the primary source of revenue to finance ongoing operations, such as the cost of running servers. However, this requires an online delivery stage in e-commerce and a B2C approach with heavy investment in the pre-sale stage, by attempting to go viral by utilizing social networks. (Lautjärvi, 2013)

How This Market Research Could Affect the Game Design

Market research is used in the games industry to increase the product's appeal. It's now a required activity, as games become more expensive to create and market. You could assume – based on most market research on the interests of young females – that the design of a pony game should be given a familiar presentation (i.e. graphical style) that mimics popular franchises, such as *My Little Pony* (Zacherle, 1981-2017). It's possible that a partnership with such an established brand may be a way to differentiate the game from other similar titles on the market.

However, market research can also negatively affect design decisions for a game. Creating links between data can lead designers and publishers to conclude a significant market exists where perhaps there is only a minor niche. For example, reading the *Financial Results Briefing for Fiscal Year Ending March* (Nintendo Co., Ltd., 2017), you would see a disproportionately low amount of U.S. female gamers using their Switch platform.

Meanwhile, researching *My Little Pony* demographics reveals a sub-culture of males (*'Bronies'*) associated with the franchise. One could assume that it may be beneficial to tailor/market the game to this segment. Nonetheless, further research on the demographic reveals there may be little interest; with herdcensus.com (2014) reporting that *"Surprisingly, the games... don't seem to have really caught on..."* In this example, a market researcher for the game would be misled by the Nintendo report, whose survey question was actually *"What is the age and gender of the person in your household who had the strongest desire to purchase Nintendo Switch?"*

This is a strong case where it could be argued that it may be best to avoid the risk of a brand collaboration and instead create a new IP which can maintain wider audience appeal.

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Legal Responsibilities/Considerations

Business Owners, Directors & Shareholders

Fiduciary Duty

- Directors have a responsibility to owners and shareholders to create profit for the business.
- Executives also have greater legal responsibilities than employees and must act with integrity and personal accountability.

Economic Climate: Brexit

- Business leaders must be planning for, and reacting to, changes in the economy which can affect business operations (e.g., Brexit) affecting; profits, manufacturing costs, hiring of staff and the cost of exporting the product internationally.

Employees

- Employees have a legal right to receive remuneration in line with their employment contract.
- Employees have protections under certain employment laws such as disability, discrimination acts and the working time directive.
- Vetting potential employees is important to protect people within the business and the businesses assets from bad hires.

Clients

Developer-Publisher Relationship

- Games companies have a responsibility to their publishers to deliver certain milestones and fulfil their contractual commitments in order to receive their publisher's continued support.

Protection of Intellectual Property (IP)

- Companies must protect their client's Intellectual Property as well as their own, these often take the form of non-disclosure agreements.
- The use of secure systems and backup programs (i.e. security suites and versioning software) will likely be required to protect information.

Insurance

- Business insurance is a requirement in the UK and additional insurances may be sought by clients wishing to protect their investment into the business.

Governing Bodies

Compliance and Self-Regulation

- Game developers must comply with regulatory bodies who have agreed to self-govern the industry, such as TIGA and the ESA.

Law

- These companies must also follow the local and national laws in the countries in which they operate.

Others

- Companies who generate revenue through crowd-funding must also have a responsibility to their backers to deliver on their promises.

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Development Tools

Chosen Software

Game Engine	Reason	Justification	Individual Needs	Business Needs
Unity (Unity Technologies, 2005-2017)	- No royalty fees - Larger asset store - C# or JavaScript - Ease of use	- Larger, cheaper talent pool of C#/JavaScript developers than C++	- Prevalent among mobile developers - Intuitive UI and workflow	- Free version available - More flexible licensing than UE4
Unreal Engine 4 (Epic Games, Inc., 2014-2017)	- Free to use non-commercially - More feature rich than Unity out of the box	- Can be used to quickly produce and iterate in-engine prototypes - Blueprint visual code	- Artists, designers and junior coders - Access to C++ source code for experienced coders	- Free to acquire - No per-seat licenses required to deploy

(Pluralsight, 2014) (Marsh, 2016)

3D Modelling	Reason	Justification	Individual Needs	Business Needs
Blender CITE	Free for commercial use	Reduces the cost of production	3D modelling skills transferable	No cost to deploy or maintain

(Pluralsight, 2014) (G2 Crowd, Inc., 2017)

