

# Powering up

The ESG challenge to the videogaming industry



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# 1. Introduction

This white paper serves as a comprehensive exploration of the key challenges and opportunities confronting the gaming sector in relation to ESG practices. It is a timely response to both the industry's call for introspection and improvement, and the UK Government's recently announced framework [<https://bit.ly/3qtOqDi>] for videogames research. The framework underscores the significance of videogames in society, addressing vital aspects such as mental health, online safety, and education. The videogame industry has an undeniable influence and reach, underscoring its significance and wide-ranging impact on individuals of all ages.

**“60% of UK adults aged 16 and over, and 91% of children and young people between 3-15 years old, play videogames.”**

Department for Culture, Media & Sport  
Video Games Research Framework  
Published 30 May 2023

[<https://www.gov.uk/government/publications/video-games-research-framework/video-games-research-framework>]



Aligned with the objectives of the UK Government's framework, this analysis provides an insight of the gaming industry's ESG performance and presents actionable solutions for positive change. An extensive examination of the top 20 video game companies (see page 6) is conducted, comparing their practices to relevant sectors, including Consumer Goods, Toys & Sporting Goods, and Internet and Media Services.

The framework highlights the importance of upholding ethical standards, safeguarding intellectual property rights, and ensuring data privacy regulations in video game research. Collaboration among academia, industry stakeholders, and the gaming community is encouraged to foster responsible and impactful research endeavours.

Notable trends and challenges within the gaming sector's ESG practices are revealed through this analysis. While the industry has demonstrated strengths in certain areas, such as historical leadership and adaptability, it also faces significant weaknesses that demand immediate attention. The report sheds light on the risks associated with product design and lifecycle management, promoting access and affordability, and the necessity of robust data security and customer privacy measures.

Included case studies exemplify how inter-industry collaboration can empower companies to enhance their ESG performance demonstrating how videogames can directly impact education, promote inclusivity, and foster stronger communities, companies.

# 1. Introduction

The analysis has been conducted by leveraging the expertise of Mettle Capital, a leader in sustainability and purpose-driven analytics. Mettle Capital provides daily assessments of materiality and sentiment for over 5,000 listed and private corporates in Europe and the US since 2010. Access to comprehensive data, advanced visualisations, and AI analytics on evolving risks in the industry has provided unique insights into the critical issues of sustainability. Through this approach, recommendations show how to maximise the industry's potential for positive impact while mitigating any potential adverse effects.

The industry stands at a pivotal moment with the opportunity to shape the future of the gaming industry. This goes beyond entertainment: become catalysts for social progress and responsible innovation. The UK Government's framework provides guidance, emphasising the importance of ethical research practices, data protection, and collaboration – with the potential to change current and implement new regulations.

The industry should continue to work to remain a beacon of innovation, inspiring positive change and leaving a lasting legacy.

“How can games be designed for use as education tools and tools supporting learning. You could consider how games can be used for teaching and learning, and their value in supporting learning.”

Department for Culture, Media & Sport  
Video Games Research Framework  
Published 30 May 2023

[<https://www.gov.uk/government/publications/video-games-research-framework/video-games-research-framework>]



Having actively championed the gaming industry for seven years, Checkpoint's interest and agenda are driven by a sincere desire to encourage self-reflection and inspire the industry to strive for continuous improvement.

Checkpoint acknowledges this report presents a solution, but not the solution. It is an invitation for the industry to critically examine itself, question existing practices, and explore how it can contribute to positive change. The aim is to foster an open dialogue and collaborative mindset that leads to innovative approaches and shared responsibility.

Through its work and initiatives, Checkpoint seeks to empower the industry to embrace new possibilities and drive meaningful impact.

**CHECKPOINT**

## 2. The Challenges of ESG

The video game industry holds a prominent position in today's global landscape, characterised by its remarkable growth and economic significance. In 2021, the industry achieved a staggering revenue of over \$180 billion USD, solidifying its status as a major economic force [1]. With its expansive global reach, the industry has become a cultural phenomenon, captivating audiences worldwide. Moreover, the videogame sector plays a crucial role as a significant employer, generating diverse job opportunities and driving growth in related industries [2]. Its unique ability to cultivate transferable skills positions it as a valuable contributor to various sectors. Additionally, as society enters the era of the Fourth Industrial Revolution, the video game industry assumes a pivotal role in unlocking the transformative potential of technology [3]. While comprehensive ESG audits have yet to be conducted in the industry, it has already displayed leadership by embracing ESG and CSR practices [4].

ESG (Environmental, Social, and Governance) considerations hold significant importance in the gaming industry, driven by the inherent risks they pose to businesses. While ESG outcomes, such as positive environmental impact and social responsibility, are crucial, the true essence of ESG lies in managing the risks that could jeopardise the long-term success of the industry.

In terms of the Environmental aspect (E), energy consumption throughout the development and delivery of games presents a major challenge. Although there are specific examples of good practice in the industry with some players making a significant reduction in energy consumption, the wider industry must address the environmental footprint of its operations, from reducing carbon emissions to implementing sustainable practices across the value chain. Microsoft and Ubisoft\* are two publishers that have publicly had a huge drive towards more responsible energy consumption, with Microsoft going even further with its commitment to being "water-positive" too: <https://bit.ly/3P5T8RS> – Microsoft, <https://bit.ly/3qyUNFn> – Ubisoft

The social aspect (S) centres around trust within the franchise and the industry's support for players with new intellectual property (IP) and innovative games – especially post COVID where publishers enjoyed great profits. The industry has witnessed stagnation in delivering fresh content, leading to player frustration. Rebuilding trust, encouraging creativity, and promoting inclusivity are key social challenges that the industry must confront.

A great report from GamesIndustry.biz: <https://bit.ly/43OygCK> which brings together all the findings.

Governance (G) issues within the games industry are another critical concern. Instances of poor culture within game developers have eroded consumer trust in the management of gaming companies. Moreover, there has been a concerning rise in social and offensive culture within specific sub-sectors. Addressing these governance challenges is essential for fostering a positive and responsible industry culture. (deliberately chosen examples from over a decade to show this is a systemic issue that has been going on for a long time):

Harassment (inc Sexual): <https://n.pr/3JaJUjr> Overworked: <https://wapo.st/3P8r5Bk>  
Gamergate context (from 2014): <https://nyti.ms/2T8grgH>

These high-level challenges encapsulate the pressing issues facing the gaming industry today. By pro-actively addressing these ESG dimensions, the industry can enhance its sustainability, reputation, and customer satisfaction, thereby ensuring its long-term viability in an evolving landscape.

