COPENHAGEN BUSINESS SCHOOL

# The Image of Gaming in Military Practice

## Recruitment and Legitimacy

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**Master's thesis**
**Turned in on January 15, 2019**

Number of pages: 107.46 pages

Number of characters with spaces: 244,463

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# Abstract

The purpose of this thesis is to investigate the introduction of the Danish Defence's headhunting of gamers for Air Force positions. We wanted to examine and explore how people within the organization perceive gaming and consequently, how this impacts gaming technology's pervasion within the organization with regards to recruitment and training.

Through the exploration of the Danish Defence's historical use of gaming technology, interviews with employees from the Danish Defence recruitment and simulations-training departments, a gamer focus group and a comparison with the recent U.S. Army eSports promotion team initiative, the general perception of gaming technology is sought as well as a look into brand and legitimation aspects of the Danish Defence and its connection to gaming.

Examining the pervasion of gaming technology in the Danish Defence provides two major insights. First, we find a dominance of simulation technology within Danish Defence military practice, something that can be attributed to the historical use of simulation technology and perceived unrealism attributed to commercial gaming. Secondly, we find this dominance reflected in a minimal active use of commercial gaming technology within the Danish simulation workers and the Danish Military of Defence Personnel Agency. Furthermore, there are signs that the historical NATO collaboration on simulations will set precedence for gamer recruitment collaboration in a NATO context.

The comparison of the Danish Defence and the U.S. Army initiatives potentially provides interesting evidence and arguments for the social construction of gaming technologies. We find that in a context with experience in the use of the technology, it is accepted and applied more actively than a context that perceives little applied function. The Danish gaming initiative is quite a novel step for the organisation and it could have implications for how the Danish Defence can brand themselves.

While gaming's use in training and recruitment has been explored before in a U.S. military context, it is quite understudied in a Danish context. Furthermore, this paper provides valuable insight into new digital recruitment approaches and its relation to gaming and simulations.

# 1.Introduction

As gaming has been a major phenomenon in late modern times, there is a substantial amount of academic work on the area in general. The same can be said about the U.S. Army's use of self-developed games for recruitment purposes. Simulation technology holds a long tradition in the armed forces and this area has typically been covered from a more technical angle. Presently, both the U.S Army and the Danish Defence have launched eSports recruitment initiatives. Since these gaming initiatives are novel in their nature, it is our wish to contribute to the field of military simulations and recruitment, with the exploration of new aspects of gaming recruitment.

The Danish Defence (DD) is a military organization with a standing professional army that is reliant on voluntary service. It still has some remnants of a conscription system but it is almost superficial in a classical sense because the conscription positions are filled up with volunteers trying out military life. This entails that the DD is responsible for attracting candidates to ultimately sign a contract with the DD. The transaction cost that lies in the marketing for and selection of potential candidates is an ever-present area for optimization. Just think of how the advertising industry and the HR hiring industry are continuously evolving. The same conditions are affecting the DD, as it has to compete for candidates alongside the rest of the job market. The ever-present problem of having to fill up the ranks with qualified candidates is made more complex by the competitive hiring market.

"The Danish Defence is looking to hire more gamers (Bollerslev, 2019)." So, states this seemingly surprising headline of an article written by DR in the beginning of 2019. Some might say that this is just a decision riding on the increasing popularity of gaming, deemed the biggest entertainment industry in the world, and that soldiers and gamers are completely distinct from each other, representing a Ying and Yang dichotomy. One representing the epitome of the online world of today and the other, the simple, physical trench war of the old. However, is this new recruitment initiative as surprising as you might think?

As the Danish Defence initiated their gaming recruitment initiative, the U.S. Army was launching their new recruitment strategy with a focus on competitive gaming. The two things were set in motion around the same time. The two initiatives are significantly different in

form and function. We will focus on the Danish initiative and have the U.S. Army's initiative as a supporting element, bringing some comparability to the empirical exploration.

This exploration's primary sources are interviews and a single focus group. The interviews and the corresponding data presented are all with a Danish focus except one American interview. The Danish interviews will be split between the two empirical focuses of the thesis, namely recruitment and simulations that will be related to gaming and training. We do so to explore how different people within the DD perceive gaming technology and what impact it may have on the extent of gaming use in comparison to simulations. This comparison is based on the view that gaming technology and simulation technology are two separate but related technology-based practices. We consider them to be different in both usage and form, something we have made sure to bear in mind throughout this research.

The findings will consequently be treated with theoretical concepts that can help us understand the findings. There will be an aspect of technological investigation to access both simulation and gaming's role in the armed forces.

Hence, the Research Question is as follows:

**How is gaming pervaded in the Danish Defence with regards to recruitment and training?**

We believe that this research question will allow us to explore gaming technology's impact on essential areas of Danish Defence's military practice. The decision to keep a focus on only the Danish military is to secure the most efficient answer. However, we will use the U.S. Army's new eSports program as a place of comparison due to the similarity of the programs and the U.S. Army's long history with gaming.

The aim of this paper is to understand the new approaches and digital ideas in relation to technology and military legitimization. This paper is empirically grounded and our interest is theoretical.

In this paper, we will explore, analyze and discuss interviews with groups in charge of recruitment at the Danish Ministry of Defence Personnel Agency, simulation training and a

focus group of gamers who know the military from the inside. These results will be explored based on the following theories related to technology: Social Construction of Technology and Baudrillard's simulacra and hyperreality. Furthermore, recruitment results will be discussed on the basis of brand theory, isomorphism and legitimacy as well as chosen recruitment models.

It must be noted that the authors of the thesis consider themselves as respectively gamer and soldier, as Kasper has extensive personal knowledge on competitive gaming and Frederik has three years' experience in The Danish Home Guard as an infantryman.

# 2. Literature Review and Theoretical Framework

The literature review and theoretical framework has a diverse consistency of concepts that helps to treat the research questions broadly and with varying pragmatic features. As this thesis' research question is concerned with military recruitment, there has been selected an American and a Danish theory on military recruitment to facilitate understanding of the profession. As recruitment efforts are heavily communicative acts with implication for the perception of the military entity, there are consequently chosen theories on legitimacy, isomorphism and branding. Furthermore, we have incorporated theory on hyperreality to gain insights about how gaming and simulation represents reality. Each theory or concept will be explained below.

## 2.1. Social Construction of Technology

In the endeavour of trying to understand how gaming pervades in the Danish Defence training and recruitment, it makes sense to explore how technology might not mean the same to everyone in the DD and what impact that has on technology. This is where Social Construction of Technology helps support the exploration.

Social Construction of Technology as a theory deals with the development of technology. In our thesis, we use Bijker's (2001) definition of Social Construction of Technology (SCOT). Bijker (2001) believes that technology is socially constructed and technological artefacts are

treated as outcomes of negotiations between social groups or stakeholders. SCOT has many valuable theoretical insights that deal with the creation and development of technology as well as specific research steps that will allow us to move through our investigation, research presentation and analysis of the development and importance of gaming in the military as a socially constructed technology.

To further explain what SCOT is, it would be valuable to contrast and compare the concept to that which stands on the opposite side, technological determinism. The difference between the two views comes from the assumptions made about the relationship between 'society' and 'technology' (Kline, 2015). According to Fuglsang (2001), technological determinism was rooted in the Western world post-World War II. In this period, technology, which had mostly caused harm and suffering during both world wars, was for the first time considered a driver for socioeconomic change and industrial development like the invention of the diesel engine and the airplane (Bijker, 2001).

This view of technology encompasses two main elements. First, it argues that technological development and its employment happens autonomously. This entails that some sort of internal technical logic dictates the design of technological artefacts and systems. Second, development of technology determines societal change to a large degree (Kline, 2015; Bijker, 2001). From this perspective, the relationship between technology and society is one of a superordinate and subordinate. Here, technology is seen as the rational and determines the social structure and its values. However, technological determinism was argued to be a one-dimensional view of technological development, which does not represent users but the industrial sectors and its elites. Furthermore, technological determinism did not incline to allow social and political interventions on technology and fast-changing technological advancement is pervasive and desirable as well. This meant to shut off political debates such as how technology is used and for whom it is built (Bijker, 2001).

SCOT was the critical response to technological determinism. It moved the emphasis away from the perspective that only technology drives history to the view that society and technology mutually shape each other (Kline, 2015; Bijker, 2001). Pinch and Bijker state:

> "In SCOT, the developmental process of a technological artefact is described as an alternation of variation and selection." (Pinch & Bijker, 1984, p. 411)

Compared to technological determinism's linear model of technology influencing society and science, SCOT works with a multi-directional model, where opinions of various stakeholders and societal constituents are included (Pinch & Bijker, 1984).

Understanding that technology is socially constructed means that gaming technology is not just a simple interactive entity influencing others, but rather something that involves multi societal layers.

In order to explore a piece of technology's social construction, SCOT uses three research steps. The first step is a sociological analysis of a technological artefact to demonstrate its interpretative flexibility. A technological artefact is defined by (Bijker 2001) as a social construct that people describe similarly. Analyzing a technological artefact according to SCOT will show that there might be multiple technological interpretations of an artefact instead of just one. The idea that a piece of technology can become many artefacts, depending on different groups' interpretations is what Bijker refers to as interpretative flexibility (Bijker, 2001). These referenced groups help us understand and finalize this analytical step because finding and describing the relevant social groups (RSGs) is important in order to analyze a technological artefact. An RSG is defined as a group of people who have like-minded opinions about an artefact. These opinions involve the perceived use, problems and solutions attributed to the technology. By analyzing the perceived use, problems, solutions and new artefacts, we can explain how technology and its perception changes as it develops.

This variation also illustrates that for example a bike can be seen as useful for sports, transportation or dangerous and it sets up possible conflicts of meaning the RSGs assign to artefacts. To keep track of RSGs, problems and solutions, Pinch and Bijker explain a model for the multi-directional view and this model will be applied to analyze RSGs within our thesis in Figure 1 (Pinch & Bijker, 1984). The artefacts are illustrated by bold hexagon shapes, the RSGs take the shape of stadiums, the problems are circles and lastly, the solutions take the form of non-bold hexagon shapes.

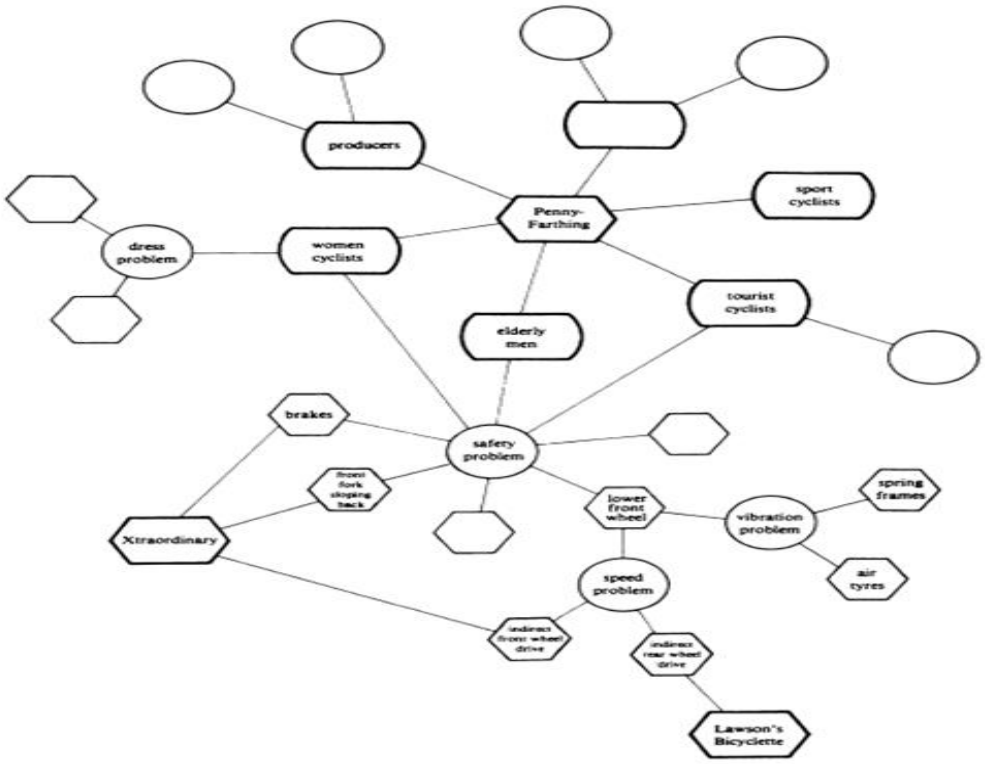


*Figure 1: illustration of Pinch and Bijker's multi-directional model, source: Pinch, T. J., & Bijker, W. E. (1984). The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other. Social Studies of Science, 14(3), p. 418.*

The second research step deals with the description of the artefact's social construction process, which becomes possible as these RSGs become visible for analysis. When describing and following this process, the key concepts are 'stabilization' and 'closure'. The process of social construction diminishes interpretative flexibility as one artefact starts to dominate which over time leads to stabilization. A convergence of meaning finally results in what the SCOT theory refers to as 'closure', where its interpretations meet a solution to be stabilized and a single artefact is identified as a closure (Bijker, 2001). Consequently, this step makes it possible to analyze and explain why some variants "die out" while others "survive", leading to meanings that will rule the use of the technology. As Pinch & Bijker mention, the development of artefacts describes the fluctuation between variation and selection where interpretative flexibility could be a clear illustration of variation, while the move towards stabilization and closure shows the selection process (Pinch & Bijker, 1984).

Finally, the processes of stabilization should be analyzed and explicated in a broader theoretical framework. The goal of the final research step is to explain why the social construction process goes in one direction rather than another. To answer this, the concept of a 'technological frame' is applied to the different RSGs. This concept deals with how these frames structure how members of an RSG interact with each other and shape their actions and thought patterns. It can be compared to Kuhn's paradigm (Bijker, 2001). Both concepts refer to a collection of assumptions, values, concepts and practices that represent a way of seeing reality for the group that subscribe to them. Furthermore, they subscribe to the issue of incommensurability. Since each group sees reality differently, the groups might subscribe alternative meanings to the same concepts making it hard for them to understand each other based on their own frame. However, when it comes to differences, Kuhn's paradigm is primarily limited to scientific communities while technological frame can be applied to many types of RSGs. Therefore, the practice of such a frame influences future practice as it is referenced and acted out (Bijker, 2001). The construction process thus works in a cyclical motion from technology becoming an artefact, then leading to a technological frame which is accepted by an RSG and back to the beginning stage again.

However, what is interesting about technological frames, other than its influence on future practice, is the possibility of people having multiple technological frames. This point allows such members to interact with several RSGs and their technological frames. This can help formulate alternatives and shape the design of the technology.

From the perspective of gaming and military recruitment, SCOT's idea of interpretative flexibility through several artefacts will be applied to our data to analyze if the interviewees perspectives on gaming show signs of implied RSGs. This might illustrate variable RSGs depending on social groups, e.g. military personnel and gamers, and how they would describe the technology. As a result, we can see if the militaries' recruitment strategy and view fits with their target group.

Furthermore, 'stabilization' and 'closure' will be used as we go through the historical change of the perception of gaming technology both within society and military. Exploring the social construction process of said technology should help us understand the changes that have happened and are happening in connection with gamer recruitment and why they are happening possibly related to one or several dominant artefacts. One element of change would be the social construction of simulation technology within the Danish Defence sector.

The concept of 'technological frames' will be useful when explaining the standards of RSGs as well as comparing the potential impact that an RSG could have on another RSG due to members' connection to numerous technological frames. From a military and gaming perspective, military personnel with gaming experience can apply both a military frame on gaming as well as a gamer frame. You can consider the possible influence of such things on the recruitment process and whether it allows them to formulate alternative or similar relatable views compared to the typical gamer. We will use technological frames to compare the U.S. Army and the Danish Defence and what their gamer recruitment strategies allow for in connecting with the gamer segment.

To some and to us, the interpretative flexibility is the strongest point of SCOT as it seemingly allows for a more user-oriented model. On the other hand, people criticize whether this flexibility really is for the people since it can give attention to too many groups of people, which might minimize the focus and lead to slow decision-making.

## 2.2. Simulation

As these groups try to ascribe meaning to technology through their technological frames, we want to try and explain these perceptions through discussions of portrayed reality involved in simulation and gaming.

### 2.2.1. Baudrillard's simulacra and hyperreality

Similarly, to SCOT's technological frames' influence on ascription of meaning, Baudrillard delves into explaining meaning through a discussion of how people perceive reality.

"The simulacrum is never that which conceals the truth – it is the truth which never conceals that there is none. The simulacrum is true. Ecclesiastes." (Baudrillard, 2001, p. 169).

This is how Baudrillard explains his concept of simulacra. To simplify the meaning of the concept, it refers to something made in the likeness of a person or a thing. From his perspective, simulacra refer to how society simulates the real, meaning how society depicts reality. For example, pictures from his perspective would work as simulacra illustrating the real world. However, Baudrillard argues that reality is becoming more and more destabilized

and it is becoming increasingly harder to figure out what is real and what is fiction. In that sense, he argues for a slippage between the real and the imagined. Where most people might see simulacra as a sign that refers to a 'real life' referent whether or not we are talking about a first-order simulacra, a faithful representation of the original, or second-order simulacra, a sign that is non-faithful to the original, Baudrillard thinks that something has changed (Baudrillard, 2001).

If we look at the quote at the beginning of this section, it is said to have been taken from the Tanakh or Hebrew bible. This is untrue and thus helps illustrate the concepts of simulacra, simulation and the hyperreal. What he means by this quote is that in a postmodern world, simulations no longer refer to an actual real object like a map referring to a place. Now, these versions of the world have gained a life of their own, their own reality that people might start to use as referents. The real thus no longer exists, only competing simulations of reality. His quote shows exactly that; A version of reality that in reality does not represent the real, but e.g. if a person decides to believe that this quote is taken from that book, it becomes that person's reality. In that sense, if a person blindly starts to believe the truthfulness of the quote and does not know that it is fiction then that information might become hyperreal, making it seem more real than the real world to the person. Overall, Baudrillard's concepts are used to illustrate how reality and fiction are getting mushed together into something hyperreal where it becomes impossible to distinguish between the two.

We will discuss our use of Baudrillard's simulacra later but first, it would be valuable to consider another way of looking at simulation.

### 2.2.2. Simulation Games

When we talk of simulation in the Danish Defence today, they mainly refer to simulation games. To define and explain simulation games, looking at the aim of the game gives the clearest answer. The aim of the simulation games is to recreate the operational and physical aspects of combat, which means they have to authentically stick to strict interpretations of reality. Basically, simulations are usually expected to be very realistic. Simulation platforms allow for customization of missions and the creation of flexible scenarios. The game Virtual Battlespace (VBS) was able to create and run simulations in virtual environments that looked almost identical to their real-life counterpart. Simulators might also mimic the physical proportions of the person playing it influencing the gameplay accordingly. Other things found

in simulation platform shooters could be realistic recoil, bullets drop with gravity and drift of wind. Additionally, vehicles running out of gas is common and also massive and detailed maps with long-distance combat rather than the well-defined short distance combat you would find in First-Person-Shooter games (FPS). In that sense, simulators focus on the physicality of combat, leading to the players learning about the procedure of war (Lenoir & Caldwell, 2018).

In our thesis, we will apply both Baudrillard's simulacra and the general explanation of simulation games. Our reasoning is that they are inherently related in the discussion of reality. Our research has shown that simulation technology is the most common form of gaming technology used in the military, however, it is generally not very popular amongst gamers where things such as war games are quite common. We will thus analyze and discuss whether these two types of games also illustrate two orders of simulacra to the military groups. Similarly, if there is a difference in how these two gaming technologies portray reality, we will consider what implications this could have on gamer recruitment and the battlefield image in the military. Does the perception of war differ and will the possible perceptive difference influence the successfulness of military gamer recruitment? Is the hyperreal possibly more appealing to gamers? How might this relate to the RSG artefacts?

Lastly, the Danish Defence and the U.S. Army use different degrees of application of the simulacra of the gamer target group. We will take this into consideration when it comes to the recruitment strategy.

*Critique of Baudrillard and simulation games*

Before we move on, let us critique the theory. Baudrillard's mindset with simulacra can be critiqued of being cynical and taking away any argument of truth or reality. Consequently, if everything is a simulacrum, how can we say anything is real or make any valid claims? Therefore, we use the concept mainly as a way to explain the interviewees' description of gaming and simulation technology's portrayal of reality but we do not go as far as denouncing or disowning the validity of people's perceived reality.

## 2.3. Process of Recruitment

We have discussed theories of technological perception and organizational presentation. We will now consider previous models of recruitment in order to discover the influence of gaming technology on the recruitment process and presentation strategy. In this section, we will explore two models of recruitment.

### 2.3.1. Model of Military Recruitment

When considering recruitment in the gaming segment, it is important to understand the steps involved in military recruitment and whether the gamer segment might vary from the "regular" youths when it comes to military enlistment. Looking through the models available on the subject of the military recruitment process, it became apparent that the selection was limited. We decided on a model based on the US military's recruitment process from 2003. The model presents a schematic of the most influential factors involved in the recruitment process.

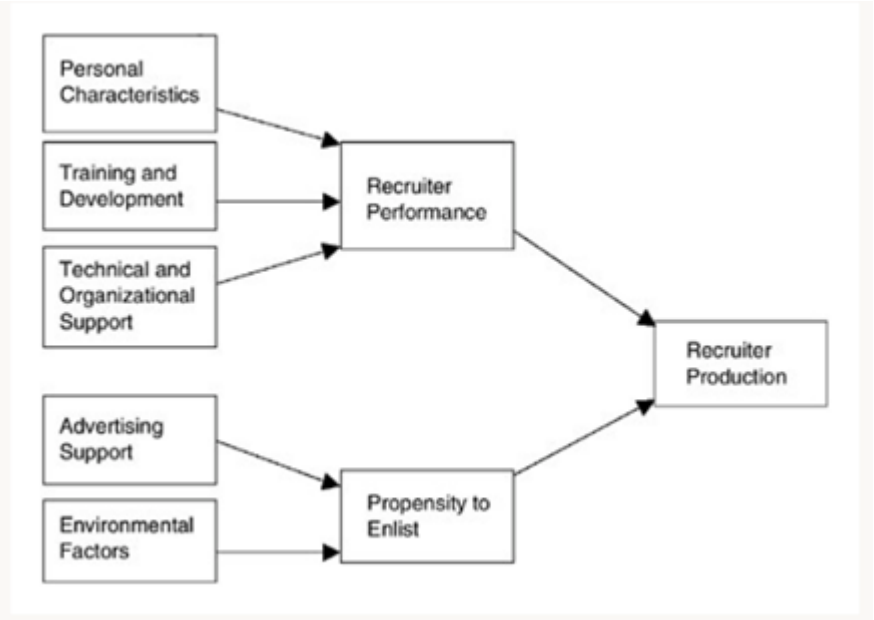


*Figure 2: U.S. model of military recruitment, source: Penney, L. M., Horgen, K. E. & Borman, W. C. (2000). An Annotated Bibliography of Recruiting Research Conducted by the U.S. Army Research Institute for the Behavioral and Social Sciences, p. 1.*

The model is set up in such a way that furthest to the right of the model, we find “Recruiter Production”. This is the end goal and what the model hopes to influence, which is how successful the recruiter is when it comes to meeting recruitment goals. Moving to the left of the model, it illustrates that this production comes as a function of both “Recruiter Performance” and the “Propensity to Enlist.” “Recruiter Performance” refers to the effort put forth by the individual recruiter toward recruiting qualified young talent while “Propensity to Enlist” deals with the current youth’s interest in serving the military (Penney, Horgen, & Borman, 2000).

These functions are further affected by various aspects that can have a positive or negative influence on the effectiveness of the recruitment outcome.

On the side, recruiter performance is influenced by three factors. First, the personal characteristics refer to what each recruiter brings to the recruiting environment like for example how interested they are in the recruiting mission, communication skills and problem-solving abilities. Second, “Training and Development” connect to the initial training and the successive development assistance given in order to prepare them for the mission. Simply put, is the U.S. Army Recruiting Command (USAREC) preparing its recruiters well enough? Last one involving recruiter performance is “Technical and Organizational Support.” It refers to the recruitment commands information and resources, e.g. presentation and promotion materials, leads on potential applicants and procedures for keeping and organizing information on applicants (National Research Council, 2003, p. 223).

Moving on to factors influencing “Propensity to Enlist”, we find two factors “Advertising Support” and “Environmental Factors.” “Advertising Support” simply involves the amount of advertising efforts like advertisements, local and national campaigns undertaken by the military recruitment command (National Research Council, 2003). Before moving on to the last one, it is important to dive into the theoretical beliefs of this model. Penney et al. (Penney, Horgen, & Borman, 2000) see these first four factors as controllable by USAREC and according to the theory these four should thus be emphasized (p. 2).

The only ones that cannot be controlled are the environmental factors. Examples of environmental factors are unemployment rate, local population density, presence of a military facility nearby, traditional feelings toward the military, and ratio of military/civilian pay (Penney, Horgen, & Borman, 2000).

Overall, this model is meant to assist the USAREC in their recruitment efforts by illustrating the areas of interest that it might improve upon in order to increase its effectiveness.