2D Artwork	Reason	Justification	Individual Needs	Business Needs
GIMP	2D image manipulation tools	Free and cross-platform image editor	Artists often favour Mac OS machines over Windows	Well known, familiar, flexible and specialist raster and vector graphics editors that have a low cost (free) of deployment
Krita	2D digital painting and animation, e.g. 2D backgrounds	Free and open-source digital painting and animation software	More suited to illustration than GIMP	
Inkscape	2D scalable graphics, e.g. UI	Free and open-source vector graphics editor	Professional quality and cross-platform	
OpenShot	Professional quality video composition	Marketing and promotional materials	Usability for low and high skill sets	

(GIMP Development Team, 2017) (Krita Foundation, 2017) (Inkscape Project, 2017) (OpenShot Studios, LLC, 2017)

Long-term Considerations

- Cost and therefore risk reduction is a long-term benefit of selecting low-cost or free software alternatives to mainstream software packages such as those provided by *Autodesk* (1982-2017) or *Adobe* (1982-2017).
- By utilising two of the most popular game engines (see *Appendix A*) you can make use of developers with different skill sets and levels of experience and while promoting personal development within your teams.
- In terms of the free and open source software, each of the above software packages have a healthy and active development community, backed by a history of long-term support for their respective programs.

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Data Security Plan

Cybersecurity Issues

Data security risks are a constant and evolving threat to businesses (Rose, 2015). They are especially hazardous to those dealing with proprietary and/or sensitive data. Therefore, any company – including those developing video game software for consumers – must carefully plan to handle such data and mitigate the risk of data and security breaches, or it may face negative public relations, brand/image damage, financial penalties or possibly legal action. *Appendix B* contains relevant data security guidance from *Strauss (2017)* and *GamesIndustry International (2011)*, covering the aspects of dealing with security breaches that are highlighted below.

Hardware & Software Systems

Backup and recovery

Data integrity is essential, so the use of a robust DVCS/CVCS during games production not only mitigates the risk of data loss but also provides developers tools to manage and maintain multiple, versioned builds/iterations of a game.

Vulnerabilities & Security software

Proactive use, monitoring and maintenance of software and security suites, up-to-date with the latest security patches, can mitigate threats from vulnerable hardware/software, malicious attackers, malware/Trojan programs.

Non-cyber

Lost devices and documents

Sensitive company or game data may be lost or stolen through employees accidentally leaving a confidential document or device (e.g. phone, laptop) where it's unprotected, which can compromise financial or IP interests.

Accidental disclosure or disgruntled employee

Breach of a non-disclosure agreement (NDA) or a disgruntled employee wishing to leak/sell some or all the game, software or customer data can cause irreversible damage, stressing the need to plan and promote good practices and processes in the business and create a fair and open environment to foster good will among employees.

Obligations

A company can be obliged to protect its clients and employees' data – contractually or by law – be it use of intellectual property, personal information or otherwise. These obligations can not only include the information collected on its customers, but also on a business's employees and partners.

For example, UK government policy dictates that every person within a business is responsible for, and therefore must follow strict rules regarding, the use of personal data. (Crown, 2017)

Data Protection Act 1998 (DPA)

DPA is the legislation that outlines how personal data must be collected, stored, processed and transferred. It covers the eight key principles, as well as their interpretation, relevant conditions, exception cases, roles and more. It establishes the Information Commissioner's Office (ICO), an independent body set to uphold information rights in the public interest, and who every company that processes personal information must register with. (ICO, 2017)

General Data Protection Regulation 2018 (GDPR)

ICO publish guidance for organisations (ICO, 2017), which also includes a living document detailing upcoming changes to UK legislation (ICO, 2018) that will come into force for all companies on 25th May 2018, under the EU's new GDPR. UK companies will still need to comply with the GDPR after Brexit if they wish to continue to do business with EU citizens, as well as during the one-year cross-over period between the regulations enactment and the UK's exit from the EU. (GDPR Associates, 2017)

NDA

- *Answer the questions, referring to the included NDA*
- *No word limit since each question requires a short answer*

1. *Is it a 'Mutual' or 'One-Way' NDA? (1 mark)*

One-Way

2. *Which clause could be described as impractical with regard to sharing information with colleagues? (2 marks)*

Clause 3

3. *Which clause could suggest that you challenge the authority of the police if required to disclose information? (2 marks)*

Clause 5

4. *Which clause contradicts the purpose of non-disclosure? (2 marks)*

Clause 7

5. *Under which country's laws is the agreement governed, and why is this a problem? (3 marks)*

Rhodesia – This is a problem because the country is now internationally recognised as the Republic of Zimbabwe.

