Hertie School

Better Late Than Never:

An evaluation of the German Federal Government Computer Games Funding

Master of Public Policy Thesis

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I. List of Abbreviations

App	Application
BMWI	Federal Ministry for Transport and Digital Infrastructure
BMWK	Federal Ministry for Economics Affairs and Climate Action
CAD	Canadian Dollar
CCI	Creative and Cultural Industries
DLR PT	German Aerospace Center Project Management Agency
Indie	Independent
IP	Intellectual Property
SME	Small and Medium-sized Enterprises
GVA	Gross Value Added
TCVG	Tax Credit for Video Games
USD	United States Dollars
VC	Venture Capital
VGTR	Video Game Tax Relief

II. Executive Summary

Globally, Germany is one of the top consumers of video games and yet domestic game developers demand only a 4.2% market share (game e.V., 2021). Recognising this as an issue, the first federal-level funding program for video games in Germany was launched in 2019 with the aim to make the country a more attractive place to develop games and grow the domestic industry in the long run.

This study carried out an on-going evaluation of the fund through interviews with video game developers (n=7), video game academics (n=3), a private sector advocate (n=1) and a public sector employee (n=1) in order to determine how well the programme is reaching the intended targets and what sort of unintended consequences are emerging. The interviews reveal that the funding guidelines have been improved since the initial rollout, better suiting the needs of the sector, and industry specialists have been brought into the public administration. Respondents report that more cultural and artistic games are being produced, and a maturation of the industry is occurring as the generation of people who grew up with digital games specialise in games journalism, academic research, and production. The broader potential impact of the video game sector does not seem to be fully realised at the political level.

Securing 50% of a project's total costs is a large barrier for small studios and attainable funding amounts are reportedly restrictive when considering the complexity of game development. This necessitates that studios remain small in project scope and number of employees. Many new game companies are being founded but for small companies the path to achieve commercial viability remains a challenging one.

Based on the ability to access capital, large and international companies may be more likely to reap long-term benefits from the fund. The federal video game funding is achieving its goal of attracting international companies. In the last few years, many German game studios and publishers have been bought by foreign owners, and international game companies are establishing subsidiaries in the country. It appears the domestic industry is primed to grow, and it seems this may happen under the influence of foreign ownership rather than being propelled by locally established companies.

1. Introduction

Video games have become one of the biggest industries for entertainment in the 21st century, with a market revenue greater than both the sports and film industries combined (Witkowski, 2021). The global video game industry brought in annual revenues over 100 billion USD for the first time in 2017 while the film industry passed the same threshold only in 2019 (Ibid); one source states global revenues in the video game industry were 180 billion USD in 2021 (Wijman, 2021). Video games are today more accessible due to innovations in online distribution and the increased use and accessibility of smart devices. Traditionally, games have had the reputation of being for youths or computer enthusiasts, but the reality has changed quite a bit. Today, the largest and fastest growing market segment is mobile phone games, and the fastest growing demographic is aged between 50 and 69, known as "silver gamers" (game e.V., 2021).

Increased mobile phone use is one part of a double revolution that influenced the distribution of games while the other is the increased and improved access to the internet (Behrmann, 2017). The distribution of games has historically been centralised around brick-and-mortar shops, but today as many as 58% of all games in Germany are downloaded rather than purchased as hardware (game e.V., 2021). New forms of monetisation have been created in the form of free-to-play games, supporting mass availability of free games on mobile platforms, resulting in thousands of new titles being released every year. Valve Corporation's online distribution platform Steam is one of the most recognisable platforms for PC games. In 2006 it released 71 games. This number increased to 11,784 in 2021 (Steam, n.d.).

Although national debates have long centered around their potential for harm, video games are incredibly popular in Germany. About 60% of Germans regularly play digital games; the country has the largest market in Europe and the 5th largest in the world. The total sales revenue in 2020 was 8.5 billion euros (game e.V., 2021). This figure represents an increase of 32% from the previous year and includes physical sales as well as digital sales, consoles, electronic accessories, and related paraphernalia.

This level of success and profitability are in no way reflected in the German game development sector, which commands less than 5% of the market share (game e.V., 2021). While state-level funding schemes began to emerge in the mid-2000s, the federal government only launched its first funding program in 2019. The Federal Government Computer Games Funding, hereafter called the German Games Fund, is a pot of 250 million euros that will be distributed over 5 years. This is considered by many in the industry to be overdue, as other industrialised nations have had schemes in place since the mid-90s, highlighting the catch-up game that Germany is playing today.

The goal of the German Games Fund is to offset the country's comparatively high production costs and to grow the local industry, in part by becoming more attractive to foreign investment and talent (BMWI Funding Guidelines, 2020). After 3 years in operation, this study conducts an ongoing evaluation of the fund to understand how effectively it is reaching the targeted groups and to develop an understanding of some of the outcomes and impacts it may be generating.

Interviews were conducted with stakeholders from across Germany to better understand how the fund has been implemented and its impact on the Small and Medium-sized Enterprises (SMEs) that comprise the majority of the German game development sector (game e.V., 2021). Discussions with stakeholders illustrate a growing industry that is becoming increasingly international. Although the video game sector is maturing and enjoying wider acceptance and specialised knowledge, small and start-up studios face many challenges to achieving commercial viability. The findings support a future industry that will be dominated by global players rather than home-grown companies.

This paper begins by looking at the games industry in Germany and the origins of funding to understand the cultural context that led to the implementation of the federal support scheme. The German Games Fund guidelines are examined more closely, giving rise to Hypothesis 1 based on challenges in the application phase, followed by a discussion of the business model that development studios operate under. Next, audio-visual funding in Germany is explored to understand the similarities and differences with the film industry. Start-up culture in Germany is then discussed, as many creative entrepreneurs found their companies with this model, followed by an exploration of similar funding schemes in Europe and North America. Hypotheses 2 and 3 are based on the increasing presence of large and foreign games companies. Moving forward, cultural policy governance reveal why creative and cultural industries (CCI) are funded in the first place and how nation-wide debates on the harms of video games long delayed significant public support. The evaluation and methodology sections lead to a discussion of each hypothesis and its findings. A more holistic discussion section considers additional findings about the impacts that the German Games Fund is having on the domestic video game development sector.

2. Games in Germany

Defining a "video game" has not been easy or uncontentious. A recent example is the case *Epic vs Apple* in which Apple was taken to court on allegations of monopolistic behaviour, namely for preventing applications (apps) from advertising alternative payment methods and taking a 30% cut of all in-app payments (Staton, 2021). The initial ruling read: "The Court begins with a definition of a videogame. Unfortunately, no one agrees and neither side introduced evidence of any commonly accepted industry definition" (Roberston, 2021). Later the ruling states,

> "At a bare minimum, videogames appear to require some level of interactivity or involvement between the player and the medium. In other words, a game requires that a player be able to input some level of command or choice which is then reflected in the game itself. This gaming definition contrasts to other forms of entertainment, which are often passive forms enjoyed by consumers (film, television, music). Videogames are also generally graphically rendered or animated, as opposed to being recorded live or via motion capture as in films or television. [....] The court concludes that video games include a diverse and eclectic genre of games, that are tied together at minimum through varying degrees of interactivity and involvement from a game player" (Robertson, 2021).

For the purposes of this paper, the definition from the funding guidelines for the German Games Fund will be used, "i.e. [an] interactive electronic works based on a game idea. These works respond to user input and are designed to serve educational and/or entertainment purposes and intended for publication." (BMVI Funding Guidelines, 2020, p. 1).

Video games are widely played in Germany, with 58% of all Germans playing games at least occasionally (game e.V., 2021). This supports the fact that, according to the 2021 industry report from the German Games Industry Association, known hereafter as game e.V., Germany remains the largest market for games in Europe and the 5th largest in the world. Total revenue in 2020 was 8.5 billion euros, an increase of 32% from the previous year. This spike in consumption was primarily driven by lockdowns during the Covid-19 pandemic, and while many industries were suffering, the same could not be said for the video game industry, with only 1 in 10 companies having anticipated a business downturn heading into 2021 (game e.V., 2021). The video game industry proved itself to be resilient on a few different points. Many companies switched to remote work more seamlessly and nearly 60% of games were purchased through digital distribution as downloads, bypassing the need for brick-and-mortar stores (Ibid).

The incredible profitability of the German games market is, however, not enjoyed by German game developers who earned only 4.2% of the total revenues from domestic games sales in 2020. Although the real numbers have increased with total increased revenues, the share of the market that German-developed games demand has been steadily decreasing from a high of 6.9% in 2014 (game e.V., 2018; 2021). Germany has a history of being domestically successful with browser games and failed either by inaction or inability to internationalise their offer (Lange & Liebe, 2015; Academic 3).

Illustrating the challenge for local game developers, a report on the German game industry by Goldmedia (2021, p. 86) found that, “the majority of industry sales are generated by a few large companies, the vast majority of which belong to internationally active groups, especially through publishing activities.” This is in line with the 90:10 dilemma that haunts the industry: 90% of all revenues are earned by 10% of games (Dyer-Witheford & Sharman, 2005). International game companies are reportedly buying up local studios and establishing subsidiaries in Germany (Academic 1; Academic 3; Public Sector Advocate), and of the top 10 game companies by size and revenue (including those with only sales and marketing offices, like Nintendo), only 2 of them are German development studios (Castendyk et al., 2020).

A distinction is made in the game industry between people employed directly in the core labour market and those employed in the extended market, and various reporting agencies attribute them slightly differently. The Entertainment Software Association of Canada considers the core market to be those directly employed at full-time. It considers peripheral those who supply the industry and has an additional category for the jobs that are created by the spending of the games market industry (Nordicity, 2021). Game e.V. distinguishes between the core market of people employed by developers and publishers; programmers, level design, art, narrative, localisation, etc. and the extended market; people employed by service providers, retailers, educational establishments, the media, and public sector in connection with games.

Core employment in Germany has either decreased in the last years or remained stagnant, with the total of 12,726 employees in 2015 decreasing ultimately to 10,906 in 2021 (game e.V., 2018, 2021). The extended market has also seen a decrease since 2015; 18,505 down to 16,115.

2.1 Public Funding for Games

Public funding for games has existed at the state level in Germany since 2006 and is usually carried out in cooperation with local film and media funding agencies (Behrmann, 2020). Video games are at a disadvantage by being the youngest medium. Schemes may have multiple categories and support personnel for film and television grants, while games may have 1 or none. According to one respondent, in the early days of games funding, bids were frequently lost to the film industry who had more extensive experience with submitting applications (Academic 2).

