

# *Impact of Leadership Styles on Enterprise Success in the Area of Knowledge and Human Resource Management*

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Knowledge and human resources has become the focus of numerous research due to their impact to overall company performance. In addition, the efficiency of management of knowledge and human resources management is driven by numerous factors. The goal of this research is to investigate to what extent the main types of leadership style impact the enterprise success in the area of knowledge and human resources management. Survey on a sample of Croatian companies has been conducted and the relationship between the leadership style and enterprise success in the area of knowledge and human resources management has been examined by the usage of multiple linear regression models.

*Key Words:* leadership style, knowledge management, human resources management, survey, linear regression

*JEL Classification:* O15

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## **Introduction**

Learning and growth perspective, i.e. knowledge management perspective, creates the foundation necessary to achieve success in the areas of finance, human resources and internal processes. The aims of knowledge management perspective lead to excellent results of other perspectives (Osmanagić-Bedenik 2015).

Knowledge management perspective consists of three categories: human capital, information capital and organizational capital (Nahapiet and Ghoshal 1998). The core tasks of the knowledge management perspective are employee training and progress within organizational culture. Continuous employee development, learning and acquiring new skills within the organization that encourages their work and rewards it contributes considerably to business success (Vrtiprah and Sladoljev 2012; Ženko, Mulej, and Potočan 2017).

Employees represent the main driving force of growth and development of each enterprise (Rašić, Mulej, and Čančer 2016). Regardless of the use of the latest technological achievements, production of new products or services, enterprises cannot progress without motivated and competent employees. In addition, it is important that enterprises take care of employee satisfaction and reward them in accordance with their commitment and contribution to business development (Terzieva and Morabito 2016). It is necessary to provide further development of skills and competences through lifelong education and learning programs for employees who are willing to engage in teamwork and learning, which will have a positive impact on both employees and further enterprise development.

Information technology is used intensively in knowledge management (Tanriverdi 2005; Varnali 2011; Pejic Bach 2014). The development and progress of the application of the balanced scorecard system led to the need for automation, i.e. for the use of certain software programs during its application (Marr and Neely 2003; Morgado et al. 2014). The three main reasons for applying software programs when implementing the balanced scorecard system are: data integration, data analysis and communication within the enterprise.

In today's business environment characterized by rapid changes and adaptations to international markets, management needs to be changed or adapted to new business conditions as well (Bennis 2007), such as social media (Roblek et al. 2013). Nowadays, enterprises are focused mostly on customers, employees and constant introducing of innovations in order to be able to compete with their competitors and respond to market demands successfully (Verhoef 2003). Leadership is precisely the main factor in managing enterprises during the time of change, but also during problem solving, since only the leader is capable of creating an environment in which their associates are encouraged to be leaders, cooperate with each other and develop themselves, which contributes to the enterprise development (Sherehiy, Karwowski, and Layer 2007).

Leaders contribute to the organization success on several levels: managing change, directing associates, managing towards accomplishing set goals, encouraging others to maximize their skills and competences (Bouckenoghe, Zafar, and Raja 2015). They play an important role in international business because they encourage the creation of effective teams, increase efficiency and productivity, motivate associates, coordinate activities within several organizational units and contribute significantly to the enterprise success (Fragouli 2016).

Behaviour-based leadership includes several types of leadership: leadership based on the use of authority, Likert's leadership systems, task-oriented leadership, leadership continuity (Renko et al. 2015). Leadership based on the use of authority, i.e. power, includes three basic styles: autocratic, democratic and laissez-faire leader (Mehta 2016). The autocratic leader is a person who manages others by a system of awards and punishments, communicates by ordering and commanding and seeks subordination of their associates. The democratic leader cooperates intensively with their associates and encourages their participation in making and implementing decisions. The laissez-faire leader gives almost full independence to their associates. The aim of this paper is to examine the correlation between enterprise success and leadership styles.

### **Measuring Knowledge Management**

Improving the employees' knowledge and skills, as well as the rewarding system, increases employee satisfaction and motivation considerably, which also has a positive impact on the business of the enterprise (Križmarić 2014). The perspective of learning and growth is a key factor, as it defines the key competences and skills, technology and corporate culture that is needed to support the successful realization of enterprise's strategy (Osmanagić-Bedenik 2015).

