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Using of KPIs and Dashboard in the analysis of Nike company's performance management

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Abstract. *The purpose of management control is to increase the motivation of managers and to create a greater convergence of objectives within an organization. It is a well-established management principle that what cannot be measured cannot be managed. However, it is equally true that what cannot be monitored cannot be well managed. This is where business dashboards come in. Living in an age of digitalization in which the world is changing and adapting to the complex systems of society, businesses must always be prepared with the tools necessary for adaptation. This article describes some important concepts in enterprise performance measurement management exemplified by Nike. In addition, a dashboard will be designed and the importance of monitoring key performance indicators will be highlighted.*

Keywords: enterprise performance management, Dashboard, KPI, business analysis.

JEL Classification: A10, G12, G17, L25, M2.

1. Introduction

Business analysis is a set of activities that coordinate change in an organizational context by defining needs and proposing solutions that bring value to the business. This value is determined by achieving benefits, reducing costs and identifying new opportunities within the organization.

Business analysis: According to BABOK® (A Guide to the Business Analysis Body of Knowledge – Babok Guide, 3rd edition), is the *practice* of enabling *change* in an enterprise/organization by *defining needs* and *recommending solutions* that *provide value* to stakeholders.

Business analysis is a relatively new economic discipline that promises to provide great benefits to organizations, ensuring that business requirements are aligned with the business change solutions implemented. Many of these solutions will include new or improved IT systems, and others may have a broader purpose, incorporating changes in areas such as business processes and employee roles.

Living in an age of digitalization in which the world is changing and adapting to the complex systems of society, businesses must always be prepared with the tools necessary for adaptation.

The vision of modern companies is to easily manage the wide range of products and services they offer that are supported by multiple processes, organized in several points of the business network, which must be carried out as efficiently as possible through various communication channels.

It is well known that enterprise is an important point in a country's economy, being the most eloquent example of a complex adaptive system. Like a fitness landscape represented by speed, intelligence and endurance, the business sector must be able to maintain intense and varied connections.

The need to identify useful tools that would help improve or increase performance is current and of great interest to all businesses. Experiencing a world in which we are surrounded by a multitude of data, the need to maintain the strategic direction set by a company, to reduce the uncertainty of making the right decisions, exists.

This research aims to analyze how key performance indicators (KPIs) are used in order to monitor the performance of the Nike company but also how to design an effective dashboard for this purpose.

2. Theoretical concepts on Key Performance Indicators (KPIs)

Often, the information found in dashboards is dashed by both the customer and the managers. These elements are called KPIs.

In Wayne W. Eckerson's view, a KPI is a way of measuring the performance of a company or an individual, the organizational or strategic activity that is crucial for the current or future development of a company.

KPIs are high-level snapshots that look at a project evolving from predefined targets. KPIs measured with current achievements will influence future ones. KPIs are essential elements of added value to a company.

Terms such as “cost variation”, “time”, “performance”, “cost”, “implementation time”, “collection period” are considered KPIs if used correctly, even if they do not always appear under this name. The need for KPIs is simple: What can be measured, can be achieved!

If the purpose of a performance measurement system is to improve efficiency and effectiveness, then the KPIs used must reflect measurable elements. It does not make sense to measure an action if users are unable to change the result.

For more than four decades, the only KPIs have been their time, cost, and derivatives. Today, it is well known that true results cannot be measured in terms of time and cost alone. That is why there is an increased need to use other KPIs. It has been shown that many KPIs can be contained in a single KPI. For example, the customer satisfaction KPI can be a mix of time, cost, quality and efficient communication in the customer relationship. KPIs are derived from formulas that help us combine other elements of measurement into a single KPI, which is also specific for the benefit of a company.

What is or is not a KPI is defined by each company. Project managers need to explain to management the difference between metrics and KPIs, why certain KPIs are presented in a dashboard. For example, metrics focus on completing projects, reaching intermediate stages, and meeting performance goals. KPIs focus on future outcomes and this is the information needed by stakeholders (decision makers) to make decisions. Simply put, metrics risk getting stuck in the past. With the help of KPIs one can understand how to use this data for future decisions. Neither metrics nor KPIs can anticipate the success of a project, but KPIs can provide much more accurate information about the end result if the trend continues.

The fact that stakeholders are interested in metrics/KPIs and dashboards does not guarantee that they will understand what will be presented to them. It is imperative that stakeholders understand the information presented in the dashboard in order to draw the right conclusions. The risk is that stakeholders do not understand the indicators and then reach erroneous conclusions and lose confidence in the concept of measurement by indicators. Restoring confidence in the performance measurement process can take a long time and become expensive.

With all this in mind, it is necessary that in the first months of using the concept of performance measurement, the project manager periodically informs each stakeholder so as to ensure that they understand what they see and always reach the correct conclusion.

We have previously stated that what is measured is achieved and that by measurement the understanding of information is obtained. If the purpose of a measurement system is to achieve efficiency and effectiveness, then KPIs must reflect controllable indicators. There is no point in measuring an activity or a KPI if the user cannot change the result because the KPI will not be accepted by stakeholders.

Stakeholders: Each task includes a list of stakeholders who will participate in or be affected by it. A stakeholder is an individual with whom a business analyst will interact directly or indirectly during the ongoing task. Any stakeholder can be a source of requirements, assumptions or constraints.

Some of the stakeholders involved in a business initiative can be found in the following list, which is not exhaustive and can vary depending on requirements.

- Business analyst: Inherently a stakeholder in all activities specific to business analysis. According to BABOK, he is responsible and accountable for these activities.
- Customer: Uses products or services provided by the company and may have contractual or moral obligations that the company undertakes to fulfill.
- Expert in the field (business): Has detailed knowledge about a specific topic relevant to the business need or scope of the solution. Here you can find people such as managers or consultants.
- End user: Interacts directly with the solution. Here you can find all those who participate in a business process or use the proposed solution.
- Expert in the field (implementation): Has extensive knowledge regarding the implementation of one or more components of the solution. Some of the people who can fulfill this role are: developer, solution architect, database administrator, change manager.
- Operational support: Responsible for the regular maintenance of a system or solution. It can be provided by: operations analysts, technicians, launch managers.
- Project manager: It manages the activities necessary to deliver a solution that meets a specific business need and the achievement of project objectives, taking into account factors such as scope, budget, program, resources, quality and risk.
- Supervisory authority: Responsible for defining and imposing standards. Standards can be imposed on the solution through legislation, corporate governance methodologies or auditing. These include: the government, public regulators and auditors.
- Sponsor: Responsible for initiating the effort in defining a business need and developing a solution that meets that need. They authorize the efforts to be made and control the budget and the scope of the initiative.
- Supplier: Stakeholder who is outside the boundaries of a particular organization or business area. It provides the company with products or services in accordance with contractual or moral obligations to be fulfilled. These include: consultants, vendors, providers.
- Tester: Responsible both for verifying how the solution meets the requirements defined by the business analyst, and for directing the verification process. They also ensure that

the solution meets quality standards and that the risk of gaps is well determined and minimized. An alternative role is that of Quality Assurance analyst.

