Digital Observatory Research Cluster

New EU Commission report on games has serious methodological flaws

Executive Summary

The European Commission's report, "Understanding the Value of a European Video Games Society," outlines recommendations for the EU games industry's future. While important, the report falls short in several critical aspects, making it inadequate as the sole foundation for EU Creative Industries policy decisions.

The report recognizes the significance of the EU games sector, which generates substantial revenue and employment. However, it is marred by significant methodological issues and a lack of a strong evidence base.

Key deficiencies include:

1. **State of Knowledge**: The report's methodology lacks transparency and balance in expert representation. It misses vital academic rigour, leading to an imbalanced perspective.
2. **Limitations of Evidence**: The report relies on industry estimates without adequate contextualization or data source scrutiny, raising credibility concerns.
3. **Claims and Conclusions**: The report makes unsubstantiated claims and factual inaccuracies, such as mischaracterizing European countries' actions regarding loot box regulation and oversimplifying the EU-US gaming market relationship.

In conclusion, the report, while valuable, has limitations that compromise its utility for policy decisions. To guide the EU games sector effectively, future policy recommendations should be informed by rigorous, unbiased, and transparent research. The Creative Industries sector deserves policies based on the best available data and research.

Introduction

The European Commission has released a much-anticipated report on the future of games in the EU. The report "Understanding the value of a European Video Games Society" is quite an important document for anyone working with games in the EU, because it fundamentally sets out recommendations for policy in the games domain in the future. It is thus similar to the Video Game Research Framework released by the UK Government earlier this year.

However, while the report includes many good perspectives, it is not suited as the sole basis for making policy decisions for a very substantial area of the EU Creative Industries because of fundamental methodological issues. For example, the report overlooks crucial evidence, includes several errors, and contains weaknesses in the data used which are not as clear as they perhaps could be.

The EU games sector

The games sector forms part of the wider Creative Industries, and even if establishing the actual size and composition of the EU games industry is challenging, it is by all accounts an important asset for the bloc. While the numbers we have about the industry are estimates, and thus to be taken with substantial caution, the sector generates revenue in the billions of euros and employs tens of thousands of people. A lot of EU games or games-related companies are SMEs, meaning that there is quite a start-up culture and potential for future growth in the sector.

The associated academic research environment is flourishing, and EU-based research environments are among the oldest and most well-established in the world. Perhaps more importantly, independent research has documented that games are an aspect of interactive technologies that billions of people interact with globally, meaning that games are an important part of human existence.

Therefore, ensuring that policies exist in the area to promote a healthy games industry with strong protections for the users is quite important. Given the recent controversy about the potential negative or positive health impacts of gameplay, and the debate around monetization mechanics in some games, this need for policy is emphasised.

Unfortunately, the report which could have provided a good foundation for decision-making at the EU level of policy, falls short on several fronts, not the least in the lack of a strong evidence base for the recommendations proposed in the report, crucial evidence not cited, an imbalance in the experts interviewed or consulted for the report, unsubstantiated claims, and lack of fact-checking. It therefore cannot be recommended that policymakers take this report at face value but read it critically and reflect on the evidence base behind the conclusions provided.

The report was commissioned by the European Commission Directorate-General for Communications Networks, Content and Technology (DG CNECT), and prepared by two private companies, ECORYS and KEA. ECORYS is, according to their own website, a "research-based consultancy" and KEA is an international policy design research centre.

While a full breakdown of every single issue found in the report is out of the scope of a post like this one, we will draw out some larger issues and highlight a few examples:

1) The state of the art of knowledge

The report has run a number of workshops, interviewed experts, and fielded an online survey of "sector representatives" as part of the basis for building the conclusions in the report. It is not clear who participated in the workshops, but we are told who the interviewed experts are. This is supplemented with a "desk-review strand" (p18). A number of sources are mentioned, but there is a severe lack of detail about how this "literature review" component was carried out or how included material was selected. There is no indication of a systematic review or breakdown of search strings, databases etc. used which is otherwise the minimal standard for any academic work. A lot of the resources used are e.g., blog posts or magazine articles.

Any academic paper trying to establish the State-Of-The-Art (SOTA) of knowledge in a domain, without documenting the methodology used, or applying critical reflection to the sources used, would have a hard time making it past peer review.