The aims of learning and growth perspective include alignment of human potentials and technology with its own strategy. Each enterprise needs to determine the way to harmonize the requirements of key internal processes and management of employees' relations and career. The importance of investing in human potentials, through their progress and learning, represents the key enterprise resource.

During the implementation of measuring the balanced scorecard system, the enterprises are focused mostly on three areas (Kaplan and Norton 2001):

1. Capacity of employees – measured by employee satisfaction, productivity, formal education, further development.
2. Information system – provides access to accurate, timely and high-quality information.
3. Alignment of individual interests with enterprise's interests – enterprise's employees need to be familiar with enterprise's goals in order to participate in their realization.

In the knowledge management perspective, monitoring success in the

development of enterprise's strategic capability and intellectual capital is performed (Wiig 1997; Von Krogh, Nonaka, and Rechsteiner 2012). It can be noticed that the basic indicators are: (i) employee retention, (ii) employee satisfaction, and (iii) employee productivity. The business foundation and realization of the results are made of: employee competency, technological infrastructure and a comfortable working environment, i.e. a motivating organizational climate.

#### INDICATORS FOR MEASURING EMPLOYEE COMPETENCY

When selecting indicators for measuring employee competency, it is important to define what key skills and resources the enterprise needs to implement the strategy and what competencies the enterprise currently possesses, as well as what makes the difference and how big that difference is (Spee and Jarzabkowski 2011). Furthermore, it is important to invest in further development and improvement of employees through lifelong learning programs (Blaschke 2012).

#### INDICATORS FOR MEASURING INFORMATION SYSTEM POTENTIALS

One of the main factors, which is increasingly becoming the most important key to the enterprise success in today's global economy, is information and communication technology. Access and use of timely and high-quality information with developed IT infrastructure represent the competitive advantage of the enterprise (Lew and Sinkovics 2013). Enterprises that do not want to lag behind the competition but be market leaders instead must invest in the development and implementation of information and communication technologies.

Indicators for measuring information system potentials are used to measure the percentage of employees who have access to necessary information at a given time, as well as when assessing the potential of information systems in relation to enterprise's needs.

#### INDICATORS FOR MEASURING MOTIVATION, COMPETENCE AND GOAL-ORIENTATION

Employee motivation is linked considerably to organizational culture and working environment, i.e. to workplace satisfaction (Moon 2000). Employee satisfaction indicators are collected through an employee questionnaire. The most common form of conducting a questionnaire is via intranet or e-mail.

Parmenter (2010) states the following measures for managing the learning and development perspective successfully: (i) Investments in training, (ii) Working life, (iii) % of employees with graduate degree and % of employees to be reclassified, (iv) Fluctuation rate, (v) Employee productivity, (vi) Number of years of manager's work experience, (vii) Quality of the working environment, (viii) Achievement of personal goals and (ix) Violation of ethics.

### **Measuring Leadership Styles**

Scientists who supported behavior-based leadership theories tried to define the best leadership style that would be effective in all situations, which led to several theories and leadership models such as: autocratic, democratic and laissez-faire leadership style. Given the advantages and disadvantages that exist in all three leadership styles, one can conclude that there is no single best leadership style, but that leaders must adapt to the situation and associates in order to achieve the best result.

### **Research Methodology**

The Leadership Styles Questionnaire, taken from the book *Introduction to Leadership* by Northouse (2012) was used as a research instrument. In addition, a questionnaire for measuring enterprise success in terms of four dimensions of success was used.

Leadership styles in the organizations from the sample were measured by using the attached questionnaire in which the autocratic, democratic and laissez-faire leadership style were measured by using certain claims. The Leadership Styles Questionnaire was taken from the book *Introduction to Leadership* by Northouse (2012). Respondents indicated on a scale of 1 to 5 to what extent they agree with each claim.

Claims that measure the presence of an autocratic leadership style are:

- L1 Employees need to be supervised closely, or they are not likely to do their work.
- L4 It is fair to say that most employees in the general population are lazy.
- L7 As a rule, employees must be given rewards or punishments in order to motivate them to achieve organizational objectives.
- L10 Most employees feel insecure about their work and need direction.

