

The Balanced Scorecard for Higher Education — the Case of Maria Curie-Skłodowska University

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Abstract

The Balanced Scorecard originated by Kaplan and Norton translates strategy into tangible and measurable objectives in four perspectives: financial, customer, internal business process, learning and growth. These perspectives can be modified, extended and adapted to the specific characteristics of company. This popular and modern management tool is used to clarify strategy, vision, and mission. It enables executives to realize their strategy in the most effective way. In contemporary times, the Balanced Scorecard is gaining popularity and has an ever increasing number of applications in the areas of benchmarking, budgeting, Total Quality Management or cost management. Nowadays it is more and more often implemented in the management of universities. The article presents the example of developing the Balanced Scorecard model at Maria Curie-Skłodowska University in Lublin.

Keywords: Balanced Scorecard, strategic planning, management, higher education

Introduction

Developing a winning strategy (whether it be for private sector organizations, government, or non-profit organizations) has never been seen as a simple task. However, successful strategy implementation is far more important and it is an extremely daunting task. Niven (2002, 9–10) notes there are a number of barriers to strategy execution, such as:

- vision barrier — only 5% of the workforce understands the strategy,
- people barrier — only 25% of managers have incentives linked to the strategy,
- management barrier — 85% of executive teams spend less than one hour per month discussing strategy,
- resource barrier — 60% of organizations don't link budgets to strategy.

The importance of strategy realization was noticed also by 2by2 Strategy Advisor, which performed 2013 strategy survey (Tulldahl 2013) targeted towards business executives. According to the results of this survey, strategy realization (70%) was considered one of the most significant strategy challenges. Other noted challenges are illustrated in figure 1.

In response to these research results, 2by2 Strategy Advisor proposed five components for being able to realize the strategy in an effective way: the business plan, key performance indicators, individual incentives, change, and follow-up mechanisms.

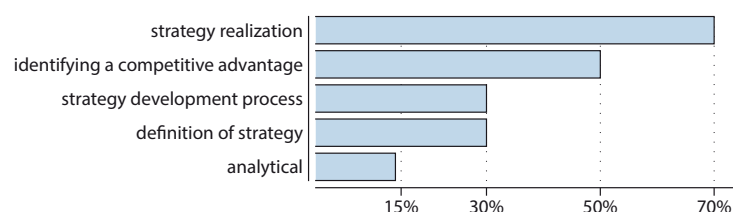


Fig. 1. Challenges related to strategy

Data source: Tulldahl (2013)

In accordance with surveys and analysis of new social and economic determinants, it is considered appropriate to find and implement such a strategy for profit and non-profit organizations (including universities) that would correspond to significant and constant changes in the socio-economic environment. One effective and modern instrument of organizational management suggested by authors is the Balanced Scorecard—allowing for effective implementation, monitoring and verification of developed strategies.

The main aim of this article is to present the possibility of the Balanced Scorecard's practical use in higher education institutions based on the example of Maria Curie-Skłodowska University. The article verifies the hypothesis that the Balanced Scorecard—accordingly modified—enables comprehensive management of a university.

1 The Balanced Scorecard model—the basics

Today more and more higher education institutions search for some methods or instruments fundamental to realizing objectives connected with clear and effective strategy realization. One of the tools meeting these demands is the Balanced Scorecard. The Balanced Scorecard was introduced in a 1992 *Harvard Business Review* article (Kaplan and Norton 1992). After this publication, several companies efficiently and rapidly adopted the concept giving the authors deeper insights into its potential and power. During the next 15 years, as it had been implemented by thousands of public, private, non-profit companies around the world, Kaplan and Norton broadened the model into a management instrument for describing, communicating, and implementing strategy (Kaplan 2010, 2). This misleadingly uncomplicated methodology translates a company's strategy into performance objectives, measures, targets, and initiatives in four perspectives: financial, customer, internal business process, learning and growth (Niven 2002, 13–17). The Balanced Scorecard can be used to achieve the company's strategic goals, because apart from financial factors, it also considers non-financial factors (Pham-Gia 2009, 6). This model made it possible to measure the critical and crucial parameters representing an organization's strategy for long-term value creation (Kaplan and Norton 2004, 5).