Of the 16 states in Germany, most have programs set up for the development of computer games, though three still lack any form of funding. Many of the existing schemes have been growing steadily; in 2020 a total of 8.82 million euros was made available at the state level (game e.V., 2021; Castendyk et al., 2020). Most of these schemes are based on a selective approach, meaning that a committee of experts decide which projects are funded and to what extent. Funding generally comes in the form of performance related repayable loans although some are non-repayable grants (Castendyk et al., 2020).

Game e.V. is the lobby group for the industry and co-organises gamescom, the world's largest consumer exhibition for computer and video games (Federal Ministry for Transport and Digital Infrastructure, 2021). Game e.V. was formed in a merger of the two German games associations and recently celebrated its 4th anniversary with over 350 member companies (game e.V., 2022). In 2021, there were 749 companies in Germany developing games, publishing them or both, a 20% increase from the previous year, and could very well have resulted the years-long efforts of game e.V. advocating for a funding scheme on the national level.

2.2 The German Games Fund

In 2017, the governing coalition in the German Bundestag put support for the domestic games industry on the table. This happened in part due to the efforts of game e.V., but also from a realisation that video games have great economic potential. This realisation came while the domestic industry languished in stagnation and extraordinary growth took place elsewhere. This finally caught the political actors' concern, and motions were begun to establish a federal funding scheme for German-developed games.

Developing and implementing the German Games Fund took another 2 years, as it had to get approval from Brussels that its exact wording would not cause any market disturbances. European Union anti-competition laws prevent the use of state aid to give advantage to a certain good that would create unfair competition within the internal market (EU, Article 107(1)). Two exceptions to this law were used to roll out the German Games Fund. The first was the rule of *de minimis*, which states that amounts up to 200,000 euros to a single company over a 3-year period are not large enough to cause market distortions (Commission Regulation 1407/2013). The second is the exception for the promotion of European culture (EU, Article 107(3)).

In 2019, the German Games Fund was launched in a pilot phase. Due to pending approval from Brussels, the fund was restricted to allocating grants up to 200,000 euros under the *de minimis* rule. The Federal Ministry of Transport and Digital Infrastructure (BMVI) were the initial administrators of the fund, which sparked some discussion about whether they had the right expertise for this project, as it is the ministry that oversees mobility, aviation, highway construction, waterways and the like. In the first year of implementation, the BMVI received 380 applications, showing that demand was present indeed (game e.V., 2021).

The full-scale scheme was launched at the 2020 gamescom, an inauguration with less attention and fanfare than it otherwise might have had because of the COVID-19 pandemic. The rollout was begun in late summer, although the first recipients received funding only well after the promised 3-month processing allotment. The BMVI Funding Guidelines set out quite clearly what the aims of the programme are:

> “The aim is to bolster Germany’s status as a games development hub within a diverse cultural landscape, enable it to be competitive internationally, in this way helping to strengthen the audio-visual sector in Europe.
>
> This funding support is to benefit the industry as a whole, from small development studios to major corporations. The funding support is intended in particular to increase employment figures in the cultural and creative industry as well as the number of games published in Germany, and enhance their position both on the German and international markets. Furthermore, the instrument is to incentivize international companies to establish permanent operations in Germany, in this way leading to sustainable job creation. As a result, the number of development studios and companies in Germany is to increase.” (BMVI Funding Guidelines, 2020, p. 1)

Additionally, the BMVI (2021) released a document called “Strategy for Germany as a Games Hub”, which contains more specific goals, namely increasing the attractiveness of venture capital in start-ups, establishing hubs that help SMEs grow, supporting foreign companies that wish to establish in Germany, supporting large German companies so that they may produce AAA games and having a supply of skilled personnel.

A creative hub is mentioned but the nebulous term requires a definition. Chaloupková and Kunc’s (2022, p. 3) review of state-of-the-art literature define creative hubs as:

> “a combination of physical and virtual spaces that provide and facilitate important business support activities and processes, such as networking, opportunities for research and cooperation. Importantly, these activities and processes can be seen as creative services that enable knowledge exchange and opportunities for growth and sustainability development.”

Creative hubs have no fixed shape. They may consist of buildings where creatives and businesses are located or exist as incubation areas that support innovation and development, as well as on- and offline networking infrastructure. Each hub is unique because it is determined by geographical location, cultural context, community requirements and funding models (Chaloupková & Kunc, 2022). In interviews, respondents mentioned that Berlin is a hub, the Saftladen Indie Games Collective being one example of a networking and support space, and building blocks exist in other cites, like the Cologne Game Lab and Incubator.

2.3 How the Funding Works

Drawing from the BMWI Funding Guidelines (2020), both prototype development and game production are eligible for funding, delivered in the form of a non-repayable grant. The expected costs for production must be a minimum of 100,000 euros and the percentage of funding received is determined on a sliding scale. Projects under 2 million euros receive 50% of costs, reduced to 25% when at and exceeding 8 million euros. Prototype funding is a little different, with costs for development funded for 50%, with total expected costs between 30,000 and 400,000 euros.

Other relevant special provisions include that production must not have started before the approval of a funding application, a culture test must be met, applicants must provide at least one example of a previous development project, the final product must be submitted for evaluation for age rating according to the Youth Protection Act and be intended for publishing.

Concerning costs, the beneficiary must commit 10% of the total costs in their own resources, may subcontract up to 50% of personnel costs, and grants may only be awarded if the entire funding of the project is ensured (BMVI Funding Guidelines, 2020). Developers must secure, in addition to putting up 10% of their own finances, 40% of the total expected costs. Under German law, it is possible to combine funding from different public sources up to a combined total of 70% for game production and 80% for prototypes.

The culture test stems from the exemption from the EU anti-competition laws and is met by fulfilling at least 3 criteria in total from 3 different categories. Example criteria are that the game is set in Germany or the European Economic Area, the narrative or gameplay is particularly creative or innovative, and at least 50% of the team members have their main place of residence in Germany, are subject to taxation there or are otherwise familiar with German culture, for example due to qualifications obtained in Germany or an appropriate period of time spent in Germany (BMWI Funding Guideline, 2020).

According to the public employee respondent, the funding process is completely standardised and is not unsimilar to other funding schemes in Germany. Respondents reported that the application process is a resource-intensive process and considerable hurdle, and therefore I set out the first hypothesis:

Hypothesis 1: The bureaucratic process of the application for the fund prevents some of the targeted SMEs from applying.

2.4 The Business Model

Four core activities are central to the production of digital games, regardless of platform i.e. PC, console or mobile. Development involves creating game software. Publishing involves the financing, manufacturing and promotion of a product. Licensing becomes involved if externally owned intellectual property (IP) will be integrated into a game and finally distribution is the shipping of products to retail stores (Dyer-Witheford & Sharma, 2005). A company may perform one or all these activities.

Video game development is complex and time intensive, integrating several skillsets. For example, narrative design writes the story and game progression; level design creates the structures for playing and challenge; art direction ensures artists adhere to the same visual aesthetic; localisation translates the game into various languages; and Q&A test games to make sure they function as they are supposed to. Two main funding models exist for game production: indie and contractual collaboration with games publishers.

An indie (short for independent) is a development studio that self-finances its own projects. They are generally smaller in size, consisting of as few as 1 or 2 people, and often regarded as more innovative and creative (Dutton, 2012). Many indie studios are started as hobby or passion projects, funded by friends and family or a part- or full-time job. Indies often struggle to attain sustainable, full-time operations. One reason may be an oversaturated market: many development tools are free to use and people who want to make video games do so out of passion rather than for consideration of wages, driving down profit margins for everyone (Lipkin, 2019). Public funding in Germany likely does not cause conflict with indie status because the public institution does not influence artistic freedom or require a stake in the company.

Developers may instead invest their own resources in a prototype that is then pitched to video game publishers who contract and finance development. Publishers in addition may offer access to distribution channels, market knowledge and marketing teams. As increasing amounts of games are published every year, distribution and marketing play a hugely important role, increasing the chances to get mass exposure. Publishers can exert immense influence over what games get made because of these additional resources. Indies tend to be significantly disadvantaged because they must surrender creative control and IP rights to receive funding that may cover only expenses (Dyer-Witheford & Sharma, 2005). AAA (pronounced triple-A) are a high-profile category of video game which indicates that a project has the backing of a major publisher like Ubisoft, Nintendo, Activision-Blizzard, etc. and therefore a tremendous production and marketing budget.

According to interviewees, public schemes offer better conditions, as the public actors demand no stakes in the IP nor make artistic direction input other than requiring to know the presumed age classification of the game. Public funding has the additional benefit of empowering indies in negotiations with publishers. The next section will explore the origins of game funding and conditions for starting a new indie studio.

3. Audio-Visual Funding

At the state level, funding for video games in Germany often originated in schemes for audio-visual mediums, which includes film, television and VR technology. As stated in an interview, film production companies have had longer experience, and even an industry around, completing public funding applications and therefore often won out over applications for video game projects (Academic 3). Throughout the course of the study, comparisons with the film industry led to few comparable insights because, as stated by many of the respondents with backgrounds in film, the business models are vastly different. The private sector advocate stated that German films have primarily a domestic market, whereas games have access to a global audience via online distribution platforms, so without public funding German films may struggle to exist at all, which is not so true for video games.

The German Games Fund is not a hugely significant funding pot in comparison to public sponsorship of other cultural sectors. In 2006, all public funding for music amounted to roughly 2.419 billion euros, although the majority of it came from state and municipal levels. It amounted to roughly 30% of all expenditures on culture (Söndermann, 2011). In 2015, 311 million euros were allocated to the film industry, half of which was provided by the state level (Bomnüter & Schulze, 2019). 50 million euros a year from the German Games Fund, plus roughly 8.82 million euros from the state level (mentioned in section 2.1) amounts to far less funding than the other audio-visual mediums.

Recent studies have begun to reveal some of the unintended consequences of heavy government sponsorship in the film industry. While funding ensures freedom, preservation and diversity, an extensive study of the French film industry found a non-linear relationship between government sponsorship and market performance of funded organisations; beyond a certain threshold, total economic effects of funding became an impediment to success (Jourdan & Kivleniece, 2016). This is in part due to crowding-out effects, incentive corruption, which has also been called subsidy tourism in Germany (Bomnüter & Schulze, 2019), and inefficiencies associated with market intervention (Jourdan & Kivleniece, 2016; Messerlin & Parc, 2017). These ideas were explored in interviews, but no significant correlations were found with the video game industry.