Now, that we have explained the model, we can argue why we chose it and of what use it might be to this report. In order to discuss the influence of the new gamer recruitment initiatives on the U.S. Army and the Danish Defence, it makes sense to compare the old recruitment process of the early 2000s and the current recruitment process. By using the data from back then and applying the model to today's recruitment process, we will be able to analyze, compare and discuss the recruitment changes that have happened to each individual organization based on interview data and other sources. Furthermore, the analysis will help us compare the two organizations and how they might contrast each other. To explain our use of the model more specifically, it will be applied in its original state for the past recruitment process but we will also accommodate and transform it to fit the present-day process.

Ultimately, our analysis and contrast in time and place should allow us to illustrate how recruitment via gaming has influenced and possibly created and added new aspects to the two militaries' recruitment processes anno 2019.

*Critique*

You could critique that this model on the basis that the DD uses conscription and thus the model would not fit, however, the gaming recruitment strategy seems to involve active recruitment for the position, something that would fit a typical U.S. recruitment model.

### 2.3.2. From potential applicant to applicant

To further elaborate on the Danish military's recruitment process, an additional official Danish military recruitment model will be added as well. What is different between the two models lies in its focus. While the first focuses on what factors affect the recruiter's performance and the perspective recruit's propensity to enlist, this model focuses on trying to define and explain the consumer's "purchase" process, i.e. the stages a recruit goes through in the process of going from a potential applicant to an actual applicant.

The model, according to the Danish Defence, refers to a recruitment theory that:

> *"*The purpose of recruitment is to influence the potential applicant's readiness to apply for admission (sent an application for admission) to one or several of our military educational programs." (Forsvarsudvalget, 2012, p. 14).

According to their model, a potential recruit normally moves through four different stages before they are ready to submit their application: knowledge, interest, involvement and decision.

This model is widely based on the AIDA model (Forsvarsudvalget, 2012). This theory of communication was proposed in 1898 by E. St. Elmo Lewis. AIDA is an acronym for Attention, Interest, Desire and Action, the four cognitive stages Lewis believed an individual experienced when receiving a new product or idea (Pashootanizadeh & Khalilian, 2018). To properly explain the model, what each phase entails while taking into account the Danish Defence edition, we will combine the AIDA stage descriptions from Pashootanizadeh & Khalilian with an inclusion and comparison to the recruitment platforms the Danish Defence in 2012 used and saw as connected to each stage. The multiple platforms interact with each other through the processes and this also means that a lot of them play a role in several stages (Forsvarsudvalget, 2012).

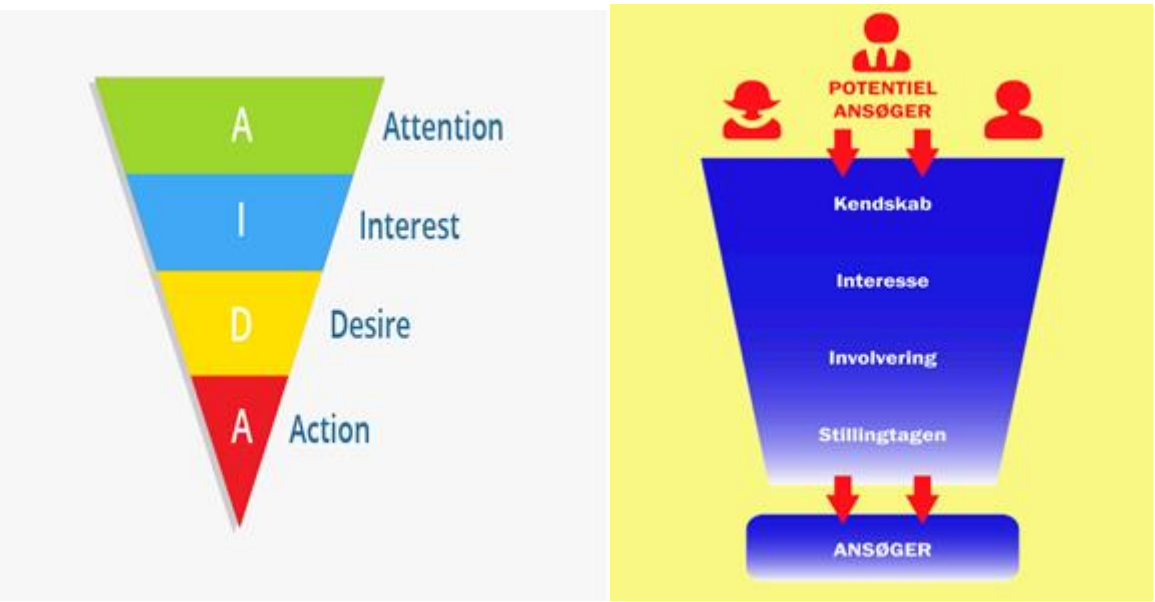


*Figure 3: AIDA model and Danish Defence recruitment model based on AIDA model, source: Forsvarsudvalget (2012). Notat vedr. forsvarets rekrutteringspotentiale samt forsvarets nuværende rekrutteringsvirksomhed (Report 2011-2012), p. 15.*

To explain the Danish Defence's use of the model and theory behind it, the recruitment efforts are organized within the stages allowing them to keep track of the effect of various recruitment platforms. The reason behind keeping track of recruitment efforts lies in their applied theory, which states that, "the collective recruitment efforts should have a balanced effect on each stage in order to move the potential applicant (translated quote from Forsvarsudvalget, 2012, p. 15)."

The Attention Stage is compared to the first step of the cognitive hierarchy where we need to attract and keep consumer attention. This stage is about promoting the product in order for the person to become aware of the brand (Bogost, 2007 in Pashootanizadeh & Khalilian, 2018). The Danish Defence connects the Attention Stage to recruitment platforms like Web and Mobile recruitment and marketing as well as the Danish Defence Day, which is a day where young men go to a mandatory conscription day. Furthermore, campaigns and school counsellors help create positive experiences with the Danish Defence. These platforms all involve attracting attention and introducing potential applicants to the Danish Defence, its possibilities and its different educational programs.

The Interest Stage deals with drawing the attention of the consumer. Building a reader's interest can come as a consequence of the media, of information or providing a solution to a certain problem. Building awareness is best done by explaining the product and its benefits (Pashootanizadeh & Khalilian, 2018). In the Danish Defence, the interest stage is illustrated through recruitment platforms like fairs, schools and orientations; practical trainee work; conscription; events; Web and Mobile recruitment and marketing, and the CRM database (figure 8). These all seem to involve explaining and showing the benefits of being in the army to the person which should increase interest as is described in the AIDA model.

The Desire Stage involves the major importance of a marketer's ability to create a need for their product. This step is essential since selling a product depends on the marketer's ability to provide a correct solution to a problem. In that sense, it entails both motivating the consumer to own a product and successfully creating the needs within the consumer. However, this is also the stage where the consumer might especially doubt the validity of your argumentation and promises, making it harder to convince people (Hadiyati, 2016 in Pashootanizadeh & Khalilian, 2018). When it comes to how the stage can be done, we see the same recruitment platforms used as in the Interest Stage, however while introducing "Internal Recruitment" as an extra option (figure 4). To explain this stage based on these platforms,

recruiting via fairs and schools allow both the handover of information to explain the products and their benefits but also finding the right "fit" for the consumer through discussion of interests with the potential consumer and motivating the person.

Last step of the process is the Action Stage. Here, the marketer is creating the next step in purchasing and using said product. Here, the marketer's focal point should be on finalizing the purchase by determining the consumer consequently leading to the action of the acquisition (Ghirvu, 2013 in Pashootanizadeh & Khalilian, 2018). The Danish Defence connects this stage to campaigns, Web and Mobile recruitment and marketing, internal recruitment, events, the Danish Defence Day, conscription and the CRM database (figure 4). To link this to the Danish Defence's recruitment work, the Action Stage means identifying an applicant and then leading them to the actual application to the Danish Defence's study programs.

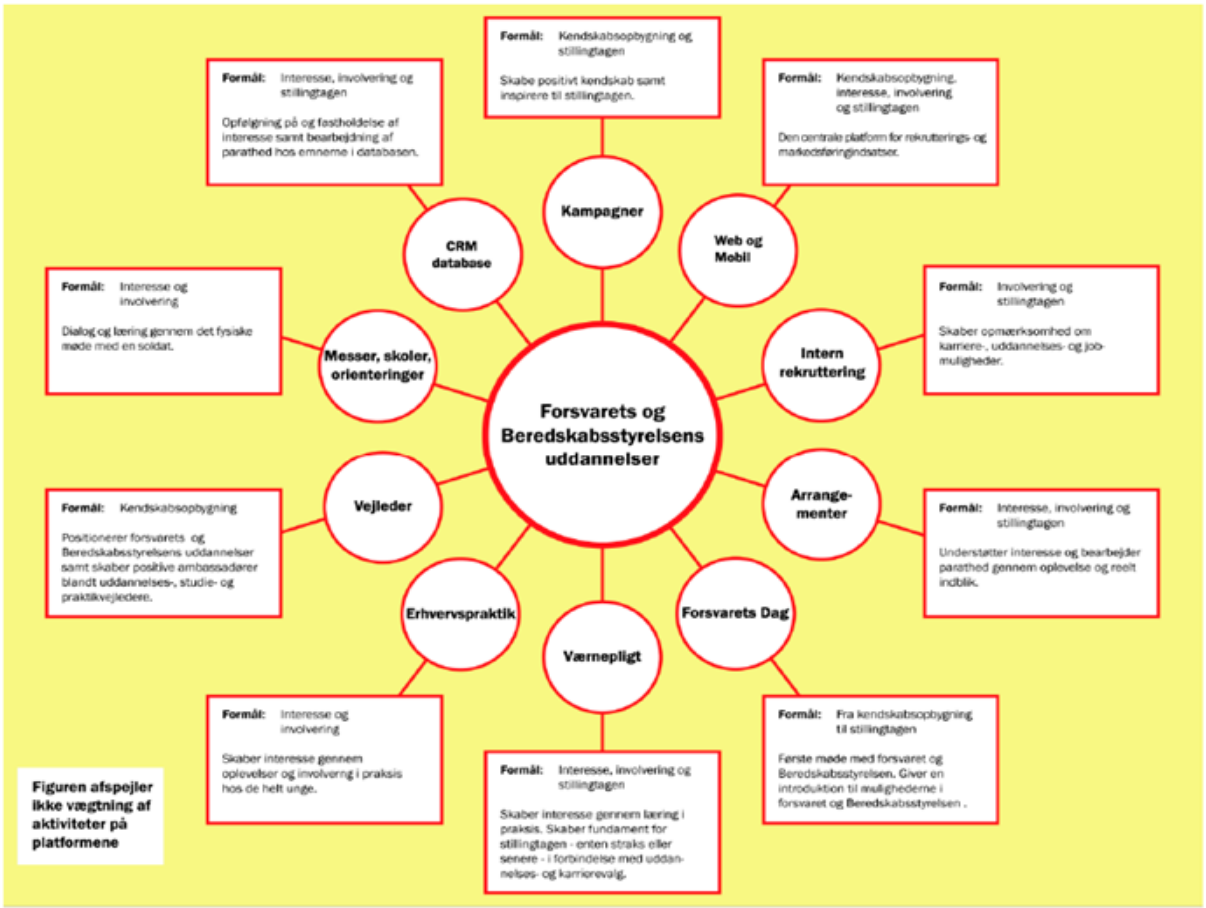


*Figure 4: The 10 recruitment platforms of the Danish Defence. source: Forsvarsudvalget (2012). Notat vedr. forsvarets rekrutteringspotentiale samt forsvarets nuværende rekrutteringsvirksomhed (Report 2011-2012). p. 16.*

We will use the model as a pillar to explore the major recruitment platforms connected to gamer recruitment. While the other model involves more factors influencing the process, this one delves more deeply into what seems to be the process of increasing the propensity to enlist as referenced in the American model. This involves taking the information gained from the interviews of both military organizations and connecting the mentioned recruitment platforms involved in gamer recruitment. This will allow us to map the recruitment efforts made by putting them into AIDA model and transforming the generic model into a model more specifically based on the gamer recruitment process of the U.S. Army and the Danish Defence.

*Critique*

What is somewhat problematic about this model is its application of the AIDA model. It only leaves room for outbound marketing, showing people what they are interested in, instead of considering inbound marketing where they find you because you are what they are interested in, the type of marketing you might find on Twitch and YouTube.

## 2.4. Brand

Moving on from recruitment theory to Aaker's brand identity system, it is worth noting that we will use the most significant part Brand Identity Model to keep focus on possible ways for potential observers to view the DD. This will be according to four brand classifications.

The Brand Identity Planning Model (Aaker, 2002) stems from the book Building Strong Brands that was first published 25 years ago. The brand identity model is broad in its scope and long in its trajectory because it needs to fathom all potentially relevant brand aspects of the business while also taking the planning process of the brand from its infancy to realization into account. In that sense is the model very applicable for the manager who wishes to have theoretical assistance for a practical process. For the academic who wishes to analyze a given company’s brand identity is it not necessarily relevant to use the whole model. Therefore, the focus will be on the Brand Identity System that can be characterized as the core of the model where the business maps out its identity, not taking into account its external environment or the plan for implementing it.

The Brand Identity Planning Models strongest feature is the Brand Identity System that can be described as a framework for exploring different perceptions of the brand and at the same time making a distinction between what is the bearing core of the brand, so to say the DNA and what is the extended brand (Aaker, 2002). The extended brand can be managed and changed according to changing strategy, the core cannot. The extended brand consists more or less of four categories that are not mutually exclusive. The brand can therefore consist of all of them and change in the eyes of the receiver.

The first category is Brand as Product that entails a brand being perceived as the products it sells. This is not typically the case for a business with a diversified range of products as the customer can have a hard time pinpointing the essence of the business' offerings. Furthermore, the brand will be bound up on the pragmatic characteristics of the product. The second category is Brand as Organization that deals with the brand being perceived as the qualities and characteristics the organization shows or stands for. The third category Brand as Person attributes the business with human personal traits. The fourth category, Brand as Symbol, deals with symbols that can identify the organization, typically this will be a logo but it can in principle be anything that will make people recall the brand (Aaker, 2002).

Even though the greater planning model is thought out for the business trying to improve its brand, it is still relevant for the academic who needs to evaluate a business or organization on the stable conditions. The point here is that the organization in focus, i.e. the military, is not a business as such. It is a state entity that is trusted with taxpayer's money to deliver protection and offensive capabilities on behalf of the nation state. If one were to allow service to be classified on the same terms as a product, the Brand Identity System is able to incorporate the Danish Defence's brand. The Danish Defence is delivering a service to the Danish people and as an organization it can be reviewed on all four categories to determine the most dominant now and historically.

*Critique*

The model in general is best suited to use on organizations that can be considered as a silo. The Danish Defence can be considered as a multidivisional business where each subsidiary is a military branch that holds its own brand. Furthermore, the model is relatively old, but the concepts are more or less timeless.

## 2.5. Legitimacy

In the previous section, we focused on how an organization can be viewed by an audience according to diverse and tangible classifications. In this section, we will present mechanisms for perception that lead to legitimization.

Suchman's (1995) inclusive article on legitimacy collects the prominent academic work on legitimacy that results in a holistic framework that opens up different forms and usages of legitimacy. The legitimacy concept takes root in the conviction that organizations cannot demarcate themselves from the society or the environment that they are submerged in, thereby defining legitimacy as something that derives from an open system. This further entails that change or evolvement comes from the culture that decides on adoption of technology, not the other way around where technology decides cultural behavior.

### 2.5.1. The concept of legitimacy

Justification for existence is the essence of legitimacy. This is obtained when there is a match between for example an organization and the environment in which the organization has to navigate. The degree to which the match is successful is not only dependent on attractiveness but also understandability (Suchman, 1995). This broad definition has to incorporate a temporal aspect to legitimacy; An organization's legitimacy is reliant on a track record while at the same time nurturing that track record in the present to always come out looking good. This falls in line with the dynamics of the concept, where the legitimization process is accessed from the observer’s perspective while the entity being evaluated must maintain performance while looking forward (Suchman, 1995). Therefore, it is important that the entity documents its performance so that the observer can make a qualified judgment (page 6).

*Two different views on legitimacy*

The institutional view, on the other hand, sees legitimacy as the DNA of an organization. Legitimacy thereby forms the building blocks on which the organization’s beliefs are built. It controls the philosophy and consequently the actions of the organization (Suchman, 1995). This DNA becomes the standard level of excellence by which the organization is examined

and judged upon by the external environment thereby the organization is held up to its own preset expectations. The two views that Suchman in this article tries to balance between can be seen as either a perspective of “looking in” or “looking out”, where “looking in” accounts for the institutional view and “looking out” for the strategic view (Suchman, 1995).

### 2.5.2. The three concepts of organizational legitimacy

*Pragmatic legitimacy*

An important aspect of pragmatic legitimacy is what can be called exchange legitimacy. It takes point of departure in the notion of close stakeholders, referred to here as constituents, who are visibly affected by the organization's actions. This entails that constituents are actively surveying and engaging with organizations when relevant (Suchman, 1995).

When an organization involves a constituent actively in its legitimization work, the goal is to obtain more reciprocal legitimacy. The point is to include the part of the external affected environment in the policy work that will have an influence on them (Suchman, 1995). The organization will thus have to relinquish authority to better mitigate risk associated with legitimization and will consequently share responsibility with the constituents even though the constituent is not legally liable as such, this is what influence legitimacy entails.

The third and less prevalent aspect of pragmatic legitimacy is dispositional legitimacy. Here, in the eyes of the constituent, organizations are depicted as personified entities that carry human traits such as trustworthiness and reliability (Suchman, 1995). These human traits can serve as a safeguard against legitimacy erosion because these personality traits are relatively stable.

*Moral legitimacy*

Whereas the aforementioned pragmatic legitimacy is concerned with the constituent’s self-interests in relation to the organizations doing, it is the opposite with moral legitimacy that is concerned with the well-being of society as a whole. Moral legitimacy is about what is right according to society’s beliefs, not what is good or preferable to the individual.

One aspect of moral legitimacy is consequential legitimacy, which builds upon a sort of measurability. The point is that through technical standards defined by man, one can measure an effect on something. It is, therefore, possible to say something about the effects on a given person or object with the help of an understandable measuring system, the principle is that the organization is measured and judged on its actions (Suchman, 1995).

Procedural legitimacy is a significant aspect of moral legitimacy because it concerns itself with practical and open conformity. The opportunity for legitimization lies in the somewhat public behaviour of an organization. If the organization adopts practices or procedures that are highly esteemed by the external environment, will it improve its public perception and gain legitimacy. The organization cannot just adopt any behaviour that is generally regarded in high esteem (Suchman, 1995). There has to be congruence between the purpose and the subsequent practice of the organization in question.

Structural legitimacy differentiates itself from procedural legitimacy by not being concerned with the acts that result in legitimacy but rather the structures that determine the procedures that will eventually lead to more legitimacy (Suchman, 1995).

Personal legitimacy, the final of the moral legitimacies, entails an individual who most likely is a leader to act on the organization's behalf with his or her personal charisma as a game-changing factor (Suchman, 1995).

*Cognitive legitimacy*

Comprehensibility with regards to legitimacy takes its point of departure in the chaotic and incomprehensible world that the observer often finds himself or herself in. The same principle applies to organizations in the eyes of the observers or constituents as they have been referred to previously. Because, as with the rest of the world, organizations are also subject of incomprehensibility. Observers will try to make sense of the world and organizational behaviour with the aid of cultural models and their own beliefs (Suchman, 1995). This should subsequently cause a cognitive legitimization process in the mind of the observer.

"Taken for granted" refers to a cognitive legitimacy concept best described as permanent organizational solutions. The key is that larger problems are held in check and are therefore no longer visible because organizations keep them so (Suchman, 1995). Consequently, since

organizations are keeping the problems out of the observer's cognitive radar, the consequence is that the observer takes the solution for granted.

The last aspect of cognitive legitimacy is temporal texture. It makes a distinction between acts that are episodic and initiatives that span over a longer period of time (Suchman, 1995).

Suchman's work on legitimacy is ideal to uncover the duality of legitimacy on which old state-run organizations such as the U.S. Army and the Danish Defence has to balance when trying to be perceived as legitimate in the eyes of their respective external audiences. Both organizations' age and the importance of upholding the sovereignty of their respective nation-states entails that they can be accessed on the ground of the institutional view. This means that the organization can be analyzed on the grounds of what it already possesses of internal legitimacy and on the other hand can it also be assessed on the strategic view because the Danish Defence still has to follow the times and stay relevant. It can be expected that strategic legitimacy is the only way to innovate the already existing legitimacy. The existing legitimacy stemming from the organization referred to as organizational legitimacy can be used to uncover the multilayer legitimation complexity that exists around significantly unique organizations such as the U.S. Army and the Danish Defence. The Army stands for something in general but it still means a lot of different things to a lot of different people and it is still innovating, hence the legitimacy theory will be used to get a clear picture of how an organization is potentially accessed by its external environment.

*Critique*

The theory is best suited to access organizations that are reliant on legitimacy from an external environment. It can be argued that an organization as the DD is not reliant on legitimacy from the external environment because it is indispensable as a police force or a parliament. The law is the legitimacy, anything else can be considered as opinion.

## 2.6. Isomorphism

In the following section we will go into depth with isomorphism, which concerns how populations of organizations create professional fields. This theory is included with the

purpose of later assessing how militaries can potentially create professional fields amongst themselves.

Historically, several isomorphic strains of organizational research exist that deal with homogeneity in structure, culture and output (DiMaggio & Powell, 1983). These earlier studies are integrated in DiMaggio & Powell's theory, which is developed as a method of analysis for organizational fields.

The theory is primarily concerned with explaining homogeneity within organizational fields, not the lack of homogeneity. Organizational fields are in this context meant as professional entities who aggregate a field due to their demarcations with regards to: key suppliers, resources, product consumers, regulatory actors and organizations that compete with similar services or products. As such the method is therefore focused on uncovering the whole range of relevant entities that form the organizational field, whereas the earlier strains of research were only occupied with either competition from the population perspective or the network perspective concerned with interaction among different entities (DiMaggio & Powell, 1983).

According to the theory, these organizational fields can only be determined with the use of the method actively. The method seeks to define a given organizational field trough "empirical investigation" and is based on the following four criteria: First, there needs to be an increase in interaction among organization in the not yet established field. Second, emergence of clear signs of domination or alliances. Third, increasing amounts of information that the entities within the field must deal with. Fourth, the entities within the organizational field must become aware that they are bound to the same field.

A potential field can be considered established if it meets the four criteria described above. The field can be based on competition, the state or profession (DiMaggio & Powell, 1983). DiMaggio & Powell are not primarily concerned with competitive isomorphism but with institutional isomorphism that can create "an iron cage", where organizations eventually end up being constrained by the environment that they themselves have created around them. Institutional Isomorphism is therefore not only about organizations' wish to capture markets and resources, but rather the legalization and power. The isomorphic change occurs through three not fully demarcated mechanisms that will be covered below.

### 2.6.1. Coercive isomorphic change

The pressure by which the coercive isomorphism is carried out can be either formal or informal. The pressure stems from organizations that can exert influence on a given organization because of its dependence on the exerting organization and from the society that the organization is embedded in. The pressure itself can be exerted in different styles such as; force, persuasion or invitation to join in collusion (DiMaggio & Powell, 1983). The pressure can be regulatory in the sense that government or state demands a certain behaviour or practice according to a legal framework. This entails regulations that are laid down with respect to environmental pollution, taxation, financial reporting or labour market laws in general. These pressures with a political origin have two sides to it: the first is that politicians are isolated from their actions so that they cannot experience the effects of their own legislation. The second side is that these legislations are applied so broadly that it affects multiple categories of organizations, thus deeming the legislation both less adaptive and less flexible. Thereby, states that are shaping the legislation are also shaping organizational structure (DiMaggio & Powell, 1983). Suppliers of utility services or other critical infrastructure will also determine how the organization can operate, not in a stringent way, but as an indirect pressure to conform.

The phenomena do not only apply to actors within population or within networks with asymmetric power relations. The pressure can be applied on subsidiaries by the mother organization. The asymmetric relation here is formal and explicit. The ownership control gives coercive isomorphism a pragmatic character whereas the coercive isomorphic pressure in the conformity form is best described as a bottom-up adaptation. This bottom-up adaptation can be a necessity as seen above with telecommunications and infrastructure and the other side that can be compared to the wish of fitting in with the ones, one wishes to be associated with or seeks the approval of (DiMaggio & Powell, 1983).

### 2.6.2. Mimetic isomorphic change

Whereas the coercive isomorphism above is dealing with authority, mimetic isomorphism is a way of dealing with uncertainty for the sake of fitness. The mimetic process is deliberate in

the way it consciously seeks to mimic aspects it finds succinct enough to incur positive change. The problem with this is the lack of guarantee that the imitating company has with regards to its imitation leading to positive change. This is to be expected, what is not to be expected is the unique results that can be created when one unique organization is trying to copy aspects of another unique organization, who's practices are created in a historic and complex manner. This makes it difficult to decipher what and how something has worked previously. But the effort of mimicking the unique pre-setting of a given organization allows for a unique result that can entail innovation (DiMaggio & Powell, 1983). This unintended innovation can off course be a force that renders trivial mimetic behaviour redundant. With the broad sense of uncertainty and mimetic behaviour in mind is it easy to see why young companies tend to model themselves on already existing companies. This act of modelling is an inspirational act for the quest of legitimization from the environment rather than being accepted by one's own class of organizations.