Collaboration between stakeholders involves frequent and two-way communication. Collaborative relationships help maintain the free flow of information when obstacles arise and promote a common effort to solve problems and achieve the desired results.

It is a real challenge to work with stakeholders. There are complex situations that need to be overcome, such as:
- Convincing stakeholders to accept KPIs can be difficult, even if they understand and have experience in project management.
- Before presenting the KPIs to stakeholders, it is necessary to check whether the KPIs are in the system or should be collected.
- The cost, complexity and duration of obtaining the information must be established.
- The risk of the IT system changing and losing its relevance in an asset change process may impact the collection of information needed by KPIs during a project.
- Some KPIs may not appear from the beginning, over time stakeholders will request the inclusion of additional KPIs in the system.

The ultimate goal of a KPI is to identify what is needed to improve performance and maintain strategic direction. If the measuring system is set for short periods of time, the team can react immediately to correct errors.

KPIs are pre-set quantifiable units of measurement that reflect the major success factors of an organization. They are units of measurement that measure the evolution of organizational objectives. It is a real waste of time to select and implement KPIs that cannot be controlled.

For example, a blood pressure monitoring device tells us the blood pressure, if it is too high or too low, but does not explain to the doctor what to do to bring it to normal parameters. KPIs aim to reduce uncertainty in order to make the right decisions. Qualitative measurements of indicators and KPIs can be used and should be used as levels of quantitative measurements. Eventually quantitative measurements become qualitative.

The literature often identifies the characteristics of KPIs using the SMART rule.
- **S**pecific: The KPI is clear and focused on achieving the organization's goals and objectives.
- **M**easurable: KPI can be represented by quantitative units.
- **A**chievable: A KPI can be achieved with the available capacity and resources.
- **R**elevant: The KPI contributes to the intended impact of the organization.
- **T**ime bound: The KPI is framed in a time interval.

Although the SMART rule is a valid model, its applicability to KPIs is debatable. Perhaps the most important attribute of a KPI is that it is ACTIVE. If the intermediate result is not favorable then users should identify what action can be implemented to correct the trend. Users must be able to control the result. This is a weakness of the SMART method.

Wayne Eckerson has developed a more sophisticated set of 12 features for KPIs. The features are more suitable for business KPIs.

1. *Strategic:* KPIs are adapted to the company's objectives.
2. *Simple*: KPIs must be straightforward and easy to understand, without containing complex indicators that are difficult for users to identify.
3. *Assume:* KPIs must be assumed by an individual or group within the organization, who can be held accountable for the outcome.
4. *Actionable:* KPIs are regularly monitored in order to be able to intervene when necessary.
5. *Frame time*: KPIs can be updated from time to time so that performance is improved if needed.
6. *Benchmarks:* Users can return to the original form of the KPI.
7. *Precise*: Performance Indicator data can be measured and reported with reasonable accuracy.
8. *Correlate:* The KPI can be used to achieve the expected result.
9. *Practices:* The use and analysis of KPIs have shown that the data must be realistic.
10. *Align:* KPIs must be aligned with the organization's strategy and objectives.
11. *Standardized*: KPIs are based on standardized definitions, rules and mathematical formulas so that they can be integrated into dashboards.
12. *Relevant:* KPIs lose their impact over time, so they need to be periodically reviewed and updated.

KPIs should be understood and used there and when they are needed and help complement the performance management framework, business dashboard, balanced dashboard or business intelligence strategy. To facilitate the design of dashboards and scoreboards, the KPIs introduced are grouped according to the key business perspectives they present and which are used by most organizations, regardless of the type or branch of activity*: Financial perspective; Customer perspective; Marketing and sales perspective; Employee perspective; The perspective of corporate social responsibility.*

3. Scorecard, Dashboards and Reports

There is a fine difference between scorecards, dashboards and reports. Each of these tools can combine elements that belong to the other tool, but in essence each addresses a distinct level of the organization's decision-making process.

Scorecard: Starting with the highest and strategic level of decision of the organization we find the scorecard. The scorecard is mainly used to help align the operational level of the business with the strategic one. The main purpose of a scorecard is to keep the business oriented towards a common strategic plan, by monitoring in real time the execution and reporting the results of that execution to a specific strategy. The basic indicator of a scorecard is the KPI. These KPIs are often a combination of several indicators that measure the organization's ability to implement a strategic plan. An example of a KPI scorecard is

“Profitable Sales Growth” which combines in a single Indicator the following units of measurement: enrollment of new customers, sales volume, operating profit.

Dashboards*:* At the next level after the scorecard, in the decision-making process of the organization, the dashboard is located, given the fact that it focuses more on the presentation of results, operational objectives. An operational objective can contribute to one or more strategic objectives. In a dashboard the focus is on how to achieve the operational objective itself, not on the strategy. The purpose of a dashboard is to provide users with specific business information in a format that is both intuitive and easy to understand. The information transposed in a dashboard is based on units of measurement and performance indicators.

Reports*:* Probably the most prevalent BI tools are reports. They can be very simple and static in nature, such as a list of sales over a period of time, or sophisticated report tables that contain groups of information, pivots, analysis of information. Reports are best when the user needs to analyze raw data in an easy-to-read format. When combined with scorecards and dashboards, the reports amazingly allow users to access raw information that is the basis for determining units of measure and KPIs.

An enterprise dashboard is a graphical visualization tool connected to different databases. These databases are generated by enterprise systems such as the core platform, CRM, credit processing system and other database systems.

A dashboard is used to track and present the KPI implemented at the institution level. They track company results such as customer trends, financial results, just about anything you want to track as long as there are databases. A dashboard helps you keep track of developments over time, historical and recent, such as customer and funding developments. At the same time, a dashboard also helps to generate future predictions using analysis systems.

At the base of a dashboard that provides correct information and for the understanding of decision-makers, or those directly interested in monitoring the activity are:

- Selection of KPIs.
- Database preparation.

Even if it seems incredible, the technology used to create a dashboard does not matter. All the tools used in creating a dashboard, Power BI, Tableau, Qlik, Datapine are the same at the end of the day. What is most important is the database used and the establishment of the KPIs needed to be analyzed, presented.

3.1. Using applied software to design Dashboards

For every organization in the digital age, the volume and value of data is constantly increasing. If you want to get more value out of the available data, then you can use the dashboard technique that serves as an essential tool for monitoring and control within an organization.

In one place, quickly and effortlessly, we can get a precise and deep understanding of business data through a simple graphical interface. To gain in-depth knowledge about this, let's continue to introduce Dashboard software, with a special note on free and open-source Dashboard software solutions.