2 The Balanced Scorecard in non-profit organizations

The most significant role of the Balanced Scorecard is the ability to translate corporate strategy and mission into measurable and tangible objectives, focusing on the most meaningful measures. It is a popular management system which is used to clarify the organizations' strategy and vision and translate them into action. Therefore it enables executives to accomplish their strategy in an effective way (Świerk and Mulawa 2014). Kaplan and Norton established five basic principles of the Balanced Scorecard as a part of the strategic core of an organization (Kaplan and Norton 2001, 9–17):

- translating the strategy to operational terms
- aligning the organization to the strategy
- making the strategy part of everyone's everyday job
- making strategy a continuous process
- mobilizing change through leadership

The practical application of the Balanced Scorecard leads to improved business processes across the company, and increase of credibility and trustworthiness which may impact improvement in the entity's functioning. Even though the Balanced Scorecard is a new tool, it has an ever increasing number of applications. This is because of its applicability which make it possible to adapt this tool to the specific needs of any enterprise. Therefore, it is not surprising that the Balanced Scorecard grows in importance and popularity among universities (tab. 1). The main reasons (Farid, Nejati, and Mirfakhredini 2008, 35) for the Balanced Scorecard implementation by universities are:

- It is treated as a vital management tool (University of California at San Diego).
- It enables assessment of academic program and planning processes (Rossier School of Education at University of Southern California).

- It allows use as a marketing tool to differentiate images in the higher education market (UK and South Africa universities).
- It is a tool for reinforcement of the importance of managing rather than just monitoring performance.
- It brings benefits to the accounting department heads—they were supportive of the Balanced Scorecard applicability and benefits to accounting education programs (survey of 69 accounting department heads).

Tab. 1. A list of universities that applied the Balanced Scorecard

University	Unit that implement the Balanced Scorecard	Country
University of California at San Diego	Business Affairs	USA
University of California at Davis	Division of Administration	USA
University of California at Berkeley	Business and Administration Services Division	USA
University of California at Los Angeles	Administrative Information System Business Administration Service	USA
University of California at Irvine	Division of Business and Services Administration	USA
University of California at Santa Cruz	Business and Administrative Service	USA
University of California at San Francisco	Campus Auxiliary Service	USA
California State University at Northridge	Administrative and Finance	USA
California State University at San Marcos	Finance and Administrative Service	USA
California State University at San Bernardino	Administration and Finance	USA
California State University at Pomona	International PR, Communications	USA
Florida International University	Entire university	USA
University of Louisville	Entire university	USA
University of Vermont	Entire university	USA
University of Akron	Entire university	USA
University of Virginia	Library	USA
University of Alaska	Information Technology	USA
University of Denver	Office of Research and Sponsored Programs	USA
University of Arizona	Library	USA
University of Iowa	Facilities Services Group	USA
University of Missouri	Admin. & Finance	USA
University of North Carolina at Wilmington	Business Affairs	USA
University of Northern Colorado		USA
University of St. Thomas	International Management Program	USA
University of Vermont	Financial Analysis & Budgeting	USA
University of Washington	Administrative	USA
Fort Hays State University	Entire university	USA
University of Florida	Library	USA
Charleston Southern University	Planning & Student Affairs	USA
Cornell University	HR	USA
Illinois Benedictine College		USA
Indiana University	Research & Academic Computing	USA
Pennsylvania State University	Outreach	USA
University of Edinburgh	Entire university	UK
Glasgow Caledonian University	Entire university	UK
Deakin University	Library	Australia
Bond University	Entire university	Australia
Carleton University	Finance and Administration	Canada
The University of the West Indies	Entire university	Jamaica

Source: Own elaboration on the basis of own survey and Binden, Mziu, and Suhaimi (2014, 39)

Private, Government & Non-Profit Organizations have different priorities, objectives, and missions. Consequently, it is necessary to change the architecture of the Balanced Scorecard (fig. 2).

Non-profit organizations (including universities) as Niven emphasizes, have to elevate the role of the mission and customs, and reduce the influence of financial indicators (Niven 2002, 293). The Balanced Scorecard developed for universities illustrates how they achieve missions aimed at improving society. For comparison (tab. 2) the authors show examples of universities with different perspectives.