### 2.6.3. Normative isomorphic change

The final isomorphic change concept is normative pressure that takes point of departure in professionalization. Professionalization in this regard has many angles to it. Members of an occupation can seek to control its frame by setting a standard for what it takes to be part of that profession. Professions can as such stand out in their own right and be changed by isomorphism (DiMaggio & Powell, 1983). One has to be aware that individuals can be part of both a specialized profession and the organization they get to practice their profession within. This distinction is in line with the idea of education as a guarantee for fitness between the individual and the context he or she is to work in. This is connected to the idea of professionals forming networks between organizations that will result in ideas being shared within these networks (DiMaggio & Powell, 1983). This will hypothetically have an isomorphic effect as the ideas are implemented as a result of network interaction.

The hiring of candidates is, as described above, heavily influenced by the educational background that is instrumental for a newly hired employee's ability to fit into professional networks (DiMaggio & Powell, 1983). If the candidate is not accustomed with a given set of norms is it common to take the new employee through a socialization process that can entail everything from physical appearance to usage of vocabulary. This makes it easier for

companies to source from both industry and profession to either uphold the status quo or change.

Industry configuring events are arenas where the top of the hierarchy can manifest their positions and thereby uphold or shape the criteria for success. Such events further serve as gatekeeping tools in deciding who is allowed to attend a given setting and achieve advancement within that setting (DiMaggio & Powell, 1983).

The theory of isomorphism has to be seen in connection with Suchmann's work on legitimacy above that distinguishes between an inside-out look and outside-in look, and different ways of obtaining legitimacy. This is not the case for DiMaggio & Powell's work that is concerned with how organizations construct professional fields because of varying pressures. These conceptual pressures can help explain the drive behind the Danish Defence and the U.S. Army gamer recruitment activities. The point being that the organization's professional environment is a cause for change, not the general public or customers. An organization will look to its peer for concrete inspiration on how to conduct itself. The mechanisms that spark this change will happen through one of the three changes described above.

*Critique:*
As the theory is concerned with populations of organizations and the formation of professional fields, it was not originally intended for investigating military organizations because they hold a sort of state sanctioned monopoly in any given nation state. This entails that the theory has to be adjusted to foster interesting insights. The way we do so, is by exploring potential sub populations within a given organization.

# 3. Methodology

The following chapter will start with a birds-eye view explaining the social constructionist paradigm as it governs the following narrowing of focus. This leads us to the research design section where we will cover aspects that have been important in creating a pragmatic funnel from the birds-eye view to concrete pragmatic considerations. From here, we will go through data collection and especially focus on interviewing as a method, because it is our primary

first-hand data source. Therefore, we will discuss how the interviews were treated with the research tool Nvivo 12. In addition to the interviews, we have also gained primary data from a focus group interview, which will be elaborated upon. We will also discuss limitations/delimitations.

## 3.1 Scientific/philosophical background

The philosophical standpoint and scientific background for this paper is based on the social constructionist paradigm. The reasoning for this decision connects to our problem statement:

How is gaming pervaded in the Danish Defence with regards to recruitment and training?

We base our paper on the assumption that gaming technology has different meanings to various social groups.

There are different Social Constructionist theories but according to Vivien Burr (1995), they generally share certain common assumptions. We will quickly go through some of these assumptions mentioned by Burr and explain their influence on this paper.

First of all, social constructionism argues how language is used to represent the world. Consequently, the way we talk about the world (identities, social relations, ethics and objects) do not illustrate a neutral reflection of our world but rather language plays an active role in creating and changing it (Jørgensen & Phillips, 2002). Such an assumption highlights the importance of language focus and analyzing the language of our social groups to understand how each one actively tries to change the artefact or at least how they perceive the artefact.

Second, we also understand the world, the categories and concepts we use, based on our historical and cultural background (Burr, 1995). This means that notions change over time and these notions can be specific to a certain culture. Simply, all ways of understanding depend on the context making them historically and culturally relative. Therefore, this assumption makes it clear that the way groups understand the world depend on their cultures, both national and more immediate cultures, and the historical place in time that can influence the popularity of gaming. Ultimately, comparing two military organizations based in two

different countries should be done with the utmost care. Gamers in the U.S. and Denmark might be different.

This somewhat connects to the third assumption, which mirrors social construction of technology (SCOT) where knowledge and social action supposed to go hand in hand. This means that descriptions or constructions of the world sustain some patterns of social action while others are excluded leading to certain constructions gaining hegemony. The influence of such an assumption introduces the possible domination of certain artefacts and how our methods will have to focus on dominating words.

Lastly, with the social constructionist approach, there is an assumption of anti-essentialism. Since the world is created through social interaction there is no 'one' truth. Therefore, our paper will not be able to give a final and "true" answer to the research question but interpretations. The answer will be relative to the reality perceived by the reader and the writer. However, hopefully it will be able to shed light on how the US and Danish militaries create meaning around technology in relation to recruitment.

## 3.2 Research Design

*Exploration and inductive progression*

The report is designed with an inductive approach, as the report is not intended to examine a hypothesis. The reason for working inductively with the report is because there is, as far as we understand, not much prior academic research on military recruitment aided by gaming aspects. The academic articles available such as Smith (2010), Macedonia (2002a), Macedonia (2002b). Huntemann & Payne (2009) mainly explore U.S. military use of commercial video games and simulation for training of soldiers. However, Huntemann & Payne and Smith also explore military video games' use as a tool for recruitment and development of future soldiers. However, little exploration has been done about the new gaming recruitment initiatives especially in Denmark. Our thesis is thereby explorative in its nature.

The report sets out to primarily explore the Danish Defence and how gaming is pervaded in its recruitment and training. However, in order to properly answer this question, a comparison is made between the Danish Defence and another military, the U.S. Army. This decision is based on two militaries' similar new recruitment endeavours and comparing the two will be beneficial in order to more clearly show the perceived impact of gaming on the Danish Defence.

*Sources*

It is clear from a quick outsider look that the Danish Defence and the U.S. Army are opting for different strategies that are rooted in different contexts. The primary focus of the thesis is the Danish Defence, which is partially due to practical restraints of obtaining new primary data through our interviews and observations.

With the author's proximity to the Danish Defence and connections within this military system it is ideal that the new primary data is obtained from this system by the authors. Another significant reason for obtaining new primary data on the Danish Defence is that there is no substantial public information on its history with simulation or on its current work with gaming themed recruitment. On the other hand, there exists a fairly large number of historical sources on the United States military's work with simulation and its relationship to the gaming industry. Thereby, the literature on U.S. military's work with gaming and simulation industry has served as the empirical foundation for further research into the Danish Defence's historical and current work with simulation and gaming.

*Access to information*

One might think that researching military affairs and gaining reliable and fairly unfiltered information would be difficult. That would normally be the case. In the case of recruitment, it is not so. Recruitment is a public activity, which means one has access to the communication efforts that are targeted towards potential recruits and cadets. The corresponding strategy and the information behind the public recruitment efforts is fairly accessible because the military has to convince the tax paying public that it has spent its resources responsibly. Obtaining

information on The Danish Defence's use of simulation technology has not been difficult because they purchase from a market that is not pressured by confidentiality. The technology is often available for the civilian market, and the military versions are not that sensitive to outside scrutiny before they are implemented with a specific military sub-entity.

*Connecting to areas of research*

As the report is explorative, it is difficult to stay strictly within the realm of gaming and steer around simulation. The two topics are deeply connected when one looks under the surface. From the outside the two areas are not as such connected, but with the new initiatives from both the U.S. Army and the Danish Defence, it would be unsatisfactory to demarcate the two areas up front.

## 3.3 Data collection

Based on the scientific background of this study, we have used common methods connected to this. The data was collected by the use of various qualitative methods. Social Constructionism's anti-essentialism perspective argues against aspects of one correct truth. Consequently, this study will always reflect some sort of bias and our answer to the research question is positioned to be tentative. Quantitative methods are used to measure something physical. According to Nygaard (2005), these methods are usually connected to positivism where the ontology sees reality as something palpable and the paradigm's epistemology is based on the idea that you can reach knowledge via precise measurements becoming equal to valid knowledge (p. 30-33). This does not really reflect a social constructionist perspective. From an epistemological perspective, this means that you go from subjects to positioned knowledge. Understanding the influence of gaming on the military and the perception of gaming is subjective to each individual person and his/her situation in the relevant organizations that we are investigating. Below we will present our methodological process in detail.

### 3.3.1. Interview

The primary source in this thesis is the interviews. As the thesis is of an exploratory nature it is natural to count on interviews as the main type of primary source. The interviews allowed us to go into depth with a narrower focus as we progressed through the interview conduction. This meant that the interview questions were kept semi structured and prepared just before conducting the interview, as to keep the questions up to date with the progression of the thesis. Furthermore, using interviews will also allow us to analyze the answers and word choices based on Social Constructionism in relation to the interviewees' perspectives on gaming technology and what it means to them and generally to the military.

We ended up with six interviews. Anders Bech, Ronny Vossen and Jimmi Andreasen's interviews allowed us to explore the gamer recruitment process and similar aspects while Johnny C. Jensen and Niels Krarup-Hansen had extensive knowledge on simulation technology and its use within the Danish Defence. Ryan Meaux was our contact and main source of information about the U.S. Army eSports program. This split between professionals working with recruitment or simulation was intended as a way to better obtain clean data where the two subjects were not intermingled.

We identified these people on the background of online articles and press releases. All were willing to participate, except for an additional interviewee who declined. Anders Bech facilitated the contact between the interviews and the authors.

| Name | Title | Interview reasoning |
|---|---|---|
| Anders Bech<br><br>(Appendix A) | Major and Head of Section of the Danish Ministry of Defence's Personnel Agency | He is in charge of the MDPA's recruitment marketing and the person who appointed Ronny Vossen. |
| Ronny Vossen<br>(Appendix B) | Special consultant | In charge of the MDPA gamer recruitment project. |
| Jimmi Andreasen<br><br>(Appendix C) | Leading Psychologist at the MDPA | Conducted the DD's experiment on gamer specific abilities and their usefulness in the Army. |
| Niels Krarup-Hansen<br>(Appendix D) | Senior Advisor at the Danish Ministry of Defence | Extensive knowledge on simulation tech use in the DD. |
| Johnny Clemen-Jensen<br>(Appendix E) | Senior sergeant at Jutland Dragoon Regiment | Implementer of Steel Beasts and knowledgeable on simulation tech |
| Ryan Meaux<br><br>(Appendix F) | Senior Sergeant for the USAREC | One of the founders of the U.S. Army eSports program |

*Table 1: Description of interviewees and interview reasoning.*

#### 3.3.1.1. Interview phases

In order to successfully and effectively gain the knowledge we need to systemize our interview process.

First of all, we will plan and conduct the interviews by constructing an interview guide and following Steiner Kvale's *seven phases* (Kvale & Brinkmann, 2009, pp. 122-123). The seven phases involve:

1. *Thematizing*

We will determine the purpose of each individual interview based upon our research question and the expertise of each interviewee.

2. *Designing*

We will design the interview, decide which format to use, which questions to ask and try to determine how long the interview will be etc.

3. *Interviewing*

We will conduct the interviews with the respective interviewees.

4. *Transcribing*

The transcriptions will be used for data collection and linguistic analysis in order to find meaning related to simulation and gaming technology. However, for our analysis to be as effective as possible, we will leave out unnecessary aspects of the interview like social interactions not linked to the topic, pauses, filler words like "ehm", questions the interviewees could not answer and so on. The interviews can be found as appendices attached to the thesis.

5. *Analyzing*

We will analyze and employ the information obtained in the interview.

6. *Verifying*

Verifying an interview means to determine the validity, reliability and generalizability of our interview findings. Kvale's (2009) way of checking reliability is to check how consistent the results are across interviews and validity refers to whether the interview investigates what it was set out to investigate (p. 102). Consequently, we made sure to verify how common our results were between interviewees and consider whether we investigated the subject properly based on our analysis of the interviews.

7. *Reporting*

We will report the findings and apply them in the conclusion of the thesis.

#### 3.3.1.2. Interview format

When interviewing, we have chosen to apply the semi-structured interview format (Easterby-Smith, Thorpe, & Jackson, 2008, pp. 142-145). Generally, a semi-structured interview is based on some predetermined questions, while also give freedom to adjust the order of the questions, add additional questions such as clarifying questions or comments to minimize misinterpretations and miscommunication. Such a structure enables the interviewer to form the interview based on the actual physical interview situation rather than only basing it on presumptions. This should increase the chance of gaining a better and broader understanding of the interviewee's point of view while also limiting the interviewer's bias by allowing clarifying statements on both parties.

To explain more specifically how we incorporate this format, we describe a set of around five pre-established questions per interview. These questions will be based on the research questions and what we think each interviewee can elaborate on. The reason for doing so lies in the uncertainty of how long each person may have time to talk, as they might have other engagements later, but also to allow time to form the interview with follow-up questions based on the received answers. This freedom to form the interview will fit well with the somewhat limited knowledge we have concerning the use of gaming within the Danish Defence. It allows us to change as we gain more knowledge and explore the research topic. However, while a limit on prepared question could lead to less thought through questions and doubts about what to ask next, we believe the positives outweigh the negatives. On the other hand, to minimize such issues, we will make a list of a few extra questions, which can be applied in case of such issues.

#### 3.3.1.3. Nvivo 12

We apply Nvivo to this thesis due to its many relevant capabilities.

First, it will allow us to store and organize our semi-structured interviews. Due to the fact that we have a good number of interviews, six to be exact, we thought it necessary to keep them systematically. Generally, having a lot of qualitative data can make it hard to make sense of

the data without having a proper research tool. This is one aspect where Nvivo will help us. Second, it will allow us to more easily categorize and analyze our data. More precisely, Nvivo allows us to sort the data by themes or attributes. This is useful in the sense of our chosen scientific background that relies on generalizing and finding trends in language. In this thesis we will mainly apply the word frequency tool to a content analysis of the interviews in a similar fashion as seen in Tackney, Chapell, & Sato (2017). Furthermore, in some parts we will apply the illustrative tool of cluster analysis in tandem with these word frequencies to find otherwise hidden trends.

### 3.3.2. Focus groups

In addition, we will obtain data via the use of a focus group. The reason for this was to get some data from individuals in the DD that were not working with recruitment or simulations. One of the problems with interviewing 5 people that are professionally connected in the same organisation is that one might get a one-sided story. This is where the focus group comes to its right. It will bring perspective to the data obtained through the Danish interviews.

The perspective we will get is heavily influenced by the contributors of the focus group. The contributors are all from The Danish Home Guard. The Home Guard is a sub branch of the Danish Defence and it is common for former professional soldiers to enlist in The Home Guard when they enter the civilian job market. This is also a reason for the varying degree of knowledge and a diversification in knowledge depending on where, how long and on what level the given soldiers have served. This diversity should bring a more holistic critique of the MDPA's efforts.

Furthermore, the interviewees should also be more or less in the gamer segment. They may not all live up to the criteria of seven hours a week of gameplay, the MDPA set for their gamer definition. But they all have a history of gaming. The fact that they are no longer incorporated in the 3 main branches of the DD makes them willing to make statements that the interviewees might self-censor. Adding to that, it is likely that the focus group contributors are more or less in the target group for the Danish gaming initiative's programs. They have graduated high school, they have a military background and they game, so they are qualified to make enlightened statements on the subject. Because of the relatively high

knowledge on the subject, it was decided to ask open but predetermined questions to keep the interviewees on tack but still leave space for exploring personal opinions from the 5 focus group participants.

### 3.3.3. eSport gaming

The following description and analysis of an eSports match is made with the purpose of showing how professional and streamed eSports matches are conducted. What is significant about this particular match is that the team from the U.S. Army meets the U.S. Air Force in a show-match. The tournament is held in connection with the U.S. national Rainbow Six Siege league.

Rainbow Six Siege is a first-person shooter game (FPS) where the prevailing professional game mode is 5 VS 5 as in classic Counter-Strike. The game mode demands that the gamers choose a specific character for each map in the same manner as gamers choose characters for League of Legends matches. This brings unpredictability and variation to the matches, which results in more excitement on the viewer's side. The characters have their own individual and unique abilities and perks that can be slightly modified. The endless combinations of operator compositions take away stability for the competing team but leaves uncertainty for the purpose of entertainment. Operator is the designation of the Heroes or characters the gamer can choose between.

The match starts with a banning round where the competing gamers from each team choose three operators that they want to prohibit their competitors from choosing in the given map. This pre-round is called the banning round. After this, the five gamers from each team are able to choose their playing character in the form of an operator.

The tournament format that the described match is a part of follows standard conventions for eSports streaming with info graphics and commentators. The streamed video will either be from point of view of the gamer or video from a camera that the producers can freely guide around the map to capture the battles of the match from good angles. The game is made so the free roaming camera can look through the roof of the buildings to give the viewer the best

possible entertainment while the two commentators assesses the match and share little anecdotes.

What makes this match especially significant for this report is first of all that two U.S. Military teams battle each other like the branches' highly anticipated football matches. Secondly, the type of game being competed in is a First-Person Shooter. This entails as stated earlier that a preset environment is laid out and the gamers can innovate best practice within the frame of the game. The artistic touch and the cultural references of the game are heavily influenced by the Revolution in Military Affairs (RMA) in form of Special Operations Forces (SOF). The characters one can choose in form of operators are all inspired by real units from all over the world. The operators wield different weapons and have different abilities in handling special tools that can support engagements. Rainbow Six Siege takes the best from games such as Counter-Strike and League of Legends and wraps it in the military coolness that the Tom Clancy video game franchise is known for. Therefore, it is ideal to look into how the standard eSports tournament set-up can incorporate the military aspect in their endeavour.

We will try to generate themes out of communicative statements that refer to cultural aspects of military life. We want to show a connection between the language and the implicit semantic meaning of the identified statements. This fit in the social constructionist frame of the report, because the latter entails subjective identification of cues and the interpretation of its relevance to broader society etc. There is subjectivity in the reality that is understood between individuals and subjectivity in the identification of discourses by the analyzing academics. A foundational reason for using this method superficially is that it consists of 3 stages or levels for investigation. The stages are: text, interaction and context. The focus here will only be on "text" or the verbal quotes cited in this paper. The quotes selected have reference to the U.S. military, and all quotes that can be identified as a military reference by the authors, can be identified by a layman. No expert military references were identified. The statements have been deductively searched for, for the purpose of demonstrating a military gaming narrative and assessing its style. The primary intention of looking at the specific discourse is to uncover meaning rather than look at the message. Language is of course the bearing base for uncovering the meaning that discourses can be identified on.

The reason for using this analytical method is not to be critical for the sake of being critical, but rather to be inspired by the method to identify cultural phenomena that could be deemed

problematic if one wished to deem them so. Identifying communicative phenomena that can compile a discourse is the priority. This is because we wish to see how the commentators speak about military gaming not the motivation for doing so. Here, it is very important that we distinguish between military references made in relation to active duty soldier gamers competing with others in a military themed video game and the common pragmatic language used by the commentators to describe the actions in the game, for example to shoot a rifle or throw a grenade. These phrases might sound like military references but they are unavoidable to use if one were to describe the actions within the game. Rainbow Six Siege is modeled on the actions of Special Operations Forces (SOF) so one needs to distinguish between description of actions and normative statements made in relation to the real branches of the United States military.

As there are no dialectic antipoles to be found from looking at the match in isolation it would be necessary to set one up against the voice of the commentators to show an explicit power struggle. It would be farfetched to dig into a macro level of power asymmetries, manipulation and exploitation on such a thin foundation as 40-minutes of sports commentary. It would be too deterministic in a deductive sense to look after typical power relations and have them confirmed on an implicit communicative basis. This needs to be avoided as the analysis method is generally critiqued for being too broadly applicable.

The match and the commentary bear the mark of being an American event. The tournament is for U.S. teams with 300 live spectators who can be assumed to be U.S. citizens.

### 3.3.4. Limitation/delimitation

*Limitation of scope*

As explained earlier, the report is exploratory in nature. This has demanded extra discipline in constraining the scope of the report and staying within it, as the paper has evolved. As we have not sought to confirm or disprove a concrete statement or hypothesis, it has been important to hold a relatively narrow focus where three topics intersect. The three topics are military recruitment, gaming and simulation.

*Within two academic programs*

The three topics described above are examined in an explorative frame and the two academic programs that the authors adhere to entails that the communication and creative industries will determine the academic scope and angle. Communication can shed light on the communicative relationship between the sender and receiver, here the military and potential recruits. Furthermore, the communication aspect works with branding and the processes of establishing frames of reference with regard to technologies. Creative industries are relevant when discussing the technologies being used in both simulation and gaming that share an intertwined history and stem from the same place. The technical aspects of simulation and gaming are not meant to be treated on an expert level. This would be outside the relevant spheres of the two academic programs and would pull the explorative work too far away from recruitment. ”Considering recruitment is the process of pulling people into a system in which they have not yet received specialist training, the standard for technical understanding is set for entry level or user level with regards to the target group for recruitment.”This sets a good foundation for the level of technical insights that the authors, readers and participants in data collection should work on.

*A cross section of three topics*

The U.S. military has deep historical ties with the commercial gaming industry, primarily with a focus on enhancing training. The Danish Defence also has a development-based relationship with a major actor in the niche simulations gaming market. The U.S. military has a longer history with the gaming industry for the purpose of recruitment efforts and enhancement of training technologies. The U.S. Army is taking their gaming-based recruitment efforts into a new direction, while The Danish Defence is adopting their own gaming recruitment strategy. Both these new gaming-based recruitment strategies are being implemented in a time where military technology is becoming more digitized. So, the distance between how soldiers train and potentially fight is becoming smaller. Therefore, is important to incorporate the aspects of simulations into the research because the technology they use to recruit is the same that recruits can be trained with post recruitment. So, the topics of gaming, simulations and recruitment are all relevant for the change we are focusing on.

# 4. Results

Our results chapter starts out with an explanatory section that go into topics that serve as background knowledge for the thesis as a whole. They are the result of research from secondary sources and the topics are heavily influenced by novel American military programs and ground-breaking innovations in the late 90's early 00's gaming that has led us to where we are today with modern simulation games for both the private and military market. In continuation of this will we describe a First-Person Shooter eSports match with professional teams from the U.S. Army and Navy respectively. The following section presents the interview results, revised for optimal analysis and discussion in later chapters.

## 4.1. Gaming and simulation - a historical relationship

### 4.1.1. Simulation in the early days

In the late 1970's, simulations were a costly affair with little contemporary economic justification. At the time, a simulator would typically cost twice as much as the hardware it was trying to imitate. But simulators could still help training scenarios that are difficult to practice with analog training. Therefore, it was already in 1978 decided by DARPA to pursue the goal of constructing flight simulators that could train pilots in dog fights within 25 years. The project was initiated by Air Force captain Jack A. Thorpe (Lenoir & Caldwell, 2018).

### 4.1.2. Battlezone: Arcade game turned into simulations

The early days of the American military's collaboration with the videogame or arcade game industry are shrouded in folklore and uncertainties. This is also the case for the first practical simulation device that the American military allegedly almost adopted. Atari was one of the pioneers within arcade games in 1980 where they launched the successful arcade game called Battlezone. The game was a 3-dimensional game that allowed the player to drive a tank while moving the gun horizontally to fight against foes. The arcade game tried to replicate the feeling of manning a tank by having the driver looking through a small screen that emulated the periscope of an armoured vehicle, while controlling two joysticks (Tony, 2016). This arcade game triggered a group of former military officers to establish contact to Atari with

the purpose of examining the possibilities of converting Battlezone to an infantry fighting vehicle simulator. This was definitely possible and the former officers were to act as the link facilitating the deal and relationship between the Army's Simulation Technology and Training Center (STTC) and Atari. Atari had the possibility of gaining more sales from an already developed technology without spending resources on marketing (Tony, 2016). For the Army, this was an attractive endeavour because the simulator could save resources in a training context. This notion of saving was primarily focused on using fewer munitions in gunnery practice. Ammunition is significantly more expensive than diesel fuel and mechanical maintenance costs. This was the reason behind Battlezone being adapted to focus on gunnery training instead of driver training. The project was apparently never adopted fully by the Army as only two Bradley Trainers has resurfaced, but it was a tale about the times to come.

### 4.1.3. Steel Beasts

Steel Beasts was first released in year 2000 as a commercial game focused on realistic tank simulation. This game was targeted at what is today known as Mil-Sim for military simulation market, which has always been a niche. The game featured an American Abrams tank and a German Leopard tank as tanks that could be manned by the gamer, with the opposing enemies typically being Russian tanks. A short while after the game was released was it picked up by Johnny Clemen Jensen who has been part of the Danish main battle tank corps, located in Jutland. He initiated and led the work with implementing the game as a simulation tool in the Danish Army. What started out as a proposal reluctantly accepted by Johnny Clemen Jensen's superiors ended up being a bearing component in the education of not only Danish tank crews but also in the education of many other western tank crews. The game was used in its commercial version by the Danish Army, and the civilian joystick used to operate various mechanics of the tank was switched out with an actual spare part controller. From there the course was set that ended up with Steel Beasts being the software for live size tank compartment simulators. So, what started as a civilian game is now primarily a product for militaries that need ongoing technical assistance for development from the eSim Games, who offer Steel Beasts as their only product (Johnny Transcript).