[1] Newzoo. (2022). Global Games Market Report 2021. [<https://bit.ly/43bhMod>]

[2] Entertainment Software Association (ESA). (2021). Essential Facts About the Video Game Industry. [<https://bit.ly/3MYKNhn>]

[3] Schwab, K. (2016). The Fourth Industrial Revolution. World Economic Forum. [<https://bit.ly/3WV7UNr>]

[4] Deloitte. (2021). Global Impact Report: Purpose, Performance, and Progress. [<https://bit.ly/428x8c5>]



### 3. Summary of findings – ESG focus

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The ESG analysis of the gaming sector has revealed several key findings and trends. The report focuses on the top 20 videogame companies, including Nintendo, Tencent Games, Epic Games, The Pokémon Company, Sony PlayStation, Microsoft Xbox, Capcom, Ubisoft, Electronic Arts, Bandai Namco Entertainment, Take-Two Interactive, Sega, Activision Blizzard, Square Enix, Embracer Group, Warner Bros. Games, NCSoft, NetEase, Netmarble, and Nexon.

The report compares the video game sector to other industries, including Consumer Goods, Toys & Sporting Goods, Internet and Media Services, S&P500, and STOXX600. Within the sector, there are notable strengths and weaknesses in ESG practices.

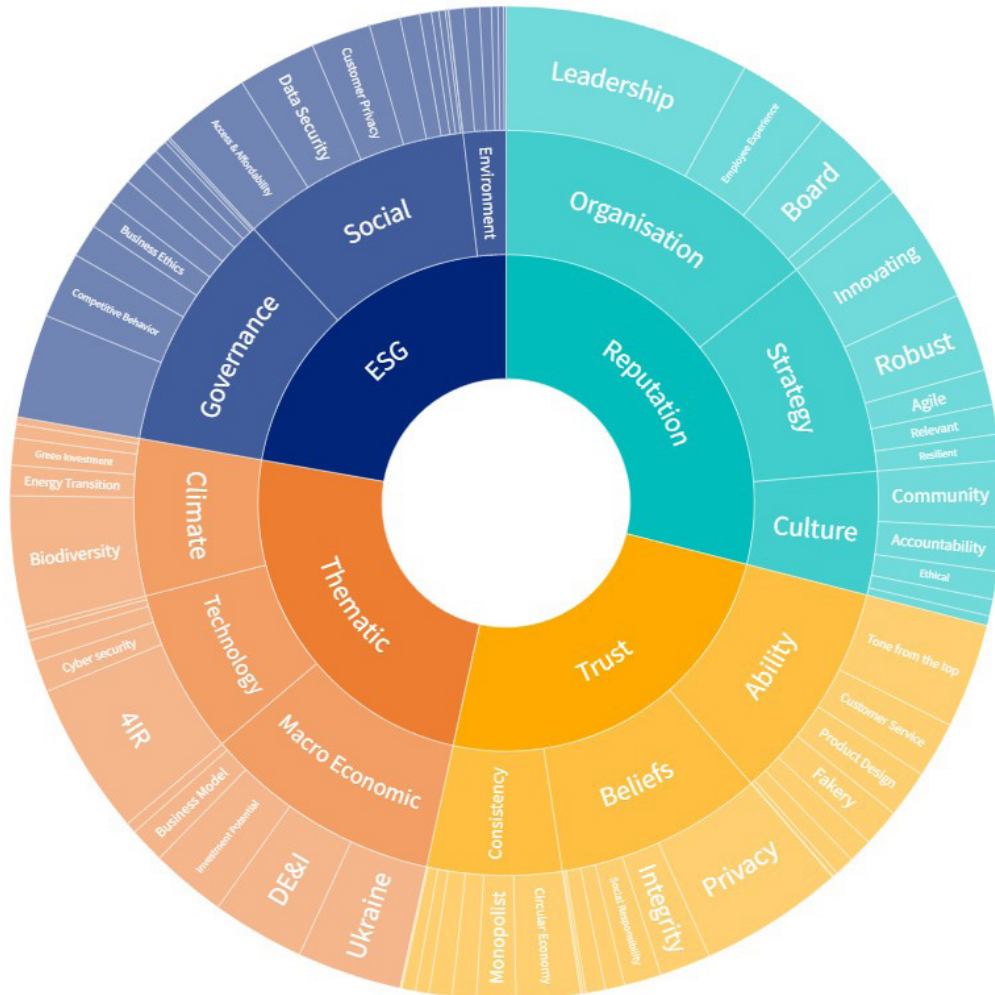
One significant finding is the need for immediate attention to Product Design & Lifecycle Management, which focuses on incorporating ESG considerations into the characteristics of products and services provided or sold by the companies.



### 3. Summary of findings – ESG focus

#### Materiality\*

Relative Materiality for ESG, Reputation Trust and Thematic Models



#### Overall materiality

What is the most significant conversation around the gaming sector? What are investors, regulators, customers, talking about when they talk about the gaming sector?

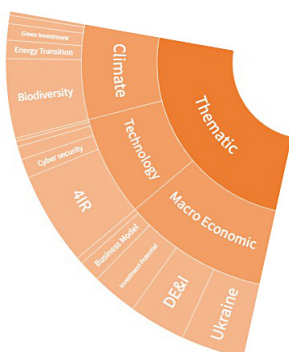
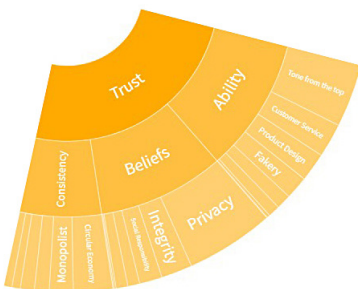
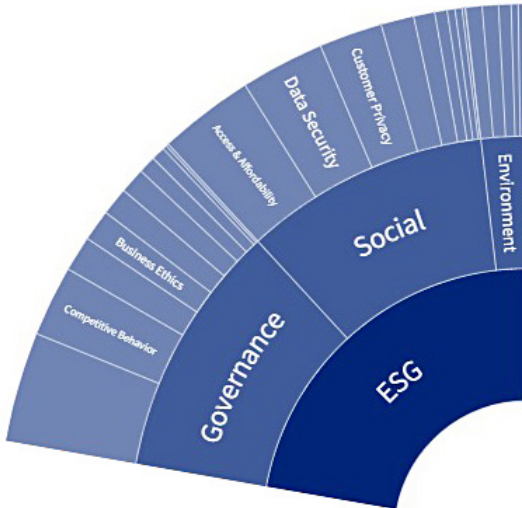
Compiling all the relevant conversation from across publicly-available traditional, trade and social media over the last 12 months highlights where the material issues are in reality rather than based on *a priori* best guesses. We see a roughly equal amount of conversation in the four models. This suggests that the gaming sector faces equal risks amongst its stakeholders.

