

# LINKING ORGANIZATIONAL SUPPORT TO INNOVATIVENESS – CONCEPTUAL IMPLICATIONS FOR TALENT MANAGEMENT

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## Abstract

**Background.** Both talent management and innovativeness have received significant research attention recently. However, these two, were usually separately treated research fields. Thus, there is a need to explore conceptual links between them.

**Research aims.** The main aim of the paper is to present implications for talent management theory and practice on the basis of empirical, quantitative research results on relationships between organizational support and the level of innovativeness.

**Method.** The research is based on a survey among the owners or managers of higher organizational level. The research sample is composed of 250 Polish organizations that operated in Silesia.

**Key findings.** The number of innovations depends on the number of employees responsible for this type of activity. To some extent innovativeness depends on the formal plan or program directed towards innovations fostering, the percentage of yearly income or motivational activities targeted towards innovative and creative employees.

**Keywords:** Organizational innovativeness, Talent management, Quantitative research results

## INTRODUCTION AND BACKGROUND

Innovativeness (understood here as the ability to innovate) has remained an important element of management theory for many years (Katila & Shane, 2005, p. 814–829). Researchers usually define it in terms of a result of certain organizational activities or as a variable leading to other organizational outcomes (Danneels & Kleinschmidt, 2000). In this paper the first approach which considers innovativeness as the result of organizational activities is adopted. As such, it is influenced by different factors (called “support” in the title). Researchers argue that the level of innovativeness relies on multiple factors (Read, 2000, p. 95–119), and some of them frequently assume that human capital (or human resource) characteristics are among the most important variables influencing the level of innovativeness of the company (Greve, 2008, p. 476–494). While in recent years human resource management and a human capital approach accounted for significant literature support (Ulrich, 1997), the last ten years definitively belongs to talent management (Barlow, 2006). After only 10 years it is nearly impossible to have studied all the works addressing the issue of talent

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management. The number of models may cause a young researcher to give up the topic because of literature richness. However, in this case, literature still lacks accepted and empirically supported models.

Despite significant research little is still known (or results are confusing) about how organizations should support innovativeness and what the role of human resources is in the innovativeness process. This paper links these two (above mentioned), usually separately treated, research fields. The aim is to present implications for talent management theory and practice on the basis of the empirical, quantitative research results on organizational level influences of innovativeness.

The first part briefly presents current knowledge on innovativeness (describing authors approach to the problem). On the basis of the literature review the hypotheses is posed and briefly research results on innovativeness and its influences are presented. Next, on the basis of research results implications for talent management, which is preceded with literature analysis, are discussed. The paper finishes with implications for theory and practice.

### **Innovativeness – the Role of Organizational Support**

Organizations are only as innovative as their employees (Oldham & Cummings, 1996, s. 607). Adapting the Pareto Rule 80% of effects are produced by 20% of employees – that means, that 80% of innovations are proposed by 20% of the organizational community. By this definition, they are talents (because they have the ability to cross organizational roles and create new things, new value) (Tansley, Stewart, Turner, & Lynette, 2006). That means that organizations could expect more in terms of innovativeness from their talents.

The literature review indicates that innovativeness recently received significant research attention. Researchers tend to attribute this interest to rapid changes in the environment, which are clearly the necessity for change and product life-cycle shortening, among other factors, that drive the need for innovations (Lei & Slocum, 2005, p. 31–45). Despite the changing nature of business in recent years innovativeness is not a new issue anyway.

Sawhney, Wolcott, and Arroniz (2006) state that creating value for customers and the organization constitutes the essence of innovativeness. This is any creative change of different parts (or functions) of an organization that produces value. In this regard innovativeness relates strongly to value creation then a new product by itself and can be performed at any level of an organization. The most influential definition of innovativeness, created by the OECD within the Oslo Manual (2005) concentrates on novelty in products, processes, as well as marketing and organizational solutions. For the purpose of this paper it is assumed that innovativeness is a process of



