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Agile Work Organisation in German Start-Ups: Exploration of Deregulation of Employment

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Abstract

Start-ups operate in dynamic seed stage, start-up stage and growth stage in an uncertain and volatile environment. An analysis of 59 start-ups shows that companies have special characteristics in terms of the organisational characteristics of employer attractiveness and flexible work organisation. The effects of the two organisational characteristics on an agile workforce are proven by a literature study. The study concludes with a theoretical-conceptual model that illustrates the factors influencing employer attractiveness and flexible work organisation. The results of the survey are brought together with the current state of literature and an approach to organisational agility is developed that takes deregulation tendencies into account.

Keywords

Agile workforce, deregulation of employment, agile organisation, employer attractiveness, flexible work organisation, strategic resources, human resource management

I Introduction

There are currently two major challenges for companies to face in the German economy, which are largely independent of the size of the organisation or the sector in which it operates. On the one hand, many companies suffer from a shortage of skilled workers and, on the other hand, they are confronted with dynamic market changes, such as shortened technology cycles. Both phenomena have not recently emerged in the past years (Klein, 2010). Rather, the shortage of skilled workers has been a permanent issue in theory and practice for some 20 years now due to demographic developments in combination with the education strategy of German politics (Oelsnitz, 2007; Klein, 2008; Börsch, 2019). Moreover, the need to dynamise organisational competencies due to volatile markets has been reflected in well-known publications and management approaches since the mid-1990s (Collis, 1994; Teece et al., 1997; Helfat, 1997; Teece et al., 2016; Schoemaker et al., 2018).

About 20 years ago, at the beginning of the shortage of skilled workers and dynamisation, the supply side of the German economy could formally be divided into small and medium-sized enterprises on the one hand and large enterprises on the other. Both types of enterprises competed mostly on the labour market and partly also on the sales markets. Then, as now, there were differences between these forms of enterprises at the level of work organisation, for example in terms of hierarchical complexity, bureaucracy or personnel strategy intensity. These forms of business organisation are also currently represented in the economy. Another common type of organisation is the start-up company. They are considered as innovative and dynamic. As their overall economic importance increases (Bartel, 2016; Kollmann et al., 2018; Böhm et al., 2019), they are also involved in both new markets and established sectors. They often offer customercentric solutions in the form of innovative products and services and thus bring momentum to established markets or even generate new sales opportunities. For the German economy as a whole, unconventional start-ups are a gain in many areas. Innovations in products and services but also in work organisation contribute to the international competitiveness of the German economy (Böhm et al., 2019). At the same time, start-ups bring new challenges for the established organisational forms of small and medium-sized enterprises as well as large enterprises. Market pressure on conventional companies is growing as a result of the increased emergence of startups in both the labour and sales markets. Through their innovations, they contribute to the dynamisation of the markets and are also in direct competition with other companies for specialists and managers. The challenges of company management - lack of skilled personnel and dynamisation - do not lose their significance due to the entry of start-ups into established markets in particular. In large parts of the workforce, start-ups are regarded as attractive employers, which makes access to qualified specialist personnel more difficult for companies in general (Tepe, 2012; Icks, 2016).

II Derivation of research questions

General access and the flexible availability of personnel resources are the key factors in being able to survive in competition. Particularly in dynamic markets, it is therefore important for companies to be able to attract and retain employees (Klein, 2020). For start-ups, too, it is essential

to be flexible in terms of personnel deployment and, under certain circumstances, personnel redundancy in order to ensure economic success. For an organisation to be able to generate competitive advantages for its operations in dynamic markets from its human resources, two conditions must be met. First, the company must be attractive to potential and current employees. A pronounced attractiveness as an employer ensures flexibility in personnel recruitment and retention. Secondly, the company must have a flexible work organisation. Adaptability in work structures enables the company to deploy personnel flexibly and to control the quantitative size of its workforce variably.

Start-ups as employers have a considerable attraction especially for the courted generations Z and Y (Tepe, 2012; Icks, 2016). These employees are also particularly attractive to established companies in the context of agility requirements in dynamic markets and a continuing shortage of skilled workers (Klein, 2019). However, start-ups do not have the same high personnel marketing budgets as large companies or medium-sized enterprises. In addition, they cannot draw on extensive experience of the past decades in external and internal communication to create an employer attractiveness. The same applies to the design of the recruitment process and personnel retention measures. Nevertheless, they have become well known as attractive employers to younger generations in particular. Start-ups seem to have attractive characteristics from the point of view of some (potential) employees, which are probably not necessarily directly related to high financial expenditures for personnel marketing and employer reputation. However, the focus is on the question of what makes start-ups attractive as employers. The first research question can be derived from this.

Research question 1: Are the basic working structures in start-ups attractive to employees?