### 4.1.4. SIMNET

It was also Air Force Captain Jack A. Thorpe who was the one to initiate the SIMNET program for DARPA. The Bradley Trainer developed with Atari can be seen as an initiative working towards functional interactive simulators that in the future could be linked together for the purpose of collaborative or what could be seen as multiplayer simulations. The SIMNET was the network program to link together not only a tank crew but also whole brigades fighting, consisting of tracked vehicles, Airplanes and helicopters, fighting an equally strong adversary who could be controlled by either man or computer (Rhea, 1989). Although Thorpe was an Air Force officer when he began working on future flight simulators was, he was quickly drawn into the DARPA projects that were aimed at the army such as SIMNET. When Thorpe started up the work with SIMNET he was focused on acquiring technologies from the civilian world (Lenoir & Caldwell, 2018). He found help from three privately owned firms to deliver different aspects of the technology needed to develop a free roam world in which realistic battles could take place. This further reduced the dependency on a single contractor or system, even the computers used in the simulators could come from different manufactures. Focus was not on achieving beautiful graphics but rather on realistic mechanisms such as vehicles needing refuelling and airplanes not being able to land at airstrips that has taken bombardment damage. This focus on realistic mechanisms of war was not limited to the software but also the hardware. The armoured vehicle simulators that the Army eventually went along with were also focused on contributing to the realistic dynamism of battle by not making redundant controls operational and only painting fake buttons. The project took off in 1982 and was operational by 1990. In the end, it was possible to connect thousands of units via fibre optics and instructors could free roam the digital battlefield in a spectator mode while recording the whole battle for later constructive review (Rhea, 1989).

### 4.1.5. Falcon flight simulator game series

Falcon was a game strictly meant for the civilian market as realistic flight simulator where the player was manning a F-16 Falcon from within the cockpit. The first version of the game debuted in 1984 with some problems. The series got improved, and with a manual of typically 600 pages there was no doubt that this game meant to simulate a real F-16 fighter-jet. This was confirmed by gamers who got access to a real F-16 dashboard manual that made

them better Falcon gamers. This also caught the attention of a National Guard pilot and instructor who had the game repurposed for training his pilots (Lenoir & Caldwell, 2018).

### 4.1.6. The Institute for Creative Technology (ICT)

As described above, the 1980's were focused on simulation with help from the private industry for the purpose of developing real time multiplayer simulations to train crews of vehicles and aircraft, both fixed and rotary. The 1990's had a different focus, a focus on gaming as a recruitment tool and a source of technologies. The 1980's had seen some experimentation with adapting the legendary Doom First-Person Shooter (FPS) game to military use with realistic scenery and weapons, but to little avail, which seems understandable now, more than 30 years later, when comparing Doom to modern FPS games. But it had to start somewhere and The Institute for Creative Technologies was the initiative to bring structure to these sorts of collaborations. The collaborations should be focused around harnessing these civilian entertainment technologies for training, simulations and operations under one roof. ITC was set up in the frames of Southern University of California in 1999 almost 2 years after the initiative was green lit. ITC was to be staffed by academics, gaming industry professionals and military personnel who were all told that the work should benefit the respective groups or industries (Lenoir & Caldwell, 2018). The project was granted 45 million USD for the first 5 years and undertook various projects. Most notable was the work that saw the light in the form of commercial products.

### 4.1.7. ICT and Full Spectrum Warrior

The first commercial product released in 2004 in collaboration with external video game publishers was Full Spectrum Warrior, as the final civilian version was named. The game was not the typical FPS game. As a platoon leader you had to lead your men through hostile environments and direct the firepower of your men who were split in fire teams without wielding a rifle yourself. This was atypical of an FPS shooter and bore much more resemblance to military tactics than a normal FPS game. A military version of was also made. The two games stemming from the same work had the advantage of taking the best of two worlds. The civilian game had a true military simulation edge to it and the military version had repeat value for the soldiers who properly found the game entertaining. The civilian version had better sound and graphics and the military version had an after-action review known from standard military practice. A key code that unlocked the military version of the

game was obtainable for the civilian customers, which led to some criticism, but the civilian game was successful despite this and made in into the top 10 selling games of 2004 (Lenoir & Caldwell, 2018).

### 4.1.8. Americas Army

In 1999, Colonel Casey Wardynski initiated the work with a new game that should serve as a connecter with the youth who was spending more and more time in front of a screen. At the same time the Department of Defence was interested in exploring capabilities within the networked gaming world (Lenoir & Caldwell, 2018). Americas Army (AA) was released in 2003 as a free downloadable game. The game was honest about its intention of giving the American youth a view into the Army life for the purpose of recruitment. The game was in contrast to Full Spectrum Warrior fully developed by the U.S. military and could freely be downloaded from an army website. The game was a conventional FPS and did not have an alternative tactical military gameplay like Full Spectrum Warrior did. The game had significant uniqueness; a feature that made it impossible for the gamer to shoot at U.S. soldiers. If one were to join a multiplayer team death match, it would not be possible to play for any other team than the U.S. Army while the enemy team would be an opposing force viewed as an insurgent group. The gamers playing on the enemy team would have the same, mirrored experience, only being able to play as the U.S. Army and viewing the enemy team as the insurgents. Colonel Wardynski saw advantages in reaching out to the young people who were gaming as the Army would only become more tech-reliant in the future and these young people were used to receiving and conveying information digitally. The relevance in targeting a relatively digital mature youth was not the only advantage with AA. The game was an opportunity to instil good army values onto the potential recruit and send a message about what the army stood for. The gamer playing the game for the first time had to go through boot camp to learn the practical functions of the game while being schooled in the values of the U.S. Army (Lenoir & Caldwell, 2018). These values would then later be relied upon to take decisions that would result in a good game score thereby moving the emphasis from killing to being a responsible soldier.

### 4.1.9. ARMA and VBS

Whereas Steel Beasts is mostly focused on armoured vehicle simulation, VBS is the broader military simulator leading the market for government contracts. The military version has a

commercial counterpart for the civilian market named ARMA. Both games run on the same engine and features anything from planes, artillery, tanks, jeeps and foot soldiers, which makes the game's application much broader than Steel Beasts. Government contracts entail a certain degree of customization to the given army's needs. The civilian ARMA version is the leader in the Military Simulation, aka Mil-Sim, market and the superior graphics expected of the commercial market spills over into the WBS. On the other hand, WBS can contribute to the militaristic realism that civilian buyers of ARMA seek, thereby creating a synergy effect between the two products developed by Chezh Bohemia InterActive (Lenoir & Caldwell, 2018).

## 4.2. Rainbow Six Siege eSports match

### 4.2.1. Description of eSports Branch Battle

*Branch battle*

The match is a show-match between the Army and the Air Force who have a long-standing rivalry like many branches in U.S. military. The best-known aspect of the friendly competition between the branches is the Army-Navy football game, where cadets from West Point battle it out on the pitch with cadets from the Navy Academy in Annapolis. The two teams' military affiliation makes them special compared to normal eSport teams and special enough to have their own gaming league. This is quickly referred to with when one of the commentators mention that; "They played in the military gaming league" (Rainbow Six Esports, 2018, 1:00).

*Skills*

There is a difference in how gamers from the two military teams are assessed on their gaming skills in relation to what skills are expected from the different branches. The game is barely started before one commentator states that he expects the Army to be the better shooters; "I anticipate they have good shooters from the Army" (Rainbow Six Esports, 2018, 2:53). Later in the match, the Army is criticized for not upholding basic Army skills when they are not checking their corners properly for enemies hiding when moving through the map, "Army training, you gotta check your corners, man" (3:59). Later in the game the Air Force is

slandered on the same grounds. Furthermore, they are criticized for not using a drone either to check corners: “Don’t check the corners with the drone, this is what the Air Force is trying to prove” (Rainbow Six Esports, 2018, 6:10).

*Values*

The special culture of military entities and the values that govern their behaviour is a strong narrative that the commentators of the eSports match buy into. The first time this comes into light is when the match starts. The commentator says: “We are gonna have the crowd erupt, here for their military brothers” (Rainbow Six Esports, 2018, 2:17). This supports the narrative of the military being a family that supports each other. This is emphasized later by a statement: “You would think there was more cohesion in the Army, as they say, no one gets left behind” (Rainbow Six Esports, 2018, 16:00). They are literally upheld to their own values.

*Clichés and the conformist*

It is clear that the commentators do not come from a military background themselves but are trying to conform to the custom of being respectful towards the military and serving individuals. This is clear when they use the term “Jarhead” about an Army player. Marines are referred to as jarheads for their will to obey orders blankly and fight fearlessly, not Army or Air Force soldiers. And a civilian outsider using the term “Jarhead” can be seen as an insult. At a point when the match is already in progress, we hear a service message specially called out for veteran personnel: “To all the veterans watching, who are not familiar with the game.” Lastly, the gamers are thanked for their participation in relation to them doing military service: “Thank you to our service members from the Army and Air Force” (Rainbow Six Esports, 2018, 19:53).

## 4.3. Interview

The results from the six interviews are presented below. They are partly pooled together according to bearing theme in the interview. This means that the results from Ronny and Anders interviews are presented together first, because they are both involved in the work

with the gamer initiative. Following this, the results from the Jimmi Andreasen interview will be presented. His work as a psychologist with specialization in different military programs should complement the general recruitment focused results. Thirdly, we have the results from Niels' and Johhny's interview presented together because they work with simulation acquirement and simulation training respectively. Lastly, we present the interview with Ryan Meaux which will bring some comparability to all the prior interviews as he is employed by the U.S. Army Recruiting Command.

**Ronny Vossen & Anders Bech**

*Connection with the gamer segment*

According to Anders, visibility is an important aspect and gamers must see that the Danish Defence is doing something for them. The recruitment section of the Danish Defence considered simply just giving out merchandise that had a practical purpose. The value of merchandise is temporary and simple. So, in addition to this, the recruitment section decided to focus on something with long-term value. This is why they have opted for participating in educational contribution for the talent camps held by the NGO Esport Danmark. Here, the Danish Defence can educate participants on topics that they hold in high regard and which can be relevant for the young people attending the talent camps. This includes topics like Tactics, Ethics & Moral on the battlefield, Geneva conventions etc. The recruitment effort thus spans from merchandise to education and everything in-between as Anders puts its (Anders Transcript, 10:33).

Anders is of the conviction that the increased popularity of gaming and eSport is a wave that one has to catch at the right moment. The moment that the Danish Defence recruitment caught the wave was well aligned with the general level of digitalization that the Danish Defence was in (Anders Transcript, 14:36). Ronny adds to this by underlining that the Danish Defence can easily create a connection because they are so involved with a gaming aspect in their training programs that spans from huge high-tech fighter jet simulators to simple multiple-choice question games for officers being schooled in the Geneva conventions (Anders Transcript, 14:56).

The MDPA defines a gamer as a person who games more than seven hours a week. The Danish Defence is not necessarily looking for professional gamers, so setting the seven-hour definition is a way to engage with normal gamers which is also the target group (Ronny Transcript, 19:37).

The type of games a gamer plays can determine the outcome for which skills are developed. Ronny explains that there is a great difference between playing Counter-Strike GO and a flight simulator game. Some games are good for communication, coordination and overview whereas others are good for developing the abilities to be under calm pressure, quick reflexes and fast decision making whereas other games would be about taking responsibility, orientation or visualization (Ronny Transcript, 19:37).

Ronny pays special attention to the relationships that gaming is able to create; the more atypical ones that would not usually form. His point is that one is not recognized by their person, but rather the Gamertag, i.e. screen name, and the performance associated with that name (Ronny Transcript, 24:53).

The Esport Danmark talent camps that The Danish Recruitment Command attend and contribute to are meant to create a connection to all the gamers that will not go professional (Ronny Transcript, 24:53).
Age is also a relevant factor when considering the outreach to the gaming segment. If a game is played by a group that has a wide age range, is it necessary to adapt communications so not to scare the younger ones and potentially receive bad PR (Anders Transcript, 14:36). The recruitment command will keep sort of an arm's length to the game in the sense that they will not move into the game and start acting there. They will stand outside and communicate into the game or community. This means that the recruitment command will not act as a sponsor (Anders Transcript, 30:19). When a group of full-time professional Danish Army soldiers competed in the Firma CS tournament, they were allowed to play with their team name as The Danish Defence "Forsvaret". The Firma CS tournament in Denmark is the most prestigious amateur tournament and the soldiers had signed up on their own initiative. Their supervisors and the MDPA allowed the team to play under the "Forsvaret" name and wear their service uniforms. This of course entailed some instructions and guidelines on how to conduct themselves and represent the DD in a given setting (Anders Transcript, 31:41). Other improvised initiatives regarding the subject of gaming, simulations and recruitment has also

been reviewed by the MDPA as such not to have any elements fall out of the strategic line that is being worked on in the recruiting command.

*Recruitment Reformation*

The Danish Defence´s recruitment still uses old and conventional recruitment initiatives in tandem with the new gamer recruitment initiative. Being present at career fairs at schools and other places is always relevant as young people who attends these things are usually receptive because they are standing at a crossroad (Anders Transcript, 10:33). The recruitment command will also attend higher learning institutions in same line with the educational sessions they offer in collaboration with Esport Danmark. The difference is that when they attend events at the Danish Technological Institute (DTU), they are not interested in building a pipeline of future potential recruits to certain functions, but rather to gain improved employer branding through informative sessions that demonstrate technological capabilities by coming out to DTU and give technical presentation that are interesting for staff and students. In these sessions, they will not push career options but the students will gain insights into the armed forces and the possibilities within (Anders Transcript, 34:40).

When Anders started his current job in recruitment in 2011, 80 to 90 % of the funds were used for what he calls wide communication channels that entails televised commercials and ads in national newspapers. Today that percentage is around 20-30 %, the rest is digital (Anders Transcript, 17:49). The digital communication allows for targeted communication to a certain target group. That is why all targeted communication is run through digital channels. The wide communication channels like the TV can hit multiple stakeholders at the same time. For instance, TV commercials for voluntary conscription service can speak to both the primary recipient who is the young man eligible for service and his parents who are considered secondary receiver. Whereas recruitment of young people for specialist functions such as pilot or Language Officer can be reached directly online.

The internet has been revolutionary for the Danish Recruitment not only in regards to targeting of certain groups, but also because it shortens the distance between the military world and the civilian world, a distance that is marked by soldiers wearing odd clothing and learning to kill. To make this distance shorter, the internet is a gift to Anders. The internet makes connectivity possible and the computer games can create an interest for the military universe (Anders Transcript, 19:42).

The advantages that lie in being able to recruit focused on specific target groups are of course also available for the competing recruiting entities. The young people that the Danish Defence is trying to recruit are also sought after by the private labour market. This does not mean that targeting is a means where the MDPA can save resources due to efficiency (Anders Transcript, 19:42).

*Professionalism*

The professionalization of gaming that has taken place along the rising popularity of gaming is also a factor in the Danish MDPA decision to initiate the gaming initiative (Anders Transcript, 14:36).

*General digitalization*

Anders is of the belief that society in general has been digitalized and that the DD is part of the greater society in general. So, the digitalization is increasing both inside and outside the military respectively. Skills and competencies developed in the civilian world are sought after in the military but the military also has forces that are sought after in the civilian world. (Anders Transcript, 17:50)

The classic military work, embodied in the digging of trenches and handling of small arms takes up less and less space in the Danish military but it will never disappear. These are things that can always be learned, like the changing of a spare wheel. The classical military skills will not die out but they will play into an increasingly digital framework where a field officer will manage the troops in the trenches with the help of a Battle Management System (BSM) that can be run on a tablet (Ronny Transcript, 11:14). The focus on the future takes point of departure in the electronic and digital world, a world that the current generation of potential recruits have grown up in. They expect a certain level of digital education available, when they enter service. Because they know that simulation can help train skills and scenarios that takes ages to train in the conventional physical way (Anders Transcript, 23:18).

When asked why there is not a focus on the digital aspects of the military programs they are recruiting for, Anders answers that they should probably be better at explaining how digitalization and simulation is a part of a given education after they have caught the attention of a potential cadet or recruit (Anders Transcript, 34:40).

*Effectiveness*

The Danish Recruitment Command has executed their targeted campaigns towards gamers in relation to two training and career programs. The first was for the pilot program that leads to pilots being specialized in flying fighter jets, helicopters or transport planes. With the pilot program there was made content for internet use and a mini documentary filmed with the famous Danish Counter Strike GO team, Astralis, conducting pilot tryouts on national television. After the campaign targeted towards gamers had run, there was a significant improvement in the proportion of qualified candidates. The improved outcomes of the gamer focused pilot campaign led to an Air Traffic Controller campaign more directly targeted towards gamers. Following this campaign, there was a drop in the selection factor. Prior to the campaign, they needed 40 applicants on average to find one qualified candidate. This number fell to 25 and has stayed at this level in the two consequent rounds of applicants. This has led to several positive consequences, it saves time, capacity, money and less applicants are left disappointed (Anders Transcript, 40:20).

*NGO*

Ronny is asked if the association with the NGO Esport Danmark was established to heighten the status of the Danish Defence in the eyes of the gamers. Ronny explains that it was not a matter of public association but it was initially a way to establish contact with the community and establish communication paths with the one organization in Denmark that works as an umbrella organization for gaming in Denmark (Ronny Transcript, 24:53). Working with Esport Danmark has also been a way for the Danish Recruitment command to tell parents who are often worried about their kids gaming excessively, that there are future job possibilities that can benefit from the skills they are building up. The work with Esport Danmark is also an opening to further break down barriers between ethnicity, culture, religion and sex (Ronny Transcript, 24:53).

*Foundation for the Danish gaming/Esports program*

The MDPA first started to target gamers because they needed new personnel for air traffic controllers, and thought there might be a possibility that gamers are predisposed for being good air traffic controllers, because they have experience with selective prioritization etc. Digital material for communication purposes was produced to reach and interact with the segment online. The anchor content of this push took point of departure in a video with a Danish influencer who got to try out a military air traffic controller simulator. He did good and impressed the instructor and the representative from the DD. The influencer, who covers gaming content on his channel, was in an ideal position to establish communication and relevance between his followers and the DD. This led to a lot of applicants and those who were gamers did better in try outs than previous rounds of applicants (Ronny Transcript, 08:07).

The Danish recruitment campaign has not been inspired by another nation's military for the initiative. The initial idea they had about gamers being predisposed for the air traffic controller function due to their accumulated screen time. This was followed up by research into the gamer segment to find out how to match different types of gamers with different profiles that the Danish defense needs (Ronny Transcript, 43:42).

*Brand*

For Ronny is it important that the Danish Defence is being branded as a modern organization, which can be difficult because it is viewed as a traditionalistic organization and a slightly old-fashioned one. He sees it as an opportunity that the DD can go out to these young people that they need because the organization is becoming more digital. Ronny ads that the level of digitalization is a balancing act because added levels of digitalization require additional safety systems. Adding to that, safety comes first so the systems have to be tested thoroughly (Ronny Transcript, 18:20). According to Anders, most young people are associating the DD with the Army. They are not aware that the Navy is totally different and that the Air Force is highly technological (Ronny Transcript, 34:40).

**Jimmi Andreasen**

*Gaming and pilot experiment*

Jimmi Andreasen explains his involvement with the gamer recruitment initiative. His group wanted to explore the possible connection between playing video games and increased performance in certain military educations primarily pilots and Air Traffic Controllers. About three years ago, they started collecting data through their test to explore the hypothesis. This involved the test of gamers' skills, their performance in the selection process and at the Royal Danish Air Force Academy (Jimmi Transcript, 4:54).

He clarifies that they have not actually made any analysis of it. "It is based on a hunch, I would say" (Jimmi Transcript, 2:58). Jimmi tells us, it is a typical issue in Denmark that when we have such small segments it is really hard to statistically prove or do analysis of anything before you reach at least 50 to 100 people which is uncommon. It was primarily the marketing department who used this hunch and limited data to boost the interest for the Royal Danish Air Force Academy. The significant increase in applicants for the Air Traffic Controller education was overall the most surprising part and he supposes this trend might be due to the DD's promotion of it on YouTube (2:58). This observation refers to the DD's sponsorship of a YouTube video made by Danish pro-gamer and YouTuber, Lasse Vestergaard. Here, he tries his luck at the aforementioned job in a Danish Defence simulator; a video that has close to 190,000 views on YouTube (Lasse Vestergaard, 2016).

*Screening and digital mindset*

Jimmi explains how the DD only uses simulation to a small degree during the screening process of certain job positions such as Identification Operators in the Air Force and the War Information Crew in the Navy. These are more demanding specialized positions with a need for special cognitive capabilities since these positions involve radar control. Other positions, such as privates, are referred to as professionally trained soldiers and consequently deal with the manual level of soldiering. These positions do not get involved with much high tech, leaving little need for screening of such skills (Jimmi Transcript, 7:38).

He further goes into the impact of digitalization of future DD screenings, by mentioning potential changes to certain screening expectations if cyber conscription becomes a reality. At the time of the interview, it was uncertain. However, it is becoming a reality from February 2020 (Hansen, 2019).

These conscriptions work with other areas that need technical competencies within IT and from his experience, IT specialists will usually not meet the strict expectations for physical and mental sturdiness and it might not be needed for the job they get (Jimmi Transcript, 7:38). This is confirmed in the aforementioned article where work with IT is the primary part of the conscription and limited capable recruits are accepted, however, normal conscription is included in the ten-month program (Hansen, 2019).

Lastly, he explores his NATO research work with the digital mindset. He explains that people with a digital mindset can more easily handle digitally demanding positions and carry the digital transition of an organization. He believes that, moving forward, a digital mindset will be a parameter of strong competition for the Danish Defence and private companies alike (Jimmi Transcript, 21:18).

**Johnny & Niels**

The contemporary simulations market has changed quite significantly since the early 2000's where Senior Sergeant Johnny Clemen Jensen introduced Steel Beasts to the Danish Army and will most likely change much in the future.

*The old simulations market*

The evolvement of computer graphics and processor power naturally led to both better computer games and flight simulators. While the evolution of military flight simulators continued was a PC flight simulator market for civilian consumers thriving in the 90's. The military tank simulator, on the other hand, has not been as crucial for both the Danish and American Army as there is as such no fatal risk involved in training with a tank compared to an aircraft. The U.S. Army was the pioneer with the Atari based Bradley Trainer as previously described.

The Danish Army acquired a tank simulator from Siemens in the late 80's or early 90's (Johnny Transcript, 8:10). Around 10 years later, the first Steel Beasts game was released. It came out in the year 2000 and was intended as a civilian PC game for the civilian simulations niche market (Wikipedia contributors, 2019). The game attracted the attention of Johnny Clemen Jensen who saw the training options that the game could potentially offer. He proposed to his senior leadership that the Danish Army acquire and implement the game for simulations training purpose. The senior leadership who was presented with this proposal had a hard time accepting the idea of their soldiers getting paid to game at work (Johnny Transcript, 00:43). It took a couple of years before Johnny's idea was accepted as a serious alternative to the now outdated simulator from Siemens. A significant element of this change in mindset among Johnny's superiors was the reconfiguration of a real tank driver control grip to be compatible with a PC after having a USB cable connected to it. This was especially important because the civilian joystick could facilitate incorrect learning and muscle memory is important in the training of tankers (Johnny Transcript, 9:00). It was not only the civilian gaming heritage of Steel Beasts that made it difficult for Johnny's superiors to buy into his idea. eSim Games was a small business employing only two people and the price they offered compared to the established simulation companies like the 100-man strong simulations department of the German defence company KMW that offers full package solutions with both hardware and software, could not be compared. Eventually, they were assured that eSim could deliver what Johnny was advocating for and the process of building up a complete simulation system on the foundation of Steel Beasts software began. According to Niels, this was natural timing in the sense that the PC graphics standard was good enough to deliver adequate digital visuals. Furthermore, the alternative would have been to use heavy and expensive simulation solutions from the big simulation companies, who would also have to service and modernize the equipment when appropriate (Niels Transcript, 18:25). With the current tank simulation solution that the Danish Army has, there is good collaboration with the software developers when it comes to connecting to the simulation's hardware. eSim Games will make codes for the game so the Danish tank mechanics can connect the hardware functions to the game. Furthermore, the mechanics were able to 3-D print certain tank parts for the simulations hardware instead of using the original tank parts for the simulator and thereby saving money (Johnny Transcript, 46:01).

*The simulation market of today*

Niels is focused on the importance of simulations being a photocopy of the real world. One of the reasons is the importance the soldiers put upon the graphics detail and resolution, as Niels put it: “It is important that the simulator is a photocopy of the real world” (Niels Transcript, 18:25). This notion is backed up by Johnny, who states that the soldiers are demanding and have high expectations about high-resolution graphics that almost resemble Hollywood motion pictures. The reason for this level of expectation is found in commercial video games according to Johnny. When the soldiers are introduced to Steel Beasts, are they emphasizing the year is 2019 and that the graphics are not up to date (Johnny Transcript, 11:35). The technical reason for this, as Johnny explained, is that fast-paced FPSs like Call of Duty are confined to a small digital setting whereas simulation games as Steel Beasts allow for free movement and engagement in a digital landscape stretching 120 x 120 kilometers. The resolution becomes less of problem when the soldiers are actually solving tasks actively and immerse themselves in their military function. As Niels explains it: “..the forward air controller and the fighter bomber pilot who trained in tandem did not take long to forget that they were not laying on the ground or flying high in the sky, the way they worked together and the way they concentrated on what they were seeing on their screens and the consequence of their actions that were based on the visual inputs. They were totally lost in the simulation and they would not have noticed if there were 10 people standing next to them because they were working on a task and immersed in the simulation.”

