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CONTENT

THE INFLUENCE OF THE BUSINESS INTELLIGENCE ON THE BUSINESS PERFORMANCE MANAGEMENT

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Abstract: The possibilities for expansion and growth of businesses are increasing with the development of information technology. Adding the information technology in business sector functioning is bringing new concepts which are affecting the future of business and information technology as two inseparable sciences. Managing business performance is a critical requirement for maximizing business profitability. Business performance management is actually a set of integrated analytical processes which using technology is directed towards financial and operational activities in a company. Managing business performance influence the process of reducing costs, increasing revenues and strengthening the competitive advantages of companies, which can be implemented using the technologies of business intelligence. The paper is covering the key performance indicators and balanced scorecards, which provide a framework for organizing strategic objectives in four different fields, namely internal business processes, financial, customer and development. As performance measurement periods are becoming shorter, management simply must have the capability for rapid reaction. To do this requires monitoring and tracking capabilities that can generate complete and accurate information upon which they can directly react. This information provides the required business intelligence for proactively managing business performance.

Keywords: key performance indicators, balanced scorecard, non-financial data, business performance

1. Introduction

The companies functioning in the global economy are in a complex position because the business performance measurement time frames are becoming shorter. The profitability, growth and success are analyzed quarterly instead annually. To keep pace with the changes, companies need to react quickly to incorporate varying demands and needs from the market. Elasticity and business cleverness are among the most important means to remain competitive. What is needed is a complete and comprehensive approach that facilitates companies to line up strategic and operational objectives in order to fully manage realization of their business performance measurements.

Successful businesses need information to give them a single view of their enterprise. With this type of information, they can make more effective decisions, manage business operations and minimize process interruptions, align strategic goals and priorities both vertically and horizontally throughout the business and establish a business environment that promotes continuous innovation and improvement [1, 2].

All these needs for constant redefinition of business goals and strategies requires an IT system that can take up these changes and help business users optimize business processes to assure business objectives. Business performance management has the main role here by providing key performance indicators, which can be used to evaluate business performance. In fact, key performance indicator is a performance metric for a specific business activity that has an associated business goal. The goal is used to determine whether or not the business activity is performing within accepted limits. The observation and analysis of key performance indicators provide business users with the approach necessary for business performance optimization. Business performance management also becomes a great guide for IT departments who are being asked to make logical observation from simple numbers in a way that it helps them focus their resources in areas that will provide support to enable management to meet their business goals. They can now concentrate their tasks and focus on those tasks that help to meet business measurements and achieve business goals. These tasks include planning, budgeting, forecasting, modelling, monitoring, analysis, and so forth [3, 4, 5].

To enable the implementation of business performance management organizations may need to improve their business integration and business intelligence systems to provide proactive and personalized analytics and reports. Business integration and business intelligence applications and tools work together to provide the information required to expand and observe key performance indicators. If some activity is outside the limits given from the key performance indicator, a kind of signal can be generated to notify business users that corrective actions are needed. Business intelligence tools are used here to display these types of indicators and guide users in taking appropriate actions.

2. The connection between BPM and BI

Business performance management has important impact on the cost reduction, income increase and strengthening the competitive advantages of the company. This process enables to develop, observe and compare basic indicators for company operation through monitoring and management of core business processes and objectives that needs to be achieved by taking the appropriate actions that will give the expected results. BPM is a complex business approach for managing the combination of strategic and operational objectives with current business activities. This can be implemented with the usage of the business intelligence technologies. Business performance management is generating a high level of interest and activity in the business and IT community because it provides management with their best opportunity to meet their business measurements and achieve their business goals.