3.1 Start-up Culture in Germany

The definition of a start-up remains rather unsettled, however according to Marzett (2018) distinctions can be made in comparison with small businesses that show how new game studios share similarities with the start-up model. While a small business sells a familiar or standardised product, start-ups tend to be innovative: all games have unique code and developers often devise new solutions to achieve a specific effect in their game. On top of that, innovative games are more likely to stand out from among the crowd. Small businesses are focused on profit, while start-ups are focused on creating a product and the first profits may only be seen months or years into a project. A small business may take out a loan, but start-ups often receive funding from friends and family, crowdfunding and investors. Game publishers are a substantial source of funding for small studios, and a developer respondent observed that there are classical investors out there with interest in games, and yet still some hesitancy from indie studios to collaborate (Developer 7). Finally, start-ups often shut their doors within the first few years of operation. This is also seen in the games industry, and interviewees mentioned several reasons for this. The most common issue is that small studios lack business expertise and incorrectly plan for the scope for their project (Developer 3; 6; 7; Private Sector Advocate). Games are complex to produce and many times a project is not finished because time and money has run out.

Additionally, some finished projects never became commercially viable. This is not entirely without benefits. While a small studio may close because of this, those developers can show they managed to produce a game, which goes far for further employment in the industry

(Lipkin, 2019; Developer 7). Plaguing larger studios is a problem with poor management (Academic 3) and competing vision from different actors with influence over production choices (Developer 6). The game industry also faces incredible turnover rates because of poor working conditions and low pay, with only one-third of game professionals remaining in the industry longer than 10 years (Crevoshay et al., 2019).

Becoming an enterprise has its challenges in the first place and the rest of the section explores the conditions for start-up companies in Germany.

Games and software dominate the creative industry start-up arena and are generally launched by younger, creative, male entrepreneurs (Kohn & Wevel, 2018). This is consistent with the games industry: half of all games companies in Germany are less than 5 years old (game e.V., 2021). In 2019 about 70,000 start-ups were launched in Germany (Metzger, 2020) but only 1 in 330 reach a long-term stable state (Mckinsey, 2021). For comparison, supposedly 500,000 – 700,000 start-ups are launched in the UK every year, with 26% dissolving within the first 12 months (Kepka, 2020).

A report by McKinsey (2021) concluded via qualitative interviews that Germans refrain from acting on entrepreneurial ideas because of obstacles in the founding process, like the fear of financial insecurity, lack of entrepreneurial knowledge and complicated processes. The report explicitly mentions that launching a business remains unnecessarily difficult and time consuming. It references a 4-day process in France and Denmark, in which disclosures can be signed off on and registration and other administrative requirements completed. Many start-ups begin with little financial resources (Kohn & Wewel, 2018) and according to a report by Birkel et al. (2021, p. 83), when compared internationally, Germany invests too little in start-ups because “software is still seen not as an economic value-creation instrument but as a necessary tool”. It seems however that appetite for and availability of venture capital (VC) is increasing in Germany. One fifth of start-up founders reported the plan to use VC to finance growth, an increase from 9% in 2018 (Metzger, 2020).

Access to financing and bureaucratic processes were cited as challenges in interviews. For example, Developer 2 had been so put off by the process of becoming a business that they decided to avoid further bureaucratic processes altogether and therefore chose not to apply for the federal fund. Respondents also cited the 50% own contribution as a significant hurdle to accessing the German Games Fund, causing some to miss funding rounds because they could not secure the amount. Multiple respondents reported that unemployment benefits and similar social welfare programmes are strong, which supported decisions to form their own studios (Academic 3; Developer 5; 6).

The next section will explore conditions for the game industry in other nations.

4. Games Funding in Abroad

Game e.V. (2021) determined that game developers in Germany face costs up to 30% higher than in other countries. Germany is quite late to the game in establishing a federal fund, as Canada launched state sponsorship in the late 90s and is today home to many gaming industry hubs and is a big magnet for talent. France worked its way through EU anti-competition law in the early 2000s and the UK not long after.

Canada has a complex array of funding schemes and tax breaks from the various levels of government and only the most widely known and referenced is mentioned here. The province of Quebec established the Refundable Tax Credit for the Production of Multimedia Titles in 1996, allowing for 37.5% of labour expenditures to be claimed if a title is available in French and 30% if it is not. This subsidy was specifically created to lure Ubisoft to Montreal, a successful endeavour that has today led to one of the world's most well-known game hubs. The tax credit has drawn criticism that it only benefits foreign companies and comes at the expense of taxpayers: in 2021, Quebec spent 253 million CAD on the tax credit alone (Bridges, 2022). Not all public funding schemes are the same: tax breaks are seen as being beneficial for well-established companies who have revenue generation, while grants are more effective at supporting small companies and start-ups.

France began recognising video games as part of institutionalised public culture already in the early 90s. In 2003, the prime minister announced the founding of the first school of video games and in 2005, the French Postal service printed more than 3 million stamps with images of video game characters like Pac-Man (Blanchet, 2015). Around this time, France wanted to increase funding above 200,000 euros but came into conflict with the EU. After passing the legislation back and forth with Brussels for a couple of years, the Tax Credit for Video Games (TCVG) was established around the cultural exception in 2008. The TCVG is a 30% tax credit on eligible expenses with a maximum of 6 million euros (Ministère de l'Économie, des Finances et de la Relance, 2022). Subcontracts are capped at 3 million euros and may only be spent in the EU, two-thirds of salaries must be spent in France or the EU, and attention has been given to maintaining the control of intellectual property by developers during production. According to Behrmann (2020), France ensures that expenditures are kept within France and the EU.

The UK sowed the seeds of its computer game industry in the 1970s by identifying increased computer literacy as a tool for industrial renewal (Tsang, 2021). It launched the BBC Computer Literacy Program in 1980 and after a decade in operation, 87% of students who had received computers had used them to play games and learn computer programming (Donovan, 2015). The UK had a thriving games industry in the mid-80s, but by the mid-2010s, tax reliefs in Canada and elsewhere were driving a decline in the sector (Ibid). In 2014, after some failed attempts passing the funding model in Brussels (Behrmann, 2020), the Video Games Tax Relief (VGTR) was introduced, for which companies could claim 25% of production costs. As of 2021, it had paid out 444 million pounds in tax relief (Feller & Rae, 2021). The funding guidelines for the VGTR are slightly different that the German Games Fund, as the comprehensive cultural test is much more robust, and subcontracting is capped at 1 million pounds (Behrmann, 2020).

France, the UK and Canada are home to large games development companies and publishers because of their early move to provide state sponsorship. The business model for games gives a lot of power and influence to game publishers who finance production for revenues and a stake of the IP. Because it is the largest market in Europe, Germany is attractive for large games companies, which intensifies the competition for smaller companies and start-ups (Casendyk et al., 2020). Considering the challenging financial environment for small companies and start-ups and the increase in established, foreign-owned games companies moving into Germany, I state the following hypothesis:

Hypothesis 2: More foreign owned companies will apply for the fund than German owned companies.

While the French, UK and German programs were designed around the EU's anti-competition laws, one of the more distinct differences is the amount of public funding that may be subcontracted, whether domestically, in the EU or further abroad. France only allows subcontracting within the EU, the UK caps it at 1 million pounds, and Germany allows up to 50% of the funding to be outsourced, with no geographical distinction. With an increase in foreign companies moving into Germany, it may be that they are not incentivised to grow their subsidiaries domestically but will tap into their international network instead. I state the final hypothesis:

Hypothesis 3: Resources from the fund will benefit the parent company more than the subsidiary.

Following this discussion on various federal funding programmes, the next section examines why and how national governments decide to fund creative industries.

5. Creative and Cultural Industries

The growth potential of the creative sector has captured the attention of investors and governments around the world (Throsby, 2010). The creative and cultural industries (CCI) tend to increase in employment as the sector grows because of the higher degree of labour-intensive activities than in other sectors of the economy (Throsby, 2010). According to one academic respondent however, the German political leaders really took notice of the video game sector when it became apparent how profitable it could be (Academic 3).

The concept of creative industries emerged in the late 1990s in the UK to map the economic activity and impact of the various sectors that were involved in cultural practices (O'Brian, 2014). Key to the original concept of creative industries was the "potential for wealth and job creation through the generation and exploitation of intellectual property" (Department for Digital, Culture, Media and Sport, 2001, p. 5). Ownership of intellectual property in the video game industry is important because high popularity of a game may generate further revenue through sequels, spin-offs and franchising. Recycling familiar characters and archetypes is a tactic used by game companies to hedge against market uncertainty by producing easily relatable content (Srauy, 2019). IP is also a tool for indie studios who can relinquish partial ownership to acquire funding and investment, and in some cases, it has been claimed by universities where games were developed (Davies, 2020). Any further profits earned with the IP, through films, merchandising etc. are shared with any holders of the IP.

In the age of information, the UK highlighted and uplifted the legitimacy of the CCI as economic generators in themselves. The CCI and especially the games industry is built around new technology and is a significant source of innovation-intensive, information services (Throsby, 2010). This change was marked by a wave of pragmatic efforts by policy makers to embrace the economic potential and shift towards market governance of the CCI, primarily in Europe (Ibid). CCI policy intervention has been justified most often by using an economic lens, with the critical distinction at the heart of the issue being whether it is a public or private good (Pratt, 2006). Putting a value on creativity and culture is a task fraught with distortions caused by power and perspective that influence what is seen as art and what receives government sponsorship. There is an ideological discourse, with particular forms of art being bound up with notions of identity and the nation state (Pratt, 2006). Section 5.2 will examine the progression that video games have gone through in Germany to be considered as cultural artifacts.

5.1 Cultural Industry Governance

Today policy is based on aesthetic, political and economic judgements. Pratt (2006) argues for using *CCI governance* over *policy* as political decisions encompass the definition of cultural artefacts, their production, their legitimisation, and the implementation of policy. He distinguishes between 3 forms of CCI governance, referring first to protectionism, which is the act of protecting national treasures that are wrapped up with national identity. The second is privatisation, often referred to as the "no policy" option and characterises the governance of popular music, film and perhaps video games (Pratt, 2006, p. 17). Finally, Pratt highlights a new form of governance for the CCI which acknowledges the existence of the market and actively shapes it. More open and democratic forms of decision-making over investment priorities move the focus from simple subsidies to more broadly based support for culture and the debate that ensues. This final category resembles perhaps the shift in the governance of video games that is undergoing in Germany.