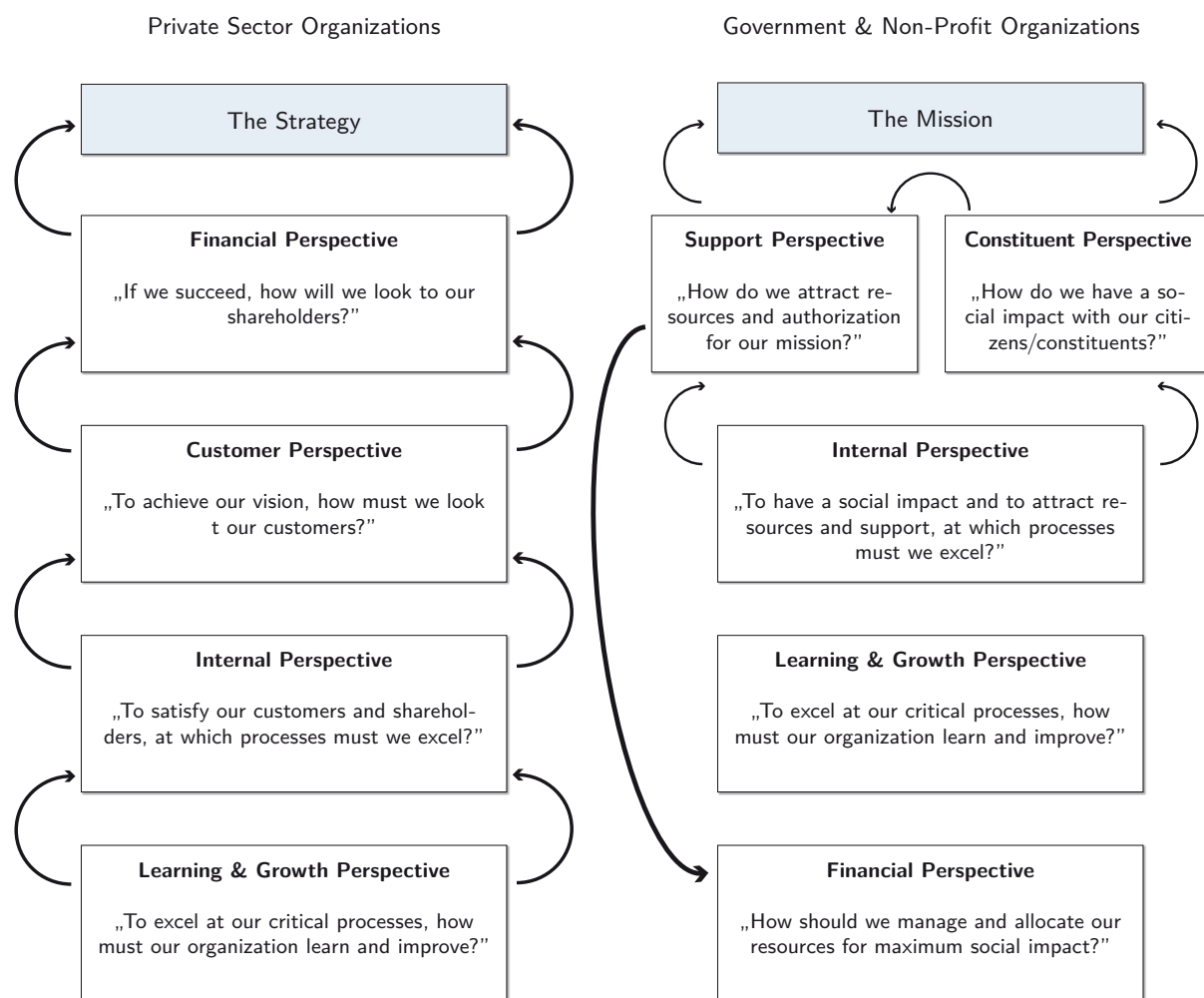


Fig. 2. The Balanced Scorecard Model of Value Creation

Source: Presentation of R. S. Kaplan at conference “[(R)E]wolucja Balanced Scorecard: Budowanie organizacji skupionej na strategii” [(R)Evolution of the Balanced Scorecard: Creating the Strategy-Focused Organization], organized by Institute for International Research in Warsaw, 2005.02.09

Tab. 2. Examples of perspectives included in Balanced Scorecards in different universities

University	Department/ Division	Mission Statement/Vision	Perspectives of Balanced Scorecard
University of California at San Diego USA	External & Business Affairs	Mission: Raising financial support for University of California at San Diego's research, teaching, and patient care, while delivering superior service to our stakeholders in a responsive and cost-effective manner	<ul style="list-style-type: none"> • customer • stakeholder/financial • internal • innovation & learning.