The creation and management of business performance is not a simple one-time process. The emergences of new technologies and changes in the company's goals that go along with contemporary economic trends have a huge impact on the management of companies. Products or services offered by the company itself suffer changes. As the changes in business environment are continuously occurring, companies need to modify business processes that affect their performance and success. To be one step before the competitors, companies must quickly detect strengths and weaknesses in their operations, which will enable them effective decision making. Business performance management allows flexibility for the companies that will adapt them to the rapid and ongoing changes. So, the needs of businesses are creating the usage of business performance management. But, the implementation of business performance is much more than installation and implementation of new technology. The company needs to examine the business environment and to identify necessary changes to existing business processes in order to be able to use solutions which business performance management can offer [6,7].

[9] BPM-abbreviation for Business Performance Management

Business performance management is actually a set of integrated analytical processes which using technology is focused to the financial and operational activities in a company. Basically, the process of business performance management include financial and operational planning, monitoring and reporting, as well as models and analysis of key performance indicators. These indicators relate to certain business activities that have common target. Monitoring and analysis of key performance indicators, enables managers and creators of the future of a company insight into the needs for optimal business performance. Applications and business intelligence tools are needed to provide information used to develop and monitor key performance indicators. For example, when a particular activity or process is outside the limits of the key performance indicators, alarming managers provoke corrective actions that need to be taken by them. Business intelligence is used to obtain key performance indicators and to guide managers to take appropriate steps to solve business problems that arise in the company.

Business intelligence is used by companies for long-term strategic planning, short-term tactical analysis and manage everyday operations and activities. Business performance management uses business intelligence to access, select, combine, and analyze information and their usage in making decisions that will affect the next steps taken by the management of the company.

Business intelligence has a great impact on business planning. This particularly applies to strategic issues such as increasing revenue, reducing costs and a decision about introducing new products or services. If the main goal of companies is to increase sales, then the use of business intelligence should give guidance with information about which products are mostly sold, which locations and price, what are competitors and the possible impact of marketing on total sales. Business performance management and business intelligence are complementary in supporting the strategic planning by providing systems that compare current situation in the company with business objectives and helps managers to identify ways of improving long-term business performance [8, 11].

Except the planning of long term activities for achieving the objectives of the company, the use of business intelligence can have a profound impact on daily operations and activities of the company regarding the development and execution of these short-term activities in an efficient manner. If one of the main objectives of the company is achieving bigger sales and profitability, then the way it can be realized, is reviewing the production and delivery of products in a shorter time with the lowest cost. Here tactical and operational part of the business intelligence is used to help decision making and taking the appropriate steps by the managers. The business intelligence can be used on well-known traditional way, where production and achievements of the planned production quantities and possible spending cuts in this process will be monitored. However, business intelligence can be used to monitor and control the working process to improve and manage the overall operation of the company. Some of the possible impact can be made by identifying opportunities to improve quality or reduce the variable costs associated with production. All these possibilities of business intelligence usage related to the establishment of strategies in a company, as well as taking the tactical and operational activities in accordance with business performance management, help the company to establish business plans and perform daily activities.

Managing the business performances include various types of information and data arising from the work of the company, such as information from regular business activities, analysis of past activities, business plans, forecasts, data from the external environment of the company and other. These data types are used and processed using business intelligence to create a basis that will enable business performance management. Analyzing from a financial aspect, key performance indicators and balanced scorecards are used as main financial techniques in business performance management. The various techniques of business intelligence are used in their development, such as: data mining, data warehousing, as well as on-line analytical processing [12, 13].

To overcome the problems of managing business performance using only the numbers and analysis, and to use business performance management to obtain specific numerical indicators as final results, non-financial data processing should be introduced. As examples we can mention customer satisfaction, research and development in the company, the external image and ratings of the company, the impact of the environment, employee satisfaction and other. All these data can be obtained by using social networks, blogs and web pages, and different types of media (newspapers, magazines, TV shows and others).