The Federal Ministry for Economics and Climate Action (BMWK), who have recently taken over responsibility of the German Games Fund from the BMVI, counts 11 submarkets of the CCI. The BMWK uses the commercial character of a company as the main criterion as to whether it belongs to the CCI. The company must be market-based and generate revenue from art, culture and creativity, while not receiving most of its funding from government or licence fees, nor support from non-profit funds or private investors (Andres et al., 2019).

Yearly reports from the BMWK compares the CCI with other economic sectors, highlighting how important a role they play. Comparing gross value added (GVA), in 2016 only the automotive industry generated more with 147.8 billion euros than the CCI with 97.1 billion euros, followed by the mechanical engineering sector at 96.7 billion euros and the financial sector with 75 billion euros (Andres et al., 2019). In 2020, though most sectors faced a downturn in light of the global pandemic, the CCI remained the second largest contributor to GVA (Birkel et al., 2022). Of the 11 submarkets, software and games (a single submarket) make by far the greatest contribution to GVA: in 2020, software and games contributed 37,387 million euros with the next greatest submarket, advertising, contributing 11,681 million euros (Birkel et al., 2022).

The possibility of being creative is a strong incentive for working in the CCI and the people who pursue these jobs are noted for being full of passion and intrinsic artistic motivation (Kuene et al., 2018). At the same time however, the CCI in general can be characterised as precarious and unpredictable (Neff & Wissinger, 2005), marked by low incomes and entrepreneurial work often supplemented with additional employment (Kohn & Wewel, 2018). This description characterises the game industry well, with new companies struggling to reach viability among stiff competition and others exploiting the passion of employees in what is called “crunch”, a period of extensive, often unpaid, overtime lasting weeks or months, that is so common as to be “built into the equation” of game production (de Peuter & Dyer-Witheford, 2006, p. 608).

5.2 Games as Culture in Germany

When speaking about the cultural status of video games in Germany, Developer 5 said, “I don’t think there’s much appreciation for the craft of [making video games], which hurts the industry as being recognised as very serious, and a very hard workplace.” Video games have historically been associated with adolescent males, and frivolous and sometimes asocial activities and lifestyles (Styhre et al., 2018). National debates in Germany have revolved around gambling, addiction and especially violence. Violent games, colloquially called killer games *(Killerspiele)*, often became the centre of media storms, accused as being an influence for school shootings that occured in the early 2000s. Directly following an attack in 2003, legislation was passed to include video games under the Youth Protection Act. All games for sale in Germany are subject to examination by the Entertainment Software Self-Regulation Body, which have some of the strictest guidelines in Europe (game e.V., n.d.). The discussion, not definitively put to rest, was revived in 2016 following an attack in Munich by an 18-year-old man that left 9 dead (Mehmet, 2016), although research shows no conclusive connection to playing video games and carrying out violent acts (De Simone, 2014; Ferguson, 2019).

Among the fierce debates, actors and commentators from the video game industry have been actively working to consecrate games as cultural artifacts (Styhre et al., 2018). The process of consecration is one of legitimisation. It is the attempt to establish a durable, symbolic distinction between objects and individuals that are worthy of veneration within a field of cultural production and those that are not (Allen & Parsons, 2006).

In an empirical study conducted via interviews with industry actors in Sweden, Styhre et al. (2018) found three interrelated themes regarding the consecration of video games. Firstly, games are a form of cultural expression; the software engineering and technical skills are that of a craft. Secondly, consecration grapples with the pervasive issues of gender inequality, and combating the historically masculine dominance of both the industry and customer-base. Finally, there is an emphasis on the "creative fringe" of the industry. Indie creators raise issue with the gamification and lack of diversity in games. In an industry that is already high-growth and profitable, consecration challenges conventional wisdom regarding what video games are in order to include the interests of new categories of gamers, especially adult, female gamers (Styhre et al., 2018). Legitimising video games as cultural artifacts not only acknowledges the wider cultural significance they already possess but may also result in economic benefits (Ibid).

The perception of video games is continually improving. Even amongst the *Killerspiele* debates of the time, video games were recognised as a cultural good in 2008 by the German Cultural Council (*Deutscher Kulturrat*), an association that calls itself the contact point for politics and administration at the federal, international and EU level concerning cultural-political matters (Deutscher Kulturrat, n.d.). The German Computer Game Awards have been running since 2009, also acting as a form of consecration.

The gradual shift in the cultural perception was quite succinctly expressed by Chancellor Angela Merkel as she gave the opening address at the 2017 gamescom in Cologne. She said:

> "Computer and video games are of the utmost importance as cultural assets, as a driving force for innovation and as an economic factor, which is why I was also very pleased to come to Cologne to provide this developing industry with my recommendation." (game e.V., 2017)

Respondents generally agreed that the perception of games in Germany is improving as the generation that grew up with games becomes well-established in the workforce. Interviews however showed that there remains a perception that some, especially those in funding and decision-making positions, remain unfamiliar and uniformed about the complexity and cultural significance of video games. Establishing a federal funding program was a significant step in consecrating video games, signalling support and recognition as a cultural product.

5.3 Creative Policy Evaluation

Public policies are targeted interventions that address societal problems, and the German Games Fund was introduced to counter the decreasing competitiveness of the video game sector. Evaluation is the process of assessing whether a policy has delivered what was promised. It asks questions like; has the policy contributed to improving the problem within the expected budget and time; did it achieve any substantive results at all; and has it yielded other positive or negative unintended effects (Hassel & Wegrich, 2022)? Finally, evaluation should lead to learning within the affected organisations and spur adjustment to the implementation process or perhaps even result in termination of the policy (ibid).

An evaluation assesses how effectively a policy addresses the problem at hand as well a how efficiently the intervention works. An evaluation of the German Games Fund relates the inputs (public project management, funding pot, funding guidelines) to the outputs (number of projects funded and published, employees hired), outcomes (number of companies/subsidiaries founded, improved international reputation, increased domestic market share) and the ultimate impact (an internationally competitive games industry).

The German Games Fund was implemented in 2019 with a 5-year mandate, so this study is an on-going evaluation that will focus on understanding outcomes, as the programme is too new to have generated meaningful and measurable impact.

6. Methodology

To assess whether the German Games fund is reaching its targeted group and to understand what greater impacts it is having on the shape of the game sector, stakeholders with different interests and relationships to the industry were interviewed. Game developers (n=7) was the largest group of interviewees, 5 of which received funding from the German Games Fund and

2 having never attempted to apply. All developer respondents were founders of their own studio. The development studios range from 2 employees to 9, which are representative of the game studios in Germany, of which 70% employ fewer than 10 people (game e.V., 2021). Unfortunately, no large studios responded to requests for interviews. Similarly, the average age of the company of respondents is 7, the national average (Ibid). All studios but one were founded in Germany and presently all are based here. The remaining respondents (n=5) do not actively develop video games but have an academic background (n=3) teaching or researching game related studies, are private sector advocates (n=1) or public employees (n=1). Many respondents have overlapping specialties but are coded by their current profession. People were contacted via their connection to the industry; game developers were identified on publicly availably lists of studios or on the BMVI's project page for those who had received grants. Non-developers were identified via their work in the industry. A total of 50 emails were sent to potential candidates.

Interviews were held over a 3-month period. Following the logic of Small (2005), each interview was viewed as a case that followed up on findings from previous interviews and the number of people interviewed sought to reach a point of saturation where no new information was gleaned about the impacts of the German Games Fund. Accordingly, the interview questionnaire was developed initially based on the research question and refined over the course of the interviews as new knowledge was gained. The interviews were semi-structured, and the questionnaire reflected the differing roles of the respondents. It contained questions about the application process, the culture of games in Germany and the impact of the fund. On the whole, the main questions and themes remained the same whereas the prompts became more specified. Interviews lasted between 30 and 60 minutes and the majority were recorded for note taking purposes. Selected quotes from transcriptions have been included in the appendix for reference. All but three of the respondents have had direct interaction with the German Games Fund, either through contributing to the creation and implementation or applying for a grant. A draft of the findings was discussed with 2 of the non-developer respondents to confirm findings and invite critique.

Semi-structured interviews were chosen for this study because the German Games Fund has been in place for only 3 complete years. Employment in the industry has tended to fluctuate and this is a short amount of time to have hard data that reveals any clear impact. Speaking with people may illuminate changes that have been made in this short time, and the learning process that the private and public actors are going through. As this is an ongoing evaluation, assessing the impact is not yet possible and subjective experiences may be more useful for informing policymakers and public managers on possible programme improvements (Hassel & Wegrich, 2022).

As the effectiveness of the fund is under question here, the generalisability of the findings to other national funds is less important than findings of how the fund may be affecting the industry across the country. As well, the aim was to have as many interviews as possible to reach saturation and receive no new information, and results varied per topic. The main findings about culture, implementation and international involvement were consistently reinforced while nuances about start-up culture continued to be varied. A limitation to the study is that only one developer was interviewed that had originally founded a studio abroad, and no further international or large companies were part of the interview process. Additionally, no game publishers were interviewed.

6.1 Interview Analysis

The interviews were analysed using inductive qualitative content analysis. The hypotheses were developed as the interviews progressed, becoming stable after about half of the interviews were completed, and influenced further specifications in the questionnaire.

When half of the interviews has been conducted, transcriptions were coded based on patterns found in the text. Main categories and sub-categories were established, and the codebook was updated before doing a second reading of the transcriptions, recoding the text, and analysing the remaining conversations. The main categories that emerged were culture and games in Germany, the application process, funding options, and a global industry. The codebook can be found for reference in the appendix.

In the next sections, each hypothesis will be examined in detail followed by a discussion about the improvements that have been made since the rollout in 2019, the outcomes that the German Games Fund is producing, and some predictions about potential impacts.

7. Hypothesis 1:

The bureaucratic process of the application for the fund prevents some of the targeted SMEs from applying.

