Assessing the Fit of Applicants – A Pilot Study among Austrian Start-ups

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Abstract
Many innovation-oriented companies in the Western world are facing a scarcity of young talent particularly in the technical and engineering professions. As an engine of innovation, start-ups depend ever more on the fast growth of human capital, to secure their survival and success. Little research has however been done regarding hiring in start-ups, therefore a pilot study of good practice in start-ups that is essential for HR expansion and innovation is very necessary for innovation-oriented companies. The main result of the study, using a qualitative approach is the formation of a theoretical framework that can demonstrate good practice in the hiring process model, used for Austrian start-ups. This framework has been based on intensive research into the recent literature dealing with the person-environment fit, as well as in-depth interviews with HR managers active in Austrian start-ups. The outcome of the study does not only provide a theoretical framework for hiring in start-ups, but also provides insights into the hypothetical creation of future studies on hiring in other innovation-oriented companies.

Keywords
Austrian Start-ups, Selection Process, Person-Environment Fit, Applicant Assessment, Hiring Process Development
Introduction

Innovation and entrepreneurial activities are strongly connected; start-ups are the engine of innovation (Doruk & Söylemezoğlu, 2014). In a recent study to investigate innovation efficiency in Europe, Austria proved to be one of the leaders (Kontolaimou, Giotopoulos, & Tsakanikas, 2016). Austrian start-ups play an important role in job creation and constantly boost the economic growth of the country; human capital and HR management significantly affecting their success in innovation and survival (Doruk & Söylemezoğlu, 2014). Therefore, most start-ups are eager to hire talent, especially technical talent, in the upcoming year (Dömötör & Spannocchi, 2016). Traditionally, hiring issues have been studied by comparing the actual practices of a company with accepted favorable practice, derived from studies on HR management in large companies. (Taylor, 2006). However, empirical studies have shown that hiring in start-ups should not slavishly follow traditional studies on HR practice. Sometimes, due to a lack of resources and experience, accepted favorable practices in HR management are not applicable (Heneman & Tansky, 2002). Additionally, there are few studies to be found in relation to HR expansion in start-ups. Therefore, a more specific research focus on applicants’ suitability assessment is necessary for fast growing start-ups, and a more qualitative methodology is recommended (Taylor, 2006).

Hiring suitable employees has a significant effect on the success of start-ups. The person-organization fit concept, which belongs to the person-environment fit domain, has been integrated into the model of personnel selection for more than 20 years (Bowen, Ledford, & Nathan, 1991), and is used to choose the best fit applicants for specific organizations. However, the literature on start-ups in combination with the person-environment fit theory is rare, as most authors have mainly focused on strategic HR management. This, in spite of the fact that scholars have suggested that a person-organization fit is essential in regard to applicant selection in start-ups (Taylor, 2006). Additionally, several European authors have noted that there is a scarcity of research on different types of fit and their relationship with working outcomes in Europe (Oh, et al., 2014). Therefore, the goal of the current study is to explore good practice in applicants’ fitness assessment in Austrian start-ups, in combination with the person-environment fit theory, and also provide empirical insights for future quantitative studies on personnel selection in start-ups or in innovation-oriented non-start-up companies.

The paper has been structured as follows: First, a conceptualization model was proposed by integrating the selection process in start-ups with concepts of person-environment fit. Following this, empirical research was carried out among HR managers of fast growing Austrian start-ups. A theoretical framework for the fit assessment of applicants was created, based on data analysis, which is supported by person-environment fit theory. Finally, the paper concludes with a discussion of theoretical and practical implications as well as the limitations of the study.

The research question is: How do fast-growing Austrian start-ups assess the fit between applicants and their future work environment in the selection process?

