

A Work Project, presented as part of the requirements for the Awards of a Master's Degree in Management from NOVA – School of Business and Economics

## Development of a Balanced Scorecard in the Investment Department of an Insurance company

Yizhe Zhao, No. #2110

A Project carried out under the supervision of:  
Associate Professor Maria João Major

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## Abstract

In this Work Project, focus will be given to develop a Balanced Scorecard in the Investment Department in an insurance company in Portugal on the department level in order to improve the performance measurement in that department. This is an interventionist research (Suomana *et al.*, 2014) where the researcher acts as a consultant inside the department and also links the theoretical knowledge with the findings. The Work Project, along with the Balanced Scorecard developed was developed so as to provide the director of the department with the tool to evaluate the performance of the department and set strategic objectives in one year.

Key Words: Balanced Scorecard; Insurance Company; Portugal; department

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## 1 – Purpose of the Work Project

The purpose of this work project, which consists of a direct research, is to design a Balanced Scorecard (hereafter “BSC”) for the Investment Department (hereafter “DIV”) in Fidelidade (hereafter “the company”), a Portuguese insurance company with the management located in Lisbon. Such BSC aims to help managers in the Investment Department to improve efficiency and performance in work and set both financial and non-financial goals step by step. A little more than one year before the beginning of the Work Project, the company experienced a shift in ownership, which relatively changed its strategic planning and short-term objectives and resulted in an incredible turnout.

The director of the Investment Department intends to introduce into the department a more mature performance measurement system for further improvement. Taking into consideration the BSC, one of the most popular performance measurement systems (PMS) in the world, the researcher was asked to mock developing a BSC in the department and deliver the findings to the director to illustrate the critical objectives of DIV. Furthermore, the researcher is responsible for supporting the whole process. Therefore, the design of the BSC for DIV should serve as a pilot project before the design of the BSC in the rest departments takes place.

In the following part, the literature on the BSC is reviewed. Part three outlines the methodology followed to develop this Work Project. Part four depicts the Work Project findings as well as the BSC designed by the researcher and in the final part the main contributions and further improvement that the present Work Project would bring about are listed.

## 2 – Literature Review

### *2.1 What is the Balanced Scorecard*

The concept of Balanced Scorecard was devised by Robert S. Kaplan, Baker Foundation Professor from Harvard Business School and David P. Norton, founder and director of the Palladium Group as well as business theorist (Ahn, 2001). Initially, the BSC developed as a series of critical measures and indicators that provided the company's top management with a broad view of the business performance (Kaplan *et al.*, 1992, 2001). Later on, this way of measuring performance turned into a strategic management technique as the companies started to link corporate strategies with actions

by putting in use of the BSC (Kaplan *et al.*, 1996, 2004). Normally, organizations adopt the BSC for two reasons. Some firms used the BSC as a management by objectives system, where performance measurement targets are used and compensation is based on achieving those targets. Some other firms use the BSC as an information system to provide managers with a tool to improve working performance. Or, both motives are combined by the managers (Taylor, 2010).

A BSC includes both financial and non-financial measures, which translates corporate strategy into tangible objectives and performance measures. In other words, this process will translate the mission and vision of the organization into strategy. The vision outlines what the organization wants to be, serves as a long-term view and concentrates on the future of the organization. On the other hand, the mission defines the fundamental purpose of an organization, describing how it achieves the vision in the future.

Such performance measures or indicators that are also named Key Performance Indicators (KPIs) as mentioned above should be numbered varying from 15 to 25 in each BSC (Kaplan *et al.*, 2008). The organization's objectives and the KPIs to measure its achievement are categorized in four perspectives: Financial, Customer, Internal Business Process and Learning and Growth. The financial perspective aims to answer the question "How do we look to shareholders" and establishes the long-term financial goals for organization or business unit. The financial perspective provides most direct results of the financial performance of the organization. All the rest three perspectives have an ultimate impact on the financial perspective. As for the customer perspective, managers are supposed to figure out "What the customers expect from the company". The Internal Business Process perspective deals with the internal processes within which the organization or business unit should excel at in order to make sure it delivers the promised value to customers. The Learning and Growth perspective helps the managers to set goals so as to create continuous value for the organization.

There are three types of BSC defined by Speckbacher *et al.* (2003) that are widely accepted:

- (1) Type I BSC: a multi-dimensional framework for strategic performance measurement that combines financial and non-financial strategic objectives;
- (2) Type II BSC: a Type I BSC that describes strategy by introducing a Strategy Map;
- (3) Type III BSC: a Type II BSC that also implements strategy by defining objectives, measurements, targets, frequencies and incentives.

Therefore, it is not difficult to reach the conclusion that the Type III BSC is the most complete one, which will also be adopted in this Work Project.

Organizations adopt a Strategy Map to set strategic objectives, which also illustrates the relationships between the objectives across the four perspectives of the BSC. The BSC and the Strategy Map are consistent and the latter will provide the readers with a direct diagram illustrating how the strategies are interrelated (Kaplan *et al.*, 2008). It can be concluded from previous researches and studies that the successful execution of a strategy requires three components which were designed as “Describe the Strategy”, “Measure the Strategy” and “Manage the Strategy” ((Kaplan *et al.*, 1996, 2001, 2004). This leads Kaplan *et al.* (2004), to formulate the following equation:

[Describe the strategy] + [Measure the strategy] + [Manage the strategy] = Breakthrough results.

