Labor in the (Danish) Games Industry - A White Paper

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Introduction

This white paper was compiled based on and following a panel discussion at the IT University of Copenhagen on October 13th, 2021. The panel was constituted by a range of panelists from both research and the local games industry. As the first of a series of events to bring together industry and research in reflexive discussions, problem identifications, and hopefully solutions, the panel was titled "Labor in the (Danish) Games Industry".

The panel focused on work conditions within the Danish games industry: How does labor look in the industry? What measures does the industry take to elevate the status quo if necessary? How do conditions look compared to other industries nationally, and games industries internationally? Most of these issues are intertwined with bigger economic and political issues and therefore necessarily highlighted with the local context in mind. As the first iteration of the "Dialogue Tree" series, this and following panels offer a platform for discussion of 'Danish issues' of the local games industry.

To arrive at this paper, notes were taken during the panelists' presentations and the following discussion. These notes were then cleaned up and arranged into main topics, which represent the following sections. Section one draws a more general picture of the Danish games industry in three main topics that were dominant during the panel: (1) Statistics about the industry, (2) Salaries within the

industry in comparison to other industries, and (3) overtime work or 'crunch'. Section two focusses on the Danish games education, its national and international image, and the aims and perspective of the IT University of Copenhagen's games program. Section three summarizes the extensive methods, outcomes, and potentials to increase employee satisfaction, as presented by the various experts from the industry. After these three main sections, the current paper will briefly point towards more minor points, as well as suggestions made for future iterations of Dialogue Tree.

Before proceeding to the contents of our first Dialogue Tree, it is important to note that not all participants might subscribe or agree with all points made within these sections, some of them are points made by individuals, others general perceptions of the participants. These differences will be indicated as clearly as possible.

The Danish Games Industry

"Most of the problems in the Danish games industry are people problems, not tech problems."

- Regő Porkoláb, Flatponies

The following section will cover the more 'objective' picture of what the Danish games industry is. It is split in three main topics that were discussed during the Dialogue Tree: (1) The Danish games industry in numbers, (2) Salary levels, (3) Crunch. Following this, other problems mentioned during the presentations and debates will be highlighted and briefly discussed.

The Danish games industry consists of approximately 450 registered companies in the sector Computer Game Development (as of summer 2021). While there are some big players among these companies, the majority is constituted by small and medium sized businesses with 20 or less employees. The demographics of employees within these companies point towards a young workforce (80% are between 20-39 years old) with an above average international background: 21% of employees in games are not Danish, compared to 10,5% in the overall economy.[1]

These demographics indicate a problem the Danish games industry faces currently and has to face in the near future: Many individuals gain experience in the games industry but migrate into other industries with increasing age. A subsequent problem is that hiring highly sought-after programmers into the games industry is difficult. Consequences of the first issue are a loss of expertise in the games

[1] Labor market statistics retrieved from *Danmarks Statistik*: https://www.dst.dk/da/Statistik/nyt/NytHtml?cid=26849

industry and the constant need for re-education and onboarding. One dominant factor for both issues are salary levels.

Salaries and personnel costs were discussed on three different levels: (1) Danish games salaries in comparison to other Danish salaries, (2) in comparison with international games salaries, and (3) in comparison to international salaries overall. Most panelists agreed that salaries in the Danish games industry are lower than in other comparable Danish industries – with the exception of IO Interactive, the biggest player on the Danish market. This is also supported by the PROSA[2] data from 2019, in which 61% of respondents reported that they earn less than they could in a different industry.[3] Emil Lundedal Hammar (Royal Danish Academy) sees this as a problem: "The games industry runs on the passion of its workers." If one's own passion is the primary or only motivation to work in the industry, external factors, such as a family and finances, can quickly motivate to take positions in better paying industries, which then leads to the problems of labor migration indicated above. Internationally, Danish salaries are high due to the local economy, taxes, and living costs. Thus, in a globalized society, the Danish games industry competes with locations with much lower costs and is vulnerable to outsourcing to cheaper labor markets. This, however, is a problem many Danish industries face, and like other Danish industries, the Danish games industry has a good reputation due to its highly educated and skilled workers. Riley Andersen (Umami Games) pointed out that, in discussions with important, potential investors, the excellent formal education of Danish games employees can be an asset against skepticism towards the comparably high cost of labor.