- L13 The leader is the chief judge of the achievements of the members of the group.
- L16 Effective leaders give orders and clarify procedures.

Claims that measure the presence of a democratic leadership style are:

- L2 Employees want to be a part of the decision-making process.
- L5 Providing guidance without pressure is the key to being a good leader.
- L8 Most workers want frequent and supportive communication from their leader.
- L11 Leaders need to help subordinates accept responsibility for completing their work.
- L14 It is the leader's job to help subordinates find their 'passion.'
- L17 People are basically competent and if given a task will do a good job.

Claims that measure the presence of laissez-faire leadership style are:

- L3 In complex situations, leaders should let subordinates work problems out on their own.
- L6 Leadership requires staying out of the way of subordinates as they do their work.
- L9 As a rule, leaders should allow subordinates to appraise their own work.
- L12 Leaders should give subordinates complete freedom to solve problems on their own.
- L15 In most situations, workers prefer little input from the leader.
- L18 In general, it is best to leave subordinates alone.

#### MEASURING THE SUCCESS 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 financial, process and market dimension of success and the knowledge 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 process dimensions of success are:

- P1 Efficiency of internal processes.

TABLE 1 Success of All Enterprises Together Measured by the Balanced Scorecard System from the Field of Knowledge Management

Item	(1)	(2)	(3)	(4)	(5)	(6)
z1 Employee competency	60	3	5	4.017	0.624	0.679
z2 Application of new technologies	60	2	5	4.017	0.854	
z3 Organizational climate	60	2	5	4.017	0.748	
Knowledge	60	2.333	5.000	4.017	0.584	

NOTES (1) N, (2) min, (3) max, (4) average, (5) standard deviation, (6) Cronbach's alpha.

- P2 Innovation of products/services.
- P3 Innovation of internal processes.

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 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 shows the answers of the respondents – managers who are members of the board of directors – to questions by which they evaluated the success of all enterprises measured together by the balanced scorecard system, with the average answers of the respondents from all enterprises being compared. The respondents agree mostly with the item P2. Product/service innovation within the dimension Process success (average rating 4.00).

Figure 1 shows the comparison of average ratings of the presence of leadership styles in all enterprises together. The respondents agree mostly with the attitudes that reflect democratic leadership style (the highest av-

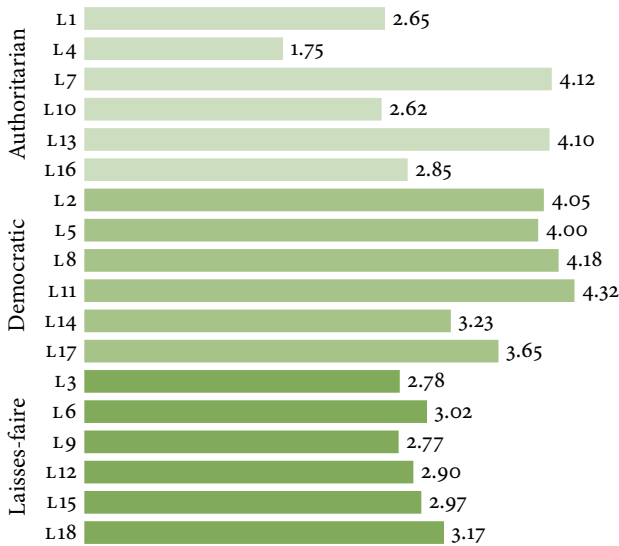


FIGURE 1 Comparison of Average Ratings of the Presence of Leadership Styles in All Enterprises Together

erage ratings are noticed), while they agree the least with the attitudes that reflect laissez-faire leadership style (the lowest average ratings are recorded).

## Results

### IMPACT OF LEADERSHIP STYLES ON ALL ENTERPRISES TOGETHER

Table 2 shows a regression model with the dependent variable Knowledge and employees. All items of measuring leadership styles, which refer to autocratic, democratic and laissez-faire style, were used as independent variables. Step-wise multiple regression analysis was used to form the model. A model with a determination coefficient of 0.381 was established, indicating that the selected model implied 38.1% deviation from the dependent variable.

