Company Innovative Leadership Model

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Summary:

The paper aims at building a model that measures the company's innovative leadership. Certain innovation indices have been introduced, but they all measure innovativeness at the macro level rather than at the company level. The need for such a model stems from the lack of any kind of assessment method that could help companies evaluate their own efforts, performance and capabilities with regard to innovation. Furthermore, a country's innovation performance depends pretty much on companies' innovation-related activities and there has not yet been devised any method to boost and properly assess companies' innovation performance and potential. In order to make a clear distinction between company leadership and innovative leadership, a model for measuring the company leadership is first developed in this paper. After that a model for company innovative leadership is proposed. The applications of such a technique allows for using both models to measure the company's leadership in comparison with its innovative leadership. The model can also be applied to make a summary of some best practices in the company's innovative leadership. It represents a wellbalanced model for innovation development and performance. However, the main target of the model is to analyze and measure the companies' innovative leadership and to compare different companies along that specific criterion. The model can be used as a company innovative leadership index as well after it is has been applied to some particular industrial sectors or regions.

Key words: innovations, leadership, company leadership, model for innovation measurement, innovation index

JEL Classification: D90, O31, O33, M21

1. Introduction

hat is leadership? This question has been the object of investigation for social researchers for much of the 20th century and still there is no universally agreed-upon definition of leadership. A large number of definitions has been advanced by scholars. The core concept of almost all created and developed definitions involves the notion of influence. Leaders influence others to pool efforts to work towards achieving a particular aim. The difficulty to provide a single definition of leadership comes from the too broad scope of the term. It affects and includes a big number of qualities, competences, skills, approaches, reactions and situations. Yet, there is a definition, which The GLOBE (House et al., 2004) agreed upon and it states that the leadership is the ability of an individual to

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influence, motivate and enable others to contribute toward the effectiveness and success of the organizations of which they are members (House et al., 2004, p.15). The focus of the GLOBE's study has been organizational leadership, not on leadership in general, which means it refers to business leaders. Some other definitions characterize leadership as the capacity to translate vision into reality (Bennis, 2003, p.136). Peter Drucker said that the only definition of a leader is someone who has followers (Drucker, 1996, p.54). According to John Maxwell, leadership is influence - nothing more, nothing less (Maxwell, 2005). Kevin Kruse defines the leadership as a process of social influence, which maximizes others' efforts towards the achievement of a goal (Kruse, 2013). Leadership is not correlated with seniority or someone's position in the hierarchy of a company, and has nothing to do with titles. Nor is it a synonym of management. Some of the skills and competences, which usually leaders have are positive and optimistic attitude, social and emotional intelligence, ability for lifelong prudence, courage, learning, decision making abilities, area expertise, change management skills, ability to take risk and innovate, set vision and strategy, display drive and purpose, demonstrate ethics and integrity, communicate effectively, among other skills and competences.

What exactly does leadership have in common with innovations? Innovation itself has also been, and continues to be, an important object of interest in a number of different disciplines, including economics, business, engineering, science, and sociology. Despite the fact that innovation has been studied in a variety of disciplines, the term is often poorly understood and can be sometimes confused with related terms such as change, invention, design, and creativity. Yet, there are some definitions, which give the big picture of what innovations really are.

One of the most commonly used definition states that innovation is the process of making changes to something established by introducing something new that adds value to customers (O'Sullivan, 2008). Some alternative concepts and definitions of innovation express it as a result from some creative or inventory process that passes into exploitation. When innovations succeed, they usually bring big changes to the organization, and the market, to consumers and society, and to human development in general. Their sources may include an organization's R&D efforts, customers, specialized innovative companies, by employees, environmental circumstances. Presumably each great idea needs an innovator or an innovative organization to develop it into a product or into some kind of final good and to launch it onto the market. This is the cross point of innovations and leadership. Great ideas need an innovator or an innovative organization to become innovations themselves, to fulfill one of the core ingredients of the innovation, i.e. to bring value to customers. Innovations need leaders even for the purpose of reaching those customers. Yet this paper does not present an overlapping of the concepts of leadership and innovativeness or of leaders and innovators. Nevertheless such relations between innovations and leaders definitely exist, given that innovators, just like leaders, influence others.

