Are Entrepreneurs Distinct Innovators? A Detailed Look at Entrepreneurs' Innovative Behaviour in Four Countries

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Abstract

Since Schumpeter, entrepreneurs and innovative activities belong together. Innovativeness as a personality trait was also found to be related to entrepreneurial status and business success. However, not much is known about the specific facets of entrepreneur's innovative behaviour. This study aims at better understanding of how entrepreneurs differ from managers in the different areas of their innovative behaviour at work, and, secondly, how this behaviour differs for entrepreneurs who have and do not have employees. Representative samples of working population from Germany, the Czech Republic, Italy and Switzerland (N=3498) were interviewed with the use of Innovative Behaviour Inventory. Individuals involved in independent entrepreneurial activities were creating new ideas and trying to overcome obstacles during implementation more than employed individuals. People who managed others communicated new ideas and tried to engage other individuals in the new idea implementation more than the ones without subordinates. Finally, what differentiated entrepreneurs from all the other groups was their higher involvement in implementation starting activities. Overall, these differences led to the leading position of entrepreneurs in achieving the innovation outputs.

Introduction[*]

Since Schumpeter (1934), entrepreneurs are considered to be catalysts of change, creative destructors and innovators in general. Management books (e.g., Drucker 1985), empirical studies (Mueller, and Thomas 2000), and meta-analyses (Rauch, and Frese 2007) identified innovativeness and related openness to experiences (Zhao, and Seibert 2006) as the defining features of entrepreneurial personality. However, innovativeness is typically analysed as a trait and is closely related to the interest of an entrepreneur in innovations. It is usually conceptualized broadly, often as a unidimensional factor (e.g., Jackson 1994) without understanding the various facets of innovative behaviour in a rather complex innovation process.

On the other hand, innovation management literature deals with the topics of what the innovation process is (e.g., Farr, Sin, and Tesluk 2003) and how to manage it effectively (Bernstein, and Singh 2006). Such knowledge can be applied in corporate settings, but does not tell us much about the activi-

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ties independent entrepreneurs do. It also focuses on the system and less on the activities of an innovating individual.

Therefore, there is a value in better understanding of what entrepreneurs do when they innovate and how they differ in their innovative behaviour when compared with other individuals, and especially with their managerial counterparts. Such knowledge can be utilized by entrepreneurship teachers and consultants who support entrepreneurs in their innovative efforts. Moreover, not all entrepreneurs innovate to the same extent (e.g., Miner 2000) and we can expect substantial differences, for example, between the owner of a quickly growing IT company and a self-employed webpage programmer.

The study's goal is, firstly, to understand better how entrepreneurs differ from managers and other employees in the different areas of innovative behaviour at work, and, secondly, to differentiate between entrepreneurs themselves and to find differences and similarities in their innovative behaviour.

Entrepreneurs and Innovative Behaviour

Generating or recognizing novel and useful ideas that have the potential to be developed into new goods or services appealing to some identifiable market belongs between key challenges of entrepreneurs. Having identified those opportunities, entrepreneurs must figure out how to bring the project to fruition (Ward 2004).

Drucker (1985) considered innovation as the specific tool of entrepreneurs by which they exploit opportunities. Research so far focused mainly on innovativeness as a personal trait (e.g., Rauch, and Frese 2007; Mueller, and Thomas 2000) or, on the other hand, on innovativeness on a firm-level (e.g., Covin, and Slevin 1989; Rauch, Wiklund, Lumpkin, and Frese 2009).

Innovativeness can be described as a person's willingness and interest to look for novel ways of action. This conceptualization does not imply the introduction of innovative products, rather, more a preference to engage in creativity and experimentation (Rauch 2010). Innovativeness helps entrepreneurs to recognize valuable opportunities and to search for new ways of completing tasks (Ward 2004).

Research shows that entrepreneurs tend to be more innovative than other population. For example, Carland and Carland (1991) found that both U.S. male and female entrepreneurs have significantly higher levels of preference for innovation than managers. Similarly, entrepreneurs scored higher on Kirton's adaption-innovation scale (Kirton 1976) than general managers of large organizations in the study of Buttner and Gryskiewicz (1993). Finally, Shane, Kolvereid, and Westhead (1991) reported that the desire to be innovative and at the forefront of new technology was frequently given as a reason for starting a business in all three countries involved in their study.