7.1 Analysis

All respondents but the private sector advocate believe or know of German games developers that have not or would not apply for the fund because the bureaucratic task was too intimidating and resource intensive. Additional email correspondence with studios that did not lead to full interviews also stated that they had avoided the fund because of "bureaucratic hurdles and catch 22s" (personal correspondence, 15.03.2022). Developer 2, who has never applied for public funding, said that the process to become established as a business in Germany had required so much administrative work and overcoming of bureaucratic hurdles that the experience was a main reason the studio was put off applying for the German Games Fund.

The most often referenced hurdle was the time and effort taken to fulfill administrative requirements and complete the application documentation. Developer 3 said "over the course of that funding period, we could have technically employed another person just for the funding." Developer 1 also said some studios may give up midway when they realise how intensive the process is. This was confirmed by the public employee, who also made clear that the vast majority of applicants complete the application process and then also go on to be approved. They also confirmed that making a mistake on the forms can result in costly delays, from a week of resending forms for a forgotten signature to much longer, depending on the type of mistake. It was emphasised however, that applications are not dismissed because of mistakes.

Securing the self-contribution of 50% was one of the most difficult requirements for especially small and start-up studios (Developer 3; 5; 6; Public Employee). Indie studios do not usually operate with their own cash flows but collaborate with publishers who transfer production money periodically in order to maintain control over development (Behrmann, 2020). Respondents reported taking on debt in order to fulfill the requirements or refrained from doing so, and therefore could no apply for additional rounds of funding. Those who are unable to secure the 50,000 euros needed for a 100,000 grant for example, are in effect unable to access the fund.

Unfamiliarity with the relatively standardised process of applying for funding in Germany was another challenge for first-time applicants. Those respondents with a background in film referenced how film funding has been around for much longer and thus film makers are familiar with the “routine” of funding applications, often winning out over games projects in joint audio-visual funding schemes because of this expertise and experience (Academic 2). The public bureaucrat mentioned that many studios needed to learn the formal language required as developers are perhaps more familiar with the language of marketing.

When the fund rolled out in 2019, the BMWI was overwhelmed by the number of applications it received even though, as pointed out by many respondents, the fund was not exhausted by the end of the year. This newly formed team that was to oversee the distribution of the fund was often cited as lacking expertise in the games industry in general and about the inputs needed to develop games. As Developer 5 put it, “I felt they had no idea what we were talking about”.

Processing time as stated in the guidelines was to be a maximum of 3 months and a very strict rule existed that production cannot begin before the funding has been received. In reality, the BMWI needed a minimum of 3 months to process applications and many respondents only received funds and were able to begin production after 9 to 13 months. This is a major problem for studios who lack the personal resources to sustain themselves or must halt production completely for the better part of a year and has supposedly resulted in the financial ruin of companies, for example when investors pulled out due to delays (Games Wirtschaft, 2020; Developer 3; Academic 3).

7.2 Discussion

The administrators of the fund have taken measures in the last 3 years to improve on the process and reduce some of the exclusionary barriers to entry. Regarding the application process, the private sector advocate said; “we always joked, you know, this takes rocket science to figure it out”, and indeed the application process was outsourced to the German Aerospace Centre (DLR) in October 2020, more specifically to the DLR Projektträger (DLR PT). This subsidiary offers professional project management and since taking over the administration, and with some pressure from game e.V., it has put on offer FAQs, a hotline and virtual consulting seminars. The public employee claimed that the project management team has been increasingly staffed by people with backgrounds in game studies, cultural and social studies, and at a very minimum play video games. Developer respondents noticed a change on the public administration side, experiencing deep interest from the DLR PT team and noting the helpfulness of having a regular contact person, as opposed to irregular as it had previously been (Developer 5; 6).

The DLR PT gives extensive consulting before the application phase begins which, according to the public employee, greatly helps to minimise mistakes made during the process and also clear up confusion regarding what kind of projects can be funded. The DLR PT offers continuous support throughout the application process as well as during the production phase, for example by advising studios on how to fill out forms regarding expenditures. As many of the growing pains are being worked out, the processing of application times has also decreased to be more or less in line with the 3-month limit stated in the guidelines.

The strict requirements for self-contribution were relaxed in 2020 when a large number of applications could not be approved because this section was not filed correctly (Behrmann, 2020). A contract from a publisher or other suitable means of security could be provided as proof of own contribution. As well, the strict rule stating that games cannot start production before funding approval was also relaxed, allowing studios to begin work at their own risk.

Finally, and to the consensus of respondents, the games sector will and must go through a kind of professionalisation in that developers will become more familiar with the process of public funding applications. This experience will develop with repeated interaction with funding schemes and decrease the intensity of resources needed to successfully complete the process. Developer respondents mentioned channels on Discord (a social media platform) and game collectives that exist where developers support each other during the application process.

In conclusion, some games companies do avoid applying for the federal games fund but as the experience and expertise grow both on the developer side as well as on the public administration side, a pool of resources grows for those with little experience to tap into.

8.2 Hypothesis 2:

More foreign owned companies will apply for the fund than German owned companies.

8.1 Analysis

According to the private sector advocate “a lot of international companies are buying German companies right now. It’s only 2 months into the year and already there’s been *so* many deals in the games industry.” Additionally, “large parts of the German games industry have been sold out to foreign companies over the past 2 or 3 years. Most developers are now owned either by the Swedish or French or British or US, American, or Japanese companies” (Academic 1). A recent example of this phenomenon is the notable Daedalic Entertainment, famous as an indie publisher and point-and-click game developer, which was acquired by the French games company Nacon in early 2022 (Nunneley, 2022).

There seems to be a trend of foreign companies moving into the German industry and considering the challenge for small or new studios to secure 50% of the total in self contributions (see section 8.1), it appears that securing funding could be easier for projects with backing from foreign game development companies. The challenge is exacerbated by an apparent trend with the developer respondents to be either unable to secure the interest of a publisher or to be wary of entering into a contractual relationship (Developer 1; 4; 5; 6). Developer 4 recited the experience that “many publishers don't pay you and don't pay royalties even though it's in the contract. I had all of this, went nearly broke two times because they just stopped paying and then told me yeah find a good lawyer.”

Respondents reported that incomes for game developers in Germany remains low, and therefore experienced individuals leave either the industry or relocate abroad for better conditions.

8.2 Discussion

It is not possible to conclude that more foreign owned companies are applying for the fund, and it is even unlikely. The public bureaucrat reported that most applications are German, from German companies and completed in the German language, though the DLR PT has capacity in 14 languages. The entrance of foreign companies into Germany is likely less than the number of video game start-ups that are launched each year. In 2021, there was a 20% increase in the number of companies producing and publishing games from the year before (game e.V., 2020). Academic 1 and the private sector advocate agreed that perhaps in the last few years too many large grants were given out: the average sum of a grant in 2021 was half a million euros and the greatest so far 2.83 million euros (Games Wirtschaft, 2021). Small studios who struggle to secure the 50% self-contribution of, for example, a 100,000-euro grant must scope smaller than larger companies with more access to financial resources. 200,000 euros is not a lot of money to be ambitious with when developing a video game.

Of the 20 studios that have received the biggest funding amounts since the launch of the Games Fund and 14 are either fully or partially German-owned (Games Wirtschaft, 2022). 3 in the top 5 are foreign owned, however the overall picture is not that of foreign ownership.

9. Hypothesis 3:

Resources from the fund will benefit the parent company more than the subsidiary.

9.1 Analysis

This study was not successful in securing interviews with employees from large or foreign-owned studios and so few concrete insights were gleaned about the interaction of the fund between German subsidiaries and their foreign ownership. International companies that enter Germany need to set up a premise and have staff here, and so there are necessarily on-the-ground benefits.

Switching the focus from direct foreign ownership, publishers are still a main source of funding and are mainly international as Germany has relatively few. As noted above, the most prominent Daedalic was recently sold to a French company, though it continues its operations as usual. Relations have changed with the advent of the German Games Fund. One respondent remarked anonymously:

> "Let's say most profit from this funding goes to the publisher because it gets the same game for half the price. In the next year, you receive 120,000 euros for a six-month project, which is not really much money for six months of work with a full team. This is what the publishers usually offered me. Nowadays, this amount is the same, and the publisher tells me, "Get the rest from the fund". So we have 240,000."

Developer 7 illustrated another interesting change in developer-publisher relations with the introduction of more bargaining power on the developer side:

> "For some publishers, as part of the deal, you get financing. [....] And they like to have that in the deal, because it's also in a way how they make money, because they give you money, and for that, they get a bigger cut of the revenue. So aside from marketing, the financing is part of the services they deliver. And if you don't need the financing part, because the game is finished, for example, I felt like the deal is less attractive to them. You go to them and say, "Hey, I don't need your money, but I also don't want to give away more than 20% of my revenue", it becomes less attractive for them. They'd much rather give you a bit of money, and then take 50% of your revenue."

9.2 Discussion

The quotes from respondents above illustrate that publishers and developers alike benefit from the existence of the federal grant and alludes to increased negotiating power on the developer side, which is a significant change.

The qualitative nature of this study can also not reveal what percentage of the German Games Fund remains within Germany. While it is possible that 50% of funding received can be given to subcontractors outside of Germany, there were mixed responses as to whether this a necessary flexibility or a loophole to be exploited. The games industry is so incredibly decentralised, and talent is dispersed geographically with low barriers to collaboration, that many games productions are created with international collaborators. The complexity of the game production requires multiple skill sets and, for example, various respondents said localisation and music are often outsourced.

10. Discussion of Findings

This study has revealed a number of intentional and unintentional consequences of the German Games Fund.

10.1 Reasons Developers do not Apply

It can be concluded that there are still a number of video game developers who have not considered applying for the German Games Fund. There seems to be some misinformation of the rules and target audience, and one possible reason could be that the fund has primarily operated in a time when trade fairs and other important industry events have not taken place. These are important for networking and advertising new offers and may have an effect when they resume full scale.

There exists a scepticism from the small studios of working with financing partners. The label of being an indie studio has long been worn with pride and has either been maintained by being unable to secure investment interest or by avoiding contractual collaboration and the relinquishment of artistic control and revenues. This independent spirit and perception that decision-makers are uniformed and unfamiliar about the games industry may result in targeted SMEs self-selecting themselves out for accessing federal funding.

Securing 50% of the total costs of the project is the biggest barrier for small studios or start-ups. Respondents reported that developers in this position are often recommended to seek out financing from the state level as it is more flexible, however often come in the form of a repayable loan.