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Tab. 2. (continued)

University	Department/ Division	Mission Statement/Vision	Perspectives of Balanced Scorecard
California State University USA	Business and Finance Division	Business and Finance supports the educational mission of the California State University through effective leadership, asset management, technology use, support services and governmental advocacy.	<ul style="list-style-type: none"> • financial • customer • operational • innovation & growth
University of Virginia USA	Library	Mission: Enabling research, teaching, and learning through services, collections, tools, and spaces for the faculty and students of today and tomorrow.	<ul style="list-style-type: none"> • customers • finance • internal operations • learning & growth
The University of the West Indies Jamaica	Entire university	Mission: To advance education and create knowledge through excellence in teaching, research, innovation, public service, intellectual leadership and outreach in order to support the inclusive (social, economic, political, cultural, environmental) development of the Caribbean region and beyond.	<ul style="list-style-type: none"> • financial • employee engagement and development • internal operational processes, • teaching, learning and student development • research and innovation • outreach (national and regional development; internationalisation; marketing and communication; and alumni engagement)

As seen above, the Balanced Scorecard being a multi-dimensional instrument, can be adapted to every university-specific functional conditions.

3 Developing the Balanced Scorecard model — the case of Maria Curie-Skłodowska University

The work connected with developing and implementing a comprehensive strategy at Maria Curie-Skłodowska University was undertaken in 2011 (from March to December) and 2012 (from January to March). In view of the importance of this project, it was necessary to establish a steering committee consisting of university representatives and Ernst & Young consultants.

3.1 Maria Curie-Skłodowska University — basic information

Maria Curie-Skłodowska University is the largest university in Eastern Poland. It came into being in 1944. Its current strong established position has been developed over 70 years of teaching tradition. Since the beginning, the university has been perceived as a market leader in the education sector offering students first-class education.¹ The university consists of 11 faculties and employs around 1800 researchers who conduct projects under the responsibility of the National Science Centre, the National Centre for Research and Development, Minister of Science and EU programmes. Furthermore, Maria Curie-Skłodowska University has vast experience in relations with foreign research centres.²

1. See: About UMCS. [a:]http://www.umcs.pl/en/about-umcs,1549.htm.

2. See: *Wiadomości uniwersyteckie* 2014, no. 7/207, available at http://serwis.umcs.lublin.pl/wiadomosci/2014/wu_208_net.pdf.

3.2 The process of the Balanced Scorecard development in Maria Curie-Skłodowska University

The model of Maria Curie-Skłodowska University Balanced Scorecard was developed in accordance with Kaplan and Norton methodology. The University is included in the group of government & non-profit organizations. For this reason the traditional Balanced Scorecard perspectives (including order) had to be amended. The basis for the mission and vision framework were the results of strategic analysis that included:

- analysis of external determinants important for Maria Curie-Skłodowska University development, and
- a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats).

Thereafter, the steering committee framed a clear mission and vision (tab. 2).³ The mission is treated like a description of university relevance and its main objective. The mission should focus academic efforts mainly on realizing the proposed action whereas the vision express efforts and aspirations.

Tab. 3. Maria Curie-Skłodowska University mission and vision

Mission	Vision
Maria Curie-Skłodowska University's mission is to offer a high level of education, transfer of knowledge and skills necessary to enter the workplace or start a scientific work, conduct research contributing to the fields of science and economy development, support Lublin and the Lubelskie Voivodeship development thanks to educational, research and cultural activities, promotion of the region across borders and in the home country.	Maria Curie-Skłodowska University (by 2021) will become the largest and top-rated university in the East of Poland, amongst the top five best universities in Poland characterised by a stable financial background, attractive in the eyes of students (also foreign students), conducting high quality research, active in the area of knowledge commercialization and cooperation with socio-economic environment operators.