Scholars hold diverse ideas when defining start-ups. Brierley (2001) considered that start-ups are companies in the process of setting up business, while the US Small Business Administration defines start-ups as being typically technology oriented and having high growth potential (U.S. Small Business Administration, 2016). However, some of the features are commonly agreed upon. Firstly, start-ups are innovation-oriented; they are the “engine of innovation” in a society (Doruk & Söylemezoğlu, 2014). Innovation can be seen in the technology or the business model of a company (KPMG, 2014). Secondly, start-ups are new companies, that were established less than 10 years ago (Brierley, 2001; Woodside, Bernal, & Coduras, 2016; Fassi & Dömötör, 2015). Thirdly, start-ups are considered to be temporary organizations as they are still searching for a
scalable business model in order to realize growth in revenue and number of employees (Blank, 2013; Fassl & Dömötör, 2015).

Based on the features stated above, the definition of start-ups in the current study refers to those firms that are younger than 10 years, with an innovative business model, or in the field of technology and in the process of significant HR growth.

**Literature Review**

**Person-Environment Fit (P-E Fit)**

The focus of the current study was the fit assessment of applicants to fast growing start-ups in Austria, who fell into the individual level analysis of fit. The person-environment fit theory is therefore relevant. P-E fit refers to the congruence between characteristics of individuals and characteristics of the environment (Ostroff & Zhan, 2012). All in all, the P-E fit theory proposes the necessity of matching personal characteristics with the characteristics of the environment they interact with. The P-E fit theory is also widely used in the hiring process (Ostroff & Zhan, 2012) to choose the best fit employees for firms.

The P-E fit is constructed from the P component and E component. The P component indicates the personal attributes and characteristics of an applicant (Ostroff & Schulte, 2007), and the E component refers to the start-up environment. It can be conceptualized according to the hierarchical levels in a firm (Ostroff & Zhan, 2012). When the P component and E component show congruence or complement each other, the P-E fit has been achieved (Ostroff & Zhan, 2012). To study the fit between applicants and start-ups, some concepts in the P-E fit domain need to be considered, to build up a theoretical framework for fit assessment.

**Forms of Fit**

Regarding the basic forms of P-E fit, supplementary and complementary forms of fit are frequently mentioned in the literature (Ostroff & Zhan, 2012). The notion of supplementary fit and complementary fit was proposed by Muchinsky and Monahan (1987). The supplementary fit is based on similarity between an individual’s characteristics and the characteristics of the environment. In a start-up context, applicants can fit well into their new environment when other work colleagues possess similar characteristics to theirs (Muchinsky & Monahan, 1987). In contrast, the complementary form of fit emphasizes characteristics of applicants’ ability to serve to “make whole” or complement the characteristics of the start-up (Muchinsky & Monahan, 1987).

Another perspective found in the literature to conceptualize the forms of P-E fit is the distinction between needs-supplies versus demands-abilities (Caplan, 1987; Edward, 1991). Namely, that fit occurs when the applicants and the start-up can meet the demands of each other (Caplan, 1987; Edward, 1991).

Although these two kinds of distinction in the conceptualization of the forms of fit are often referred to, scholars have often defined the form of fit from only one perspective (e.g. only from the needs-supplies perspective) and have overlooked the others in their empirical studies (Kristof, 1996). Kristof, therefore created an integrated model for the forms of fit and expanded the conceptualization of complementary fit by Muchinsky and Monahan. When taken into the start-up context, the fundamental characteristics of start-ups are not only derived from the values of their employees, but also the broader work climate and values. Moreover, supply and demand relationships can be included in the expanded definition of complementary fit (Kristof, 1996). When the needs and demands of the start-ups or applicants can be met by what the other side offers, the effect of being “made whole” can be achieved for the side with demands. To avoid confusion and differentiation difficulties caused by overlap which has been shown in former studies, the
argument of Kristof is accepted. In the current study, the needs-supplies and demands-abilities forms of fit were excluded, and the two basic forms of fit conceptualized as the expanded concept of supplementary and complementary fit.

Subtypes of Fit
Different hierarchical levels of analysis of the applicant fit in a start-up, shape four distinctive subtypes of fit (Ostroff & Schulte, 2007).
Person-individual fit, also termed dyadic fit in the start-up context, refers to the relationship between an individual and other colleague in the firm (Kristof-Brown, Zimmerman, & Johnson, 2005; Ostroff & Zhan, 2012). The subordinate-supervisor fit appears the most in studies (Adkins, Russell, & Werbel, 1994; Van Vianen, 2000), and is termed person-supervisor fit. The handful of empirical studies on this, have found that person-supervisor fit correlates significantly with employee satisfaction with their supervisor, as well as job satisfaction (Kristof-Brown, Zimmerman, & Johnson, 2005, p. 314). However, the influence of person-supervisor fit in the selection process has not yet been widely researched.