In order to manage the strategy, measurement and description of the strategy from earlier phases are essential. With the Strategy Map effectively describing the strategy of the organization from the perspective of the BSC framework by using the causal links (Kaplan, 2004), the equation can be rewritten as:

[Strategy Map] + [BSC] + [Appropriate Organizations] = Breakthrough results

A well-developed strategy map can, to a great extent, portray the company’s strategy and the measurement of success for this specific strategy (Knapp, 2001). However, recent studies encounter various difficulties in developing Strategy Maps in the organizations. One of the biggest problems is that not all the objectives have causal relationships and by implementing such a concept on purpose, it seems “wrong” not to discover such cause-and-effect relationships (Nørreklit, 2000, 2003; Nørreklit *et al.*, 2008). Another difficulty facing the managers is that people is hard to evaluate and define. The organizations are made of by employees and while the Strategy Map is aiming to set objectives for the organizations, the most subjective factor - the behavior of employees is left from the center of discussion (Almqvist, 2006).

## *2.2 How to develop a Balanced Scorecard*

In order to develop a BSC as a performance measurement system for one organization or for one business unit, several steps should be taken in order to achieve expected outcome. (Niven, 2006) First of all, it is necessary to conduct a deep and thorough background study on this organization, which also includes the mission and vision of

the organization, the strategies and competitive position using internal records and external sources. The more the researcher understands about the organization, the easier it is for him to customize the BSC to suit the organization.

After gathering all the necessary information about the organization itself, it is important to inform the employees and the managers in the organization what the BSC is and its functions in the organization. It makes no sense to develop the BSC with nobody understanding its essence and need. Once the employees are educated about this performance measurement tool, their idea of the corporate strategy will be strengthened and the resistance towards its implementation will relatively drop, which will help improve the performance measurement system in the long run. At the same time, sufficient support from the management level will strongly help during such a phase (Ahn, 2001).

Thirdly, the information generated in the first step will be analyzed and translated so that a clear status of the organization will be presented. Then, a Strategy Map with the strategic objectives can be developed. The Strategy Map can communicate to everyone in the organization what is critical to the success in the four perspectives of the BSC with a direct diagram (DeBusk *et al.*, 2003). Then each of the strategic objectives in the Strategy Map will be translated into metrics in order to execute strategy and the measures of these objectives will be created in this way. After that, the targets, initiatives and frequencies will be set in order to gather feedback on whether the measuring process is yielding satisfactory results or not (DeBusk *et al.*, 2003).

Just the corporate level implementation is far from sufficient to build a complete and successful performance measurement system in one organization. To enable the employees to demonstrate how they can make a difference, it is important to cascade the BSC method to the lower-level directions and departments (Niven, 2006; Ahn, 2001). In this way, employees in the specific business units can discover actions reachable in the tailored departmental BSC.

### *2.3 Benefits of the Balanced Scorecard*

The financial and non-financial perspectives of the BSC are all involved in the development of the organization so that non-linear performance breakthroughs are expected (Banker, 2000). Organizations are no longer satisfied with just improving the

financial performance but are more and more concerned with the development and culture-building in the long run (Almqvist, 2006).

Balanced Scorecard is “balanced” due to its even distribution and harmony in design (Sundin, 2010). There are three main characteristics with which the BSC enables balancing multiple objectives in organizations according to Sundin (2010). The first is a systematic and deep recognition of the stakeholders in the organization. The understanding of the stakeholders helps managers comprehend “for whom the performance should be measured” (Kaplan, 1992). With such a base, the second characteristic is to bring together in a single management report the most critical ones of the seemingly unrelated elements of an organization’s competitive advantages. The KPIs are grouped into the four perspectives and the relationship will be observed clearer. Finally, the perceived relationship resides in the Strategy Map of the BSC, enabling recognition and equilibrium of the mutual dependence of strategic objectives. The BSC is in this way “balanced” (Geuser, 2009).

What is worth mentioning is that the BSC focuses on the infrastructure-building of the organization and emphasizes it the base of the design (Maltz *et al.*, 2003). The Learning and Growth perspective has full attention on the infrastructure of the organizations as the intended purpose of this perspective is to strengthen the intangible assets values and organizations’ capacity in the long term (Grembergen, 2001). The strategic objectives of the Learning and Growth perspective are the drivers to achieve desired results in the other three perspectives and aim to enhance employee capacities, information systems capacities and employee motivation and alignment at work. Necessary skills should be provided to enhance employee capacities and to align employee’s personal goals with the ones of the organization and in order to realize such purpose, information serves as a base to facilitate such linkage, requiring IT systems to adjust at the same time (Martinsons, 1999). With suitable IT systems, the Learning and Growth perspective can focus on the growth and development of the employees, strengthening the corporate values from inside.

The BSC is also linked to the compensation systems and performance evaluation systems in many organizations. In the past, the incentive plans and rewards were normally related to the financial indicators at work (Banker, 2000). With the non-financial indicators included, employees can be evaluated from multiple angles and in this way, productivity is enhanced. According to Banker, more attention given to the

customer-satisfaction-oriented nonfinancial measures is expected to result in increased revenues in the research conducted in the hospitality industry.

#### *2.4 Criticisms of the Balanced Scorecard*

Bunches of case studies can support the normative statements but there still remains little empirical evidence on whether the usage of BSC is truly associated with improved organizational performance (Geuser *et al.*, 2009) or, whether the BSC will actually work. According to a KPMG report, cited by Almqvist (2006), more than 70% of scorecard implementations fail. This is an astonishing proportion and the reason for failing is mainly due to the failure to make a real difference inside the organizations using the performance measures suggested.