Over the past years, 'crunch' has been a dominant topic within game industries worldwide. 'Crunch' describes periods of time during development in which workers must spend extensive amounts of overtime work on company projects. In the discourse, the global games industry is often inherently connected to crunch. Due to the extended working hours and additional stress, crunch can be linked to various health issues such as "insomnia, depression, heart disease, stroke, and on-the-job-injuries" (Take This, 2021). However, the PROSA survey from 2019, which drew negative attention towards the Danish games industry in 2020, shows that the Danish games industry does slightly better in terms of crunch than the games industry globally. Much more problematic is that 60% of workers in the Danish games industry report to not receive compensation for overtime work, when it occurs. Emil Lundedal Hammar points out that globally only 10% report a lack of pay for overtime.

[2] PROSA is a Danish union and unemployment insurance fund ("A-Kasse") for IT personnel.

[3] PROSA mini survey from 2019:
https://www.prosa.dk/fileadmin/user_upload/Lokalafdelinger_og_udvalg/OEST/2019_06_Working_Conditions_in_the_Game_Development_Industry.pdf

While these were three main points of discussion during the panel, other problems were also highlighted during individual talks. Aside from knowledge migration, salary deficits, and overtime work, what are problems and obstacles that the Danish games industry faces?

Martin Pichlmair (ITU Copenhagen) observes that there is a lack of professionalism in the Danish games industry. Many companies are formed around projects (e.g. student projects or game jam games). They often consist of former students of design and programming, who want to make games, but lack the skillset to establish successful *businesses*, let alone scale them. This issue can be connected to a lack of formal training in business development and management. A lack of training that can also produce another issue in the Danish games industry: Parallel to developments in global media, also in the games industry a focus on individual personalities can be observed. This means that, often but not always, individuals who are exceptionally skilled and competent in their respective field become leaders and public figures of companies but have no formal training required for such positions. Despite generally flat social hierarchies, Danish games companies have a pyramid-like leadership structure and those on top are – due to a lack of training – often not the most qualified for their position, despite their technical or artistic knowledge.

Some of the issues raised here, such as crunch – ultimately a question of work-life-balance – could be discussed not as a problem of the Danish games industry per se, but as a clash between Danish culture and international – maybe more neoliberal[4] – values. If the global industry shifts towards fewer labor rights and 'worse' conditions, a natural clash would occur within the Danish society, which is closely linked to and based on unionization, and worker and labor movements. Riley Andersen summarized the challenge fittingly: "There must be a balance between attracting outside investors and keeping the Danish conditions." Ultimately, answers to this hypothesized clash remain to be found in the future of labor markets and Dialogue Trees.

Education

This section will discuss some of the education related topics of the first Dialogue Tree. It will start with the self-understanding and goals of the IT University's games program, move to certain advantages educational institutions have in in the games eco-system, and finish with particular problems observed and suggestions made for current games education(s) in Denmark.

[4] Blanton and Pekson (2016), for example, showed that neoliberal policies have historically had a negative impact on labor rights, which can be considered part of the core values of the Danish society.

It is the general perception that the Danish games industry is valued for its highly educated and skilled workers. Denmark is a location of higher education, especially in the technology sector, and offers different degrees in – or closely related to – games.[5] Naturally, these degrees and schools focus on different areas within game development,[6] and release their graduates with the respective expertise into the industry in Denmark.

As an educational institution and program, the IT University of Copenhagen's mission is to create lifelong learners, who are aware of their own value and enter the industry with values that improve conditions from the inside. Martin Pichlmair points out that it is necessary to educate students not only in the tools and techniques that are currently used in the industry but foster experimentation with new technologies. With this, ITU's aim is to release graduates with the skill for autonomous self-education and the ability to adjust to the rapidly changing games industry. The second and third point go hand-in hand: To improve labor conditions in the games industry, future employees need to know their own worth within a given company, to be able to make demands and make a stand. Furthermore, ITU's vision is to obviate toxic cultures of harassment and discrimination[7] by teaching values of diversity and inclusion. With this approach, they hope to influence labor conditions in the games industry in the long-term and from within: "The good thing about being a university is that you won't disappear any time soon, so you can approach problems from a more longitudinal perspective."