Person-group fit highlights the interpersonal compatibility between individuals and their work group or work units (Kristof-Brown, Zimmerman, & Johnson, 2005; Werbel & Gilliland, 1999). Taken into the start-up context, this means assessing the congruence between personal characteristics such as the values and goals of the applicant, with the norms and climate of their future work group in the start-up, or matching their personal attributes with the work group members. Compatibility defines P-G fit (Ostroff & Zhan, 2012). P-G fit can display both a supplementary and complementary form. The complementary form of P-G fit is evident if the applicant possesses special skills or characteristics that are totally different from the other group members in the start-up; at the same time, these special skills or characteristics can fill the gap in the group regarding skills or certain characteristics resulting in a supplementary fit. This form of P-G fit is considered helpful in increasing the performance of the group (Ostroff & Zhan, 2012).

Person-job fit refers to a compatible relationship between the characteristics of an individual and the characteristics of the specific job or tasks that the individual is to work on. It has been traditionally investigated in the hiring process (Kristof-Brown, Zimmerman, & Johnson, 2005; Ostroff & Zhan, 2012). P-J fit exists when the knowledge, skills, and abilities of the applicants are able to meet the requirements of a specific job in the start-up, or when the job which the applicants will work on, can fulfill their needs, desires, values and preferences (Kristof-Brown, Zimmerman, & Johnson, 2005).

Person-organization fit is the congruence or compatibility between the applicant and the start-up regarding values and other fundamental characteristics (Kristof, 1996). P-O fit can occur in three different ways: Firstly, the start-up and the applicant can offer what the other needs. This needs-satisfying capability should be provided by at least one of the entities (the start-up or the applicant). Secondly, both the applicant and the start-up firm share common fundamental characteristics. Thirdly, both first and second conditions occur simultaneously (Kristof, 1996).

Mode of Fit
The context and system factors of the environment in a start-up can be conceptualized in different ways. The result of differing conceptualization is the production of two broad modes of fit: respectively, person-person fit, and person-situation fit (Ostroff & Schulte, 2007).

Person-Person Fit
Person-person fit is formed on the basis of the match between the applicant’s characteristics and the people-centered environment in the start-up. Two forms of fit can be achieved according to the similarity effect or the “making whole” effect of the combination between the P component and the E component (Ostroff & Zhan, 2012). A people-centered environment is comprised of the collective characteristics of employees in the same start-up, or the personal attributes that employees learned from their start-up environment (Schneider, 1987); namely, the configuration of attributes, goals etc. The fit based on the similarity effect is termed person-person compositional fit (Ostroff & Zhan, 2012). The conceptualization of this form of fit is derived from the notion that “people make the place” (Schneider, Goldstein, & Smith, 1995); It emphasizes that a homogeneity among employees results from an attraction between the applicants who wish to join a start-up and the existing employees who have similar values, personalities and interests (Ostroff & Schulte, 2007). The other form of person-person fit is based on the complementary effect that applicants’ attributes offer to the others in the start-up. When an applicant possesses specific attributes or characteristics that are different from other employees and can bring in these attributes missing in the start-up, then person-person fit occurs. This form of fit is termed person-person compilation fit (Ostroff & Zhan, 2012). Person-person compilation suggests that applicants may be attracted by the start-up as they can offer complementary attributes and due to their very uniqueness, their self-worth in the start-up may be increased (Ostroff & Zhan, 2012).