\* See p22 – B. Description of the criteria used to evaluate ESG performance



### 3. Summary of findings – ESG focus

#### Overall materiality (continued)



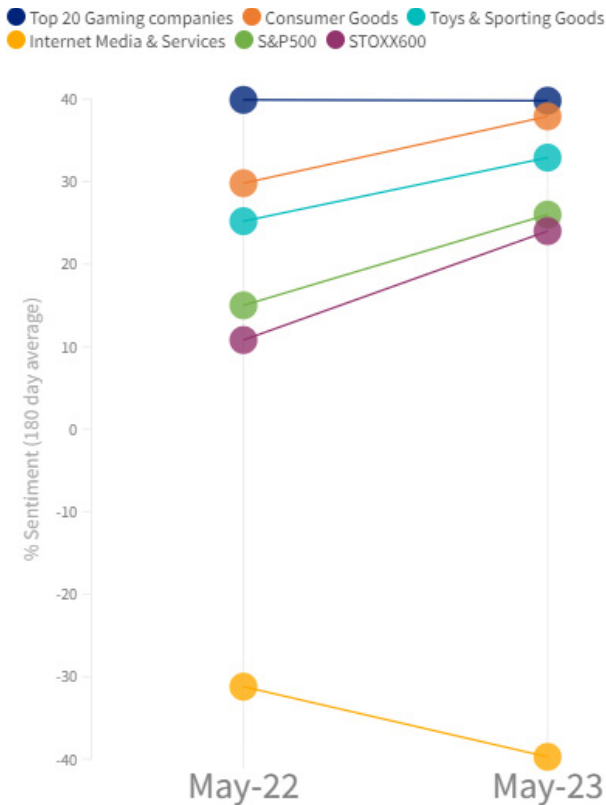
- **ESG** – Environment Social Governance model captures the most significant topics of conversation amongst sustainability investors. Within this model, the Governance lens (Standards for running a company) is the most material, followed by the Social lens (Consideration of people & relationships). Unlike many other sectors, the Environment lens (Conservation of the natural world) is the least material. This highlights that investors need to understand the nuances of each sector rather than taking a ‘one-size-fits-all’ approach. We focus on the ESG model in this white paper but we can equally analyse the other three models in the same way.
- **Reputation** – this model captures the most significant topics of conversation amongst regulators, policymakers and NGOs. Within this model, the Organisation lens (Is the entity well organised? Is it known for strong leadership, effective management, robust oversight and high employee morale?) and the Strategy lens (Is the entity perceived as having a well-defined, well-regarded strategy that is flexes and adapts to changing market conditions?) dominate the Culture lens (The values, beliefs, and behaviours that determine how a company’s employees and management interact, perform, and handle business transactions).
- **Trust** - this model captures the most significant topics of conversation amongst customers. Within this model, the Ability lens (Does it do what it says on the tin?) and Beliefs lens (Do I care?) dominate the Consistency lens (Does it do what it says over time?).
- **Thematic** - this model captures the most significant topics of emerging conversation across a broad range of longer-term investors seeking to exposure to evolving social trends. Here there is equal weighting across the Climate lens (Emerging investment themes in solutions that lead to significant and measurable reductions in pollution levels, and contributing to achieving net-zero emissions by 2050.), Technology lens (Emerging new technologies with broad applications across multiple sectors and multiple use cases), and Macro Economic lens (Changes in the global economy that have sufficient weight to rebalance whole sectors’ and nations’ economic prospects).



### 3. Summary of findings – Sentiment snapshot

#### Sentiment\* vs. Peers

Now vs 12 Months previous



The ESG model is at 40% – a strong showing relative to other sectors. However, those other sectors and benchmarks have caught up over the last 12 months. The Consumer Goods sector, the Toys & Sporting Goods sub-sector have both closed the gap on the gaming sector. This suggests that the competitive advantage once enjoyed by the gaming industry has gone. It is no longer set apart from its wider sector or sub-sector so needs to act in order to restore its previous competitiveness in the eyes of sustainability investors. The poor performance of the Internet Media & Service sub-sector, dropping a further 10% from an already poor -30%, shows the extent of how bad this effect can be.

*Focusing on the ESG screen, how well is the industry performing? How well is it performing in absolute terms in the present compared to 12 months ago? How well is it performing relative to its two closest subsectors? Relative to its wider sector, relative to its stock market benchmarks? The chart shows Sentiment (180-day trailing average) of the industry and its peers for May 2023. It is a snapshot to give a simple visualisation of performance.*

\* See p22 – B. Description of the criteria used to evaluate ESG performance






### 3. Summary of findings – Risk Analysis

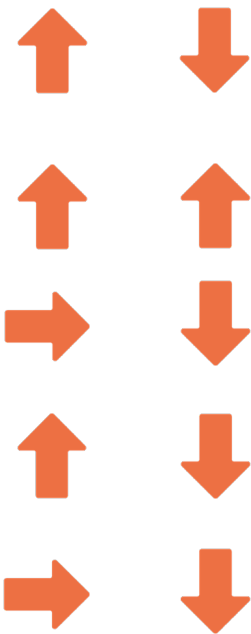
Within the ESG model, which are the most important topics to focus on? We can rank by materiality – the relative percentage of the overall conversation expressed per driver. We see that Product Design & Lifecycle Management, Access & Affordability and Data Security are the three most material topics for the **Top 20 Videogaming companies**.

#### Key Topics

Most Significant Drivers in last 12 Months

Materiality      Sentiment

-  **Product Design & Lifecycle Management (15% materiality)**  
Incorporation of environmental, social, and governance (ESG) considerations in characteristics of products and services provided or sold by the company.
-  **Access & Affordability (13% materiality)**  
A company's ability to ensure broad access to its products and services, specifically in the context of underserved markets and/or population groups.
-  **Data Security (12% materiality)**  
The management of risks related to collection, retention, and use of sensitive, confidential, and/or proprietary customer or user data.
-  **Competitive Behaviour (10% materiality)**  
Social issues associated with existence of monopolies, which may include, but are not limited to, excessive prices, poor quality of service, and inefficiencies.
-  **Customer Privacy (9% materiality)**  
The management of risks related to the use of personally identifiable information (PII) and other customer or user data for secondary purposes including but not limited to marketing through affiliates and non-affiliates.