There are two statistically significant independent variables in the model that reflect autocratic style L4. It is fair to say that most employees in the general population are lazy (statistically significant at 1% level) and L10. Most employees feel insecure about their work and need direction (statistically significant at 1% level). Variables L4 and L10 have a negative impact on the dependent variable Knowledge and employees in all enterprises.



TABLE 2 Regression Model with the Dependent Variable *Knowledge and Employees* and the Independent Variables *Items of Leadership Styles (All Enterprises Together)*

Style	Variable	(1)	(2)	(3)	(4)	(5)
Constant		5.391	0.404		13.346	0.000***
Autocratic	L4	-0.187	0.061	-0.343	-3.050	0.004***
	L10	-0.213	0.059	-0.404	-3.600	0.001***
Democratic	L11	-0.171	0.078	-0.252	-2.199	0.032**
Laissez-faire	L12	-0.129	0.060	-0.253	-2.130	0.038**
	L18	0.161	0.061	0.309	2.636	0.011**

NOTES  $R^2 = 0.381$ , Adjusted  $R^2 = 0.324$ . Column headings are as follows: (1) non-standardized coefficients, (2) standard error, (3) standardized coefficients, (4)  $t$ , (5)  $p$ -values. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

There is one statistically significant independent variable in the model that reflects democratic style L11. Leaders need to help subordinates accept responsibility for completing their work (statistically significant at 5% level). Variable L11 has a negative impact on the dependent variable Knowledge and employees in all enterprises.

There are two statistically significant independent variables in the model that reflect laissez-faire style L12. Leaders should give subordinates complete freedom to solve problems on their own (statistically significant at 5% level) and L18. In general, it is best to leave subordinates alone (statistically significant at 5% level). Variable L12 has a negative impact on the dependent variable Knowledge and employees in all enterprises, while variable L18 has a positive impact.

#### IMPACT OF LEADERSHIP STYLES ON SMALL AND MEDIUM-SIZED ENTERPRISES

Table 3 shows a regression model with the dependent variable Knowledge and employees in SME enterprises. All items of measuring leadership styles, which refer to autocratic, democratic and laissez-faire style, were used as independent variables. Step-wise multiple regression analysis was used to form the model. A model with a determination coefficient of 0.267 was established, indicating that the selected model implied 26.7% deviation from the dependent variable.

There is only one statistically significant independent variable in the model that reflects autocratic style L10. Most employees feel insecure about their work and need direction (statistically significant at 1% level).

TABLE 3 Regression Model with the Dependent Variable *Knowledge and Employees* and the Independent Variables *Items of Leadership Styles in Relation to the Size of the Enterprise – SME*

Style	Variable	(1)	(2)	(3)	(4)	(5)
Constant		3.972	0.416		9.544	0.000***
Autocratic	L10	-0.200	0.071	-0.465	-2.797	0.009***
Democratic	L5	0.162	0.091	0.295	1.773	0.087*

NOTES  $R^2 = 0.267$ , Adjusted  $R^2 = 0.212$ . Column headings are as follows: (1) non-standardized coefficients, (2) standard error, (3) standardized coefficients, (4)  $t$ , (5)  $p$ -values. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Variable L10 has a negative impact on the dependent variable Knowledge and employees in SME enterprises.

There is only one statistically significant independent variable in the model that reflects democratic style L5. Providing guidance without pressure is the key to being a good leader (statistically significant at 5% level). Variable L5 has a positive impact on the dependent variable Knowledge and employees in SME enterprises.

#### IMPACT OF LEADERSHIP STYLES ON LARGE ENTERPRISES

Table 4 shows a regression model with the dependent variable Knowledge and employees. All items of measuring leadership styles, which refer to autocratic, democratic and laissez-faire style, were used as independent variables. Step-wise multiple regression analysis was used to form the model. A model with a determination coefficient of 0.796 was established, indicating that the selected model implied 79.6% deviation from the dependent variable.