Person-Situation fit
In person-situation mode, the situation-centered environment features the social and structural situation in a start-up (Ostroff & Zhan, 2012). The social situation refers to emergent constructs that represent the culture and climate of the start-up which is created by the contributions of personal behavior, attitudes and cognition of all the employees in the start-up, through informal interaction processes (Ostroff & Schulte, 2007; Bowen & Ostroff, 2004). The social person-situation fit is manifested by the similarity between applicants’ characteristics and the culture and climate of the start-up, founded on the basis of sociological concepts; it is also termed social person-situation compositional fit (Ostroff & Zhan, 2012). The structural situation refers to the structural-technical environment in a start-up, including task activities, skills and job requirements etc. (Ostroff & Schulte, 2007). These structural settings of a firm are often driven by functional goals or production processes. In former studies, an evident fit was seen to be manifested by the match between the skills and work preferences of an applicant, and the specific job requirements and resources provided by the start-up. It is also termed structural person-situation compositional fit (Ostroff & Zhan, 2012; Ostroff & Schulte, 2007).

Subtypes within Different Modes of Fit
The modes and subtypes of fit can be crossed and further divided into subtypes of fit under various modes (Ostroff & Schulte, 2007). Figure 1 shows Ostroff’s (2007) integrated model of different subtypes of fit in various modes and forms. Even when the subtypes of fit within different modes that can affect the assessment of a start-up applicant’s fit are yet unknown, their impact can be expected as the environment in start-ups is typically unstable and constantly changing (Shane & Venkataraman, 2000).

Under the person-person compositional fit mode, the examination of fit describes how similar the personal attributes of the applicant are, to the personal attributes of his or her future supervisor (P-I fit), to other employees who work in similar jobs (P-J fit), to other members within the future workgroup (P-G fit) and to other employees in the start-up (P-O fit) (Ostroff & Schulte, 2007). Person-person compilation fit is however about how much the applicant’s personal attributes can
complement the combination of personal attributes derived from this hierarchical environment within the start-up (Ostroff & Schulte, 2007). Also, the mode of social, person-situation, compositional fit is about matching applicants’ personal attributes with the socio-psychological context, defined through converging cognitions, perceptions, affects or behaviors within the hierarchical environment of the start-up (Ostroff & Schulte, 2007).

The structural person-situation compositional fit mode comprises, the alignment between personal attributes of the applicant and the job categorization (P-J fit), workgroup structure (P-G fit), or the firm structure in the start-up (P-O fit) (Ostroff & Schulte, 2007).

In summary, P-E fit is constructed of diversified concepts. Fit has different forms, subtypes, and mode. To thoroughly study how start-ups apply the P-E fit theory into their fit assessment of applicants, following concepts should be considered.

The fit concept has long been mentioned in the hiring-related literature on HR management. Traditionally, the P-J fit and P-O fit are applied the most often to employee selection (Werbel & Gilliland, 1999; Adkins, Russell, & Werbel, 1994). A high number of studies are focused on a recruiter’s perception of an applicant’s fit within an interview context, e.g. (Bretz, Rynes, & Gehart, 1993), which has proved to be a significant influence on their hiring recommendations (Cable & Judge, 1997). This has been an important factor in final hiring decisions (Dipboye, 1994).

Scholars have suggested that not only do P-J fit and P-O fit play essential roles in the selection process, but that also other subtypes of P-E fit may have an influence on the selection and organization entry processes at multiple stages or in multiple manners (Sekiguchi, 2004). Studies that have combined both fit types are still rare (Sekiguchi, 2004), not to mention the inclusion of other dimensions of P-E fit into the selection process. Furthermore, hiring for different types of fit has shown positive effects on employee attitudes and employee work performance and provides better control over newcomers, etc. (Judge & Ferris, 1992; Kristof, 1996).

Ostroff and Zhan (2012) describe a selection method, as making a pre-hire assessment using P-E fit, according to the results of a pre-hire assessment form, the resulting pre-hire anticipatory fit, and then leaving the ultimate hiring decision to the firm.

Conceptualization Framework for an Applicant’s Fit Assessment in a Start-up Context

The conceptualization framework was created (see Figure 2) based on the integration of a selection process in start-ups and person-environment fit, to provide theoretical direction for the current study.

