Innovation and Leadership Style in Croatian Companies

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Abstract

Innovations present a key role of development and success of the companies. Fostering innovative approach in companies has several advantages. Innovation activities lead to competitive advantage, higher economic growth and better position on the global market. Furthermore, companies that are open to innovation, enable more efficient cooperation and communication between different business units through knowledge and information sharing. Motivated employees are ready to work on new and creative activities which lead to higher profitability and satisfied clients who prefer innovated products or services. Leadership style also effects on employees' results and their readiness to accept new ideas and changes that will improve business performances. The aim of this paper is to investigate the relationship between enterprise success and leadership styles. In order to determine characteristics of the relationship, multiple regression models have been conducted.

Keywords: leadership style, innovation, enterprises, multiple regression
JEL classification: O15

Introduction

Through the perspective of internal processes, a decision is made about how to achieve a certain goal through four basic process groups: (i) Operative management process – everyday actions connected to the process of supply, production and delivery with the goal of enhancing supplier cooperation or increasing capacity, (ii) Customer management process – everyday actions with the enhancement of customer relationship management to increase their retention as well as their spending, (iii) Innovation processes – continuous processes to enable the company to successfully operate on a dynamic and turbulent market and to take advantage of all chances and opportunities to foster innovation related to the development and sale of new products or services, (iv) Regulatory and social processes – Regulatory and social processes of daily activities related to regulatory bodies, regulations and the environment in which the company operates with the aim of increasing social responsibility towards society.

Innovations present an essential factor for economic development and competitive advantage (Žižlavsky, 2013; Zhang et al., 2018). Business growth and progress depend upon innovative and creative processes, new ideas, sharing knowledge and information (Pejic Bach et al., 2018). Nowadays, open cooperation with external partners and clients has significant impact on innovation activity which enables long term improvements (De Felice et al., 2013). However, collaboration and team work between different departments also play an important role for innovation activities. In other words, information and knowledge exchange among departments and effectiveness of their collaboration foster innovation processes (De Clercq et al., 2011). Innovation activity of enterprises is a base for competitiveness, business survival and prosperity (Calabrese et al., 2013). Important factors that have

strong effect on innovation process are: intellectual capital, technological knowledge, innovation efforts and protection, motivated personnel. Leaders and their style of managing employees and business play an important role in enterprise. Transformational leadership is specific while it said to inspire employees' creative performance (Kollmann, 2013). Leader's intention is to create satisfied environment and trusting relationships that will foster innovation and make opportunities for further development (Gregory, 2016). Furthermore, successful leaders are capable to discover and implement innovations and improve organizational learning and performance (Bock et al., 2015).

In this research, focus is at the three basic styles of leadership, since number of previous researchers focused on the impact of other types of leadership to different aspects of business performance, such as transformational and transactional leadership. The brief review of these findings is as follows. The relationship between leadership and organizational performance is noted by many authors (Walumbwa et al., 2008; Queen et al., 2009; Shin, 2003) as well as the impact of human resource management on organizational performance (Huselid, 1993; Zhu et al., 2005; Bisel, et al., 2012). Therefore, the aim of this paper is the examination of the relationship between enterprise success and leadership styles. Multiple regression models are used in order to investigate the strengths and sign of the relations.

Previous research has focused to different aspects of the leadership styles in Croatian enterprises (Milološa 2015a; 2015b; 2015c), while the contribution of this research is the impact of leadership styles on knowledge management and human resources management success. The paper is structured as follows. After the introduction, the success in the area of knowledge and human resources management is discussed. In the third part of the paper, research methodology is presented. Results are outlined in the fifth part, while the final part of the paper provides the concluding remarks.

Methodology

Measurement of leadership style

In order to measure leadership styles present in Croatian enterprises, the Leadership Styles Questionnaire (Northouse, 2012) is used. The questionnaire consists of three groups of statements measuring autocratic, democratic and laissez-faire leadership styles. Respondents indicated on a scale of 1 to 5 to what extent they agree with each claim.

Measuring the innovation level of the sample organizations

Measuring the success of the sample organizations was conducted by using a questionnaire that measures the enterprise success in relation to its competitors in its core business area, given the knowledge management and human resources management success. The respondents indicated on a scale of 1 to 5 to what extent they agree with the claim that their enterprise is better than the competition in the business.

The research unit is an enterprise registered in the Republic of Croatia, and the population consists of the collection of all such enterprises. The Croatian Chamber of Economy represents the framework of the sampling, from which the sample of enterprises will be chosen randomly. The respondent is the president or an executive board member of the enterprise, and the enterprises will be contacted by phone in advance to establish contact and explain the purpose, but also the confidentiality of the research results, as well as their use for scientific purposes only. The survey was

conducted in May 2014, on a stratified sample of 60 enterprises total divided into 6 sub-groups. Of this, there were: (1) 10 small and medium-sized enterprises in the growth phase (sub-code: SME-growth); (2) 10 small and medium-sized enterprises in the maturity phase (sub-code: SME-maturity); (3) 10 small and medium-sized enterprises in the stagnation phase (sub-code: SME-stagnation); (4) 10 large enterprises in the growth phase (sub-code: Large-growth); (5) 10 large enterprises in the maturity phase (sub-code: Large-maturity) and (6) 10 large enterprises in the stagnation phase (sub-code: Large-stagnation).