There are three statistically significant independent variables in the model that reflect autocratic style L1. Employees need to be supervised closely, or they are not likely to do their work (statistically significant at 5% level), L4. It is fair to say that most employees in the general population are lazy (statistically significant at 1% level) and L13. The leader is the chief judge of the achievements of the members of the group (statistically significant at 1% level). Variables L1 and L13 have a positive impact on the dependent variable Knowledge and employees in large enterprises, while variable L4 has a negative impact.

There are two statistically significant independent variables in the model that reflect democratic style L5. Providing guidance without pressure is the key to being a good leader (statistically significant at 1% level)

TABLE 4 Regression Model with the Dependent Variable *Knowledge and Employees* and the Independent Variables *Items of Leadership Styles in Relation to the Size of the Enterprise – SME*

Style	Variable	(1)	(2)	(3)	(4)	(5)
Constant		2.921	0.673		4.339	0.000***
Autocratic	L1	0.202	0.088	0.374	2.298	0.032**
	L4	-0.459	0.086	-0.875	-5.325	0.000***
	L13	0.379	0.096	0.435	3.971	0.001***
Democratic	L5	0.256	0.075	0.417	3.413	0.003***
	L17	-0.594	0.112	-0.612	-5.321	0.000***
Laissez-faire	L3	0.200	0.058	0.407	3.430	0.003***
	L6	0.133	0.076	0.213	1.754	0.095*
	L9	0.204	0.073	0.329	2.778	0.012**
	L12	-0.124	0.063	-0.211	-1.959	0.064*

NOTES  $R^2 = 0.796$ , Adjusted  $R^2 = 0.705$ . Column headings are as follows: (1) non-standardized coefficients, (2) standard error, (3) standardized coefficients, (4)  $t$ , (5)  $p$ -values. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

and L17. People are basically competent and if given a task will do a good job (statistically significant at 1% level). Variable L5 has a positive impact on the dependent variable Knowledge and employees in large enterprises, while variable L17 has a negative impact.

There are four statistically significant independent variables in the model that reflect laissez-faire style L3. In complex situations, leaders should let subordinates work problems out on their own (statistically significant at 1% level), L6. Leadership requires staying out of the way of subordinates as they do their work (statistically significant at 10% level), L9. As a rule, leaders should allow subordinates to appraise their own work (statistically significant at 5% level) and L12. Leaders should give subordinates complete freedom to solve problems on their own (statistically significant at 10% level). Variables L3, L6 and L9 have a positive impact on the dependent variable Knowledge and employees in large enterprises, while variable L12 has a negative impact.

#### IMPACT OF LEADERSHIP STYLES ON ENTERPRISES IN GROWTH AND MATURITY PHASE (LEADERS)

There are two statistically significant independent variables in the model that reflect autocratic style L4. It is fair to say that most employees in the

general population are lazy (statistically significant at 1% level) and L7. As a rule, employees must be given rewards or punishments in order to motivate them to achieve organizational objectives (statistically significant at 1% level). Variables L4 and L7 have a negative impact on the dependent variable Knowledge and employees in market leader enterprises.

There are two statistically significant independent variables in the model that reflect democratic style L8. Most workers want frequent and supportive communication from their leader (statistically significant at 5% level) and L17. People are basically competent and if given a task will do a good job (statistically significant at 1% level). Variables L8 and L17 have a negative impact on the dependent variable Knowledge and employees in market leader enterprises.

There are four statistically significant independent variables in the model that reflect laissez-faire style L6. Leadership requires staying out of the way of subordinates as they do their work (statistically significant at 5% level), L9 As a rule, leaders should allow subordinates to appraise their own work (statistically significant at 10% level), L12. Leaders should give subordinates complete freedom to solve problems on their own (statistically significant at 1% level) and L18 In general, it is best to leave subordinates alone (statistically significant at 10% level). Variable L12 has a negative impact on the dependent variable Knowledge and employees in market leader enterprises, while variables L6, L9 and L18 have a positive impact.