The first step dealt with the assessment of the fit of applicants for a start-up, based on the determined P-E fit concepts with regards to those subtypes, mode and forms of fit that concerned the most (Ostroff & Zhan, 2012). The next step dealt with start-ups developing their fit perception of applicants; also termed pre-hire anticipatory fit (Ostroff & Zhan, 2012). This is an overall impression of the degree to which the applicant would fit in with the firm. The last step was about start-ups developing their hiring recommendations accordingly.

Methodology

Research Approach

There are few existing studies or literature in the field of applicants’ fit assessment in start-ups. Furthermore, the fit perception in start-ups contains many subjective interpretations and predefined subjective issues, such as which subtypes, mode or forms of fit, are appreciated the most. In research terms, these fall into the area of interpretivism. Therefore, a qualitative methodology with indicative reasoning strategy was applied.
Research Design
In-depth interviews directly with the HR managers of fast growing Austrian start-ups, to obtain information on good practice in the fit assessment of applicants were carried out. Due to the fact that the selection process varies from firm to firm, and that HR managers were geographically removed, face to face, in-depth interviews were seen to be more practical and effective for data collection.

Sample
The crucial characteristic of the target start-ups was that they should be going through significant HR growth, namely an increase in the number of employees. About 71.8% of start-ups in Austria plan to hire new employees within the next 12 months (Dömötör & Spannocchi, 2016). In 2015, on average, 5.5 new employees were planned for in Austrian start-ups, and in 2016, the average, planned number of new employees was 4.1 (Fassl & Dömötör, 2015; Dömötör & Spannocchi, 2016). Additionally, start-ups in the digital industry accounted for over 60% of start-ups in Austria, based on the data of the European Start-up Monitor (Dömötör & Spannocchi, 2016). Thus, the five fast-growing start-ups selected for the current study were companies in the digital industry that hired at least 15 new employees in the previous year. The HR managers were the target respondents for this research, meaning those involved in the whole selection process from application screening, the undertaking of interviews, to the coordination of job-offer negotiations.

Interview Guideline
All the interview questions were created around the steps of the hiring model development process for start-ups (see figure 2).

The first part was related to what Ostroff (Ostroff & Zhan, 2012) called the key questions that firms need to determine, before an applicant’s fit can be assessed. The first segment of questions was on how start-ups conceptualize their E and P components, by inquiring about their opinions and experiences on the fit assessment of applicants. It also obtained facts on those things that start-ups pay attention to when they perceive the fit of applicants, in order that information about modes and forms of fit could be collected.

The other segment of the interview guideline explored other factors that influence hiring recommendations in start-ups, besides pre-hire anticipatory fit.

Data Analysis Methods
The coding process of the current study was made up of two phases. In the open coding phase, all the codes were based on the content of the interviews (Creswell, 2007), the codes being categorized by the segments of the interview guideline. The other phase was the axial coding phase. In the current study, axial coding was carried out according to the hiring recommendation development process for start-ups (see Figure 2), and categorizations were based on the integrated model of different subtypes of fit in various modes and forms (see Figure 1). After these two phases of coding, the connection or relationships among the categories of codes was shown in easily understood diagrams (Creswell, 2009).

Results
Findings within the Open Coding Phase
General Image of Fitting Applicants to Austrian Start-ups
The descriptions of a general image of a fitting applicant were relatively diverse in their wording, however, there were three characteristics commonly mentioned by the respondent HR managers. Possessing the skills required by a specific position, being a team player and having a passion for
the area of work were emphasized the most. As the start-ups were mainly structured in small teams, the characteristics stated above, ensure the employees stay motivated in their jobs.