The focus is on eliminating wrong learning and following the NATO principle of VVA (Validation, Verification and Accreditation). So, the simulation has to be a photocopy, not only in the visuals, but also the realism with regards to the functional mechanics of objects. As Niels explains it: “it is not good to have a simulator for a vehicle that does not incorporate the function of a brake booster, as this could result in live accidents when shifting to manning the real vehicle” (Niels Transcript, 50:25). This leads to the notion of trust with regards to the simulators and the live equipment they are to replicate. Niels tells how the old F-16 fighter simulators in Danish possession have been difficult to update, which have resulted in pilots training for an older F-16 model. Displays and data are not the same ones that the pilot would experience in the real aircraft, this is a waste of the pilot’s time.

The tank simulation is set up around the mastery of craftsmanship, as one of Johnny's colleagues added:

> "It is a detail but it is not gamers we are interested in, because what is being practiced here is craftsmanship, simulations only support the craftsmanship they are expected to master. Their everyday job has nothing to do with a mouse, that's why we have the simulator" (Johnny Transcript, 46:30).

This stands in contrast to training of drone pilots that are not exiting a simulator to man the real equipment. They train exactly like they operate; the operational and training interface is the same control station used for the RPA (Remotely Powered Aircraft). Prior to controlling a real flying RPA, the airmen can be instructed while training on a simulator that resembles the live control station. So, the simulation will be almost indistinguishable from the live training and missions which is not the case with the tankers that have to go from a booth to manning a real vehicle.

*Virtual simulator*

The tank simulator that the Danish Army uses is built up like the internals of a tank with screens displaying what cameras or lenses would project in the real tank. The Leopard 2 tank that the Danish Army runs and train with Steel Beasts can fire grenades from its cannon up to four kilometers away. This is difficult to grasp for new tank recruits that may be used to seeing direct feedback from the video game. But when one fires a shot that is aimed four kilometers away, one will not be able to see the impact in either Steel Beasts or in real-life (Johnny Transcript, 12 Minutes 39 Seconds). This is realistic but does feel uncool for the guys simulating tank combat when they compare to their civilian FPS games. The realism related to firing grenades over large distances is also present when it comes to the cliché military activity of waiting. Johnny explains that the games the soldiers play from home have no breaks and nonstop action whereas Steel Beasts resembles war more realistically with waiting time interrupted by high-intensity combat followed by more waiting time (Johnny Transcript, 13:02).

*Seriousness*

The soldiers being trained in tank warfare with Steel Beasts are of a generation that knows its ways around digital interfaces and they have no problem caching on to Steel Beasts. As Johnny phrases it: "We appreciate and enjoy that they can do everything with their fingers without looking down" (Johnny Transcript, 13:19). This helps in the training, but there are

times where the teachers must emphasize the seriousness in what they are teaching and that the 3D targets they are aiming at can be real people, so Johnny underlines there is a balancing act in explaining that it is not all fun and games.

This seriousness is also evident in the fact that the tanker students play Steel Beasts in their spare time. The students are taught on a Steel Beasts PRO version in the classroom and a personal edition that the students can bring home on their own laptop to practice and have fun. The cadets at the officer school in Copenhagen are also issued this personal version of Steel Beasts and are even assigned homework for the game (Johnny Transcript, 14:26). According to Johnny, it is taken for granted that the soldiers are highly motivated, and they are aware that the lack of skill will only fall back on themselves.

Likewise, there are many things that are not needed to simulate because they are barely relevant in the real world. This is seen with the lack of need to implement buttons in the simulator that are never used in practice when manning the real tank. The focus from the tank instructors side is to make sure that the simulator does not create openings for wrong learning and that new improvements on the tank are correlated with the simulator software and hardware, or that updates on the software does not interfere with the simulation hardware (Johnny Transcript, 26:17).

Niels states that it is of the utmost importance that the soldiers that are sent out on mission come home in the same state as they left and simulation is a means to meet that end: " I have been a leader of NATO's work in this whole field, and I have briefed the leadership of NATO, and one of the things we communicated was that it saves lives, it saves resources, money and time…." (Niels Transcript, 26:07). This is in line with previous statements that underline the importance of having simulations to train scenarios that would otherwise be impossible to train prior to deployment or other unexpected military scenarios. Here one should not forget that Niels works with simulation on a large spectrum. From training one individual in a flight simulator so the pilot has confidence in his abilities before taking to the skies, to incorporating this flight simulator with others, so pilots can train formation flying and combat teamwork. These flight simulators can then battle out digital combat scenarios with support from their Army branch colleagues manning tanks and personnel on the ground. Further, forces from other NATO-countries can support the combined Danish effort with their respective Air Force and Army to defeat a common foe. Taking these considerations

into perspective is it not difficult to imagine the problems that can arise in an actual war scenario if collaboration and combat on this scale has not been simulated prior to the real thing.

*Efficiency*

The Danish Defence is difficult to change in this regard, as Niels explains it. The Danish Defence cannot just swipe a credit card. It has to go through an elaborate buying process (Niels Transcript, 39:03). When asked about the current state of the simulations and commercial gaming market and the apparent shift from the U.S. military supporting universities and gaming studios in developing technology for them, to the current situation where the commercial gaming industry is the self-reliant leader in technologies around gaming and simulation (Niels Transcript, 39:03). The current focus of Niels and his colleagues are how to get the most out of the commercial civilian market. Game engines are a special focus because there is no need to reinvent the wheel as Niels specifies (Niels Transcript, 39:03).

According to Niels, it is important that the software can work together like Lego bricks, so the HLA (High Level Architecture) makes it possible for nation states to achieve connectedness between their different kinds of troops' digital training capabilities while being able to participate in larger NATO simulations sessions. It has not always been possible to conduct "Distributive Operations Capabilities", as digital military simulations were limited to LAN (Local Area Network). This meant that forces from one country could only simulate with other human participants that were connected to the LAN, that in practice entails that soldiers from one garrison could not train with soldiers from another garrison. With the garrisons being connected tankers can practice in combination with infantry located at the other side of the country or another type of unit that they might work with in an actual war scenario. Prior to this interconnectivity, it was standard procedure in the Danish Army to move the soldiers geographically for them to simulate together digitally. This also means that soldiers across different garrisons will have professional relationships only in the digital world, unless they cross paths during live exercises (Johnny Transcript, 51:33).

Simulations can also help with the efficient procurement of new weapons systems. The Danish Defence has done this several times to see how different fictitious scenarios would play out when testing a weapon system against a given threat. This sort of digital

experimentation is significantly cheaper that trying to simulate it live (Johnny Transcript, 27:53).

Routine is a major driver for the use of simulations. From the instructors' side there is special focus on the soldiers' ability to follow procedure. The instructor can see and listen to the soldiers' actions from his own booth. The reason for this focus on routine and following procedure is that the soldiers' have to fall back on this training instinctively when they are under pressure (Johnny Transcript, 40:00).

The training in simulator also improves concrete skills to the level where it is clearly measurable. Johnny shares that the Danish soldiers being trained significantly improve their real live fire skills when training in Steel Beasts. The simulation in this regard is not about saving ammunition in exchange for bigger electricity bill, there is also a safety aspect to it:

> "We don't simulate to save ammunition, but the stupid mistakes that tend to be expensive are best kept within a simulator setting. After the stupid mistakes are made in the simulator can we go out and do it live and right in the first try. So indirectly, one can say that we save some ammunition, but the mistakes we make in here" (Johnny Transcript, 42:36).

*Digital mature soldiers*

With the apparent digitalization of society and the military, it is to be expected that the common soldier must adapt to this reality. According to Niels, this is not a problem because it's a tendency that makes things easier:

> "I think it follows the development of society because it's a tendency that it becomes easier. I would think of the earlier days where they had to drive old military trucks with two or three mechanical gears or declutches, one would not have real synchronization so one would really have to be acquainted with the noise to know it was locking in, or else one would not get it in gear. Today with electric driven vehicles and the near future of these vehicles is it not a problem, as it is now enough to just shift a lever up and down to shift gear. In this way, it has become easier and technology helps us. To be a captain on a ship requires a lot of skills, but these days it is possible to tell the ship to dock itself, and it will do it with the help of the

> technology that controls a smart steering system using back thrusters, speed and so on" (Niels Transcript, 27:24).

This digitalization is also apparent with the soldiers that receive their first training in Steel Beasts. Johnny can clearly feel a difference compared to a decade earlier with regards to the soldiers' ability to quickly familiarize themselves with the simulation game: "… I can see throughout the generations that the young people we get through today only need two minutes of introduction if there are buttons and a screen and from there they can rely on themselves. Previously was it necessary for me to stand and explain everything" (Johnny Transcript, 3:54). But this also entails some problems from Johnny's perspective as an instructor. He describes how this more tech-savvy generation prefers instructions on the screens, and that the alternatives are not exciting enough. This is a general problem that affects all instructors in the Danish Defence according to Johnny. Therefore, it is a necessity for instructors in general to focus on how they can make their courses smarter, faster and more "sellable" to young people. This was a reason behind the Danish Defence improving their e-learning (Johnny Transcript, 3:54).

Occasionally, a soldier without any kind of gaming experience has to be taught in Steel Beasts because it is obligatory when being educated on a tanker function. This type of students can have some frustration that is not typically seen with the gamers. These frustrations are linked to the handling of software and hardware. One platoon leader who had been solely interested in bicycling during his early youth was likely to blame his digital shortcomings on the computer or making excuses such as "I am not used to gaming" (Johnny Transcript, 15:36).

One of the clear advantages of digital simulations is the military's ability to use the recording of the simulations for review and improvement initiatives. The Danish tankers are not utilizing this potential in the same thorough way as the Americans. Classification of previously conducted missions can make it too sensitive to use for training (Johnny Transcript, 49:33).

*Simulation technology as a recruitment driver*

When asking Niels how simulations can help strengthen recruitment efforts in relation to a tech-savvy youth that might think that the military is just rifles and trenches, is it clear that he sees possibilities for exploitation. He states that it could be a possibility to do as the Danish Center for Cybersecurity, with the phrase:

"Hey, pay attention to us not being technologically inferior. We might be the best in the front row and we have something to offer. Our aircraft, helicopters, our communications systems, we are currently doing stuff with the artillery. We are in the top echelon and we are getting really good" (Niels Transcript, 31:23).

He supports this idea further by going into how both Danish and foreign companies are part of the work with exploiting the technology and making solutions that work for the Danish Defence and that standardization of this technology in NATO context allows for interaction across national borders and oceans.

*Physical standard*

Simulation is no excuse for lowering physical expectation or demands for soldiers. The soldiers who operate the Danish Leopard tanks need to be able to operate the tanks as the engineers who designed them intended. A part of that is loading the tank's cannon with 25 kg grenades, a procedure that should ideally be done around 6 seconds. The loader is expected to do it in around 6 seconds no matter if the tank is moving or fatigue is straining the crew (Johnny Transcript, 17:01).

*Gamer Type*

When asking Johnny to do a teamwork comparison between a gamer and the previously mentioned cyclist who had never gamed, it is clear the gamers have a natural feel for using controls while communicating at the same time (Johnny Transcript, 21:02). He adds that the young people who master digital skills can be a great asset for the armed forces. The Dutch Army employs young personnel who are tasked with engineering and building up structures and landscapes for simulations maps. In a military department consisting of 70 men, 10 of them are young people who have an IT-educational background and who typically are part of the gamer culture. The wages that these young people receive are not attractive but the conditions under which they work is referred to as a "party" by Johnny. He puts emphasis on

the notion of the Dutch being good at utilizing the potential of their young people while adding that the DD is opening their eyes to the possibilities with their soon to be cyberwar conscription program.

*Strategy*

In the Danish Defence Acquisition and Logistics Organization, they are very aware of the importance that technology holds in connection with the military doctrine and the Danish Defence as an organization. To them, technology, doctrine and organization are interconnected in a triangle where they each hold a corner. These three aspects go hand in hand and one cannot change an aspect or corner without revising the other aspects. This principle is something that is always in the back of Niels' and his colleagues' minds. The principle is that even though technology changes from archery to mobile phone controlled IED's or missiles, the way we conduct war will change with the evolution of technology too (Niels Transcript, 46:00).

*Preparing for the future*

NATO has a Science and Technology Organization (STO) that employees 5000 full time scientists and has 200.000 people connected to their different networks (NATO, 2018). Niels is part of one of the 5-7 panels, Human Factors, and has previously been the head of the Modelling Simulation Group. He shares that he and his colleagues go out to what they call users to access needs and wants (Niels Transcript, 46:00).

**Ryan Meaux**

*Opportunities that gaming brings to the U.S. military*

From Ryan Meaux's perspective, the U.S. Army's move into gaming "brings in a completely different set of people" (Meaux Transcript, 4:38). He mentions how many forms of technology such as bomb disposal robots, drones and flight simulators use gaming technology, PlayStation-style controllers for robots and VR-headsets for the simulators. In addition, the Army has a gaming studio in Alabama where they build the flight simulators that the Air Force uses. Therefore, new people with gaming experience are valuable to the U.S. Army since they have been self-trained to sit behind a computer and work with the

aforementioned types of technology. As he puts it: “They already have the basics of it down without them even really knowing it” (Meaux Transcript, 4:38).

*Recruitment segmentation*

However, Meaux clarifies that the recruitment efforts of U.S. Army eSports (USAE) does not involve recruiting gamers per se, but rather anyone with an interest in video games who might want to join the Army at the present time (Meaux Transcript, 10:34). The focus of the U.S. Army is to use gaming through its variety of genres, streaming platforms and consoles to reach the vast gaming community. Meaux explains this decision is based on the Army’s size and consequently its ability to divert efforts to smaller subsections of the community (Meaux Transcript, 41:41). Such a size, gives the U.S. Army the possibility to be very present within a wide array of the community.

> “The purpose of that (making teams in all popular competitive games) was because the gaming community is such a vast market. We need to be in just about every market humanly possible” (Meaux Transcript, 40:40).

Meaux illustrates the sheer size of the U.S. Army Recruiting Command (USAREC) by mentioning a few of the sports the Army already has teams in such as basketball, baseball, football, track and wrestling (Meaux Transcript, 42:20).

Meaux did not explain why they want to reach everyone, but looking at the U.S. Army’s news site, the Army did not meet its expected yearly quota in 2018 and therefore, they are trying to change that trend partly by moving into eSports and gaming (Myers, 2019).

We can observe this reasoning on whether they see recruitment via gaming as an issue. He argues that recruiting is tough and that most people play video games anyways so he does not see an issue with such recruitment initiatives (Meaux Transcript, 6:29).

*The USAE program*

The aforementioned teams refer to recently created or soon to be created eSports teams which have been formed to do various promotions for the Army. The teams were created by doing tryouts for over 40 different gaming titles and since it was Army-wide, people applied from a plethora of job positions within the Army. They pick the top 10 best people and work with them (Meaux Transcript, 47:20). The program is based on headhunting within Army personnel and people who want to join need to go through regular Army job training before they can join the teams. Once they have been headhunted, the USAE job is playing video games full-time, 9-5 Monday through Friday (Meaux Transcript, 25:19). The term the U.S. Army uses to refer to such Army team players is U.S. Army Recruiter Liaisons (Glenn, 2019).

These liaisons are only given a 72-hour crash course in recruiting but mostly when they are in action, they game, interact with the kids, telling them why they joined the Army and their Army story. The USAREC defines the Army story as personal, detailing the soldier's own Army experience such as their enlistment experience, assignments, awards, campaigns and assignment locations. According to USAREC (2019), this story helps the prospective future soldier understand and see the world of the Army (p. 16).

But when it comes to extensive information about the Army, fully trained recruiters will take over (Meaux Transcript, 50:56). When asked whether the event recruitment process is similar to the USAREC's American football team, Meaux replies that these sorts of teams follow the same avenue for events when it comes to recruitment (Meaux Transcript, 51:45).

The recruiter's Army story is personal and details his own Army experience. The recruiter's Army story may include their initial enlistment experience and subsequent assignments, promotions, awards, campaigns, and assignment locations. The recruiter's personal story reveals the world of the Army to a prospective future soldier. It allows them to see the Army through the recruiter's eyes, and picture themselves as Soldiers. The recruiter working face-to-face with a prospective future soldier has the most immediate and effective impact on mission success (USAREC, 2019).

*Engagement*

When it comes to engagement for the USAE, the internet is the strict focus of the Army when keeping in contact with the target group. "We don't do no phone calls, we don't knock on people's doors (Meaux Transcript, 19:50*)."* A reference to the previous engagement strategy that involved such outreach tactics has been overhauled after the bad results in 2018 (Myers, 2019). He even presents how the program was established due to the high engagement that SGT. Jones and he were able to produce on Twitch, "It had nothing; it was a brand-new channel. In less than 24 hours, we had over 2 million views. The channel is up to 10,000 followers now, so, it was highly successful. Once, he (the two-star general) had seen that, he was all for it" (Meaux Transcript, 24:40). Engagement consequently accumulated to views rather than leads in this context.

First, he engaged the target group via an AMA thread on Reddit, however, it was Reddit who reached out to Meaux in the first place (Meaux Transcript, 38:00). The platforms he mentions are Twitch, Mixer, Facebook and YouTube. To add to that list, searching online via Google leads to additional USAE Social Media platforms like Twitter and Instagram. Meaux argues that the people from this group spend up to 6-8 hours a day on these platforms (Meaux Transcript, 19:05). What they generally do on social media is post a lot of videos of people at events messing around with robots and simulators (28:58). Increased engagement also happens through cross-posting with big gaming companies. So far, Meaux argue that they have had a good amount of success (Meaux Transcript, 19:54). Examples of collaborations with private companies include several interviews they have done with ABC, CBS and a documentary with HBO.

The material they pass out at the events are typically STEM-related (Science, Technology, Engineering and Math) based on the research they have made on the market and gamer interests. Examples are robots and the flight simulator but anything that can be transferred from gaming over to the army is what they will bring (Meaux Transcript, 11:34).

Another way they engage people at events is the use of their gaming trailer "equipped with eight gaming chairs, multiple screen monitors both on the inside and outside, and a variety of gaming consoles" (Sherlock, 2019). They use it to allow gamers to compete against the U.S. Army eSports team members in various games. Spectators who wait in line to play against the teams are engaged by recruiters and U.S. Army eSports employees discussing the 150 job

opportunities as well as benefits and opportunities of military service. They attribute a lot of this engagement to a goal of changing the misconceptions people have and leaving a positive impression of the Army (Sherlock, 2019).

*Misconceptions go both ways*

To further explore these misconceptions, Meaux reflects on the type of images, people commonly have of the Army and military personnel as well as how the Army tries to combat negative stereotypes. From his perspective, the average American thinks that the people in the military are brainwashed, killing machines and some even think they have tracking devices implanted (Meaux Transcript, 35:38). This is attributed to the minimal amount of people, less than one percent, who get to interact with military personnel combined with the mostly negative portrayals of the military in the media (Meaux Transcript, 34:24).

He finds that these people change their opinion when they meet the soldiers in person and realize they are no different from themselves (Meaux Transcript, 34:24). This partly connects to the idea of furthering the Army's brand by getting as broad of a pull as possible. In addition, Meaux brings up the possible backlash from the community both based on early negative reception but also if they had decided not to do anything but recruit. As he puts it: "it is like our general says, we got to make our street cred first…"(Meaux Transcript, 30:16). He argues that although they move into the market to find new recruits, it is more important to win and be good in the community. If it was the other way around, it would be obvious why the Army would not be received well. This illustrates that the broad pull also relates to the illustration that the Army is in it for the long run. Similarly, he mentions the need to have knowledge of the subject matter (gaming and the gaming community) when interacting with gamers at gaming conferences. "You don't want to be identified as a person who is a fake" (Meaux Transcript, 16:10). For the U.S. Army, it is important that they go all out and that they understand what group they are talking to, but at the same time, proper representation of the Army is said to be essential too. "… the top 10 people might not only be based on skill because if we have someone who's fat, they're not a good representation of what we are as a whole..." (Meaux Transcript, 47:20).

This image management comes down to a lot of facets of these athletes. It is not only about how good they are at the game but also, who they are, what jobs they have, how they look

and the way they carry themselves (Meaux Transcript, 47:20). This discussion shows both the way the U.S. Army sees themselves as healthy, both physically and mentally, but also portraying certain expectations of its recruits even gamers. On the other hand, the decision to set certain standards for their gamers also comes down to breaking down barriers within the Army itself, “The average person in the military they use the old stereotype; fat, sits in his mom’s basement all day but we’re breaking down that stereotype by using that special forces guy that’s a gamer” (Meaux Transcript, 33:00).

So, the acknowledgement of USAE is not only needed from the gaming community but likewise from the military community.

*Recruitment process*

Despite leveraging a lot on technology in the USAE for engagement, Meaux states that the U.S. Army recruitment process still works non-digitally. The process takes about a week and goes as follows: People with no knowledge of the Army meet the recruiters at events and are told about the opportunities and benefits of joining the Army. Those who are interested fill out an information card, which will be passed on to a local recruiter who schedules a meeting with them. The person comes into the office and learns more about the Army’s offerings. If they still find it interesting, they will have to take a mental aptitude test, a physical and lastly, they pick a job and sign a contract (Meaux Transcript, 43:48).

To contrast this, the Navy has moved to a digital recruitment process something the Army is inspired to do as well to save money and effort (Meaux Transcript, 45:17).

## 4.4. Focus Group

In short, during our focus group interview (appendix H) various themes around the impact of gaming in the military were explored.

The majority of the focus group play multiplayer video games classified as a First-Person Shooter and Strategy games, like Counter Strike, League of Legends and PUBG, games

played in eSports. On the other hand, simulation games are only mentioned in past play experiences but mainly in military use.

From a skill perspective, most of them argue for gaming experience's transfer over to areas of the DD that work with similar technology. They mention the video-game-like feel of controlling a tower as a sniper, the similarities between video games and Steel Beasts, and the fast reaction time and multitasking inherent in many video games that is needed in Air Force positions.

> "They do like a hundred things in ten seconds. It is crazy. These are skills the Danish Air Force are looking for or can use" (Appendix H).

When comparing simulation games and commercial video games, they describe video games as unrealistic products made for pure fun, competition and socialization: "When I play Counter Strike, it is not only about getting headshots. You cannot "carry" a team that does not work together (appendix H)." On the other hand, they describe simulation games as slow and boring, "…you spent approximately an hour before you find the target ship you had to bomb and then about an hour getting back to the aircraft carrier."

While gaming is a fully accepted part of their spare time, they problematize its use in DD recruitment and training. They reason that gaming's lack of reflection of reality and focus on fun makes it unfit and unethical for portraying the military experience since, "Fighting and blowing stuff up takes up about two percent of the work as an Army soldier."

Lastly, the focus group discusses the difference between the U.S. Army and the DD, and what potential impact each organizational culture has on the extent of gaming's application in recruitment.

The DD is mentioned to be strongly against anything they deem to be wasteful or express bad demeanour. They exemplify that commonly operative units look down on recruitment promotion, seeing it as moving resources away from units with already few funds for real-life training, "Every time the Danish Defence tries to promote itself, the employees in the operative units see it as resources taken away from the operative work" (appendix H).

In addition, they attribute this cultural mindset to DD's conscription recruitment tradition making new recruitment entertainment initiatives like gamer recruitment possibly be seen as wasteful like the newly introduced Social Media team (appendix H).

On the other hand, they see the U.S. Army as a "Sales Army" since they do not have conscription. They argue that recruitment entertainment is highly used with a high budget where promotion teams in sports are frequent.

## 4.5 Analysis

### 4.5.1. Content analysis

Now that we have reviewed the interviews "separately", we will compare and analyze the top 50 most frequent words expressed by different groups of interviewees to find similarities and differences between them. The design of this content analysis is inspired by the one found in (Tackney, Chapell, & Sato, 2017).

**Step 1: Mapping**

The total number of interviews amount to six in total. As we mentioned in our research method section, the interviewees represent two different countries: Denmark and the United States. The majority, five out of six, are Danish while only one is American. Judging from this, we will mainly be able to analyze the Danish view on gaming technology. However, national culture is not the only cultural influence. The Danish Defence interviewees all have different ranks and work in different departments.  For example, 50 % of the interviewees work for the MDPA.

**Step 2: Military affiliation**

The way we analyze the interviews is by sorting them according to their military departments and hence, their work with gaming/simulation technology: The MDPA, Danish Defence simulation workers (DDS) and the USAE (U.S. Army eSports). As we know, the MDPA interviewees contain Ronny Vossen, Anders Bech and Jimmi Andreasen who works with

manning the DD units which also involves gamers. The DDS group contains Niels who is from a department in charge of procuring and maintaining military materiel like simulation tech for DD units and Johnny who works with simulation tech in a tank regiment. Lastly, the American interviewee, Ryan Meaux works with gaming recruitment in the USAE.

**Step 3: Word frequencies**

To explore the most discussed terms, the top 50 frequently occurring words of each of the aforementioned groups were identified, leaving out any unnecessary words such as “and”, “or” etc.

Word frequencies are explored on two levels. First, we explore the similarities and differences on a department level within the DD, comparing table 2 and 3, which each list the MDPA and the simulation workers top 50 words by frequency of occurrence. Then we move on to comparison on a national level, comparing the two DD groups to the most frequent words used by the USAE found in table 4.