Recent meta-analysis shows that entrepreneurs are more innovative than other people and innovativeness is positively related to the decision to start a business and is also positively and directly correlated with business success (Rauch, and Frese 2007). Interestingly, entrepreneurs' innovativeness produces higher relationships with business success as compared to the relationship between firm level innovations (introduction of new products, services, processes and markets) and success (Rauch 2010; Rosenbusch, Brinckmann, and Bausch 2010).

On the firm-level, innovativeness can be defined as the predisposition to engage in creativity and experimentation through the introduction of new products and services as well as technological leader-

ship via R&D in new processes (Rauch et al. 2009). In their meta-analysis, Rauch et al. confirmed the positive correlation between entrepreneurial orientation (based on Covin and Slevin's scale) and performance. Innovativeness was the individual component of the entrepreneurial orientation construct that correlated with the firm performance the most (corrected $r = 0.195$).

Rauch (2010) claims, it would be interesting to discover whether or not firm level innovativeness is dependent on the owners' innovativeness and how. To reformulate this claim a little bit, there is a gap between the innovativeness as a trait and a firm-level innovation. This gap can be closed by the better understanding of the innovative behaviour of an entrepreneur that is a mediator between a personal trait and the firm-level innovativeness. We can expect that the personality of an entrepreneur influences his/her behaviour and this behaviour has a direct influence on what happens in the firm and has consequences for the business success. Therefore, it is interesting to focus more on this missing link.

Measuring the Innovative Behaviour

Based on the process oriented definition of workplace innovation (West, and Farr 1990), we define innovation as the process of new idea creation or adoption and a subsequent effort to develop it into a new product, service, process or business model with an expected added value for a potential user.

Such definition allows us to focus on the acting individual in the different phases of the innovation process, and enables to involve different innovation types, not only radical innovations, but also the substantially more frequent incremental ones. In the innovation process as a whole, we identify six distinct activities of innovating individuals. The innovation process at work can be started either by an independent creation of a new idea (e.g., Unsworth 2001; Amabile et al. 1996) or by a search for new ideas (e.g., Kelley, Peters, and O'Connor 2009). Then, there is a need to communicate potentially interesting idea to others (e.g., Binnewies, Ohly, and Sonnentag 2007). It may be employees or business partners in the case of entrepreneurs, or colleagues and managers in the case of employed individuals. If the idea shows its viability and is approved, first implementation activities can start (e.g., Baer, and Frese 2003). The innovation champion usually involves other people and overcomes obstacles during implementation until finally delivers results of previous innovative activities (Howell et al. 2005). It must be stressed that the process is not linear, it includes many feedback loops and the phases are often co-existing. For example, latter implementation phases also include the aspect of idea generation when a new ways of implementation or resource acquisition must be found out.

The issue is how to measure innovation in line with this conceptualization. Existing person-related innovation measures can be largely grouped into three categories:

1. measures of innovativeness as a personality trait,
2. general measures of employee innovative behaviour, and
3. measures of innovation champion behaviour.

The first and frequently used measure of general innovativeness is Kirton's Adaption – Innovation Inventory (Kirton 1976) that differentiates innovators form adaptors on three scales – originality, efficiency and group conforming. The second measure is then the innovativeness scale from Jackson Personality Inventory (Jackson 1994). However, none of these scales is focused on innovative behaviour at work.

Concerning general innovative behaviour of an employee in the work context, well established are innovative behaviour measures from Scott and Bruce (1994) and Janssen (2003), and creativity scale by Baer and Oldham (2006). Nevertheless, these scales measure just a general innovative behaviour at work by one general factor and do not allowed a more detailed look on innovation.

The third group of existing measures focused solely on the behaviour of an innovation champion. Shane, Venkataraman and MacMillan (1995) suggested a measure of three championing factors (autonomy, cross-functional appeal, locus of support). In a newer study, Howell, Shea and Higgins (2005) developed and validated champion behaviour measure capturing three different facets (expressing enthusiasm and confidence about innovation success, persisting under adversity, getting the right people involved). Both these measures, however, did not focus on the initiation phases of the innovation process and focused on R&D personnel.