Generally, the issue of the relatedness between leadership and innovations does not concern the innovations' need for a leader, but rather leaders' need for innovations. So the main question is whether and why leaders need innovations and why. One possible answer to that question is that they do, considering that innovations are one of the strongest and most powerful tools of influence. Their impact on others gives leaders an instrument to successfully perform their leadership function. However, innovations are more intimately related to

the changes in the business environment in recent years. What is more, they are more related to the intensity of these changes. Nowadays, the business environment undergoes such dynamic and changes and transformations that strategy, forecasting and planning are not so strong tools in leaders hands. Sometimes, they are the contrary. Leaders should meet be able to respond promptly to market requirements and even predict them. Therefore leaders have turned to innovations as an assistant in their targets and successful business management. Being a leader suggests being somewhat different and leading towards some changes, which should improve the current state of affairs. It really reaches some part of the innovation's definition.

2. Leadership of a company

What is the company's leadership – why is it different from the personal leadership and what does it exactly mean?

Company leadership is not the same as personal leadership. In the company's meaning, leadership is not related to personal skills and competences. Is the assumption true that a company is a leader due to its leaders? It might be true, but there are a lot of examples that prove the contrary. There are companies that are able to build leaders on their own or to run the business irrespective of the person at the helm of the company or at least not due to the leader's qualities and actions. Usually these companies have a long history, a large board of directors, a wide product range, loyal customers, brands that have become household names for the market segment. The literature does not give a structured and consistent definition of company leadership. There are leading companies on a specific market, but company leadership has not been in the focus of researchers' attention. A leading company is one with big a market share, with a long history, good practices in the field, and a recognizable brand. The slight distinction between a company that is a leader and the company leadership could be revealed by examining the difference in meaning between leader and leadership. A leader is someone who leads or commands a group or an organization. The meaning of leader could be equalized with a manager. Leadership however is the ability to make people or groups of people implement some idea or work towards a goal. In the sense of company leadership suggests a company's ability and desire to be in the first positions by different criteria and accordingly be recognized as a leading company. In other words - the company's leading position in a sector is a consequence of its leadership ability. Some other perspectives reveal company leadership as the ability to set the direction of development in the sector or rearrange market shares within the sector or launch new trends in the sector. In this study all theories are generalized and company leadership is assumed to be the company's ability to be a leader in the respective business sector. This general working definition does address the issue of the criteria that define a company as a leader in a sector. In practice a lot of indices introduce different criteria to assess companies' leadership position and hence serve diversified needs. Some of the most valuable indices are: Dow Jones Indices, Forbes, NASDAQ, S&P 500 index, among other indices. They usually assess and classify companies based on their financial performance, business valuation and organizational effectiveness. The indicators that are incorporated in indices are the price of a share, the annual revenue, net and operating profit, investment return, market share, product diversity, growth, quality, social environment, social incentives, employment engagement,

etc. The evaluation could be performed annually, quarterly, or could be based on periodical data or cover a long period of time. The methods for such evaluation are found in the main sources of the data that build the indicators. Obviously, the most commonly used practice is to use numeric data since it is deemed appropriate and easily processed. However, by using only numeric data provided mainly by accounting and financial statements and sales reports, researches do not take into consideration the modified data that has been adapted for accounting standard reasons and requirements. A method for incorporating non-numerical data into calculations in the process of a company's evaluation is interviewing managers. This method is hard to analyze given that the results should be adapted to the used dimension. Furthermore, managers themselves are also not usually supportive and honest in giving their opinion about their own companies' management. This dishonesty is usually provoked by the managers' participation in decision making and in the organizations' progress and by their desire to place their company on better place in such indices. On the other hand, objective financial information is not easy to interpret without knowing the company's strategy in detail. For instance, net profit itself could result from some big investments in recent years or from entering new markets, in which cases initial costs are bigger (Genchev, 2009). Yet this study has focused only on numeric data and on closed and dichotomous questions such as the source of indexation of companies, because when leading companies are the object of investigation, the authentication of financial data is inappropriate. What is

Table 1. Main characteristics of company leadership

No	Indicator	Details
1	Market share (%)	As a percentage in the sector
2	Size of assets (M)	According to balance sheet
3	Volume of investments (in 3y)	Volume of investments in last 3 years according to Profit and loss account
4	Number of employees	How many employees work in the organization
5	Sales revenue (M)	According to turnover report
6	EBITDA (M)	Earnings before interest, tax, depreciation, and amortization
7	Net profit (M)	The difference between operational profit (EBITDA) and net profit is the sum of interest, tax, depreciation and amortization, which are part of the leadership management and their management should be taken into consideration
8	Profit before tax (EBT) (M)	Indicates financial management of a company for all financial services, interactions and practices
9	EBITDA margin	EBITDA/Sales revenue
10	EBITDA change (%)	Change in EBITDA (%) from previous year
11	Equity (M)	According to balance sheet
12	Debt ratio (leverage)	Ratio of liabilities to equity
13	ROE (return of equity)	Net profit/equity
14	Assets turnover ratio	Sales revenue / total assets

more, the study aims to explore companies only with regard to their characteristic to be leaders, and not their overall business profile and performance.