creating a value for the organization or market through novel organizational solutions. However, such a definition does not offer an answer for the basic question: what conditions shall organizations create to promote value creation through innovativeness? This or similar questions have drawn researchers attention for years (Lei & Slocum, 2005, p. 31-45). Moreover, researchers tend to treat innovativeness itself in two different manners. Some of them emphasize the dependent nature of innovativeness and some treat it as an independent variable (Danneels & Kleinschmidt, 2000, p. 1-39). This paper concentrates on innovativeness as a dependent variable focusing on the relation between different organizational support activities and the level of innovativeness. While there are numerous organizational variables influencing innovativeness this paper concentrates on some of them. Firstly, it may be assumed that the level of innovativeness depends strongly on financial support for such an activity. Therefore, organizational willingness to create a budget for innovations should positively affect their number (Klein & Knight, 2005, p. 243-246). On the other hand an organization can foster innovativeness by creating a formal plan or a program aimed at promoting such activities. The level of organizational innovativeness can also be influenced by existence of a unit responsible for innovations and by a number of its members. Rewarding highly creative employees comprises the next important factor worth considering.

## METHOD

### Research Hypotheses

On the basis of the above mentioned reflections the following subsequent research hypotheses have been posed:

- H1. The higher the budget for innovations creation and implementation the higher the level of organizational innovativeness;
- H2. There is a relationship between the existence of an innovativeness plan or organizational program and the level of innovativeness;
- H3. There is a relationship between the existence of an organizational unit responsible for research and development, the number of its members and the level of innovativeness;
- H4. The higher organizational rewards for innovators the higher the level of innovativeness.

### Sample Selection

In order to test hypotheses the research results of a project carried out in 2011 by the Chair of Entrepreneurship and Innovation Management have been used. The research sample was composed of 250 Polish organizations that operated in Silesia, of which 77% were small companies, 14% –



medium and 9% – large. There were 77 trade companies, 74 service organizations, 39 were production ones and 60 were mixed-type. Owners or managers at a higher organizational level were the respondents. The sample was not representative, therefore, the research results may not be attributed to the population. The main aim of this research project was to explore the effects, level and antecedents of organizational innovativeness. Results enclosed in this paper comprise a small part of this larger project (details are presented in the Statutory Research Report).

## **Variables**

In order to verify posed hypotheses seven questions of the original questionnaire were used:

1. Does your company spend a part of its yearly income on development and implementing new products, solutions, technologies? (answers: yes, I am not sure, no).
2. If so, what percentage of yearly income is it? (answers presented as a % value).
3. Does your company possess a formalized plan of development and implementation of new products, technologies, processes (answers: yes, I am not sure, no).
4. Is there an organizational unit responsible for finding, developing and implementing of new products, technologies or processes within your organization (answers: yes, no).
5. How many employees are there in the organizational unit responsible for finding, developing and implementing new products, technologies or processes within your organization? (answers: 1 – from 0 to 4; 2 – from 5 to 7, 3 – 8 and more).
6. Employees, who invent new solutions or develop new products, technologies and processes, are enforced, empowered and rewarded for their innovations? (1 – strongly disagree, 2 – disagree, 3 – it is hard to tell, 4 – agree; 5 – strongly agree).
7. What new products, technologies, processes or organizational solutions were introduced in your company within the last three years (2008-2010). Please write the number of innovations (product, process, organizational and marketing innovations, the list of 17 different types of innovations developed by T. Kraśnicka).

Because of a high autocorrelation within items in question number 7 (number of innovations of different types) - new products, technologies, processes, etc., a principal axis factor analysis with Varimax rotation was conducted. Results revealed the existence of 3 dimensions/constructs with eigenvalues greater than 1. They were: organizational and marketing innovations (8 items loaded), product and production innovations (7 items loaded), price and packaging innovations (2 items loaded). For all items,



loadings were higher than 0,6, for all items loaded to constructs, the Varimax with Kaiser normalization was used and rotation converged in 5 iterations. The coefficient under the correlation matrix was significant and Bartlett ( $p < 0,001$ ) and KMO ( $p = 0,81$ ) tests allowed for employment of results in further research. Therefore, in the next analyses the factor analyses results has been used. For question 7 empirical data – observed in a sample – were exchanged with 3 meta-variables (constructs) counted as means of answers (of loading items). Alpha Cronbach results have proved the data reliable, with coefficients equal to 0,801 for dependent variable and 0,855 for all 7 questions.

