

GUNNING FOR PERFORMANCE

**THE ROLE OF CALCULATIVE PRACTICES IN GOVERNING
THE INDIVIDUAL ESPORTS PLAYER**

SEBASTIAN SMEDLUND

NILS WAGNER

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Gunning for performance: The role of calculative practices in governing the individual esports player

Abstract:

In this paper, we seek to examine how the performance of the individual esports player is measured and evaluated. By drawing on a cross-sectional interview study we aim to provide a comprehensive conception of the role of calculative practices in the nascent research area of esports. Utilizing the theoretical lens of Foucault (1977) and his notion of discipline, we find that individual performance measures provoke emotions in players. Both anxiety from instantaneous performance feedback and the allure to attract a digitally involved audience can incite behavior that adversely affects team performance. Furthermore, we distinguish a ‘Peer Evaluation System’, a network of professional players who draw on an interplay of subjective evaluation and calculative practices. The legitimacy of the system rests on the trust in the expertise of its participants. An inherent assumption in the system is the limited validity of quantitative performance measures to accurately assess performance. By drawing on more subjective forms of evaluation, the peer evaluation system imposes norms for professional conduct and thereby antagonizes the adverse effects of quantitative individual performance measures. We thus claim that the recourse to complementary subjective forms of performance evaluation validated through a network of experts avails to mitigate the inherent deficiencies of quantitative accounting regimes.

Keywords:

Performance measurement systems, individuals, calculative practices, Foucault, discipline, esports

Authors:

Sebastian Smedlund (41376)

Nils Wagner (41357)

Tutors:

Lukas Goretzki, Associate Professor, Department of Accounting

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Stockholm School of Economics

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Sebastian Smedlund

Nils Wagner

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1. Introduction

“We are entering the age of the infinite examination and of compulsory objectification.” – Michel Foucault (1977, p. 189)

Precisely as Foucault predicted in his work *Discipline and Punish* (1977) there has been a surge in demand for accountability, transparency, and efficiency (Espeland & Sauder, 2007). This request has materialized in the extended use of quantitative performance regimes intended to evaluate the performance of organizations and individuals. Such measures are no longer solely being utilized in the corporate world, but today penetrate large parts of society as a whole. School rankings (Espeland & Sauder, 2007; Sauder & Espeland, 2009), performance measurement systems in the public sector (Van der Kolk & Kaufmann, 2018), public rankings of doctors (Narin et al., 2005) and online review rankings (Jeacle & Carter, 2011) are examples of their manifestation in society. While performance measures potentially improve accountability, transparency, and efficiency, critics argue that they fail to accurately reflect performance in complex environments (Van der Kolk & Kaufmann, 2018).

The demand for performance measurement is also evident in the world of sports where the increased commercialization and public interest have engendered a demand for individual performance at the highest level. As part of this development, professional sports organizations increasingly employ a multitude of measurement practices intended to monitor and improve player performance (Carlsson-Wall et al. 2016). Technological innovations have enabled sports organizations to collect new types of data on player performance induced by ‘GPS-derived movement data, inertial sensor metrics, and integrated biological monitoring’ (Andon and Free, 2019).

The intersection of technology and sports can also be observed in the rapidly growing and professionalizing esports industry. Defined as ‘organized individual and team-based video game competitions’ (Andon & Free, 2019), esports was estimated to have 459 million viewers in 2019, and projections estimate the viewership to double in six years (Reyes, 2019). To put the viewership in relation to traditional sports, the 2017 NBA finals attracted 32 million unique viewers, while 58 million unique viewers saw the world finals in the game *League of Legends* (Goldman Sachs, 2018). The growing interest has elevated esports into mainstream culture and it is increasingly considered a legitimate sport. However, down to the present day, esports remains an unexplored area in the accounting literature, making it a particularly interesting subject to research. Since the new sporting domain of esports continues to grow fast-paced, it creates interesting opportunities to study the accountability and governance of the professional player.

While several studies have affirmed that performance measurement affects and alters the behavior of those being subjected to the measurement (Espeland & Sauder, 2007;

Narin et al., 2005; Sauder & Espeland, 2009; Van der Kolk and Kaufmann, 2018), the extant accounting literature has barely examined the effects of accounting practices put in place to govern the athlete in the sporting domain.

In view of the above-outlined gap in accounting research we aim to study the role of calculative practices in the nascent research area of esports. In order to generate a more in-depth understanding of the effects of specific governance structures on esports players, we have chosen to limit our study to one discipline, Counter-Strike: Global Offensive. The choice of Counter-Strike was motivated by its prominent public performance measurement system. We formulate the following research question:

“How is performance measured and evaluated in Counter-Strike and how does that affect the player being measured?”

To answer our research question, we employ a qualitative cross-sectional interview study spanning 14 interviews with different stakeholders in the Counter-Strike scene. In order to analyze our empirics, we invoke the work of Michel Foucault and his notion of discipline. We apply a framework similar to Sauder and Espeland (2009) to distinguish the surveilling, normalizing, and internalizing features of the PMS.

This paper makes two contributions to our proposed domain. Firstly, we show that quantitative individual performance measures induce two sets of emotions, anxiety, and allure (Sauder & Espeland, 2009). We find that anxiety from instant performance feedback can negatively affect decision making and lead to irrational behavior. Moreover, we observe the allure to attract an audience that ascribes high legitimacy to public performance measures and rankings. We ascertain that both emotions can incite players to unduly focus on measured tasks (Van der Kolk & Kaufmann, 2018). In view of the increasing availability of data in sporting organizations (Andon & Free, 2019), we argue that professional sports clubs need to be mindful of the effects of individual performance measures, as we have shown that they can have a detrimental effect for team performance.

Secondly, we introduce the Peer Evaluation System, a network of professional players who draw on an interplay of subjective performance measurement and calculative practices. The Peer Evaluation System is characterized and legitimized by the expertise of its participants who utilize a more nuanced measurement system than the quantitative PMS as it encapsulates also non-quantifiable aspects of performance. The transparent flow of information in a network of experts serves to discipline as the system punishes individualistic behavior and sets the norms for professional conduct. The Peer Evaluation System facilitates the internalization of team-oriented behavior and antagonizes the adverse effects of individual performance measures. We hold that a complementing subjective performance evaluation mediated through expertise (Giddens, 1990) avails to diminish the inherent deficiencies of calculative practices.

The rest of the paper is structured as follows: At first, we outline our domain and method theory and develop our theoretical framework. Thereafter, we present the research methodology, followed by an outline of our empirical findings. In the next section, we discuss our findings in light of previous literature. At last, we summarize our contributions and discuss the study's limitations as well as suggestions for future research.

2. Literature

In the following literature chapter, we expound our domain theory, method theory, and our developed theoretical framework. The domain theory provides an outline of the role of accounting in sports, and the wider notion of calculative practices in society.

Secondly, we introduce our method theory where we emphasize the main concepts that will be integrated into the theoretical framework. In the third section, we give an account of our theoretical framework which links concepts from the method theory to the usage and effects of performance measurement systems.

2.1. Domain Theory

In the following section, we provide an outline of the domain that we aim to contribute to with this paper. Initiating this section with literature on the entanglement of accounting and sports, we then refer to selected research on calculative practices and their effects on individuals in contexts other than sports. This structure provides guidance in the process to develop our research question.

2.1.1. Accounting in sports

Hopwood (1983) calls for researchers ‘to study accounting in the context it operates’, a notion of widening the conception of accounting. He highlights that more research should be conducted on accounting in the form of calculative practices and on its operation in modern society. Mennicken and Miller (2012) build on Hopwood’s notion arguing that accounting is a calculative practice by which one can turn qualities into quantities and make the subjective objective. This section aims to shed light on how the extended notion of accounting as a calculative practice has found its way in the increasingly commercialized sports industry.

Modern sports clubs are categorized as hybrid organizations, meaning that there is a demand for organizations to perform both in sports and financially (Carlsson-Wall et al., 2016). The requirement of financial success is commonly referred to as the business logic and incorporates objectives such as a balanced budget, a low level of debt, or the generation of a specific return to shareholders. Coexisting with the business logic is the sporting logic. The sporting logic is directed at performance in sports, which is measured through the league table position for instance. Carlsson-Wall et al. (2016) find that the information from a PMS, such as the current league position of a team, affects the priority between the sporting and the business logic. If the team is in a position to win the league or to be relegated, the sporting logic prevails. However, if the team ranks in medium league positions, what the authors refer to as the ‘zone of indifference’, then the business logic is prioritized.

In the course of the professionalization, sports organizations have provided athletes with improved training facilities and personal development guidance. However, these structural changes have also engendered a demand for performance at the highest levels (Cordery & Davies, 2015). Organizations increasingly utilize calculative practices to govern their athletes and to comply with the demand for performance. Carlsson-Wall et al. (2016) study a large Swedish football organization that employs a multitude of metrics to measure the performance of players. During games, the organization collects statistics on measures such as running capacity, pass completion rates, cross-completion rates, and goals per shot on both individual and team levels. Moreover, players leave urine-samples each morning, allowing the organization to analyze the players' diet and sleeping habits. This enables the club to create a profile of each player which serves to adapt workout and nutrition to optimize the performance of players. With the increasing application of technological innovations in professional sports, organizations gain further opportunities to measure performance. They gain access to large amounts of data on individual player performance occasioned by 'GPS-derived movement data, inertial sensor metrics, and integrated biological monitoring' (Andon & Free, 2019). In view of the increasing number and detailedness of performance measures, it seems relevant to examine their effects on the players. As of today, there appears to be a gap in the accounting literature.