What is commonly agreed is that the effectiveness of the BSC is hard to evaluate. Few studies assess directly the financial performance after the implementation of the BSC in the organization according to Nørreklit *et al.* (2008). It is also hard to examine the effectiveness due to the fact that all the non-financial perspectives demand long-term observation and the characteristics of the organizations also affect the final performance. BSCs are not often implemented at the start-up stage of the organizations, which indicates that the corporate culture and hidden problems are already formed when the management intends to improve performance. Whether the implementation of such a management system can shake the hidden problems deeply, with the organization finally surviving the changing process or just breeze from the surface is still a mysterious area waiting for further studies to improve.

Thirdly, since the BSC emphasizes implementing the strategic objectives in a “balanced” way, few competitive advantages are highlighted. All that the BSC provides to the organizations is a “balanced” development in the long-term but in reality, many managers believe that sometimes only by seizing the opportunities with the most powerful advantages over the competitors can one organization survive in the business world. The equilibrium may not strengthen the advantages of the organizations. From this perspective, the BSC seems too mild when dealing with corporate strategies. On the other hand, different business units have specific functions and focus so the all of the four perspectives may seem too overwhelmed (Mooraj, 1999).

At the same time, Salem *et al.* (2012) compared BSC as a PMS with other commonly-accepted PMSs and pointed out that the focus of the BSC is still on the



financial perspective since all the targets are supposed to be expressed in numbers and ratios to evaluate performance. The influence of the competitors and the environment is neglected in the BSC too since more focus is given to the internal characteristics of the organization itself (Maltz, 2003).

According to the study of Maltz (2003), the lack of focus on human resources makes BSC incomplete and many companies, after some years of using BSC, added one dimension to compensate such an issue. More orientation on the development of the employees will serve as a critical component to the success of the organizations. People development plans such as scholarships given to employees to develop human capital in the organizations today are more and more welcomed.

Nørreklit, (2000, 2003; see also, Nørreklit *et al.*, 2008) criticized that the suggested cause-and-effect relationship between the four perspectives in the BSC is problematic as Kaplan and Norton failed to prove that there are both logical and causal phenomena between the relationships of the perspectives. Normally, cause-and-effect relationships involve a time lag, which is not discussed in the BSC and such lack of time lag influences the relationship between development and operations in a negative way. On the other hand, not all the leading indicators have the same exact influence on the lagging ones. Nørreklit (2000) believes that there is interdependence between the four perspectives instead of what was initially proposed by Kaplan and Norton.

There is no definitive understanding if the BSC is flawless or problematic (Nørreklit, 2000). Since the BSC is a very flexible tool, it is supposed to be adjusted and corrected in practice. The effectiveness of the BSC in the organizations and business units should always be discussed in the future to improve the design and benefit more users.

### 3 – Methodology followed in the Work Project

#### *3.1 Design of the Work Project*

This section contains a description of the methodology used to conduct a qualitative case study of the Balanced Scorecard in DIV. The components of this section are stated in the following order: the overall objective of the study, research questions, design, data collection as well as analysis methods (Yin, 2009; Ryan *et al.*, 2002).

To begin with, the overall objective of the Work Project is to design a Balanced Scorecard in the Investment Department in Fidelidade. This is an Interventionist Research where the

researcher acts as a kind of consultant in the organization in order to investigate for sufficient data for the study conducted (Yin, 2009). The interventionist researcher will normally extend the case study methodology by communicating with organizations to solve actual problems (Dumay, 2010). The emic and etic perspectives of the interventionist research should always be balanced (Suomana *et al.*, 2014). The emic perspective focuses on studying behavior from inside the system while the etic emphasizes that the researcher links the findings with theoretical frame. It is urged that the researcher research the literature of BSC and develop the BSC of DIV at the same time.

The research question involved in this Work Project is – “What are the objectives and the corresponding performance measurements, targets and initiatives to establish for the BSC of DIV in the following year?”

To design the case study, DIV was chosen by the researcher as this department is currently operating with no systematic performance measurement system. At the same time, the director of the department intended to implement the BSC in order to better evaluate the performance of the department. The introduction of BSC is supposed to witness a difference in strategy making and performance evaluation. The Work Project was conducted under the direction of the director of DIV and supported by the director of the Human Resources Department (Hereafter DRH) and two representatives in DIV. The CFO of the company was also interviewed at the beginning phase to help the researcher have a better idea of the financial status of the insurance company in general. In this way, the researcher was actively participating in the design of the BSC, coordinating meetings, producing support documents for the department as well as ensuring that the purposes for the various phases of the project were met on time (see Design plan of the BSC in Appendix I).

The Design Plan for DIV clearly illustrates the phases, which the researcher and the director followed in order to achieve the intended purpose of the Work Project. Phase A was designed to understand the environment where locates DIV. In Phase B, the information, mission and organizational structure of DIV were discussed and at the end of this phase, a SWOT analysis was presented. Phase C was conducted to translate the strategies concluded from the SWOT analysis into objectives with the use of a Strategy Map. At the same time, corresponding measurements were selected by the director and the researcher. Phase D and E were designed to set the targets and frequencies of the

measurements, which after a week's time was finalized. The work was presented to the director at the end of November, 2015.