Table 1
Descriptive Statistics of the Innovation Perception Level of Croatian Vompanies

	N	Min	Max	Average	St.dev.
INNO. Innovation of goods/services	60	2	5	4.000	0.781

Source: Authors' work

Results

Table 2 shows the regression model with the dependent variable INNO. Innovation of goods / services. As independent variables, all the items of measuring leadership styles are used, relating to autocratic, democratic and laissez-faire style. To form the model, Step-wise multiple regression analysis was used. A model with a determination coefficient of 0.311 was formed, indicating that with the selected model 31.1% of the dependent variables deviation was interpreted.

Only one independent variable that reflects autocratic style is statistically significant in the model *L4. It is fair to say that most of the employees, generally in the population, are lazy* (statistically significant with 5% probability). L4 variable has a negative impact on the dependant variable INNO. Innovation of goods / services in all companies.

The model has three independent variables that are statistically significant that reflect a democratic style *L8. Most employees want frequent and friendly communication with their superiors* (statistically significant with 5% probability), *L11. Superiors should help their subordinates accept responsibility for performing their work tasks* (statistically significant with 1% probability) and *L17 People are generally competent, and if they are given tasks, they will do the job* (statistically significant with 10% probability). Variables L8 and L17 have a negative impact on the dependent variable INNO. Innovation of goods / services in all companies, and variable L11 has a positive influence.

Only one independent variable that reflects the laissez-faire style is statistically significant in the model *L6. Superiors should stay on the side while employees are doing their job* (statistically significant with 10% probability). Variable L6 has a negative influence on the dependent variable INNO. Innovation of goods / services in all companies.

Table 2
Regression Model with the Dependent Variable INNO. Innovation Of Goods / Services and Independent Variables: Leadership Styles Items – All Companies Together

INNO. Innovation of goods/services	Non-standard coefficients	Standard error	Standard coefficients	t	P-value
Constant	5.331	0.955		5.579	0.000***
Autocratic style					
L 4. It is fair to say that most of the employees. generally in the population. are lazy.	-0.201	0.096	-0.275	-2.088	0.042**
Democratic style					
L 8. Most employees want frequent and friendly communication with their superiors.	-0.294	0.135	-0.273	-2.171	0.034**
L 11. Superiors should help their subordinates accept responsibility for performing their work tasks.	0.354	0.118	0.349	3.002	0.004***
L 17. People are generally competent. and if they are given tasks. they will do the job.	-0.204	0.108	-0.224	-1.886	0.065*
Laissez-faire style					
L 6. Superiors should stay on the side while employees are doing their job	-0.177	0.088	-0.234	-2.007	0.050*
Model representational indicators					
R2					0.311
Adjusted R2					0.247

Note: * 10%, ** 5%, *** 1% probability
Source: Authors' work

Table 3 shows the regression model with the dependent variable INNO. Product innovation in small and medium companies. As independent variables, all the items of measuring leadership styles are used, relating to autocratic, democratic and laissez-faire style. To form the model, Step-wise multiple regression analysis was used. A model with a determination coefficient of 0.562 was formed, indicating that with the selected model 56.2% of the dependent variables deviation was interpreted.

There are two independent variables in the model that are statistically significant that reflect the autocratic style *L1. Employees need to be constantly controlled, otherwise they will not work at all.* (statistically significant with 1% probability) and *L10. Most employees feel insecure about their job and need additional instructions* (statistically significant with 5% probability). Variable L1 has a positive influence on the dependent variable INNO. Product innovation in small and medium companies, and variable L10 has a negative effect.

There are two independent variables in the model that are statistically significant that reflect the democratic style *L2. Employees want to be part of the decision-making process* (statistically significant with 5% probability) and *L8. Most employees want frequent and friendly communication with their superiors* (statistically significant with 5% probability). Variable L2 has a positive impact on the dependent variable

INNO. Product innovation in small and medium companies, and variable L8 has a negative effect.

Only one independent variable that reflects the laissez-faire style is statistically significant in the model *L18. Generally, it is best to let the subordinates do their job* (statistically significant with 1% probability). Variable L18 has a negative influence on the dependent variable INNO. Product innovation in small and medium companies.