In compliance with our observations and experience, we have selected the following indicators that could presumably characterize the leadership of a company:

The methodology for measuring a company with regard to its leading position requires that all these components should be evaluated and filled in a radar chart. Figure 1 is an example. On the chart two companies have been compared based on their leading position.

it is of its performance. As a result of its innovations a company may create some innovative products that bring new goods to society, or improve the offered goods or ensure a better price or higher quality of previous goods because of the innovative processes used in their production. These innovative companies can presumably non-traditional customers reach in innovative ways. It is this innovative sales/ service channel that can make them ensure their success. There are leaders among the innovative companies and outperform them.

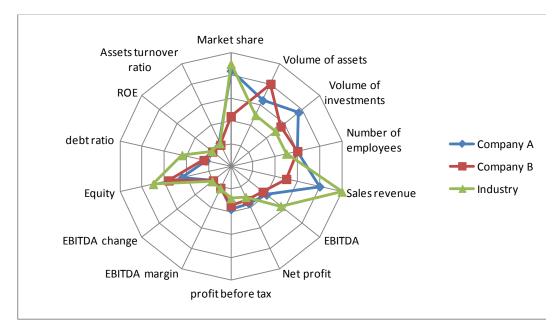


Fig. 1. Company leadership model

3. Company innovative leadership model

An innovative company is not some kind of specific company, innovative in structure or with organizational representation; it generates innovations through innovative ways. A company's innovativeness is an integral part of its characteristics, competences and mostly

The company innovative leadership model aims at evaluating the companies' innovative capability and performance. It plays the role of a calculator to measure leading innovative companies. It contains 12 criteria. The innovation indicators falls into three main groups: indicators measuring the company's innovation activity, indicators measuring the company's innovation potential and indicators measuring the company's innovation

competencies. They do not measure the innovation environment, government support, investments access, educational support, or other factors that are external for companies. The leading innovative companies' model measures the innovative leadership at the company level. The indicators fall under in the above-mentioned three groups.

Innovation competences

Competency is a persistent pattern of behavior resulting from a cluster of knowledge, skills, abilities, and motivations (Boyd et al., 2011). Prahalad and Hamel (Prahalad and Hamel, 2006, pp. 79-91) define it as "a harmonized combination of multiple resources and skills that distinguish a firm in the marketplace". In their research both scholars arrive at the conclusion that ambition and desire for building competences is what characterizes global winners. The concept of competences was developed by McClelland (McClelland, 1973, pp. 1-24) first in 1973 and later on was clarified by Boyatzis (1982) in 1982. The main concept of competences on which this study draws is that there is not one single criterion that can possibly expose a company's successfulness or innovativeness. The latter can be revealed only by a set of criteria such as skills, knowledge, abilities and motivations. This group of criteria contains organizational experience, business motivation, the behavioral characteristics of both staff and management. Some of the innovative competences are: creativity (generating ideas, critical thinking, and creative problem solving), managing change (sensitivity to situations, challenging the status quo, intelligent risk-taking, reinforcing change), integrating perspectives (openness to ideas, research orientation, collaborating), enterprising (identifying problem, seeking gathering improvement, information, independent thinking, technological savvy, result orientation), etc. (Boyd, 2011).

All competencies in the field of

innovations are hard and difficult to assess and apply for the purposes of setting indices such as the innovative company model. Yet, some competences influence other factors and indicators that are measurable and hence reveal the companies' innovation capabilities and potential. That is why that section of measures of company innovative leadership is not integrated within this model.

Innovation potential and capabilities

In this section metrics are organized in five subgroups of indicators. The section aims at measuring the company's innovative potential as well as the company's current innovation-related performance. The five categories among which the different criteria are allocated are: flexibility, social skills and competencies, platform and data, leadership, strategy, business process.