As there was no measure that would cover the specific innovative behaviours in all the different phases of the innovation process and in the same time enabled to include general population, a new measure of innovative behaviour at work Innovative Behaviour Inventory was established that helps to understand both the initiation (idea creation, idea search, idea communication) and implementation (implementation starting activities, involving others, overcoming obstacles) phases of the innovation process (Lukes, Stephan, and Cernikova 2009). With this measure, a study on general adult population can be conducted that allows comparisons of entrepreneurs with other groups. Furthermore, such an instrument allows us to build more refined models and hypotheses regarding innovative behaviour.

Based on previous innovativeness studies (Carland, and Carland 1991; Buttner, and Gryskiewicz 1993), meta-analysis (Rauch, and Frese 2007), and described conceptualization, we formulate the first hypothesis:

H1: entrepreneurs behave at work more innovatively than employees and also more than managers, that is, they are more engaged in creating new ideas, searching for them, communicating them to others, in starting their implementation, involving others and overcoming obstacles in the implementation and they also achieve more innovation results.

Entrepreneurs and Self-Employed

However, entrepreneurs are not innovative to the same extent. Tuunanen and Hyrsky (1997) found that both Finnish and American entrepreneurs who report their primary objectives to be profit and growth scored higher on Jackson's innovativeness scale than did those reporting family income as their primary goal. Similarly, Carland, Carland, Hoy, and Boulton (1988) found that entrepreneurs who establish and manage a business for the principal purposes of profit and growth have a higher preference for innovation than other small business owners.

In his typology of entrepreneurs, Miner (2000) distinguished between personal achievers, real managers, expert idea generators and empathetic supersalesmen. It can be clearly expected that expert idea generators would show more innovative behaviour when compared with other three types.

Finally, scholars have different approaches to who the entrepreneur actually is. Global Entrepreneurship Monitor project, for example, focuses on entrepreneurial activity regardless the size of business, that is, any individual engaged in any kind of (independent) entrepreneurial activity counts as entrepreneur (reference). The other approach focuses on individuals who pursue entrepreneurial op-

portunities without regard to resources currently controlled (Stevenson, and Jarillo 1990). Implicitly, there is more ambition involved, that is, to pursue the opportunity, to take the risk, to hire employees, to grow. In line with past research of business owners (e.g., Utsch et al. 1999), we distinguish between self-employed freelancers who have no employees, and business owners – entrepreneurs, who have at least one employee. A difference in innovative behaviour between these groups can be expected, not only because of presumable differences in motivation and ways of business management, but especially because of the differing options to engage other people in the development of their new ideas. It is substantially easier for entrepreneurs with employees at hand; therefore we expect these differences to be significant.

In this study, we define a person owning and managing his/her own company who employs other individuals as "entrepreneur with employees", a person engaged in entrepreneurial activities on his/her own, without employees, working for him-/herself not for an employer as "self-employed without employees" and a person employed in a company owned by somebody else who has at least one subordinate employee as "employed manager". Other working individuals are referred to as "employees".

In line with the previous text, we formulate the second hypothesis:

H2: self-employed will show less innovative behaviour at work than entrepreneurs with employees in the areas involving interpersonal communication; especially, they will be less engaged in communicating new ideas and in involving others in the idea implementation.

Methods

Innovative Behaviour Inventory covers areas of work-related innovative behaviour consisting of seven subscales named Idea creation, Idea search, Communicating ideas, Implementation starting activities, Involving others, Overcoming obstacles and Innovations outputs. The first six subscales constitute a second-order factor Innovative behaviour at work that is positively and significantly related with the subscale of Innovation outputs. The inventory is reliable and shows satisfactory factorial, criterion, convergent, and discriminant validity (Lukes, Stephan, and Cernikova 2009). It was also found to be measurement invariant in seven countries (Lukes, Stephan, Novy, and Lorencova 2010).

The examples of items are for Idea creation 'When something does not function well at work, I try to find new solution'; for Idea search 'I try to get new ideas from colleagues or business partners'; for Communicating ideas 'I try to show my colleagues positive sides of new ideas'; for Implementation starting activities 'I develop suitable plans and schedules for the implementation of new ideas'; for Involving others 'When I have a new idea, I look for people who are able to push it through'; for Overcoming obstacles 'I usually do not finish until I accomplish the goal'; and finally for Innovation outputs 'I was often successful at work in implementing my ideas and putting them in practice.' The full inventory including all 23 items (answered on 1 to 5 Likert-type scale) and scale reliabilities are described in Lukes, Stephan, and Cernikova (2009).