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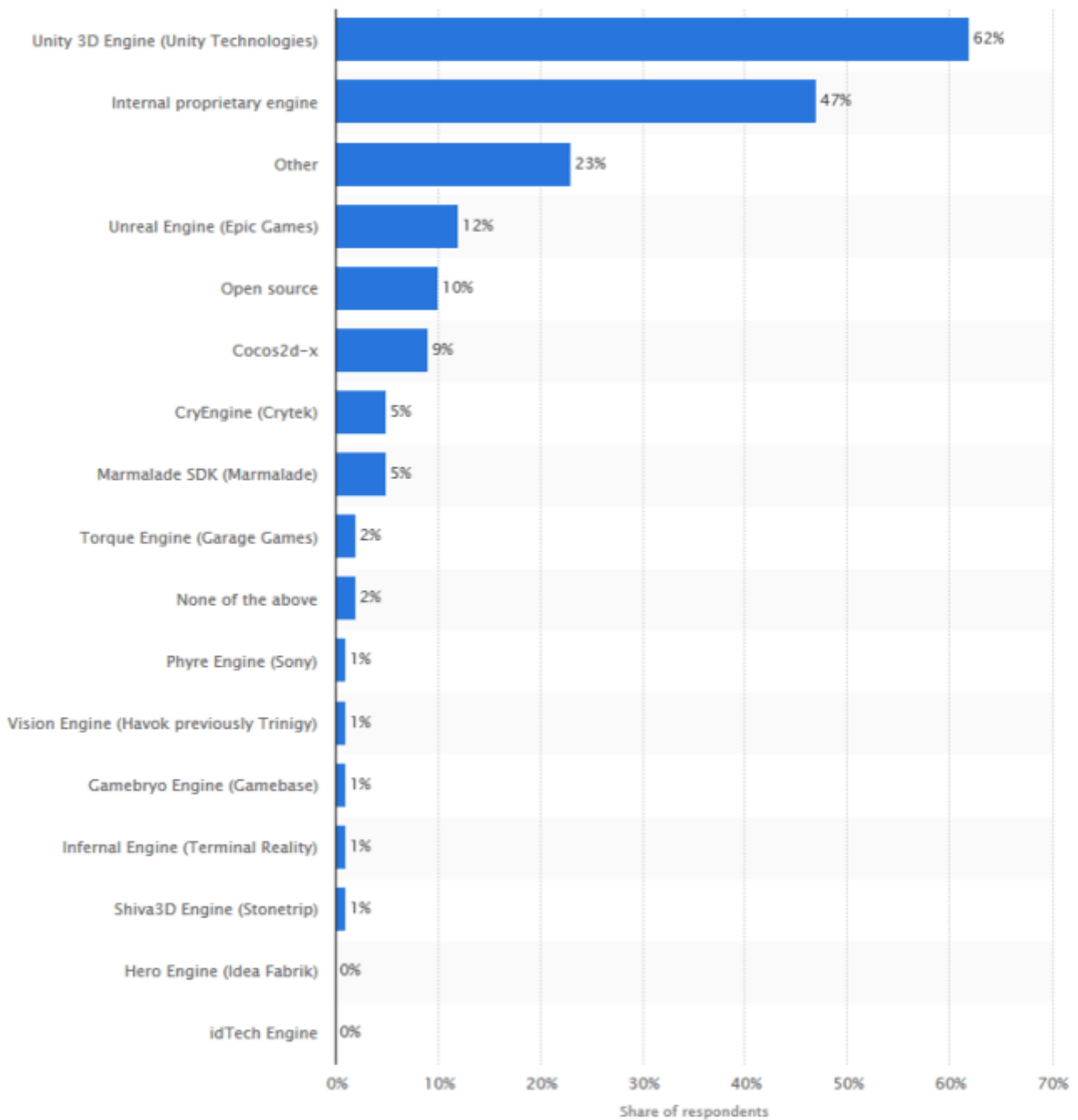
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Appendices

Appendix A – Leading game engines used by video game developers in the United Kingdom (Statista, 2014)

What game engines do you currently use?

This statistic illustrates the most popular game engines used for video game development in the United Kingdom (UK) in 2014. The greatest share of respondents reported using Unity 3D Engine, at 62 percent.



© Statista 2016

*Appendix B – Data and Security Recommendations**Steps to avoid non-cyber breaches*

- 1. Background check all new employees.** It is important not only to get at least two references from previous employers, and to call both references, but it is also advised that you do a background criminal record check on all employees.
- 2. Physically protect papers and laptops.** Safeguard important physical documents. Remember that bad employees are one of the top causes of security breaches. Similarly, make sure all company-issued laptops and tablets are password protected and are kept in a safe place when not in use.
- 3. Shred old documents.** Along the same lines, keep in mind that discarded or stolen papers are one of the top causes of security breaches. Improperly disposed-of physical documents can be a prime source for Identity theft and credit card fraud.
- 4. Institute a privacy policy.** Make sure that everybody in the company understands the importance of strong security and what your specific protocols are.
- 5. Back-up.** Should the worst occur, you will be very happy if you have a current remote backup of your system and data.