10.3 Commercial viability

Even when smaller companies succeed in securing the self-contribution, Developers 3, 4 and 5 mentioned that the amount was not enough to cover the full production of the games, needing to use their own resources (or simply not pay themselves) in order to complete the project. The amount of money received necessitates that they remain small in scope of project and number of employees.

While more small studios are being established and producing complete games, there does not seem to be a path to commercial success as access to marketing expertise and distribution channels still seems tied to collaboration with a publisher. Developer 6, for example, had successfully received funding from the *de minimis* round, but could not follow up on successive rounds because the 1st game had not generated enough revenue to cover the self-contribution.

The Strategy for Germany as a Games Hub (Federal Ministry for Transport and Digital Infrastructure, 2020) lists the creation of hubs to support small studios as a goal of the fund, however there seem to be no substantial measures to achieve this or additional support for small studios. Video game incubators are one example of institutions who support developers with planning, mentoring, funding, by attracting investment and marketing games (Jensen, 2019). There exist some incubators in Germany but with limited capacity, for example, of 5 projects per year (Gamecity Hamburg, n.d.).

10.4 Professionalisation and Maturation of the Sector

Bureaucratic processes have been one of the main challenges cited by the small developers in this study, but the knowledge and familiarity with such a program will be developed through subsequent applications and reduce the effort needed to carry them out. The fund is only 3 years old and does push for a kind of professionalisation of studios, who will learn not only how to successfully complete the bureaucratic procedures but also how to realistically budget and scope for the received funds, and the public institutions themselves will absorb knowledge through contact. As Developer 6 claims, "The funders are getting better at providing the right kind of funding." As well, the BMWK and DLR PT seems to have reformed processes and specialised internally and so the application process is much improved since the initial launch.

The generation of people who grew up playing digital games are also contributing to the maturation of the gaming industry. According to Academic 3, the first and even second generation of people are now in the post doc phase of game studies. This will help relieve some of the pressure of finding reviewers for academic work, although researchers still face complicated processes when applying for funding, often needing to apply in media studies or musicology categories because none exists for games (Academic 3). It is not yet official, but the German Games Fund may also be opened for research-related grants in the future.

There is an increase in the number of educational institutions that offer game design programs. It had been observed that in the past that graduates of programs lacked some necessary skills upon entry into the job market, and that most of these institutions are private (Academic 3). Academic 2 suggested that the spectrum of educational programmes could be examined, in terms of types of diplomas offered ("Do you really need a B.A.?") and with potential to specialise into the different branches of games design.

10.5 The Future Industry

The German Games Fund is achieving a number of goals it set out. The number of newly found companies has increased as well as the overall number of firms because increasing amounts of foreign games companies are establishing themselves in Germany. More and more educational institutions are implementing game design programs and creating a pipeline of talent to supply the industry. Significant employment increase is yet to be seen as well as the production of AAA games. The increase in the reputation of the German game industry is a measure to be observed in the future but based on these points I conclude that the German game industry is likely set to grow.

The German Games Fund is also creating unintended consequences based on the stated goals that will influence the shape of the industry for years to come. Large companies are more likely be able to transform benefits from the German Games Fund into long term benefits by having additional resources to run multiple projects at the same time that negate some of the effects of the strict guidelines and access distribution channels via their publishing partner or department.

More cultural and artistic games are being released because of the funding of small studios but benefits may not be sustainable after the completion of a funded game. Access to marketing and distribution impact visibility and commercial success and funding is not covered by the German Games Fund.

There are few German publishers and so game financing is often carried out with international companies, based in Germany or abroad. Research into the difference in creative and cultural output by independent game developers and large companies with investor commitments could reveal definitively whether creativity declines under pressure from financial stakeholders.

11. Conclusion

Countries such as Canada, France and the UK created a competitive advantage by establishing early federal sponsorship for their games industries that Germany will have a hard time catching up to. Developing video games is a complex, time and resource intensive process with a competitive market that threatens to bury games before they reach commercial success. Making and funding games is therefore a volatile endeavour that makes securing financing a challenge for start-up studios. Publishers remain a significant source for funding and the German Games Fund allows projects what would be overlooked to get off the ground and gives small developers better negotiation power when approaching publishers. As most publishers are international, this shows that the German games industry will be influenced heavily by outside players.

There is incentive for international companies to invest in Germany, and there has already been a large increase in the number of small studios that have been founded. While the scheme is only in its 3rd year, there seems positive signs that the industry will grow over the course of funding, even if slowly. In conclusion, the German Games Fund is achieving the goals it set out, but while doing so is heavily influencing the future shape of the German video game industry.

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13. Appendix

13.1 Codebook

Thematic content analysis codebook:

1. Culture
    a. Past and present perception of games
    b. Generational gap
    c. Consecration of games
    d. The culture test
2. Application process
    a. Resources required
    b. Selection criteria
    c. Efficiency of ministry / implementation
    d. Commercial success
3. Funding options
    a. Artistic licence
    b. Barriers to entry for German developers
    c. Wealth creation
    d. Risk taken by developers
    e. Start-up culture
4. Global industry
    a. Attractiveness of Germany as a development location
    b. Foreign ownership
    c. International cooperation
    d. Growth in the German industry

13.2 Interview Transcriptions

Developer 1

03.02.2022

What experience do you have with public funding?

We got funding from the Medienboard Berlin-Brandenburg. Between the Medienboard and the BMVI, 60% of our budget was covered, which made it much easier to secure the rest of the funding with private publishers. A publisher from Australia picked us up. Where publishers decide to invest depends mostly on the concept of the game & its commercial viability, as opposed to any other criteria.

The Medienboard and public funding in general gives you favourable conditions, which is in contrast to the less favourable conditions you get with private funding, such as a stake in your company or IP.

Did the games fund change anything in the German industry?

Yes! Funding is getting easier for small studios. Public funding increases as well as the excess of capital in the world with a limit of havens to put money into means that games are really hot. The problem with private funding is that only once the publishers have been paid does the studio begin to collect the revenue. This consumes potential money that can invested in further projects.

Developer 2

16.02.2022

Do you consider the ownership of the intellectual property when choosing funding?

Yes. Losing part ownership of the game is something we thought about. We also thought of the unknown consequences of being affiliated to a company. Over the last decades, we’ve seen different scandals or issues with company/publisher/investors. Everyone is aware that the video game industry can be problematic with the way the are working their own team and partners. First, we want to avoid as much as possible loosing our independency but also don't want to help or support company/publisher/investor that treat people badly or share some value that we disagree with. That's why we check very carefully our partners because we are afraid of that aspect. It’s a small chance but still.

Developer 3

10.03.2022

Why did it take so long for Germany to get a federal funding scheme?

We are a small company, and we cannot run without funding currently. I mean, we are, but we haven't paid ourselves since the last funding ran out. I just want to make sure this is an opinion, and I think it is because Germany has had little success in video games like in the Triple-A sector.

The other part, maybe the bigger part would be that Germans don't trust the new media. It's like a very old and digitally behind country.

What is the perception of games in Germany today?

In terms of who would have the money for funding games - still pretty bad. I think so because we ourselves had to apply for a lot of stuff and getting into the [German Games Fund] was quite easy when talking about what kind of project we wanted to apply with. It wasn't that easy in the sense that it was very bureaucratic. And if you have no prior experience with stuff like that, you would end up doing some mistakes that you didn't want to do. And I think over the course of that funding period, we could have technically employed another person just for the funding.

My colleagues are from an art school, and it has a big funding for alumni projects. And it funds anything, really. And when my colleagues applied for it, they got rejected with the argument that it didn't have artistic value. And I mean, that's probably because there are people in that committee that are around the age of 50 to 60 that think that it's about shooting people and so on. I think the opinion of the public is still: video games are bad.

How was the process of applying for the German Games Fund?

I think applying for the funds and getting the first payment was thirteen months apart.

Do you think that the resource intensive process of applying would prevent some studios from trying to apply?

Yeah, I know, so I know that there have been studios that had to stop working because of that. That was a very big Reddit's article about it. It was about a company who had the same issue as we did, but couldn't afford to wait such a long time because as soon as you apply for the fund, you cannot start with your project because part of the contract is that you haven't started with your project before you get the final approval of that.

Statistics show that the amount of people who are working in games was declining. Do you think this trend has been reversed?

Oh, I don't think so. No, I really don't think so, because the bar for entering this funding was too high for people who are just getting started to do it. I mean, you could go for the prototype funding. I mean, we got the funding and we had to bring in 30% of our own money, so we were only able to do that because we were privileged enough to get a private credit on that. And secondly, it was not enough money at all. So if we were anything like real business people, we would have known that, from the get-go, one year is not enough to develop a game and that 100,000 euros are not enough to finance the amount of people you need for that.

Developer 4

11.03.2022

Why did it take so long for Germany to get a federal funding scheme?

Yeah, this is what I'm asking myself all the time. It really took a long time. Games are for kids and kids are not business. Maybe this is kind of a cultural thing and maybe the German politicians at that time were more kind of conservative. If this is the right word, I don't know, because I think they were nearly all parties at the time that didn't give a damn for game development. And it was extremely hard to do work over here. Therefore, I found it nearly impossible to start a games business in Germany.

Statistics show that the amount of people who are working in games was declining. Do you think this trend has been reversed?

Yes, I was able just because of the fund to finally pay salaries which are competitive, because first I had to pay so low because the guys are working for me out of friendship more or less. I have a small team, not able to do huge projects, just smaller ones, and the time and budget is very tight. And on top of that, many publishers don't pay you and don't pay royalties even though it's in the contract. I had all of this, went nearly broke two times because they just stopped paying and then told me yeah find a good lawyer, ciao. But I always fought my way through these hard times, with the help of God probably I was able to continue and I'm still here. It's fine.

And it's going quite better now because of the funding. I'm really happy that this was done, and totally got involved. I got the first and then the second, and now the third round and every time I hired a new developer. We had seven, then eight and now we're nine. Step by step because it's very hard to find good people and because if I put in ten, maybe two or three will be kept because the other seven don't know what they are doing or they are not able.

Developer 5

16.03.2022

What is your experience with public funding?