In addition to a pronounced attractiveness as an employer in order to ensure the availability of resources, a flexible work organisation is essential in order to meet volatile market requirements. Due to the low complexity of the organisational structure of start-ups, they appear less bureaucratic and much more dynamic than established medium-sized and large companies. On the one hand, this can be attributed to shorter decision paths and more direct communication. Secondly, flexible work organisation promotes organisational adaptability in a fast-moving competitive context (Khoshlahn and Ardabili, 2016). It is questionable which elements of flexible work organisation start-ups have and how these can be evaluated from a strategic perspective. This leads to the second research question.

Research question 2: Which components of a flexible work organisation do start-ups focus on? How are these components to be evaluated from the point of view of strategic management?

III Theoretical framework: Agile organisation and agile workforce

The organisational concept of agility is essentially based on approaches from the early 1990s. However, Brown and Agnew (1982) had already previously defined corporate agility: "Corporate agility, the capacity to react quickly to rapidly changing circumstances, requires a focus on clear system output goals and the capability to match human resources to the demands on changing circumstances." The current understanding of the term goes beyond the previously focused level

of organisational agility by focusing on the attributes of proactivity and positive attitudes towards environmental change (Conboy, 2009). According to today's understanding, earlier approaches to agility are rather assigned to the concept of organisational flexibility (Conboy, 2009). Nevertheless, the definition according to Brown and Agnew (1982) already reveals the fundamental significance of human resource management for attaining organisational agility. Without the right human resources, neither flexible work organisation nor agile organisation is possible. Vázquez-Bustello et al. (2007) also name the basal influence of human resource management. Furthermore, Gunasekaran et al. (2002) describe the personnel resource as a decisive prerequisite for an agile organisation, from which the agility to cope with changing competitive conditions emanates. Goldman et al. (1996) also describe the personnel factor as an essential characteristic of agile organisations, taking work organisation into account.

Accordingly, a company succeeds in differentiating itself from competing market competitors and in achieving competitive advantages in dynamic markets through its personnel resources and the design of its work organisation. Sherehiv et al. (2007) also address the importance of work organisation in their contribution, as do Uhl-Bien and Arena (2018), and emphasize its influence on the agility of an organisation. The connection can also be found in the contribution by Yusuf et al. (1999), in which they highlight the influence of employees and their cooperation in agile organisations as well as Sharifi et al. (2001) and also Conforto et al. (2016). Sharifi and Zhang (1999) also integrate the personnel resource as a basic component in their agility approach. Like Tsourveloudis and Valavanis (2002), they represent the compelling link between employees and the agile competencies of an organisation. In addition, Meredith and Francis (2000) describe adaptable work structures and flexible employees as essential building blocks of agile companies. Sarker and Sarker (2009) focus on the agility of resources, naming both human and technologybased resources as key resources. They describe the essential importance of human resources as the ability of the work organisation to adapt team compositions flexibly and immediately to dynamic challenges. They argue that the success of agile team reconfiguration is a key competitive factor in volatile markets. Teece et al. (2016) and Kettunen (2009) also confirm the reconfiguration as the central capability of agile organisations. Kettunen (2009) also focuses on human resources as an essential component that provides the starting point for internal action potential in dynamic markets. Tseng and Lin (2011) have also taken up the concept of the adaptability of work organisation and personnel, which is imperatively linked to the (re-)configuration.

Many approaches deal with components of organisational agility, revealing a link to human resources and work organisation. Youndt et al. (1996) already concentrated on a flexible workforce as the core of vital organisations: "If a firm wants to successfully pursue a flexibility strategy, they must develop and maintain a highly skilled, technologically competent and adaptable workforce that can deal with non-routine and exceptional circumstances [...]" (Youndt et al. 1996: 836). Especially in the recent past, the agile workforce has become the focus of agility research. An organisation that generates competitive advantages in a dynamic environment therefore has strategic access to human resources and creates agility in work organisation. Agile workforce includes both the component of strategic resource availability and the component of flexible resource configuration with regard to personnel. Khoshlahn and Ardabili (2016) describe the agile workforce as one of the main pillars of organisational agility. In addition, Sherehiy and Karwowski (2014) conducted an empirical study of the design variables of an agile work organisation in smaller companies. The result is, that "autonomy at work is one of the most important predictors of workforce agility" (Sherehiy and Karwowski 2014: 472). The authors emphasize the role of

empowerment and autonomy in decision making and job enlargement. This leads to the participation and identification of employees in management tasks. According to the authors, this generates potential in the sense of workforce agility for coping with dynamic market conditions. Similarly, the study by Patri and Suresh (2017) in the healthcare industry confirms the positive relationship between employee empowerment and autonomy in decision making on the one hand and agile workforce on the other. The authors point out that an agile company urgently needs a work organisation with a low degree of authority and a high degree of employee friendliness. Mahringer and Renzl (2018) come to similar conclusions. According to their findings, organisations can develop dynamic skills if the context of the work organisation promotes entrepreneurial thinking and action among employees. Crocker et al. (2019) also argue in a similar way, emphasising the open design of work organisation as a success factor. In particular, they refer to the facilitation of informal interfaces for the cooperation of employees.