(Strauss, 2017)

Preventative measures for electronic breaches

- 1. Use a secure wireless connection.** On the wireless front, be sure to password-protect your wireless network; you are an easy target without this simple level of security.
- 2. Update your software.** This is an easy way to stay protected. A lot of small businesses neglect their software updates, which make them vulnerable to some of the most severe security attacks, like ransomware. Anti-virus software is a must, and Windows 10, which has tons of security protocols built in.
- 3. Download from reliable sources.** One of the bad guys' top tricks is to make you download infected software from their scam sites. Be super careful about where you download from.
- 4. Use strong passwords and/or change passwords regularly.** You know this, but do you do it? Changing passwords may be annoying, but it truly is one of the best things you can do to protect your business.
- 5. Use a secure connection for receiving/transmitting sensitive financial data.** Your e-commerce and other vital financial transactions should be done over sites that use either SSL (Secure Sockets Layer) or TLS (Transport Layer Security.)

(Strauss, 2017)

*Actions to take in the event of a data breach***1. Having a plan in place to deal with a security breach is critical.**

If you suffer a security breach, whether through employee mishap or a hacked server, you need to have a plan in place so that people know what to do, fast. Before any security breach, you need to have the following in place:

- **Data mapping:** even before a security breach, make sure you know what comes into your business from where.

- Data audit: know where you are storing your data and how to access it quickly.
- An obligation on your business partners to notify you if they detect a security breach.
- A plan for reporting security breaches to management quickly and efficiently (this could mean having both a designated communication channel, like an email address, as well as a senior manager assigned to deal with these issues).
- A mechanism for shutting down a security breach quickly.
- Plans in place for damage assessment and limitation.

2. Get help, early on.

Once you know a security breach has happened, get professional advice early on. In particular, security advisors can advise on technical issues and your lawyers can advise on what the leak could mean for the business. Make sure you know who to turn to as part of your standard data security arrangements.

3. Engage with your customers as soon as possible.

In the Sony case, there was a gap of around a week between Sony becoming aware of the leak and then announcing it publicly. Sony explained that it had been actively investigating the leak during this time, but some customers were sceptical.

Clearly there's a balancing act between focusing on shutting down the leak and keeping customers informed. But nonetheless you need to do what you can to engage with your customers as soon as possible, for two reasons: (1) especially following Sony/PSN, customers will want to know what's going on; and (2) there's a good argument that the Data Protection principles require you to engage with customers as soon as possible.

4. Effective PR is important.

Don't hire PRs when the damage has already been done. When preparing your security breach plans, speak with your PRs in advance so that you have something and someone to work with if a security breach ever occurs.

5. Destruction is the best safeguard: don't keep data unless you really need it.

You can't lose data which you don't have anymore. As a safety precaution (as well as good practice in accordance with the Data Protection Principles), you should therefore undertake regular checks to see what data you no longer need, and you can therefore delete from the system. This should help to remove old/unwanted/obsolete data from your servers.

6. Having good working security is very important.

Data Protection legislation requires data controllers to take "appropriate technical and organisational measures" to secure the personal data they hold. That doesn't require you to turn your servers into Fort Knox. It doesn't even necessarily require you to encrypt all your personal data (though that's good working practice).

It does require carrying out an assessment of what data you hold and what security measures are needed to protect it adequately. This will vary from business to business depending on a whole range of factors, including how much and what kind of data they hold (and how sensitive it is), what measures are available to them and at what cost. There are recognised quality and security standards – considering moving your business on to that standard (and ensuring your business partners do too).

7. Getting back to normal: under-promise, over-deliver.

One of the problems which Sony faced was widespread uncertainty and speculation regarding when the PSN service would be resumed (this is often likely to be a problem where a security breach results in the takedown of a service).

We'd suggest the best practice would be, insofar as possible, to adopt a cautious approach when estimating when the service is likely to become fully functional again – better to under-promise and over-deliver than have to give a series of moving relaunch dates.

8. Hardwire data protection into the business.

A major factor in security breaches is that business systems and processes are not fundamentally designed with data protection in mind – their security measures are bolted on afterwards. So, the next time you start a business or new job or new project, consider how to hardwire data protection into it. It's good practice and it's likely to become the law in the near future.

9. Appoint a senior manager to be responsible for data protection.

Again, a major factor in security breaches is that responsibility for protecting data falls between management cracks. Put a senior manager in charge of data protection and give him/her sufficient resources and training to do the job. It's good practice, good PR and it's likely to become the law in the near future.

(GamesIndustry International, 2011)