The main sources of the collected evidence were 3 semi-structured interviews (See Agenda of the Work Project in appendix II), 5 discussion meetings, external documentation such as Yearly Report 2014 and monthly report of June 2015 and internally prepared documents from the representatives with data and graphs. Semi-structured interviews took place at the very start of the project so that the researcher could get a general and brief idea of the functions and responsibilities of the company. The CFO, the director of DIV and the director of DRH were interviewed with each interview taking about one hour and a half on average. After the first two semi-structured interviews and the first two discussion meetings, a BSC design plan as well as the SWOT analysis were devised and proposed by the researcher to the director. The SWOT analysis was conducted to present the current situation and potentials of the department. One Discussion meeting was arranged between the researcher and the director of DIV to choose the objectives and corresponding KPIs. The draft Strategy Map was later proposed by the researcher on October 28<sup>th</sup>, 2015, which shows the interdependence among the objectives selected. The director eliminated some of the proposed objectives and replaced with new ones in the following week, in order to better align these objectives with strategy and mission of the department. Then the researcher sets targets and frequencies of the KPIs and finalized the project with the help of the two representatives in the rest discussion meetings. The researcher contacted the director of DIV through phone-calls and emails regularly since the latter could not always be available to meet personally.

Data triangulation was adopted to ensure the credibility of the collected evidence by interviewing different people with different tasks and job definitions in the DIV (Yin, 2009; Ryan *et al.*, 2002). Note-taking and tape-recordings were used during the interviews, some of which in Chinese, some in English due to the structure of the company. There is no transcript due to the length of the meetings and interviews. The interviews and discussion meetings provided qualitative data such as concepts, opinions and attitude towards the design. An inductive approach was adopted to analyze the data involved, as the inductive approach shall be used when qualitative research is the major design of the inquiry (Merriam, 2005). Quantitative data, such as the Market Share Ratio, Solvency Ratio and Gross Premiums, was also provided in the process to adjust with the targets in the BSC designed. The internally prepared documents and opinions of the

director were also carefully analyzed and referred to by the researcher during the Work Project to define the targets of the KPIs. The researcher analyzed the data either individually or with the representatives during discussion meetings and communicated through informal conversations to arrange the meetings and discussions.

### *3.2 Brief introduction of DIV*

Fidelidade has been providing businesses in Portugal since 1808. As the leader in national insurance market in both life and non-life sectors, Fidelidade wins countless prizes in the industry. According to the monthly report of the company in August 2015, the company has already become an undisputed leader with total 30% share of Portuguese insurance market in both life and non-life sectors according to the monthly report of June, 2015. By going international, suggested by the new Chinese shareholders, the Fosun Group and supporting the Insurance business with investment in hospital Luz Saude, Fidelidade seized the opportunity to grow and expand in the long run. And this principle is also what DIV is focusing on. DIV deals mainly with the company's investment management. Reserves generated by the insurance business are used for investment until they are needed for pay-outs. In addition, equity capital buffers help to ensure that the company has adequate funds to pay claims or benefits in scenarios in which actual pay-outs are larger than the reserved. Therefore, the investments include reserves for expected claims and benefits as well as shareholders' capital that act as an additional buffer for unforeseeable events. In DIV, teams are mainly responsible for portfolio management. The mission of DIV is to control investments, to execute transactions and to control the transactions on the portfolios. The vision is to generate more income for the company under Solvency II, a European Directive that codifies and harmonizes the EU insurance regulation. And this Directive is urging European insurers to meet the minimum criteria and stay away from insolvency with the qualitative and quantitative requirements.

There are three teams managed directly by the director and one senior manager in DIV, the Investments and Financial Products team, the Reporting team and the Database and Settlements team, each being led by one team manager and 4 or 5 team members. The Investments and Financial Products team focuses on portfolio management, and DIV has currently more than 300 portfolios in process: unit-linked portfolios, profit-sharing portfolios and others (fixed-income portfolios and nonlife related

portfolios, etc.). The team is also responsible for designing financial products. The Reporting team, which is relatively small with only 3 team members, delivers Internal Investment Reports to the department, analyzing the exposure to some companies listed. At the same time, weekly and monthly reports are sent by the Reporting team to give different information concerning transactions and the foreign exchange exposure. The Database and Settlements team records all the transactions made by DIV, checks with the depository bank, provides support and data for the Accounting Department and Risk Department, evaluates the portfolios and settles the counterparties. The asset management part is supported by three parties: DIV, the Fosun team and one asset management team out of the company where DIV only analyzes the data instead of the investments. DIV has to report to the Executive Committee from the Fosun group regularly. The company adopts the concept of BSC as a performance measurement tool, however, the director of DIV is not currently adopting the concept and he also believes that the department is rather centralized due to the quality of decision-making and team work in investments.

## 4 – Findings and the Balanced Scorecard

### *4.1 SWOT Analysis of the DIV*

In order to develop a BSC in a company or in one department of the company, the strategies must be studied and understood so that the mission and vision of the company or the department can be translated into strategic objectives and then be observed and executed through day to day work. The process of developing a SWOT analysis will help the company or the department devise the strategies, thus leading to more clear strategic objectives to be developed (Lee *et al.*, 2000). By first implementing the SWOT analysis to develop a set of strategies that makes sense, the SWOT analysis will serve as a stepping stone towards the actual implementation of the BSC. It is critical to start with a SWOT analysis before discussing with the director from the DIV about the mission and the vision. A SWOT, which stands for Strengths, Weaknesses, Opportunities and Threats, is an analytical framework that can help one company face its challenges and find potential markets to fit in. Here below is the SWOT analysis of the DIV:

#### **Strength**

- ✧ Long history in Portuguese market

With a long history, the insurance company leaves the consumers a reliable image

and so the acts of DIV will be more convincing. Consumers' having more faith in the company ends in sufficient premiums and investing funds for DIV.