One of the factors that definitely measures a company's innovativeness is its ability to be flexible and resilient to the environment as well as to economic, social and market requirements. The company's positioning amid an economic crisis, changes in the market, legal framework or customer expectations shows a high level of dynamics and could help it to hold the steering wheel. This criterion is even more relevant for leading innovative companies. It might be measured by using financial data of the last three years and by comparing it to the average financial performance sector-wide. Another approach involves analyzing its consistency. If the financial data shows consistency and perseverance, a conclusion on the company's flexibility could be made. For the purpose of measurement flexibility some basic and common financial data should be taken into consideration. The indicator measured by this criterion is the change in sales revenue from the previous year

(1). If the trend is rising, then the company's reaction to the market and its innovative capabilities are good enough.

- (2) Social capabilities, communication and marketing skills, and associated data with these activities, help companies to build more powerful relationships with customers. The measured criterion that exposes a company's innovative capabilities is how much a company benefits from using the main social interaction channels with potential customers to predict and forecast trends. A major focus of innovation is the use of smarter data considered from the perspective of the business, customer behavior, social networking activity, and social content. The particular measurement indicator draws its data from the main channels: feedback from office/shops, questionnaires to customers, Facebook, Tweeter, Linkedin networks, own company website, userdriven innovation, test customer groups in pre-sales stages, CRM, direct marketing, etc. The calculation is made by filling how many of these channels the company uses. If it uses 1 or 2 of the channels - then the company receives 2 points from 10. The most innovative companies by this criterion are expected to use all possible channels for interaction with customers.
- Platform and data combine software, hardware, data and analytics that allow companies to develop and manage an ecosystem of customers, partners, or developers and to manage by optimum way the interactions between all dependencies which can possibly stem from those main factors. This criterion is measured by counting how many of the following platforms and databases the company uses: customer database, product database/catalog, process system, online trade channel, automatic and smart processes, CRM, time process measurement software, etc.
- (4) Leadership might be a significant factor that allows companies to make dramatic moves into new markets and innovations. This indicator is measured

- by evaluating the company's leadership practices. If there are policies development leaders, coaching mentoring programs, then the company should be awarded the full points by this criterion. The criterion is measured by dichotomous base depend on existing and using such kind of leadership practices or their lack. When a comparison among several companies is made, then more complicated scale should be applied by comparing the number of used procedures and the results they bring.
- (5) Strategy, planning and policies refer to the collection of innovation methods and reveal companies as pioneers. Innovation development policy, R&D departments, decision making on innovation products and processes, innovation processes development. Each policy brings one point. The scale consists of 10 points in basic measurement and might be extended when a comparison between several companies is realized.

Innovation activity

The third group of criteria is the well-known innovation metrics that uses some specific practices in companies. Such metrics are used in the Innovation Scoreboard and other innovation measurement indices.

- (6) Research and development costs and investments are any expenses associated with the research and development of a company's goods or services. R&D expenses are a type of operating expense and are incurred in the process of finding and creating new products or services.
- (7) Employees in R&D departments or teams (employees with innovative ideas from last 12 months) how many employees are devoted to innovation activities.
- (8) Number of introduced new product/ process/marketing/organizational innovations per year – the criterion directly

reveals the company's innovative activity. Hereby some comparisons with innovation projects on track could be accomplished or with innovative projects still under construction.

- (9) Ratio between the number of innovations made in-house and the number of innovations made in collaboration with some third parties (academic institutes, universities, innovative companies, consultants, customers, open innovation, user-driven innovation, public sector, etc.).
- (10) R&D expenditure as a share of total revenue This metric, also called R&D/Sales Ratio is useful to compare the effectiveness and efficiency of R&D expenditures between companies in the same industry. In the meaning of the Company's innovative leadership model, the criterion measures not effectiveness only but also innovation efforts.
- (11) Registered trademarks, patents, new designs that criterion provides information about legal and registration procedures that a company has been taken

during the last year about its innovations. The result shows how the company ensures protection of its innovations and the activities it has performed.

(12)**Training** and educational improvements (degrees, diplomas) of the employees (number of activities/number of employees) - innovative companies rely on its team's innovativeness and that is why the company should train and improve the skills, knowledge ad competences of the employees. The criterion shows the type and number of training programs and educational improvements employees attend. The criterion is organized as an index in order to eliminate any size or industry-related dependency.

