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Balanced scorecard: A contemporary management tool for performance management

K e y w o r d s: balanced scorecard, performance management, methods of management

S u m m a r y: Changes are part of any kind of development, economic development included. The increased transfer of information and technology development lead to swift and inherent changes in today's economy. These changes became a guideline and even an asset in the past few decades. As the amount and intensity of the information increased, the information provided by conventional financial statements was not enough for management to respond properly and promptly, and remain a leader in the market through cost reduction and created added value. For this purpose, the aim of researches conducted in 1980s and 1990s was to discover and establish a tool that would balance between the stability that every organization is striving for, and the swift and intensive changes that are integral part of any environment of any organization. Through extensive research, the concept of measuring the scorecard in a balanced way was developed during that time. The balanced scorecard as a concept was to link the gap between the past and conventional financial statements, and the future, meaning the mission and vision of the organization. Over the years, the balanced scorecard has evolved and proved to be an enduring business management idea since its conception. The aim of this paper is to present the meaning, role and development stages of the balanced scorecard method, which enables management to have a share in the inevitable changes of the business environment. Methods used in this paper are methods of analysis and synthesis, and methods of induction and deduction.

1. Introduction

The speed of information transfer increased while these technological advancements had impact on the development of economy. Although the history of economy

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could be traced to the prehistory era, the turning point in human history was the invention of the printing press in the 15th century. In the pre-industrial revolution era (13th to 19th century) (1) dominated crafts guilds; the products were produced by individuals for individuals, being adjusted to the needs of the local population. The Industrial Revolution changed the way the goods were produced; this era caused the craftsmen to leave their jobs and work in factory. During the 18th and 19th century technological capability outran population growth and natural resource scarcity, thus estimating that by the last quarter of the 19th century an average inhabitant of then leading economies (Great Britain, Belgium, Canada) had about three times the material wealth and standard of living of the typical inhabitant of a pre-industrial economy (2). Researches done by Frederic W. Taylor, and their application during that era caused greater efficiency in the factory productivity (2). Although the first half of the 20th century was marked by the World War I and World War II, it was also marked by acceleration of total factor productivity growth in the U.S. manufacturing (3); the total productivity being defined as the rate of transformation of total input into total output (4; 5) (a crucial measure of efficiency). The history of the 20th century was economic, because 'the economy was the dominant arena of events and change, where economic changes were the driving force behind the changes in other areas of life in a way that had rarely been seen before' (2). This century was also marked by the wealth that exceeded any estimations or predictions (2). This change in economy was of such proportions that making and using the necessities and conveniences of daily life became the driving force, having an effect on production, distribution and consumption (2). The goods produced in the 19th century nowadays are being produced significantly faster due to the technological capabilities that expand the range of goods and services. Just a simple example of this is the use of the tablet and new Windows 8 Application for Cabin Crew in the Emirates Airlines (6), which provides instant information transfer relating to various customer questions (weather, food and alike) as well as better communication and coordination of the employees of this organization, with a motive of providing excellent service and thus making a profit.

Transfer of information is connected to the means and technology used to transfer it. In 1876 with the telephone as a new means of communication, the information spread much faster than up to that point in human history. Most of latter-days inventions such as fax machine, computer and Internet are nowadays widely used by individuals, not only in their offices, but also in their homes. Information becomes an asset which value is not decreased, but increased by its use.

The increased transfer of information and technology development lead to swift and inherent changes in today's economy. Changes are part of any kind of development, economic development included. These changes became a guideline and even an asset in the past few decades. As the amount and intensity of the information increased, the information provided by conventional financial statements was not enough for management to respond properly and promptly, and remain a leader in the market through cost reduction and created added value. Key elements of contemporary business environment are human resource, information and customer relationship, which all create added value. This being a guideline, managers are finding new ways to monitor and manage these key elements, with the balanced scorecard being one of them.