This 'longer breath', as well as a certain level of financial independence, and more loosely defined areas of responsibility, also put universities and other educational institutions into the position of fostering exchange and collaboration. Dialogue Tree is one such initiative, which is unlikely to occur without the freedom of these institutions. Similarly, and grounded in the same advantages, educational institutions should, and often do, take the lead in innovation and the contextualization of video games in the broader cultural sphere. Thus, aside from the education of future game developers, the main role of educational institutions is that of facilitators and catalysts. These are ITU's games program's individual goals, and its perceived role of educational institutions, but the discussion highlighted especially one point about the Danish games education(s) more generally.

[5] For example, the IT University and Royal Danish Academy of Fine Arts in Copenhagen; The National Academy of Digital Interactive Entertainment, DADIU; the Animation Workshop in Viborg; the Erhvervsakademi Dania in Grenaa. Additionally, the neighboring Swedish region of Skåne is home to The Game Assembly.

[6] An opinion piece by Toke Krainert (2020) about some of these foci can be found at: https://www.gamesindustry.biz/articles/2020-08-27-craft-art-and-science-three-ways-of-teaching-game-design

[7] See the developments surrounding Activision Blizzard in 2021, or past, similar issues at Riot Games. These, of course, are only two very prominent examples of problems that can be found at many other places within the global games industry as well.

As discussed above, one of the local industry's issues is a lack of managerial, business, and leadership training. This is, quite obviously, a problem of the current games education, which often prioritizes game design and programming tasks over knowledge of how to run a successful business, such as management, marketing, or attracting funding and investments. It was noted that such knowledge does of course exist, for example at Copenhagen Business School (CBS), but a transfer or exchange of knowledge occurs seldom. As one member of the audience pointed out: "I am from CBS, where we had a lot of meetings with companies, entrepreneurship courses, etc. It was all about getting out there. I am now a self-educated game designer – partially through extensive interaction with programming students. But the crossing of this gap [between business and game design] wasn't really facilitated." The National Academy of Digital Interactive Entertainment, DADIU, was mentioned as 'the only current option' that bridges this gap in development-oriented programs with dedicated, industry-like roles. The facilitation of such projects, and exchange between universities to gain (management, business, entrepreneurship) skills direly needed in the industry is a future task for educational institutions.

Methods of Increasing Employee Satisfaction

Engaged and satisfied employees were described as "the key to success" of businesses in the games industry – and potentially everywhere. The obvious connection is that happy employees make good products. The less obvious one is that employee satisfaction strongly feeds into a company's broader image in society, which then leads to the attraction of new, qualified talents. Finally, high employee satisfaction rates can also lead to a decrease (or permanent low level) of sick leaves. This section is dedicated to specific techniques or frameworks to increase employee satisfaction, discussed by the participants. The order of methods was chosen arbitrarily to move from micro-methods of direct management to macro-methods of quantitative employee satisfaction evaluations.

During times of COVID-19 and forced home office, employee satisfaction was a matter of each employee's individual situation. In smaller games companies of up to approximately 20 employees it appeared to be common practice to have close contact between managers and employees to assure good satisfaction rates. Such talks were described to occur on a frequency that differed between companies. To cover all individual solutions found in these talks would exceed the scope of this summary, but in the following some of the broader categories in which solutions occurred will be pointed out.

Working hours were a dominant topic, especially for people with family. While this also relates to 'crunch', here the focus were the difficulties faced by young families with two, full-time employed partners who must also care for their children. A common solution to this is a flex-time model in which employees can be present at the office in different time frames (e.g. 8-16 or 9-17). Another currently popular suggestion is to decrease working hours overall. Different models – especially championed by Astrid Mie Refstrup (Triple Topping Games) – include the 'four-*day* work *week*', in which one day of work is dropped completely, or the 'four-*hour workday*', in which working hours are reduced by half. The basis for the latter model is the argument that white collar workers often are not productive for more than four hours a day and only "pretend to be busy" for the remaining time.