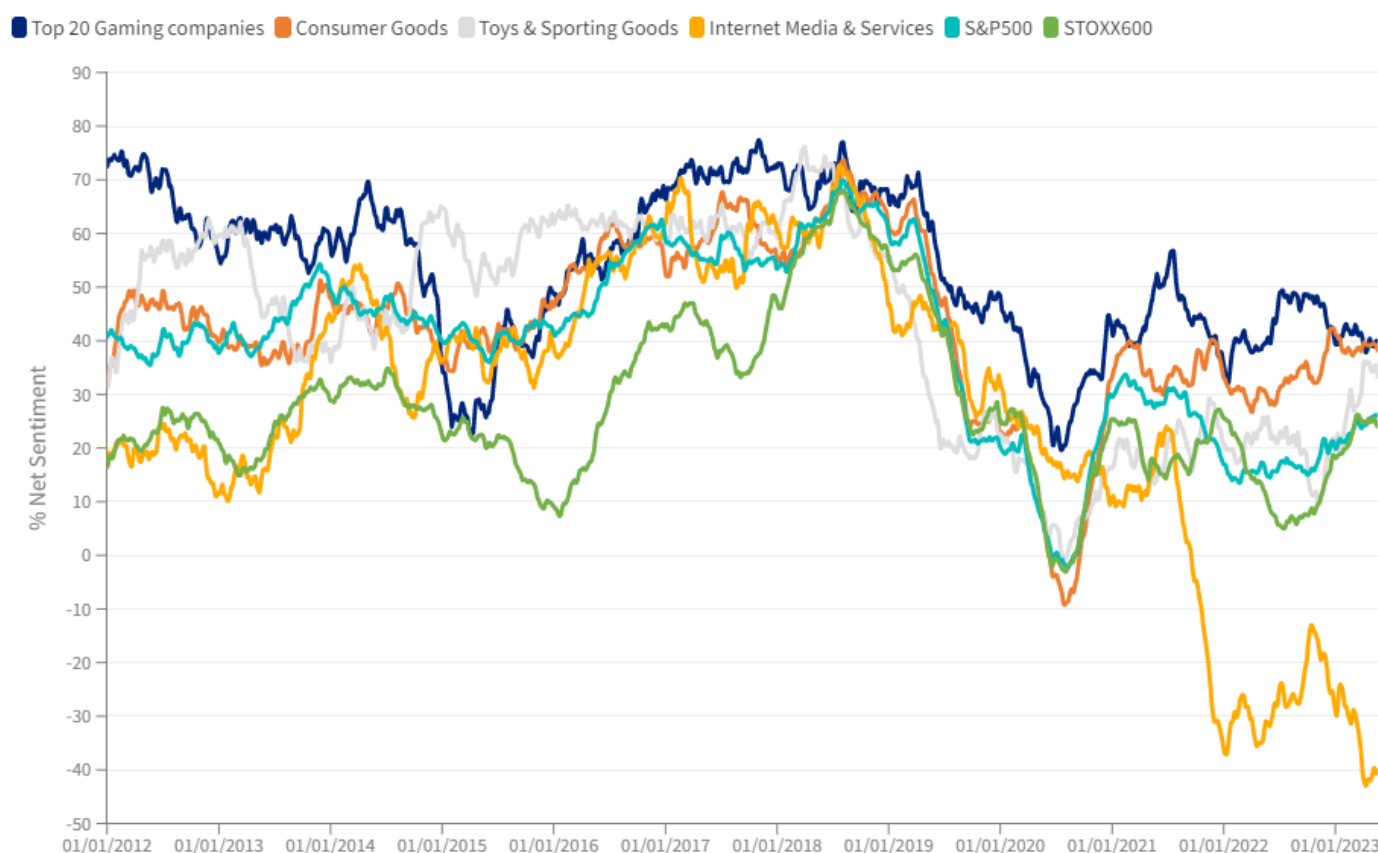
By comparing the 12-month change in sentiment and materiality between the Top 20 Gaming Companies, the Toys & Sporting Good sub-sector and the Internet Media & Service sub-sector, we can risk assess the key topics. As shown in Section 4: Drill Downs, Product Design sentiment is decreasing while materiality is increasing. In other words, there is increasing negative conversation on this topic over the 12 month period – so this topic is marked as Red for downside risk. By contrast, for Access & Affordability, sentiment is increasing while materiality is also increasing – so this topic is marked as Green for upside risk.

### 3. Summary of findings – Sentiment Timeline

Looking at the longer-term trend in sentiment shows the extent to which the gaming industry has been caught up by its sector, sub-sectors, and benchmarks. 10 years ago, the industry held a clear 30 point surplus over its sector and sub-sector. It was briefly overtaken by the Toys & Sporting Goods sub-sector in 2015-16 but regained its primacy from 2017 to present.

However, in the last 12 months, the gaming industry is at parity with its sector and sub-sector. This shows the longer-term deterioration of sentiment in the industry as the sector and sub-sector are flat on the period. In other words, gaming's historic 'sentiment premium' has gone so that it is viewed with the same sentiment as the wider Toys & Sporting Goods sub-sector, and indeed the wider Consumer Goods sector.

#### 180-day trailing average sentiment over time



Both stock market benchmarks for the **Top 20 Videogaming companies** – S&P500 and STOXX600 – showed the same momentum but from further back. This suggests that there are wider market effects at work here as the slow recovery from the global pandemic spreads across the market. This makes the need for competitive differentiation harder for the gaming industry.

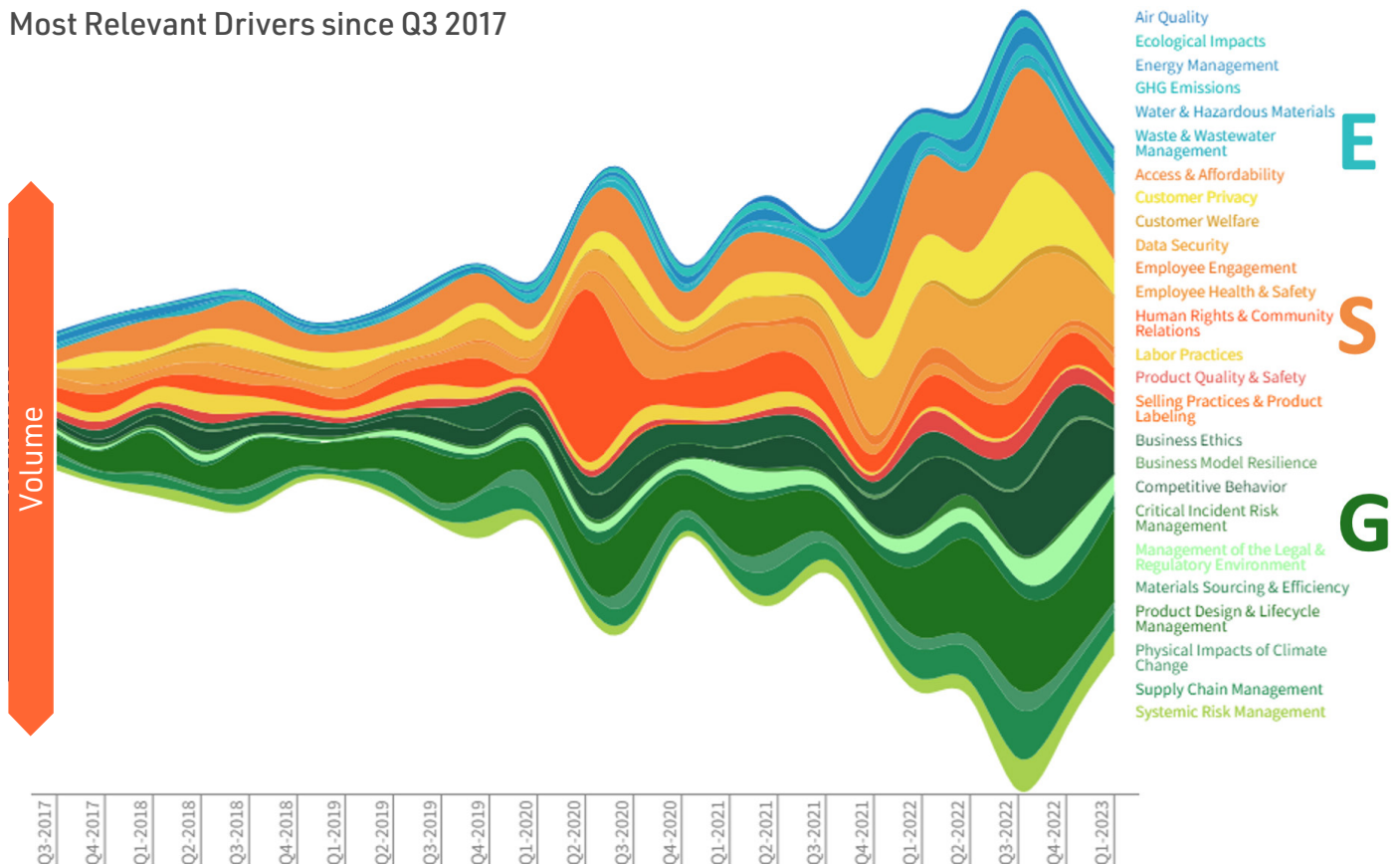
*Sentiment is calculated as net polarised sentiment from all relevant publicly-available conversations across traditional, trade, and social media using bespoke Natural Language Processing. This is a ratio of positive and negative commentary which is then volume weighted and has a range of -100% to +100%.*