The agility of an organisation is largely based on its workforce. An agile workforce enables a company to change and adapt in uncertain and volatile competitive conditions. An agile workforce requires the strategic availability of human resources (Ghosh and Willinger, 2009). Therefore, the employer attractiveness plays a decisive role for an agile organisation. A pronounced attractiveness as an employer ensures the flexible reconfiguration of personnel resources (Gunasekaran et al. 2002). Furthermore, a flexible work organisation is a basic component of the agile workforce. Adaptability in work structures enables an organisation to act dynamically in an autonomous and empowering context, while management can variably control the quantitative size of its workforce.

The attributes proactivity and positive attitude towards environmental changes (Conboy, 2009), which are decisive for an agile organisation, correspond in their logic to the basic organisational structures of start-ups. Start-ups also seem to largely fulfil the characteristics of attractiveness (Patri and Suresh, 2017) and flexible work organisation (Crocker et al., 2019), as they often correspond exactly to the self-image of the start-up culture from which they generate competitive advantages (Venckuviene, 2014). Furthermore, Gulati (2019) stresses the fundamental importance of the work organisation of start-ups for economic success. An open work organisation stands for autonomy and decision-making powers as well as for creative freedom. The work structures are designed to be as variable as possible in terms of employee friendliness, without losing sight of the corporate objective. These very elements of work organisation are also reflected in the agility approaches of Patri and Suresh (2017) and Conboy (2009) as central success factors for agile workforce and organisation.

IV Research methodology and study design

The study was carried out on the basis of an empirical survey of employees and managers of start-up companies based in Germany. A standardised questionnaire was used for this purpose. The contents of the questionnaire are based on the experience gained from accompanying a start-up in the first three years after its foundation. It was a Cologne-based start-up in the social messenger sector. It served as an observation object with regard to work organisation in the development phases (seed stage, start-up stage, growth stage). The start-up had an average of eight employees. The conclusions were that employer attractiveness and flexible work organisa-

tion are important factors influencing agility. This served as a basis for the design of the questionnaire. The questionnaire was initially distributed online to 521 start-ups listed in the two German start-ups associations (Bundesverband Deutsche Startups e. V. and Rhein-Main-Startups). Subsequently, to increase the response rate, the survey was conducted among randomly selected start-ups (11 start-ups) at the Hannover Messe 2018 and further potential participants were searched and contacted via Internet research (around 87 start-ups).

The study revealed a total of 59 useful feedbacks. 30 respondents are founders or co-founders. Of the 59 participants, 35 are managers. 65.7 % of managers reported having between one and five employees in their area of responsibility, 20 % six to ten employees and 2.9 % each 11 to 25 and 26 to 50 employees respectively. The remaining 8.6% had no direct (disciplinary) leadership. Nearly 90 % of the start-ups surveyed have fewer than 26 employees, with 48.5 % of the companies responding that they employed fewer than six people at the time of the survey. 27 of the participating companies were on the start-up stage, where market entry had already taken place and sales were realised. Furthermore, 18 companies saw themselves in the growth stage, which is characterized by strong sales growth with established products and services, and 12 companies in the seed stage, the conceptional phase before market entry. At the time of the survey, the remaining two companies were in the later stage or steady stage, which are characterised above all by market saturation. The median age of the company is two years and ranges from less than one to five years. The most common industries among the study participants are software/licensing (25.4 %), e-commerce (16.9 %), app development (10.2 %) and manufacturing (10.2 %).

The results of the survey lead to a conceptual research approach. The aim of the study, to generate first impressions of the agility behaviour of the interviewed start-ups, was thus achieved. The main intention was to draw conclusions for a theoretical-conceptual model on the basis of statements by a larger group of people from German start-ups. The theoretical-conceptual approach serves the structured representation of relevant characteristics of start-ups in the sense of organisational agility research. For the theoretical-conceptual discussion of the research questions, the survey served to obtain first impressions and less as a comprehensive, representative study for the scientifically complete description of the real image.

The theoretical-conceptual model takes up the two characteristics of organisational agility derived from literature research: Employer attractiveness and flexible work organisation. Start-ups are considered particularly proactive and positive towards environmental changes. According to Conboy (2009), these are the essential characteristics for organisational agility. Under these conditions, start-ups form a suitable basis for exploring organisational agility more closely. Therefore, the approach of this paper focuses on the conceptual research of employer attractiveness and work organisation in German start-ups.