Having laid the groundwork for an effective organizational dashboard, it is worth noting that the dashboard software must also meet the standards of any good software, which includes the following:

- Quick response. Users should not be too late in retrieving dashboards and associated reports.
- Intuitive. End-users should not be forced to go through a large learning curve or compulsory training.
- Web-based. Users should be able to access the dashboard via the web if they have adequate access rights. The web-based feature can also be called thin client.
- Secured. System administrators can easily manage security software to reduce and track improper access. The software must also provide data encryption to ensure the transmission of sensitive data over the Web.
- Scalable. A large number of users can access the software without the system crashing or slowing down below an acceptable level of performance. This quality requires a reasonable size of hardware and network.
- Compatible with industry. The software should integrate with the standard databases of different vendors and work with different server standards (e.g. Net, J2EE) and different operating systems (e.g. Unix, Windows, Linux).
- Open technology. Software should not have proprietary standards that make it difficult or impossible to extend it in a complex IT environment. It should work well with the predominant protocols for information exchange, such as XML, ODBC, JDBC, OLE DB, JMS and Web Services. Note, open technology does not mean open source, which mostly refers to free software with open access to the source code.
- Sustainable. It should be easy to manage a large deployment of existing IT staff with limited training in on-board software. In other words, the software should not be so complex as to require a long-term contract or hire another expert to support its deployment, assuming that the organization has reasonably qualified IT staff.

3.2. Some software used for dashboards design.

1. Seal Report(1): is a free open-source dashboard software that provides a framework for daily reporting. With minimal effort, dashboards can be created using any database as a source.

This software has limited business intelligence capabilities. The emphasis is on easy installation and quick report design. Once the software is set up, reports can be built and delivered in minutes.

Seal Report contains the Report Designer application that helps you create, edit, and run reports. The server manager in this software performs administrative activity. The end user can edit and run dashboards using Web Report Server. The activity scheduler schedules the execution of the report.

2. Dashbuilder[2]: The non-technical user can visually create business dashboards by using this free dashboard tools. Data can be extracted from the dashboard from heterogeneous sources of information, such as regular text files. This complete web application is based on Uberfire.

The new version of this software is UF Dashbuilder which has many amazing features and user interface. For building dashboards and business reports, this software is an open-source platform. Target users of this tool can be managers or business people who act as consumers of dashboards and reports.

3. Grafana[3]: The Grafana serves as an open-source dashboard for excellent analysis and monitoring. With this free dashboard software, users can create dashboards with panels. Within a set time frame, this panel represents specific values.

For any specific project or business need, you can customize the dashboard because it is versatile. This open-source application for analysis and monitoring works as a powerful tool for computerized business decisions. It is a flexible software that supports multiple data sources.

This analysis platform allows you to query and view different KPIs. A data-driven culture can be promoted by creating, exploring and sharing dashboards with team members.

4. Datapine[4]: It is another software tool that helps companies turn valuable data into new perspectives and make real-time data-based decisions, with the help of which they can design an efficient dashboard.

Datapine has a user-friendly interface that allows it to be understood by non-technical users as well. It offers a variety of innovative BI 4.0 features, such as smart alerts, predictive analytics and interactive dashboard features.

5. Case study: Nike's performance management

Nike Company, Inc. was founded in 1964 by Bill Bowerman and Phil Knight, based in Beaverton, Oregon. At first, the company was known as “Blue Ribbon Sports”, then changed it to NIKE in 1971. Currently, the company's executive director is Mark Parker (since 2006).

The Nike story begins with a small sports shoe distribution point in the trunk of Phil Knight's car. From these seemingly unfavorable circumstances, Phil started the company that created a real culture and a lot of fashion trends. The company was born out of the need for Oregon athletics coach Bill Bowerman to find more durable running shoes and Phil Knight's desire to make a decent living, without giving up his passion for athletics. The first pair of shoes was designed with the help of a waffle maker. Watching his wife prepare the waffles, Bill came up with the brilliant idea that such a model would be suitable on the running track, that's how the Nike Waffle Trainer was born.

Nike's core business is the worldwide design, development, manufacture and marketing of high-quality footwear, clothing, equipment and accessories. NIKE is the largest seller of sports shoes and clothing in the world. Nike is identified by a mix of independent distributors and subsidiaries in over 120 countries around the world. Almost all footwear and clothing are produced outside the United States, while sports equipment is produced both in the United States and abroad. Nike Inc. sells its products through its online stores, retail, direct sales, wholesalers and other third parties. The fiscal year of the enterprise consists of 52 or 53 weeks and ends on the last Saturday of September.

The suppliers of any organization are those economic agents that provide the entity with the resources it needs to carry out the activity, so with their help the production process is carried out. In general, companies have to choose their suppliers based on certain criteria such as: geographical location (for the supply and distribution chain), transport costs, economic power and market share, the price they offer for goods or services provided, the quality of resources and supply, but also the seriousness and compliance with the contract drawn up. Because labor is quite expensive in the United States, about 99% of footwear is produced abroad. In the case of Nike, most factories are located on the Asian continent, in countries such as China, Taiwan, India, Thailand, Vietnam, Pakistan, the Philippines and Malaysia. The reduced supply chain allows the company to save $ 0.15 per piece compared to a classic distribution model. For the Nike company, which transports over 900 million pieces a year, these savings represent a real competitive advantage.

The efficiency of the Nike company increases from the low production costs. Instead of owning its own factories, the Nike footwear division requires the services of independent manufacturers located in 14 countries around the world. Most of the independent factories (96%) are located in Vietnam, China and Indonesia.

Beyond the production process, Nike also relies on independent companies to supply raw materials for footwear from the countries where they are produced. This allows Nike to reduce its intermediate costs by limiting the number of suppliers with whom it has to negotiate contracts. Once the shoes have been manufactured, the items are shipped to 57 distribution centers around the world. In the United States, the company operates five major distribution centers in Memphis, Tennessee.

Although sales to wholesalers continue to account for the vast majority of Nike's revenue, the company is making serious efforts to expand its presence in other distribution channels, especially DTC-direct to customer sales. In 2012, 83.3% of Nike's revenue came from wholesale sales, while 16.2% came from DTC sales; by 2013 these values decreased to 79.2%, respectively increased to 20.3%. DTC sales allow companies to interact directly with consumers, provide improved customer service, and become more aware of what customers really want.

Another potentially disruptive factor that Nike's production and distribution process will have to deal with is automation. The high cost of labor in the United States is the main factor pushing production abroad, but as robotic technology improves, companies like Nike have the opportunity to remove these unnecessary costs and resume many of their production operations.

According to Morgan Stanley forecasts, "Almost 20% of Nike and Adidas footwear production will move to more automated factories by 2023, due to a commercial environment" buy now, wear now "forced by the transition to e-commerce".