### 3. Summary of findings – Materiality Timeline

What is material across the **Top 20 Videogaming companies** has evolved over the last six years. The chart shows the quarterly volume per driver. Taken together it also shows the evolving ESG profile of the industry. Social and Governance drivers are much more significant than Environmental drivers. In the latest full quarter (Q1 2023), the most important drivers are Product Design & Lifecycle Management, Access & Affordability, Data Security.

Most Relevant Drivers since Q3 2017



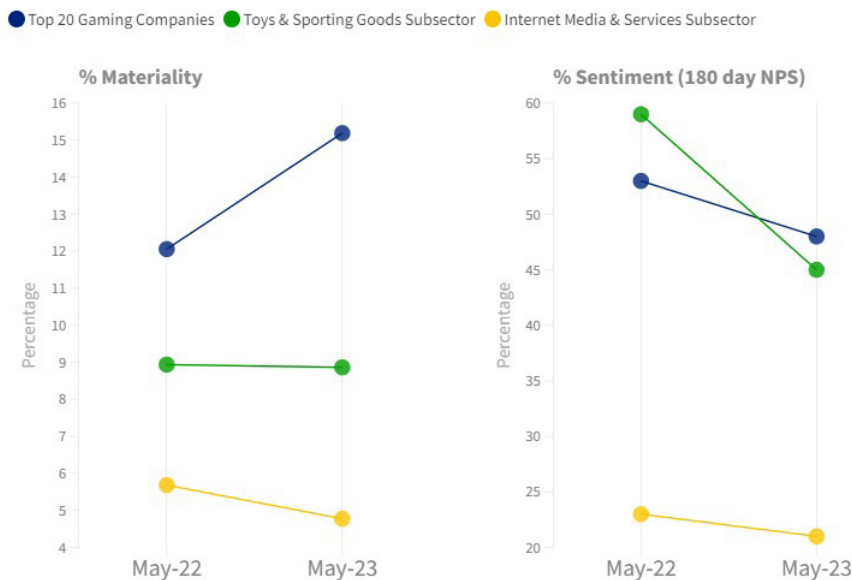
The bulges in the chart show bulges in conversation around specific events. For example, the Q2 2020 bulge in Human Rights & Community Relations relates to **Microsoft** announcing that it will not sell its facial-recognition technology to police departments in the United States until a federal law exists that regulates its use.

The chart shows the volume of conversation in each driver per quarter since Q3 2017 analysed in the ESG model. All publicly-available relevant conversation is collected, thereby showing actual rather than a priori materiality.

## 4. Drill downs – Product Design

Product Design describes the incorporation of environmental, social, and governance (ESG) considerations in the characteristics of products and services provided or sold by the company. We can see the 12-month change for the Top 20 Gaming Companies in materiality and sentiment relative to the two sub-sector benchmarks. Materiality has increased markedly while sentiment has declined (although it still outperforms both sub-sectors). So, while this topic is a red, downside risk for the industry, it is still in a position of relative strength.

### Now vs 12 Months previous



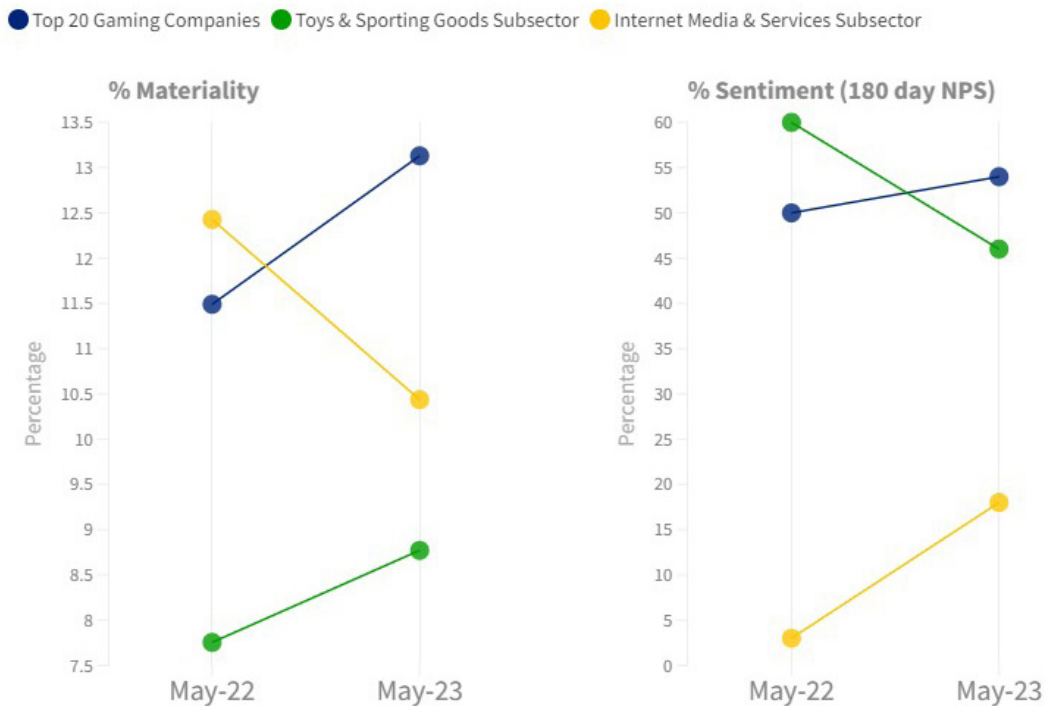
*Taking **Sony** as one of the larger contributors to the conversation on this topic in the industry, we deploy a gen-AI summariser to pick out the most significant aspects of the conversation.*