V Results and discussion

1 Results of the survey

The results of the survey can be divided into two areas according to the literature research. The basic theoretical work identified employer attractiveness (Patri and Suresh, 2017) and flexible work organisation (Crocker et al., 2019) as prominent determinants of organisational agility.

1.1 Employer attractiveness

With regard to employer attractiveness, it should be emphasised that the characteristics of team development and organisation, positive interaction with employees and assumption of responsibility by employees were perceived by the study participants in their start-ups as working particularly well. On a scale of 1 (very good) to 4 (not good), the mean was always less than 2. The best score was 1.5 for positive interaction with employees, with a standard deviation of 0.7, followed by team development and organisation, and assumption of responsibility by employees (1.9 for each average, with a standard deviation of 0.8). In addition, 89.1 % of the total respondents rated the current motivational incentives set in the organisation for employees as appropriate. This figure was approx. 97 % among managers and approx. 78 % among employees.

Nearly half of the start-ups do not provide core working hours for their employees. About two-thirds of the companies also offer employees the opportunity to work from home. In addition, half of the respondents stated that they create job opportunities independent of location. Furthermore, 73.7 % confirmed a constructive failure culture as dominant. The remaining participants said that their business organisation reacts situation-dependent to mistakes (22.8 %) - which does not rule out a constructive error culture - or that predefined consequences would be drawn (3.5 %).

In response to the question of whether employees are involved in decision-making on corporate strategy, 49.1 % stated that management makes the strategic decision on the basis of the proposals developed by the employees. 19.3 % even thought that management played a coordinating role in the decision-making process and that the actual decision was made by the employees. Only 31.6 % stated that employees were not involved in decision-making on corporate strategy. There were no significant differences between the information provided by managers and that provided by employees. The influence of employees on operational decisions was rated even higher. Only 17.5 % of the total respondents hold the opinion that there was no significant influence. On the other hand, 42.1 % stated that the employees had full decision-making authority in operational matters, and 40.4 % replied that the supervisor made operational decisions on the basis of employee proposals. Here, too, there are no significant differences in the distribution of answers between managers and employees.

1.2 Flexible work organisation

Start-ups work, among other things, with fixed-term employment contracts and freelancers and have employment relationships without contractual regulations. According to the data, permanent employment is the most frequent employment relationship (approx. 40 %), followed by work/service contracts for freelancers (approx. 22 %). However, there is no contractual arrangement for about every fifth employment relationship. The percentage of non-contractual employment is

slightly higher than the percentage of temporary employment (approx. 17 %). It can be assumed that, in reality, the actual proportion of jobs without contracts is significantly higher, as 28 respondents did not provide any information at this point. It cannot be ruled out that employment without contractual arrangements is the most common variant.

A similar picture emerges for the answers on the scope of employment relationships. The survey showed that around 46 % of the positions were filled full-time and around 64 % part-time, almost half of these were minor employments. However, around one-third of the respondents did not provide any information on this subject. The questions on the employment relationship (form of contract and scope of position) were answered by significantly fewer managers than employees. Approximately half of the managers did not provide any information on this.

It has already been mentioned with regard to employer attractiveness that the start-ups surveyed predominantly offer flexible options to the place of work through home offices and location-independent variants and, moreover, frequently do not specify core working hours. The average working time of full-time employees is not particularly exceptional at around 45 hours. However, 60.7 % of those surveyed stated that employees are expected to be reachable even outside working hours. Approximately 44 % thought that this was a general accessibility and about 56 % restricted accessibility to urgent cases. In addition, around 73 % mentioned that the employer assumes that the employee can also be reached at weekends - outside core working hours.

The survey on the holiday regulation revealed that almost half of the start-ups have no fixed holiday regulation, approx. 17 % offer the statutory minimum holiday, one company operates under a collective agreement and around 31 % pursue an individual (not described in detail) holiday regulation. Since 80.7 % stated that they had no or individual leave arrangements, it is not surprising that only 18 out of 59 respondents provided information on the annual extent of their entitlement to leave. According to the statements, 50 % of the companies grant a regular holiday entitlement of 30 days, 22.2 % of 28 days, 16.7 % of 25 days and 11.2 % of 24 days or less.

2 Discussion and theoretical-conceptual model

The start-ups surveyed appear to be particularly attractive for employees in some respects and also to have extremely flexible working structures. Both contribute to the results reflecting a picture of start-ups in Germany where companies are agile and competitive. However, some aspects also raise doubts about the sustainability of work organisation and corporate strategy, which could significantly reduce medium to long-term competitive potential.