If the automation goes as planned – a report by the International Robotics Federation claims that about 1.3 million new robots will be installed in factories in the next three years – companies like Nike could firmly consider restructuring their production strategies.

However, a company as expansive as Nike must continue to find ways to minimize production and distribution costs across all of its production channels. This will require great responsible logistics planning, as well as a firm commitment from Nike to be as innovative in its distribution operations as it has been for decades in product design.

5.1. SWOT Analysis

First of all, it should be reminded what a SWOT analysis is and what it is used for. Therefore, SWOT analysis is a method of analysis-diagnosis that is performed in a relatively short period and that does not look for detailed solutions, but rather global solutions. Diagnostic analysis or SWOT analysis (Strengths-Weaknesses-Opportunities-Threats) is, in short, the analysis of strengths, weaknesses, opportunities, but also the so-called "threats". Thus, the four sections listed above for NIKE will be highlighted below.

Figure 1. *SWOT Analysis*

Source: The design is done by the authors.

5.2. Boston Consulting Group Matrix

The BCG matrix is a 2×2 matrix and uses the idea that economic performance is determined by two factors, namely the relative market share and the relative growth rate of the market.

The relative market share is the ratio between the market share of the company in question and the market share of the strongest competitor of the company. The relative market share expresses the level of market dominance by the firm. Market share also indicates the ability to generate income, with cash flow being the most important factor: the higher the level of market dominance, the greater the company's ability to generate liquidity.

The market growth rate is an important indicator for two reasons. In a fast-growing market, sales of a product may grow faster than in a slow-growing market. This increase in sales thus attracts a large amount of cash that can be used to grow the business.

Taking into account these two factors, the products are classified as follows:
- STARS (stars) – high market share/high market growth (cash neutral – does not generate cash).
- MILK COWS (high market share/low market growth (cash generators).
- Question Marks – low market share/high market growth (cash flow).
- Dogs – low market share/low market growth (cash neutral – does not generate cash).

In order to be able to build the BSG matrix, we selected 4 Nike brand products for which we found or estimated the relative market share and the relative growth rate of the market. The first product selected is part of the Nike equipment category and is a white "Utility Power" (Product 1) sports bag for men.

The second product chosen is part of Converse for Nike, namely "Converse Chuck Taylor All Stars Low Top" (Product 2).

In this category, Nike competes with brands such as New Balance, H&M, Zara, etc. for casual, sports shoes. Thus, a growth rate of 14% and a market share of 12% were estimated. The leader in this market is New Balance with a market share of 25%. Another product to analyze is part of the Nike Skateboarding category and is called "Nike SB Zoom Stefan Janoski Canvas RM" (Product 3).

A last selected product is part of the Men Apparel category and is represented by Nike "Trening B NSW TRK SUIT CORE BF" (Product 4).

To achieve the BCG matrix, we will need a series of data. We will use the data related to the 4 products above from NIKE's portfolio. The information of the indicators used are summarized in the table below.

Table 1. *Data used for the construction of the BCG matrix*

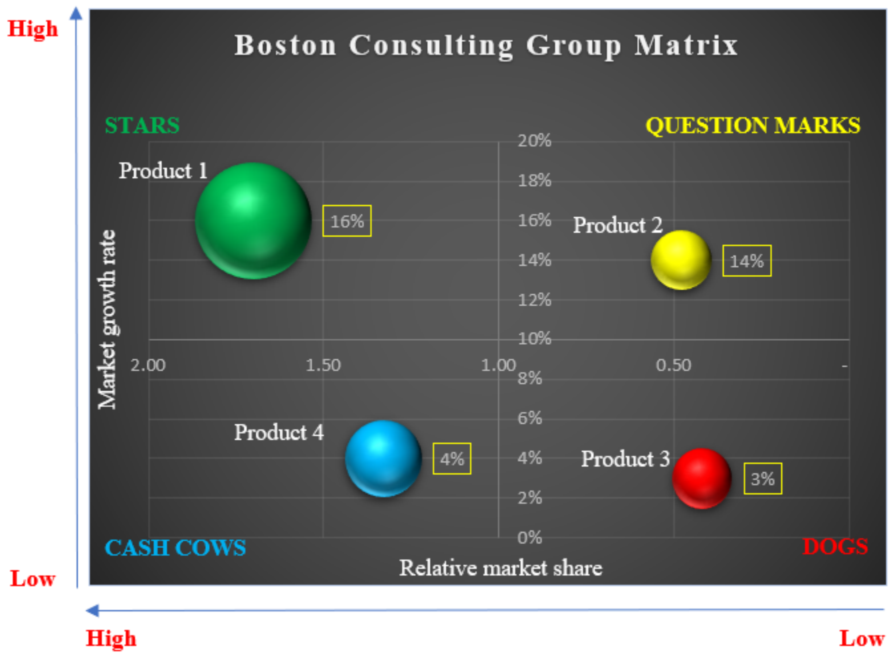
Products	Market growth	Market share	Market share of the largest competitor	Relative market share
Product 1	4%	20%	15%	1.33
Product 2	14%	12%	25%	0.48
Product 3	3%	12%	28%	0.42
Product 4	16%	46%	27%	1.70

Source: The calculations are performed by the authors.

It is necessary to know the notions of market growth, market share and relative market share). In order to obtain the relative market share, you must divide the market share of the analyzed product by the market share of the most important competitor.

Boston Consulting Group helps companies increase their efficiency in terms of successful business activities. To this end, the matrix plays an important role because it is a useful tool for strategic product performance planning at industry and company level. The matrix was introduced in 1970 by Bruce Doolin Henderson, president and CEO of Boston Consulting Group, and has since been used by many corporations to improve their ability to run them business efficiently and profitably. The BCG matrix needs a systematic classification rule, being an exploratory analysis tool based on interactions, so as to obtain the consensus between different managers and the analysis of the personalized classification scenario. The matrix provides recommendations for the development of strategic resource allocation and strategy development in the typical multi-business company. It is argued that relative competitive position and growth are the two fundamental parameters that must be taken into account when determining the strategy that an individual business must follow when viewed in the context of the company's overall business portfolio.

Figure 2. *BCG Matrix for Nike's Portfolio*



Source: The design is done by the authors.

From the BSG matrix above it can be seen that the equipment and accessories are Cash Cows for the Nike company. They generate cash to turn questioned products (dilemmas) into dairy cows. To support these products, Nike has hired a lot of celebrities for advertising and invested in an innovative design.

In the chapter Star you can find sportswear. Certainly, the leader of the Nike product portfolio are Nike shoes (Nike Air Max etc.), but they have not been analyzed because Nike is the leader in this market segment, holding the largest market share. It seems that due to the pandemic period, sportswear has become a star of the portfolio because there have been changes in the lifestyle of consumers. The stars bring in the highest income, but can easily be converted into dairy cows if growth strategies are not carefully managed.