✧ Experienced and highly-educated staff

With the employees' average age of 45.9, the company has left the consumers a reliable image. Having worked in the DIV for more than 3 years, the majority of the staff is quite familiar with the situations they are handling. The rich experience gained in work can in turn bring efficiency to their work.

✧ Strong and flexible database

The database of DIV in use is considered very useful and flexible in terms of recording the transactions and positions DIV is dealing with. Such well-functioning system helps a lot in minimizing the error rate during transactions.

**Weakness**

✧ Lack of young talents

The Department is relatively small and more employees are expected to be recruited in the future to support the analysis part of work. The director aims to build an Analytical team in the near future.

✧ The database consumes excessive resources

To organize and support the database in use it requires people, resources and time. Therefore, it is expected to be more automated, especially for the Database and Settlement team, so that the internal process can be improved and be more efficient.

**Opportunity**

✧ Private Equity (PE) sector

The PE sector is considered potentially attractive by the Executive Committee. This value-related investment area introduced by the shareholders gives DIV the chance to grow and gain more.

✧ Support from shareholders

With the support from the new shareholder, Fosun Group, the capital for further investment is strengthened and the "Dual Investment Approval" conducted by the Executive Committee and the department ensures the security of the investment decisions.

**Threats**

✧ Bad economy in Portugal

Under the depression, many consumers will stop purchasing insurance packages that are less urgent in the short run and will be more conservative facing investing choices. The bad economy also leads to higher interest rates in the market, pushing DIV to invest in unfamiliar foreign portfolios.

✧ Regulations and Rules worldwide

The investing activities are highly regulated by the various governmental and regulatory authorities in the countries of its operations. These legal proceedings will consume time of the group's senior management. If DIV fails to address these proceedings in an appropriate way, the company will have its reputation harmed and suffer additional legal risk which in turn, increases the size and number of claims and damages asserted against the company or subject the company to enforcement actions, fines and penalties.

✧ Uncertainties concerning Interest Rate

Changes in interest rates can affect the insurance and investment performance. DIV's investment portfolio contains interest rate sensitive-investments, such as corporate bonds. Increase in market interest rates might decrease unrealized capital gains on fixed income securities of the investment portfolio. Interest rates are highly sensitive to monetary policies of government, domestic and international economic and political conditions and other factors beyond the department's control. Volatile interest rates may impact the operating performance of the whole company as its income and investment returns depend on the level of interest rates.

#### 4.2 Strategy Map

When designing the BSC for DIV, the process of "Translating the strategy" (Kaplan *et al.*, 1996) will take place in the process. "Translating the strategy" means defining strategic objectives and KPIs (Kaplan *et al.*, 2008). Then, the selected KPIs were chosen and carefully selected, enabling the "Communicating process" to take place. BSC objectives were integrated in the process, which also enabled the "Linking process" to be conducted in the Strategy Map.

The ultimate strategic objective of DIV to contribute is "to increase profitability of the company", which must make part of the department's strategic theme "to enlarge the international business proportion", which is proposed by the director. This strategic

objective was integrated in a strategy map developed by the researcher and approved by the director to gain consensus.

As a matter of fact, DIV is not in direct contact with the insurance-buyers of the company, the researcher and the director of DIV believed that the clients of DIV are the shareholders of the company, the Accounting Department and the Risk Department inside the company, due to the fact that the investment decisions have direct impact on the rights and benefits the shareholders are enjoying and the two departments use the results and data provided by DIV. At the same time, in order to emphasize the importance of human resources management, the fourth perspective was changed from Learning and Growth to Development and People. This perspective serves to satisfy all the aspects of the formers and give certain attention to the cultivation of employees.

The Development and People objectives are at the bottom of the Strategy Map, serving as a foundation as they stand for the long-term improvement in the department. These objectives are categorized as the slowest to change and improve but are one of the most crucial in the corporate culture. At the same time, the need for more talented analysts is also presented. The Internal Business Process objectives and the Customer objectives are in the middle, presenting many soft evaluation objectives such as satisfaction level and automation of the database. How the department is expected to work and provide final results to the internal clients and shareholders can be observed from such objectives. Finally, the top of the Strategy Map is occupied by the financial objectives. The financial objectives can directly reflect the performance of DIV by presenting the figures and ratios.

When designing the BSC for DIV, two ways of strategy implementation approaches were discussed. The Top-down strategy implementation method suggested by Kaplan *et al.* (2008) demands a clear cut system of command and control in the department. A clear hierarchy of authority will benefit the business unit in designing the BSC. However, there are studies suggesting repeatedly that the top-down strategy is sterile and uninspiring as the mass of employees can hardly reach the corporate strategy nor participate in creation (Hamol, 1996).

On the other hand, the Bottom-up strategy implementation method could gain more understanding from the view of the target population and service deliverers. Since Bottom-uppers place more emphasis on describing what objectives would arouse problem and difficulties in reaching stated objectives (Matland, 1995), it is considered more reasonable to be adopted in this Work Project.



At the same time, it's also proved too difficult for managers and the director to source strategic objectives directly at the beginning. After discussion, the Bottom-up strategy implementation was adopted in this Work Project. The BSC contains the most critical KPIs of the department, as recommended by Kaplan *et al.* (2008).