When we start comparing the two groups within the DD, we find various themes that seem to protrude in the most common vocabulary but also different words for each group. One is each department view on gamers and gaming technology and their usefulness within the DD.

**Table 2.** MDPA top 50 word frequencies by Nvivo 12

| | | | |
|---|---|---|---|
| Gamer | 44 | Flyvevåbenet | 9 |
| Uddannelses | 23 | Mindre | 9 |
| Simulerings | 20 | Relevant | 9 |
| Gaming | 18 | Initiativ | 9 |
| Pilot | 17 | Rekruttere | 9 |
| Computer | 16 | Allerede | 8 |
| Sammenhæng | 16 | Moderne | 8 |
| Sport | 15 | Spille | 8 |
| Digitale | 15 | Særligt | 8 |
| Digitalt | 14 | Virker | 8 |
| Bruger | 14 | Droner | 7 |
| Samarbejde | 14 | Erfaring | 7 |
| Spiller | 13 | Finder | 7 |
| Kompetencer | 13 | Holde | 7 |
| Mennesker | 12 | Muligt | 7 |
| Forskellige | 11 | Stillinger | 7 |
| Gamerne | 11 | Tilstede | 7 |
| Kigger | 11 | Univers | 7 |
| Samme | 10 | Militær | 6 |
| Computerspil | 10 | Soldat | 6 |
| Rekrutterings | 10 | Fordel | 6 |
| Sammen | 10 | Baggrund | 6 |
| Udvikling | 9 | Bredt | 6 |
| Esport | 9 | Digital | 6 |
| Bedre | 9 | Drone | 6 |

**Table 3.** DDS top 50 word frequencies by Nvivo 12

| | | | |
|---|---|---|---|
| Simulator | 54 | Fremtiden | 6 |
| Gamere | 24 | Holde | 6 |
| Sammen | 23 | Kører | 6 |
| Steel | 21 | Masse | 6 |
| Gaming | 17 | Opgave | 6 |
| Verden | 15 | Penge | 6 |
| Firmaer | 11 | Sparer | 6 |
| Briller | 10 | Startede | 6 |
| Bruger | 10 | Udvikling | 6 |
| Soldater | 10 | Våben | 6 |
| Samme | 9 | Bedste | 5 |
| Systemer | 9 | Bevæger | 5 |
| Træne | 9 | Fotokopi | 5 |
| Version | 9 | Kampvogn | 5 |
| Gamle | 8 | Koster | 5 |
| Kampvognen | 8 | Lever | 5 |
| Lande | 8 | Område | 5 |
| Mening | 8 | Samarbejde | 5 |
| Mennesker | 8 | Sikkert | 5 |
| Skifte | 8 | Sjovt | 5 |
| Leopard | 7 | Skyder | 5 |
| Virkelig | 7 | Soldaterne | 5 |
| Simulere | 6 | Spille | 5 |
| Bedre | 6 | Svært | 5 |
| Forskel | 6 | Teknologi | 5 |

What is most clear in the comparison is both groups in the Danish Defence are similar in their skew towards *gamer(s*), found 44 times in the MDPA interviews and 24 in the DDS interviews while *gaming* is only mentioned 20 times by the MDPA and 17 times amongst the DDS. Firstly, we would like to make the readers aware that *gamer* in Danish can be used as an action verb "to game", however, after investigating the interviews, it was found in such form on just two occasions demonstrating a limited impact on the overall data. Other than that, these numbers show both groups' seemingly higher interest in the community of gamers rather than the act of playing video games which is only mentioned 10 times by the MDPA and none by the DDS.

But is there a difference in what interests the interview groups about gamers? It seems to be the case, based on what comes up in Nvivo's cluster analysis of *gamer* in the two groups. Here, we find that the MDPA uses the term in connection with *special* while DDS uses it in a cluster with the *simulator* (appendix G). One is an adjective describing the gamer group and the other links the group to the technological equipment. In that regard, it illustrates the context of each group and where each focus lies in either recruitment or training. This is further accentuated outside of the interviews where the word *special* can be found in a DD

recruitment advertisement titled “Gamer in the Danish Defence” shown at the Blast Pro Series gaming tournament and also found on their YouTube channel, “If you are a gamer, you can be of *special* use to the Danish Defence” (Forsvarets Uddannelser, 2019).

For the MDPA, *competencies* (13 mentions) seems to be the key focus word that links the words *gamers* and *special*. According to Cambridge Dictionary, the meaning of the word can be attributed to a work context, “An important skill that is needed to do a job” (Cambridge). From this observation, we can tell that gamers are described seriously from the MDPA’s standpoint linking it to qualifications involved in a job. We also observe that they present specific examples of professional competencies gamers have based on their experience like reaction time and 3D visualization (Ronny Transcript). These competencies are based on results found in scientific experiments (Ronny Transcript). In that sense, the MDPA uses argumentation and support for gamers’ use in the military.

Furthermore, we can analyze the extent to which recruitment of gamers with such abilities go. The frequent word for where gamers fit in the Danish Defence is *education* (23 mentions). However, we see that the one that prevail is *education* within *the Air Force* (9 mentions), illustrated by the common word *pilot* (18 mentions). We also previously found the word Air Traffic Controller mentioned in two different variations both with six mentions, however, due to a need to edit the MDPA table data and the lowest mention rate of each variation, these words were seemingly chosen to be left out by the Nvivo program. Due to their combined high frequency, we decided to include it in the analysis. These two military educations and positions exemplify where the MDPA find gamers useful which is the *Royal Danish Air Force* (9 mentions). These are mentioned as particularly demanding and: “Normally, it is only about 4 percent of the Danish population who has what it takes to become a pilot.” (Ronny Transcript, 00:00). We do find examples of other educations where gamers fit but only one entails something other than the Air Force. What is especially interesting about these educations is that they frequently apply simulator training, exemplified in the DD’s collaboration with YouTuber Lasse Vestergaard where he tried an Air Traffic Controller simulator (Vestergaard, 2016). To further support this observation, Ronny Vossen explains how these positions fit gamers since they work with high tech communication equipment (Ronny Transcript, 29:53).

Looking at the DDS' word *simulator* (54 mentions) commonly clustered with *gamers*, we find that this is the most commonly frequented word by this group with a considerable lead to both *gamer* and *gaming*.

Something that can be attributed, on the one hand, to the context of the interviewee group but more so that gamers and gaming are perceived as of low importance compared to the practical use provided by the simulation game technology in their field, as an unknown soldier state:

> "We are not interested in gamers rather it is the practice of our craft which the simulator supports because normally, they (the soldiers) have nothing to do with a computer mouse (unknown soldier in Johnny Transcript, 46:30)."

This quote illustrates what the DDS uses the simulation game technology for which is to *train* (9 mentions) *soldiers (*10 mentions). Therefore, the technology usefulness and appliance of simulation to train soldiers so that they can play out scenarios as Johnny Clemen Jensen mentions, "There is a large number of soldiers who have never touched it (Steel Beasts/simulation games) before (Johnny Transcript, 20:10)." On the other hand, he mentions how young soldiers are much more competent with computers and the simulation games they give them, making the pick-up process is much faster (Johnny Transcript, 3:54).

However, the difference between the importance of gamers in the MDPA and DDS is that one finds certain self-taught competencies important to get into an army education, while the other sees technological knowledge as a bonus for parts of the military training but not really a prerequisite to get in. We see this similarly agreed upon by the MDPA. *Simulation* (22 mentions) occurs more frequent than *gaming* amongst the MDPA interviewees showing a strong interest in this technology as well illustrated by Anders' quote: "… it is really nice for our educators and in our units that use simulation to get someone who just says 'that is really cool'"(Anders Transcript, 23:18). It illustrates the stronger focus on transferring people's gamer skills to get better use of the simulation technology in the Danish Defence.

Despite this slight variation in focus, it is apparent that each group for the most part refers to the practicality, utility and seriousness of the application of gaming and simulation technology. This seems apparent by just looking at Oxford's definition of (*E)sport* (combined 24 mentions by the MDPA), "a multiplayer video game played competitively for spectators, typically by professional gamers" (Lexico). We see it similarly in the DDS interviewees'

description of simulation technology as something useful to train how to perform military *assignments* (6 mentions), *shoot* (5 mentions) and use certain *weapons* (6 mentions). We also see this seriousness and rationality expressed in the focus on *cost* (5 mentions) saving capabilities, both fiscal and human casualty costs, of simulation technology supported by words like *money* (6 mentions) and *safe* (6 mentions).

However, there is one frequent word applied by DDS interviewees that seems to be in conflict with the professionalism and seriousness of military simulation, which is *fun* (5 mentions). Although it is not the most recurring word in the interviews, the interviewees take *fun* as an important way for the soldiers to learn, "they are sitting down and having fun and we get something back in return (Johnny interview, 14:26)." The reference refers to the decision to allow the soldiers to take home a version of Steel Beasts for them to practice with. To Johnny, military learning should be fun but it becomes apparent that fun in a military sense has limitations. Both interviewees keep the *fun* within a controlled environment and with certain expectations. First, Johnny explains that the home edition of Steel Beasts comes alongside expected homework (Johnny Transcript, 14:26) and the fun of the soldiers playing against each other, leopard versus leopard tank, is not very common because there is a risk of it leading to mislearning of military reality (Johnny Transcript, 41:00). Second, Niels says that pilots typically find photorealistic simulators fun because they are relevant to their jobs (Niels Transcript, 50:25).

The last similarity that can be found is the agreement that the technological and societal *development* (MDPA -10 mentions, DDS – 6 mentions) has a major influence on the DD. While the MDPA interviewees also use the word when talking about the development of skills mentioned before, both use the word when referring to the *modern* (8 mentions by the MDPA) Danish Defence. According to them, the digital development causes the military to deal with a smaller and more efficient military, making them reliant and influenced by digitalization and gaming to do so.

*The DD compared to the USAE*

The USAE and the two other groups express both similarities and differences.

**Table 4.** USAE top 50 word frequencies by Nvivo 12

| | | | |
|---|---|---|---|
| Gaming | 54 | eSports | 8 |
| Gamers | 35 | Events | 8 |
| People | 33 | Relation | 8 |
| Army | 30 | Training | 8 |
| Military | 24 | Type | 8 |
| Work | 20 | Whole | 8 |
| Time | 18 | Companies | 7 |
| Community | 17 | Guy | 7 |
| Play | 15 | Internet | 7 |
| Video | 15 | Market | 7 |
| Different | 14 | Process | 7 |
| Now | 13 | Sit | 7 |
| Know | 13 | Social | 7 |
| Talking | 13 | Simulator | 7 |
| Job | 12 | Best | 6 |
| Person | 12 | Hours | 6 |
| Good | 11 | Initiative | 6 |
| Media | 11 | Robots | 6 |
| Want | 11 | Skills | 6 |
| Bring | 10 | Take | 6 |
| Join | 9 | Tell | 6 |
| Teams | 9 | Effort | 6 |
| Looking | 9 | Approach | 5 |
| Program | 9 | Becoming | 5 |
| Come | 8 | Call | 5 |

*Gaming, gamers and simulation*

Firstly, Ryan Meaux from USAE has *gaming* as number one with 54 mentions instead of *gamers* as we saw in the DD interviews. From what is apparent, the U.S. Army mostly refers to the impact of gaming, whether it is the object of video games, the events and communities surrounding it or the act of playing video games. We clearly see this emphasis on gaming as a medium in the U.S. Army eSports program explanation video produced for the National Gamer Day. Here, Sgt. Jones argues for the program's validity through its ability "to connect America to its Army through the passion of gaming" (The U.S. Army, 2019). Therefore, we observe a focus on bonding through the act of playing video games rather than targeting and recruiting gamers which can explain why the frequency is different from the DD. Secondly, they connect commercial gaming to areas of military work such as Army training in commercial games, stress-relief and competition (The U.S. Army, 2019). Thirdly, they also emphasize the growing popularity of gaming as a medium as a cause for taking this logical step to reach a larger audience. This focus on a larger audience seems to explain the reason why *gamers* is the second most mentioned with not nearly as high of a frequency (35). Gamers to the USAE, refers mainly to the eSports team members they have headhunted, which is further accentuated by the difference in how they perceive and proceed within the community.

Other than gaming and gamers, our interviewee from U.S. Army eSports refers to *simulators* (7 mentions) to a much lower degree than the DD. We find them mentioned mostly in the context of material to bring to events and how they use the simulation technology they have. The USAE does not place importance on portraying education with high amounts of simulation, but rather show what things they have that can relate to gaming. Therefore, we see a transfer of simulation to gaming than transferring gaming skills to simulation, "Pretty much everything you can think of that can be gaming related that can transfer from gaming over to the army that's what we bring out there (Ryan Meaux Transcript, 11:34)*."*

*Community*

Therefore, instead of concerning themselves with gamers' skill development and their relevance to specific military educations like the Danish Defence, they care about reaching everyone in the *community* (17 mentions) who is interested in gaming regardless if they play or not.

The *gamers* (35 mentions) referred to by the U.S. Army are for the most part the special recruiters that are hired as a gateway into the gaming community. In that sense, Meaux talks a lot about creating a personal one-on-one *relation* (8 mentions) between the army (its gamer recruiters) and the gaming community. We do see, however, that Meaux agrees that the army and its representatives have to *know* (13 mentions) the type of people they are talking to. While the MDPA want to be knowledgeable on where the army can be most relevant in the community, the U.S. Army wants to make sure that they can reach these "kids" properly. Reaching them, Meaux explains, involves making sure you know what you are talking about when it comes to gaming. While the gamers reach them through physical play, the other recruiters have to make sure that they know the gaming culture and references for the Army to become a proper, accepted part of the community.

*Recruitment and values*

Another difference is the U.S. Army recruitment strategy illustrated by the frequency of the word *teams* (9). Introducing these eSports teams allow the recruiters to interact with possible

applicants through friendly and serious competition. We find this strong focus on competitiveness in the word *best* (6 mentions). They want to show that they take this move seriously through their goals to be the best in each eSport. It is similar to the focus on being of relevance from the Danish Defence but taking it a step further and being more visible. Likewise, modernization is something discussed in U.S. Army recruitment where the move away from recruitment phone *calls* (5 mentions) is recent and the USAE is one of the ways, the U.S. Army wants to move in a more digital direction. However, as Meaux mentions, the Army still depends on old school face-to-face recruiter meetings to fulfill the recruitment process.

### 4.5.2. Sociological analysis of technological artefacts

Now that we have reviewed and analyzed the interviews and focus group, we will analyze the data-based SCOT's (Pinch & Bijker, 1984) first two research steps, leaving the last step for the discussion section.

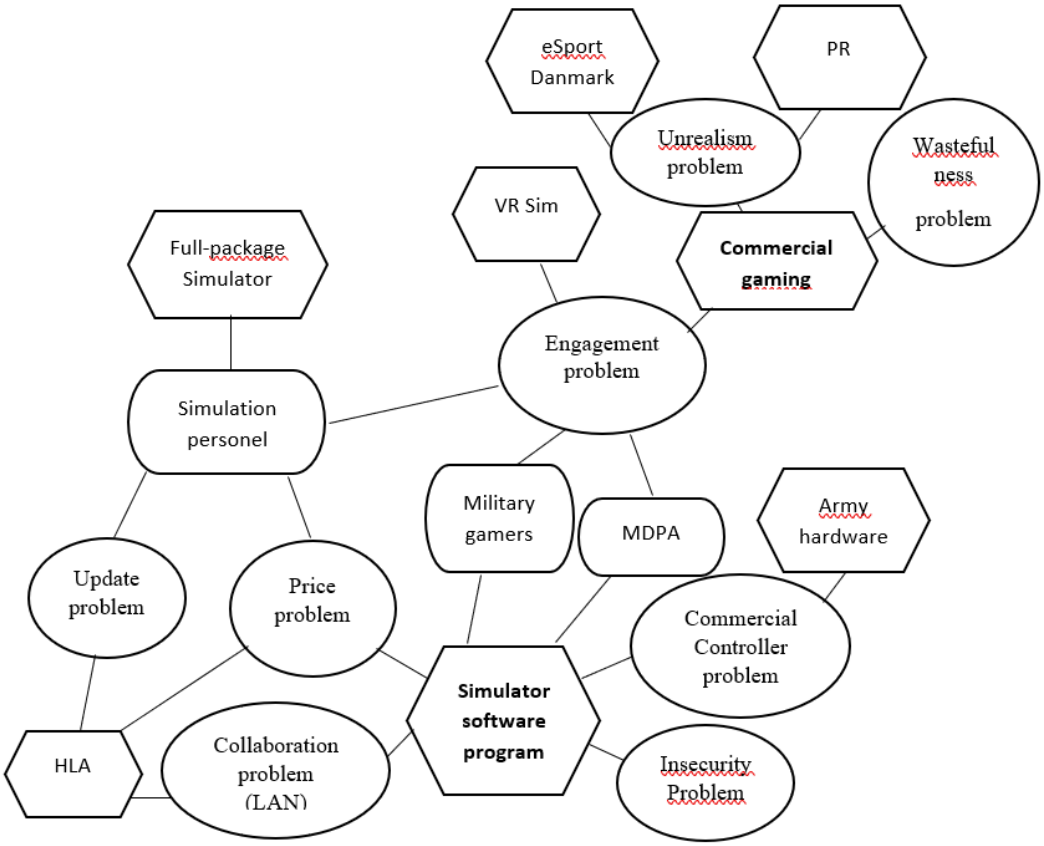


*Figure 5: Developmental Process for DD simulation and gaming*

#### 4.5.2.1. Simulation technology

*Functions*

As we look into the referred functions of simulation tech, we find two types of simulators mentioned: full-package solution commercial simulators and simulator software programs.

Based on our results, we see that two types of simulation artefacts are mentioned by the DDS interviewees, while they occur both amongst the MDPA and the military gamer focus group. However, what functions do they ascribe to these and does it illustrate the same artefact across groups?

For the DDS, the full-packaged simulator function is mainly for novices within the Air Force to minimize the fatality attributed to making a mistake in such a context (Niels Transcript, 16:57).

As we move into the simulator software programs, the DDS agrees that simulation's main function is to simulate certain military educational programs training (Navy, Air Force and Tank). The DDS perceives its technology as one to create and simulate a cheaper, close to one-to-one realistic world that saves the DD money and lives. This function is very rational and serious, something you would expect in military culture explicated by Niels' statement, "Realism is important so they trust the training." However, we also found that DDS see the technologies function as something fun for the students. Something that will be discussed further regarding its trueness compared to other interview groups.

The MDPA also perceives simulation technology to function on a military educational level for training and entrance examination: "It is extremely nice for our teachers in the units that use simulation to get someone in who says: "that tech is really cool"" (Anders Transcript, 23:18). The fact that the units they want to recruit gamers for are units that apply simulation further supports that statement. There are a few examples of simulators being used at recruitment events and shown off in their collaboration with Lasse Vestergaard (2016) that can show simulation as a perceived usable gamer recruitment tool to the MDPA group due to its recognizable gaming format and ability to give an impression of the military as a modern organization to the youth. However, there are limited examples in their strategy of such a decision and therefore, we do not perceive it as a highly influential artefact in the DD. On the other hand, the USAE clearly describes and uses simulation technology as part of a group of

recruitment tools they actively bring out to events as it can relate to gaming according to them (Meaux Transcript, 11: 34).

Our focus group of military gamers do not use simulation much but the agreed function likewise connects to military training, referring to simulation games like Steel Beasts as training games "use games like Steel Beasts for further training (Appendix H)."

So far, we see that the DD interview groups and military gamers share the same view on the "simulator software program" artefact with its function rooted in military education and limited use as a functioning recruitment tool. On the other hand, USAE embraces simulation as a recruitment tool and is less focused on its use in the military.

*Problems*

In figure 5 involving problems based on our results, we see few issues mentioned by the military workers in regards to simulation technology. However, the interview groups within the Danish Defence and our focus group agree that the main technological problem for the simulation software artefact is an "engagement problem", "price problem" and "update problem." Anders Bech from the MDPA problematizes the out-datedness of the simulation systems they have in regards to new recruits' modern expectations (Anders Transcript, 23:18). Similar statements were made by the simulation worker Johnny with regards to speed and graphics of the military simulators which, due to its much larger areas, cannot compete with the triple A video games (Johnny Transcript, 11:35). The military gamer statements refer to simulation as slow and boring (appendix H). These can be related to the "update problem" mentioned by both DDS and the MDPA where the importance of safety first causes slower implementation of new simulation tech (Ronny Transcript, 18:20).

A problem that is not of concern to USAE's recruitment simulation artefact. This difference shows that the interpretative flexibility resulting in two different simulation artefacts lies between an RSG of interviewees with DD military experience and an RSG of USAE. The shared perceived problem and the DDS aforementioned fun learning function of the artefact seem to show a conflict between the simulator software artefacts perceived use and problem. The question is then if this illustrates a reason for why the DD does not choose to use simulation to the same extent in recruitment as USAE or if it illustrates an influence and

changing perception of video game technology moving closer towards the use of gaming technology in the DD. It can also be argued that the update problem shows DDS' focus on soldiers rather than potential recruits due to their training background.

*Solutions*

This moves us to the artefact solutions expressed by the potential RSGs. For the DDS, out-dated tech can be updated or upgraded as Niels exhibits by the needed upgrade from F-16 to F-35 simulator (Niels Transcript, 50:25) and Johnny's contact with eSim when new aspects like codes need to be made (46:07). Similarly, the MDPA wishes to update simulators and other current DD tech or add VR to training to make simulation more interactive and bring it closer to gaming.

Only the military gamers consider gaming a solution to the problems and they limit it to PR as long as the technology is not used to portray military practice wrongly and lie about what to expect from the military experience.

#### 4.5.2.2. Commercial gaming

*Functions*

This illustrates the major difference between USAE and the DD. We find that commercial gaming technology is not something the DD, neither DDS nor the MDPA, finds functional within actual Danish military practice. The way playing commercial video games functions to the DD is the non-military experience and competencies you hypothetically develop that can provide increased performance within certain job positions and support more efficient use of simulators. They generally seem to refer to a general idea of gaming meaning any type of video game.

For the MDPA, gaming's function is about "specialized recruiting efficiency" in regards to competencies and professionalism of gamers for certain educations (Anders Transcript, 14:36) and to the DDS employees gaming supports "simulation training efficiency." Their

strategy of targeting within the competitive gamer segment exemplifies the commercial gaming artefact.

To the military gamers, we see that they generally refer to gaming's function as entertainment with word use like it being fun, cool and fast paced. Furthermore, it involves socializing with others and one mentions the teamwork aspect of competitive gaming. The games they play for the most part involve multiplayer games further accentuating the use of gaming as a socialization and competitive tool: "When I play Counter Strike, it is not only about getting headshots. You cannot "carry" a team that does not work together" (appendix H).

This in many parts fits with USAE description of the commercial gaming artefact, where it functions as a way to compete against other eSports teams and also a way to socialize and connect with potential recruits by playing video games with them. The main function of the artefact is to assist in increasing recruitment numbers by getting in contact with a new group of people through gaming technology.

*Problems*

The main issue attributed to the gaming artefact is the "unrealism" problem. For the simulation personnel, they perceive gaming's lack of realism to cause mislearning of military skills (Niels Krarup-Hansen, 50:45). The MDPA problematizes that the commercial gaming artefact gives an unrealistic image of military life. The focus group also finds it problematic to use gaming in military training and recruitment on the same merit that "gaming is not typically a reflection of reality" (appendix H). In a way, this problem relates to an ethical problem attributed to the artefact, misleading recruits through wrong portrayal of military practice. The military gamers explicate it through the slow reality of military warfare, "Fighting and blowing stuff up takes up about two percent of the work as an Army soldier" (appendix H).

Another issue that is not mentioned by the MDPA or the DDS, but is explored by the military gamers, is a "wastefulness problem" attributed to the commercial gaming artefact in a recruitment context. This is attributed to a DD cultural problem with operative units looking down on recruitment promotion as a waste of money. They argue the small size of the DD and reliance on conscription causes few recruitment entertainment initiatives to have been

made and thus, they are seen as wasteful giving the example of the negative response to the Social Media team (appendix H). This one likely relates to part of the reasoning behind the two other group's attribution of an unrealism problem to the gaming artefact.

Lastly, we find a "stereotype problem" amongst the DD interviewees and the USAE. This involves both stereotypes of Army soldiers being killing machines as well as a typical commercial gaming stereotype that gamers are lazy and fat. Although, the interviewees argue not to believe in said stereotypes, they do refer to it as a typical military view of gamers. We see them mentioned mainly exemplified as prior perceptions held by the group, however, it shows its persistence and something that can have an influence.

*Solutions*

The MDPA's solutions to the "unrealism" problem of the commercial gaming artefact is to keep out of using gaming as a recruitment tool and rather find shared commonalities between competitive gaming and military practice (Ronny Transcript). We see research implemented as a way to illustrate the proven connection between Army jobs and the gaming artefact. For the DDS, gaming is simply not considered a valid technological artefact to use in training.

The USAE to the gamer stereotypes is to recruit portrait gamers that can debunk the stereotypes as we exemplified by the Special Forces gamer. Other than that, the USAE focus on portraying "seriousness" as being good for the community and wanting to win, is an example of a solution to the stereotype problem.

Overall, we can argue for interpretative flexibility of the commercial gaming artefact seeing that the function of gaming is different in every group based on their context and position and thus illustrate RSGs. However, there are similarities in regards to attributed function and problems within the DD that support something closer to a collective DD RSG.