## RESULTS

In order to verify hypotheses posed in the first step Spearman's correlation analysis was used. Results are presented in Table 1. To make the table clearer, only significant correlations are presented.

**Table 1.** Correlation Matrix

		Rewarding for innova- tions	Number of employees in unit responsible for innova- tions	% of yearly budget allo- cated for innovations	Formal innovation plan or program	
Spearman's rho	Dimension1: organizational and marketing innovations	Coefficient	,144	,436**	,024	,273**
		Sig.	,142	,000	,409	,000
		N	57	56	98	226
	Dimension2: product and production innovations	Coefficient	,239*	,494**	,189*	,169**
		Sig.	,047	,000	,036	,008
		N	50	54	91	205
	Dimension3: price and packaging innovations	Coefficient	,204	,380**	,080	,258**
		Sig.	,089	,008	,264	,001
		N	45	40	65	155

Source: own elaboration.

As Table 1 shows, the number of organizational and marketing innovations is influenced by the number of employees within the unit responsible for innovations (from here on called the R&D department) and by the existence of a formal plan or program of innovativeness. Product and production innovations were strongly influenced by the number of employees in the R&D department and to a lesser extent by the rewarding of employees, financing (represented by % of yearly budget allocated for innovations) and the existence of a formal plan or innovation program. The number of marketing and packaging innovations is moderated by the number of em-



ployees in the R&D department and by the existence of the formal plan. Correlations between the dependent variable and the number of employees in the R&D department is relatively strong or very strong (nearly 0,5), and between dimensions of innovativeness and the rest of supposed independent variables are weaker, although still significant. At this stage, research results bring support for the hypothesis H3, and hypotheses H1, H2, H4 gain partial support.

In order to better understand relations between dimensions of innovativeness and independent variables regression models with the dependent variables dimension1, dimension2 and dimension3 were created. Despite relatively high correlations regression models could not be used to assess the nature of relations between variables because of either a low determination coefficient (below 0,1) or a low number of observations included into the model (when 3 or 4 independent values were included in the model).

While the preparation of regression models occurred impossibly, curve fit models for dimensions 1, 2 and 3 and respectively correlating independent variables have been estimated. Curve fit estimations brought further knowledge on the nature of relationships between the number of employees in the R&D department and organizational and marketing innovations as well as product and production innovations. The rest of the estimations were insignificant or the r square was too low to pay attention to. Table 2 presents the results of curve fit estimations for two dependent variables.

**Table 2.** Model Summary and Parameter Estimates

Dependent Variable	Equation	Model Summary				Parameter Estimates		
		R Square	F	df1	df2	Sig.	Constant	b1
Dimension 1: Organizational and marketing innovations	Growth	,202	13,687	1	54	,001	,500	,546
	Exponential	,202	13,687	1	54	,001	1,649	,546
Dimension 2: Product and production innovations	Power	,232	15,718	1	52	,000	2,646	1,315
	S	,243	16,700	1	52	,000	3,084	-2,128

The independent variable is the number of employees in R&D department.

Source: own elaboration.

Curve estimations brought further support for hypothesis H3 stating there is a relationship between the number of innovations and the number of employees responsible for innovativeness. Although the relation is moderately strong (the predicting value can be interpreted as relatively high, with r square greater than 0,2) the relation is not linear. In regard to



organization and marketing innovations, models with the highest r square are growth and exponential, and in regard to product and production innovations the best models would be power or S one.

## **DISCUSSION AND CONCLUSIONS**

### **Talent management: (Re)defining the role in modern organizations – research results implications**

The conducted analysis brought support for hypothesis H3 and partial support for hypotheses H1, H2, H4. The number of innovations was strongly dependent upon the number of employees responsible for this type of activity. To some extent it (innovativeness) depends on the existence of a formal plan or program directed towards innovations fostering, the percentage of yearly income or motivational activities targeted towards innovative and creative employees. These results prove that the creation of a department responsible for innovations within the organizational structure fosters innovativeness. However, spending a large part of the yearly budget, careful planning of innovation activities or rewarding employees for innovativeness do not necessarily get a return on the investment. It seems that innovativeness is not necessarily stimulated by the amount of money spent. In regard to compensating or rewarding employees for innovativeness the research brings support for what O'Connor and McDermott observed as the mismatch between the risk required of innovation teams and the reward mechanisms used (2004). However, to some extent it contradicts what Serrat (2009) states that a tight budget restricts innovativeness. According to research results the budget influences the level of innovativeness much less than the rest of hypothesized variables, but research results in this case are ambiguous.

Organizations have always been focused on attracting and retaining high performers but the significance of talent management started to grow after the paper published by Michaels, Handfield-Jones and Axelrod (2001). They were the first to claim “the war for talents”. Despite the late start, in the last 10 years researchers approached talents and talent management from diverse standpoints. For the purpose of this part of the paper talent is defined as a total of certain characteristics (high potential, abilities, motivation, knowledge, intellectual abilities, experience, and others), undertaken activities (talent is creating, inspiring, understanding, crossing organizational roles, shaping and maintaining, putting to practice, investing, concentrating and focusing on divergent things) and things being shaped/influenced by their actions (organization, effectiveness, aims, passion and development, work, clients, etc.). Talent is a person who creates “an edge” for the organization. The above stated talent definition contains elements from numerous areas – 22 different definitions located within the



literature. It is a result of a 'meta-analysis' of diverse approaches to who the talent is.

There are also different approaches to defining and describing the essence of talent management. 11 different models of talent management have been located, and this is not a complete review. Frequent parts of talent management models were: identifying, attracting and acquiring, maintaining, developing, assessing and dismissing of talents, which clearly states for a process. Some models also emphasized the role of contingencies (strategy, structure, vacancy and job characteristics, labor market, legal regulations, and others) (Pocztowski, 2008) and process effectiveness (Rynes & Barber, 1990).

While most theoreticians and practitioners agree that talent can constitute an "edge" for the organization, and that it should be nurtured in some "special manner", talent management solutions presented in the literature do not significantly differ from human resource management models. Firstly, most talent management models emphasize the same or very similar phases (if presented as a process) as human resource management ones. They all draw attention to acquiring, maintaining and developing employees and their competencies. Secondly, if talent management is presented as being affected by contingencies, these contingencies are usually very similar to ones enclosed in human resource management models. Thirdly, both human resource management and talent management are linked to organizational measures of effectiveness.

The difference between both concepts seems are in the nature of the management subject – the dissimilarity between talent and employee (or pools of employees). That, in turn, helps to explain the pressure and tendency towards defining "the talent". It is the distinction between "talented employee" and "ordinary employee" that focuses attention, not the process of employing the potential. The only visible and highly emphasized difference between talent management and human resource management is the identification process (i.e. the process of defining who is talented and who is not) (Burke, 1996). This is usually done by assessing and comparing the characteristics (competencies), effects (organizational level outcomes) and actions (measured by behaviors) of the candidates for "talents". To summarize the abovementioned, it seems that proposed ongoing talent management solutions are close to traditional human resource management models. This in turn allows us to state that despite the difference between a "talent" and "ordinary" employee the theory of talent management has little (if anything) to offer to practitioners in terms of scientifically proved and tested models. Organizations, while nurturing their most precious assets – talents – if building routines on the basis of literature recommendations – are forced to employ traditional human resource management practices.





Despite difficulties in research results interpretation they clearly pose a new challenge for talent management. If the level of innovativeness does not depend strongly on money spent on that purpose, and it is contingent upon the structure, the composition of the unit responsible for innovations, adequate sourcing, shortening the duration of vacancies should become an important issue for managers responsible for talent management (Tzabar, 2009).