Table 3
Regression model with a dependent variable INNO. Innovation of goods / services and independent variables: particle leadership styles given the size of the company – small and medium companies

INNO. Innovation of goods / services – small and medium	Non-standard coefficients	Standard error	Standard coefficients	t	P-value
Constant	5.346	0.853		6.269	0.000***
Autocratic style					
L 1. Employees need to be constantly controlled, otherwise they will not work at all.	0.288	0.091	0.494	3.168	0.004***
L 10. Most employees feel insecure about their job and need additional instructions.	-0.207	0.100	-0.344	-2.076	0.049**
Democratic style					
L 2. Employees want to be part of the decision-making process.	0.333	0.138	0.369	2.417	0.024**
L 8. Most employees want frequent and friendly communication with their superiors.	-0.389	0.164	-0.363	-2.364	0.026**
Laissez-faire style					
L 18. Generally, it is best to let the subordinates do their job.	-0.332	0.111	-0.443	-2.985	0.006***
Model representational indicators					
R2					0.562
Adjusted R2					0.471

Note: * 10%, ** 5%, *** 1% probability
Source: Authors' work

Table 4 shows the regression model with the dependent variable INNO. Product innovation in big companies. As independent variables, all the items of measuring leadership styles are used, relating to autocratic, democratic and laissez-faire style. To form the model, Step-wise multiple regression analysis was used. A model with a determination coefficient of 0.636 was formed, indicating that with the selected model 63.6% of the dependent variables deviation was interpreted.

Only one independent variable is statistically significant in the model that reflects the autocratic style *L4. It is fair to say that most of the employees, generally in the population, are lazy.* (statistically significant with 1% probability). Variable L4 has a negative impact on the dependent variable INNO. Product innovation in big companies.

Four independent variables are statistically significant in the model that reflects the democratic style *L8. Most employees want frequent and friendly communication with their superiors* (statistically significant with 5% probability), *L11. Superiors should*

help their subordinates accept responsibility for performing their work tasks (statistically significant with 1% probability), *L14. The task of the superior is to help employees "favourite part of the job"* (statistically significant with 5% probability) and *L17. People are generally competent, and if they are given tasks, they will do the job* (statistically significant with 1% probability). Variables L8 and L17 have a negative impact on the dependent variable INNO. Product innovation in big companies, while variables L11 and L14 have a positive impact.

Only one independent variable is statistically significant in the model that reflects the laissez-faire style *L3. In complex situations, the superiors need to let their subordinates figure things out on their own* (statistically significant with 1% probability). Variable L3 has a positive influence on the dependent variable INNO. Product innovation in big companies.

Table 4
Regression Model with a Dependent Variable INNO. Innovation of Goods / Services and Independent Variables: Particle Leadership Styles Given the Size of the Company – Big Companies

INNO. Innovation of goods / services - Big	Non-standard coefficients	Standard error	Standard coefficients	t	P-value
Constant	4,797	1,054		4,553	0,000***
Autocratic style					
L 4. It is fair to say that most of the employees, generally in the population, are lazy.	-0,465	0,115	-0,698	-4,039	0,001***
Democratic style					
L 8. Most employees want frequent and friendly communication with their superiors.	-0,388	0,160	-0,366	-2,429	0,023**
L 11. Superiors should help their subordinates accept responsibility for performing their work tasks.	0,458	0,133	0,473	3,433	0,002***
L 14. The task of the superior is to help employees "favourite part of the job".	0,308	0,144	0,338	2,137	0,043**
L 17. People are generally competent, and if they are given tasks, they will do the job.	-0,583	0,171	-0,473	-3,404	0,002***
Laissez-faire style					
L 3. In complex situations, the superiors need to let their subordinates figure things out on their own.	0,321	0,089	0,515	3,609	0,001***
Model representational indicators					
R2					0,636
Adjusted R2					0,540

Note: * 10%, ** 5%, *** 1% probability
Source: Authors' work

Conclusion

In this paper an empirical analysis on relationship between enterprise success and leadership styles was conducted. Three regression models were established to test the influence of the leadership style on enterprise performance.

In the first regression model the dependent variable was INNO. Innovation of goods / services for all companies. Regarding autocratic (L4) and laissez-faire (L6) style, there is only one independent variable for each leadership style which is statistically significant. Three independent variables (L8, L11, L17) that reflect democratic style are statistically significant. In the second regression model the dependent variable was INNO. Product innovation in small and medium companies. Regarding autocratic (L1, L10) and democratic (L2, L8) style, there are two independent variables for each leadership style which are statistically significant. Only one independent variable (L18) that reflects laissez-faire style is statistically significant. In the third regression model the dependent variable was INNO. Product innovation in big companies. Regarding autocratic (L4) and laissez-faire (L3) style, there is only one independent variable for each leadership style which is statistically significant. Four independent variables (L8, L11, L14, L17) that reflect democratic style are statistically significant.

It can be concluded, that there is significant relationship between leadership style and enterprise success. However, the analysis includes only Croatian firms. Further research should be focused on specific industries and should include more countries and most successful enterprises in the world. Comparison of results will give better insight and more details regarding leadership style, innovation activities and enterprise performance.

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