### 4.5.3. Description of the artefact's social construction process

To understand the artefacts, we have just described and their relative dominance in each military, we need to show the fluctuation between variation and selection that Pinch & Bijker (1984) assign to artefact construction.

We have so far shown that there is a bias towards the use of simulator software games in the DD both for recruitment but especially in military education, at least from what we can see in the many descriptions of useful aspects of this artefact. In comparison, competitive video games are limited in their practical function both amongst simulation personnel and the MDPA, while the gaming artefact has perceived practical use in the U.S. Army with the introduction of USAE.

An explanation to this divergence of strategies, seem to come from the historical use of each technological artefact in the two militaries showing two social construction processes of the artefacts. On one hand, the Danish Defence social construction process has stayed within the simulation artefact from its first implementation to today. In the late 80's to early 90's, the dominant technological artefact was the full-package simulator illustrated by the acquirement of a Siemens tank simulator since no other opportunities were present at the time, something you can attribute to a period of closure in the artefact construction. Ten years later, the DD finds itself in a period of interpretative flexibility choosing between two simulator artefacts, the full-package simulator and the unknown simulator software program, Steel Beasts.

Despite the problems attributed to the simulator software program, insecurity of provider and commercial controller, it was chosen due to its solution to the full-package simulators high expenditure problem and the fact that the mechanics made a solution to support a realistic controller for the simulator software artefact. Since then, the full-package simulator artefact has fallen out of favour in the DD showing a stabilization and closure process with the simulator software becoming the dominant artefact in the organization. At the time, the simulator software was based on LAN limiting the reach of training since the garrisons needed to connect to the same network. This was solved by simulation software's use of HLA that made it possible to combine simulation systems together across countries in NATO cheapening simulation software cost further by making the need to buy one product for everything obsolete (Johnny Transcript, 23:37). What is prevalent about the history of simulation technology in the DD is the complete lack of introduction of commercial gaming

technology and high use and development of simulation games exemplified by a much higher amount of solutions to the artefact's problems. Therefore, it makes sense that recent gamer recruitment initiative is limited in its use of the gaming artefact and the simulator software is dominant.

What we find in our description of the DD artefacts is the strong focus on the function of the simulator software artefact. The introduction of DD's gamer recruitment initiative for now, introduces a new artefact to the Army, something that at least shows the recognition of gaming as an artefact worth considering. However, the gaming artefact's social construction process still seems weak at a place where its perceived function is limited in the DD's military practice due to the strong dominance of the simulator software keeping a stabilized situation with little present change.

On the other hand, the U.S. Army has through its technological history of simulation and video game use experienced several social construction processes. In the 1970's, the U.S. military, perceived simulators as too expensive, compared to real training, to even be of use to them. In the 1980's, simulators were implemented to create multiplayer simulations for the training of soldiers in vehicles and aircrafts while the early 2000's saw the move to gaming as a recruitment tool with America's Army. All these are examples of military created games in collaboration with private companies showing a clearer connection between the U.S. Army and commercial video games. The fact that the trend moved away from training-purposed simulators to recruitment-based video games shows that the social construction process has moved towards interaction with potential soldiers and the work with private companies cement that. Ryan Meaux argues that they produce their own simulators in Alabama which shows that interpretative flexibility in regards to the simulation software artefact is still relevant but the use of it as a recruitment tool and the complete acceptance of competitive gaming in recruitment makes it seem that gaming's impact on the U.S. Army is starting to become a dominating artefact.

# 5. Discussion

One discovery we made through our work this thesis, was the DD's seemingly conflicting perception of gaming and its influence, we see as leading to minimal direct use of gaming technology in training and recruitment. On one hand, we find general agreement that simulation technology is the proper video game technology for Army training and screening for highly digital job positions, while commercial gaming technology is seen as not reflecting DD's military practice. We see this limited pervasion of gaming technology in both training and recruitment in comparison to simulation. We can also attribute it to a smaller organization where entertainment promotion is seen as bad demeanour.
On the other hand, there is agreement that the transfer of gamer's gaming experience to military positions is useful. This conflicting view seems to reflect on the agreed importance of modernizing the DD, something gamers will help support. This emphasis reflects visibly through terms like digital mindset, increasing use of simulation, online recruitment aspects and concern about seeming modern to the youth of today.

It was discovered that military simulation in the NATO alliance is an area with extensive collaboration that serves multiple purposes. It gives great flexibility for NATO-personnel that have to train together across borders, and it gives the national defences the possibility to save time, resources and enhance the skills of the soldiers. It is not only digital training where the NATO countries collaborate on, they also share best-practices on the usage of the simulation software and it procurement.

The change we see in both the U.S. Army and the DD is great matter to treat with isomorphism because it could help open up a discussion on how a professional sub-field is potentially emerging in the military recruitment industry with gaming as its core. The collaboration around digital simulations that we have seen in NATO can possibly give some indications on how future gaming recruitment might spread in NATO.

We found that it is of great importance that the Danish gamer recruitment program is based on military pragmatic goals such as heightening the quality. This is because the DD approaches the gamers with exclusive promises of potentially being accepted into highly prestigious military educational programs on the basis of their alleged skills. Therefore, it is

important that this congruence is documented, so there are no grounds for suspecting that the DD took advantage of young people who define themselves as gamers to get more applicants.

The notion of congruence that we present above is best treated with legitimization theory as it should open for different ways an observer can perceive the practice of the DD in general and the gaming initiative specifically.

## 5.1. SCOT, Simulacra and Hyperreality

From the perspective of SCOT, this limited direct use of gaming is seemingly due to the extensive dominance of the simulation artefact in the DD's RSG. To further explain this discovery, the simulation artefact has been accepted to have a very useful training function, something that in part can be attributed to this technology's extensive historical developmental process within the DD. Here, we have seen a visible social construction process showing a selection phase moving away from full-package simulator artefact to a simulator software artefact and since then this artefact has been steadily developed further with additive parts to solve certain perceived problems.

On the other hand, the commercial gaming artefact is perceived to have no real active function within the DD for training. In addition, there has been no previous developmental process of the artefact within the organization.

We can also relate this dominance to SCOTs sociological processes of stabilization. We argue that there are two technological frames that have influence on the DD: a military frame and a gamer frame. For the DD, the competitive gaming artefact is being resisted by the military frame that is seemingly basing its view on characteristics of the dominant simulator software artefact.

First, the acceptance or rejection of the artefacts seems to reflect Baudrillard's (2001) notion of first- and second-order simulacra as well as hyperreality. To the DD interviewees, simulation games are accepted into the military frame due to their perceived first-order simulacra illustrated by the simulation workers use of a common word for a sign that refers to a real-life referent, "photocopy". Consequently, they see it as close to true representation both

in training and recruitment, which is of high importance to the DD RSG. In comparison, gaming to them generally reflects second-order simulacra, meaning it misleads by not being faithful to the real-life military experience (Baudrillard, p. 166). The mislearning attribute of the DDS and the misleading attribute of the MDPA fits this idea. The DD, mostly the DDS and the military gamers, perceive gaming's potential for supporting a hyperreality setting as something not suitable for the military technological frame, shown by Johnny's decision to explain to the new soldiers that simulation is serious and a single mistake reflects possible death in real life (Johnny Transcript, 13:19).

The military frame's focus on professionalism also goes against the perceived casualness of gaming. However, what we do see is an effort to understand the gamer frame and the usefulness of the commercial gaming artefact. We find all our DD interviewees being aware that gamer stereotypes are untrue and that gamers can be useful to the DD in order to gain people with a digital mindset, so there is a growing acceptance. In addition, we see how the MDPA is trying to understand, link and validate the gamer frame to the military frame through collaborations with gaming organizations and gamer skill experiments. The decision to focus on eSports, a now serious sport, further supports the wish to change the perception of the gamer frame within the DD. Furthermore, the DDS interviewees accept that fun is important to simulator training despite the seriousness of the matter.

However, the choice to not move into active use of gaming shows a limited acceptance. Consequently, there is a stabilization in the DD around the simulation software artefact due to the fact that the two technologies are not perceived to achieve the same goal. The goal of more effective recruitment and fun is not inferred to be as important as realistic training and portrayal.

To support the points made about the DD's SCOT process, we have to consider the U.S. Army as the opposite example. In the U.S. Army, it is apparent how the gaming artefact has a clear accepted function. We see the historical use of video games that support recruitment illustrating an acceptance of the gamer frame. Furthermore, the USAE shows an effort to create a direct link between the military frame and the gamer frame. The eSports team members illustrate both the use of a military frame and a gamer frame in the recruitment function as the Army personnel has shifted from their normal positions to play competitive games based on their gamer skills. We also find the gaming artefact used as a fun way to de-stress from the mentally pressing context of war (U.S. Army eSports, 2019). The active

function of the gaming artefact introduced with the USAE program, we argue, illustrates a stabilization process with clear lines of its recruitment function.

## 5.2 Legitimacy

*The Danish recruitment command and its options for sourcing legitimacy*

The gamer recruitment initiative is the focus of this section, where the practice and strategy around this program will be treated foremost compared to other initiatives that the DD is conducting that could be seen as a legitimization effort.

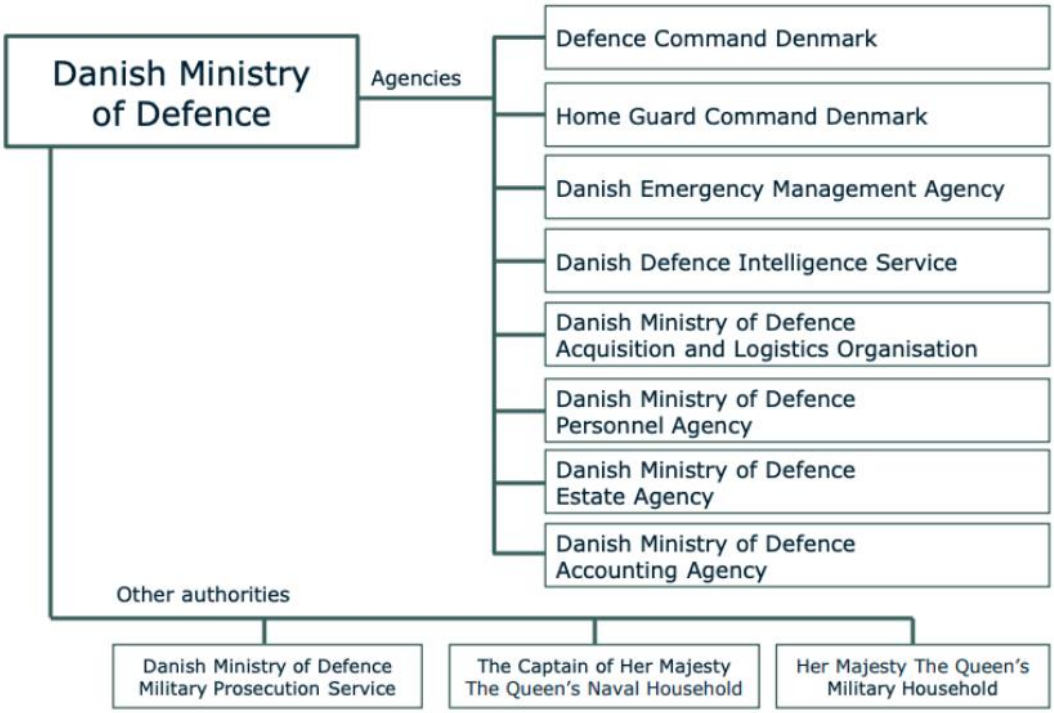


Figure 6: *Illustration of DD's organizational structure, source: Forsvarsministeriet (2019). Ministerområdets organisation.* https://fmn.dk/omos/ministeromraade/Documents/Ministeromraadets-organisation-2019-DK-

og-EN.pdf?fbclid=IwAR3fROaBIEWxoB-mjBmNw567I3Cygnlt2KpZP-e072bd6LhVs6ODXWy7QXE

The Danish Defence or Danish Ministry of Defence consists primarily of 8 agencies or commands with different levels of strength and relevance (see above diagram). The recruitment command formally known as the Danish Ministry of Defence Personnel Agency is the organ that supplies the Danish Defence with personnel and conducts HR related tasks. So, when the MDPA is conducting campaigns with an employer branding edge it is to alter the recipients' view of the DD as a whole.

### 5.2.1. Pragmatic legitimacy

*Involvement of gamers*

When discussing the pragmatic legitimization work that the Danish Defence is conducting, it is important to note that it is primarily the recruitment command who initiates and conducts the work with the purpose of recruiting and heightening the brand of the DD. The personnel that works with simulator training is as such not concerned with perception but rather with performance of their students and the educational level they are expected to reach. But this does not mean that the recruitment command cannot utilize the simulator aspect of the Danish Defence to bolster the MDPA´s efforts. When focusing on the gaming initiative, it is clear that it holds several layers with regards to action that can be considered a legitimization effort, as we will discuss.

*Exchange legitimacy and relevant constituents*

Constituents are the group of external individuals that monitor the Danish Defence and are visibly affected by its actions. These criteria best resemble people already employed in the DD as they are directly affected by the actions of their employer. They are already in the system as opposed to a potential recruit who has no obligations to the DD unless Denmark is suddenly invaded. Following up on the constituents as monitoring individuals, it is clear from the focus group held and conducted by the authors that the common soldier has strong and clear opinions about how senior management is running the DD. So at first glance, it would

seem that the soldiers are the constituents of the DD on the criteria of relatedness and opinion. But the MDPA is looking outside the frames of the DD for new recruits while at the same time legitimizing their position in the eyes of potential recruits. Therefore, it will only be relevant to view gamers who are not employed by the DD.

These constituents are not the usual sort as they are indirectly affected by the activities and their opinions are expected to be vague. The indirect constituents refer to the gamers who the DD have no authority over and that are not a part of the military system. That is the whole point of them being potential recruits and because they are not part of the system, we anticipate that their opinions about the system are vague. Identifying the relevant constituents in the case of military recruitment is quite different than identifying the overall constituents.

*Influence legitimacy and societal respect*

It is, of course, not all gamers that can obtain positions in the DD and therefore, there will not be a specific exchange between all the gamers and the Danish Defence. The ones that are not eligible for service or not interested can be classified as participating in influence legitimacy. This is because even though they have no intention of ever joining, the MDPA will still have an influence on them. This could be in the form of general acknowledgement of gamer skills from Danish society or it could be the job market in general that copies the strategy of the recruitment command to utilize gamers' skills.

*Dispositional legitimacy and tradition*

The human traits with which one can describe the DD would typically be terms such as: traditional, violent and strict. These can then be considered personal traits that are not easily altered. This will at first glance seem incompatible with something as modern as a gaming recruitment initiative and fits with the statements both Ronny and Anders made with regards to the DD being old-fashioned. But the Danish Defence was also seen as professional which entails the responsibility of being a capable fighting force. So we will argue for the DD's dispositional legitimacy being rooted in tradition and its special role of defending the nation with violence.

### 5.2.2. Moral legitimacy

*Consequential legitimacy and the track record*

One has to remember that the DD is seeking legitimization on two different levels simultaneously. One is the general legitimacy and the other is the specific legitimacy connected to the gaming recruitment initiative. These two levels are related, but will work simultaneously. As Ronny pointed out, the MDPA is always looking to recruit outsiders for different educational programs. So we argue for an overall societal legitimization drive where the DD seeks to be in balance with the population it is responsible for and to. Simultaneously, focused level where specific demarcated groups are targeted in relation to a specific area within the DD where legitimization is needed in a certain form. Moving on from this, it is clear that young Danes who consider themselves gamers will need to assess the track record of the DD to deem them worthy of a gamer's approval, so to say. Because like there are layers within the DD, there are also layers within the individual. The young Danish gamer is also a citizen in the state of Denmark and we anticipate that he or she has general opinions about the role the military has in society etc., while at the same time, having strict ways of assessing if the gaming initiative is original or fake.

Procedural legitimacy and sincerity

The above paragraph and its reference to the concept of acknowledgement is closely related to the procedural legitimization aspect because with the latter, it is possible to undertake actions specifically to improve the external environment's view on the organization. This is what we referred to above with gamers potentially having to judge initiatives on the basis of original VS fake. Whereas consequential legitimacy is about assessing the track record of the DD, procedure is a way for the DD to actively manage current or future initiatives with the strategic aim of gaining legitimacy on the basis of what is considered favourable by society. That is why it is important that the MDPA is explicitly demonstrating that there is congruence between the wish to employ gamers and the relevant work they can expect to engage in, as if not to leave any doubt about the intentions of the recruitment command.

Structural legitimacy

When taking a look at the DD with structural legitimacy in the mind, it is important to bear in mind that the DD is not a business that can configure itself according to a given market's evolution. The DD and the American military are, like other militaries, bound to the ever-present task of defending the state, which makes militaries somewhat rigid, and their obligations set a certain limit to the level of structural configuring that is possible. This will then consequently set a limit for what kind of procedures that can be integrated into the structure. Here, we will argue that the congruence discussed above makes it easy to adapt DD's structure to incorporate a gamer initiative. There is relevance in having gamers manning digital systems that they have a natural relationship with and they will enter the organization on the same principles as anyone else and receive standardized training. In that sense, there is no need to structure the DD for the incorporation of gamers for various programs because after enrolment there is no differentiation made between candidates.

Personal legitimacy

As there is no living founder of the DD nor a leading individual with an owner stake it is most natural to discuss the effect of having a stable and reliable leader that does not use his or her charisma as a force for change. One can argue that the military is too much of a public good and that it is an institution that is geared to replace any individual in any position at any time though a hierarchy structure to rely on leader's charisma as a catalyst of change or control. One could argue that one of the legalization strengths of the DD is that it cannot fall or rise in esteem on the basis of a leader and his or her actions as it would entail a stabilization risk.

### 5.2.3. Cognitive legitimacy

Compressibility and the military entertainment complex

The previously referenced military entertainment complex is a good example of a system that can consist of cultural models deriving from video games or movies. It helps the audience make sense of a world they are often excluded from. It is on the basis of the models that

understanding is created. The military as an organization and the logic in its endeavours is bound up to these models. Without the entertainment industry and their military themed creations, it would seem natural that the layman civilian would have more difficulties understanding the military system. Furthermore, if the individual does not have a societal or historical interest in the doings of the military, they will most likely have an understanding of the military from popular culture and the military entertainment complex will deliver series, movies and digital games in a never-ending stream. Some of these products will display reality better than others but the key point is that the MDPA should bear in mind that the potential recruits might have made up their mind about service based on a distorted foundation.

Taken for granted

The Danish society or the DD's external environment has never known a life without a military as a part of the state and neither has the previous generations. Every generation knows that it is inheriting an institution from the previous one and it would be an almost philosophical and existentialist thought not to take the national defense for granted as a Dane. First the thought of human civilization without the ability to wage war or defend itself is not worth discussing, as it holds almost no historical relevance. Denmark has since its formation as kingdom waged war more or less and the story is the same with the American military, post-revolutionary war. So, the concept of an ever-present military is what the previous generations are used to and a citizen of either two nations has never known anything else in their existence. So, if we say that a military as such is so rudimental that citizens can only take it for granted, it would be interesting to discuss what is potentially taken for granted. The generation that is recruited currently are typically so young that they were kids under the 9/11 attack and the subsequent "revolution in military affairs" (RMA). They have grown up under the war on terror and have seen how an asymmetrical war is fought in the 21$^{st}$ century. That it is fought with Special Operations Forces and technological superiority and the evolution of the two has been gradual as the war has continued. Furthermore, this almost pragmatic evolution has been communicated through entertainment so we can anticipate that civilians have found the means and their evolution necessary and natural. The DD is not initiating the initiative to be considered legitimate, they are using it as a means to reach their goals of better capabilities, and the level of capability they can maintain is where their legitimacy is drawn.

Temporal

As discussed earlier and mentioned in several interviews is the DD an old organization with traditions going far back in history. Here, it makes sense to underline that many traditions and practices are continual in their nature because continuity is the point of these actions. These are mostly symbolic but there are also practices of a more combat-related mode that holds its own merits and are still considered relevant, such as digging trenches for defensive warfare. Some practices and processes are episodic in the way that they come and go. Things that are deemed obsolete without a related successor are in our eyes considered as episodic. This means that the digital simulation record of the DD can be considered one continual record as opposed to several episodic periods with different simulation systems.

## 5.3. Isomorphism

### 5.3.1. Coercive isomorphic change

When discussing how coercive isomorphic change could be shaping the DD, it is key to keep in mind that dependence is the catalyst for this change. If the DD is not dependent on any entity that can exert its influence via power there is as such no fundament for coercive isomorphic change. There is no entity trying to use force, persuasion or invitation to join in collusion with regards to initiating a gamer initiative in the recruitment command.

If we are to identify change catalysts that act as a coercive cause for initiating the gamer initiative, it is evident that the gamers themselves can be seen as a cause for initiating the program. It is a tricky thought but the gamers that are sought by recruitment have a bargaining power of a sole supplier in the sense that the gaming community must supply the DD with itself. Furthermore, the gamers are only categorized in the marketing targeting they are not even distinguished from non-gamers in the recruitment commands' own definition after the selection process. In the end, it is the DD that has to hire these gamers, so the

relationship between the recruitment command and the gamers is reciprocal with regards to power relations.

*Formation of a field*

We argue that state sponsored militaries are a field of their own. But their formations often go so far back that we cannot talk about a formation in the sense of a modern professional field. Militaries are almost by definition an extension of the state. It is controlled and funded by the state but is still demarcated from it and operates under its own laws. Currently, the focus is on the structuring of the state entities nationally and internationally. The U.S. Army and the DD are each connected to a larger national net of state entities or institutions that can practice coercive isomorphic change on each other. We have earlier restated the statements of Ronny and Anders who refer to the MDPA coming up with the idea to target gamers by themselves. That is significant because of the unique constellation that the Danish Defence is considered a state entity, but no other state entities are pushing them to adopt a gamer initiative, making it is a novel strategy in an old system.

*Mimetic isomorphic change*

The U.S. Army's newest gaming initiative with the establishment of eSports teams is an initiative that is designed to have more young people engage with the Army and potentially sign up for service whereas the Danish Recruitment Command is currently focusing only on recruitment of gamers because of their skill for specific Air Force programs. The two strategies are different in both form and objective and they were more or less rolled out at the same time. This rules out that the two military entities have established their initiative with mimetic behaviour.

This really makes them first movers and it is the first movers that prove they are doing it for efficiency. From this, we can anticipate that other nations' militaries might try to mimic the two strategies or the parts they find viable for improving efficiency.

If we are to think of militaries throughout history, it is clear that they mimic each other in a competitive setting. Most people are familiar with the Arms Race concept. One has to keep in mind that arms races are a peacetime phenomenon that has a degree of deterrence to it.

### 5.3.2. Normative isomorphic change

Networks are the key to the spread of normative isomorphism and if we were discussing private businesses it would be relevant to differentiate between organizational networks and professional networks. But because the DD and the U.S. Army are military entities, the organizational networks will most likely be confined to a military setting. Military recruiters are from the military and will work for, or in the military, which has been the case with the 2 recruiters interviewed in this report. The point is that organization and profession cannot be separated, which means that organizations cannot dominate the profession or vice versa because they are locked together in their national boundaries. A Danish military recruiter is for a lot of reasons bound to the DD and can only serve within that organization. There is only one military in Denmark and being employed by a foreign power is in principle not possible for a Danish citizen.

It is another story if we were to discuss how militaries will exhort normative isomorphic change on each other or how the branches within a military structure will exhort normative change on each other.

If we take the first scenario is it important to note that we have already discussed above how coercive isomorphism was strongest in the relation between the gamers and the militaries wishing to recruit them, based on interdependence as no national military is dependent on another nation's military in relation to recruitment. Then, when discussing mimetic behaviour amongst the militaries, the most logical thing to assume is that other militaries will only copy traits they find likely to improve efficiency for their situation and context. This has already set a scene where we can see that a demarcated state organ as a military is confined to itself unless it collaborates with allies. It is in the alliance that the normative isomorphic change will most likely have the greatest impact. If the collaboration that we have seen take place in NATO with simulation sets a precedence for future gaming-based recruitment, it is possible

that the militaries within the alliance will formally work together and share best practices. It will probably not reach a level of collaboration as we have seen with the development of for example Steel Beasts or NATO's simulation working groups. In these, there is a concrete need to pool resources together for everyone's best, because they can split development or requirement costs or train together digitally like they do physically. There is no concrete need to collaborate on the area except for the wish to advise or share information with an ally and thereby improve the overall strength of an alliance.

Furthermore, there is no industry-configuring event for military recruiters working with gaming. Ronny spoke about the Nordic military recruiters sharing best practice on especially conscription, but there is no third party or venue to officially bind together militaries with regard to gaming recruitment. The members of NATO have an intergovernmental organization that can facilitate the working groups concerned with simulations. The soldiers and engineers working with simulations as a concrete training tool have conferences such as ITEC that binds together users with the sellers of the market. So future gaming recruitment collaborating between militaries will most likely be on an ad hoc basis in the near future and it is possible that the first movers will get to set a standard or dominant design over the best way of practicing gamer recruitment that the late movers will need to adhere to if they wish to be considered gaming recruiters in the eyes of other military recruitment professionals.

Finally, there is the possibility that militaries such as the American one will see an internal isomorphic change because of the decentralized recruitment structure. It is a possibility that the U.S. Army branch that clearly is the leader within the American military's gaming-based recruitment will standardize best practice with regards to methods and personnel.