- 1. Complaints about Sony:** Numerous users are expressing their dissatisfaction with Sony's products and practices, from poor product quality, allegations of anti-competitive behaviour, and concern about Sony not permitting Microsoft's Game Pass service on their platform. Some users mention past security breaches and controversies, and there is criticism regarding the company's supposed sustainability efforts.
- 2. PlayStation and Sony Products:** There are discussions on Sony's PlayStation, including criticisms about their decision to restrict access to purchased StudioCanal movies next month and prevent cross-platform gaming. There are calls for a loyalty program in the form of NFTs to allow gamers exclusive access to buy products like the PS5 before bots inflate prices.
- 3. Microsoft's acquisition of Activision Blizzard:** Some users are expressing concerns about the implications of this acquisition, suggesting that it could potentially lead to a monopoly in the gaming market and result in increased prices for gamers.
- 4. Packaging and Shipping Issues:** Customers have complained about the poor handling and packaging of Sony products during shipping, causing damage to the products upon arrival. One user praised Sony's announcement to remove plastic packaging from small products starting in 2023.
- 5. Cloud Gaming and Game Services:** The conversations around this topic concern Sony's stance on Microsoft's Game Pass and other game services, with some users arguing that Sony is trying to hinder competition.
- 6. Sustainability and Environment:** Some tweets express disappointment with Sony's sustainability efforts, arguing that the company's products are contributing to e-waste. Sony's decision to remove plastic packaging from some of its products starting in 2023 is met with mixed responses.

## 4. Drill downs – Access and Affordability

Access 7 Affordability describes companies' ability to ensure broad access to their products and services, particularly in underserved markets or population groups. We can see here that both materiality and sentiment have improved over the 12-month period – making this topic a green, upside risk for the industry. The trend in the sub-sectors is noticeable. Internet Media & Service has decreasing materiality and improving sentiment so its downside risk here is ameliorating. But the reverse is true for the Toys & Sporting Goods sub-sector – an emerging downside risk to be addressed urgently.

### Now vs 12 Months previous



*Taking **Microsoft** as one of the larger contributors to the conversation on this topic in the industry, we deploy a gen-AI summariser to pick out the most significant aspects of the conversation.*

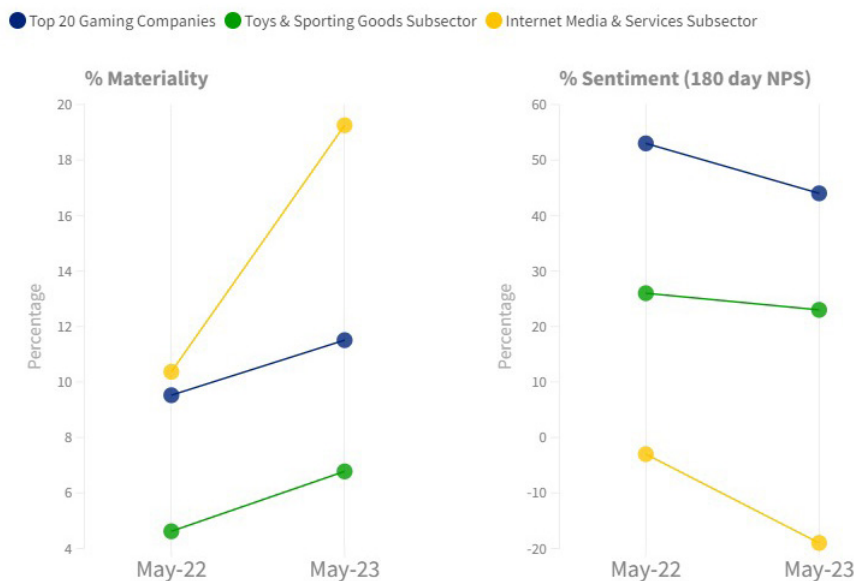
1. Microsoft has announced a proposed \$69 billion acquisition of Activision Blizzard Inc., the maker of the popular video game series Call of Duty. Microsoft is now offering the game to Nintendo consoles through a 10-year agreement, despite the possibility that the acquisition could potentially lead to less competition in gaming, a concern raised by the UK's Competition and Markets Authority (CMA).
2. Concessions from Microsoft's meeting with European regulators indicate a possible partnership with Nvidia's GeForce Now cloud service, giving it access to Xbox games and Activision Blizzard titles. These titles had been barred from third-party cloud services until now.
3. In addition to these developments, Microsoft is expanding its cloud gaming offering, a free benefit included in its Xbox Game Pass subscription product. This strategy can be particularly beneficial to consumers in developing markets where consoles and PCs are not easily accessible or affordable.



## 4. Drill downs – Data Security

Data Security describes the management of risks associated with the collection, retention, and use of sensitive customer or user data. On this topic, materiality and sentiment are broadly flat. So this topic is marked in Amber – neither an upside nor downside risk currently but needs to be monitored and ideally managed towards green rather than red.

### Now vs 12 Months previous



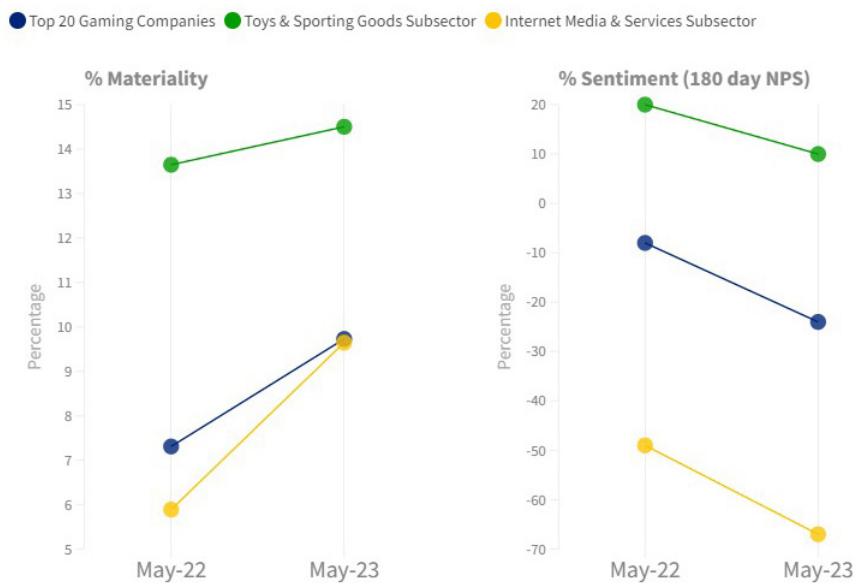
*Taking **Epic Games** as one of the larger contributors to the conversation on this topic in the industry, we deploy a gen-AI summariser to pick out the most significant aspects of the conversation.*

1. Complaints range from perceived inadequate security measures, with users reporting suspicious activities like receiving 2-factor authentication codes without logging in, to allegations of Epic Games Launcher spying on its users.
2. Some users have voiced concerns about Epic Games' alleged data collection practices on social media, leading to mistrust and criticism. This discussion is happening within the broader context of heightened scrutiny from the FTC and other regulatory bodies around the world concerning tech companies' data collection practices and their impact on user privacy.
3. Epic Games is set to pay a fine of \$520 million following a settlement with the U.S. Consumer Protection Agency (FTC). The FTC had accused the company of not providing adequate protection for underage players. This included allegations of data collection on minors without parental consent and deceptive practices that led millions of gamers into making unwitting purchases. A notable part of the agreement involves Epic Games compensating for claims tied to in-game purchases made by underage participants. The deal, however, still awaits court approval. The case has stirred discussions on how gaming companies handle user data, especially those of minors.
4. A software and hardware provider specializing in IT security is partnering with Epic Games, the producer of Fortnite, to facilitate immersive real-time collaboration in architecture, engineering, and construction (AEC). The partnership is part of preparations for the metaverse and represents a significant move towards incorporating immersive video technology within these fields. This partnership represents another step in Epic Games' expansion beyond the gaming industry, despite ongoing debates about data privacy and cybersecurity in the context of the company's operations.