To put it differently: If you want to write about a big, complicated, interdisciplinary topic crossing industry, academia and public policy like video games, you need to do a big, complicated assessment of the state-of-the-art of knowledge. This is a major time factor in contemporary data-driven policy research, whether in games or other technology domains. This was clearly not done here and means that the report is missing out on critical evidence and commentary, as well as missing out on data sources that could have substantially strengthened the evidence base of the report. For example, [this overview of playtime distribution worldwide is based on more than 100 billion hours of playtime data](#), or this paper [analyses 5bn USD worth of financial transactions in games](#).

There is a whole academic domain of inquiry - game analytics - which specifically utilises industry data to draw conclusions about the behaviour of users and the games market. Game analytics research includes [thousands of peer-reviewed publications](#) across numerous domains including business intelligence, design and AI, and is [mirrored in the games industry](#) where it is a key area of focus because [telemetry data is incredibly valuable](#). The report seems to largely ignore all this research which utilises industry telemetry data, something the report otherwise mentions is missing.

With respect to the workshops, the online survey and expert interviews, we get very little information about who participated and to what degree these are representative of the various components of the games industry and associated sectors and organisations - including the academic institutions that are delivering the training for the games industry. We know how many participants were in the workshops and online survey, but not who they are or how they break down across stakeholder groups.

For the expert interviews, there is a list provided, but the list is completely dominated by industry representatives and only two independent academics. Both are based in the UK and are experts in intellectual property law.

This means that independent experts (or policy stakeholders) on any other aspect of games – including other kinds of law, design, development, ethics, business intelligence, games industry experts, policy experts, economists, marketing, etc. were not included. This makes the field of experts imbalanced, and if that is also the case for the workshops and online survey, puts major limitations on the conclusions that can be drawn from the data.

The report also mentions three "sector experts" who were interviewed. It is not clear how they contributed to the report as they are not referenced anywhere in the report text.

The report makes the online survey and interview guide available in the appendices. There is, however, no argument as to how these were constructed or discussion about which topics were included or not included – again, these are baseline requirements for any academic paper using surveys or interviews as a method for gathering qualitative data.

2) The limitations of the evidence

The report states (p20): "Much of the literature sourced through the desk research provides insights and commentary on various topics but is more limited when it comes to offering robust evidence based on quantitative data." The same limitation is acknowledged regarding the representativeness of the survey sample (p19). In other words, the companies creating this report have run into the same challenge everyone working with the games industry has, in that we lack independently verified market data. The report briefly outlines that much of the evidence base used stems from industry reports and estimates and the work of various analytics companies such as Statista and Newzoo.

We commend the report for acknowledging these limitations (that is unfortunately not a standard), although the degree to which the report lacks a strong evidence base to draw conclusions from is not clearly made. But there is a larger issue here: If you first acknowledge that a source is biased or incomplete, you need to seek better data, or at least contextualise them using other data sources (triangulation).

You also have to be critical of the source and establish credibility. And yet the report does not reflect on how the data e.g. IFSE reports were collected. And it does not emphasise these critical limitations later on in the report. Furthermore, if you cannot establish a strong evidence base, you have to remind the reader that the numbers are estimated or potentially biased every time you use them (who will remember limitations presented in the beginning of a 231-page report when they get to the end?). Rather than writing, for example: "according to Statista data, there were 246 million Europeans playing video games in 2021" you should write: "According to unverified estimates by private analytics company Statista, whose methodology for collecting these estimates is not publicly transparent, there were [etc.]" (Statista's numbers have been critiqued in the past for being estimates based on non-transparent methodology). These are fundamental considerations, and especially important when the writing you produce can be used as the basis for policy, i.e., decisions can be made on your writing which can impact people.

To be clear, sometimes you have to do the best with the data at hand, but you should try to get the best data possible, signpost the issues, and put some major disclaimers on any conclusions drawn, especially when you know those conclusions can be used as the basis for decision making which impact lives and companies.

3) Claims and conclusions

Throughout the report, claims are made without backing evidence or which are inaccurate, suggesting that fact-checking has not been carried out properly.