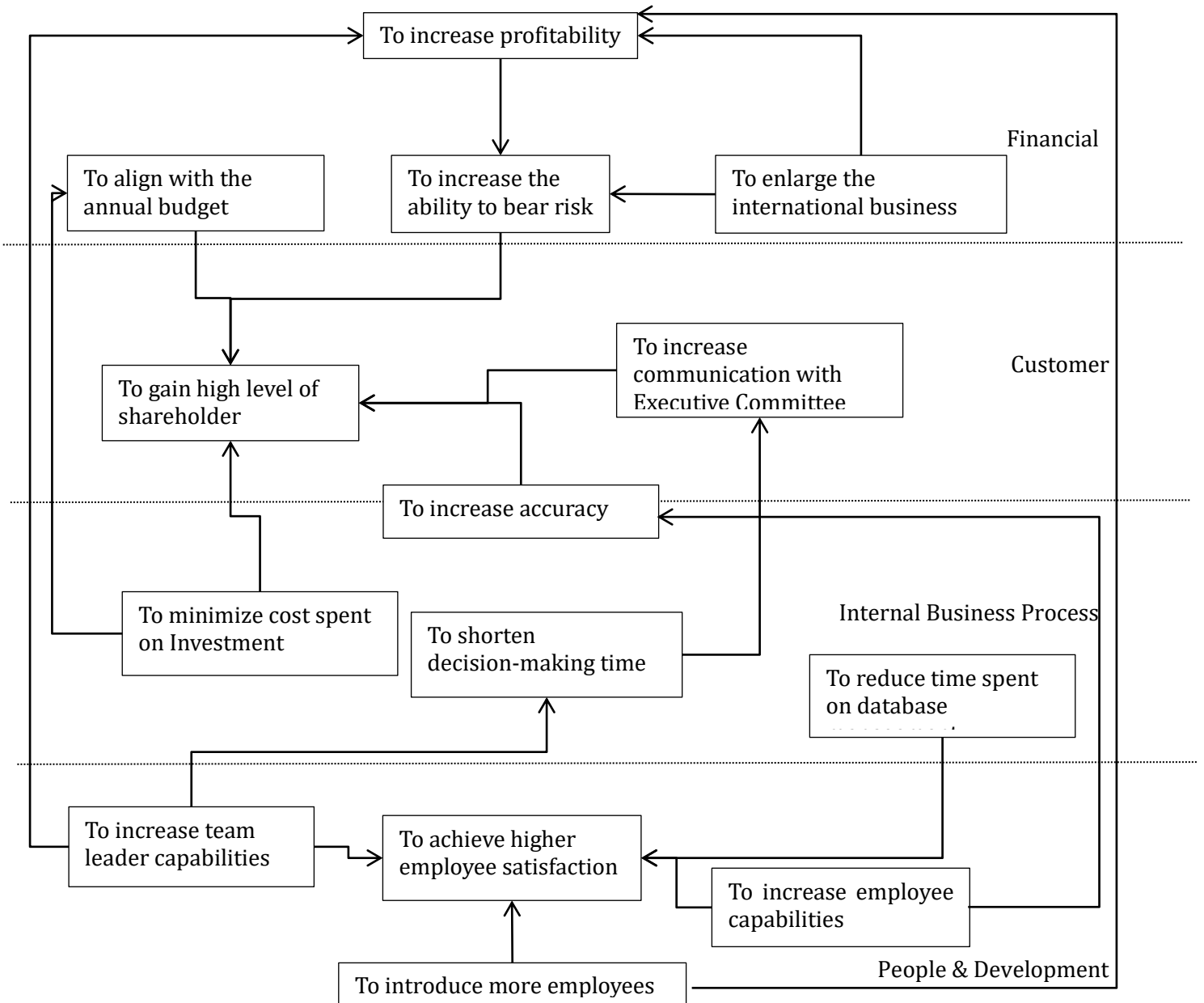


Figure 1: Strategy Map of DIV

### *4.3 Balanced Scorecard*

To measure the strategic objectives, 15 KPIs were carefully selected and discussed through weeks with the director and the representatives of DIV. Furthermore, since the purpose of developing a BSC for DIV is to improve ultimately the department's financial performance, more leverage is given to this perspective. According to the director, the performance of DIV highly depends on the market, which means it is meaningless to set financial objectives for more than one year. In this way, the BSC is designed only for the next year for DIV.

As mentioned earlier, the BSC designed for DIV during this Work Project is classified as a type-III BSC since this type includes objectives grouped into four perspectives and mapped in chains of relationships, as well as associated KPIs and targets (Ahn, 2001). Initiatives, however, are not part of the BSC due to the scope of the Work Project.

Most of the measures in the BSC are set as quantitative as possible so that the director can evaluate them easily, and it facilitates the result-comparing process at the same time. Due to the sensitivity of the information, the majority of the measures are set in percentage in the Work Project. In the BSC, the usage of surveys is proposed by the researcher to the director as a way to evaluate the satisfaction rates mentioned below.

The targets of the strategic objectives are set mainly by adopting the methods from the S.M.A.R.T criteria (Doran, 1981), which means that the department objectives should be targeted specific, measurable, assignable, realistic and time-related. However, it is also noticed that not all the objectives have to satisfy all the five characteristics from the S.M.A.R.T criteria since some objectives are relatively hard to measure in terms of quantitative approach, which reflects one of the disadvantages of the BSC discussed. What matters most here is the opinion of the director. Former performance and data of DIV is also taken into consideration in the target-setting process.