Figure 2 illustrates the Company innovative leadership model with all its measures.

The methodology for measuring leading innovative companies ensures well-balanced results. The reason why this approach has been chosen is that a lot of companies running its business in particular economic fields tend to apply one tool

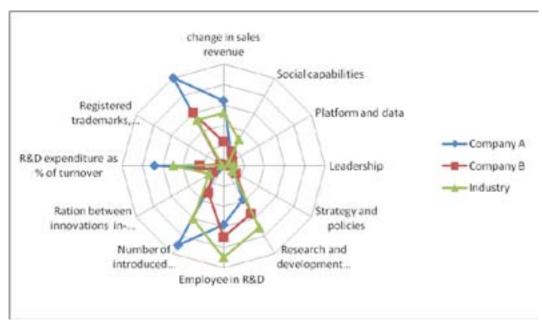


Fig. 2. Company innovative leadership model

more than the other. These companies pursue а stable long-term innovative policy and ensure sustainable performance. That is why the leading innovative companies' model is targeted at ensuring well-balanced results with regard to almost all indicators, considering that it measures not only the company's current situation and performance, but also the expectations, potential and capabilities for future innovation development. The purpose to apply this model is to show and identify the parts of the innovative performance and potential the company should further stimulate and develop.

How does the company innovative leadership model differ from the other ones and what value does it bring to companies?

There are a lot of indices aimed at indexing and evaluating the innovativeness. No one of them emphasizes on the leading position of innovative company or innovation leadership. Most of them just distinguish innovative and ordinary organizations by some criteria. Actually, the commonly employed indices aim to measure not company innovativeness, but the innovativeness of a sector or even of a country. That is why for a company it is difficult to analyze what efforts should be made in order to achieve innovativeness. This is what the leading innovative company model guarantees. It encompasses 12 factors that expose the company's innovative performance, capabilities and competencies and allow for making some comparisons, whether between two or more companies, between a company and its sector, amongst several sectors, etc. This comparison is made possible by the commonly used indices to measure innovation leadership.

Some of the most famous indices measuring innovativeness are: Innovation Union Scoreboard, Global Innovation Index, Global Competitiveness Index, OECD Science, Technology and Industry Scoreboard, The Boston Consulting Group/National Association of Manufacturers Index, The Global Innovation Index of the Economist Intelligence Unit. The Bulgarian equivalent of such index is Index Innovations BG.

The Innovation Union Scoreboard measures three main types of indicators and eight innovation dimensions, capturing in total 25 different indicators. It aims at measuring macro level innovation performance. As a result, the Innovation Union Scoreboard gives an overview of the innovation activities and efforts of EU member countries. They are clustered in four categories: Innovation Leaders, Innovation followers, Moderate innovators, and Modest innovators, where exactly has been placed Bulgaria¹.

The core of the Global Innovation Index (GII) Report consists of a ranking of world economies' innovation capabilities and results. Over the last seven years, the GII has established itself as a leading reference on innovation².

The Global Competitiveness Report assesses the competitiveness landscape of 144 economies, providing insight into the drivers of their productivity and prosperity. The report try to be the most comprehensive assessment of national competitiveness worldwide, providing a platform for dialogue between government, business and civil

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¹ Innovation Union Scoreboard 2014, Available on: http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014-summary_en.pdf

² Global Innovation Index 2014 Edition, Available on: https://www.globalinnovationindex.org/content.aspx?page=Gll-Home

society about the actions required to improve economic prosperity. Competitiveness is defined as the set of institutions, policies and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the level of prosperity that can be earned by an economy3. The OECD Science, Technology and Industry Scoreboard has been constructed after 50 years of indicator development at OECD to look at major trends in knowledge and innovation in the global economy. Over 180 indicators illustrate and analyze trends in science, technology, innovation and industrial performance in OECD and major non-OECD countries (notably Brazil, the Russian Federation, India, Indonesia, the People's Republic of China and South Africa)4.

The first one and unique at the moment Innovation Index in Bulgaria has been developed by The Applied Research and Communications Fund (ARC Fund) and it aims at improving the national innovation system in Bulgaria by analyzing the conditions and opportunities for innovation growth.

As it is mentioned above, the main existing innovation indices emphasize on innovation performance on macroeconomic level. The proposed leading innovative company model aims at measuring the companies' performance, capabilities and opportunities for innovation development. It could bring value to companies, which desire some improvement in their innovation performance and perspectives.