2.1 Employer attractiveness

Start-ups provide important incentives to motivate employees. In this way, they create the basis for being able to act vital even under uncertain and dynamic context conditions such as seed stage, start-up stage or growth stage (Vázquez-Bustello et al., 2007; Gunasekaran et al., 2002). They succeed in successfully shaping team development and organisation as well as promoting autonomy and the assumption of responsibility by employees. According to Yusuf et al. (1999), Sarker and Sarker (2009) and Gulati (2019), these are central prerequisites for organisational agility.

In the companies surveyed, there is predominantly a very good working atmosphere, which is reflected in the way the company deals with its employees. The majority of employees have enormous degrees of freedom in the choice of working hours and place of work. On the other hand, rigid working time models with compulsory attendance are rather rare. In addition, there is a positive culture of error in most start-ups. Instead of punishment, the focus is on the constructive handling of mistakes. This is also perceived by the employees and is reflected in the high satisfaction values (positive interaction with employees).

Most start-ups also succeed in involving their employees in both operational and strategic decision-making, leaving them to a large extent the power to make decisions. According to Gulati (2019), a distinct decision-making authority is a decisive feature of an agile workforce. This enables the company to generate organisational proactivity, which, according to Conboy (2009), is one of the two main guarantors of organisational agility. The second guarantor is a positive attitude towards environmental change. An organisation in dynamic-volatile phases such as the start-ups surveyed (seed-stage, start-up-stage, growth-stage) probably has a positive attitude towards environmental change. A further indication of this is that they would not otherwise be prepared to entrust their employees with operational and strategic decision-making powers.

The start-ups surveyed control a large number of measures that positively influence the attractiveness of employers. Employer attractiveness contributes significantly to the agile workforce (Patri and Suresh, 2017). This in turn is the indispensable breeding ground for creating organisational agility (Khoshlahn and Ardabili, 2016).

2.2 Flexible work organisation

The work models frequently found in the start-ups surveyed are characterised by flexibility in terms of working time and place of work. On the one hand, this can benefit the attractiveness of the employer, as it gives employees personal freedom. On the other hand, the company can make use of vital working models to increase organisational agility by making work organisation more flexible (Crocker et al., 2019). In addition to the work models preferred by start-ups (in terms of time and place), adaptive employment relationships also contribute to work organisation flexibility. The relatively high proportion of work/service contracts for freelancers and temporary employees enables the company to flexibly manage its quantitative human resources. In addition, the enormous number of non-contractual employment relationships provides start-up companies with the flexibility and competitive potential that the German economic system does not actually provide for and which the economic and social system cannot tolerate on a large scale in the long term. In addition, the high importance of part-time contracts in start-ups surveyed suggests that they also offer great potential for flexible work organisation. Part-time contracts could be an indication of a systematic adaptation of the amount of individual working time to fluctuating workload. Similarly, part-time employment could be an indication of quite low pay levels, especially as the proportion of minor employment seems excessively high.

The constant availability, especially outside working hours and even at weekends, speaks for the agile behaviour of the organisation. These are not individual cases or derogations in particularly urgent cases. Rather, the accessibility requirement of the start-ups vis-à-vis the employees is presumably designed systematically in order to be able to manage the dynamic seed stage, start-up stage and growth stage as successfully as possible with the advantages of an agile workforce.

This is underpinned by the fact that start-ups have in large parts not manifested clear and consistent holiday regulations.

Start-ups are flexible in many areas of work organisation. Formal work structures are usually reduced to a minimum. This enables companies to achieve flexible work organisation (Gulati, 2019) and thus generate a high degree of organisational agility (Khoshlahn and Ardabili, 2016) - but not without overall economic risks.

2.3 Theoretical-conceptual model

In dynamically volatile markets, companies with high organisational agility secure strategic competitive advantages for themselves (Teece et al., 2016). The basic requirement for this is an agile workforce (Kettunen, 2009). In order for a company to succeed in designing an agile workforce, two organisational characteristics in particular need to be considered:

- High employer attractiveness: An agile workforce requires the strategic availability of personnel resources. A pronounced attractiveness as an employer ensures the option of flexible reconfiguration of the personnel resource (Gunasekaran et al. 2002).
- Flexible work organisation: Flexible work organisation is the basic foundation of agile workforce (Meredith and Francis, 2000). Adaptability in work structures enables an organisation to act dynamically through an autonomous and empowering context for their employees (Gulati, 2019), and through the possibility for the management to variably control the quantitative size of its workforce.

The organisational characteristics of employer attractiveness and flexible work organisation are influenced by the characteristics examined (Fig. 1).