3. Balanced scorecards and KPI

In the process of setting the basics of business performance management, it is necessary to precisely define the key performance indicators. Each of these key performance indicators needs to express one of the major goals of the company and its future plans, so the management of these key business indicators will result in improved business performance. These indicators actually direct and guide the decisions of the company indicating whether the work the company is operating in accordance with predefined operating plans and strategies. Different types of companies have a number of key business indicators, from simpler to more complex. Business performance management needs to extract the most important indicators that are needed to process and thus to determine the next steps and ways to meet the objectives of the company. Among the long list of possible key performance indicators can be mentioned: the number of companies that are buyers of products, the average number of customers within a specified period, the value of products by customer, not fulfilled orders, temporary delay in delivery, accurate delivery, turnover, average costs of transportation to customers, sales trends, unplanned expenses, demographic separation of purchase, payment of outstanding debts and other. In the process of selection of key performance indicators managers can use as simple indicators as production in one shift, to more complex indicators that give results related to profitability by product, location or season. The choice depends on whether it is managed with daily operations or long-term business performance [14].

The need for business performance management is expressed in all levels and in relation to overall functioning in a company. Managers can recognize the need for strategic management of business performance that is the need to detect the linkage of strategy and business processes and activities undertaken to fulfil that strategy, and to analyze whether and how these processes successfully implement this strategy. Executive managers need performance management which will be consistent with the business processes they manage and should be linked to overall business strategy of the company, which provides the main reason for the use of balanced scorecards . Including business intelligence here, balanced scorecards actually are analytical applications that accumulate, model and display multidimensional performance information. These include financial, non-financial performance targets, daily indicators, analysis of trends in the company and other. Traditional business intelligence tools are used for complete critical processing of collected data, analysis and presentation in order to set objectives in managing business performance.

Balanced scorecards provide a framework for organizing strategic objectives in four different fields: financial, customer, internal business processes and development. The financial section deals with development strategy, profitability, and risk viewed from the perspective of shareholders and other stakeholders directly and indirectly related to the company. In terms of customers, the strategy is to create values and differences of the company in comparison to the other companies that will be visible by customers. Strategy in terms of internal business processes is giving strategic priorities for various business processes that affect the objectives of the company. Development, as one of the four parts from balanced scorecards, is providing a climate that will support organizational change, innovation and growth of the company. These four fields provide the basis for constructing the plan that will include and implement these strategies. Here are several critical elements that will have a direct connection to organizational strategy, such as the growth of productivity, profitability growth by increasing the part of the market where the company is represented, improve operational processes and achieving the goals, innovation in products and services, as well as the need for investment to generate sustainable development. Creating the logical architecture of the strategic framework with the help of these elements, managers have clear picture of the company's goals and how those goals will be achieved [15, 16].

Non-financial indicators enable managers' better insight to the overall functioning of the company, because many non-financial indicators can often reflect intangible values in the company, which accounting rules refuse to accept for processing. In addition, non-financial indicators provide information about specific activities that should be taken to achieve certain strategic objectives. Contemporary modes of operation require from the companies to identify areas where non-financial indicators can have a major impact on the implementation of the given strategy. In addition, proper selection of non-financial indicators and their proper connection with the financial indicators provide sufficient basis for deep analysis that managers should make for better functioning of the company. But, it is important to determine which non-financial factors have the greatest effect on long-term economic performance. Choosing an appropriate model according to which the managers will determine the non-financial indicators and establishing database, which transformation into information will give the values of the indicators, are the most important parts in setting the foundations for getting the non-financial indicators important for the companies [17].

4. Conclusions

The management in the company need to focus on ways of implementing business performance management in software tools, where using the balanced scorecards will overcome difficulties with the management of data in the company collected from different sources. These data should be integrated into data warehouse, where it will be saved for further processing and presented with usage of different graphical tools. Through the implementation of business performance management, multidimensional business data and specifically named information parts (perspectives, objectives, initiatives) that are used by balanced scorecards will be linked. Also, the connection between different parts will be established. Implementation applies in relation to the preparation of special reports that will provide a graphic display of important indicators. Well performed implementation will be of great importance for managing the companies and improve their business performance.

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