The Nike Converse product category can be found in the Dilemmas or question marks category. If Nike adopts effective and specific strategies, this product can be converted into a Cash Cows. For such a product there is a higher market growth than market share. Converse almost came out of the top of consumer preferences, as many athletes stopped using or switched to similar models provided by competitors. In the Dogs dial we are dealing with product 3, i.e., the Nike Skateboarding category. These products do not consume too much cash, nor do they generate enough profit. Nike skateboarding looks like the company's dog because it is not the heart of skateboarding brands, so it does not receive enough support/feedback from people.

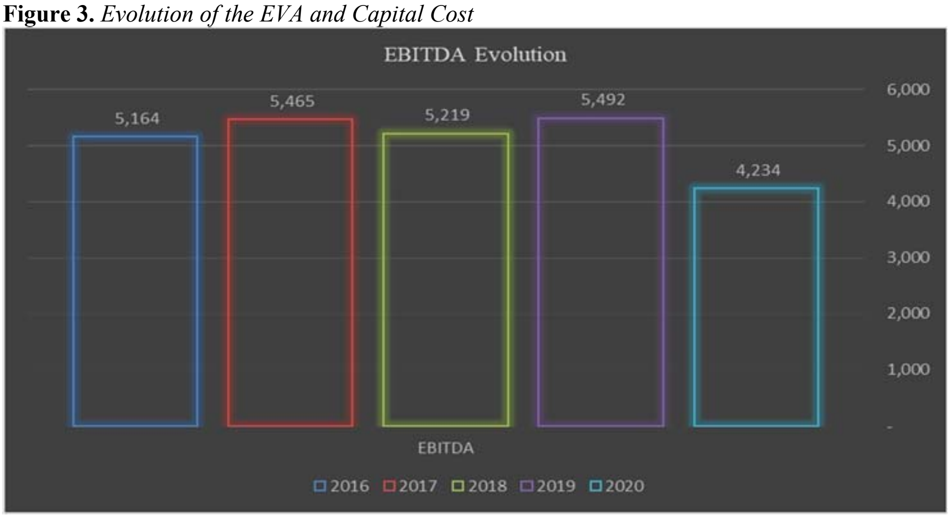
5.3. Analysis of key performance indicators

5.3.1. Financial perspective

A. EBITDA

This financial indicator allows us to better compare companies and their operating profitability without taking into account their capital structure. EBITDA is a measure of an enterprise's operating profitability over time that will eliminate the potentially distorted effects of changes in interest, taxes, depreciation and amortization. Therefore, this indicator is the sum of net profit, cost of interest, cost of taxes, cost of depreciation and amortization. To identify the profitability of Nike, we will analyze the historical values of this indicator for the last 5 years (2016-2020). Values are expressed in millions of dollars.

Figure 3. *Evolution of the EVA and Capital Cost*



Source: The design is done by the authors.

B. EVA (Economic Value Added)

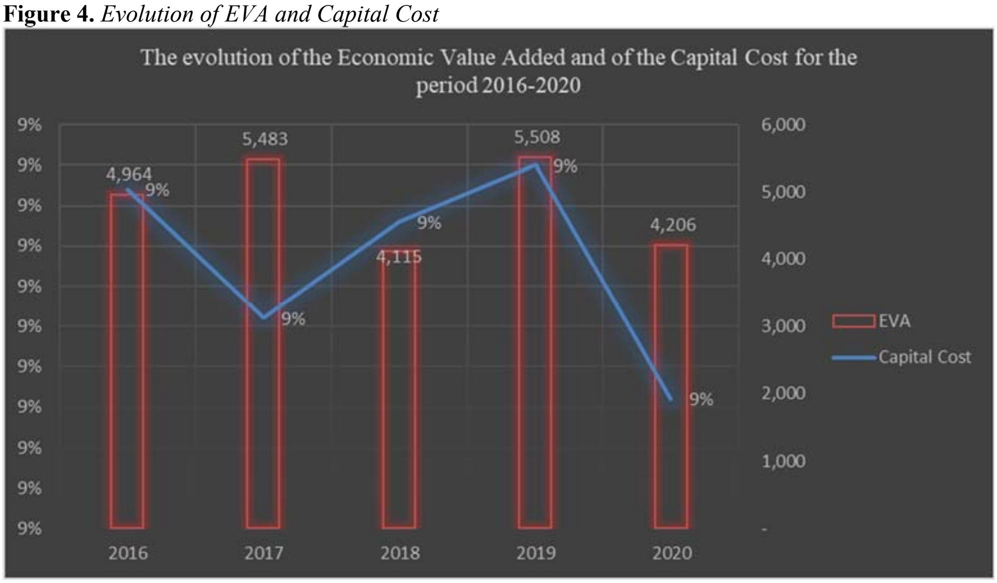
We will use this indicator to receive confirmation of the profitability of Nike and its projects. EVA is calculated as net operating income after tax less costs to finance the company's capital. The formula is:

$$EVA = NOPAT - (WACC \times K)$$

where:
NOPAT – Net Operating Profit after Tax.
WACC – Weighted Average Cost of Capital.
K – Economic Capital used.

WACC is the rate that a company is expected to pay on average to all holders of securities to finance its assets; Like net income, the highest value for Nike is recorded in 2019 at a rate of 9.35% expected to be paid to holders of securities to finance their assets.

Figure 4. *Evolution of EVA and Capital Cost*



Source: The design is done by the authors.

If a company's EVA is negative, it means that the company does not generate value from the funds invested in the business. Instead, a positive EVA shows that a company produces value from the funds invested in it. Therefore, Nike is showing performance on this indicator, producing a maximum value of 5508 million dollars in 2019 from the invested funds.

5.3.2. The customer's perspective

A. Customer satisfaction index

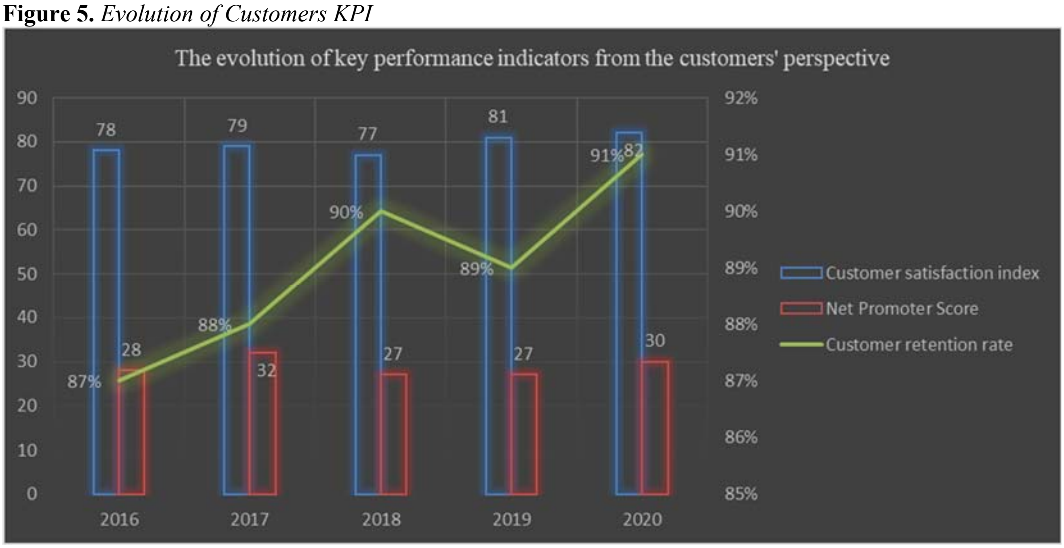
To assess customer satisfaction, we will analyze these indicators to get an idea of the success of the Nike organization in providing products and services in the footwear market.