Availability is another topic connected to working hours. To prevent burnouts and overworking, availability of employees (and employers) can be strictly limited. This means that colleagues are not to be contacted outside of their working hours: evenings, weekends, and holidays are strictly reserved for leisure and family. In a globalized economy with necessary meetings across time zones, this can lead to new issues. Astrid Mie Refstrup's suggested and practiced solution is to schedule one day per week in which working hours are adjusted to another time zone, and to include one's own time zone in communication (e.g. email signature) to make others aware of one's availability.

Over the past two years home office models have experienced a surge in popularity. Unfortunately, remote work shows negative effects on perceived inclusion (Grenny & Maxfield, 2017) and quality of professional networks (Yang et al., 2021). Thus, while home office can offer important flexibility to workers and open opportunities to hire from remote countries, measures must be taken to ensure the remote workers' inclusion into the office environment. One such solution is to assign a desk to the remote worker, where a computer and webcam are connected, and colleagues can pass by to 'directly' talk to the remote worker.

Equal pay can decrease the feeling of unjustly compensated work and with it increase the feeling of solidarity in a company. As a pioneering experiment, Triple Topping Games decided to pay all their workers the same monthly salary (plus a bonus for each year they work in the company). With this, the company seeks to battle the unequal, global wealth distribution between men and women, and increase solidarity within the company.

Other measures to increase employee satisfaction are the distribution of female products in bathrooms, to avoid unpleasant situations and reduce stress; offering vegetarian and vegan option at lunch or in the canteen; and incentives to use a bicycle for the daily commute.

In larger scale companies, these methods of direct management and contact to each employee are not feasible. An alternative in these cases are more quantitative approaches. One such approach includes surveys that are sent out to all employees within the company on a weekly basis. To limit the time consumption of these surveys, only a sub-set of questions is sent out to each employee. The aim is to monitor the satisfaction levels in various categories within teams, not necessarily the individual levels. The system is designed to identify outliers of responses and inquire more deeply about the reasons for a, for example, unusually negative reply. This quantitative approach also offers the possibility to directly compare: (1) one's own offices with each other, or (2) the company against an index of global companies.

Less tangible methods of improving employee satisfaction begin before the hiring process and outside the office building. To attract the most qualified people, a company must not only create an environment within the company but consider the surroundings as a factor as well. One of the reasons for IO Interactive to open a second office in Barcelona was, for example, the different environment. Copenhagen offers good salaries and the benefit of Danish welfare, health, and educational systems, which are attractive for settling workers with families. Barcelona, on the other hand, promises a vibrant, warm-climate lifestyle – which might attract young, liberal, and open-minded graduates.

A second thing to consider as a company is the self-understanding and creation of a shared vision. This refers to the image a company has of itself, what it aspires to be and with it, which people it hires. Does the company aim to be a fresh, innovative indie startup that participates in game jams, indie shows, and requires their workers to indulge in the young indie scene? Maybe hiring the CBS student with aspirations to become a multi-million CEO is the wrong move. Do you want to maximize your sales, increase the company's value as fast as possible and cash out at a given point sooner rather than later? Maybe here they would be a better fit. Yet another approach can be to create a company explicitly based on the ideals of diversity and feminism, put emphasis on equal pay and actively support young families. Each of these images will attract a certain type of employee and employees should also be picked accordingly. There are no good or bad companies in these examples, and they deliberately represent two ends of a scale. They are chosen to highlight different self-understandings and requirements for potential employees. The idea is to find those people who fit what the company is and aspires to be, to make sure that the vision is shared and worked towards.

Regő Porkoláb summarized many of these hands-on approaches in six principles, which will be briefly summarized in the following:

1. **Build trust and facilitate cooperation.** A team with the best professionals in the industry will still produce poor outcomes, if the members do not trust each other and each other's work.
2. **Align vision, communicate direction.** It is necessary to clearly define goals and communicate these repeatedly towards all stakeholders.
3. **Nourish motivation, protect health.** Enable employees to flourish within the factors of the self-determination theory (Deci & Ryan, 2012), for example by enabling to give a talk at events like Dialogue Tree; and ask them how they feel at work.
4. **Create structure, make work visible**. Creating and defining clear work structures and procedure is more important than the work itself. If a project takes longer than expected, the structure is what gets to company to the goal.
5. **Drive coordination, facilitate alignment.** For efficient work and meetings, it is important to align methods/structures to the task at hand. "If we focus so much on designing games, we should do the same for meetings."
6. **Adapt to change, embrace uncertainty.** You can schedule tasks, but you cannot schedule outcomes. If there is a playtest in two weeks, you will not know what your players say about your game. Thus, it is necessary to embrace uncertainty and be adaptive. To make a good game, it is necessary to gather continuous feedback, even though it is unpredictable.