There has also been a call to quantify overall individual performance in a team setting in order to understand the individual's impact on the outcome of the game (Duch et al. 2010). The intricacy of individual performance measurement varies with the complexity of the game. In sports such as football, the high degree of interaction among the team members, and the uninterrupted flow of the game complicate the quantification of individual performance. By means of social network analysis, Duch et al. (2010) try to quantify the individual performance of the football players participating in the 2008 European Championship. Through the quantitative measures of the social network analysis, the authors construct a ranking of the top 20 players in the tournament and compare it to a subjective evaluation of the top 20 players. While the model proves some accuracy by selecting eight players that were also on the subjective top 20 player ranking it still indicates the difficulty in quantifying performance in a team setting.

In an analysis of a Swedish elite football club, Baxter et al. (2019) explore the entanglement of accounting and emotions via the concept of passionate interests (Latour, 2013; Latour & Lepinay, 2009; Tarde, 1902) which are defined as matters that 'hook' actors emotionally. Latour (2013) argues that in order to fully acknowledge calculative practices one must also recognize the calculation of passions in accounting. Organizations comprise a 'nexus of passionate interests' which point to the emotive impact others have on the self and vice versa (Baxter et al. 2019). By means of devices that quantify passionate interests, so-called 'valuemeters', these interests become visible and meaningful, a notion that is affirmed by Tarde (1902), Latour (2013), and Latour

and Lepinay (2009). In accounting literature, it mainly prevails the perception that accounting generates emotion (Boedker & Chua, 2013). However, using the assumption of a nexus of passionate interests in sports organizations, such interests can actively shape accounting practices in organizations.

In addition to that, Andon and Free (2019) state that, in contrast to conventional businesses, economic success in sports organizations is also affected by ‘changeable passionate interests amongst fans and the general public’ that are based on the evaluation of the sport’s entertainment value or team performance. Highly passionate fans create a need for accountability in sports organizations (Andon & Free, 2019). In the study of Baxter et al. (2019) the passionate interest to win the league is quantified via a public ranking. Further, the passionate interest in derbies is quantified by means of the number of derbies not won (Baxter et al. 2019). Some performance measures are more important than others as valuemeters, often when they are unambiguous, simple, and based on deeply rooted, long-standing passions as is the case with the aforementioned derbies. Hence, prominent emotions can also avail to rethink prevalent rankings and PMS in general.

2.1.2. Calculative practices in society

Rose and Miller (1992) argue that calculative practices constitute a technology of government, ‘a mechanism through which programs of government are made operable’ by turning complex processes into a single financial figure. The ability of calculative practices to govern is evident in Miller and O’Leary’s (1987) study of standard costing in the US, where they find that through the creation of costing norms and standards, notions of efficient and inefficient workers emerge. By formulating standards and targets calculative practices act as a liberal government, shaping the individual in a way that is self-disciplining, thus constructing the self-regulating person (Miller, 2001).

By employing the lens of governmentality, Jeacle (2015) studies the role of calculative practices in the setting of the fast fashion industry. This industry is characterized by the constant renewal of styles, shortening the lifetime of fashion garments to weeks rather than months. Therefore, a key to success in the fast fashion industry is the ability to respond quickly to fashion trends. This has prompted actors to adopt the quick response (QR) practice, which aims to fasten the movement of the product to customers and customer information to the company. The author finds that calculative practices are crucial to enable and mediate the faster movement of products and information. Furthermore, calculative practices facilitate decisions of what garments to push and what garments to kill. Thus, the calculative practices assume a central role in the determination of fashion trends. By defining what is fashionable, calculative practices ‘enroll the self-regulating customer in her quest to be ‘in fashion’’, thus governing the daily dressing rituals.

Bialecki et al. (2017) set out to research the role of accounting information in the valuation process of singularities, where singularities are defined as ‘everyday goods and services that are unique, multidimensional, incommensurable, and of uncertain quality’. The authors do this by studying the Internet Movie Database, IMDb, which provides its users with both quantitative information in the form of ratings and qualitative information in the form of reviews. The authors find that ratings heavily influence a user’s choice of film. The significance of numbers is also evident in Jeacle and Carter (2011) who argue that online user ratings, exemplified by ratings of hotels on the website TripAdvisor, are considered as a credible indication of the quality of the establishments by its users, thus highlighting ‘the power of the number’. Although the users of IMDb relied heavily on the ratings, they also consulted the reviews of people with similar tastes in movies to reduce the risk of an unsatisfactory outcome (Bialecki et al., 2017). This highlights the interplay between quantitative and qualitative information as well as strengthens the notion of the importance to rely on multiple measures. The importance of online reviews is also evident in Bickart and Schindler (2001), who argue that online reviews constitute a new social order, where the opinion of followers on the internet is potentially of greater value than the one of a traditional expert.

Espeland and Sauder (2007) show how media rankings of law schools exert pressure on organizational actors to alter their behavior when being measured. The authors argue that in the United States, rankings of schools produced by popular media have seen an increase over the last three decades and that these rankings are being extensively consumed by prospective students. The schools are evaluated through a set of criteria that quantify qualitative factors in order to determine a ranking order. To improve their rankings, schools engage in actions that transform themselves to conform more closely to the criteria that are being imposed by the ranking system.

Furthermore, the authors find that there is a difference between public performance measures, such as media rankings and private performance measures, for example, internal performance measures within companies (Espeland & Sauder, 2007). While private actors can revise their performance measures if they incline people to act in an unintended way, public performance measures are unlikely to change even though they produce unintended behaviors.

In a follow-up study, Sauder and Espeland (2009) argue that rankings provide easy scrutiny, motivating more ill-informed audiences to feel qualified to assess the performance of the ranked object. As the external audiences now can see inside the ranked object, the transparency expands the ranking’s influence and facilitates a tight coupling between the ranked object and the external audience.

Evident from the studies outlined above, the wider notion of accounting as a calculative practice is necessary in order to captivate how accounting practices are used in modern society.

2.1.3. Effects of performance measures on individuals

In the previous section, we presented how performance measurement systems in the form of calculative practices are increasingly being utilized by different stakeholders in society. In the following, we will review research on the effects of calculative practices on the individuals that are being measured.

Reactivity is the notion that people alter their behavior when being observed, measured, or evaluated to improve the result of the assessment (Espeland & Sauder, 2007). A central purpose of performance measurement systems is to alter the behavior of the measured individual to align the individual's behavior with the goals of the organization. However, reactivity can also alter behavior in unintended ways which might compromise the organization's goals. A common form of reactivity is 'gaming', meaning the individual tries to manipulate the numbers without regard for the underlying purpose of the measurement. The risk of gaming increases if the measures are tied to rewards or punishments.

Another example of reactivity in connection to performance measurement is thematized in a paper by Narin et al. (2005). The authors study the effect of 'Physician scorecards', a system which, amongst other things, reports patient mortality rate. The purpose of the scorecard is to make better-informed decisions when it comes to choosing physicians or hospitals and to provide healthcare organizations with comparative data that enables them to improve the quality of healthcare. However, the authors find that physicians became more reluctant to perform procedures for patients that were at higher risk for an adverse outcome, even though the procedure would have benefitted the patient. The reason for the physicians to avoid these procedures was the risk of a bad outcome which would have decreased their score on the scorecard and thus could have negatively affected the perception of their competence. While the intention of the scorecard was to improve the quality of healthcare for the general population, it might also negatively affect the healthcare of certain high-risk patients.

Van der Kolk and Kaufmann (2018) study how performance measurement systems impact individual workers in a public sector company. The authors apply cognitive dissonance theory to understand the workers' different beliefs about performance measurement systems. The study indicates that performance measurement creates cognitive dissonance in a workplace that is characterized by a complex work environment. To cope with the cognitive dissonance, the employees try to make more of their work tasks measurable even though they acknowledge that it would be difficult to quantify most tasks. Additionally, the employees are more inclined to spend time on work tasks that are easily measurable and pay less attention to the work tasks that are not measured.

Van der Kolk and Kaufmann's study exemplifies how performance measurement can affect and alter the behavior of the measured subjects. While performance measurement

systems might be a way to increase efficiency, responsiveness, accountability, and transparency, it is also argued that they often fail to reflect all aspects of the complex environment in which they are applied.

In another study, Van der Kolk et al. (2019) examine how four types of management control systems affect intrinsic and extrinsic motivation in individuals and how this implicates their performance. They find that result control, defined as examining the desired versus achieved results, is positively related to extrinsic motivation, while not crowding out intrinsic motivation. The increase in extrinsic motivation also seems to increase performance. Similarly, Kim and Cruz (2016) find that players' satisfaction increases when their skills and abilities are being monitored and evaluated.

2.1.4. Concluding remarks

In the domain theory, we have examined how the commercialization has affected professional sports clubs and how the resulting changes have implicated individual athletes. We find that increased demand for performance from the athlete is accompanied by meticulous measurement. Following this, we discussed the widening notion of accounting as a calculative practice in other societal areas and we debated the impact of measurement practices on individuals in different environments. Through our theory review, we have identified two research gaps that we aim to explore in our paper.

Firstly, the field of esports is completely unexplored by accounting academics. Therefore, we aim to generate a fundamental understanding of the term performance in Counter-Strike. We intend to determine how performance is measured and evaluated from the perspective of different stakeholders.

Secondly, although several studies have shown that performance measures affect the behavior of a measured individual, no studies have focused on sportsmen in professional clubs. In order to improve the performance of athletes, it seems relevant to understand how they respond to measurement systems. Thus, we aim to determine how measurement practices affect athletes.

In due consideration of the identified gaps in our literature review, we formulate our research question:

“How is performance measured and evaluated in Counter-Strike and how does that affect the player being measured?”

2.2. Method theory

In order to analyze our empirics and to answer our research question, we will draw upon the work of Michel Foucault, and more specifically his notion of discipline, depicted in *Discipline and Punishment* (1977).

Viewing accounting as a calculative technology that produces visibility and transparency, Foucault's notion of governmentality and disciplinary mechanisms could be used as a framework to analyze the disciplining effects of PMS on individuals (Mennicken & Miller, 2012). Earlier studies have applied Foucault's work in a similar manner, for example, Sauder and Espeland (2009) who illustrate the disciplining effects of school rankings. Furthermore, Miller and O'Leary (1987) study how accounting practices render individuals accountable for calculable norms and efficiency standards. In another paper, Townley (1996) studies how to account for individual performance by applying Foucault's work on discipline and confession.

Seeing Foucault's work being summoned in studies where individual accountability is being assessed (Sauder & Espeland, 2009; Miller & O'Leary, 1987; Townley, 1996), it seems adequate to apply a similar methodological lens when analyzing our empirics.

2.2.1. Discipline

In *Discipline and Punishment* (1977), Foucault introduces the concept of discipline. Discipline is described as a form of power mechanism with the intention to alter the thoughts and behaviors of social actors through subtle means. The goal of the disciplinary system is not to punish, but rather to reform, to alter the behavior of the individual to that of the norms. The success of discipline derives from its mechanisms; hierarchical observations, normalizing judgment, and the combination of the two, the examination. Through its mechanisms, 'discipline makes individuals', meaning that discipline has the ability to decompose the masses into individuals.

Hierarchical observation

At the core of the disciplinary system lies hierarchical observation, a means of observation. This is an apparatus that renders all individuals visible and distinguishable from each other. As it is constructed not to be seen, but to see others, individuals are unaware of when they are being observed. Ideally, the disciplinary apparatus would allow one individual to see everything constantly. However, as no person can see everything the system needs relays, a hierarchical structure through which observed data pass from lower to higher levels. Although this hierarchical structure has levels, it is the system as a whole that constitutes its power, not the people at the top of the hierarchical structure. In one aspect, it is indiscreet as it is everywhere and constantly alert. In another aspect, it is absolutely discreet as it functions in complete silence.

Normalizing judgment

A distinctive feature of the disciplinary control is the non-observance, the individual's inability to live up to the required standard. This illustrates a primary feature of the disciplinary system, to correct deviating behavior. In contrast to the traditional judicial punishment system, which judges if one's actions are not in accordance with the law,

the disciplinary system introduces a distribution between positive and negative and all behavior falls within this distribution. This makes it possible to quantify and establish averages and to obtain ‘the punitive balance sheet of each individual’, as Foucault describes it. However, discipline does not only try to alter behavior through punishment but also through gratification and encouragement. Normalization is common in today's society through educational programs, medical practices, and industrial processes and products.

Examination

The examination combines hierarchical observation and normalizing judgment. It is described by Foucault as ‘a normalizing gaze, a surveillance that makes it possible to qualify, to classify, and to punish. It establishes over individuals a visibility through which one differentiates and judges them.’ It is exercised through invisibility but renders all its subjects visible. The examination situates individuals in a field of documentation, as the results of the examination are recorded in documents, which contain detailed information about the individual, effectively reducing the individual to a ‘case’.

2.2.2. The Panopticon

Foucault further develops his notion of discipline through Jeremy Bentham’s ‘Panopticon’, an architectural model of disciplinary power, designed as a prison. In the Panopticon, inmates are separated from each other into individual cells. In the cells, the inmates are constantly visible to a monitor but are unable to see the monitor. The monitors cannot watch all inmates at the same time, but from the perspective of the inmates, they could always be monitored. Since the inmates never know when they are being monitored, they must always behave as they are watched. As Foucault puts it ‘He who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power [...] he becomes the principle of his own subjection’, meaning that the inmates *internalize* the behaviors to conform to the rules of the prison.

The idea of the Panopticon exceeds the prison, it is a generalizable model that can be applied to schools, hospitals, and factories. Foucault argues that the Panopticon is a useful model whenever one has to deal with multiple individuals upon whom a task or behavior must be imposed.

2.2.3. The enabling elements of Discipline

In *Discipline and Punishment* (1977) Foucault describes Discipline as something repressive, punishing, and cruel. However, in his later work, Foucault revises his notion of discipline by suggesting that there are enabling elements of discipline. He suggests that disciplinary power can persuade subjects to assume ‘responsibility for the constraints of power’ and to become ‘the principle of his own subjection’ (Foucault,

1977), meaning that the subject willingly observes, analyzes, and transforms itself (Goretzki, 2013). Discipline is therefore intertwined with technologies of the self, a process of self-examination and objectivization of the self by the self when the individual's intentions and actions are aligned with that of the disciplinary power. Subjects can develop and form themselves through discipline and self-knowledge, and 'discipline is thus the necessary price that we pay for realizing desire' (Brown & Lewis, 2011).

2.3. Theoretical framework

In our theoretical framework, we will expand on Foucault's notion of discipline, linking it to the usage and effect of PMS. Our theoretical framework is outlined in a similar manner to Sauder and Espeland (2009) who use Foucault's notion of discipline when analyzing the effects of public rankings of US law schools. Consequently, we will structure our empirics by highlighting the *Surveilling*, *Normalizing*, and *Internalizing* elements of the performance measurement systems.

2.3.1. Surveillance

The first part of the theoretical framework concerns the surveilling features of the PMS. At the heart of Foucault's hierarchical observations lies surveillance, an apparatus rendering its subjects visible (Foucault, 1977). Sauder and Espeland (2009) develop the notion of surveillance further by distinguishing three characteristics of surveillance, it is *continuous*, it is *attentive to detail* and it has the ability to *observe from a distance*.

In the panopticon, the surveillance of the prisoner is *continuous*, in that the prisoner never knows when he is being observed and must therefore always act as if he is. The surveillance is also attentive to detail as the structure of the panopticon renders the entire cell visible to the guard, allowing the guard to observe every movement of the prisoner. Lastly, the panoptic guards are able to *observe from a distance*, making it impossible for the prisoner to know who is observing him.

Similarly to the panopticon, Mennicken and Miller (2012) argue that accounting numbers possess the ability to produce visibility and transparency. This is illustrated in Sauder and Espeland (2009) as the authors show how rankings of US law schools engender visibility. Although the actual publication of the rankings is annual, the scrutiny by its constituents is *continuous*, giving rise to an omnipresent sense of surveillance. Furthermore, even small changes in the ranking criteria can impact a school ranking, forcing the school to be *attentive to even the smallest details* that before rankings seemed insignificant. Lastly, the authors argue that the rankings enable *observation from a distance* as rankings circulate extensively, allowing for external audiences to 'see' inside and scrutinize the law schools.

2.3.2. Normalization

The second part of our theoretical framework concerns the normalizing features of the PMS. By rendering the subjects equal while at the same time using normative criteria to establish individual differences, normalization becomes the ‘penalty of the norm’ (Sauder & Espeland, 2009).

Foucault (1977, p. 183) argues that normalization works through five aspects: It *compares*, *differentiates*, *hierarchizes*, *homogenizes*, and *excludes*. Sauder and Espeland (2009) utilize the five aspects to analyze the normalizing effects of rankings. By applying a common metric to all schools, rankings render schools as *comparable* objects, neglecting any differences among the schools other than the intervals of the shared metric. Additionally, rankings *differentiate* by imposing metrics to quantify qualities and expressing them as an interval and thus establishing a *hierarchy*. As the rankings only encapsulate the common metrics, differences among schools become value-laden, a flaw rather than an alternative. This creates pressure to *homogenize* as to conform to the implicit assumptions in the ranking. The pressure of conformity is also explained by the risk of *exclusion*. Schools that deviate from normative standards embedded in the rankings will be *excluded* from the category of good schools indicated by their ranking.

As illustrated by the example of rankings above, accounting possesses the ability to turn qualities into quantities through practices such as the balanced scorecard, questionnaires, and rankings (Mennicken & Miller, 2012). Through quantification, accounting practices introduce the possibility to standardize output measures, which in turn leads to comparability among its subjects.

2.3.3. Internalization

The final part of our theoretical framework concerns the internalizing features of the PMS. Through surveillance and normalization, the Panopticon forces the individual to conform to the rules of the prison. The same logic applies to the PMS, as visibility and comparability engendered by the PMS force the individual to internalize the behaviors advocated by the PMS (Mennicken & Miller, 2012). This is illustrated by Sauder and Espeland (2009) who show that internalization is induced through the emotional and cognitive response to the rankings. The authors distinguish three sets of cognitive responses, *Anxiety*, *Resistance*, and *Allure*.

Given that rankings are a zero-sum technology, where one school’s success always is at the expense of another, the inability to control what other schools do induces *anxiety* within the administration (Sauder & Espeland, 2009). Moreover, the anxiety leads to an ‘arms race’ among the schools, where the schools spend heavily to defend their ranking.

As individuals never perfectly fit the identity imposed by discipline, a general response is to *resist* and challenge the subjectivity that discipline imposes (Sauder & Espeland, 2009). This manifested itself in schools that tried to boycott the rankings by withholding information.

When efforts to resist rankings fail, some respond by trying to control the rankings (Sauder & Espeland, 2009). Gaming, defined as the cynical effort to manipulate ranking metrics without regard for the underlying purpose of the metric, offers a chance for the schools to protect themselves from poor rankings. Thus, 'The *allure* of rankings emerges from the desire to manipulate them' (Sauder & Espeland, 2009).

3. Research Methodology

In this section, we outline our applied research methodology. At first, we motivate our chosen research design. Following this, we elaborate on the process of the data collection and subsequently expound our approach to analyze the gathered data.

3.1. Research design

We have chosen to conduct a qualitative cross-sectional interview study. By doing a cross-sectional interview study we were able to gain insights into multiple organizations but also got in contact with people outside of organizations, thus covering a more diverse set of stakeholders in the esports industry than if we would have conducted a single case study.

Using a qualitative method is in line with the suggestion of Edmondson and McManus (2007), who divide management research theory into three categories: mature, nascent, and intermediate. Given the limited accounting research on the fields of esports and the effects of PMS on the individual athlete, we position ourselves in the nascent theory category. Due to the limited research in these areas, the research design calls for rich and detailed data to generate an understanding of the researched subject. This kind of data is suggestively collected through interviews and observations. In studies where theory is nascent, researchers are not aware of what issues may emerge from the data during the research process and thus use a more open-ended research question.

3.2. Data collection

The data collection was conducted mainly through semi-structured interviews with different stakeholders of the esports scene. As esports is a novel research area in the context of accounting, the first interviews were explorative and aimed to build a foundational understanding. The initial interviews revealed the diversity of esports disciplines, so in order to gain in-depth insights, we decided to limit our research to one esports. Already in the first interviews, we identified interesting tensions in the esports Counter-Strike. Therefore, we chose to focus our research on this esports discipline and to identify further interview candidates with relation to it. From the outset, we aimed to understand how performance measurement affects the players. For this reason, it was vital to ensure that we gained access to Counter-Strike players.

In order to collect sufficient and informative data, we interviewed people from semi-professional and professional organizations, as well as stakeholders without ties to a Counter-Strike organization. Through digital platforms such as LinkedIn, Twitter, and email we contacted players, coaches, management in organizations as well as freelancing actors such as a mental coach and a commentator.

Due to the geographic distribution of the interviewees as well as the social distancing restrictions imposed as a result of the Covid-19 virus, all interviews were held over a digital medium such as WhatsApp, Skype, and Google Hangouts. The interviews were held in English. In order to enhance the reliability of the interview process, both researchers were present during all interviews (Pettigrew, 1990). A schedule of the interviews is presented in the appendix. All interviews were recorded except for one since the interviewee did not approve of tape recording. In that instance, detailed notes were taken. All the recorded interviews were transcribed, resulting in around 140 pages. The interviews did not have a time limit but were proposed to last approximately one hour. In total 14 interviews were conducted in the period February to May spanning between 30-90 minutes, averaging 51 minutes.

The data gathering from interviews was complemented by research of the Counter-Strike community website HLTV.org. This website entailed detailed performance measures on individual players and teams and facilitated a more in-depth understanding of the interviewees' statements. The commenting sections of the website served to observe discussions in the community.

3.3. Data analysis

The study was conducted in an abductive research approach, meaning that we had an iterative process between data collection, theory, and analysis (Dubois and Gadde, 2002). Having an abductive approach enabled us to continuously match the theory with our collected data. Additionally, the interview guides were continuously updated as tensions were identified, allowing us to build on previous interviews and explore the tensions in-depth.

After each interview, we discussed the key takeaways from the interview. The findings from each interview were then mapped into specific topics in order to facilitate an overview of the empirics. This process was largely guided by our method theory by differentiating the *surveilling*, *normalizing*, and *internalizing* aspects in a PMS in a manner similar to Sauder and Espeland (2009).

4. Empirics

In the following empirical section, we apply the theoretical lens of Foucault (1977) and Sauder and Espeland (2009) to identify how performance is measured and evaluated in the professional setting of Counter-Strike and to determine the effects on players.

4.1. What is Counter-Strike?

Just as the esports scene in general, the Counter-Strike scene has grown rapidly during the last years in terms of viewership and monetization. The top tournaments are played in some of the largest stadiums in the world in front of a live audience of thousands of people, with hundreds of thousands more watching the broadcast. Larger tournaments have prize pools of around a million dollars and the top players earn significant wages. In the lower tier of the Counter-Strike scene, most tournaments are played in an online format. However, these games are still broadcasted on streaming platforms such as Twitch and YouTube.

Counter-Strike is a First Person Shooter video game, meaning that the player has the point of view of the character he plays in the game. In its competitive setting, the game is played five versus five players. One side represents the terrorists and the other side the counter-terrorists. Each game is played on a best of 30 rounds basis on one of seven maps. After 15 rounds the teams switch sides (from terrorist to counter-terrorist and vice versa). Each round lasts two minutes at the maximum. The objective of the counter-terrorists is to protect the two bomb sites on the map from the terrorists, whose objective is to plant a bomb on one of the bomb sites and to protect it for 40 seconds until it explodes. Thus, the counter-terrorists win a round either if they eliminate all terrorists within the time limit or if they prevent the detonation of the bomb planted by the terrorists. The terrorists win a round if they eliminate all the counter-terrorists or if they accomplish the bomb explosion. There are five different in-game roles: Entry fragger, sniper rifler (AWPer), in-game leader (IGL), lurker, and support. Although the roles are not as obvious for a viewer as in for example football, their responsibilities and tasks vary significantly.

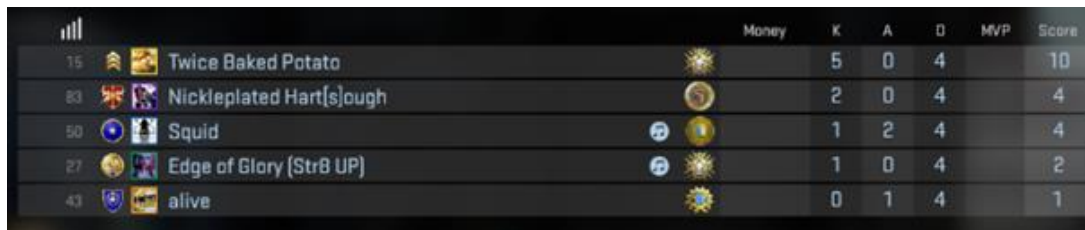
4.2. Surveillance

In the following section, we introduce the public performance measurement system that renders the performance of Counter-Strike players visible to a broader audience. Thereafter, we elaborate on the measurement practices of players and organizations.

4.2.1. Stats

In Counter-Strike, statistics, hereafter referred to as stats, are a calculative practice to quantify the impact of an individual player in the game. In the following, we will present three different kinds of stat-trackers: *In-game stats*, *Post-game stats*, and the *Individual profile*. All three stat-trackers quantify in-game performance. However, they capture game elements with diverging detailedness, they are accessible at different points in time, and they are used by different stakeholders with different emphasis.

In-game stats



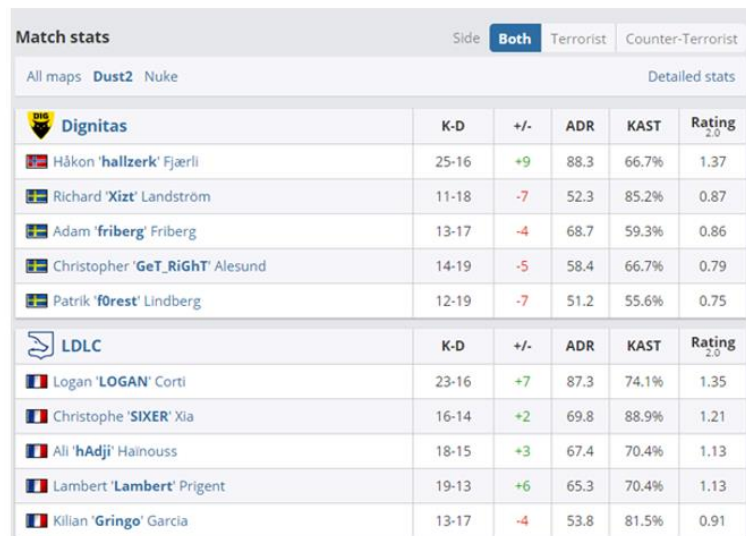
	Money	K	A	D	MVP	Score
15 Twice Baked Potato		5	0	4		10
83 Nickleplated Hart(s)ough		2	0	4		4
90 Squid		1	2	4		4
27 Edge of Glory (Str8 UP)		1	0	4		2
43 alive		0	1	4		1

Figure 1. The in-game scoreboard

The in-game stats are presented on a scoreboard that can be accessed by the player at any time during the game. The scoreboard displays five different measures: Kills, assists, deaths, MVP, and a score. In-game stats make a player's quantifiable impact visible to himself, his teammates and his opponents during the entire game, serving as an instant feedback loop on performance. The scoreboard can also be viewed by spectators of the game. In official games, which are usually broadcasted, the broadcaster can access the scoreboard, so that commentators can utilize it to evaluate a player's individual performance.

Post-game stats

The post-game stats are publicized on different websites after a game. We will illustrate them by the example of the popular community website HLTV.org where all official professional games are tracked and publicized. At HLTV.org the post-game stats are presented on a match page which provides detailed information about each



Match stats						
		Side	Both	Terrorist	Counter-Terrorist	
All maps Dust2 Nuke		Detailed stats				
Dignitas	K-D	+/-	ADR	KAST	Rating	
Håkon 'halzerk' Fjærli	25-16	+9	88.3	66.7%	1.37	
Richard 'Xizt' Landström	11-18	-7	52.3	85.2%	0.87	
Adam 'friberg' Friberg	13-17	-4	68.7	59.3%	0.86	
Christopher 'GeT_RiGht' Alesund	14-19	-5	58.4	66.7%	0.79	
Patrik 'f0rest' Lindberg	12-19	-7	51.2	55.6%	0.75	
LDLC	K-D	+/-	ADR	KAST	Rating	
Logan 'LOGAN' Corti	23-16	+7	87.3	74.1%	1.35	
Christophe 'SIXER' Xia	16-14	+2	69.8	88.9%	1.21	
Ali 'hAdji' Hainouss	18-15	+3	67.4	70.4%	1.13	
Lambert 'Lambert' Prigent	19-13	+6	65.3	70.4%	1.13	
Kilian 'Gringo' Garcia	13-17	-4	53.8	81.5%	0.91	

Figure 2. The post-game scoreboard

player’s individual performance as well as a ranked scoreboard of the players of both teams. The first page shows the K-D (Kill to Death ratio), +/- (the difference between kills and deaths), ADR (Average damage per round), KAST (the percentage of rounds in which the player either had a kill, assist, survived or was traded), and the rating 2.0 (a metric to capture overall performance, hereafter referred to as HLTV rating). The match page is more detailed than the in-game scoreboard and thus provides a more comprehensive measurement of a player’s performance. It also has a commenting section used by the audience to discuss the performance of teams and players. Indeed, the visualization of the stats on the website has developed as the main basis of performance evaluation for the community.

“I think there (in the community) is a lot of focus on stats and that’s what happens when that’s the only thing being presented really.” - Player

Individual profile

For each player who has participated in an official professional game, an individual profile is created on HLTV.org. It depicts the player’s individual performance in terms of a large set of additional statistics from all his official games. The profile page also enables the user to filter statistics by match type (online, lan, big events, majors), time frame, ranking (the ranking of the opponents faced), and maps. The amount and detail of the gathered statistical data on the profile page facilitate a comprehensive overview of the player. Organizations use the individual profile as an analytical tool to evaluate player performance.

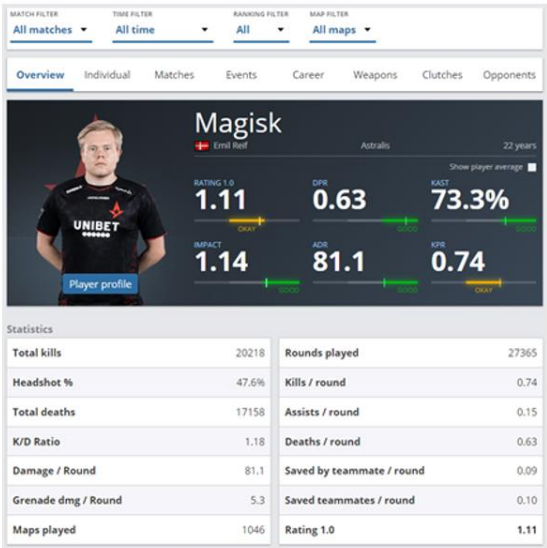


Figure 3. The individual profile

“If I go to the statistics, I can go deep. Entry kills, kills with any kind of weapon, the statistics of his last matches.” – Coach B

4.2.2. Internal peer evaluation

In organizations, managers formulated goals such as the attainment of a specific team rank on HLTV within a defined period or a minimum result in a specific tournament. Thus, any activities to improve individual players’ performance were ultimately directed at optimal team performance. Most teams started each day with discussions

about the previous day and tactical ideas for the following practices. Thereafter, they played several practices that were followed-up by another team talk, reviewing the practice games, and discussing theory and strategy. On days of official games, it was common for the team to watch the demo (the video-recording of a game) together after the game since a sole review of the post-game stats was considered insufficient to evaluate everyone's performance. With attention to detail, the players scrutinized each other's in-game actions, such as movements and the ability to create space for each other. These non-quantifiable factors were considered highly decisive for the success of the team.

"You have to watch demos to know exactly what you're looking for. You can see a lot of things on demos other than on HLTV statistics [...] It's like 90% demos and 10% HLTV statistics." - Coach B

Each organization had at least one coach for the team. An interviewed coach stated that his job entailed two main roles. He identified himself as an analyst of the players' in-game performance and as a mental coach. The coach meticulously tracked the results of the team on every map in official matches as well as practices. Moreover, he would be present at official games to monitor the communication of players as the success of the team's developed strategies was highly dependent on the verbal interaction during games.

4.2.3. External Peer Evaluation

It was described as a characteristic of the professional scene that most players are acquainted with each other due to the rather small size of the professional community and the fact that players and teams often attended the same events.

"It's a small world.[...] Everyone knows each other or has each other on steam and plays together and has played in teams together. So, everyone will have a point of contact or has secondary points of contact." - CEO

Beyond team practices, players frequently played in so-called "pugs" (pick up games), which serve as a platform for further individual practice with people of the same skill level, albeit a more casual setting than actual team practices. In pugs, the players competed in interchangeable teams rather than with the established roster of their organization. This way, professional players of different teams often played with or against each other. In the top tier, players were therefore well aware of each other's strengths and weaknesses.

"If you're getting picked up by a top team, it's usually because you've played with them. And at the time I was playing at Faceit Pro League as well, so I was playing with a few of them once in a while. And I guess that's also where they get the big impression of how you are as a player." - Player E

The immediate surveillance of peers was ascribed importance since Counter-Strike organizations grant their players considerable influence in the recruiting process of fellow players. When evaluating each other, players did not only focus on statistics and the HLTV rating but they also drew on personal impressions of the player. Moreover, the players used their close networks in the scene for informal talk about potential new players. That way, they could surveil from a distance a player's ability to fit into a prevailing system, potential issues with authority, or a history of toxic behavior.

“Talking to everyone else in the scene, former teammates, guys who played against him, guys who played with him, all that stuff.” - Commentator

4.3. Normalization

The second disciplinary mechanism is normalization, which imposes standards for the subject by comparing, differentiating, hierarchizing, homogenizing and excluding. In the following section, we will outline the normalizing features of the public PMS and the performance measurement practices in organizations.

4.3.1. Comparison

How to compare performance?

As the same metrics are applied to all players, the three stat-trackers render players comparable. This enables the user to compare every professional player with respect to specific performance indicators. However, players held that the individual statistics did not by themselves provide an accurate measurement basis to evaluate a player's performance due to the highly deviating requirements of the five different in-game roles. “I really feel that the stats have little meaning because every player has different roles.” - Coach A

Moreover, the interpretation of a specific role could vary and depended on the strategy of a team. For example, some players had a more aggressive or passive playstyle which tainted the explanatory power of individual performance measures. To evaluate progress, players rather reviewed tracked results and demos from tournaments and practices. Players applied their own subjective evaluation standard to identify potential for improvement among each other and advised to practice specific tasks. While management was not involved in this process, the team itself made sure that everyone improved individually to ensure the progress of the team.

“The coach can do such things and the team puts pressure on the players themselves. There are a standard and a judgment that they think is good and what kind of player you are. Maybe they do a lot of aim maps or different kinds of aim practices and you should do that. But that kind of happens by itself. We do not go down, we're not as delicate as

that. We're not competent enough to do that, we're not Counter-strike players ourselves.” - CEO

4.3.2. Differentiation and Hierarchization

A single rating for five different roles

The in-game stats and the post-game stats each entail an overall contribution metric, the score, and the HLTV rating. These measures incorporate the weighted impact of different actions into one metric. The score ranks players on the in-game scoreboard. Points in the scoring system are awarded to a player for actions that contribute to his team, such as a kill, an assist, or successful bomb disposal. The post-game scoreboard has a similar feature, the HLTV rating, the expected value (average) for certain statistics (like kills per round) which compares how much above or below that expected value for a certain player is. An individual rating higher than 1.0 indicates above-average performance and vice versa. It is thus a simple way for users to classify a player's performance as good or bad. The HLTV rating can be used to rank players, thus creating a hierarchy of overall game performance. It provides a more comprehensive measurement than the score as it encapsulates more in-game aspects. Despite its broader evaluation standard, the HLTV rating still failed to cover certain in-game actions.

“You can be a really passive player and just support with nades. Then you can't be expected to have positive statistics or a good rating on HLTV. Because your role is not making it happen.” - Coach B

Differentiating the level of performance of each individual was therefore heavily tied to its role. This required the identification of specific skills of each player which were most visible in his recorded games. In organizations, the performance of an individual player was not solely assessed with regard to his individual statistics. Instead, players and coaches drew on subjective forms of evaluation to qualify the differences in individual rankings.

“If you are in a support role, you will have bad stats every game even when you win 16-0[...] The thing I focus more on is if they do the right play or not. It needs more looking at a player and seeing his decision. It requires more than just looking at the stats afterward.” -Coach A

The guiding principle was to establish a strategy where the combined aptitudes of each individual could materialize into the highest possible output for the team. Such strategies could, however, place the focus on a certain individual in the team:

“So if you look at (Player Y), who is like the best player in the world right now. He doesn't have his HLTV rating just because he's a good player but also because his team

realizes that he is a good player and they want to utilize that so he can perform his best. So they play around him as much as they can.”- Coach A

The performance requirements from the players’ specific in-game roles could increase the team performance as a whole but did not necessarily materialize on their individual scoreboard. For example, the role of the in-game-leader to a large part reflected his aptitude to verbally instruct his teammates.

“I have to make sure to do calls, so we win rounds. And that’s when my performance more or less takes a big hit because I focus more on the team than on myself. “ - Player E

Different mentalities in different environments

Several players confirmed the necessity of mental support in order to perform and they highlighted the importance of the coach during official games as well as during practices where he would be present with his team on teamspeak. However, in official games, he could only communicate with his players in between rounds and during time-outs. It was common to take time-outs just so the coach could uplift his players.

“He (the coach) is trying to make us all more of a team, putting us together and just, if there is a bad mood in teamspeak, he will pause, he will speak up and just try to get us to focus, refocus and play together again.” - Player E

Despite the increasing availability of data that a coach could use to develop sophisticated strategies with the team, his role was nonetheless considered to be primarily a mental coach. The consultation of a mental coach was deemed vital by players and the organizational staff to ease mentally induced performance fluctuations and instead activate a positive mindset to help the team perform consistently.

“The coach’s primary job is mental. No matter what data you get, the mental state is the hardest state. Every game is game day for them. So if you don’t have a coach that can’t understand the mental state of their players and can’t get them in the zone then I think it obviously goes to waste.” - Data Scientist

The control of emotions constituted a decisive factor at LAN tournaments as well due to the physical closeness of the players. Different environments affected teams differently dependent on their ability to canalize emotions. A player that failed to control his facial expression could put the team chemistry at risk but he also posed a concern to the organization to uphold the brand image at a public event like a LAN tournament.

However, it was also emphasized that the spatial proximity of offline tournaments could facilitate the mobilization of a positive attitude giving teams with an intact team spirit an advantage.

“Our team performs better at LAN. Because when you’re playing in an online environment you’re sitting in teamspeak and it’s easier to fall into negative emotions and not have control of that. And also it’s harder for the team to impact a player into positivity when he’s not beside you. Different environments definitely affect the team and I would say personalities which are more emotional have a harder time online than on LAN.” - CEO

4.3.3. Homogenization and exclusion

A team of ‘fraggers’

The assessment of performance in merely statistical measures homogenized players while disregarding the requirements of different in-game roles. Players whose in-game roles implicate more supportive and strategic tasks will naturally have worse statistics and a lower HLTV rating than their teammates as such tasks are harder to quantify.

“If you don’t take in the context you will see that all the in-game leaders are terrible at the game and you could just switch them out to a fragger. And then all the teams will go to shit because when that happens, nothing happens.”- Commentator

Several interviewees stated that in North America the stats were the prevailing evaluation standard for individual performance. The repercussions of this norm have translated down to most players in the scene who feel pressured to assume the “star roles” allowing them to have better stats. Consequently, such roles are excessively overrepresented compared to a low number of IGLs and support players. Performance evaluation in merely statistical terms has forced players to subject themselves to the dominance of calculative practices. This has indeed evoked a homogenization of the player pool that is problematic for both the respective players and the organizations.

“Some of the top tier North Americans teams are having a hard time finding actual in-game leading talent because there are none... And I think that’s one of the reasons why some of these countries are left behind right now and are getting dominated by teams that actually have a focus on letting the in-game leader role and the support role shine.”
-Commentator

Forming a team

To strengthen the relationships among the players, organizations frequently arrange boot camps. One coach explained that he set up fixed schedules for each day. All players woke up at the same time, took all meals together, went to the gym together to work on their physical condition, and they had fixed play schedules with consecutive discussions. Such boot camps were considered a possibility to unite the players as a team and to get to know each other outside of the game.

“If we have a boot camp then participating in team-building events in boot camps is a goal as well. Because if you create a team outside of the game, it can only pull you forward inside of the game.” - Manager A

It was considered highly important to form a united team as successful teamplay rested on efficient communication among all members. Good individual skills on a sole basis were not sufficient to be recruited as a player. Up-and-coming players were usually expected to adapt to the norms of the team.

“So we just played with him and we thought he was good, but he had to speak more because he didn’t speak a lot, he was just doing his own thing. So we brought it up and two days later we saw that he already improved a lot, so we decided to play with him. - Player E

In teams, openness to criticism was deemed fundamental. Players who were not willing to conform would be excluded from the team.

“You’re basically telling them one way to play when they’re used to play another way. And they just have to work on improving that and be open to constructive criticism. That’s the most important part. If they’re not open to criticism or constructive criticism, then it’s not a player that you really want in your team.” -Player E

While teams demanded more from a player than to be skilled in the game, the audience and community mainly evaluated performance by reference to performance measures. In the event that a player had a statistically poor game compared to his teammates, it was common that the community postulated his replacement. This was also the case for players whose role within the team rested on supportive tasks that could not be captured by statistics and did therefore not materialize on the scoreboard.

“If you look at one of the top teams like X, the player Y is statistically doing really bad and a lot of people on reddit and discussion boards say that he should be removed but there is obviously a reason he is still there.”- Coach A

Players felt that the audience was incapable of a fair performance evaluation and instead placed too much emphasis on rankings of individual performance. Top players therefore prioritized the feedback and recognition of their peers.

“They care a lot more about their status within the professional scene.[...] They want to be regarded as good within the pro scene. That’s more important.” -CEO

4.4. Internalization

In this section, we will show how players internalize performance evaluation practices. We identify two sets of emotions in players in reaction to individual performance measures, anxiety, and allure.

4.4.1. Effects of the in-game scoreboard on the players

While most players acknowledged that statistics had only limited significance to their self-evaluation, they still admitted being affected by them during a game. Players could heavily react to weak statistical performance.

“People get anxiety or they lose focus because they have a hard time focusing on the game if they have bad stats.” - Coach A

This anxiety could provoke inferior decision making. Especially in close matches, being at the bottom of the scoreboard could incite a player to depart from the team’s strategy, which in fact harmed the team performance. Players were instantaneously presented with their failure to live up to the norm. The immediate performance feedback from the scoreboard could thus have an exacerbating effect. This notion was highlighted by several interviewees.

“If I go like 0-10, I will just look at the stats and I will not play like myself. I will just play really defensive and don’t do the plays that I used to do.” - Player A

A coach explained how he made use of an unconventional method to help his players overcome such adversities.

“I have told players when I played in other teams, to unbind tab so they couldn’t see [the scoreboard]. And that actually helped them.” – Coach A

The inability to access the instant performance feedback seemed to ease the anxiety and the exacerbating effect in response to a weak performance. Players were instead able to stay focused and act in accordance with the team strategy rather than engaging in irrational actions to improve their score and to live up to the norm.

4.4.2. The harmful allure of individualism

As previously mentioned, the match page on HLTV also functioned as a forum for the audience to discuss games. The post-game stats generally constituted the main basis for the evaluation of player performance. This created an allure, especially for up-and-coming players, to focus on their individual statistics to set themselves apart from other players and to be recognized by the audience.

“Mostly the guys that are up-and-coming will be very focused on what the crowd thinks of them and how they are doing stats-wise. Because that will be important for them to create an image and to create a following and fandom.” – Commentator

The compulsion to raise awareness among the audience induced many players to emphasize their individual performance at the expense of the team performance. This was also exemplified by another interviewee. When he was a team owner, his players faced one of the biggest games of their careers against one of the top teams in the world.

Before the game he had decided to marginally change the in-game positions, assigning some of the struggling players more favorable positions and the star player some less favorable positions. The reasoning was to create a positive net effect on the team. The anticipated drop in performance of the star player would be outweighed by the higher in-game impact of his teammates. However, the prospect of worsened individual statistics irritated the star player to such an extent, that he did not communicate during the whole game, leaving his team no chance to win the match. The prominence of individual statistics superseded the consciousness for coordinated team play. This notion was brought up by several interviewees.

“They’re good players but they want to show themselves. They don’t care about winning the game, they just want to show that they can get kills.” – Coach A

4.4.3. A fitting role

The professional structures of organizations with a strong focus on team performance seemed to enable players in less “privileged” roles as the emphasis on individual performance statistics decreased. Peers in the team understood that the actions of such players were to a large extent non-quantifiable, yet crucial for the success of the team. This reduced the pressure to engage in behavior that satisfied the audience. Team rankings and performance constituted the ultimate benchmark which valorized in-game roles that were neglected by the audience. This motivated players to take on their preferred roles and thrive in them: “I’ve always been the guy that talks a lot and that decides what we’re supposed to do. I’m kind of a red person and I like to decide things... I think you need to be born to be an IGL, because you need to have confidence and know what you’re doing.” -Player C

Players saw particular roles of the game as a means to weigh in their personality traits. The assignation of a certain role did thus not necessarily confine their opportunities for action but sometimes even reflected the type of person they wanted to be.

“The star players and the entry fraggers are usually the more silent types. They don’t talk a lot, they just let their work shine and then they’re fine with that[...] The support players are usually the guys who try to get everyone going, to include everyone and make sure everyone is on the same page. So I think it translates very well into personal and interpersonal roles and relationships.” -Commentator

4.5. Social Media and Brand Promotion

The professionalization of the esports industry has added a further dimension to the players’ scope of duty. With emotionally attached fans the field of social media emerges as a means to digitally connect to the audience. In the following, we will present the commercial activities undertaken by organizations and we will state how they exploit

digital platforms through their players' social media presence to address stakeholders like fans and sponsors.

4.5.1. Surveillance

It became evident that organizations aim to financially capitalize on the opportunities from social media engagements. Opposed to traditional sports, any income from ticket sales flows to the esports tournament organizers as of today. Therefore, organizations seek to exploit other sources of income to generate a sustainable business. The fulfillment of social media activities was deemed a subject matter of the contract that players signed when joining an organization. A player's social media presence could entail streaming his games for a specific number of hours, promoting products for sponsors or taking part in photoshoots. Players were also required to wear the official team jerseys at tournaments and public events. The abidance of these requirements was monitored by all case organizations. Also, on a semi-professional level, social media activities were classified as a vital means to gain a competitive edge. In his capacity as a former owner of a semi-professional team one interviewee depicted his reasons to sign a player at twice the salary of the competitive team:

“He had a big Youtube channel that was very active back then. And very active social medias compared to his individual level which wasn't very high... His engagement on social media actually was the reason that I could sell a sponsorship.” - Commentator

The monetary contributions from the sponsorship and the following partnerships allowed to cover the organization's salary costs. The evaluation of the player's in-game skill level was subordinate to the decision to recruit him. His value was instead measured on his appeal to the digital audience which could be quantified in the number of followers and put in relation to the organization's media penetration.

“On the lower tier teams, if you have a team that has like 500 followers on Twitter and they get a player with 6000, then they can use that to sell their sponsorships.” - Commentator

Especially for lower-tier teams, this constituted an opportunity to grow the business financially. In professional teams, it was emphasized that joining players could rather grow alongside the established brand and image of the organization.

“X did not have a brand before he came to Y. Now he has a Twitter page, and a Facebook page, an Instagram face with hundred of thousands of followers. Because if you are on Y who is already a big brand with big brands of players alongside him, you can grow that.”- Commentator

4.5.2. Normalization

Contractual agreements set the standard for players by stipulating a specific number of social media posts in a defined time period or determining a number of sponsor events that the players had to attend. The number of social media followers provided a comparative element to measure the appeal to the audience. Consequently, it quantified the added financial value in terms of an individual's ability to promote sponsors' products and the organizational brand.

In the endeavor to promote their brand, organizations identified that the mobilization of players depended on the power dynamics between players and management. The CEO invoked the transition towards professionalization and the development of a well-known corporate culture as crucial factors to get his players to act in conformity with contractual agreements.

"Player Y in organization Z, he's been for the whole of his career like: "I'm Player Y and you are dependent on me. I'm the reason organization Z is doing well in CS". But now when they recruit a new player and he's 16 years old, then they will be able to say: "This is the way we do things"[...] Then they will adapt."- CEO

He argued that the long-standing history and the entrenched practices of professional organizations have induced an acceptance of authority that avails to discipline up-and-coming players. However, he also acknowledged that older, prestigious players who attended the rising of the scene and his organization were to be classed higher in the organizational hierarchy allowing them to deny certain requests as a result of the prevailing power dynamics. It was also noted that the management of players' business matters increasingly resided with agencies.

"It helps them because they can keep their mind on CS:GO and not so much on the business side of things.[...] They can evolve into a better player and they're just being guided through the process, so it will only help them."- Manager A

4.5.3. Internalization

It became apparent that many players did not utterly recognize the value of a social media engagement for them personally as well as for the organization they were engaged with. They were rather driven by their competitive mindset than by concerns of the business perspective. Clauses that obliged players to regularly stream their games initially evoked high resistance.

"Every player had a clause that says: "You have to stream this many hours every month", and none of them did it. And so X held that above them and said: "No, we are not paying you for these tournaments because you didn't fulfill the contracts." - Player D

Although acknowledging social media commitment and sponsoring events as a part of their professional duty, many players admitted not to thrive in the process. One player referred to a photoshoot on a boat cruise where his team was filmed playing against each other. Some of his teammates showed disappointment at the lack of an internet connection and they felt uncomfortable to act delighted in a staged setting devoid of any competitiveness. However, the player noticed that, especially for rather introverted individuals, such experiences were part of a learning process to get a better understanding of the functionality of the industry. Another player viewed the ramifications from the commercialization of the scene merely as a contribution to his daily schedule.

“The whole scene is business, so if you have 100k followers and take two seconds of your life to share a post and your organization's page gets a 100k hits on that. It's not much work to do, it takes me one minute a day to make sure my social media is updated.” - Player C

The commentator (former team owner) pointed out the necessity to educate young players in lower-tier organizations about the importance of their demeanor on social media and in public events to get them gradually accustomed to organizational standards. Familiarizing them with the duties of a professional player at an early stage of their career would not only avail professional organizations to recruit socially educated players but it would also help the players to grow as a person.

“They just focus on all the other things because there are so many things to focus on as a player. I think it's the job of the lower-tier organizations to teach them that (public appearance) and I think it will be a commodity in the future.” - Commentator

He also stated that the emergence of individual endorsement deals could illustrate players an enabling side of social activeness. Overall, it became apparent that organizations aimed to make their athletes aware of the benefits they could get from such activities rather than considering them strictly imposed duties that would distract them from performing in the game.

“We try to get their head around the purpose of it and we want them to want it for themselves.” - CEO

5. Discussion

We introduce this section with a brief recapitulation of our gathered empirics. Subsequently, in two different subsections, we will discuss nuanced phenomena and contextualize them with previous literature on calculative practices and performance measurement. Following each separate discussion, we will present a contribution.

Situated in the fast-growing and professionalizing esports scene, Counter-Strike players are required to perform on multiple dimensions. While being subjected to calculative practices that meticulously quantify and track individual performance on publicly accessible websites, players are further presented with team goals set by their organization. Beyond that, they have to be approachable on social media to attract and entertain an ever-growing audience. In an esports, that is characterized by a high emphasis on quantification and individual accountability, we observe the usage of subjective evaluation approaches that assume a wider notion of performance to evaluate the aptitudes of an individual. Opposed to that, the opinion of lay experts in the community gains popularity (Jeacle, 2017).

In the following, we aim to discuss how the quantitative performance measures, the governance in professional organizations, and the involvement of the audience shape the behavior of players. On the basis of this discussion we intend to answer our research question:

How is performance measured and evaluated in Counter-Strike and how does that affect the player being measured?

5.1. Implications of individual performance measures

In our empirics, we have identified a prevalence of public performance measures, the stats, which quantify the individual performance of players. Drawing on the Foucauldian notion of discipline, we have analyzed the surveilling, normalizing, and internalizing features of these measures. The applied framework is similar to that of Sauder and Espeland (2009) who study the implications of rankings of law schools in the US. We come to see that the ranking of schools and the public performance measures in Counter-Strike share similarities. In both studies, the PMS governing employees or players are not employed by the organizations themselves but are instead imposed and published by an external party. As a consequence, organizations and players cannot alter the measures but have to defer to the evaluation criteria albeit they may question their validity. Moreover, both stats and school rankings intend to provide a measurement of overall performance by value-weighting different metrics into one figure that seeks to provide objectivity. Players and law schools are thus hierarchized in a ranking that defines a single norm for excellence (Sauder & Espeland, 2009).

However, such rankings possess an inherent subjectivity in the way they are constructed. The derivation of the formula rests on subjective choices as to what metrics to include as well as how to weight their value. Such a formula will incorporate only a limited range of available performance measures and it typically includes metrics that are easy to measure and quantify (Sauder & Espeland, 2006). Thus, a measure of overall performance inevitably provides a subjective definition of performance.

We have ascertained that the mundane practices in professional Counter-Strike teams naturally render some individuals lower on rankings as they assume roles whose impact cannot be quantified to the same extent as others. The constraints of individual performance measures cannot be utterly grasped by the audience as it is incapable of seeing the complex practices that implicate individual statistics. Sauder and Espeland (2009) give a record of an 'ill-informed audience' that feels qualified to evaluate performance over time and in relation to others by reference to rankings. The differences in rankings become 'value-laden', considered a flaw rather than a viable alternative (Sauder & Espeland, 2009). In line with this, professional players explain that their desire for a fair-minded evaluation by the audience can hardly be gratified. Keen (2007) goes as far as to say that the 'cult of the amateur' has prompted the demise of the professional.

We have identified that public individual performance measures provoke two sets of emotions in the measured individuals, allure, and anxiety. The attention from the audience allures players to focus on measurable aspects of the game to improve the individual rating and ranking. Espeland and Sauder (2007) hold the notion of reactivity, the alteration of one's behavior when being measured. One form of reactivity is gaming, the manipulation of the measured numbers without regard for the underlying purpose of the measurement. The risk of gaming behavior increases if measures are tied to incentives (Espeland & Sauder, 2007). The appeal of the audience to quantitative performance measures and rankings constitutes a strong incentive for players to engage in gaming behavior. Notably, the prominence of social media in esports can prompt individualistic behavior since a higher individual rank serves to increase the number of followers and thereby arouses the attention of organizations. Moreover, we find that in reaction to the instant and visible performance feedback during a game, players can become anxious and engage in ill-advised actions that eventually have a detrimental effect on team performance. These actions are not driven by individualism or gaming behavior but rather by fear of not living up to the norm. A weak statistical performance can thus incite individuals to place greater emphasis on quantifiable tasks.

While individual performance measures seek to objectify individual performance, their powerful effect can incite players to unduly focus on measurable tasks. Van der Kolk and Kaufmann (2018) give a record of a similar finding, where workers are more inclined to focus on measured tasks and avoid those tasks that cannot be quantified. These findings gain particular relevance in a team sport as team performance not only

rests on the performance of individuals but also on their interoperability. The degree of interaction among individuals complicates the measurement of individual performance (Duch et al., 2010). With the increased availability of individual data in traditional sports (Andon & Free, 2019), it becomes increasingly important for clubs to consider how the introduction of additional individual performance measures alters the behavior of individuals and how these behavioral changes impinge on the whole team.

In order to shed light on our research question, we provide the first contribution to our domain. Firstly, we show that individual performance measures can affect the behavior of individuals inciting them to focus more on quantifiable tasks (Van der Kolk & Kaufmann, 2018). Our findings suggest that a PMS that is designed to capture individual performance, might in fact lead to unintended behavior (Espeland & Sauder, 2007). We also find that emotions induce the alteration of behavior. On the one hand, anxiety in reaction to the immediate visibility of performance provokes inferior decision-making and irrational actions. On the other hand, we see an allure to attract attention from an audience that ascribes high legitimacy to public performance measures and rankings (Sauder & Espeland, 2009). These findings become highly relevant in a team environment where behavioral changes of individuals can negatively affect team performance. With the increasing call for transparency and governance of individual performance in traditional sports, fostered by increasing availability of data (Andon & Free, 2019), we argue that sports organizations need to be wary of the delicate effects of such measures, as they can amplify the focus on quantifiable tasks at the expense of the team performance.

5.2. The interplay of calculative practices and subjective evaluation

Jeacle (2015) studies how calculative practices of accounting enable the government of individuals noting that governing rests on the mobilization of a *Latourian network of interests*. Such a network converts the interests of a diverse array of actors into a common goal or objective (Rose & Miller, 1992). In Jeacle's context of fashion, the network is already present. Trend fashion is described as a classic example of an 'inherently normalizing and self-regulating activity' (Foucault, 1977). In their desire to follow fashion trends individuals willingly subject themselves to these trends. However, in Counter-Strike organizations, the natural prominence of individual performance measures impedes the alignment of individuals' interests towards a common objective. While players can be inclined to achieve team goals, the significance and internalizing capacity of individual performance measures remain a peril for organizations. However, in the following, we will discuss the characteristics of the professional scene that lay the ground for the alignment of objectives.

In professional football organizations, the sporting logic enacts performance measurement through positions in a league table (Carlsson-Wall et al., 2016). In a similar manner, organizational managers in Counter-Strike organizations formulate team goals such as the achievement of a specific team rank or placement at a tournament. Performance is measured in terms of the ability of a collective of individuals to optimally combine their aptitudes. Every action of the individual is thus to be legitimized by the team objective, in essence, to win games visualized by the final score of official matches. Miller's (2001) notion of a 'liberal government' does not prescribe the specific actions of an individual to achieve the target. The government formulates the target leaving it up to the responsibility of the individual to come to act as a self-regulating person.

The conception of a 'liberal government' fits the governance structures in our case organizations where managers mostly abstain from interventions in the daily business of the players, and instead trust their expertise. This goes as far as to grant players wide autonomy in the recruitment of fellow players for the team. Managers present players with the 'elegance of a single figure' (Miller, 2001), the team goal, quantified through the attainment of a certain rank. In the organizational setting, we observe a *hierarchization of performance*, the team objective supersedes individual performance measures and thus alleviates their pressure on the individual player to a certain extent. Under due consideration of each other's skills, players interactively develop strategies catered for the strengths of one or two key players whereas the remaining players assume supportive tasks and consequently rank lower in comparison. This exemplifies how individuals develop ways of governing themselves and categorize persons into versatile roles (Miller & Rose, 2008). Players, as well as organizational managers, acknowledge that the impact of different roles cannot be measured to the same extent. However, each role is all the same associated with norms jointly stipulated by the team. The rehearsal of strategies, coordinated communication, and the continuous mutual practices rest on the discipline of each individual. We observe that the motivation to win team competitions induces players to subject themselves to the specific requirements of their role and to the attached expectations from teammates and the coach (Rose & Miller, 1992). To further antagonize potentially adverse effects emanating from individual performance measures, organizations reward players with bonuses dependent on team performance (Van der Kolk et al, 2019).

As stated earlier, professional players are highly concerned about their reputation in the scene and they give preference to the performance feedback from peers. Peers apply an evaluation standard that goes beyond quantitative performance regimes. Performance assessment thus incorporates unquantifiable actions in the game as well as social skills like team behavior and communicative abilities. These skills and attributes become visible through the transparent flow of information in a network of professional players. This network is based on previous encounters in teams and competitions but also on

interactions in casual pick up games in a more informal environment. Considering the fact that professional players most widely autonomously recruit peers, one's reputation in the professional scene is of high relevance. We observe that the recruitment of a player rests either on direct knowledge of this player or on the information from a secondary contact in the network. Hence, any decisions to sign a player are based on the trust in an *expert system* that is legitimized through the expertise of its participants (Giddens, 1990). *Trust* is thus elicited through the *ability* of the contacted individual to adequately assess performance (Mayer et al., 1995). As the network comprises professional players the *ability* is provided. Jeacle and Carter (2011) distinguish TripAdvisor as an expert system that elicits trust through the application of calculative practices in the form of rankings. In our case, in fact, we observe the reverse effect. Players lack trust in the validity of prevalent rankings and therefore seek to consult *experts* who legitimize the rankings by reference to more subjective forms of evaluation that rest on expertise. Similarly, Bialecki et al. (2017) find that IMDb users do not rely solely on rankings of movies but commonly consults experts in the form of film reviewers. In our case, all players in the network have the basic ability to qualify the rating of another player, however, they require underlying information about this player to put the rating into perspective.

In order to give further information on our research question, we expound our second contribution. We introduce the *Peer Evaluation System*, a network of experts that draw on an interplay of subjective evaluation and calculative practices. The *Peer Evaluation System* does not only provide more accurate feedback on individual performance through its broader evaluation standard, but it also serves as a mode of discipline through the efficient feedback loop on players in the professional network. While the *Peer Evaluation System* imposes more requirements on individuals, it simultaneously eases the pressure to fully conform to the norms of the public individual performance measures as they are legitimized by the knowledge about the player's particular in-game role. One could describe it as more lenient than the public performance measures which relentlessly punish for flawed performance through their continuous visibility. Yet, it is also punishing as it excludes individuals that do not adhere to the behaviors and norms advocated by the system. Through its broad evaluation standard, the *Peer Evaluation System* reinforces the internalization of team-oriented behavior. On the one hand, it aims to turn individuals into highly skilled adepts of the game. On the other hand, it comes to strengthen social and communicative skills. With its sophistication and inherent expertise, the *Peer Evaluation System* assesses a combination of qualities and quantities that determine the ability of an individual to add value to a professional team. It antagonizes the internalizing effects of individual rankings and performance measures. We therefore hold that a complementing subjective performance evaluation mediated through *expertise* serves to diminish the inherent deficiencies of calculative practices.

6. Conclusion

This paper has sought to investigate the role of calculative practices in governing the individual in the realm of sports. With the growing demand for accountability, transparency, and efficiency (Espeland & Sauder, 2007), and the increasing pervasion of calculative practices in contemporary life (Jeacle & Carter, 2011), further academic insights into this area seem expedient. While many accounting scholars have examined calculative technologies and performance measures in the realm of society (Bialecki et al., 2017; Espeland & Sauder, 2007; Jeacle & Carter, 2011; Narin et al., 2005; Sauder and Espeland, 2009), sparse research has devoted its attention to the effects of governance on individual performance. In order to grasp the effects of performance measurement on the measured individual, we have undertaken a study in the novel research area of esports. Dedicating our attention to the esports discipline Counter-Strike Global Offensive, we have been able to shed light on our research question:

How is performance measured and evaluated in Counter-Strike and how does that affect the player being measured?

We contribute to the accounting literature with two major findings. The first contribution accentuates the prominence of calculative practices. Our findings indicate that a public performance measurement system that is designed to account for individual performance can incite individuals to place greater emphasis on quantifiable tasks (Van der Kolk & Kaufmann, 2018). We also find that emotions induce the alteration of behavior (Sauder & Espeland, 2009). An audience that ascribes high legitimacy to public performance measures and rankings creates an allure for players to engage in *gaming behavior* (Espeland & Sauder, 2007). We distinguish that public individual performance measures render strong internalizing effects which are reinforced by an influential audience that mainly defines individual performance by reference to calculative practices. A second prominent emotion is anxiety. The instantaneous quantified performance feedback during games can highly affect the mental state of players. It emerges that the resulting anxiety can provoke inferior-decision making and irrational behavior. Both emotions, allure, and anxiety, produce unintended behaviors that are detrimental to team performance. Therefore, with the rising demand for accountability and governance of the individual player in traditional sports, underpinned by the increasing availability of data (Andon & Free, 2019), we hold that sports organizations need to be wary of the effects of individual performance measures as they can adversely affect team performance.

With our second main contribution, we introduce the *Peer Evaluation System*, a network of professional players who draw on an interplay of subjective evaluation and calculative practices to monitor and evaluate each other. The *Peer Evaluation System* is characterized and legitimized by the expertise of its participants. An inherent

assumption in the system is the limited validity of quantitative performance measures to accurately assess performance (Van der Kolk & Kaufmann, 2018). Instead, we observe that players take recourse to more subjective forms of evaluation to adequately evaluate performance. The transparent flow of information in a network of experts renders players visible and serves to discipline as the system punishes individualistic behavior and sets the norms for professional conduct. The *Peer Evaluation System* facilitates the internalization of team-oriented behavior and antagonizes the adverse effects of quantitative individual performance measures. Based on this, we argue that a complementary subjective performance evaluation validated through networks of expertise (Giddens, 1990) conduces to mitigate the inherent deficiencies of quantitative accounting regimes.

The study has some limitations. Since we conducted a cross-sectional interview study, interviews were done with a diverse range of stakeholders from multiple organizations as well as with stakeholders without direct ties to a professional organization. This complicated the task to follow up on particular tensions that were identified in a specific organization. Undertaking a single-case study might have been conducive to engage in more in-depth research on the power relations in professional Counter-Strike organizations. Interviews with several players from the same team could provide a more profound understanding of the daily routines in a team. Secondly, given the rapid growth and the constant evolvement of the esports industry, it might have been fruitful to conduct a longitudinal study. In view of the ongoing professionalization, a study over a longer period of time could have enabled us to better grasp how trends in the industry affect governance structures in organizations and how this, in turn, affects the players. Thirdly, due to the social distancing restrictions imposed as part of the Covid-19 pandemic all interviews were held over digital media. This limited the possibility to obtain secondary data such as on-site observations.

We recommend further research on the power relations between management and players in professional esports organizations. Given the presence of adept talent scouts in traditional sports organizations, it might be fruitful to study whether organizations will uphold the practice to grant players the widest autonomy in the recruitment of new players. Moreover, we recommend shedding further light on the question of whether the interference of individual performance measures with team objectives is of relevance in other esports as well. Furthermore, in esports, unlike traditional sports, the game developer owns the intellectual property rights of the sport. It could be fruitful to research how this impacts the organization's business models and their ability to be profitable and self-sustaining.

7. References

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8. Appendix

Interview	Function	Date	Duration	Documentation
1	Manager A	2020-03-13	58 min	Audio Recording
2	Manager B	2020-03-18	42 min	Audio Recording
3	Mental coach	2020-04-08	90 min	Audio Recording
4	Player A	2020-04-09	28 min	Audio Recording
5	Player B	2020-04-09	42 min	Audio Recording
6	CEO	2020-04-10	78 min	Audio Recording
7	Player C	2020-04-11	37 min	Audio Recording
8	Player D	2020-04-11	62 min	Audio Recording
9	Coach A	2020-04-12	36 min	Audio Recording
10	Coach B	2020-04-15	53 min	Audio Recording
11	Coach C	2020-04-16	38 min	Notes taken
12	Commentator	2020-04-16	61 min	Audio Recording
13	Data Scientist	2020-04-26	46 min	Audio Recording
14	Player E	2020-05-08	40 min	Audio Recording