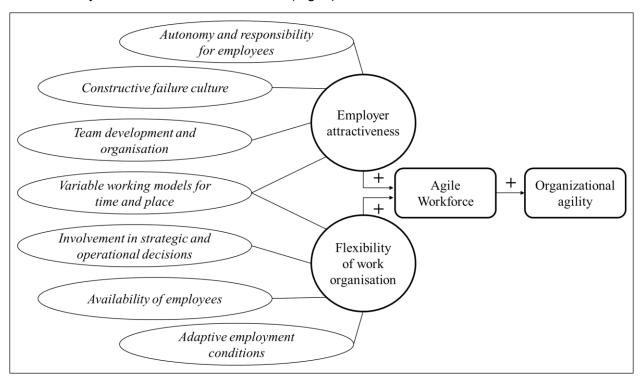


Fig. 1: Deregulation of employment and organisational effects

The characteristics of autonomy and responsibility for employees (Dyhre and Parment, 2009; Berthon et al., 2005) as well as a constructive failure culture (Dyhre and Parment, 2009) have a positive effect on employer attractiveness. Furthermore, employer attractiveness is influenced both by team development/organisation (Berthon et al., 2005; Kucherov and Zavyalova, 2012; Alniacik et al., 2014) and by variable working models (time and place) (Terjesen et al., 2007; Cafolla, 2008; Verma and Ahmad, 2016). Cafolla (2008) deals with the design of the working environment in this respect. The free choice of working hours and location gives employees the potential to optimally adapt their working environment to their individual needs. Terjesen et al. emphasise the relationship between employer attractiveness and the consideration of individual employee needs. In addition, the design of work models also has an effect on the flexibility of work organisation (Kuroki, 2012; Berg, 2008). According to Berg (2008), both companies and employees benefit from variable work models through increased flexibility and freedom of design. The involvement of employees in strategic and operational decisions also contributes to flexible work organisation (Marchington and Wilkinson, 2005; Dyhre and Parment, 2009; Wilkinson et al., 2010). The availability of employees - also outside working hours - helps to make work organisation more flexible as well (Viete and Erdsiek, 2018). Viete und Erdsiek (2018) emphasises the interplay between, on the one hand, modern information and communication technologies, which lead to constant availability, and, on the other hand, flexible working structures. This combination gives an organisation additional flexibility potential. Furthermore, loose, adaptive employment conditions have an unmistakable influence, which enable the company to control its personnel resources on a quantitative and qualitative level (Graf-Zijl and Berkhout, 2007). Nevertheless, the deregulation of employment relationships is a game with fire, since, in addition to advantages in terms of flexibility, it harbours a potential risk, for example through employee demotivation in the event of insecure employment (Malgarini et al., 2013).

VI Limitations and further research

The investigation and data collection of the start-ups served as an inspiring basis for the contents of the theoretical-conceptual model. A comprehensive, representative empirical study would be the next research step to shed more light on the model's statements. Furthermore, in this context, the theoretical construct on which the interdependencies between the characteristics considered and the organisational characteristics of employer attractiveness and flexible work organisation are based could be explored more explicitly by empirical research. In this article, the positive relationships between influencing factors and organisational characteristics with regard to organisational agility were discussed. The negative effects such as the reduction of the general attractiveness of employers due to overly loose employment relationships were pushed into the background (Backhaus and Tikoo, 2004; Berthon et al., 2005). The link between the flexibilisation of employment relationships and personal effects on employees should also be addressed (Rauner-Lange, 2018). In addition, the labour market and the social consequences of loose employment relationships should be investigated more closely (Kuroki, 2012; Malgarini et al., 2013).

VII Conclusions

Due to their pronounced growth phases and dynamic development, start-ups are particularly dependent on agile organisational structures in order to be able to operate in uncertain and volatile market conditions. They have agility-promoting factors in the organisational characteristics of employer attractiveness (Gunasekaran et al. 2002) and flexible work organisation (Meredith and Francis, 2000): Autonomy and responsibility for employees, a constructive failure culture and team development/organisation characterise the attractiveness of start-ups for (potential) employees. Integration in strategic/operational decisions, availability of employees and adaptive employment conditions enable flexible work organisation. Variable work models (time and place) also affect both employer attractiveness and the flexibility of work organisation.

In addition to the considerable potential for agility through deregulation of work structures, there is a relevant risk especially in the area of adaptive employment relationships (Malgarini et al., 2013). By overtaxing loose employment relationships, this could, on the one hand, reduce employee motivation through insecure employment. On the other hand, it is associated with economic risks if, for example, an excessive number of minor employment relationships are created.