## 4. Drill downs – Competitive Behaviour

Competitive Behaviour encompasses social issues related to the existence of monopolies, such as excessive prices, poor service quality, and inefficiencies. Here, materiality has increased and sentiment has decreased so this topic is marked as a red, downside risk for the industry. Unlike the other red risk (Product Design), sentiment is firmly in negative territory. This means that addressing the risk and reversing the trend will be a harder challenge for the industry.

### Now vs 12 Months previous



*Taking **Ubisoft** as one of the larger contributors to the conversation on this topic in the industry, we deploy a gen-AI summariser to pick out the most significant aspects of the conversation.*

1. Many users reported persistent issues with Ubisoft's version of Monopoly. These problems primarily include frequent game crashes, poor connectivity, and the inability to finish games due to technical glitches.
2. Some users voiced their disappointment with Ubisoft's customer support. They complained about the lack of assistance when unable to access their Ubisoft Connect accounts. This issue prevented them from playing games they had purchased on other platforms, such as Steam.
3. One user mentioned an issue with Monopoly on the Nintendo Switch, criticizing the game's frame rate performance compared to other games on the platform.
4. Some tweets referenced issues outside of game performance. For example, one user questioned whether Ubisoft's revenue and demand would decrease. They also hinted at political censorship and government collusion, asking whether a certain phrase was blacklisted.
5. There were also mentions of Ubisoft's rights to other games such as Uno and Far Cry, and a comparison of Ubisoft to other developers and game platforms.
6. Several tweets referenced potential intellectual property violations, tagging various organizations and personalities such as Capcom, Nintendo, Elon Musk, and the FBI. The specific nature of these alleged violations wasn't clear.
7. A few tweets referred to discussions about the potential acquisition of Ubisoft by Sony and the perceived monopoly of Sony in console gaming.
8. Lastly, some users suggested improvements, such as adding an option to block additional trade requests in Monopoly Plus to avoid prolonging the game unnecessarily.

## 4. Drill downs – Customer Privacy

Customer Privacy describes the management of risks related to the use of personally identifiable information (PII) and other customer or user data for secondary purposes, including marketing through affiliates and non-affiliates. We see here materiality is broadly flat and sentiment has dropped a little but still outperforms both sub-sectors. So this topic is marked in Amber – neither an upside nor downside risk currently but needs to be monitored and ideally managed towards green rather than red.

### Now vs 12 Months previous



*Taking **Activision Blizzard** as one of the larger contributors to the conversation on this topic in the industry, we deploy a gen-AI summariser to pick out the most significant aspects of the conversation.*

1. Users criticized Activision Blizzard's data use policies and their tactics for quantifying and grading the diversity of individuals, describing these practices as tactless and offensive.
2. There were discussions around Activision Blizzard's gaming data collection methods, and some users criticized their anti-cheat system.
3. Users mentioned the resignation of Activision Blizzard's chief compliance officer, Frances Townsend, who was involved in reviewing the company's response to sexual assault allegations. After stepping down, she's expected to become an advisor to the board and CEO Bobby Kotick.
4. There were concerns over potential data breaches, with one user threatening to join a class action lawsuit if their personal data were leaked.
5. A user clarified that Microsoft's Xbox cloud gaming service doesn't use Azure servers, refuting a claim that it does.
6. There were discussions about Microsoft's acquisition of Activision Blizzard and how this might affect the gaming industry. Some users worried that the deal could incentivize Microsoft to block rivals' access to Activision's games.



## 5. Case studies

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So how can the gaming industry rise to these challenges, address these risks – mitigating the Red risks, maximising the Green risks, ensuring Amber risks improve rather than deteriorating?

In an industry that thrives on innovation, creativity, and immersive experiences, the need for collective action and industry-wide collaboration has never been more crucial. The challenges and opportunities presented by ESG considerations require the video game sector to work together to drive positive change. By recognising the significance of ESG practices and embracing responsible approaches, the industry can have a profound and immediate effect on various stakeholders.

These case studies exemplify some of the ways the industry can be more proactive in its approach to ESG, delivering on the expectations of all stakeholders. These case studies highlight the power of collaboration, innovation, and purpose-driven initiatives:



## 5. Case studies

### Case Study 1: Microsoft – Minecraft Education

Microsoft's impact on promoting ESG practices and revolutionising learning experiences through Minecraft Education cannot be overlooked. Minecraft Education, an educational version of the popular video game Minecraft, has transformed classrooms worldwide by fostering creativity, collaboration, and problem-solving skills among students.

By leveraging the power of video game technology, Microsoft has opened doors to new educational possibilities. Minecraft Education offers alternative learning experiences and a range of educational resources that seek to align with curriculum standards. Its widespread adoption has highlighted the educational value of videogames and contributed to the recognition of gaming in the educational landscape.

Microsoft's commitment to accessibility and inclusivity is evident in Minecraft Education. The platform provides features to accommodate diverse learning needs, such as text-to-speech, closed captioning, and customisable settings.

The impact of Minecraft Education extends beyond individual classrooms. It has fostered a community of educators who share best practices and collaborate on developing new educational content. Microsoft actively supports this community, providing resources and facilitating knowledge sharing.

Through Minecraft Education, Microsoft has played a pivotal role in integrating videogames into educational settings and promoting positive change in education. Its dedication to ESG principles and commitment to empowering students highlight the transformative potential of video game technology for learning.



## 5. Case studies

### Case Study 2: LEGO Learn Through Play

LEGO Group's collaboration with the Danish education system showcases the transformative potential of play-based learning. By integrating play into the curriculum, LEGO and the Danish education system have created a dynamic and inclusive learning environment for children.

LEGO's partnership with the Danish education system has yielded remarkable results. Students have demonstrated increased engagement, creativity, and critical thinking skills, while educators have embraced more interactive teaching methods. The alignment between LEGO's mission and the values of the Danish education system has revolutionised learning experiences for children.

Notably, LEGO's involvement in the videogames industry further exemplifies their commitment to innovative learning. By recognising the power of videogames as indirect educational tools, LEGO demonstrates a forward-thinking approach to incorporating technology and play into education. This integration opens new avenues for the video game industry to explore meaningful collaborations and contribute to educational advancements.