Applicant’s Fit Assessment in Austrian Start-ups (Real Practices)
Although respondents had different experiences of the least fit applicants, their characteristics were not difficult to name. All mentioned that the least fit applicants were the lone wolves. Namely, those who prefer to work alone and care only about their personal success. Another kind of unsuitable applicant was the one that strictly followed every work process and required a lot of guidance or standard procedure in order to finish any job. Some of the respondents mentioned applicants whose professional goals focused on climbing the career ladder to help get into big-name companies. A lack of commitment was another no-go; for start-ups, commitment is not only about being responsible for the job but also about respect for the structure of the firm. In the case of best-fit applicants, respondents mentioned the sharing of the firm’s values which is the most important sign of an applicant who will fit in. The firms emphasized that applicants who are possibly fitting for them, were those who agree with their business concepts as well as with the vision of the firm. Moreover, a good fit with the ways of the team is a must in judging the fit of applicants, based on the answers of respondents. Every team has habits that have developed during daily working life in a firm; common behavior or a certain atmosphere that evolved among the employees and was liked by all. Team orientation was frequently mentioned. It is not only about caring about realization of the goals of the team, but also about considering how the team can set the foundations for their success.

Regarding crucial characteristics that start-ups look for in their applicants, all of the respondents put a good team fit as the most important factor in assessing the fit of applicants. This goes hand in hand with strong motivation and professionalism in the job, including the abilities and qualifications required by the specific position.

Potential Unfitting Characteristics Possessed by Marketable Applicants
The beliefs of respondents were very diverse, except of course in their attitude to loners who cannot work in a team. Inflexibility in the work process is another characteristic that can crop up among marketable applicants. More potential misfits between a marketable applicant and a start-up result from expectations regarding compensation, a lack of interest in a career path in start-ups or an exaggeration of applicants’ experience.

Other Influential Factors in making Hiring Recommendations
Although the pre-hire anticipatory fit is crucial in making hiring recommendations, expectations around compensation, the ideas and opinions of the hiring team and the opinions of the founder also have a strong influence.

Findings in the Axial Coding Phase
In the phase of axial coding, codes were reorganized in categories derived from the concepts of P-E fit, namely, the forms of fit, the subtypes of fit and the modes of fit.

Fundamental Characteristics Favored by Austrian Start-ups in Assessing the Fit of Applicants
The definitions of different subtypes of fit offer guidance in reorganizing and categorizing the codes developed in the open coding phase. The categories stand for the P component of fit, including personal values, personality traits, professional goals, job-related abilities and working preferences.

Personality Traits
Nearly all the respondents talked about similarities in personality traits between the applicant and the other team members or employees, which was seen as an indication of how the applicant could fit into the team or the firm well. Being a team player is definitely an essential personality trait needed for fitting into start-ups. As most of the start-ups studied were structured in small teams, employees need to cooperate with each other to complete any job; they need to be supportive and enjoy working in a team, so this is the first thing recruiters looked at when assessing the fit of applicants. The next thing mentioned by most of the respondents was how sociable the applicant was. Working in start-ups is not only about being fit for the work team that hired the applicant, but also about being fit for the firm, because the size of Austrian start-ups is relatively small. On a lot of occasions, employees need to interact with colleagues in different departments so a sociable person will help to maintain a friendly and helpful atmosphere in the firm and, as a result, daily business can run smoothly. Open-mindedness is also necessary for working in start-ups, due to the cultural diversity as seen in those start-ups studied. Being open-minded about cultural issues and respecting the opinions of others is obviously crucial. Honesty is not easy to detect during the selection process, but the respondent HR managers said they try to assess it during the interview and in on-site behavior in tests. Capturing an authentic image of the applicant is key in developing pre-hire anticipatory fit.

Job-related Abilities
In the start-ups studied, job-related abilities that are appreciated, are not only the skill sets required by the specific job position, but also the ability to learn fast and work independently with little guidance. Respondents pointed out that some team leaders or senior employees may have multiple roles in the company, making it impossible for them to give detailed guidance to each of the team members. Therefore, the right mentality and ability to search for solutions are signs for a good fit. As well as KAS (knowledge, ability, and skill) required by the specific job, applicants who are a good fit sometimes have some special skills or abilities lacking in other employees. The start-ups studied, pay much attention to the background of applicants, including working experience, skill sets, etc. There is a consensus that applicants with extra skills should not be wasted, so in some cases, new positions for applicants are created to let them apply their extra skills and allow other employees to learn from them.