References

- Alniacik, E. et al. (2014): Attracting Talented Employees to the Company: Do We Need Different Employer Branding Strategies in Different Cultures?. In: Procedia Social and Behavioral Sciences, 150: 336-344.
- Backhaus, K./Tikoo, S. (2004): Conceptualizing and Researching Employer Branding. In: Career Development International, 9, 5: 501-517.
- Bartel, S. (2016): Erfolg und Misserfolg von Startup-Unternehmen im Blickwinkel der Pfadtheorie, Diss. University Bremen: Bremen.
- Berg, P. (2008): Working Time Flexibility in the German Employment Relations System: Implications for Germany and lessons for the United States. In: Industrielle Beziehungen: Zeitschrift für Arbeit, Organisation und Management, 15, 2: 133-150.
- Berthon, P. et al. (2005): Captivating Company: Dimensions of Attractiveness in Employer Branding. In: International Journal of Advertising, 24, 2: 151-172.
- Böhm, M. et al. (2019): Die Rolle von Startups im Innovationssystem: Eine qualitativ-empirische Untersuchung. In: Studien zum deutschen Innovationssystem, 12: 1-374.
- Börsch, Alexander (2019): Risikofaktor Fachkräftemangel: Deutsche Finanzchefs mit Sorgenfalten. In: Finanzierung, Leasing, Factoring, 66, 3: 152-154.
- Brown, J./Agnew, N. (1982): Corporate Agility. In: Business Horizons, 25, 2: 29-33.
- Cafolla, L. (2008): How to Build an Effective Employer Brand. In: China Staff, 14, 9: 23-26.
- Collis, D. (1994): Research Note: How Valuable Are Organizational Capabilities. In: Strategic Management Journal, 15, Special Issue 2: 143-152.
- Conboy, K. (2009): Agility from First Principles: Reconstructing the Concept of Agility in Information Systems Development. In: Information Systems Research, 20, 3: 329-354.
- Conforto, E. et al. (2016): The Agility Construct on Project Management Theory. In: International Journal of Project Management, 34, 4: 660-674.
- Crocker, A. et al. (2019): How Targeted Network Investments Promote Organizational Agility. In: People & Strategie, 42, 2: 48-56.
- Dyhre, A./Parment, A. (2009): Sustainable Employer Branding: Guidelines, Worktools and Best Practices, Liber AB: Malmö.
- Ghosh, D./Willinger, G. (2009): A Firm's External Environment and the Hiring of a Non-Standard Workforce: Implications for Organisations. In: Human Resource Management Journal, 19, 4: 433-453.
- Goldman, S. et al. (1996): Agilität: Rahmenkonzept für die Bewältigung des Wandels. In: Goldman, S. et al. (Eds.): Agil im Wettbewerb: Die Strategie der virtuellen Organisation zum Nutzen des Kunden, Springer Verlag: Berlin, Heidelberg: 59-99.
- Graf-Zijl, de M./Berkhout, E. (2007): Temporary Agency Work and the Business Cycle. In: International Journal of Manpower, 28, 7: 539-556.
- Gulati, R. (2019): The Soul of a Start-Up: Companies Can Sustain Their Entrepreneurial Energy Even As They Grow. In: Harvard Business Review, 97, 4: 84-91.
- Gunasekaran, A. et al. (2002): An Investigation into the Application of Agile Manufacturing in an Aerospace Company. In: Technovation, 22, 7: 405-415.