In the light of research results talent identification, emphasized as the most important and difference-making issue between talent management and human resource management, could help in the composition of the innovation team. The problem of adequate composition of a team responsible for innovations has been studied extensively in recent years (Taylor & Greve, 2006, p.723-740). In this case it is imperative for talent management imperative to assert the right competencies in the team. The talent management identification process could benefit from a well-described job analysis or flexible competency profiles. The employment of tried methods in this case could lead to positive results (Brannick & Levine, 2002). In terms of attracting the right candidates the pressure should be put on shortening the time for filling the position. Timing issues in recruitment are not rare, and were previously described by i.e. Gorter and Ommeren (1999, p. 1149-1160) and Gorter, Nijkamp, and Rietveld (1996, p. 1463-1474). This leads to the following propositions:

1. Proposition 1: The crucial aspects of talent management programs designed to aid organizational innovativeness are related to talent identification, composition of a team and timing issues.
2. Proposition 1a: Talent identification processes benefit from a well-described job analysis and flexible competency profiles;
3. Proposition 1b: Talent management programs focus on the development of diversified competencies foster organizational innovativeness
4. Proposition 1c: Organizational abilities to shorten talent identification and attraction time positively influence the level of organizational innovativeness.

In regard to motivation and the rewarding of innovative employees research results indicate that the willingness to innovate is not strongly correlated to the extent to which the organization rewards for innovativeness. The reasons for individual creativity probably are somewhere else - not in the money received for value created. On the basis of the research results it is hard to propose any solution for the development of the team responsible for innovativeness, however such activities should concentrate on fostering individual creativity and shaping of interactions between team members (Miron-Spektor, Erez, & Naveh, 2011, p. 740-760). Thus, proposi-



tion 2 is: motivating talents to foster organizational innovativeness strongly relies on non-financial than financial motivators.

## Final Remarks

The literature offers numerous studies on innovativeness. Also talent management accounted for significant research attention within recent years. However, joint studies are scarce and it seems both fields could benefit from knowledge exchange. On the one hand talent management practices could help in explaining differences in the level of innovativeness. On the other hand research on innovativeness could shed a light on talent management imperatives. It seems that future research on the relationships between talent management practices and innovativeness of a company should bring interesting results, but in order to carry out such a research a talent management measurement tool should be created first.

When competing in industry companies need to build core competencies to achieve competitive advantage. This advantage can be constructed on innovation ability and the competencies of its employees. If an organization seeks a competitive advantage through innovativeness it would be advised to create a unit responsible for innovations, and then assigning competencies (employees) to this unit (this should be the job of talent management). According to research results preparing detailed plans and allocating necessary financial resources is not a key point in this regard.

The main limitation of this study is that it does not evaluate empirically the relation between talent management and innovativeness. This study would be complete if it encompassed both of these issues. The value of the research results presented above could be higher if it would be possible to assess the direct relationship. In this regard further studies are clearly necessary. It was also not possible to calculate regression models for dependent variables because of the high number of missing values. This study would greatly benefit from such models (because high correlations between variables signified a possible high predicting value).

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## WIĄZANIE DZIAŁAŃ WSPIERAJĄCYCH (ROZWÓJ) Z INNOWACYJNOŚCIĄ – IMPLIKACJE DLA ZARZĄDZANIA TALENTAMI

### Abstrakt

**Tło badań.** Zarówno zarządzanie talentami jak i innowacyjność organizacyjna w ostatnich latach cieszy się dużym zainteresowaniem ze strony praktyków i teoretyków. Nie udało się jednak zlokalizować w literaturze przedmiotu studiów podejmujących oba te obszary jednocześnie.

**Cele badań.** Głównym celem niniejszego artykułu jest zaprezentowanie konceptualnych implikacji dla zarządzania talentami wynikających z przeprowadzonego badania empirycznego nad uwarunkowaniami poziomu organizacyjnej innowacyjności.

**Metodyka.** Badanie oparto na kwestionariuszu przeprowadzonym wśród właścicieli i menedżerów wyższego szczebla. Próba badawcza obejmowała 250 polskich organizacji działających na Śląsku.

**Kluczowe wnioski.** Najistotniejszym czynnikiem wpływającym na poziom innowacyjności była liczba pracowników w komórce odpowiedzialnej za badania i rozwój. Do pewnego stopnia wpływ miało także opracowanie formalnego planu wspierania innowacji, poziom rocznych przychodów i czynniki motywacyjne w stosunku do innowacyjnych i kreatywnych pracowników.

**Słowa kluczowe:** Innowacyjność, zarządzanie talentami, badania empiryczne