Personal Values
Sharing the values of the firm is vital in assessing the fit of applicants. Only those who agree with the vision and mission of the firm, as well as other values commonly shared, can truly fit into the start-up. Applicants also need to fit in with the ways of the team, namely habits developed by them. A fitting applicant should enjoy the ways in which the team works and act in a similar way to other team members. Additionally, team orientation is described as a “common mindset” by the respondents, so recognizing whether the applicant has this common mindset is important for developing pre-hire anticipatory fit.

Professional Goals
Being passionate about the work field can ensure the motivation of the applicant towards the job. Moreover, applicants with clear professional goals are able to give useful hints to the start-ups researched, when they judge if the applicant can be a long-term fit. Also, applicants who can align their personal goals with the company goals, and always make an effort in this direction, even sometimes to the detriment of their own personal goals, are sure to be considered a good fit in start-ups.

Working preferences
Working preferences of employees is a factor in forming the climate and norms of a firm. The idea that the most fitting applicants should have the same working preferences as the others that work in the firm is consistent among respondents. Since business and working processes in start-ups can change rapidly, flexibility and the ability to adapt to changes are traits that employees of start-ups must have. Also, being self-motivated, preferring to work proactively without pushing, is significantly acknowledged. The start-ups studied, focused strongly on these criteria when they perceived the fit of applicants.

Summary
Based on the conceptualization of different subtypes of fit, we found that fast growing Austrian start-ups determine person-group fit, person-job fit and person-organization fit as the basis for an assessment of the fit of applicants. In using the attributes of these three different subtypes of fit, start-ups develop their own idea of a pre-hire anticipatory fit.

Forms of Fit Favored by Austrian Start-ups
Regarding the forms of fit, respondent HR managers held similar ideas. The supplementary form of person-organization fit and person-group fit, is valued because nearly all respondents talked about how the best fit applicants should agree on the values of the company, which indicates value congruence. Furthermore, the alignment of personal goals with company goals and team goals represents goal congruence. Having an open-minded and cooperative personality, the same as others in the team or the company, was found to be a typical sign for a similarity of personality traits. Contrary to person-organization fit and person-group fit, respondents preferred the complementary form of person-job fit when they perceived the fit of applicants. This was indicated by the efforts that the start-ups make, to assess the skill sets required by the specific job; also by their appreciation of extra skills and experiences possessed by applicants which differ from the competencies of their existing employees.

Mode of Fit Defined by Austrian Start-ups
In order to understand how the studied start-ups conceptualize the E component of person-environment fit when they assess the fit of applicants, respondents were asked to describe their experiences in selecting applicants in real practice. Data was categorized based on the definition of different modes. For example, the respondents considered that best fit applicants should enjoy spending time and sharing working space with the team and behave in the same way as other team members. This description obviously falls into the definition of the social situation. Therefore, the social person-situation compositional fit was favored by the start-ups researched.

Respondents talked of unfitting applicants who need to work strictly according to a plan, or applicants who aim for higher job titles, unrealistically fast. This description belongs in the structural technical situation, so the structural person-situation compositional fit was also popular among our start-ups.

Person-person compositional fit essentiality for the studied start-ups was indicated by the repeated mention of congruent personality, goals and values between applicants and other employees.

Results of the Current Study
The result of the current study is the integration of the findings of the two coding phases. The theoretical framework of the hiring process model in Austrian start-ups was formed (see Figure 3), to answer the research question on how fast growing Austrian start-ups assess the fit of applicants. The hiring process model in Austrian start-ups is constructed of two parts. The first part is to determine the P and E components of fit, meaning the subtypes, forms and modes of fit and the
individual attributes. The P component comprises the attributes that need to be measured; they are personality traits, professional goals, personal values, job-related abilities and working preferences of applicants. The E component integrates subtypes and modes of fit, namely P-O fit and P-G fit in person-person compositional mode, P-O fit in social person-situation compositional mode, as well as P-J fit in structural person-situation compositional mode.

Based on the results of these components, the pre-hire anticipatory fit of the applicant was determined. However, the making of hiring recommendations is possibly influenced by other factors even when the results of a former component are positive. The ideas of the hiring team or the founder of the start-up, as well as the applicant’s expectations regarding salary or compensation may affect hiring recommendation at the final stage.