We got the German Games Fund and the Medienboard Berlin-Brandenburg, which has been a mainstay for years. Everyone knows about it in the industry that it's your way of getting funding. We also tried something like a start-up thing based in universities, kind of a corporate start-up, and it was a scholarship basically. It wasn't geared towards gaming. It was for start-ups in general. And it was very hard for us to apply because it was a lot of work which we must do. But in the end, it was really a huge mistake because it took long hours. There was a council we had to meet once every couple of weeks. In the end it was a grand jury of university professors, and they didn't quite get it. I mean, they were not used to gaming as a cultural thing. And I think they were waiting for, I don't know, an invention where your eggs don’t get too hard or too soft. They were looking for like scientific, mechanical engineering stuff.

There was one more thing from the German agency for work. So when you are unemployed, you can get a boost in your self-employment. And this is kind of not a games thing, but it is a helper.

How is the perception of games now?

It really changed the last ten years for a major shift. I guess it is a generational thing. I think everyone who is like 35 or younger or so understands the medium and grew up with it and somehow enjoys it. Of course, older people, even grannies, play games and enjoy it really much because they have access to these devices. I mean, the touch-based phone is a thing to play with. And I think that really opened up the market and with that came the acceptance for games. But I think in the core of the German society, the value for games is not that great.

The annual reports of game e.V. show which international hits are produced in which country. I show my students because in Germany there is barely 1. When Crysis came out maybe, but otherwise it’s the USA, it’s Canada, it’s Japan. Or France. So, I don't think there's much appreciation for the craft of doing it, which kind of hurts the industry as being recognized as very serious and a very hard workplace, actually. That itself is a really big part, engineering, and creativity in this and working on the edge of technology. And I think this is not something people know or understand.

And of course, this would be relevant if someone in a federal agency is about to decide if there would be another funding or how high the funding pot is. If these people don't understand the complexity of it and they see it as leisure, a thing that is easily made, but they don't have a clue how it's made.

How was your experience applying for the Games Fund?

It was very exhausting. And you actually had the feeling that these guys don't know what they're talking about. So there may be okayish bureaucrats, but it's not exactly like the people in the games industry are like known for their bureaucratic powers. They don't want to do this stuff as every creative mind is probably not quite eager to do these things. But it changed. You notice that they reorganized. Before we had changing partners we had to talk to and now this last year, it was just the same two people that we communicate with.

You can see that they are interested, and they probably needed to specialize internally as well because they had to ramp up this department probably from nothing. And I guess they just grew into it. Everything has to start somewhere.

Do you think the trend of decreasing employment in the industry has been reversed?

If you get 200,000 euros, it's not that much because you have to pay taxes from this money, you have to pay health insurance and all that stuff. That really accumulates depending on what you pay yourself. And this doesn't make it especially easy to just spend the money on employees.

But if the goal is employee growth, in our case, it wouldn't apply. I think in no case for any developer it really would make a difference. Maybe they have space for a paid internship, or someone who would stay for three months but then this money would be gone. And you want to pay these people proper money and proper money is not within this budget, not at all. We did a real game but we probably shot too far with the money we had. But this is the reality and I think the big companies, I can imagine they could profit from that in terms of having more employees if they get millions. They rely on their employees and in the best case they can make something out of it after the funding. They can keep hold of these people they hired with the funding money or so.

What other measures do you think would help grow the industry?

You could offer more special student courses or degrees. Even if I am not sure this would work as people imagine, but I think much has been offered in the last year, so the whole university thing has been booming.

My impression is that a lot of game stuff in Germany is focused on money. Metrics-driven game design, game development, hyper casual games, etc. So my impression is that, with some notable exceptions, in Germany, it's kind of also always about the money and it's seldom enough that game design really is the center stage in these developments, even if they're small. What I want to say is I hope this changes because I think we should produce culturally relevant things and not just money makers for mobile games and to rip off kids and grannies of their cash.

Developer 6

23.03.2022

What is your experience with public funding?

I don't think we tried anything else before the Games Fund because we always felt like, nobody is going to give just two people money. We talked to a couple of publishers at one time or another. We never really found anyone who wanted to fund us. So this was really the only viable option. I mean, there's the European thingy that felt way too complicated and too big that we never tried. Here, we have the MDM, the mid-German Media Fund. But that is primarily for movies and they also do games. I found out basically there's one person among them who's looking over all the games projects and the person can decide which one to pitch to the others who are all only into movies and documentaries. And like, there's like one person for documentaries, one for serious movies, one for fun movies and so on. Like movies, really. Movies, movies, movies. And one game person, and they've got to fight for a part of the money going to games or to one game usually.

But I remember distinctly the forms they had to fill out [for the German Games Fund] and the stuff you had to give them was really reasonable. And then we applied with all that and then it got stressful because we couldn't work on the project before we get the money. So we had to basically wait and do nothing in the time and they never quite could tell us when they're going to be finished. It was always like, "Oh, are we going to be a couple of weeks. You're going to hear back." And then it took, I think three months. So just preparing, I think took three months and then it took another three months until we got the confirmation that we're going to get the money, we got the money, the confirmation on the day that we said we're going to start. And we had it not from them talking to us but me writing down like, "Hey, today is the day we're going to start. So do we get the money or not? Because it's kind of important to know."

I got an email like, "Yeah, yeah, you're going to get an official confirmation in a week or so, but you can start now. You are allowed." So that was really stressful.

How strict was the culture test?

I mean, it was stressful for us in the beginning when we were like, “Culture test what's that supposed to be like?” There were some Discords where we could like discuss this with other people and then we got this and really the Discord was the biggest help. Like bigger even than the guy from their side.

Is Germany a very start-up friendly environment?

I think it actually is. It's really hard to judge for me, honestly, because I don't know a lot of start-ups. I mean, I do know a couple. I think Germany is a good environment. Like, in my judgment, it could be wrong, because we have unemployment benefits.

The video game industry is very young, with many companies in Germany less than 5 years old. Do you think companies will become more successful with experience?

If they stay in the industry, that's a problem right? Most experienced people I know, they went and changed, did something else because of, you know, rough crunch times and bad money. Like really the pay I got from my two jobs, as lead game designer, was so abysmal.

Developer 7

14.04.2022

Do you think Germany is a good place to make games? Is it supportive for Game Studios?

So my opinion on this is mostly based on other factors that might not be related to funding but I think Germany or Berlin in particular, is much more of a better place to make indie games just because of the environment. Where I live before is quite expensive, in a lot of ways, like studio space, living space, just everything around it is quite expensive. There are also more people just still here, you know, there are more indie studios, something like the gaming collective I’m part of, I don't think could exist in my old city, because there's just not enough indies who thrive there. So I think in that sense, here is a much, much better place. But it's more like comparing the cities like not necessarily the countries, I think you go to other places in my home country, maybe because of funding reasons, it might actually be quite good to live there.

What are some of the challenges facing small game devs?

I think the first challenge is like, when you're talking about tiny, small, you know, when is it something that you see yourself doing for a living? You know, because a lot of indie games start out as a hobby project or a side project, and making these transitions like, “Okay, I'm gonna try this full time.” I think that's one of the big challenges. Of course, if you get funding via the grant or a loan, you know, that would give you the opportunity to just give it a shot, you might still be giving up your day job, but at least you're not running financial risk while you're building the game.

Other challenges, like structure, like giving a structure to the process of making a game. Like, you're by yourself, you have to also have the discipline to actually finish it and ship it. Or if you're with a couple of people, you have to kind of stick to it. Even if you have money, or maybe especially if you have money, it can be tempting to work on things for longer than they might be commercially viable. And then actually selling the game. Of course, I cannot speak to that so good. But it's very challenging to market your game to the right people and to actually sell copies.

What is your experience with publishers?

My first game was published by a publisher, which was actually very helpful. Initially, I didn't want it, I thought, you know, I want to do the full indie route, and I want to just do everything by myself. I think, without them, things would have been quite different. And just the fact that you completely underestimate what it takes to market a game, like how much persistence, mostly, you know, you can't be tired of sending out emails after a week, you know, you just have to stick with it and keep on every opportunity, which is what a publisher does.

For some publishers, as part of the deal, you get financing. Like, you pay them for financing. And they like to have that in the deal, because it's also in a way how they make money, because they give you money, and for that, they get a bigger cut of the revenue. So aside from marketing, the financing is part of the services they deliver. And if you don't need the financing part, because the game is finished, I felt like the deal is less attractive to them. You go to them and say, “Hey, I don't need your money, but I also don't want to give away more than 20% of my revenue”, it becomes less attractive for them. They'd much rather give you a bit of money, and then take 50% of your revenue.

Do you think your home environment or Germany have good start-up environments?

I feel like it's kind of an untapped market, because I feel a lot of these start-up financing type people are actually really looking for games content. It’s always also very financially oriented. And I feel there might be a mismatch, if you're making an indie game, it's like, “Oh, my God, I just love his character and his world, and I just want to show it to people”. Then it's not a super attractive pitch for start-up investing. But on the other hand, sometimes I feel that those kinds of investors are quite desperate for opportunities that maybe game studios could make more use of it.

Academic 1

17.02.2022

Is the German Games Fund fulfilling the cultural aspect of the regulation?

Germany is traditionally an easy target for foreign publishers or foreign companies because Germans are not very strong in self-esteem or believing in themselves. They usually look outside of the country (that has to do with our past) and to a certain degree it also has a lot of very positive aspects. So I'm not necessarily saying no to this, but it's interesting that Germany is the country where public funding has to have a discussion, you know, in other countries, a funding scheme would be automatic.

I don't know if you're aware of this, but large parts of the German games industry have been sold out to foreign companies over the past two or three years. Most of the developers are now owned either by the Swedish or French or British or U.S., American or Japanese companies. So I think that already on this level, you have a lot of international involvement, which is not necessarily only bad. But then this is a problem in Germany that our companies do not necessarily come to the point where they are able to generate wealth, which then would be coming back into the country through tax payers.

Do you think the bureaucratic hurdles are so high that some targeted SMEs will not apply?

There is a tendency among developers not to approach public funding because they think it's not culturally suitable for their way of life or activity. And I think that we need to educate the developers actively to use these funding models because actually, usually those people who are too intimidated, effectively these are the people that these programs are for.

Academic 2

22.03.2022

Do you think some companies do not apply because the application process is too resource intensive?

Yes, but I'm not sure if the reason is the bureaucratic things. If I compare this to the film industry, I have worked for a while for some so-called trans media companies that are somewhere in between games and films.