## 5.4. Brand

*As a product or service*

If we were to make a market analogy for the purpose of the DD, the capabilities would resemble a service of violence for offensive and defensive operations. It is not difficult to pinpoint a purpose for the DD as it is created and maintained with an exclusive purpose.

There are also a lot of non-combat related functions that are part of and support the military so it can fulfil its purpose and daily function as an institution. It is taken for granted by the authors that the civilian population is associating the military with performing state sanctioned violence for an offensive or defensive purpose as Anders refers to in his interview. He also refers to employees of the DD wearing "weird clothes" which can be seen as a pragmatic characteristic of the service it is performing.

*Brand as an organization*

It is easy to argue for the DD having a brand that is bound to the organizational construction itself and what it stands for. The slogan of the organization is "værd at kæmpe for" which translates directly to: "worth fighting for" (Forsvarsministeriet, 2016). This slogan appeals to the old and romantic notion of being part of something bigger than oneself is worth fighting for. The fighting aspect of the DD has been a real scenario for more or less two decades. That fighting is a matter of life and death has raised the professional esteem in the eyes of the civilian population according to both recruitment interviews and the focus group. The DD is a big organization with a unique culture when compared to other organizations within Denmark. Therefore, one can argue it to be positive that there seems to be a correlation between what the DD is designed to do and what they actually do. This lets the DD hold a brand that is in line with basic and classical principles of what a Defence is all about.

*Brand as a person*

If we are to discuss what personal traits would be suitable to attach to the Danish Defence, it is appropriate but repetitive to bring up professional and old-fashioned as we have covered before. But it is the personality traits the Danish civilians ascribe to the DD. There is a potential problem in figuring out how the individual branches are perceived with regards to these overall personality traits. The DD can also be seen, we argue, as a club of three different persons with their own personal traits. If one is to think of a fisherman and a farmer it is likely two different persons that one imagines even though they both reap goods from Mother Nature for a living. The analogy demonstrates the different cultures that adhere in the

Army and Navy and corresponding personal traits that are formed by the life that the personnel endures and experiences. How one could attach personal traits and on what background to each of the three branches is out of scope in this report.

*Brand as a Symbol*

When discussing a symbol that could be carrying the brand of the DD there is much relevant material because there are so many visual cues in the military not found elsewhere. Weapons of military grade, Navy frigates, fighter jets or just an automatic rifle are strong symbols on a power that is exclusively reserved for the DD in this case. Then, there is the clothing with camouflage and the extraordinary full-dress uniforms. The language, the food and the hierarchy are also distinct but not visual and thereby not as effect as a symbol for brand recollecting.

From our perspective, the most dominant aspect is Brand as an Organization, which seems to outshine the other categories because the organization holds such a unique role formally and legally. Furthermore, the DD has proven over the last two to three decades that they can manage the role they are meant to hold and thereby manifest the organization as a capable entity, not just a professional subculture within Danish society. The activities have mainly been carried out by the Army with reference to the campaigns in Ex-Yugoslavia, Iraq and Afghanistan. So it is natural for civilian to assign more brand recollecting to Army activities, something that Anders also mentions.

## 5.5. Gaming's influence on the Recruitment Process

So, has there been any significant change to the MDPA's recruitment process that we can attribute to gaming in comparison to the U.S. Army?

Let us start by returning to Penney's (2000) U.S. model of recruitment and discuss the impact of these new types of recruitment initiatives on each military's recruitment process.

### 5.5.1. DD and USAE gaming recruitment models

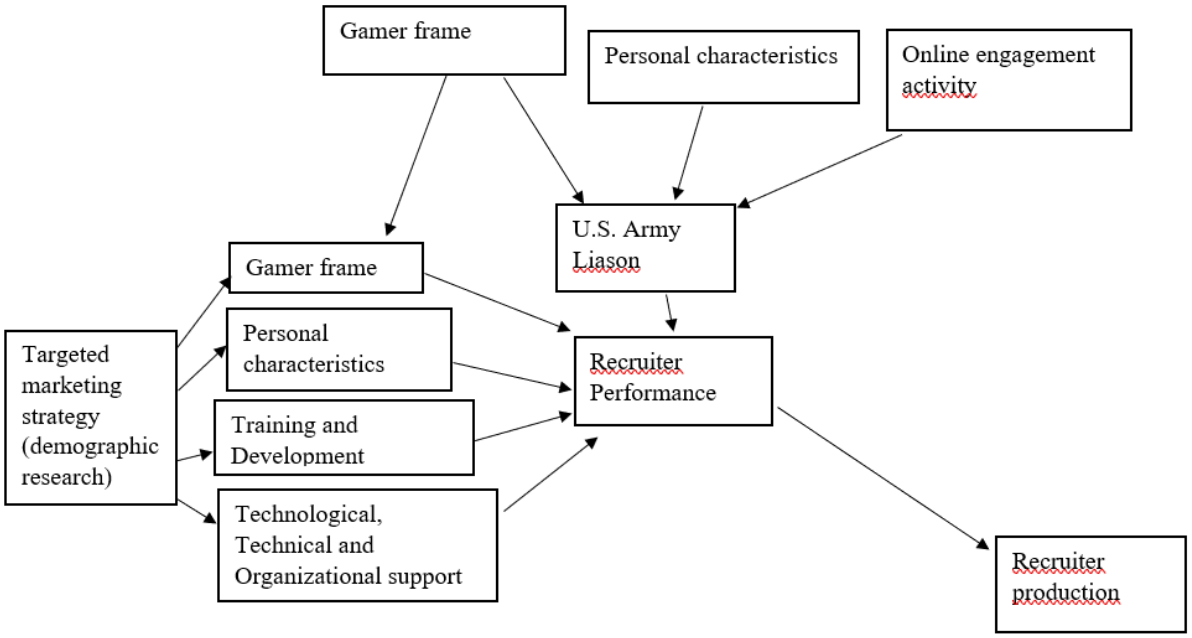


*Figure 7: Proposed USAE recruitment model*

First, we will have a look at USAE. The first major difference is the use of Army Recruitment Liaisons. On one hand, we can argue that this does not reflect a new addition since sports promotion teams have been present in the Army for a long time like their football recruitment team known as the Army Black Knights. On the other hand, the impact of these Recruitment Liaisons supporting role to the recruiters seems significant to their recruiting success despite their website saying, "the members of the eSports outreach teams are not recruiters" (U.S. Army Recruiting Command, n.d.). Therefore, we add "Army Recruitment Liaison Performance" as a supportive role to recruiter performance and similarly, we introduce the most important factors our interviewee assigns to this added dimension.

The liaisons quite clearly illustrate the influence of gaming on the recruitment model. First, we find that they are headhunted based on gaming skills, wanting to grab the attention of gamers and linking the Army's skilfulness and seriousness to a competitive gaming context. "Linking" is exactly the word that seemingly describes their new recruitment model. The liaisons' communication skills do not just involve being a good speaker telling their Army story but also providing an understanding of the context and the potential recruits' world view and view of gaming technology. Therefore, based on SCOT's technological frame

(Bijker, 2001), we add a ‘gamer frame’ factor. Their background as both gamers and soldiers allow them to perceive things from both a gamer frame and a military frame’s perspective.

For the regular recruiters we find the same adherence to the “gamer frame” although they do not have to be gamers but at least be knowledgeable on gaming as to not be identified as a person who is a fake (Meaux Transcript, 16:10). However, this also involves knowing which types of jobs they might be interested in based on their gaming background. We added an arrow from the gamer frame of the liaisons to the recruiter’s gamer frame to illustrate the collaborative connection between the two and the support the liaisons might have on the portrayal of the recruiter’s gamer frame as well as introducing them to the world of gaming.

Going back to the linking function of liaisons, the fact that we have left out the “training and development” factor further accentuates this fact. This is because Gamer Recruitment Liaisons are only given a 72-hour crash course compared to the much longer recruitment course of regular recruiters, learning the recruitment basics of how to tell their Army story. They want them to be portrayed as regular people with similar interests rather than trained recruiters (Meaux Transcript, 34:24). This fits with the lack of preparation for a recruitment mission since their job is to play games for the Army and interact with the kids.

The last relevant recruiter performance factor from Penney’s model is “technical and organizational support.” On one hand, we find that technical support on leads and applicant information still works as it did back when the model was created. The applicants still have to fill out an information card and then they will be contacted by phone to set up a meeting in person (Ryan Meaux Transcript, 45:17).

On the other hand, we find that USAE’s promotion has moved online and become technological to meet people interested in gaming where they spend the majority of their time. Flyers, posters and shirts are still there as promotional items at events but with the introduction of a gaming trailer, the use of STEM related tech and social media, we find the need for an added dimension to this factor named “technological support”. You can argue that this goes under the organizational support due to its origin as material provided by the Army. However, it involves more introduction of use, maintenance and strategic choice. Promotion in USAE involves not only what happens at events but also what is displayed online and the interaction with people online. This connects to the Army Recruiting Liaisons performance factor of “online engagement activity.” This is a major part of a gamer liaisons’

job. Use of platforms like Twitch and Discord allow for interaction and play with potential recruits, but it also works as a sort of indirect promotion through the gamers perceived skill and displayed personality. Similar things happen on Instagram and Facebook. The technological support involves not only creating online accounts which the recruiters and liaisons use, but rules are also set up for social media engagement (Myers, 2019). This is seemingly all about linking online gaming and gamer personalities to the Army.

Following this trail of thought, the factors which influence recruiter performance all seem to have an overarching factor which influences them all; a targeted marketing strategy based on demographic analysis. Townsend explains these efficiencies as new reforms that help recruitment efficiency (Myers, 2019). The new revamped factors all show such intel in the decisions whether it is the strategic decisions on who to use as liaisons and recruiters for the program, the work distribution with a stronger focus on gaming engagement and lastly, the use of relevant promotional and technological elements fitting for people interested in gaming.

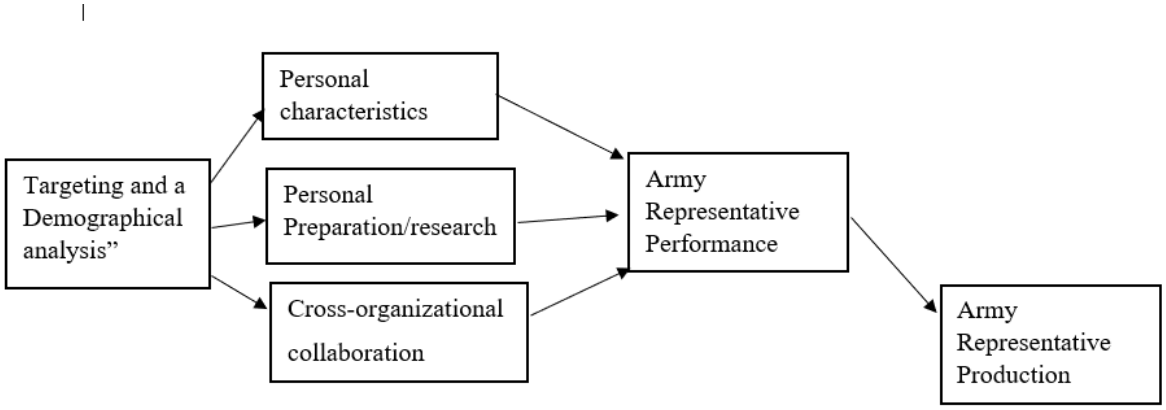


Figure 8: *Proposed DD recruitment model*

In comparison, introducing the DD gamer recruitment initiative into the model, we find little distinct structure into exactly what factors influence gamer recruitment. This can most likely be attributed to their overall recruitment strategy for these high-tech military educations, the size of the segment and the recentness of the initiative. To them, gamers are perceived as a sub-segment within a larger segment, anyone with a high school degree (Ronny Transcript, 29:53). This would suggest a smaller influence of gaming on DD recruitment.

Despite these limitations, we find an example of gaming's influence on the MDPA's recruitment model for this segment at the Esport Danmark gamer training camps. First, we find that the Army personnel chosen for these events are neither military gamers nor recruiters, but representatives from all across the DD. Consequently, "Army Representative Performance" is judged. The performance factors, upon which these representatives are judged, seem to involve a "Targeting and Demographic Analysis" but more specifically geared towards competitive gamers. We see this specific gamer targeting's influence on the MDPA's perceived valuable "Personal Characteristics" of these representatives. Compared to the USAE, this factor still has a sense of communication skills. However, it is not about sharing gaming experiences, telling an Army story or talking about military positions available to potential recruits. At these events, it is about the representative's ability to teach gamers relevant concepts like backbriefs and mental training that can be useful in both the military and competitive gaming. Therefore, instead of finding people with ties to both the gamer frame and the military frame, they find areas of competitive gaming that can be linked to military practice.

Going to these training camps, can be argued to show a "Cross-organizational collaboration" factor influencing these representatives' performance. Working together with Esport Danmark provides a medium of communication to reach gamers (Ronny Transcript, 29:53). In addition, this collaboration is done to actively support a larger pool of gamers to recruit "both the Danish Defence and the civil labour market struggle to get qualified labour and a collaboration like this serves to realize new initiatives" (Ronny Transcript, 24:53). Supporting an organization like this should therefore potentially lead to better "Army Representative Performance" due to a potential increase in military exposure at these training camps as eSports becomes more popular. The fact that we talk about exposure rather than direct recruiter performance to production shows the indirect aspect of this proposed recruitment model. Teaching skills illustrates the DD as a place with job opportunities for gamers without directly proposing them to sign up.

From this model, we find little active use of gaming technology itself since we cannot find a direct example of its use. However, the strategic act of trying to link the competitive gaming experience to the military experience shows an impact of this context on how the MDPA perceives effective gamer recruitment. In addition, the use of these representatives teaching

gamer's concepts commonly seen in professional eSports further supports the argument of how the MDPA is trying to further the professionalization of the gamer segment.

What is evidential of the MDPA's choice to link to gaming but not actively use the technology is its high focus on advertisement supporting the propensity to enlist.

### 5.5.2. DD and USAE recruitment platforms

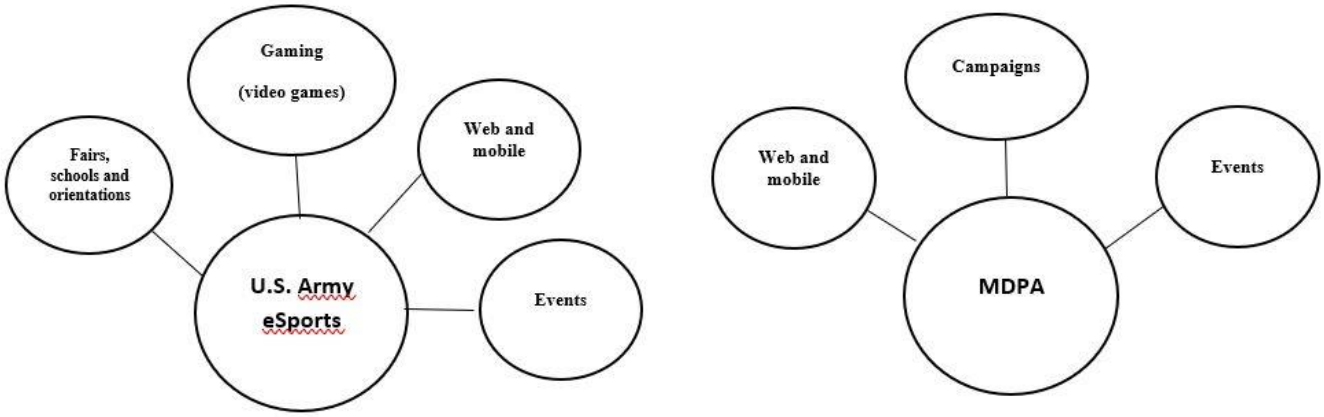


Figure 9: *recruitment platforms use of the USAE and the MDPA*

We see these strategic decisions impact on the recruitment platforms used by the MDPA. The MDPA interviewees all seem to refer to the pilot and Air Traffic Controller ad campaigns online that have been quite successful in creating engagement and an increasing number of applicants for these positions. This mix of the web and mobile platform with campaigns is the preferred way of contacting gamers. The way gaming is reflected in these online campaign's ranges from collaborations with a gamer YouTuber, gamer personality tests with attached DD education suggestions, targeted Twitch ads towards gamers and large-scale event ads. What is apparent about the way they use this platform is still the link of especially eSports to the military without using commercial gaming technology openly. However, the DD ad shown at the Counter Strike tournament, Blast Pro Series, does portray military personnel playing Counter Strike, a commercial video game. Something you could argue shows commercial

gaming technology's impact on the DD and in part this may be true but considering the context it is shown, we again see the focus on the professional competitive side of gaming.

This introduces us to the last gamer recruitment platform for the DD, events related to competitive gaming. Ronny exclaims that due to their collaboration with the famous Danish eSports team Astralis, they plan to be highly present at the Blast Pro Series with an exposure value of 20,000 gaming enthusiasts (Ronny Transcript, 29:53). We see the same link to eSport with Esport Danmark events.

Relating these platforms to the Danish Defence model based on the AIDA model, we can argue that the events and ad campaigns both involve the attention stage which is fitting since they are actively trying to create and link between gamers and the military, something that needs to be drawn attention to before recruiting actively seems viable. However, you could say that the web and mobile platform gives the online campaign the possibility to support all four stages of the model something that is not explored in the model.

For the USAE, as we have already discussed, they actively use the web and mobile platform through social media (Twitter, Facebook, Discord, YouTube, Twitch and Instagram). All of them are specifically themed around gaming in their eSports program, showing their activities, competitions and so on. This also seen through one of their program slogans "See you online" in a pinned post on their Facebook page, illustrating the decision to stick to this platform.

The social media platforms seem to mainly deal with the Attention Stage promoting and introducing the U.S. Army, as they show the exciting things they do as an eSports team and we even see giveaways encouraging people to come meet the team at events to win. To an extent, we also see the Interest Stage as the posts show the benefits of joining. The online interaction allows people to talk to and play with the soldiers.

Comparing the two uses of the web and mobile platform, we find that the DD's online campaigns do not solely focus on gamers, but rather college graduates, limiting the communication directly to the gamer segment. In addition, the social media in the Danish Defence is used for all types of education programs. "The Danish Defence's educations" is the all-encompassing title of all their social media accounts, and with the many posts with other segments in mind, it seems less focused and personal in comparison to the U.S. Army's use of the platform. Such strategic decisions make gaming seem less influential on the Danish

Defence, which matches Ronny's description of gamers as a sub-segment. In addition, it can be attributed to the scope of the two militaries and the limitations it brings to the recruitment initiative. Therefore, you might consider if this negatively influences especially the early stage of attention as a consequence of many different messages coming across.

Let us now explore whether the video games the soldiers play with the potential recruits constitute a new recruitment platform in the model. It seems to somewhat fit under the web and mobile category from an internet-based perspective, but at the same time, the web refers to the internet and video games allow for more than just browsing and talking or writing to people. Via video games, they can interact more actively through avatars. On the other hand, Discord is a communication tool that supports the use of gaming for engagement. As the Army gamers explain, the community can play a plethora of games with the Army gamers via Discord (Tactical Sh*t, 2019). It seems valid to make "Video Games" its own platform with the extent the U.S. Army eSports uses it. If we take that to be the case, gaming or video games becomes a key recruitment platform that the Social Media platforms revolve around. That argument rings true considering the content analysis main word is gaming, the act of playing video games cemented by their eSports teams. These two platforms show the extensive move to the online sphere and wanting to actively meet the gamer segment through it for play as well as recruitment. To discuss which stages of the AIDA model gaming as a recruitment platform uses, we just have to look at the recruiter liaisons' job. First, we can argue that the gaming platform allows for grabbing the attention of people interested in video games both through the excitement of simply playing with the team members on site or online. In addition, attention is built through the entertaining qualities of watching eSports matches. Gaming allows for interaction that can lead to talk about their U.S. Army stories leading to the Interest Stage. The Attention Stage can also be supported for gamers since gaming is a media of interest to them. However, as we know, the liaisons do not have knowledge of other positions so part of the Desire Stage and the whole Action Stage is not supported via this platform.

Similarly, to the DD, the U.S. Army also goes to events like gaming tournaments. However, instead of only being on the sideline they practice to compete in them and most of these typically do not support a recruitment stand. These tournaments, we would argue are used to support the Attention Stage by showing off the gaming skills of the Army something that might lead to desire to join.

What is different about the U.S. Army program is the use of conventions like PAX and Salt Lake Gaming Con as well as recruitment via gaming at high schools. Something that is normally common for both militaries. The use of gaming for recruitment at the school platform illustrates a core difference between the two militaries in what kind of person they are looking for but also what recruitment is allowed to do. While the DD keeps mainly within the competitive gamer segment through the use of its platforms, we can see how anyone who is interested in gaming is a target, also high schoolers.

To go back to Penney's (2000) model, it is interesting to see that advertising support provided as an important influencer on propensity to enlist is not essential in the USAE's preferred recruitment platforms. However, it is very actively used in the MDPA's gamer recruitment initiative. We can argue that USAE's choice of platforms shows a move away from national ad campaigns to a focus on recruiter and liaison performance and personal engagement as the quintessential link recruitment via gaming. This supports the focus on changing the perception of the Army through direct but also online interaction. The high expectancy of online engagement with USAE recruitment liaisons supports this reasoning and going online gives possibilities beyond events. We attribute the decision to mainly rely on ad campaigns by the MDPA to the large reach of such campaigns at gaming events but also the decision to stay away from the use of gaming technology. The platforms thus reflect a move to modern platforms as well as the strategic decisions of who to target in the recruitment initiatives. Lastly, we attribute the USAE's use of the video game platform as a result of the organizational perception of gaming technology and what it can be used for.

# 6. Conclusion

The insights on how a Defence can be taken for granted was a significant discovery, as a Defence is typically a demarcated culture that is always expected to be able to perform in the externals environments eyes. So, the Defence is taken for granted and it is expected that it will take the necessary steps to perform its tasks.

This leads us to the two gaming initiatives that are expected to leave an impression in the

military community that potentially results in the laggards mimicking the first movers.

Starting up a gaming initiative can be considered very modern and this could be out of line with the typical civilian's understanding of militaries as old-fashioned.

Continuing in the lane of being modern, however, it is interesting to find that the simulation artefact is actively integrated in military practice while commercial gaming is not, despite the fact that it provides a solution to the agreed upon problem with simulation: its inability to fit the gamer frame. Something we find potentially explained through the bad demeanour culture referenced by the focus group.

We see this contradiction in the recruitment model as well. The DD applies modern platforms to reach gamers and link the military frame to the gamer frame but still decides to stay on the outside communicating in instead of using gaming actively like the USAE.

This thesis provides current research on a Western phenomenon that takes different forms on each side of the Atlantic Ocean. It is relevant for research in gaming/eSports, military recruitment and military simulations. The thesis can to a certain degree be considered a continuation of the work that Lenoir & Caldwell (2018) has made in relation to the military entertainment complex, as the thesis is heavily inspired by the book's ability to combine research on military inspired entertainment products and simulation technology.

Furthermore, it contributes new additions to the field of SCOT through its exploration of different relevant social groups meaning making in regards to gaming and simulation artefacts and the impact technological frames can have on the use of technology within a military context.

We can conclude that the commercial gaming artefact is quite limitedly pervaded in regards to practice within training and recruitment in the Danish context. It is deemed as problematic especially on the basis of its perceived portrayal in military training as leading to mislearning and in recruitment as leading to misrepresentation. The lack of seriousness ascribed to the commercial gaming artefact is also perceived to stand in contrast to the professionalism and seriousness of the DD culture. However, what we do see with the gamer recruitment initiative's focus on eSports and gamer skills is a move towards professionalizing and accepting the gamer both in the eyes of the public but maybe also in the eyes of the DD. This

adheres with the professional setting displayed in our description of the Rainbow Six Siege match and we see how the proposed recruitment models support this act with DD representatives teaching gamers valuable professional skills and focusing on recruitment platforms related to eSports.

The MDPA's gamer initiative has its justification in the DD from a pragmatic viewpoint. The Danish initiative has the objective of finding better-qualified candidates with fewer resources. The DD has the opportunity to alter the general perception of the DD as old-fashioned, with the launch of the gamer initiative. It has been received positively and gained favour from the Danish press, while the DD at the same time is forgetting to market themselves on the unique IT-capabilities that exist within its organisation.

We recommend that the DD should differentiate their recruitment efforts depending on the branch that is being promoted, to be able to go into depth with how the branches work digitally. Concrete examples should be given on how programs in the military can be digitally relevant after the end of military service. We anticipate that the DD's image as old-fashioned will hinder young people from joining because they might fear that they will not be relevant on the job market if they were to seek a civilian career after a military career. The DD might not have the newest IT, but they have sophisticated and unique solutions.

When it comes to future research, we find that it will be beneficial to revisit gaming in the DD. Our reasoning is the novelty of the gamer recruitment initiative and we do see the potential for future changes in the gaming artefacts use and perception especially now that cyber conscription is becoming a reality.

Furthermore, due to the DD's connection to NATO, it would be interesting to explore if similar gamer recruitment initiatives will pop up in the future. It would also be beneficial to explore the perception of gaming and simulation within one of the educational programs where the DD is recruiting gamers as well as the impact of the gamer recruitment initiative on the amount of actual gamer applicants.

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