Source: Misja, wizja..., p. 2

The vision was made more specific thanks to five groups of university stakeholders (fig. 3).⁴

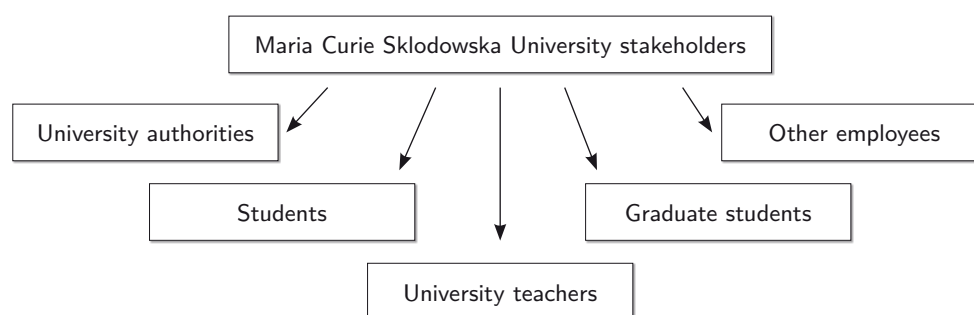


Fig. 3. Maria Curie-Skłodowska University stakeholders

This well-developed long-term mission and vision gave rise to clarification of strategic areas of university development that include (fig. 4):

- recipients of services (students, academics, regional environment)
- internal processes
- development

3. See: Misja, wizja oraz cele strategiczne i operacyjne Uniwersytetu Marii Curie-Skłodowskiej w Lublinie. Grudzień 2011, available at <http://phavi.umcs.pl/at/attachments/2013/1115/145958-zalacznik-nr-3-do-strategii-rozwoju-misja-i-wizja.pdf>, p. 2.

4. Misja, wizja...

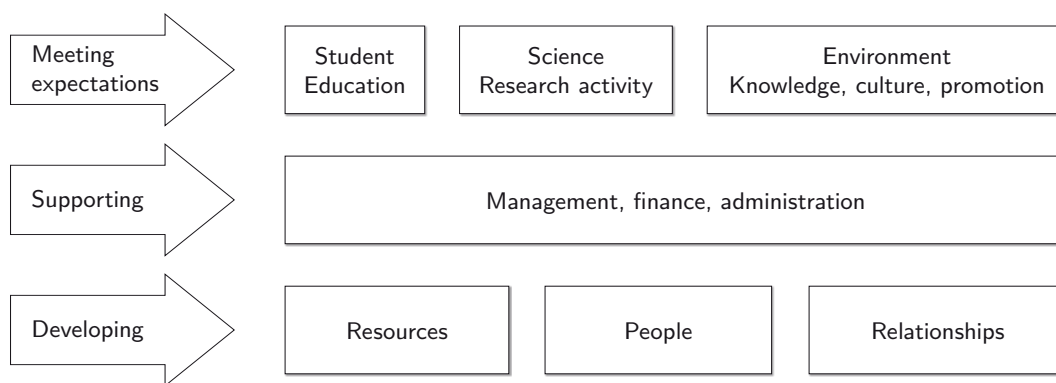


Fig. 4. Strategic areas of university development

Source: Misja, wizja...

Conclusions of the strategy analysis, and the mission and vision allowed the university to formulate strategic and operational objectives. Strategic objectives were developed in line with “SMART” (Nowak 2010, 335) criteria: Specific, Measurable, Appropriate, Realistic, Time-related.

A further step was to present the established objectives in the form of the strategy map (fig. 5) which made it possible to view strategic objectives as a series of cause-and-effect linkages between them. Strategic objectives were grouped into five perspectives: Education, Research, Relations with environment, Internal processes, and Development.

The strategy map analysis emphasizes activities that can contribute to achievement of precise strategic objectives. An Internal Processes perspective includes activities based on reorienting management process from a hierarchical to a process-based approach. It is essential for another three perspectives: research activity, relations with environment, and development which include activities connected with: activities aimed at university internationalization, initiatives aimed at promotion, improving long-term relationships with graduates, entrepreneurs, local government, and activities aimed at strengthening university employee identification with the developed mission and strategy. As a result, the university will achieve its main goals in the area of education, including its main strategy goals. The strategy map was one of the most important stages in the Balanced Scorecard design. It is extremely important in the university management. Such a perspective provides a clear link between objectives and impact on an overall strategy. In general, the strategy map detailed declarations included in the mission and vision. It contributed to improved understanding of relationships between university intellectual capital, implemented processes, relations with the environment and fulfillment of the mission by academics. Thereafter, the steering committee developed the university Balanced Scorecard. The scheme of the model is presented in figure 6.