LEGO's philanthropic initiatives, guided by the principles of the Danish education system, emphasise learner-centred education and the transformative potential of play. This successful collaboration serves as an inspiring example of how industry partnerships with educational systems can drive positive change.





## 5. Case studies

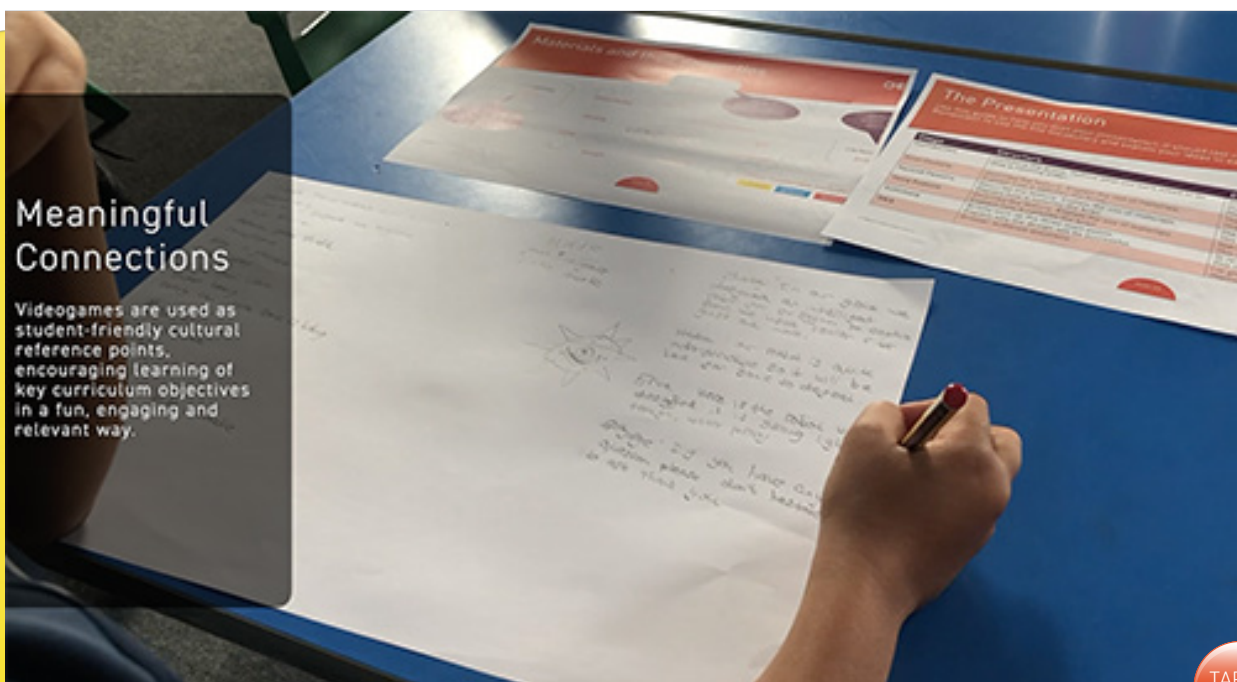
### Case Study 3: Checkpoint Learning and Sonic: Colours Ultimate

Checkpoint Learning has successfully developed a robust pedagogy centred around the integration of videogame intellectual property (IP) into school learning resources. The educational materials undergo thorough evaluation and scrutiny in collaboration with Brunel University's Faculty of Education, partner schools, and other stakeholders. The findings of the research are documented in peer-reviewed papers, providing valuable insights into the impact and effectiveness of their learning approach.

Sonic: Colours Ultimate was used to deliver a Design and Technology lesson to a year 6 class, aligning with National Curriculum outcomes. The students had the opportunity to present their designs to the game's Executive Producer over a video call, gaining valuable insights into game design and the outcomes of the lesson itself. This engagement is an example of how to level the playing field for students in a deprived area with English as a second language and of poor socio-economic backgrounds.

Checkpoint's lessons are praised for their versatility and accessibility. They are designed to be inclusive and require no reliance on technology or prior knowledge, ensuring that all students can engage and benefit from the learning experience. Moreover, Checkpoint's approach highlights the diverse range of career pathways within the gaming industry and its broader influence. By showcasing the various opportunities available, Checkpoint empowers learners to explore and consider careers that extend beyond traditional notions, thereby fostering a greater appreciation for the industry's multifaceted impact.

Through this initiative, students have interviewed European Space Agency controllers, Olympic athletes, rollercoaster engineers and game developers amongst others.



#### Meaningful Connections

Videogames are used as student-friendly cultural reference points, encouraging learning of key curriculum objectives in a fun, engaging and relevant way.

## 6. Methodology and Data Collection

### A. Explanation of the research approach and data sources

The methodology employed for this study involved scanning billions of date-stamped published content pieces annually, including earned media, trade press, and social media, across multiple languages. Mettle Capital identified content fragments specifically related to each entity and one of the 26 Sustainability Accounting Standards Board (SASB) defined ESG drivers or one of the additional 14 Reputation drivers, 24 Trust drivers and 15 Thematic drivers.

The SASB model, which serves as the reporting basis for corporations with a market capitalisation of \$75 trillion within the S&P Global 1200, was utilised. The Reputation model was derived from academic literature and implemented through machine learning techniques. The Trust model employed by the World Economic Forum was also utilised. Thematic drivers are derived from ongoing analysis of trends in the global Exchange Traded Funds sector. Content was qualified as having a positive, neutral, or negative sentiment. This allowed for the calculation of the daily volume of conversation and the determination of Net Polarised Sentiment, which is effectively a ratio between positive and negative sentiment adjusted for materiality. Trailing average data was analysed to identify trends and momentum at the driver level, followed by an examination of the content contributing to these conversations to understand the factors influencing sentiment movements.

### B. Description of the criteria used to evaluate ESG performance

There are two main elements to the evaluation of ESG performance: materiality and sentiment.

Materiality is an analysis of what causes stakeholders to make rationale decisions about an entity – to invest, to buy product, to regulate, to work for, etc. Materiality is calculated from aggregating all publicly-available relevant conversation to determine which topic appear most frequently, thereby showing actual rather than a priori materiality. Sentiment is whether the tone of the specific fragment of relevant conversation is positive, neutral or negative. Sentiment is calculated using Natural Language Processing techniques to score the tone of conversation. A derivative sentiment score is then calculated – a volume-weighted ratio of positive and negative commentary averaged over the last 180-days, ranging from -100% to +100% per day.

Mettle Capital is a sustainability data provider. They provide daily materiality and sentiment on 5,000+ listed and private corporates in Europe and US since 2010. Machine read from publicly-available traditional, trade, social media in 12 languages.

The 450m+ conversations are sorted into ESG, Reputation, Trust, Thematic issue taxonomies and delivered in an easy access platform with intuitive visualisations and insights using generative AI.

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