The frequencies were also discussed between the researcher and the director of DIV in order to achieve expected results without adding extra burden to staff involved. Since the measurements of the financial perspective are mainly the financial ratios used in the investment market, the frequencies are adopted by using the customized ones currently adopted in DIV, which are frequently evaluated. At the same time, most of the objectives from the non-financial perspectives are set to be measured quarterly so that they can be measured regularly enough to be on track with the intended purpose.

Perspective	#	Objectives	Measurement	Explanation	Target	Frequency
Financial	1	To increase Profitability	Return on Investment (ROI)	The ROI measures the profitability of the company by revealing how much profit can be generated with the investment of the shareholders and is computed as $[\text{Gain from investment} - \text{Cost of Investment}] / [\text{Cost of Investment}]$ . This is the major financial objective of DIV as DIV is one of the channels of the company to generate profit.	4%	Monthly
Financial	2	To increase Profitability	Percentage of Revenue earned from Investment	The Revenue earned from Investment measures the profitability of the company but it is different from the ROI in that this KPI can evaluate horizontally the performance of DIV.	3%	Monthly
Financial	3	To align with the annual budget of the department	Percentage deviation from the budgeted results	DIV should meet the budget proposed. Percent deviation is computed as $[\text{actual costs} - \text{budgeted costs}] / [\text{budgeted costs}]$ and should be checked every month to align with the expected results. The percentage deviation of the budget will vary due to the number of projects so the director suggested a 20% floating space for this KPI.	20%	Monthly
Financial	4	To increase the ability to bear risk	Solvency Ratio	The Solvency Ratio is used here by comparing the size of the capital relative to all risks the insurer has taken $[\text{total assets} - \text{total liabilities}]$ , applying Solvency II. The lower this KPI is, the higher possibility there is that the company defaults on its debt obligations.	150%	Quarterly
Financial	5	To enlarge the international business proportion	Weight of International Business revenues compared to total revenues	This KPI is an indicator to illustrate how the internationalization process of the company goes. With the anti-monopoly practices in the Portuguese Market, the best idea to invest is to go global, thus the larger the Weight is, the better the strategies are implemented.	15%	Quarterly
Customer	6	To gain a high level of shareholder satisfaction	Percentage of shareholders satisfaction	The shareholders are the clients of DIV as their profits are influenced by the investment strategies of DIV, thus a higher percentage of satisfaction among shareholders, the more support DIV gains. With a survey questionnaire assessing shareholder satisfaction in dimensions such as Performance Evaluation, Communication, Solvency Ratio, ROI etc., ranging from 1(extremely dissatisfied) to 5(extremely	85%	Quarterly

				satisfied), the Reporting team can come up with the percentage.		
Customer	7	To increase communication with the Executive Committee	Number of working hours of communication per quarter	Investment decisions should be approved through the “Dual Investment Approval” stage where all the decisions should be discussed by both the Investment Committee and the Executives Committee from the shareholders, thus the more communication guaranteed, the smoother the process will be. It is suggested that DIV hold one interactive meeting per week to deliver working progress to the Executive Committee and send a weekly summary report to the Committee. Each meeting lasts about two hours and a half and the summary report serves as a 30-minute presentation.	3 hours/week	Semi-annually
Internal Business Process	8	To increase accuracy	Settlement Error Rate	Settlement Errors are non-strategic errors that do not reflect the intended strategy. These errors are fatal if the amount is huge. Both miss-operations by the employees and the errors caused by the crash of the system and disconnection of internet are defined as settlement errors and the Settlement Error Rate is computed monthly as [# of miss-operations, system & internet errors] / [# of settlements].	0%	Monthly
Internal Business Process	9	To minimize cost spent on Investment	Percentage deviation from the budgeted cost spent on Investment	Behaviors like frequent trading results in higher operating costs in Investment. To avoid such costs ensures a more efficient process inside DIV. The percentage is computed as [actual budget- planned budget]/ [planned budget].	0%	Quarterly
Internal Business Process	10	To shorten average decision-making time	Time spent on the decision-making process per portfolio	Time matters in the investing projects. Efficient process will strongly enhance the overall performance of DIV as a whole. The Time will be calculated by [time of decision] – [time when the proposal was submitted].	< 24 hours	Quarterly
Internal Business Process	11	To reduce time spent on database management	Percentage of time reduced on database management due to automation	It is time and resource-consuming to support the database by hand. To introduce more automated tools to the database can optimize the Internal Process for the Database and Settlement team, leading to more efficient data utilization process. By computing ([# of total hours spent by employees on database management before automation]/ [# of total hours spent by employees on database	20%	Monthly