- Helfat, C. (1997): Know-How and Asset Complementary and Dynamic Capability Accumulation: The Case of R&D. In: Strategic Management Journal, 18, 5: 339-360.
- Icks, A. et al. (2016): Attraktivität junger Unternehmen für Fachkräfte. In: IfM-Materialien, Nr. 245: 1-71.
- Kettunen, P. (2009): Adopting Key Lessons From Agile Manufacturing to Agile Software Product Development: A Comparative Study. In: Technovation, 29, 6: 408-422.
- Khoshlahn, M./Ardabili, F. (2016): The Role of Organizational Agility and Transformational Leadership in Service Recovery Prediction. In: Procedia Social and Behavioral Sciences, 230: 142-149.
- Klein, T. (2008): Kampf um Talente: Das Kind ist (fast) in den Brunnen gefallen. In: HR Performance, 16, 6: 44-47.
- Klein, T. (2010): Dynamisches Ressourcenkonfigurationsmanagement: Eine funktionalorientierte Werterhaltung strategischer Kompetenzen, Lang: Frankfurt a. M.
- Kollmann, T. et al. (2018): Deutscher Startup Monitor 2018: Neue Signale, klare Ziele, n. p.
- Kucherov, D./Zavyalova, E. (2012): HRD Practices and Talent Management in the Companies with the Employer Brand. In: European Journal of Training and Development, 36, 1: 86-104.
- Kuroki, M. (2012): The Deregulation of Temporary Employment and Workers' Perceptions of Job Insecurity. In: ILR Review, 65, 3: 560-577.
- Mahringer, C./ Renzl, B. (2018): Enterpreneurial Initiatives as a Microfoundation of Dynamic Capabilities. In: Journal of Accounting and Organizational Change, 14, 1: 61-79.
- Malgarini, M. et al. (2013): Temporary Hires and Innovative Investments. In: Applied Economics, 45: 2361-2370.
- Marchington, M./Wilkinson, A. (2005): Direct Participation and Involvement. In: Bach, S. (Ed.): Personnel Management in Britain, Blackwell: Oxford: 398-423.
- Meredith, S./Francis, D. (2000): Journey Towards Agility: The Agile Wheel Explored. In: The TQM Magazine, 12, 2: 137-143.
- Oelsnitz, D. von et al. (2007): Der Talente-Krieg: Personalstrategien und Bildung im globalen Kampf um Hochqualifizierte, Haupt: Bern Stuttgart Wien.
- Patri, R./Suresh, M. (2017): Modelling the Enablers of Agile Performance in Healthcare Organization: A TISM Approach. In: Global Journal of Flexible Systems Management, 18, 3: 251-272.
- Rauner-Lange, C. (2018): Post-Growth Organisations as Resonant and Reciprocal Social Systems: A Matter of Gratification?. In: Manager Revue, 29, 4: 381-404.
- Sarker, S./Sarker, S. (2009): Exploring Agility in Distributed Information Systems Development Teams: An Interpretative Study in an Offshoring Context. In: Information Systems Research, 20, 3: 440-461.
- Schoemaker, P. et al. (2018): Innovation, Dynamic Capabilities, and Leadership. In: California Management Review, 61, 1: 15-42.
- Sharifi, H. et al. (2001): Agile Manufacturing: A Management and Operational Framework. In: Proceedings of the Institution of Mechanical Engineering, 215, 6: 857-868.
- Sharifi, H./Zhang, Z. (1999): A Methodology for Achieving Agility in Manufacturing Organisations: An introduction. In: International Journal of Production Economics, 62, 1-2: 7-22.
- Sherehiy, B. et al. (2007): A Review of Enterprise Agility: Concepts, Frameworks, and Attributes. In: International Journal of Industrial Ergonomics, 37, 5: 445-460.
- Sherehiy, B./Karwowski, W. (2014): The Relationship between Work Organization and Workforce Agility in Small Manufacturing Enterprises. In: International Journal of Industrial Ergonomics, 44, 3: 466-473.

- Teece, D. et al. (1997): Dynamic Capabilites and Strategic Management. In: Strategic Management Journal, 18, 7: 509-533.
- Teece, D. et al. (2016): Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy. In: California Management Review, 58, 4: 13-35.
- Tepe, J. (2012): Startups gleichauf mit den Großen?. In: Gründerszene.
- Terjesen, S. et al. (2007): Attracting Generation Y Graduates: Organisational Attributes, Likelihood to Apply and Sex Differences. In: Career Development International, 12, 6: 504-522.
- Tseng, Y./Lin, C. (2011): Enhancing Enterprise Agility by Deploying Agile Drivers, Capabilities and Providers. In: Information Sciences, 181, 17: 3693-3708.
- Tsourveloudis, N./Valavanis, K. (2002): On the Measurement on Enterprise Agility. In: Journal of Intelligent and Robotic Systems, 33, 3: 329-342.
- Uhl-Bien, M./Arena, M. (2018): Leadership of Organizational Adaptibility: A Theoretical Synthesis and Integrative Framework. In: The Leadership Quarterly, 29, 1: 89-104.
- Vázquez-Bustello, D., Avella, L., & Fernández, E. (2007). Agility Drivers, Enablers and Outcomes: Empirical Test of an Integrated Agile Manufacturing Model. International Journal of Operations & Production Management, S. 1303-1332.
- Venckuviene, V. (2014): The Obstacles for Start-Ups and the Critical Factors for Their Successful Development. In: Economics & Management, 19, 2: 154-161.
- Verma, D./Ahmad, A. (2016): Employer Branding: The Solution to Create Talented Workforce. In: The IUP Journal of Brand Management, 13, 1: 42-56.
- Viete, S./Erdsiek, D. (2018): Trust-Based Work Time and the Productivity Effects of Mobile Information Technologies in the Workplace. In: Centre for European Economic Research: Discussion Paper No. 18-013: 1-37.
- Wilkinson, A. et al. (2010): Conceptualizing Employee Participation in Organizations. In: Wilkinson, A. et al. (Eds.): The Oxford Handbook of Participation in Organizations, Oxford University Press: Oxford: 3-28.
- Youndt, M. et al. (1996): Human Resource Management, Manufacturing Strategy and Firm Performance. In: Academy of Management Journal, 39, 4: 836-866.
- Yusuf, Y. et al. (1999): Agile Manufacturing: The Drivers, Concepts and Attributes. In: International Journal of Production Economics, 62, 1-2: 33-43.