#### IMPACT OF LEADERSHIP STYLES ON ENTERPRISES IN STAGNATION PHASE (FOLLOWERS)

Table 6 shows a regression model with the dependent variable Knowledge and employees in enterprises in stagnation phase (followers). All items of measuring leadership styles, which refer to autocratic, democratic and laissez-faire style, were used as independent variables. Step-wise multiple regression analysis was used to form the model. A model with a determination coefficient of 0.724 was established, indicating that the selected model implied 72.4% deviation from the dependent variable.

There are three statistically significant independent variables in the model that reflect autocratic style L7. As a rule, employees must be given rewards or punishments in order to motivate them to achieve organizational objectives (statistically significant at 10% level), L10. Most employees feel insecure about their work and need direction (statistically significant at 10% level) and L13. The leader is the chief judge of the achievements of the members of the group (statistically significant at 5% level).

TABLE 5 Regression Model with the Dependent Variable *Knowledge and Employees* and the Independent Variables *Items of Leadership Styles in Relation to the Growth Phase of the Enterprise – Enterprises in Growth and Maturity Phase (Leaders)*

Style	Variable	(1)	(2)	(3)	(4)	(5)
Constant		7.668	0.763		10.049	0.000***
Autocratic	L4	-0.408	0.087	-0.664	-4.685	0.000***
	L7	-0.218	0.069	-0.367	-3.146	0.004***
Democratic	L8	-0.245	0.101	-0.315	-2.414	0.023**
	L17	-0.305	0.089	-0.411	-3.418	0.002***
Laissez-faire	L6	0.182	0.080	0.311	2.280	0.031**
	L9	0.120	0.062	0.218	1.944	0.062*
	L12	-0.380	0.063	-0.708	-6.062	0.000***
	L18	0.129	0.073	0.235	1.763	0.089*

NOTES  $R^2 = 0.700$ , Adjusted  $R^2 = 0.611$ . Column headings are as follows: (1) non-standardized coefficients, (2) standard error, (3) standardized coefficients, (4)  $t$ , (5)  $p$ -values. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Variables L7 and L13 have a positive impact on the dependent variable Knowledge and employees in Following enterprises on the market, while variable L10 has a negative impact.

There is only one statistically significant independent variable in the model that reflects democratic style L17. People are basically competent and if given a task will do a good job (statistically significant at 5% level). Variable L17 has a positive impact on the dependent variable Knowledge and employees in Following enterprises on the market.

There are two statistically significant independent variables in the model that reflect laissez-faire style L3. In complex situations, leaders should let subordinates work problems out on their own (statistically significant at 1% level) and L15. In most situations, workers prefer little input from the leader (statistically significant at 1% level). Variables L3 and L15 have a positive impact on the dependent variable Knowledge and employees in Following enterprises on the market.

#### IMPACT OF LEADERSHIP STYLES ON ENTERPRISES ORIENTED TOWARDS DOMICILE MARKETS

There are four statistically significant independent variables in the model that reflect autocratic style L1. Employees need to be supervised closely, or they are not likely to do their work (statistically significant at 1% level),

TABLE 6 Regression Model with the Dependent Variable *Knowledge and Employees* and the Independent Variables *Items of Leadership Styles in Relation the Growth Phase of the Enterprise – Enterprises in Stagnation Phase (Followers)*

Style	Variable	(1)	(2)	(3)	(4)	(5)
Constant		0.120	0.848		0.142	0.889
Autocratic	L7	0.124	0.069	0.235	1.799	0.090*
	L10	-0.131	0.070	-0.279	-1.879	0.077*
	L13	0.242	0.096	0.387	2.526	0.022**
Democratic	L17	0.268	0.093	0.444	2.890	0.010**
Laissez-faire	L3	0.311	0.065	0.726	4.812	0.000***
	L15	0.256	0.064	0.556	4.006	0.001***

NOTES  $R^2 = 0.724$ , Adjusted  $R^2 = 0.627$ . Column headings are as follows: (1) non-standardized coefficients, (2) standard error, (3) standardized coefficients, (4)  $t$ , (5)  $p$ -values. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

L4 It is fair to say that most employees in the general population are lazy (statistically significant at 5% level), L10. Most employees feel insecure about their work and need direction (statistically significant at 1% level) and L13. The leader is the chief judge of the achievements of the members of the group (statistically significant at 5% level). Variables L1 and L13 have a positive impact on the dependent variable Knowledge and employees in enterprises (which are) oriented predominantly towards domestic market, while variables L4 and L10 have a negative impact.