It was very visible that when the first interactive media funds were appearing, at first almost always the money went to film companies because they already had some kind of a huge routine in filling these forms out. They know how to do it for whatever 20 years. If you take a look at a production company in Germany for television and film, they have people for this. They have five or six people or something, already one of these 5 to 6 people is there in order exclusively, they are not doing anything else, to do just the paperwork for this type of application. So this was really very visible in the beginning. I remember that the money for the VR fund for example, went basically exclusively to film production companies because they knew how to fill out the forms.

But I think for the company it's also like you need to understand, do €50,000 really help me now or not? And don't misunderstand me, €50,000 is, on the one hand, a lot of money and on the other hand also not. And if you are a bigger company working with, I don't know, five or ten people and such, then 50,000 is not so much money. And you have to think about, okay, how do we apply for this? And do we really get from this what we want? And I think it wasn't always happening that they got what they wanted.

Do you think that the German games industry is growing?

In my general impression, yes, everything gets more professional on the one side and also bigger and also more diverse. By diverse, I don't just mean the easy answers to diversity, like gender, the whole range of companies, what type of games they do, what type of company sizes they have.

Obviously, it's still sad to see that German games are not so well sold all over the world, as they could be. The issue was that German companies could live for a long, long, long time by just selling games to their German audience. That's it, basically. And if you take a look at all the important franchises that have grown in Germany 20 years ago, then you've seen that they have grown quite huge in Germany and that’s it.

Academic 3

29.04.2022

Have there been options to get funding for games research otherwise?

Well, the standard research grant application you could do for example, with the German Research Association but there is the issue that there is no category for game studies. So you apply in other fields, like for example, media studies, or musicology, computer science, medicine or wherever you're located. And yeah, sometimes that's an issue because they have trouble finding reviewers.

It's also related to how the field developed in Germany, because right now, we have the first to second generation of folks who get to the postdoc phase, and even in the professorial positions, who can do these reviews, actually. For a long time, it was mostly PhD and masters students in the field. So the structures were not there for a long time. Now it's shifting, but it's still really complicated getting funding.

How has the perception of games changed in Germany broadly? And what is it like today?

Around the early 1980s, end of the 70s, it was common to go to the arcade. I found a Spiegel report from 1981, they were saying okay, it's a normal thing to go to the *Spielhalle*, the arcade, nowadays. But what was kind of interesting to me was that they did not differentiate between arcade games like Frogger, or Space Invaders, etc and slot machines. And it also related to the fact that the companies were doing both. And this is also what sparked this debate on gambling and games that we still have today in Germany. It's still up to discussion. Oftentimes, this is the one thing that was an issue from the very beginning and the other topic of course, was violence.

It switched a little. So nowadays, I think it's mostly positive. Also related to the fact that Angela Merkel was at the Gamescom, so when she said, "Okay, this is a cultural asset, and we can make money with that", that was also a very important turning point, especially for the CDU who was very against games until then.

What events have increased or improved the perception of games as culture? And how do you think this could be taken further?

There's also a lot of work that's being done on the ground level like media pedagogics people going into schools, working with young people and teachers. There's the Stiftung Digitale Spielekultur doing a lot of work like with the Games Talente competition, it's actually not really that you can pin down certain major events that shift all of it but more like, okay, there is a generational change.

It's still a work in progress. For example, we have theater studies, we have film studies, etc, etc. Those people are really trained and understanding the medium. We're at the threshold of having that, that we really get a new generation of journalists and other people in the public discourse who are actually trained and understand games as a medium properly.

Do you think some SMEs do not apply for funding because they don't think the public administration "gets it"?

there is the clash between the public tender, which has certain rules, and affordances, etc, which drive you crazy, but they are there so you have to comply, and how the industry works.

And this is also why the local programs are preferred, oftentimes, because they are way more flexible. It's more realistic, especially if you're a small company. I mean, for bigger companies, it's not a problem to wait, I don't know, half a year or a year until they can start working on a project. If you get that, it's good to get the money. But for smaller companies, or start-ups, people who do their first project for them, it can be the death penalty, actually, if they have to wait a year, right? Because they cannot pay their employees.

Do you think the German industry is growing?

I think the first evaluation [of the German Games Fund] will be in 2026. But what I see is that the quality is improving. I've been part of the jury of the German Computer Game Awards and what happened in the last couple of years, especially in student projects and prototypes, etc., is that we see very, very good, very solid, very high-quality productions.

Are there any measures that have occurred to you that would effectively support the industry here?

I think cities and states need to find the proper way to [utilize] their advantages that they have. For example, in North Rhine Westphalia, we have this megaplex of Dusseldorf, Cologne, etc. With a big workforce with many creative people, and many highly trained creative people. And what is surprising to me is that there are almost no big companies. There's a lot of publishing like Epic, EA etc. but the only big company that's active here in development is Ubisoft in Dusseldorf. I think German regions need to do more on the more local scale to be attractive for both the big and the small and start-up industries. I mean, Berlin is trying to do that. But again, not having affordable office space is still a big issue.

It's not sufficient to pour money and see what grows, you need to be way more detailed. You need to understand the industry, you need people who understand what's going on also on a global scale. Not only how can we beat Berlin? Because that's not what you're up against. You're up against Poland, you're up against Canada, you're up against Sweden, etc.

Public Employee

29.03.2022

What is your experience with games?

I've been playing games since my childhood and I've been working in the field of game studies as an academic with a background in media studies and sociology for about ten years before joining the Federal Games Funding. I have quite an academic approach to games but I also like playing for the fun of it.

What is the role of the DLR PT with the games fund?

The DLR PT offers consulting if people apply for this process and we do a lot of consulting in advance before people actually apply for a fund. People come with an idea, which we think, well, they would not be funded because they don't have anything to do with the federal games funding idea.

In general, if people come to us in advance before they apply, we are able to offer them a lot of expertise. And then actually it makes the whole application process for everyone a lot easier. I don't have any statistics on that point on how many people would apply or would not apply without consulting. But I can tell from my experience, the people that have confided in us before they went through the application process, all of their applications went a lot smoother.

The 50% self-contribution was the hardest part for developers. Would it be possible to increase the federal funding from 50 to 60 or 70? Or if it would be a good idea?

I mean, this is a government decision and also this was bound by EU law, for example, on how much an industry might be funded at all.

Still, we are aware that not every small development studio can bring this on their own. Especially for prototypes we recommend to scale a bit smaller so-to-speak. The funding money will not be sufficient if you have a small indie studio consisting of five people and you plan on developing a game for the next five years, yes, that is something that we would not fund, because they don't have the money yet, so then that would be a problem. I'm not sure if someone who is new on the market really should make such business plans, so to speak. I'm not sure if there are any possibilities to increase the funding pot because actually I think this is not possible with the ongoing funding regulations by the European Union at the moment.

How big of a setback is making a mistake on the forms?

That depends on the mistake. This is Germany and digitalization does not work for all government bodies at the moment. So we still need some documents in physical form. And if someone has forgotten their signature, then for example, they must send a whole document again because we need a signature on it. This might delay the process.

Just a small mistake really does not matter much. And even if there is a mistake, in general, this just means that we will send them an email and say, you know, I think that was a mistake. Please explain what you mean by that. Please answer us in the next seven days. That's what we normally do. So just this one mistake does not mean that the application will be dismissed. Applicants have the chance to explain themselves and correct their mistakes.

Private Sector Advocate

01.03.2022

Why did it take Germany so long to set up federal funding?

Why so late? We have an older society, a generational gap and it just took a while. But I have to say with this new government, you can feel when you talk to the new members of Parliament there's a younger generation and it's such a different level to talk about games. They know what to talk about; before that you had to explain everything and now you start immediately on eye level.

I've heard that the bureaucratic process at the BMVI can be very resource and time consuming.

It was a big topic, I think for sure. Its a lot different than when it all started in 2019 because this whole team was new. The whole game fund was new, everybody was new. And but all the feedback I hear now, it's much quicker. We always joked, you know, this takes rocket science to figure this out.

Do the multiple levels of funding in Germany cause any concern for crowding out of private investment in the games industry?

No, I'm not concerned because film financing and the business model are completely different to games. Usually when you produce a film in Germany, you would most likely have a German language original version. And it's very hard to sell those films into the world. So basically, once you're financed, the production, that's your business model.

Whereas games it really doesn't matter where you produce the game. That's why it has to be a good nurturing environment because literally you can do games everywhere in the world. Just imagine you like a classic PC game; you publish it on steam. It doesn't matter if you have a publisher or not, but eventually you have the whole like global audience and you can sell the game and you actually make money. I would predict the opposite. It's really interesting for [investors]. There's so much funding available.

Do you think that some SMEs will not apply for the funding because it is so resource intensive?

I hope not, and I don't think so. It's not for when you just open up a business, it's not really made for them because you still need the other 50%. So I would advise very young companies to go to a regional fund if it exists because they have a little bit more freedom in how you can bring the other half. They also give a bigger percentage. So I would always say, go and get the experience from a local fund. No, I know for sure startups that get [the federal fund]. That's the last of the whole process of starting a business and you learn really quickly to get to know what is needed.

How would you evaluate the German Games Fund?

You have to look at the goals of the fund. Is there an increase in employment, in companies, in the market share? A goal is that Germany is not only a nation that consumes games, but that more money actually comes back.

Has it worked to attract international companies? The ministry just published the guidelines in English two or three years after the program was established. They could have done like a crazy, cool marketing campaign and really got more attention. But the pandemic came. There's very important conferences and market places where the games industry meets, like the Games Developers Conference (GDC) in San Francisco. This all didn't take place, and this is also for our digital industry, the place to meet and to make business and this would have been the place to advertise the program. It's safe to say that it's a very good offer.

I don't know how closely you follow the games industry news, but a lot of companies, international companies are buying German companies right now. It's only two months into the year, and there's been so many deals in the games industry. There’s a lot of competition and we wanted to level the playing field.

Like I said, you need a computer and a lot of the software and everything else has been democratized, if you would say like this and then just go ahead and do your game. So there’s fierce competition across the world, that's why, like you correctly stated, did Germany take so long? I don't know. It was almost too long because it's really not easy to catch up with all the places that you have fostered their games industries.

14. Statement of Authorship

I hereby confirm and certify that this master thesis is my own work. All ideas and language of others are acknowledged in the text. All references and verbatim extracts are properly quoted and all other sources of information are specifically and clearly designated. I confirm that the digital copy of the master thesis that I submitted on XXX is identical to the printed version I submitted to the Examination Office on XXX.

DATE: May 8th, 2022

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SIGNATURE: