



Article

New Management Approaches in Digitized Work as the Cure for Inequality?

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Abstract: Due to the increasing importance of digitization, ICT and engineering sectors are also growing. In these sectors, there are a lot of high-qualified and well-paid jobs. However, despite the growing importance and popularity of digital solutions, one fact (at least) is, unfortunately, still very stable within the ICT and engineering sectors: When it comes to employees, there are still huge differences with respect to gender and gender stereotypes. (Commercial) technology development can be regarded as having masculine connotations both structurally and culturally. Therefore, we address these connotations, especially the roles of androcentric bureaucracy, which could be described as hierarchical, technocentric, and very controlling-oriented, and (the structural possibilities of) self-efficacy. We discuss, conceptually and empirically with a focus on software development, whether new management approaches like agile frameworks and new management roles like Feel-good Managers and Scrum Master could be seen as a cure for inequality or if there are new stereotypical gender-related ascriptions for specific activities or processes.

Keywords: gender inequality; female empowerment; ICT; engineering; digitization; project management; new management approaches; agile management; feel-good management

1. Introduction

As digitalization is becoming more and more important in almost every aspect of everyday life and daily work processes, the sectors of information and communication technology (ICT) and engineering are growing as well. Despite the growing importance and popularity of digital solutions, one fact (at least) is, unfortunately, still very stable within the ICT and engineering sectors: When it comes to employees, there are still huge differences with respect to gender. (Commercial) technology development can be regarded as having masculine connotations both structurally and culturally. To give some examples: Structurally, women comprised 25.8% of the workforce in the ICT sector in the USA in 2019, 18.7% in the field of software development, at which we are especially looking at, and only 9.2% in network architecture (U.S. Bureau of Labor Statistics 2020). The figure for engineering during the same period was 15.7% (U.S. Bureau of Labor Statistics 2020). In Germany, too, information technology is a highly male-dominated sector. According to a survey by the Institute for Employment Research (IAB), women constitute only 18.4% of the workforce in core IT professions, representing a decrease of 2.5% compared to 1999, which is especially noticeable in younger employees aged 25 to 35 (IAB (Institut für Arbeitsmarkt-und Berufsforschung) 2018). Within software development, 19.5% of all development experts are women (BfA (Bundesagentur für Arbeit) 2019). Therefore, the gendered division of labor seems to be very stable. Reasons for this could be seen in the gender segregation within socialization processes and their structural perpetuation in the sense of gender-specific career choices (Wiswall and Zafar 2016) as well as by structural issues within the labor market: Such as the glass ceiling effect¹ (Bertrand 2017)



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¹ Glas ceiling effect means that the share of women in leadership positions is lower than on average in all sectors.

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and the gender pay gap² (Angelov et al. 2016; Blau and Kahn 2017). It should also be mentioned here that gendered professional biographies cannot be separated from the unequal distribution of reproductive work and family constellations (Bertrand et al. 2015). Despite the undisputed necessity and explanatory power of these perspectives, we try to add an inner-organizational approach within this paper, focusing bureaucracy and self-efficacy and their gendered connotations. The starting point is that both the ICT sector and the engineering sector are often seen as androcentric (Acker 1990), because of their bureaucratic, hierarchical, and one-sided, technology-centric culture. However, in the last decades, many changes are occurring within these structural and cultural settings due to new management approaches highlighting self-organization, cooperation, flexibility, and agility, which are becoming more and more popular. To bring these points into greater focus, we pose the following research questions: Does the establishment of new agile management and agile management roles foster a more diverse gender distribution in technical work environments? Is there a transformation with respect to inequalities in gender distribution in technical work environments by virtue of new management roles emerging, and if so, how can this transformation be characterized? How do people in new management roles as members of agile teams describe their experience and their self-efficacy? Does the self-efficacy of women increase or do the new roles only promote the self-efficacy of male-dominated groups? To address these issues, we will focus on the interplay between bureaucracy and gender (Section 2.1), as well as on that between self-efficacy and gender (Section 2.2). We then present our analytical (Section 3) and methodological approach (Section 4) and provide insights into our empirical results (Section 5) and conclusions (Section 6).

2. Theoretical Background

2.1. Bureaucracy and Gender: Software Development as a Story of Bureaucracy and Androcentricity?

The dominance of men in the field of technology development was long accompanied by both structural and cultural phenomena such as a one-sided technicist understanding of processes and 'control fantasies', thus resulting in excessively hierarchical and (ex-ante) planning-oriented organisational structures, which are often understood as androcentric because male employees with full focus on their jobs and no care work duties are seen as the archetype in those concepts, and therefore these concepts are big players if it comes to reproduction of gender stereotypes (Acker 1990; Faulkner 2001; Mucha 2014). Such cultural and structural androcentrism could be detected in most large corporations, where many software developers are based, despite all the focus on start-ups. Therefore, most development projects involve rigorous project planning following the guidelines of waterfall and V-models (Komus and Kamlowski 2014; Hruschka et al. 2009), which suggest large and long-term projects can be planned entirely ex-ante—and which have often proved failures with respect to costs, time, and product quality (Kaur and Sengupta 2011). Quite often, a type of project management, which is not appropriate for the projects' duties and needs and which is especially not flexible enough, is seen as a main reason for these failures (Joslin and Müller 2015; Pace 2019). Despite this fact, the only consequence when one follows this path, is establishing even more rigorous ex-ante planning, even more hierarchies, and even more excessive control (Böhle et al. 2009). Of course, it could be assumed that such a style of management is, on the one hand, due to constant attempts to reduce costs or the (generalised) suspicion that (too) little work is being done efficiently and therefore refers to the transformation problem (Foley and Duménil 2008). However, on the other hand, its source also has to be sought in a specific, 'engineer-like', and androcentric idea of management: Everything can be planned in advance and then communicated directly and hierarchically—and if that does not work, a larger dose of the same poison is called for,

Gender pay gap means that female employees on average earn less than their male colleagues even if they have the same position and the same qualifications.

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instead of reflecting on what one is doing and finding blind spots and one-sided exaggerations. The central reference point is the production, implementation, and monitoring of plans; there is either no communication or the little communication that does take place is merely problem-oriented and therefore less productive. Therefore, management loses sight of the possibility of (re)acting flexibly in response to changes, deviations from the plan, and unforeseeable circumstances, of using implicit (experiential) knowledge, and involving all stakeholders in planning processes. Software developers are confronted with contradictory demands in their work, because they are supposed to develop products while being flexible, creative, and innovative—while, on the other hand, also performing a lot of documentation and control duties (Pfeiffer et al. 2019). For many years now, there has been a joke that developers and engineers are not developing and engineering, but only fixing the presentation for the next management meeting: They are so-called 'Power-Point engineers' and 'Power Point developers'. The non-conducive environment and the counterproductive demands are difficult and, ultimately, even dangerous (risks of stress and burnout) for male as well as for female employees (Bourgault 2016; Kaufmann et al. 2018; Kaufmann and Tummers 2016). However, it seems that this is especially problematic for female employees, because due to empirical findings from Bourgault (2016), women are on average more intrinsically motivated than men, who are on average more extrinsically motivated. Highly bureaucratic and hierarchical structures therefore seem to be a major problem for all employees within software development and engineering and especially for women, even though there are some papers that view a kind of balanced bureaucracy as a potential source of female empowerment (Baron et al. 2016) and that challenge the patriarchal connotation of bureaucracy (Wickham et al. 2008). Hence, we have to be careful: It is not a given that agile approaches favour gender equality. However, there is a change: A management style that is guided less by planning, documentation, control, and technology-centricity could represent a chance especially for women to perform their daily work in an appropriate and collaborative manner and therefore also to acquire greater self-efficacy (see below).

2.2. Self-Efficacy and Gender

The concept of self-efficacy was developed by the psychologist Albert Bandura. As a theoretical framework, self-efficacy is assigned a central role in the process of "[...] how people think, feel, motivate themselves, and act." (Bandura 1995, p. 2). If self-efficacy is perceived by an individual, the choice of behaviour is affected. Situations that are experienced as fearful or threatening will be avoided, instead of those in which individuals feel that they have the required coping skills for handling the specific setting. Efficacy expectations do help to determine the chosen behaviour of individuals: In terms of specifically how much effort they give, as well as in terms of how long they pursue their objective even though there may be obstacles along the way (Bandura 1995, p. 9; Bandura 2001, p. 10). "Such beliefs influence whether people think pessimistically or optimistically and in ways that are self-enhancing or self-hindering". (Bandura 2001, p. 10).

Individuals' expectations of success when choosing an activity are influenced by their perception of self-efficacy. The stronger the sense of self-efficacy is, the higher is the likelihood that specific activities are being pursued (Bandura 1995, pp. 6, 8; Bandura 2001, p. 10). Bandura refers to self-efficacy as an important determinant of behaviour, but other factors, like incentives, can also affect the behaviour of individuals (Bandura 1995, p. 7). Furthermore, to precisely estimate the expected efficacy, it is important to have as much detailed information as possible regarding the activity (Bandura 1995, p. 5). At the same time, fortuitous situations can also increase or enhance self-efficacy expectations, even if they involve certain uncertainties and unknowns (Bandura 2001, p. 11 f.). Accordingly, individuals consider different options, weighing advantages and disadvantages to ultimately make a decision that delivers the greatest possible value (Bandura 2001, p. 23).

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While Bandura refers to rational behaviour in decisions making, newer models claim other factors to be influential in this process. The connection of emotions and decisions has been researched more and more since about 2003 and showed that these go hand in hand. Emotions are seen as a guide through everyday life in order to avoid certain feelings and therefore determine decisions. The feelings to be avoided can be both, negative or positive, depending on the context of an individual. Furthermore, emotions can be experienced in conscious or unconscious ways and affect the decision-making process (Slovic et al. 2004, p. 312; Lerner et al. 2015, p. 800 f.). In addition, the characteristics of emotions may have an influence on decisions, like the type of emotion, its valence, but also the content or depth of thought might shape a decision through emotions (Lerner et al. 2015, p. 802 ff.). In the context of job-decisions, emotions were also found to be important (Raghunathan et al. 2006). Other models explain that contextual factors like choice sets and defaults, scarcity, and social influence make an impact on decision making as they are affecting the number of choices and alternatives individuals are facing (Bruch and Feinberg 2017, p. 10 ff.). There are also approaches that have identified gender or gender roles and the associated socialization of individuals as a source of influence on decisions. The focus here is primarily on the different inclusion of parameters in decision-making and how these decisions are influenced by gender (Johnson and Powell 1994; Perry et al. 1994; Venkatesh et al. 2000; Gianakos 2001; Glover et al. 2002).

Bandura identified four sources of self-efficacy that structure the self-efficacy individuals may sense. Mastery experiences, which are based upon personal experience of ability, are the most influential. Success raises the expectation of self-efficacy, especially when repeated, and failures lower expected self-efficacy (Bandura 1995, p. 3). Vicarious experience, the second source, refers to the observation of other individuals succeeding in fearful situations without negative outcomes or consequences. This can improve one's own expected efficacy, which raises willingness to improve, as well as to pursue the efforts. The conclusion of an individual that if others can do it, he or she can also achieve the expected outcome, is classified as a less dependable source of the self-efficacy expectation than personal accomplishment (Bandura 1995, p. 3 f.). The third source Bandura describes is social persuasion, which happens when people are being persuaded verbally that they are capable of mastering given activities. They also tend to mobilize more effort in situations if problems come up and handle those with less self-doubts. Like vicarious experience, this source has less of an effect on efficacy expectations than personal accomplishment, and efficacy expectations based upon this source can be easily dissolved (Bandura 1995, p. 4). The fourth source is physiological and emotional arousal. Threatening situations experienced by individuals elicit emotional reactions, which also provide information about their own personal competencies. By facing these emotions, information is conveyed that serves as a source of perceived self-efficacy. A low emotional arousal affects the selfefficacy expectation positively, whereas high emotional reactions are more likely to lead to a decrease in self-efficacy expectations (Bandura 1995, p. 4 f.), because "[t]hey interpret their stress reactions and tension as signs of vulnerability to poor performance" (Bandura 1995, p. 4). Hence, people who fear less may have less self-doubts and a higher likelihood of undertaking successful activities, which therefore strengthens self-efficacy (Bandura

Besides these four sources of self-efficacy, the development process in and of itself is also determined by the information people get from their surroundings and environment. Contextual factors like the social, situational, or temporal circumstances also determine how people define their self-efficacy and the events that affect the formation of it. Because these factors may be highly individual, a successful activity of one person will not necessarily have a positive impact on the self-efficacy expectation of another person (Bandura 2001, p. 15).

Beliefs of self-efficacy also play a role when it comes to career choices in life. Referring to a specific occupation, the higher the efficacy belief in the own capabilities as well as the educational background, the greater the interest in the position (Bandura 1995,

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p. 23). "People act on their beliefs of vocational efficacy as well as entertain career options." (Bandura 1995, p. 24). Therefore, people follow the sense of efficacy to implement innovation and productivity in their occupational development while also acquiring new skills and knowledge (ibid.).

Previous studies already exposed differences in terms of gender and the experience of self-efficacy. Hinz et al. (2006) found a significant difference in terms of self-efficacy and gender, with males exhibiting higher self-efficacy expectation values on average than women. In addition, a meta-analysis of studies on gender-differences in academic self-efficacy showed that females have had a higher estimation of their efficacy in the field of language arts, whereas men have had higher self-efficacy in their mathematics and computer skills. This effect was most significant at the age of 23 (Huang 2013). It may explain the higher number of males in the technological field and, vice versa, the low number of women in the field due to a lack of women's self-efficacy expectations. Furthermore, Betz and Hackett (1981, 1986) came to the conclusion that self-efficacy shows a high correlation to gender-specific occupational choices, which might reflect the genderrelated polarity in the occupational field (Betz and Hackett 1981, 1986). Further studies investigating the relationship of gender and self-efficacy in the occupational field found similarly significant correlations, but always suggested the need for more investigation (Lent and Hackett 1987; Nejad and Khani 2014; Eibl et al. 2020; Liu et al. 2017; Burger et al. 2010).

All of these studies attempt to collect data by using a conceptual approach to examine self-efficacy. What they miss is the process of development, as well as all the co-factors determining self-efficacy expectations in the field of labour. Previous research is focused on the outcomes of self-efficacy in regard to gender, career choices, or work aspirations, by using quantitative approaches and methods to examine these relations. The process itself was not the centre of attention in these studies as it might be a very complex and multi-layered procedure (Hartman and Barber 2020; Michie and Nelson 2006; Sweida and Reichard 2013; Yu and Jen 2019). Furthermore, additional sociological dimensions in the context of work, e.g., client expectations, may also have an impact on the process of development of self-efficacy expectations. By using an explorative and qualitative approach, it may be possible to gather more information about the specific process of how self-efficacy is developed and affected. These findings may also be complementary to the already existing findings.

3. Analytical Approach

Having identified the 'old' logic of technology development, which is characterized as bureaucratic, hierarchical, and rigid and which involves planning, control, and monitoring, while also having identified a tendency to move in a more cooperative and flexible direction, we pose the following research questions: Does the establishing of new management roles foster a more diverse gender distribution in technical work environments? Does the advent of new management roles bring about a transformation with respect to inequalities in gender distribution in technical work environments and if so, how can we characterize this transformation? How do people in the new management roles as members of agile teams describe their experiences and their self-efficacy? Does the self-efficacy of women increase or do they merely support the self-efficacy of male-dominated groups?

In order to address these questions, we should have a closer look at new, agile management approaches: The Agile Manifesto, which could be regarded as the starting point for the agile movement, states that collaboration, processes, and flexibility are more important than structures, following an ex-ante plan and documentation (www.agilemanifesto.org, accessed on 29 March 2020). Therefore, it could be said that agile frameworks provide a more labor-process-oriented, more cooperation-oriented, and less planning-oriented and documentation-oriented form of management and that these approaches could be seen therefore less androcentric. If we leave behind the level of concepts and approaches and focus on labor processes, then the question arises of whether these new agile management

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approaches could change both structural settings and corporate cultures within the ICT and engineering sectors and whether this change could favour gender equality. In order to do so, we chose two management roles that follow the aforementioned new management approach, instead of the androcentric idea of management, and can mostly be found in technical environments. The Scrum Master (SM for short) is very prominent in the ICT sector, but is also gaining more recognition in other fields because of the popularity of Scrum (Komus 2020). This specific position, which has its origin in the Scrum agile framework, plays an important role in teams, since it is in charge of the appropriate implementation of the Scrum guidelines. As a supporting expert, the SM facilitates communication and cooperation in the teams and eliminates impediments (diGAP 2021). Therefore, it could be seen as a position in the sense of coaching leadership. In addition, it is no leadership role, but a member of the agile team, usually consisting of the SM, the Product Owner, which is responsible for the product, and the seven developers (or engineers). Based on the rules of the agile framework scrum, scrum teams should not be larger than nine members, which has also proven to be the common practice in implementation (Komus 2020). As the agile methods are getting more and more popular, not only small start-up companies are following this framework, but also large corporations are implementing this approach in their development divisions. Even though agile methods have their origin in the software-development sector, the values and methodologies of this approach are also already being adapted in non-software sectors (Fuchs et al. 2019). The role of the Feel-good Manager (FGM for short) is similarly structured. Using management techniques, the FGM tries to affect the attitudes of employees in terms of motivation, satisfaction, and culture at work, with the goal of creating a pleasant and cooperative work environment and corporate culture. According to Gesing and Weber (2017), FGMs work with the employees on solutions that respect their individuality, personality, and demands (Gesing and Weber 2017, p. 10 f.). At first this position was found at small start-up companies in 2012, which had a huge scale up within a few years. In order to keep the so-called start-up spirit from the early stages of the company, which was a part of the corporate culture, they created the position of the feelgood manager. This new position is in charge of keeping the spirit of the company, in spite of the fast changing and growing surroundings (Frenking 2016, p. 14 f.; Greve 2018, p. 179 f.). However, as the labor market is changing and employees are bringing up new demands regarding their working environment, bigger companies are being forced to act in favour of those requirements in order to get and keep skilled personnel, regardless of the concrete sector (Gesing and Weber 2017, p. 5).

Both positions, the SM and the FGM, are focusing their concrete actions towards employees and interact with them in order to find or develop solutions for emerging problems in their working context. Working on then communication and cooperation among these employees or teams is a big part of both roles in order to create a decent working atmosphere according to the individual situation. As these two positions have a similar orientation in terms of their focus and target strategy, they are well-suited for a comparison in terms of both experienced inequalities and marginalization with respect to gender relations.

4. Methodology

Our sample contains 13 guided expert interviews with FGMs and SMs within software development sector in Germany, Spain, Hungary, and Russia. In more detail, we interviewed seven FGM, five of them female, and six SMs, two of them female, and the average age of the interviewees is 42 years. All of the FGMs and SMs did a secondary training in order to do their job and worked within software development or business administration before they became FGM or SM. The role of SMs is to provide internal service and support to teams, while also acting as supervising authority for team processes in the context of the agile project management framework Scrum: The agile framework that has been most used for more than a decade (Komus 2020). The FGMs surveyed are from development and technology research in various fields, and since all but one of them work on a freelance

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basis in several companies and sectors, they possess specialist knowledge in two respects: As experts in their particular areas and inasmuch as they have an overview of the empirical field as a whole. Therefore, our interviews were semi-structured expert interviews, which lasted 60–90 minutes each and we analyzed them by using qualitative content analyses (Hsieh and Shanon 2005; Mayring 2014). In more detail, we produced codes in the sense of deductive category application (Mayring 2000) focusing on categories like organizational structure, labor processes, cooperation and communication processes, teamwork, corporate culture, and workload, which we developed in regard to sociological literature, our former experiences, and the DGB Index 'Decent work'.

In addition, we subjected 34 interviews that we ourselves conducted and analysed as part of the research project "diGAP: Good Agile Project Work in the Digitalised World" to secondary analysis with respect to the roles of SMs and FGMs (Table 1). The diGAP project was funded by the Federal Ministry of Education and Research (BMBF) and the European Social Fund (ESF). Our methodological approach is characterised by a participatory procedure: We conduct expert interviews and present the interviewees with our findings, before holding workshops to look for collective solutions to problems that the findings raise (Huchler and Sauer 2015; Sauer 2017). The search for solutions and anticipating improvements in practice go hand in hand with our conceptual analyses: These perspectives feed into each other (Bergold and Thomas 2012) and they are explicitly focused on their significance for employees (Tight 2017). Interviews and workshops were undertaken in an SME (small and middle enterprise) with a long-lasting agile background and a big corporation with only few agile experiences, both within the ICT sector. Therefore, we conducted two quite different case studies (Yin 2009) in favour of gathering sufficiently rich data via a cross-case analysis (Khan and VanWynsberghe 2004).

Table 1. Empirical data within our secondary analyses.

| Table Content | Corporation | SME |
|------------------------|-------------|-----|
| Qualitative interviews | 17 | 17 |
| Workshops | 6 | 3 |

5. Empirical Findings

In the following, we represent the empirical findings of our data by using selected quotes from the interviews. Every quote is marked with the aforementioned abbreviation of the two positions. The empirical data showed that differences are to be found between the two positions examined, SM and FGM, in terms of a more diverse gender distribution in the technical field. The analysed data allow us to observe an increase in new areas and functions in the management of technology development. The relevance of this new field is also noticeable. The interviewees mention the greater focus upon working with employees and the required skills.

"[...] because the focus is always on people and cooperation between people and that, I think, is making such a jolt right now and will continue [...]" (SM1, 01:03:37)

"Hence it is important for the people, how I interact with them. So, humanity is becoming increasingly important." (FGM7, 00:22:09)

However, despite its increasing importance, many describe the field as not "tangible". The interviewees explain this lack of respect by the measurement of the outcomes of the activities in the field: A measurement that is not that easy to make, and sometimes it takes more time for the outcomes to be noticeable for all the persons involved. This can lead to doubts about whether the positions of SM and FGM are useful or necessary. The increased demand and respect for activities that put "people at the center" thus do not seem to go together with new assessment criteria.

"But feel-good management is not measurable, one is in the background [\dots]. It's not measurable and that's the biggest problem, how to sell it to a classic manager, they can't

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measure it and say, ah you helped plan a summer event yes great someone else could have done it. So, you have an incredibly poor basis for argumentation." (FGM3, 00:26:03)

Instead, there is an attempt to measure (purportedly) 'soft' skills with familiar, allegedly rigorous 'hard' figures and criteria—and the failure of such evaluation is accompanied by (further) devaluing of the new activities and functions.

The growing prevalence of agile methods and values in companies is often mentioned as a catalyst for the development of these new fields of activities. While the agile approach is currently practiced mainly in the IT sector, it is becoming increasingly attractive for other (company) divisions or sectors.

"[...] so for complex topics, experts working on it, yes and will also ... agile methods are in my opinion there also inevitable." (SM1, 00:34:10)

There are two reasons for this mentioned by the interviewees: Firstly, the attractiveness of approaches promising more innovation, flexibility, and ultimately profitability and a reduction in bureaucratic structures, and secondly, agile methods are considered fashionable by younger staff and can thus help in recruitment. Agile methods imply a less hierarchical, more informal environment and day-to-day work that is meaningful. Knowing the needs and demands of potential staff and allowing oneself to be guided by them is an important factor if companies are to be prepared for increasing competition for highly qualified technical staff.

5.1. Gender Composition and Labor

Material differences with regard to the gender composition of the two analyzed positions can be found when looking at the data. The role of the SM is usually dominated by men. Of the six SMs interviewed, only two are female. This matches the experience of the interviewees: SMs and developers working in the field of software development, according to whom the position is usually occupied by men and hence reflects the gender distribution in the ICT sector.

On the contrary, the majority of the FGMs interviewed were women. According to the interviewees' practical experience, the distribution of the analysed sample seems also to prevail in the entire field of FGMs. One reason for this, mentioned by the interviewees from the FMG field is that, compared to men, more women have 'helper syndrome'.

"Basically, it is perhaps more this helper syndrome that is triggered a bit. I assume that the ladies are a bit more affected by this, without me finding any scientific data [...] possibly also a higher need for security among women." (FGM2, 00:25:59)

"I think that maybe women are more attracted to the subject, because they perhaps, how shall I say, still have this caring gene, perhaps more in it than the men." (FGM7, 00:40:47)

In previous decades, the tasks of FGMs were the responsibility of jobs like office management or secretary, on top of the stipulated duties of these positions. For the most part, these jobs were usually held by women.

"[...] because often it [FGM] is put in the direction of, um Hotel Mama, caretaker on duty, such an extended office assistance and therefore also often addressed to women again, i.e. those who are the assistant to the managing director and then the managing director, for example, says 'oh you already take care of everything anyway, then we'll do it like this now, then you'll also be the feel-good manager'. But that ... that's not it. So ... not the caretaker on duty, not responsible for everything [...]." (FGM7, 00:27:45)

The interviewees also allude to this by speaking of the office's so-called "fairy god-mother" or of assistance jobs that took care of these matters, but they clearly designate the position of FGMs as one with strategic aspects and not just an assistantship.

"So we give impetus, we create the framework, we create the system. So, it is not just one-off here and there, it is also a strategic task." (FGM7, 00:28:36)

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The gender-stereotypical orientation of FGMs is denied when reference is made to the personality, character, and sure instinct of a person as important factors for filling this position. However, implicitly, possibly also unconsciously, the interviewees continue to refer to a distinction between female and male abilities. Especially when they talk about how to handle particular situations, they describe how men take a different approach to and have a different perspective on situations, which is manifested in strategic thinking, objectivity, and rationality. Women, on the other hand, take a more emotional approach. This differentiation shows in several statements by the interviewees. At another point, there is talk of a "mix" that needs to be achieved, so that the focus is placed on the ability to do the job, rather than on gender (cf. FGM1 00:23:04, FGM2 00:21:44, FGM3 00:37:44).

"Because I think it's unhealthy if it slides into a women's topic because the more women, so from my experience, if only women work on a topic, then it can backfire. And if only men work on a topic it can also backfire. So, I stand for this mixture, which should be carried out. Simply because men are a bit more objective, men are a bit, how should I put it, not more structured, women are too, but they have a different view of the procedure or processes or whatever, and women are more emotional." (FGM1 00:23:54)

"So, it's actually female-dominated. It's currently a career field that more women are taking up. Personally, I would make it more dependent on the characteristics of the person and I think it's also important that enough men come on board. Just to keep both perspectives in mind." (FGM2, 00:21:44)

5.2. Experiences with Respect to Role and Reception

Interviewees' experiences with respect to role and reception differ greatly between the two analyzed roles. SMs seems to have a well-respected role in organizations, which does not require any kind of justification of its necessity. The interviewed SMs describe the position by using terms like "carers" or "mother of the company", which is seen to be more related to processes than to staff.

"I see myself a bit as a good soul or friend of the team, so often when someone has a problem, which now and then I can't understand either, [...], as a young Scrum Master, then have to deal with situations." (SM1, 00:40:52)

Furthermore, interviewees note that practical, as well as structural, knowledge is very useful in their daily work, but also improves their standing among team members. Accordingly, many of the SMs are former developers with IT-training and became qualified as a SM later on.

"... as a male IT worker, I am also more easily accepted in a male IT environment than some who, I don't know, doesn't have any idea what they are doing, yeah, finished with sport and now I'd like to do FGM, someone like that has a harder time getting their foot in the door of course...." (FGM3, 00:09:51)

By contrast, FGMs constantly need to justify their position. The experiences of the FGMs are far more negative with regard to their external reception. Instead of the actual term "FGM", all the interviewees mention terms such as clown, table football manager, or "fruit basket supplier", with one person considering the latter to be clearly derogatory. Others report people having paroxysms of laughter upon first hearing about the feel-good concept:

"[...] and unfortunately, that's also the most common reaction in the last 5/6 years that we've been doing this with people who hear it for the first time, they get a fit of laughter at first [...]" (FGM3, 00:15:32)

As the activities involved in achieving the goals of feel-good management can vary greatly, the fluidity of the concept may also be one cause of the lack of appreciation, and this can make it even harder to gain respect and to justify oneself in bureaucratic environments.

"The first thing you always have to do is explain what it is, and that's the first hurdle to even listening to it. Happiness or whatever they are called is no better. As long as the

topic is not integrated into New Work, it will not be perceived. It is a building block of New Work. I personally try to communicate it like this." (FGM4, 00:11:50)

So-called 'explanatory work' is essential in their position and, surprisingly, such experiences are mentioned by all genders in the sample. One interviewee thus referred to himself and his colleagues as "feel-good ninjas".

"... So I sometimes call us ninjas, we're little feel-good ninjas running around the place" (FGM3, 00:26:05)

The interviewees experience these situations as frustrating.

With respect to attachment to the company, the situation of FGMs differs from that of SMs. Most of the interviewed FGMs are freelancers; only one of them is a regular employee of the company. Hence, the position is extremely flexible and unattached, with all the risks this entails. Companies hire external personnel as FGMs or as consultants for specific situations. According to the interviewees, they are usually hired by the human resources or personnel departments, while the initiative to seek their support usually comes from the management level. A concrete goal definition for the cooperation set by the client is often not present, rather the trust that a positive effect will come from it.

"Many managers simply do it and don't even ask about the figures because they are convinced that it is justified. There are many who simply say yes, we'll do it, because it has a positive effect, without asking exactly about the figures and data facts." (FGM7, 00:15:51)

FGMs thus offer support where the employer considers it necessary, but as contractors, they do not themselves have any legal authority to undertake measures. Hence, they find themselves in a dual role: They are both recipients of instructions to carry out measures and leaders.

"So strategic collaboration with management, where are we going, what's the culture, what did we envision there, but that we're actually extremely close to employees." (FGM3, 00:28:54)

The similarity of the two positions becomes even more apparent when an interviewee uses the comparison of the FGM being the SM on the enterprise level.

"I define the feel-good manager as the scrum master on the enterprise level." (FGM3, 00:03:20)

Nonetheless, the reactions to the names of the positions are very different. While the interviewees do not mention the SM term creating any problems or being replaced by other terms, some of them view the term "feel-good" critically and have ambivalent opinions about it:

"If you say you are FGM and they come with a smile or a smirk, then you also know, ah well, he doesn't know what it's actually about. That is, we actually need this educational work and clearly the terminology is not so easy in this area or in this circle, in the circle of people who just pick it up and translate it one to one with feel-good manager, it is difficult." (FGM7, 00:35:10)

The term "feel-good" often creates prejudices and gives people the wrong idea about the role.

The interviewees report that the following titles imply the same thing while not containing the term "feel-good": Human relations manager; people manager; corporate culture officer. The diversity of these job descriptions compounds the problem with the term "feel-good" and the absence of a uniform definition. Nevertheless, it is repeatedly emphasized that it is the best definition in terms of the aims of the position. Changes to the terminology tend to be rejected. The responses suggest, nevertheless, that there are other ways to counter the lack of recognition. For instance, there are cases in which male FGMs like to refer to their role as "securing skilled personnel", in order to consciously distance themselves from the common terminology and the associations that go with it. However, the specific activities remain the same.

5.3. Self-Efficacy Expectations of Scrum Master and Feel-Good Managers

The empirical data imply that, in terms of Bandura's definition, SMs do not have many doubts about their position and responsibilities in day-to-day life. The SMs interviewed are entirely aware of the job's benefits for employees' work and especially for the company and its projects:

"I fell as a kind of a lightning rod for the team. (\dots) I have to take care of the teams, its impediments, its duties and somehow its feelings." (SM8, 00:25:11 (\dots) 00:25:39)

Furthermore, if problems arise regarding the role and skills, they are always able to refer to the Scrum framework, which provides an explicit definition of the process and the roles within it.

"It seems that some managers do not know what a Scrum Master can do and what he cannot do. So I have to explain it again and again. That's a bit weird sometimes but that's ok. The most important thing is that I myself and the team are knowing what I have to do." (SM1, 00:22:45)

By contrast, FGMs mention the source of emotional arousal, which in the end led them to undertake retraining. The analysis of the material shows that FGMs are unconditionally supportive regarding their position and the general method of feel-good management. Most of the interviewees actively chose to become FGMs after having personal experiences that were so intense for them that they wanted to get into this field. Perhaps they were having trouble as an employee in their company or they were just very interested in this new field of work and the concepts behind it. In just one case, the change of position developed naturally from the current needs of the company.

"I did the business coach first and that brought people to the forefront and also through that happiness I understood what feel-good management does. What I always felt finally got a name. There were things that I felt or realized that a company needs something like that, that it depends on something like that to have a good corporate culture or a harmonious one, and with feel-good management it got a name." (FGM4, 00:01:58)

"I was asked by participants in an NLP course if I could offer something like that. I like to motivate, but I also like to show how to do things differently so that everyone is doing well." (FGM5, 00:04:01)

Referring to their own self-efficacy expectations, they are also very aware of their individual skills. However, as already mentioned, this field of work brings up more dimensions that may have an impact on the development of self-efficacy expectations, which thus seems to be a trouble spot. This became clear in terms of the aforementioned explanatory work and the justification of FGMs. Even though they are totally convinced of their skills and method and the purpose and possible outcomes, their environment is not. Hence, the reception and respect for their work suffers, even though the outcome of their work is received positive.

"Employees are often skeptical at the beginning, not about the feel-good management but about the company. [. . .] But the employees give consistently positive feedback afterwards are glad that exactly this topic is addressed, a jolt goes through the company and a different cooperation takes place." (FGM1, 00:28:28)

The data also show examples of how the self-efficacy of FGMs is partly dependent on the expectations from others regarding their work. This becomes apparent in the variety of requests they receive from different parties. The employees they work with might express demands that are not congruent with the interests of the company, which thus requests good mediating skills from the FGM in order to find a compromise for all the involved.

"The staff wants all kinds of things that would be nice, and the company has to see how it can be paid for, and whether it fits into our budget. So that's a very important factor in the job. And that's a good thing to mediate." (FGM2, 00:30:12)

Some of the requests refer to goals like Key Performance Indicators, which cannot be achieved by FGMs or are simply not compatible with the philosophy itself. In such cases, the FGMs chose not to accept the requests, which may also imply a high self-efficacy regarding their approach.

"If the openness on the part of the managing director is not there, I am either not hired, or they hire you anyway and say but leave me alone with the thing. I don't do that then, so I don't accept the assignment, so the openness has to be there from the CEO, I always talk about the degree of maturity, and of course the employees also have to have a certain openness there." (FGM7, 00:49:54)

For an overview regarding of the two roles studied and the findings from our analysed data, Table 2. Provides a comparison of the function, duties, occupational status, gender ascriptions, chances as well as risks of the positions of SM and FGM.

| Table 2. Comparison Scrum Master and Feel-good Manage | Table 2. | 2. Comparisor | 1 Scrum | Master and | Feel-good | Managei |
|--|----------|---------------|---------|------------|-----------|---------|
|--|----------|---------------|---------|------------|-----------|---------|

| | Scrum Master | Feel-Good Manager | |
|---------------------|--|--|--|
| Function | Supporting expert and coach of the development team, servant leadership | Strategic management, servant leadership | |
| Duties | Facilitate communication, cooperation; Removing impediments for the team; Protecting the team from external interruptions or distractions Taking care of Scrum processes | Affecting attitudes of employees regarding motivation, satisfaction, culture at work; working with employees on solutions with respect to their individuality, personality and demands | |
| Occupational status | Dual internal role | Dual external role | |
| Gender ascriptions | "Carer", "Mother of the company", expert among experts | caring and emotional approach, female attracting position, good fairy | |
| Chances | Gender Diversity in the ITC-sector | Gender diversity in managerial levels | |
| Risks | Reproducing current gender structures in the ICT-sector Reproduction of Gender stereotypes, wrong outer reception | | |

6. Discussion

Even though the two examined roles seem to have a lot of intersections of their actual activities, there can be found decisive differences regarding the research questions referring to gender differences and self-efficacy.

According to the interviewees and their practical experiences in the field, the role as an SM is well respected in the agile process and does not need any justification of its existence and value. If problems with respect to the responsibilities of the SM come up, they can always refer to the agile manifesto, which emphasizes the high standing of the SM in the agile framework Scrum and offers a precise definition of this role. This can be interpreted as a bureaucratic factor in this actual non-bureaucratic context that may increase the validation of this position and gives the people in charge of it a higher self-expectancy. In addition, the set of rules seems to serve as justification for them, allowing them to conclude that they are self-efficient in their role and that others only have to know these guidelines in order to realize the necessity of the SM position and the associated activities. The fact that the interviewees did not experience or mention severe problems in their daily working life might support the assumption of a high self-efficacy in their position, even though more research must be done to fully understand this process. Although our analysed sample is limited it gives a first insight into this topic

and already identifies a number pitfalls. Nevertheless, more context information about the two examined professions would be useful to understand their situation better. To gain this information we suggest further research with larger samples, perhaps using the existing self-efficacy scales mentioned earlier. Furthermore, combination of qualitative and quantitative research could provide a comprehensive insight into how self-efficacy develops and what influences this process. Keeping in mind that in the analysed dataset the interviewees described the gender distribution of their working environment or teams they are working with as very homogeneous regarding gender, the question rises, how would the experiences be described if they were in a more heterogenous working environment? As the data show, most SMs are former technical developers: They know the working processes, the steps involved, and maybe also the team members, since they are former colleagues of them. They thus make use of the source that Bandura describes as personal accomplishment, since they have experience in the field. Even though they were previously in another role, their high self-efficacy seems to be based on this earlier experience.

Another aspect that affects the external perception of SMs is their aforementioned affiliation with the company. Most SMs are former developers who were working in the company before they went for retraining. After earning their qualification to work as a SM, they switched from developer to this position in their former team. Hence, they already know the organization from within, are familiar with structures, and possibly also with the teams. Additionally, the agile framework Scrum describes the SM as an established team member of the agile team. Therefore, this position can be characterized as having a dual internal role. The goal of the position is clearly defined by the Scrum framework, which makes it easier for the team and other colleagues to understand its activities. Although the resulting tasks of SMs, like working with the team and communication and cooperation among team members, demonstrate the social aspect of this profession, the mostly formalised rules based on the Scrum framework can be seen as a kind of bureaucratic and androcentric aspect of the role, which may affect its external reception.