There are two statistically significant independent variables in the model that reflect democratic style L5 Providing guidance without pressure is the key to being a good leader (statistically significant at 1% level) and L14 It is the leader's job to help subordinates find their 'passion' (statistically significant at 1% level). Variable L5 has a positive impact on the dependent variable Knowledge and employees in enterprises (which are) oriented predominantly towards domestic market, while variables L14 has a negative impact.

#### IMPACT OF LEADERSHIP STYLES ON ENTERPRISES ORIENTED TOWARDS INTERNATIONAL MARKETS

Table 8 shows a regression model with the dependent variable Knowledge and employees in enterprises oriented predominantly towards foreign market. All items of measuring leadership styles, which refer to autocratic, democratic and laissez-faire style, were used as independent vari-

TABLE 7 Regression Model with the Dependent Variable *Knowledge and Employees* and the Independent Variables *Items of Leadership Styles in Relation to the International Orientation of the Enterprise – Predominantly Domestic Market*

Style	Variable	(1)	(2)	(3)	(4)	(5)
Constant		3.501	0.513		6.825	0.000***
Autocratic	L1	0.218	0.058	0.452	3.786	0.001***
	L4	-0.116	0.056	-0.237	-2.064	0.047**
	L10	-0.187	0.063	-0.357	-2.964	0.006***
	L13	0.182	0.079	0.249	2.289	0.029**
Democratic	L5	0.215	0.062	0.383	3.496	0.001***
	L14	-0.306	0.072	-0.508	-4.241	0.000***

NOTES  $R^2 = 0.669$ , Adjusted  $R^2 = 0.605$ . Column headings are as follows: (1) non-standardized coefficients, (2) standard error, (3) standardized coefficients, (4)  $t$ , (5)  $p$ -values. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

ables. Step-wise multiple regression analysis was used to form the model. A model with a determination coefficient of 0.762 was established, indicating that the selected model implied 76.2% deviation from the dependent variable.

There are two statistically significant independent variables in the model that reflect autocratic style L10. Most employees feel insecure about their work and need direction (statistically significant at 1% level) and L16. Effective leaders give orders and clarify procedures (statistically significant at 5% level). Variable L16 has a positive impact on the dependent variable Knowledge and employees in enterprises oriented predominantly towards foreign market, while variable L10 has a negative impact.

There are two statistically significant independent variable in the model that reflects democratic style L8. Most workers want frequent and supportive communication from their leader (statistically significant at 1% level) and L14. It is the leader's job to help subordinates find their 'passion' (statistically significant at 1% level). Variables L8 and L14 have a positive impact on the dependent variable Knowledge and employees in enterprises oriented predominantly towards foreign market.

There are two statistically significant independent variables in the model that reflect laissez-faire style L9. As a rule, leaders should allow subordinates to appraise their own work (statistically significant at 1% level) and L15. In most situations, workers prefer little input from the

TABLE 8 Regression Model with the Dependent Variable *Knowledge and Employees* and the Independent Variables *Items of Leadership Styles in Relation to the International Orientation of the Enterprise – Predominantly Foreign Market*

Style	Variable	(1)	(2)	(3)	(4)	(5)
Constant		-2.052	1.154		-1.778	0.096*
Autocratic	L10	-0.328	0.080	-0.604	-4.096	0.001***
	L16	0.213	0.093	0.473	2.291	0.037**
Democratic	L8	0.581	0.159	0.541	3.646	0.002***
	L14	0.448	0.131	0.568	3.426	0.004***
Laissez-faire	L9	0.514	0.122	0.795	4.226	0.001***
	L15	0.375	0.110	0.535	3.398	0.004***

NOTES  $R^2 = 0.762$ , Adjusted  $R^2 = 0.666$ . Column headings are as follows: (1) non-standardized coefficients, (2) standard error, (3) standardized coefficients, (4)  $t$ , (5)  $p$ -values. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

leader (statistically significant at 1% level). Variables L9 and L15 have a positive impact on the dependent variable Knowledge and employees in enterprises oriented predominantly towards foreign market.