The model of the Balanced Scorecard for Maria Curie-Skłodowska University includes 5 perspectives, 15 strategic objectives, 47 operational objectives, measures and targets values. All objectives present aspects of what the university strategy tries to attain. Measures set out how performance against chosen objectives is regularly monitored. Target values show the level of necessary performance and also rate of some kind of improvement. Part of Maria Curie-Skłodowska University Balanced Scorecard (Education Perspective) is presented in table 4.

Selected measures had an essential role in the process of the Balanced Scorecard development. These measures are the quantitative criterion of assessment and objective achievement. It plays two roles:

- monitoring function (regular monitoring of objectives), and
- motivating function (comparing current and target state of objectives).

Each measure was described in greater detail by units of measurement, sources of data, frequency of measurement, present and target values.⁵

5. Maria Curie-Skłodowska University materials.

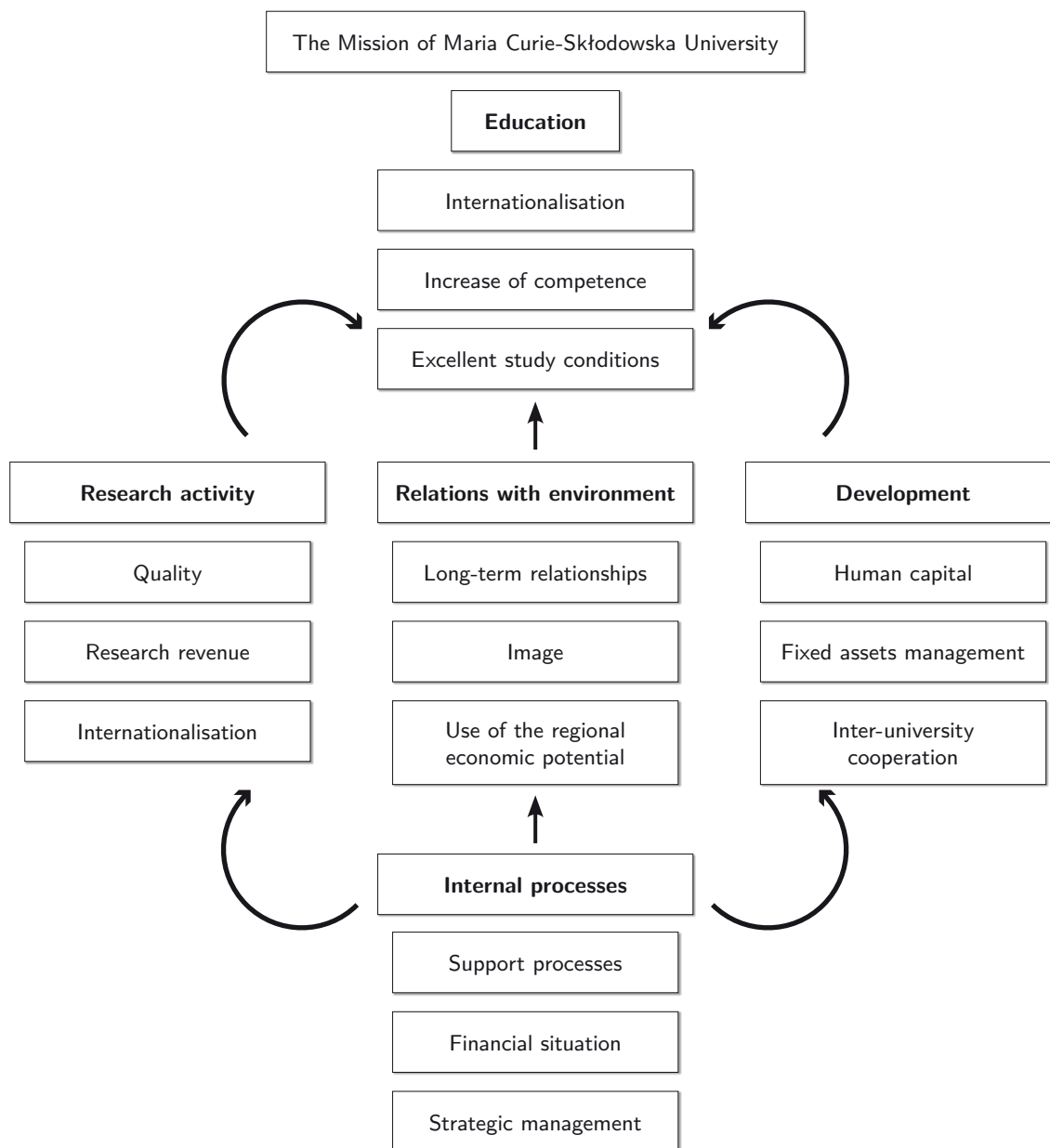


Fig. 5. Strategy map for Maria Curie-Skłodowska University

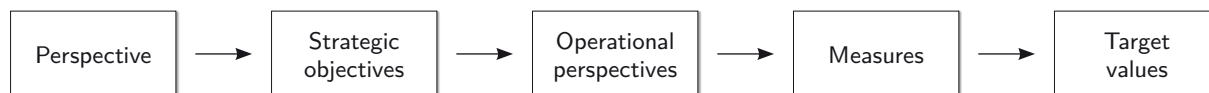


Fig. 6. Balanced Scorecard for Maria Curie-Skłodowska University—scheme

Summary

Changes of external and internal determinants having a great influence on the functioning of higher education institutions, forces university authorities to formulate and implement a strategy which should be compatible with these demands. Maria Curie-Skłodowska University using the Balanced Scorecard model enabled a multi-aspect analysis of university operation. The traditional form of the Balanced Scorecard (including four perspectives: financial, customer, internal business process, learning and growth) was specially designed and modified for university characteristics. Consequently, it includes five perspectives Education, Research, Relations with environment,

Tab. 4. The Balanced Scorecard for Maria Curie-Skłodowska University (education perspective)

Strategic objectives	Operational perspectives	Measures	Target values
Internationalizing of Education	Increase foreign representation in the group of Maria Curie-Skłodowska University students.	The proportion of foreigners in the students group.	0,9%
	Increase foreign representation in the group of members of the academic staff.	The proportion of foreigners in the academic staff group.	growth
	Improving the staff's capacities for the purpose of carrying out a teaching assignment in English.	The proportion of teaching assignments conducted in English in total teaching assignments.	growth
	Increase the number of study fields conducted in English.	The proportion of study fields conducted in English in the total offered study fields.	growth