2. Management and balanced scorecard

The saying 'If you cannot measure it, you cannot achieve it' is a thought guiding managers in their tasks. This saying is based in the quote by Kelvin (7), who said: 'I often say that when you can measure what you are speaking about and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind. If you cannot measure it, you cannot improve it.' Considering the pace at which the business environment has changed and the major drives for those changes—information and technology—managers were required to adjust their actions and plans accordingly. This has lead to new needs for managing the organizations, thus making Kelvin's quote a reality. These needs are oriented towards the future, whereas the conventional financial statements are oriented towards the past showing the results of past actions and decisions made. In 1990s a new concept—balanced scorecard (BSC)—was introduced, a tool that was to complement (8) conventional financial statements and meet the needs of ever changing organizations. Being defined as a tool (9), BSC is recognized as an enduring management tool (10).

The importance of the balanced scorecard has been increasing within the business and scientific areas. Various authors have different approaches to explanation and application of the balanced scorecard; yet, all of them agree that the BSC is a framework for multiple measures through which precise measurement is achieved and they are in accordance with the business environment, which is susceptible to various and numerous changes, with the purpose of achieving strategic goals. Authors (11) see BSC as a frame within which financial measures are supplemented with the operative measures, such as satisfaction of customers, processes, and other. The subjects of the measurement change with the structure of the organizational assets. Over the time, greater emphasis has been placed in the financial statement on the organization's intangible assets, which requires new set of measures. Norreklit emphasizes that the BSC is more than *ad hoc* collection of financial and non-financial measures; instead the BSC is a set of linked outcome measures and performance drivers, making it a strategic control system (12). Balanced scorecard fills the gap between the development of a strategy and its realization by supporting and linking the following critical management processes: clarifying and translating vision and strategy; communicating and linking strategic objectives and measures; planning, setting and aligning strategic initiatives; enhancing strategic feedback and learning (13). Epstein and Wisner (14) claim that BSC development and implementation is beneficial because it creates concise set of measures that link vision and strategy to objectives, metrics and performance of an organization. According to the authors (15), the purpose of a BSC is to form a hierarchic system of strategic objectives into the four perspectives, which is derived from the organization's strategy and is aligned with the financial measures (16).

Up to today, BSC has been implemented in many areas and kinds of organizations, such as health (17)—hospitals (18; 19), higher education (20)—universities (21; 22), public institutions—clinical laboratories (23), libraries (24), public services (25), air forces (26), and even sports (27). The reason for this diverse application of BSC can be found in its trait, which makes it possible to align tangible objectives with an organization's vision (28), making it a tool for easier accepting the decisions of management (29). Since BSC is considered as an instrument of strategy implementation (30) and is made of measurement system, these measures are easily adapted to any kind of organization in any area. This could be another reason for the wide-spread use of the BSC methodology.

3. Balanced scorecard—framework and history

The concept of the balanced scorecard was introduced by Robert Kaplan and David Norton in 1992, after extensive research on the topic of measuring performance in the organization. Through their research, Kaplan and Norton organized the measuring of organization's performance into four perspectives which are: financial, customer, internal business process and learning and growth (16), forming a BSC framework. Each of the perspectives has objectives, measures, targets and initiatives to set, through which the vision, mission and strategy will be tracked and fulfilled.

The question to be answered in the learning and growth perspective is 'To achieve our vision, how will we sustain our ability to change and improve?' This question suggests that this perspective is focused on learning and growth of the organization's employees. The question asked in the internal process perspective is the following one: 'To satisfy our shareholders and customers, what business processes must we excel at?' The measures in this perspective measure processes identified as critical to excel in for achieving the objectives of shareholders and customers. The question in the customer perspective is: 'To achieve our vision, how should we appear to our customers?' The focus of this perspective is identifying relevant customer and market segments that contribute to the financial goals. The financial perspective is to answer the following question: 'To succeed financially, how should we appear to our shareholders?' Financial objectives are the focus of this perspective, making it similar to the traditional management and accounting systems. The principal categories in this perspective are revenue growth and mix, cost reduction/ productivity improvement, and asset utilization/ investment strategy (31).