				management after automation])-1 using the data from timesheet uploaded to the intranet with the time allocation of each employee, this measurement can be observed in this way scientifically. The researcher also proposed adopting a type of timesheet for employees to allocate their time spent on each project and task to collect the data. For every work day, eight hours should be allocated by one employee by adopting the concept of cost centers. In this way, the director could have a direct idea of the time consumption of all the employees. The timesheet will be uploaded every half a month individually. Since this proposal also involves the coordination of other departments, such process is not included in the BSC under design in this Work Project.		
Development & People	12	To introduce more employees	Number of new analysts recruited	With the development of the whole department, it is necessary to build an analytical team to manage assets in DIV. Due to the quality of analytical work, the director suggested 6 employees in that team.	6+	Quarterly
Development & People	13	To increase employee capabilities	Number of training hours	Training provides the employees with essential working knowledge and helps them strengthen their abilities. The more training hours attributed to the employees, the more satisfied and secured the employees feel in the company.	8 hours/month	Quarterly
Development & People	14	To achieve higher employee satisfaction	Percentage of employee satisfaction	This KIP is critical to the building of corporate culture. With a survey questionnaire assessing employee satisfaction in dimensions such as Performance Evaluation, Career Development, Communication, Job performed, Perception on the functioning of other departments, Sentiment of belonging, Relations with team leaders, Personal & Professional Relationships and Compensation.	85%	Quarterly
Development & People	15	To increase team leader capabilities	Number of hours spent on training for the team leaders	In DIV, decisions should be made quickly and in the right tract. To help team leaders gain more knowledge and experience through different opportunities will benefit the department in the long run.	4 hours/month	Quarterly

Table 1: BSC of DIV

## 5 – Conclusion and recommendations of the Work Project

The findings of the Work Project include a SWOT analysis, a Strategy Map and a BSC with 15 KPIs in detailed explanation. With the mission and vision set, the SWOT analysis points out the strengths and weakness of DIV and emphasizes the opportunities and threats that the department is about to encounter in the future. In this way, the strategy of going international appears to be most crucial for now to serve the purpose of enlarging profitability. After understanding the current situation, the critical KPIs were listed and analyzed through discussion with the director and the representative. The interrelationship of the KPIs can be observed in the Strategy Map. Finally, the BSC designed above illustrated to which KPIs should be given attention in order to improve the overall performance in the department. The director can adjust and compare the figures and set further strategic objectives whenever necessary.

The Work Project served its purpose of developing a BSC for DIV to help the managers enhance performance. The development of the BSC is on the department level and has to be adjusted if other departments intend to use it as a PMS in the future. The BSC will serve as a pilot project in the company.

This Work Project also encounters limit actions. Due to the concerns of use of information suggested by the company, the researcher was unable to get access to the corporate BSC of the company. This prevented the researcher from departing from the strategic objectives identified for the overall company when cascading down the BSC for DIV. Yet the researcher believes that she overcame this limitation by discussing with the CFO what the main strategic objectives were for Fidelidade in the forthcoming years. Another limitation of the study was that the financial perspective was still the most weighted perspective in the BSC proposed, and furthermore that the importance of some non-financial perspectives could not be fully revealed in terms of quantitative measures.

For further research, focus can be given to examining the effectiveness of this BSC in DIV. By conducting empirical research in the department, such as comparing the performance before and after a year, and using quantitative models, the effectiveness of the designed BSC can be tested. When implementation occurs, milestones should also be set with the weights and levels to align with the current system.

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## APPENDIX I – Design Plan of the BSC

### **Phase A**

Description: To understand functions and specificities of activities of the company, and to gather data on the general performance of the company.

Participants: CFO of the company and researcher

### **Phase B**

Description: To understand the organizational structure, mission, vision and functionalities of DIV

Participants: director of DIV, director of DRH and researcher

### **Phase C**

Description: To source and select objectives and KPIs among team managers and the interdependence between the KPIs

Participants: director of DIV, representatives and researcher

### **Phase D**

Description: To define measurement frequencies for KPIs

Participants: Representatives and researcher

### **Phase E**

Description: To define targets for KPIs

Participants: director of DIV, representatives and researcher

### **Phase F**

Description: To finalize the BSC and compare with the former system

Participants: Representatives, HR manager and researcher

## APPENDIX II – Agenda of the Work Project

Date	Content	Duration
Sept. 8 <sup>th</sup>	Kick off meeting and interview with CFO	2 hours
Sept. 22 <sup>nd</sup>	Interview with director of DIV	2 hours

Oct. 5 <sup>th</sup>	Discussion about DIV information	1 hour and 30 minutes
Oct. 12 <sup>th</sup>	Discussion about DIV SWOT and design plan	1 hour
Oct. 19 <sup>th</sup>	Interview with director of DRH	1 hour
Nov. 4 <sup>th</sup>	Conclusion on the Strategy Map and measurements (KPIs) and discussion about the frequencies and targets	2 hours and 30 minutes
Nov. 11 <sup>th</sup>	Discussion about the frequencies and targets	45 minutes
Nov. 23 <sup>rd</sup>	Final discussion about the BSC	1 hour

September 2015							October 2015						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5					1 B	2 B	3
6	7 A	8 A Inter. CFO	9 A	10 A	11 A	12	4	5 B Dis.	6 B	7 B	8 B	9 B	10
13	14A	15A	16 B	17 B	18 B	19	11	12 B Dis.	13 B	14 B	15 B SWOT design plan	16 B	17
20	21 B	22 B Inter. DIV	23 B	24 B	25 B	26	18	19 B Inter. DRH	20 B	21 C	22 C	23 C	24
27	28 B	29 B	30 B				25	26 C	27 C	28 C Stra Map	29 C	30 C	31

November 2015													
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT
1	2 D	3 D	4 D Dis.	5 D	4 D	7	29	30 F Final BSC					
8	9 D	10 E	11 E Dis.	12 E	13 E	14							
15	16 E	17 E	18 F Draft	19 F	20 F	21							
22	23 F Final Dis.	24 F	25 F	26 F	27 F	28							

### APPENDIX III – Organizational Structure of DIV