	Increase of student scientific activity abroad.	ECTS points acquired abroad per student.	growth
Quality of education improvement	Adapting the educational offer to the labor market needs.	The assessment of employer preferences.	13,3 points
	Increase effectiveness of the quality evaluation system.	Aggregated evaluation of the education quality.	growth
	Increase practitioner representation in teaching.	The proportion of classes taught by practitioners in total offered teaching assignments.	growth
	Increase opportunities for individualized studies.	The assessment of individualized study opportunities by students.	growth
Study conditions improvement	Improving quality of University's infrastructure.	Infrastructure investments.	growth
	The increased use of modern forms of communication between university and students.	Student assessment of modern forms of communication development level.	7 points
	Improving quality of student services provided by administrative employees.	Student assessment of administrative services quality.	8 points

Internal processes, and Development. Designed to enable multidimensional management, it facilitates monitoring and evaluating the extent to which the objectives have been achieved.

The undisputable benefit of the Balanced Scorecard for Maria Curie-Skłodowska University is that it focuses on the most significant processes and key factors that contribute to the direction and success. Furthermore it improves internal and external communications and helps in monitoring university performance against strategic goals. Based on an example of the Balanced Scorecard application in Maria Curie-Skłodowska University, supported by other practical examples, surveys and a selection of specialized literature, it is possible to prove the hypothesis that the Balanced Scorecard—accordingly modified—enable comprehensive management of a university. Furthermore, the Balanced Scorecard may become an early warning system, providing a source of information about improving performance and the areas with a problematic impact on the overall university development.

The article argues the case for a new approach to university management. The described model of the Balanced Scorecard (widely implemented) could be a decisive step for universities, helping to implement strategy that responds to constant changes in the economic, social and business environment. Prospective studies should be focused on identifying problems during implementation of the Balanced Scorecard in universities and solutions (such as those within information systems) which will facilitate resolution of potential implementation difficulties.

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