Nike has always invested in keeping its customers interested and loyal by offering superior quality of its products and efficient distribution chain and being aware that it is much more difficult to gain new customers, thus relying on customer retention and satisfaction already existing.

B. Net promoter Score

This indicator measures the customer experience and predicts business growth. This proven value has transformed the business world and now provides the basic measure for customer experience management programs around the world. Any score that is greater than 0 is considered good, as this indicates that Nike has more promoters than detractors and that Nike customers are loyal to the company. Also, scores above 20, as in our case, are considered to be favorable.

Figure 5. *Evolution of Customers KPI*



Source: The design is done by the authors.

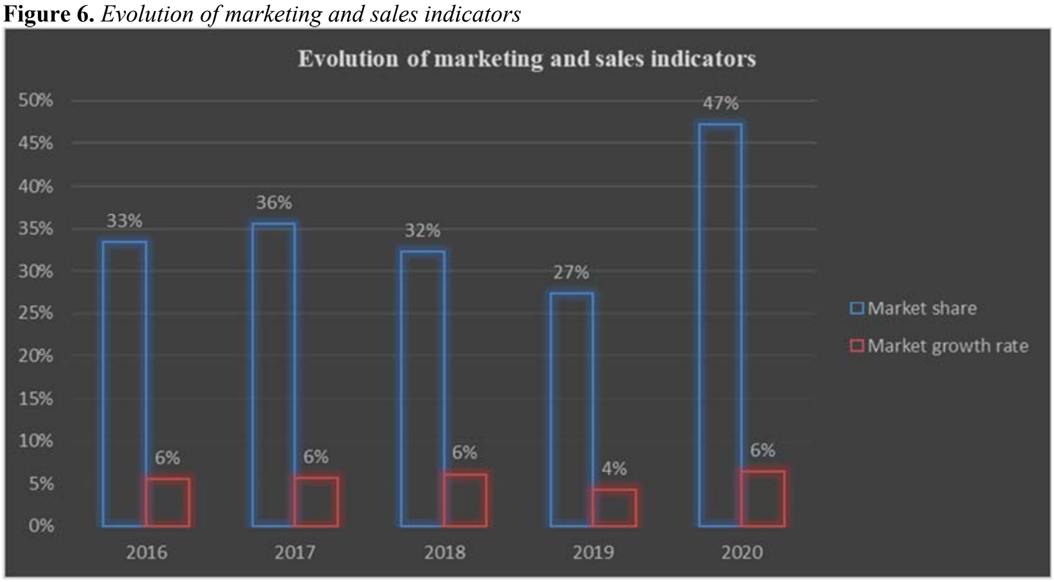
C. Customer retention rate

This indicator is calculated according to the number of customers at the end of a period, the number of new customers in that period and the number of customers at the beginning of that period. The customer retention rate indicates what percentage of all customers Nike has managed to keep over a period of time. Nike customers have always been loyal to the company and usually those who have bought a Nike item in the past have returned to buy a Nike product in the following years due to the innovation that Nike brings to the footwear market, due to product diversification and models, due to the prices that are affordable and these are just some of the reasons that explain the high retention rates of Nike customers in the chart above.

5.3.3. Marketing and sales perspective

Key sales performance indicators are measurements that tell you how your business is doing in terms of conversions and revenue. You can analyze the sales KPIs related to a certain channel, time period, team, employee, etc. to make the best business decisions.

Figure 6. *Evolution of marketing and sales indicators*



Source: The design is done by the authors.

A. Market share

We used this indicator to analyze Nike's competitive strength and market growth potential.

As market share is a key indicator of market competitiveness, it allows managers to assess the growth or overall decline of the market, to identify key trends in consumer behavior and to see their market potential and market opportunities. Therefore, this indicator measures real market power and identifies opportunities for improvement. Being a market leader, Nike has almost doubled its market share in the last year compared to the previous year, thus placing itself in a competitive advantage.

Therefore, the company can often receive better prices from suppliers, because their larger order volumes increase their purchasing power.

B. Market growth rate

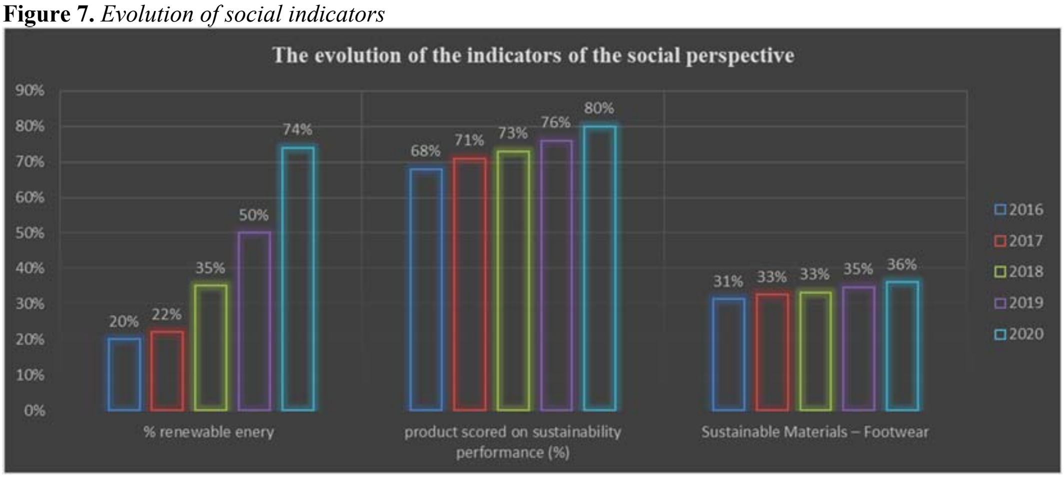
We studied the footwear market of the analyzed company, Nike, and we studied the main competitors and to better understand the size of the market and the rate at which this market decreases or increases, we evaluated this indicator for the potential for future revenue growth. The market growth rate is calculated as the total market sales for the current year analyzed divided by the total market sales for the year before the year under review. Therefore, in order to identify future growth opportunities in the footwear market and to increase the company's performance, we analyzed the historical values for the last 5 years.