Sample

In order to avoid a potential cultural bias, the data gathering was conducted on representative samples of population in economically active age (18 - 64 years) in four countries - the Czech Republic,

Germany, Switzerland, and Italy. The sample representativeness was ensured by mutually tied quotas (gender, age, education level, region and the size of place of residence) based on sociodemographic data published for each country by central statistical authority (e.g., Czech Statistical Office). Our sample consisted of 4795 adults from the Czech Republic (N=1004), Germany (N=1285), Italy (N=1256), and Switzerland (N=1250). The samples were representative for each country. The representativeness of the samples was checked by using χ^2 tests of a good fit with theoretical frequencies.

The data were gathered between May and July 2008 by CATI (Computer Assisted Telephone Interviewing) technique. The average duration of the interview was approximately 10 minutes. Selection procedure was done by the method of dialling randomly generated phone numbers, and quota limits control. Concerning particular countries, the response rate (measured as accepted interviews divided by accepted plus rejected interviews) was 58% in the Czech Republic, 65% in Germany, 34% in Italy, and 60% in Switzerland.

In this study, we are using just the sample of actively working population, that is, people currently employed or self-employed, excluding students, unemployed, housewives, and pensioners). It leads to the reduced sample size of N=3498 individuals (N=219 entrepreneurs, N=340 self-employed, N=974 managers and N=1965 employees).

Results

There are highly significant differences between the groups (entrepreneurs, self-employed, managers, and employees) in all the scales that have been used (see Table 1). Entrepreneurs with employees are characterized by the lowest means that indicate the most innovative behaviour in all the seven scales and employees without subordinates are in general the group showing the least innovative behaviour. The only exception is the scale "Involving others" where self-employed individuals have the least innovative result.

Moreover, overall significant differences do not change when the analysis is done for individual countries separately; that is, the same significant differences between the groups exist in the Czech Republic, as well as in Switzerland and in Italy. The same is true for five scales in German sample. The exception are remaining two scales - Idea search and Involving others, that show no significant differences between the four groups in German sample.

The pair comparisons revealed significant differences between the individual groups in all seven subscales (see Table 2). Firstly, entrepreneurs and self-employed come up with new ideas more than managers and employees, and managers come up with new ideas more than employees. Secondly, employees search for new ideas less than entrepreneurs, self-employed and managers. Thirdly, entrepreneurs and managers communicate new ideas more than self-employed and employees. Fourthly, entrepreneurs are the ones most involved in starting implementation of new ideas. Self-employed and managers start implementation of new ideas less than entrepreneurs but more than employees. Fifthly, entrepreneurs and managers involve others in new idea implementation more than self-employed and employees do. Sixthly, entrepreneurs and self-employed overcome obstacles the best. Managers overcome obstacles better than employees, but not so good as the remaining two groups. Finally, concerning the innovation outputs, entrepreneurs are on the first place, followed by self-employed who go second, managers on the third place and employees at the end.

Table 1

Overall innovative behaviour differences between entrepreneurs, self-employed, managers, and employees

	Entrepreneurs with employees			**Self-employed with-out employees**			**Employed managers**			**Employees without subordinates**			***F (df=3)***	***p***	***Eta*^{2}**
	N	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*			
Idea creation	219	**1.71**	.54	340	1.80	.76	974	1.96	.74	1965	*2.15*	.83	36.42	.000	.030
Idea search	217	**1.89**	.81	324	1.97	.85	970	1.97	.75	1939	*2.16*	.82	15.46	.000	.013
Communicating ideas	153	**1.88**	.90	233	2.14	1.01	967	1.89	.80	1926	*2.19*	.87	29.52	.000	.026
Implementation starting activities	213	**2.20**	1.09	321	2.52	1.28	948	2.63	1.21	1889	*3.15*	1.29	58.00	.000	.049
Involving others	202	**2.06**	.92	302	*2.34*	1.08	972	2.10	.86	1937	2.29	.96	14.52	.000	.013
Overcoming obstacles	218	**1.71**	.65	339	1.93	.85	973	2.18	.82	1953	*2.38*	.86	52.10	.000	.043
Innovation outputs	229	**1.85**	.65	292	2.03	.83	968	2.32	.86	1911	*2.71*	.93	119.88	.000	.096

1 = the most innovative, 5 = the least innovative; the most innovative results marked bold, the least innovative marked italics

Controlled for education, branch, gender and culture (education level taken as a covariate, for branch, gender and culture dummy variables created). Sample sizes differ due to the missing data.

Table 2

Intergroup comparisons of innovative behaviour differences

	ENTR vs. EMPL *F(df=1)*	*ETA²*	**MANA vs. EMPL** *F(df=1)*	*ETA²*	**SELF vs. EMPL** *F(df=1)*	*ETA²*	**ENTR vs. MANA** *F(df=1)*	*ETA²*	**ENTR vs. SELF** *F(df=1)*	*ETA²*	**SELF vs. MANA** *F(df=1)*	*ETA²*
Idea creation	49.51***	.022	27.41***	.009	60.79***	.026	12.09***	.010	n.s.		16.78***	.013
Idea search	16.86***	.008	30.58***	.010	12.98***	.006	n.s.		n.s.		n.s.	
Communicating ideas	19.34***	.009	78.76***	.027	n.s.		n.s.		9.03**	.024	18.15***(-)	.015
Implementation starting activities	100.75***	.046	86.35***	.030	51.01***	.023	15.29***	.013	10.17**	.019	n.s.	
Involving others	12.20***	.006	29.23***	.010	n.s.		n.s.		13.36***	.026	25.67***(-)	.020
Overcoming obstacles	92.68***	.041	24.21***	.008	71.62***	.031	40.82***	.033	n.s.		20.23***	.016
Innovation outputs	194.09***	.084	138.38***	.046	142.21***	.061	47.43***	.038	5.97*	.012	16.08***	.013

$p < .001$ ***, $p < .005$ **, $p < .05$ *; (-) means significant in the opposite direction; ENTR – entrepreneurs, MANA – managers, SELF – self-employed, EMPL - employees

Controlled for education, branch, gender and culture (education level taken as a covariate, for branch, gender and culture dummy variables created).

Discussion

This study explored the differences in innovative behaviour between entrepreneurs on the one side and employees and managers on the other side. It also differentiated between entrepreneurs with employees and self-employed individuals without them. In contrast to prior research it focused in more detail on the different facets of innovative behaviour at work. The better understanding of these facets and the differences between the groups can be used for entrepreneurship training, and when consulting entrepreneurs.

The first hypothesis focused on the expected differences between entrepreneurs (more innovative behaviour expected) and employees and managers (less innovative behaviour expected). The findings confirmed the leading position of entrepreneurs (who have employees) in innovative behaviour. When compared to employees, entrepreneurs were characterized by the higher levels of innovative behaviour in all the phases of the innovation process. When compared to managers, they exhibited higher levels of idea generation, implementation starting activities, overcoming obstacles, and achieving innovation outputs. On the other hand, significant differences have not been found in the idea search, communicating ideas and involving others.

Entrepreneurs' stronger position in idea generation might be given due to their higher creativity and innovativeness as a personal trait (Rauch, and Frese 2007), possibility to generate ideas as a daily activity (no requirements from a superior to do something else) or the higher internal motivation to do so (Shane, Kolvereid, and Westhead 1991). In implementation starting activities and overcoming obstacles, there may be a strong influence of proactive personality that is typical for entrepreneurs. Personal initiative is characterized as the behavior that is self-starting, pro-active and overcoming barriers (Frese, and Fay 2001). Also, in some cases, managers will not be allowed to pursue the opportunity; entrepreneur has more freedom in such a decision. Finally, better innovation outputs of entrepreneurs are in line with previous findings relating entrepreneurs' innovativeness with business success (Rauch, and Frese 2007) as well as with the higher influence the entrepreneur has, when compared with employed managers, on his/her organization.

On the other hand, entrepreneurs and managers do not significantly differ in the area of idea search. It may be that managers compensate their, in comparison with entrepreneurs, lower creativity by searching for ideas in their environment. Also, the inspiration in existing successes may help them to argue for the suggested idea and increase the chance of approval from their superior. Entrepreneurs and managers also do not differ in the areas including interpersonal communication, that is, in communicating ideas and involving others. These activities seem to be a necessary part of the manager's job. Communication, as well as giving tasks, is the core activity that a manager does at work.

The second hypothesis was that entrepreneurs with employees will be more engaged in the phases of the innovation process that involve interpersonal communication than self-employed individuals. As predicted, entrepreneurs were significantly higher in the communication of new ideas to the others and in involving other people in the implementation than self-employed. They were also higher in innovation outputs and in implementation starting activities that include planning, resource acquisition and looking for new ways of implementation. This may be related again to the concept of proactive personality (Frese, and Fay 2001) as well as to the planning styles of the entrepreneurs. Past research showed the connection of elaborate and opportunistic planning to business success, and on the other

hand, relation of reactive planning to lower success (Frese, et al. 2007), in this case having or not having an employee can be considered as a rough proxy for business success.

To summarize the main conclusions, individuals involved in independent entrepreneurial activities (with or without employees) create more ideas and more try to overcome obstacles during implementation than employed individuals. People who manage others (regardless whether they own the company) communicate new ideas and try to engage others in new idea implementation more than individuals who have no subordinates. Finally, what differentiates entrepreneurs with employees from all the other groups is higher involvement in implementation starting activities. Overall, these differences lead to the leading position of entrepreneurs in achieving the innovation outputs.

Limitations

The presented study has also several limitations. Firstly, the self-reported measure of innovative behaviour was used that constitutes a potential mono-method bias as well. However, objective data for establishing the criterion validity of the Innovative Behaviour Inventory were used in a previous study (Lukes, Stephan, and Cernikova 2009). Secondly, one item in Communicating ideas scale is more fitting to corporate environment as can be illustrated by more missing values in the samples of entrepreneurs and self-employed. Therefore, it should be reformulated in future studies on entrepreneurs.

Thirdly, our approach does not make assumptions about the relative value of incremental versus radical innovations, that is, people coming up with radical innovations would probably score comparably with the ones coming up with smaller new ideas. Nevertheless, the radical innovations are scarce and it is hard to measure "radicalism" as well. Fully different research design would have to be used involving face-to-face interviews with specific samples of R&D specialists and entrepreneurs famous for their innovation. Fourthly, the generalizability of the findings is limited, because the study was done only in four European countries. In less developed economies, entrepreneurs may face specific challenges that can lead either to more innovative (as the only way how to find ways to survive in business) or to less innovative behaviour at work (for example, if it is forbidden to employ other people by a country regime as was the case in communistic Czechoslovakia in the eighties). Future studies should include various countries outside Europe as well. Finally, the cross-sectional research design limits the ability to determine causation. Future studies might include longitudinal designs and objective measures of innovative activity results.

Practical implications

Entrepreneurs might focus on the phase of implementation starting activities that differentiates them from the other groups. It is connected to previous findings from Frese and his colleagues that personal initiative and elaborate planning influence positively business success (Frese, and Fay 2001; Frese et al. 2007). Both personal initiative and planning approach can be learned and improved. For managers who want to get more engaged in innovative and/or entrepreneurial activities, the same focus may be recommended. Also, to overcome somewhat lower idea creation capability, it may be recommended to use special creativity encouraging techniques as brainstorming or facilitated idea gen-

eration sessions, or alternatively, to get oneself into the work role that offers more space for idea creation.

Finally, for self-employed individuals who have no employees, the study identified potential pitfalls stemming from the fact of insufficient amount of people who are at hand. Engagement in both formal and informal networks as well as the use of external advisors can help to eliminate this disadvantage. All these recommendations can be also used in entrepreneurship education as well as in courses focused on unemployed individuals who think about starting an independent entrepreneurial activity.

Conclusion

The study confirmed Schumpeterian view of entrepreneurs as innovators in four countries and helped to understand better what the facets of their innovative behaviour are due to the use of Innovative Behaviour Inventory. It also helped to differentiate entrepreneurs with employees from self-employed freelancers with regard to their innovative behaviour. Entrepreneurs are the leading group in innovative behaviour at work even when compared with managers. Independent entrepreneurs (with or without employees) are more engaged in idea creation and overcoming obstacles when compared to employed individuals. People who manage others (regardless whether they own the company) communicate new ideas more and also try to engage others in new idea implementation. It can be difficult for self-employed. Understanding the differences in innovative behaviour may be used in entrepreneurship related trainings in order to highlight some areas of innovation process that might be otherwise neglected.

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