Since its inception, BSC has evolved through several stages known as the BSC generations. The first BSC created in 1992 was focused on measurement and reporting. The idea of the BSC was to enhance the information generated by financial statement which were (and still are) focused on the past, showing the effects of decisions already made. The first BSC generation was about focusing on leading and lagging indicators within the four perspectives of the BSC framework.

In the second generation the BSC is focused on the objectives. Here were the perspectives formed in the first BSC generation organized into layers that were connected through objectives in each layer (or perspective) by linkages flow (32, pp. 601–603). Objectives linked in cause-effect chains formed a strategy map and the initiatives (projects) were carried out to achieve the objectives set.

The third BSC generation links objectives in their respective layers (initially known as perspectives) across departments, which is known as cascading. Cascading is a process of developing BSC at each and every level of the organization (9). The focus of this BSC generation is on change, which includes engaging people and teamwork, instead of being focused only on the measurement. There is a tighter alignment of organization's strategy with its operations and executions carried out on a daily basis. This is the BSC generation when strategy management systems softwares were developed.

4. Conslusions

The swift changes caused by the information transfer through the technology development are to be handled with care and wisdom if the management of an organization desires to become or remain the leadership position in the market. Due to the intensity of the information circulating, the management need to find a fine balance between the relevant and irrelevant, as well as between past data and future desires. This calls for an implementation of measurement systems, such as balanced scorecard. The pace of information transfers requires the organization to measure its actions and to monitor them closely. Due to its possibility of adaptation to any organization and to any level within the organization, balanced scorecard seems to be an appropriate tool for measuring and monitoring the actions in order to improve them, in order to gain or remain in a leadership position in the market.

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Zrównoważona karta wyników – współczesne narzędzie zarządzania wynikami przedsiębiorstwa

Streszczenie: Zmiany są częścią każdego rozwoju, w tym rozwoju gospodarczego. Zwiększony przesył informacji oraz rozwój technologii prowadzą do błyskawicznych i nieodłącznych zmian w dzisiejszej gospodarce. W ciągu kilku ostatnich dziesięcioleci zmiany te stały się koniecznością, a co więcej – wartością. Ponieważ ilość i intensywność informacji wzrosły, informacje dostarczane w konwencjonalnych sprawozdaniach finansowych nie były wystarczające, aby kadra zarządzająca reagowała prawidłowo i szybko i pozostawała liderem na rynku poprzez redukcję kosztów i stworzoną wartość dodaną. Dlatego celem badań prowadzonych w latach osiemdziesiątych i dziewięćdziesiątych XX wieku było odkrycie i ustanowienie narzędzia, które wprowadziłoby równowagę pomiędzy stabilnością, do jakiej dąży każda organizacja, a szybkimi i intensywnymi zmianami będącymi integralną częścią środowiska dowolnej organizacji. Poprzez obszerne badania koncepcja pomiaru zrównoważonej karty wyników rozwinęła się w tym czasie w sposób zrównoważony. Zrównoważona karta wyników miała wypełnić lukę pomiędzy przeszłością i konwencjonalnymi sprawozdaniami finansowymi a przyszłością, oznaczającą misję i wizję organizacji. Przez lata zrównoważona karta rozwoju ewoluowała i od początku okazała się trwałą ideą zarządzania biznesem. Celem niniejszej pracy jest prezentacja znaczenia, roli i stadiów rozwoju metody zrównoważonej karty wyników, która umożliwia kadrze zarządzającej uczestnictwo w nieuchronnych zmianach środowiska biznesu. Metody zastosowane w niniejszej pracy to analiza i synteza, a także indukcja i dedukcja.

Słowa kluczowe: zrównoważona karta wyników, zarządzanie przedsiębiorstwem, metody zarządzania