Whereas the activities of the FGM are similar to the already mentioned tasks of the SM, the empirical data address the assumption that the field of FGMs has a much stronger appeal for women as an area of work, since it requires a great deal of caring. The statements made by the interviewees that women also 'care more' supports this. Studies support this assumption, as women tend to prefer professions and fields of work with an altruistic orientation, but men's and women's values converge over time (Pollmann-Schult 2009), which is on the one hand supported by our empirical findings of men in the more caring professions SM and FGM, but on the other hand, the low proportion of men found in these professions, especially in the field of FGM, speaks against this assumption. Since the focus of the examined professions is thus very much on the—controversially—caring function of this activity, the link to the reproduction of gender stereotypes seems rather obvious. This might indicate that the position is devalued somewhat. Previous studies support our empirical findings as they also discovered that both men and women are discriminated against when they enter a work area dominated by the opposite gender than the one they belong to (Froehlich et al. 2020). As the examined sector of ICT is very homogenous regarding gender, the findings might support the theory of gendered organizations, which explains the gendered segregation of labor by stating that inequality is built into the structure of work organizations (Acker 1990). Furthermore, studies in other gender-homogenous sectors of labor have identified a transformation of the elements that are reproducing gender inequality in work organizations (Williams et al. 2012). As our analysis provides a first insight into this very new and specific field of new management roles in the ICT sector, more research needs to be done in order to more accurately identify the affecting variables and causes of gender inequality in this field.

Perhaps the connotation of the term 'feel-good' as 'not masculine and weak' also leads to the fact described in the data that men are choosing other names like 'securing skilled personnel' in order to counteract defamation, which might be interpreted as a preventative linguistic practice (McDowell 2020). The result of the analysed data leads to earlier studies,

which examined gendered organizations and gendered occupations, in order to explain the gender segregation in specific fields of labor. Still, there needs to be more research done as there cannot be found a consistent picture regarding the gendered division of labor. The development must rather be described as complex and non-uniform around the countries of Europe (Handl and Steinmetz 2003). Even though the term used in FGM, "manager", might refer to a high-ranking position in the language of commerce, our data suggests that the term "master", used in SM, seems far less problematic in terms of external reception. It looks like the term 'feel-good' has an impact on how the role is perceived. The interviewees also refer to this by stating that women might have a greater attraction for concepts such as 'feeling good', which therefore could explain why there is a higher proportion of women in the field of feel-good management. Additionally, this might also imply that women have a higher self-efficacy expectation with regard to positions that involve care duties.

Although the role of FGMs overlaps with the SM-role, it is clear that their standing is quite different. As aforementioned, the SMs seem to have a double internal role, by being employed by the company their working in as well as being part of the team they are working with on a daily basis. In contrast, the FGMs seem to have a double external role and position referring to the analyzed data. They are mostly freelanced and more in the role of a temporary contracted consultant for companies, therefore they are no part of the companies or of the staff the work with. This circumstance might also have an impact regarding the work of FGMs and the view on this position, which is often considered skeptically referring to our empirical data. It can thus be seen that the two fields are structured very differently on the organizational level. Keeping in mind that the power of women in the profession of feel-good management is much greater, this clearly shows the precarity of this care-focused freelance position also compared to the caring but much more integrated SM, who is most likely a male employee.

FGMs are again and again confronted with skepticism regarding their role and added value. This becomes clear as one interviewed FGM describes it a kind of "battle" with which FGMs are confronted on a daily basis and in which they have to defend themselves. Hence, it is not surprising that other devaluating terms for the position exist. As the field of competence of FGMs shows a lot of similarities with positions, which are predominantly in charge of women, one might suspect that feel-good management might represent a continuation of this practice, suggesting the role of a "secretary 2.0".

However, despite all the challenges of the profession of FGMs the empirical findings show that the individual self-efficacy expectation of the predominantly female FGMs is high, since they have their source more in emotional arousal they sensed in their previous experience. They are convinced about their method and refer to its necessity almost religiously. Furthermore, even though their self-efficacy expectation with respect to their individual abilities and the approach of the method itself might be high, misconceptions about the profession and the goal of feel-good management are omnipresent for all interviewees, regardless of their gender. As already aforementioned, the requirements of FGMs can differ a lot as they are partly dependent on others like the contractor or employees. Therefore, more research especially with larger samples in professions with broader definitions and competencies is needed, in order to understand how self-efficacy is being developed under such a multitude of conditions. As our sample is limited regarding the size and the two chosen roles as well as their operating fields, more research with similar professions might provide a more extensive insight into the self-efficacy development process of new management roles and in which way it is dependent on contextual factors.

7. Conclusions

In some ways, a change can be observed with regard to the gender-stereotyping of occupations, since new management positions implement more diverse approaches, instead of the bureaucratic and androcentric one. This is creating opportunities for more diversity in male-dominated fields. The examination of the quite similar but still very different roles of SM and FGM shows that other factors are clearly also having a huge

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impact in terms of how the external reception of the analysed positions is experienced. Holding a managerial position does not automatically mean being respected by others. Moreover, the findings show that there are still stereotypical gender-related ascriptions for specific activities. The fact that a simple linguistic change of terms can also have an impact on reception needs to be specifically examined. In addition, the influence of self-efficacy with regard to new management positions with non-traditional portfolios should also be considered in more detail.

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