In the current context, the footwear market is growing compared to the previous year but in the last 5 years the values have not deviated much from the average, which makes us think that in the coming years, the growth rate of the market will increase and will also be around the average.

5.3.4. The perspective of corporate social responsibility

Nike's goal in this regard is to reach 100% renewable energy by 2020. Values form an upward trend with a fairly accelerated growth which can be a positive sign in terms of achieving the Nike goal.

Figure 7. *Evolution of social indicators*



Source: The design is done by the authors.

5.3.5. The employee's perspective

To assess the likelihood that Nike will be financially successful in fulfilling its vision and mission of the organization, we analyzed this indicator of the level of employee involvement. Nike evaluates employee satisfaction through questionnaires delivered and completed in each quarter to take into account their wishes, but also their objections. Nike's performance in this field is very high, and employees are very satisfied with the place where they work.

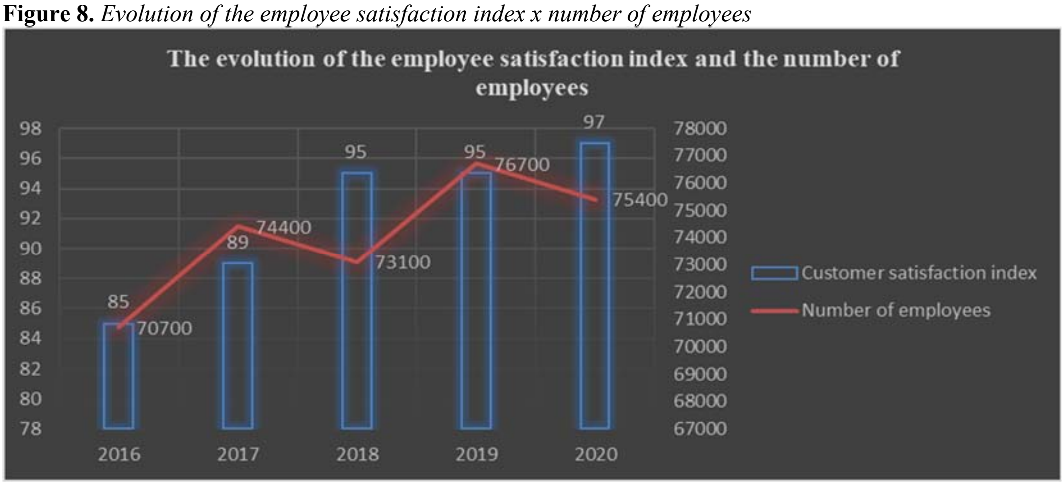
This is also seen online in the many appreciations of the CEO, the Nike representative.

From a customer perspective, although the NPS is a favorable indicator, Nike could invest more in retaining its loyal customers and attracting more customers so that the number of promoters is considerably higher than the number of detractors, and NPS to exceed 50. In this case, the company would be in the case of “Excellent”.

Nike can solve this problem by offering its customers several special holiday offers/promotions, diversifying the product chain, investing in the mobile application, researching and evaluating customer opinions distributed on various social networks and understanding dissatisfaction.

From a marketing and sales perspective, Nike in the last 5-6 years, except for the current year, was at the same market share, the average being 30% and the average growth rate of about 6%. Nike can raise these numbers by getting to know its customers better, by providing excellent customer service, by looking for new opportunities, by being present on social networks, by hosting events, by volunteering.

Figure 8. *Evolution of the employee satisfaction index x number of employees*



Source: The design is done by the authors.

Also, the brand capital is on an upward trend in the last 3 years, but it does not show a rapid growth. To increase the value of the brand, Nike must differentiate itself from its main competitors, the company must be creative with video marketing, have a strong team and be consistent.

From the employees' perspective, the indicator of involvement/loyalty score is favorable but not excellent. Of a small sample, one-third of employees were dissatisfied with working with Nike. Thus, Nike can improve this indicator by organizing trainings/team building/events for employees or by evaluating employee satisfaction through monthly questionnaires to be up to date with their grievances.

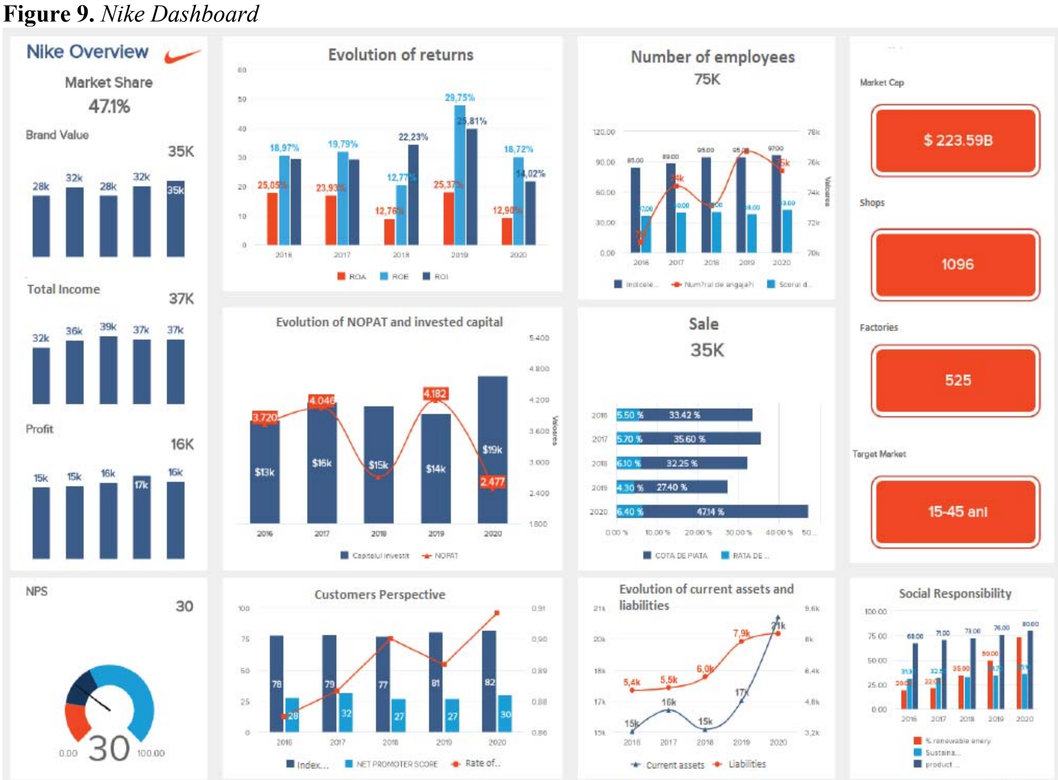
At the same time, the wage competitiveness rate is an important indicator here. Given that for a similar position, Nike pays more than its main opponent, Adidas, but not by much difference, the company could do a little research in this area and increase employee salaries to keep the commitment high and not loses employees to the detriment of the competitor.