### Discussion and Conclusion

Table 9 shows the impact of different leadership styles on the aggregate process success variable. The last three lines show the aggregate impact of a particular leadership style.

#### AUTOCRATIC LEADERSHIP STYLE

It can be noticed that variable L1 has a statistically significant positive impact on the variable of knowledge management success for large enterprises and enterprises oriented towards domestic market, and the same goes for variable L13 and large enterprises, as well as those in the stagnation phase and those oriented towards domestic market. On the other hand, variable L10 has a negative impact on virtually all enterprises, except on large enterprises and enterprises in the maturity phase, which is also true for variable L4, except for small enterprises, enterprises in the stagnation phase and enterprises oriented towards international market.

#### DEMOCRATIC LEADERSHIP STYLE

It can be noticed that the variable L5 has a statistically significant positive impact on the variable of knowledge management success for small



and large enterprises and enterprises oriented towards domestic market. Variable L11 has a negative impact on all enterprises.

#### LAISSEZ-FAIR LEADERSHIP STYLE

It can be noticed that the variables related to laissez-faire leadership style have almost entirely positive impact on the variable of knowledge management success. Variable L3 has a statistically significant positive impact on large enterprises and enterprises in the stagnation phase, and the same goes for variables L6 and L9 for large enterprises and enterprises in the maturity phase. On the other hand, only variable L12 has a negative impact on the aggregate variable of knowledge management success, on large enterprises and on enterprises in the maturity phase.

#### Conclusion

The research results point to the following differences in the knowledge management success. For the purpose of the conclusion, only the difference in the aggregate variable of knowledge management success will be analysed. The influence of the autocratic style is as follows: (i) a negative impact is present in small enterprises and enterprises in the growth and maturity phase; (ii) a neutral impact is present in enterprises oriented towards international and domicile markets, (iii) a positive impact has been made in large enterprises and enterprises in the stagnation phase. The impact of the democratic style is as follows: (i) a negative impact is present in enterprises in the growth and maturity phase; (ii) a neutral impact is present in large enterprises and enterprises oriented towards domicile market; (iii) a positive impact is present in small and medium-sized enterprises, enterprises in the stagnation phase and enterprises oriented towards international markets. The impact of the laissez-faire style is that: (i) a negative impact is not present in any enterprise group; (ii) a neutral impact is present in small and medium-sized enterprises and enterprises oriented predominantly towards domicile markets, and (iii) a positive impact is present in large enterprises, enterprises in the maturity and growth phase, as well as in enterprises in the stagnation phase. It can be concluded that: (i) small enterprises are more successful in knowledge management in the presence of democratic style, while autocratic style has a negative impact on small enterprises, and large enterprises are more successful in the presence of autocratic and laissez-faire style; (ii) enterprises in the growth and maturity phase are more successful in knowledge management in the presence of laissez-faire style, while all three leader-

TABLE 9 Impact of Different Leadership Styles on the Aggregate Variable of Knowledge Management Success (%)

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
L1			5				1
L4	-1		-1	-1			-5
L7				-1	10		
L10	-1	-1			-10	-1	-1
L13			1		5		5
L16						5	
L2							
L5		10	1				1
L8				-5		1	
L11	-5						
L14						1	-1
L17			-1	-1	5		
L3			1		1		
L6			10	5			
L9			5	10		1	
L12	-5		-10	-1			
L15					1	1	
L18	5			10			
Autocratic	-	-	+	-	+	∅	∅
Democratic	-	+	∅	-	+	+	∅
Laissez-faire	∅	∅	+	∅	+	+	∅

NOTES Column headings are as follows: (1) all together, (2) SME, (3) large, (4) growth and maturity phase (leaders), (5) stagnation phase (followers), (6) international, (7) domicile. The table shows the levels of significance and the direction of impact of independent variables.

ship styles have a positive impact on enterprises in the stagnation phase; (iii) enterprises oriented towards international markets are more successful in the presence of democratic style and laissez-faire, while enterprises oriented towards domicile markets are neutral with respect to the impact of leadership styles on the knowledge management success.

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