4. Leading innovative company's profile

A company might be placed at the top according this model if it follows and uses those principles in its innovation activities, polices and performance.

- It should be flexible to the market, customer, technical and environment circumstances. This flexibility should be visible in the sales revenue growth each year.
- 2. Social capabilities and communication with all other involved in the business are essential. The strong and well controlled relations build long-lasting and stable business environment in an otherwise unstable business world. A company should use all possible interaction channels with internal and external environment, to collect feedback, to communicate effectively. It should be aware of using at minimum those channels: feedback from office/shops, questionnaires to customers, facebook/tweeter, linkedin, own company side, user-driven innovation, test customer groups in pre-sales stages, CRM, direct marketing, etc.
- 3. As a general rule the data hidden the most important information in itself. It just must be gathered, structured, analyzed and used. Nowadays there is a big number of software doing that. A high performed company by the leading innovative model uses at minimum those methods for summarizing and applying the value of the information: customer database, product database/catalog, process system, online trade channel, automatic and smart processes, CRM, time process measurement software, etc.
- 4. Leadership is one of the strongest and useful tools for boosting a company into an innovation. The leadership itself is a capability of gaining followers. That is why the personal or company's leadership is often used for the purposes of increasing the innovativeness within an organization. Some

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³ The Global competitiveness Report 2014-2015, Available on: http://www.weforum.org/reports/global-competitiveness-report-2014-2015

⁴OECD summaries, OECD Sience, Technology and Industry Scoreboard 2011, Available on: http://www.oecdepublishing.org/multilingual-summaries/sti_scoreboard-2011-sum/pdf/sti_scoreboard-2011-sum-en.pdf

good methods for increasing the creativity within an organization are coaching and mentoring, which both are commonly used leadership techniques. For the purposes of measuring company leadership capacity, the activities and policies that boost leadership practices and measure whether or not the latter have been used in best possible way should be analyzed.

5. Company strategy and policies developed in a good and detailed manner offer some kind of proof that the company is prepared for a high performance, and for flexibility and consistency in its business operations. Therefore such procedures developed by a company normally signal a strong capacity for innovative leadership.

All the other components of the company innovative leadership model are quantitative and they could be gathered from financial statements and reports. As a combination, all the factors build innovative leadership profile of a company and might be used to measure the innovative leadership of different companies of any size operating in any business sector.

Figure 3 shows how the model is applied with sample data. The figure presents a comparison between two companies. The

blue line measures a leading company and the red line shows the performance of a leading innovative company. The difference and mismatching of the lines proves the not overlapping criteria which indicates the innovative leadership of a company and its leading position on the market. The same comparison could be applied also using the company's innovative leadership model. Both methods could be used together and individually.

5. Conclusion

Finally the following conclusions can be drawn on the basis of the presented model for measuring the companies' innovative leadership. In the first place businesses need some kind of scoring model for innovation efforts and innovation performance measuring. That necessity stems from the companies' desire to improve their market position and increase their innovativeness by evaluating the existing condition. The model also helps indicate how far the companies are from the desirable level of innovation performance or average performance within the sector. The model actually shows some

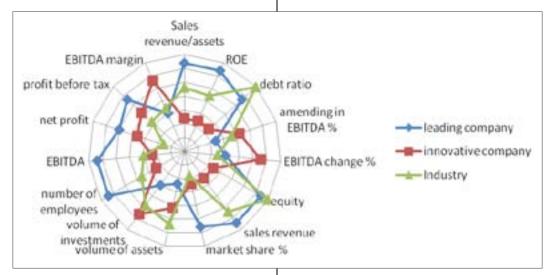


Fig. 3. Leading company in comparison with leading inhovative company

good practices for well-balanced innovation performance and provides companies with an overview of the innovative potential and scope. Second, there are innovative companies, and the existing model cannot be applied to measure their performance in terms of innovativeness or leadership. They operate in a various competition and the available indices for leading companies are inappropriate. Third, in order a country to achieve better results in innovativeness, the micro level should increase its innovative potential first. This is why the introduced model does not examine innovativeness at the macro level but at the micro level of companies. As a final conclusion, the company innovative leadership model provides a basic methodology that can be applied to any type of company in terms of business and size operating in any industry. It could be used to assess company performance, to compare companies or to measure the state of affairs of whole sectors or regions.

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