6. Dashboard design for Nike Company

In the following I designed the dashboard for the performance of the Nike company that was made in Datapine. This dashboard highlights KPIs for both customer perspective, employee perspective, financial, marketing and sales and social responsibility, as well as general statistics such as Market Cap, number of stores, number of factories and target customer segment.

Various types of bar charts, line charts, speedometers, bar charts and line charts were used to create the dashboard to make the dashboard more interactive. Two colors were used, blue and orange and their derivatives because an unwritten rule is not to use more than four colors so that the dashboard is not too loaded, but also because these are the specific colors of Nike, and are found in most reports.

Figure 9. *Nike Dashboard*



Source: The design is done by the authors. The dashboard was design in Datapine.

In the dashboard we can observe how the customer's perspective was highlighted. For this perspective, a speedometer warning system for the Net Promoter Score indicator has been implemented, which suggests that when the needle is on the orange area, the company will have problems. Any score that is greater than 0 is considered good, as this indicates that Nike has more promoters than detractors and that those who purchase Nike products are loyal to the company. Also, scores above 20, as in our case, are considered to be favorable.

So, looking at the previous dashboard, it can be said that Nike is a very high-performing company and has no cause for concern in the near future, but it needs to invest and build strategies to keep its customers loyal (because switching costs are reduced, and customers could migrate to another competitor at any time), satisfied employees and try to raise satisfaction scores and Net Promoter Score, i.e. to have more promoters than detractors, which can be achieved through innovative products with pleasant design, easy to wear, increase product quality, improve the supply chain so that customer demands are met in a timely manner, more attractive ads, more interactive mobile application and more effective marketing strategies materialized through promotions, vouchers, etc.

In terms of financial performance, Nike is constantly growing, recording revenues of $ 39.1 billion in 2019, which means an increase of 7% compared to 2018, when the company's revenues amounted to $ 36.4 billion. About 42% of total revenue was generated by North America, 26% by Europe, the Middle East and Africa. 17% from China and 14% from the rest of Asia and Latin America. A Nike stock has risen from $ 1.17 in 2018 to $ 2.49 in 2019.

Analyzing human performance, it was found that the organization has more employees' promoters than detractors, a higher rate of salary competitiveness compared to the main player, Adidas and a very high employee satisfaction index. Nike believes that a skilled and involved workforce is the key to growth and sustainability. In their view, the employees involved means that they are valued and want to contribute positively and actively to business objectives.

To lead to such employees, Nike must ensure a safe work environment both physically and emotionally, with the active involvement of management to achieve this safe work environment. In order to be aware of the opinions, thoughts, emotions of employees, Nike has created a survey which is distributed in turn called "Engagement and Wellbeing Survey". Nike has been declared one of the top 100 companies to work for. Nike offers employee benefits such as fitness rooms on campus and discounts of up to 50% on company products. Employees can also bring their children and drop them off at one of the children's centers on campus.

Moreover, Nike is one of the most diverse companies in the world, in terms of ethnicity, religion, age, gender, etc.

In terms of environmental and social responsibility, Nike is taking drastic measures. By 2025, Nike aims to use 100% renewable energy, by 2020, Nike wanted 100% of the cotton used to be produced as sustainably as possible, to use more and more sustainable raw materials for both clothing production, as well as for the production of footwear and reduce carbon dioxide emissions greatly.

Since 2010, Nike has collected over 7.5 billion plastic bottles from fields and rivers, which it later turned into recyclable polyester and used in making clothes and shoes. Today, approximately 76% of Nike products in the clothing and footwear category are made from recyclable materials.

Transportation routes to and from distribution centers have been optimized to reduce CO_2 emissions by 30%, emphasizing Nike's commitment to building the greenest and most sustainable supply chain possible. Nike wants to transport its products in a sustainable way, thus reducing costs at the same time. Nike decided to transport its products on cargo ships in exchange for air transport.

Thus, it saved 8 million dollars in one year. With this change in mode of transport, Nike aims to reduce its environmental footprint by reducing carbon dioxide emissions by 30% by 2020.

7. Conclusions

Performance analysis is one of the main concerns of a company's management, because only by analyzing the activity and identifying problems in the processes can maximize profit. Thus, it is necessary to select the most appropriate methods according to the company's objectives.

The main tools for information management and analysis of the indicators detailed in this paper are: Balanced Scorecard, which aligns the company's activities with its vision, Benchmarking, through which you can identify strengths and weaknesses, the performance pyramid, which is focuses on external effectiveness and internal efficiency and the dashboard, which presents an overview of the company's results. At the same time, it is necessary to determine trends and predict future market requirements, in this regard being addressed certain methods such as logistic regression and extrapolation.

An effective analysis of an enterprise starts from key performance indicators (KPIs), which are the basis for decision-making. They aim to align with the objectives and take over the best strategies and practices.

Nike Inc. is one of the main manufacturers of sportswear and footwear, with the largest market share. Over time, this company has managed to create an unmistakable brand, which enjoys great respect among consumers. They have always known what is the best way to market and implement a new product in a certain market, they have gone through crises and critical moments for the company's existence, in the end to make Nike a well-known and desired brand by everyone.

Based on the analysis of key performance indicators and through the creation of the dashboard, we can say that Nike company is successful in selling its products and has a high degree of customer satisfaction.

For better and better financial performance and greater market share, Nike should focus its strategy on market and product development, diversifying them to target more customer segments. For better human performance, Nike should hire capable, healthy, diverse people and provide them with a work environment conducive to daily work, as well as beneficial benefits. This can be achieved by highlighting the already existing program of inclusion and social diversity, by offering competitive benefits and wages, but also by understanding and moral support when they need it.

To actively participate in the proper functioning of the community, they could donate 2% of their income to improve the environment or society, for example they could implement a program to encourage children between the ages of 7 and 12 to play more, to practice sports, etc. Another solution to increase the performance of Nike is certainly to reduce the environmental footprint and reduce carbon dioxide emissions by using recyclable materials, by collecting old shoes and recycling them, by using recyclable energy, by reducing water waste, etc.

Notes

(1) The Sale Report is an open-source dashboard software and it can be accessed from the following available address: https://sealreport.org/

(2) The Dashbuilder software can be accessed from the following available address: http://dashbuilder.org/

(3) The Grafana program can be accessed from the following available address: https://grafana.com/

(4) The Datapine software can be accessed from the following available address: https://www.datapine.com/

(5) For recommendations, suggestions or observations, you can contact the authors Ionuț Nica (ionut.nica@csie.ase.ro) or Ștefan Ionescu (stefion09@gmail.com).

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