Suggestions for initiatives

During the discussions, two more concrete ideas emerged as possible projects to strengthen the local games industry in the near future:

(1) The transition from university to the industry was perceived as rather slow and complicated. To mitigate this more concrete graduate programs and a tighter connection of universities and industry is needed. Games specific graduate days where companies present themselves to graduating students is one such possible initiative. Another is a hub in which graduates and companies meet in organized programs. In such hub, graduates could gain experience in 'tracks' that lead them through different positions in different companies over a given timeframe – very similar to existing graduate programs in larger companies.

(2) A discussion with the audience showed that there is an apparent lack of exchange of knowledge and skills between educational institutions. To put it strongly: CBS students know business; KADK and

ITU students know game design; but the exchange and collaboration between these epistemes and skillsets is currently limited to DADIU. Thus, a stronger collaboration between universities was considered desirable. For example, ITU could more strongly advice or require students of game design to take courses at CBS. To think even bigger, a DADIU-like project pool could be created in which groups of 4-8 students create games for one or two semesters during their academic education and receive ECTS for it. In an optimal case, these students would leave university not only with hands-on experience, but also an officially released game on their portfolio.

Suggestions for Future Dialogue Trees

Value capture

Value capture, here, is meant in two ways: First, how can the Danish games industry assure that workers who are educated in Denmark and gathered first experience stay in the local economy? Second, how can we assure that monetary value created here in Denmark stays within the local industry, instead of being transferred, used, and invested abroad.

Unions and the Danish games industry

The unionization of Danish games labor was already touched upon frequently in the current dialogue tree. While it apparently everyone agreed that unionization is a desirable goal, there were concerns and hesitation towards existing solutions and unions (such as PROSA). Thus, a panel of unions and games industry could serve to kickstart a much-needed dialogue between existing unions and the games industry, to discuss the specific needs of games workers.

Conclusions

This first iteration of Dialoguetree has shown how fruitful and productive a merged discussion of researchers and industry professionals can be. We believe that, by combining macro- and micro-perspectives on the Danish games industry is a start to draw a holistic picture of the industry and practices within it. To finally summarize the main discussion points from this day:

1. The Danish games industry is highly skilled, which enables them to compete on international markets with lower costs attached to them.

2. Compared to other industries in Denmark, the games industry has a lower average salary, with the exception of a few companies.
3. The apparent, trend towards over-hours and crunch in the international games industry is not as distinctive in the Danish market.
4. Danish culture and political climate are theorized to have a positive impact on the labor conditions of its workers.
5. Employee satisfaction is one of the driving forces for a good company. To improve it, every company can take both macro- and micro-management tools. Many of these were discussed in the panel discussion and this white paper.

Participants

Organizers: **Miguel Sicart** (Associate Professor, ITU Copenhagen)
Jesper K. Kristensen (Project Manager & Games Consultant, Vision Denmark)

Participants: **Astrid Mie Refstrup** (CEO, Triple Topping)
Emil Lundedal Hammar (Postdoctoral Researcher, Royal Danish Academy)
Martin Buhl Svanum (COO, IO Interactive)
Martin Pichlmair (Associate Professor, ITU Copenahgen)
Regő Porkoláb (Producer & Community Developer, FlatPonies)
Riley Andersen (CEO, Umami Games)

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About the Author

Michael S. Debus
Postdoctoral Researcher
ITU Copenhagen
michael.s.debus@gmail.com

Michael S. Debus is a postdoctoral researcher at the IT University of Copenhagen, entrepreneur, and industry expert. He obtained his PhD on game ontologies in 2019. His current tasks include the creation of an encyclopedia for game studies terms. In addition, he is affiliated with a research project at the Royal Academy of Fine Arts, which maps out the Danish games industry, business structures, monetization models, and much more.