**Discussion**

As a pilot study investigating good practice in the assessment of applicants’ fit in fast growing start-ups by using the P-E fit theory, the findings of the current study correlate with former studies. The start-ups researched have relatively consistent ideas on the conceptualization of the E component due to common features, such as newness, smallness, innovation-orientation and a fast-changing environment which influence them to conceptualize it in a similar way (Shane & Venkataraman, 2000; Taylor, 2006). As suggested by Werbel and Johnson (2001), the flexibility of a team needs to be maintained to adapt to the fast-changing, start-up environment and to boost innovation. Personal attribute congruence at the organizational level can be beneficial for cross-functional collaboration and to reduce personal conflicts, which is important in start-ups where teams and departments often work together (Werbel & Johnson, 2001). Complementary person-job fit is preferred in fast growing Austrian start-ups, which corresponds to Leung’s idea (2006) that start-ups under expansion tend to search for talent with diverse skills and competencies, yet who still share common values with the company, as different types of people are needed to sustain growth (Zotto & Gustafsson, 2008). This finding is opposite to Ostroff’s (2012) idea that preferred forms of fit vary from firm to firm, so that could be additional proof that the HR issues of start-ups are different from those seen in traditional HR management studies.

**Implications**

Unlike most former studies that only applied certain dimensions of P-E fit, the current study has combined the integrated model of P-E fit with the selection process of start-ups. It has not only studied which concepts of P-E fit are used in the selection process of start-ups, but also how these concepts are applied in good practice. The results might make a contribution to future studies related to applicant attraction and selection in start-ups and other innovation-oriented companies. On a practical level, the results provide implications for stakeholders in related fields. For other Austrian start-ups, the results supply a theoretical framework to guide them through the fit assessment of applicants. As the start-ups researched display HR expansion, their opinions and experiences summarized in the current study can trigger rethinking on the perception of an applicant’s fitness in other start-ups in Austria. How start-ups determine the contents in each subtype of fit and on the mode of fit can be rethought. Also, the hiring process model in Austrian start-ups offers a framework for others to use in the fit assessment of applicants based on their needs, helping them to focus on the most important issues. For instance, start-ups can rank the essential attributes or extent of fit, measuring the most suitable in the earlier stages of selection to clarify which applicants are the best fit for the firm. Moreover, start-ups can accordingly provide training for their recruiters or managers in order to better select fitting applicants. For innovation-
oriented non-start-up companies, learning from good start-ups is useful for their applicant selection and helps them to focus more on the attributes of the applicants who are beneficial to innovation. For monitoring organizations, the results provide potential parameters for studying hiring behavior in start-ups. For start-up incubators, the theoretical framework of hiring recommendation development can contribute to programs that focus on supporting start-ups to enlarge their teams effectively and efficiently.

Limitation and Further Research Direction
The current study has certain limitations. The research scope was narrowed to fast growing Austrian start-ups; the influence of the cultural dimension in different countries on different subtypes of fit (Astakhova, 2016) was not included. Also, the sample size was relatively small, therefore generalizing the findings of the current study needs to be very cautious. Further research can, on the one hand, test the results of the current study by using quantitative methodology; and on the other hand, investigate the relationship between the dimensions of applicants’ fit assessment and the working outcomes of other innovation-oriented companies.

Conclusion
The current study focused on the theoretical perspectives of applicants’ fit assessment in combination with person-environment fit theory in fast growing Austrian start-ups. A qualitative methodology was applied, and a theoretical framework for the hiring process in Austrian start-ups was generated from the good practices observed. The results showed that in fast growing start-ups, the similarity in values, professional goals and personality traits between the applicant and other employees must be evident. Also, working preferences and job-related abilities should be diverse, to ensure the fit between applicants and a specific job position, as well as the working team, while at the same time boosting innovation.

References


KPMG. (2014). *German Start-up Monitor*.


Figures

Figure 1: Integrated Model of Different Subtypes of Fit in Various Modes and Forms
Figure 2: Hiring Process Development Model for Start-ups

Figure 3: Hiring Process Model in Austrian Start-ups