For example, the report contains obvious legal errors concerning the regulation of video game loot boxes. The report states (p94): "European countries such as Netherlands, Germany and Belgium are among the first to take legislative steps towards banning loot boxes." However, it was pre-existing gambling laws that were being enforced against loot boxes. It was also not mentioned that the success of Belgium's attempted "ban" on loot boxes has been questioned, which is crucial contextual information. Germany never banned loot boxes. Rather the amendments to the media law only required that the national age rating organisation (USK) consider the presence of loot boxes as part of the age rating assessment process. Given how debated loot boxes are in the context of games, it is disappointing to see these issues.

Furthermore, the report ignores any experiences that can be gained from policies enacted around games and how we play them elsewhere in the world, for example in Asia.

The report also mentioned that the US market can be seen as connected to and reflective of the EU market (p21). While there may be some truth to this, this is an oversimplification. The way we play games, and the games we play, is highly geographically diversified.

Another example is the claim: "The number of European gamers increased significantly over the COVID-19 pandemic" (p7). However, what independent evidence exists says something different. The global number of people playing games is - by all estimates we have but with the caveats mentioned above - rising, and has been for a decade or more. This does not mean the pandemic is the cause of that increase, as the sentence implies.

These are just a few examples, and all could have been solved by carrying out a systematic review of the available literature.

Conclusion

There are useful elements of the report, but given the magnitude of the domain it seeks to inform, it falls short of delivering unbiased, well-evidenced policy suggestions. The report thus suffers from the same fundamental issues that a lot of literature on games has problems with lack of primary data, lack of critical assessment of the evidence base used, lack of internal and external validity, and lack of generalizability. Unclear signposting. Added to this are issues with the opacity of how qualitative data collected were analysed and utilised.

Are we guilty of making similar mistakes in our own writing? Certainly, nobody is perfect, least of all academics. But this is a big, important report carried out to inform the future of policy in a key EU industry and all the associated areas, including academic games research. It should adhere to a higher standard, or at least be much more open and transparent about the data collected and their analysis, and about the limitations in the conclusions drawn. Games – and the wider creative industries – is an important EU sector, and that sector, and the people who use the products it produces, or research the societal impact of those products, deserves to be guided by policy that is informed by the best data and research available.

Disclaimer: In this article we critique the report: "[Understanding the value of a European Video Games Society](#)". The purpose of this article is to point out some of the issues we have with the report, and should be read as opinion.

Recent reports

David Zendle, Catherine Flick, Elena Gordon-Petrovskaya, Nick Ballou, Leon Y. Xiao & Anders Drachen (2023): No evidence that Chinese playtime mandates reduced heavy gaming in one segment of the video games industry. Nature Human Behaviour. Available from: https://www.nature.com/articles/s41562-023-01669-8

David Zendle, Catherine Flick, Darel Halgarth, Nick Ballou, Simon Demediuk and Anders Drachen: *Cross-cultural patterns in mobile playtime: an analysis of 118 billion hours of human data*. Sci Rep 13, 386 (2023). https://doi.org/10.1038/s41598-022-26730-w

David Zendle, Catherine Flick, Sebastian Deterding, Joe Cutting, Elena Gordon-Petrovskaya, and Anders Drachen: *The Many Faces of Monetisation: Understanding the Diversity and Extremity of Player Spending in Mobile Games via Massive-scale Transactional Analysis*. ACM Games 1, 1, Article 4 (2023). https://doi.org/10.1145/3582927

David Zendle, Catherine Flick, Darel Halgarth, Nicholas Ballou, Joe Cutting, and Anders Drachen. 2023: *The Relationship between lockdowns and video game playtime: A multilevel time-series analysis using massive-scale telemetry*. J Med Internet Res (forthcoming). http://dx.doi.org/10.2196/40190

Anders Drachen. 2022: *Games-based Collaboration as a Driver for Massive-Scale Mental Health Research.* In: Child and Adolescent Mental Health, 28(1). https://doi.org/10.1111/camh.12617

To quote

Drachen, A. & Zendle, D. (2023): *New EU Commission report on games has serious methodological flaws.* Comment, Digital Observatory Research Cluster. Available from: digitalobservatory.com.

This white paper has been released by the Digital Observatory Research Cluster, a non-profit, cross-institutional academic research group focusing on delivering data-driven insights and observations about our digital lives to inform people, society, industry and policy. Find out more on: digitalobservatory.com. **Contact:** Dr David Zendle, Director, david.zendle@york.ac.uk, Dr Anders Drachen, CCO, adrac@mmmi.sdu.dk