To my family,

Paola, Salvatore and Felice,

and to my grandma, Maria

For being there for me.

INDEX

Introduction	5
CHAPTER 1	
ACCOUNTING SYSTEM AND COST ANALYSIS	
1.1 Mission, vision and accounting. How to connect them?	11
1.2 Planning and control: looking to past and present to forecast the future	15
1.3 Traditional accounting system.	21
1.4 Introducing new accounting system approach: Activity Based Costing	24
1.4.1 Accounting system by cost centers	25
CHAPTER 2	
ACTIVITY BASED COSTING	
2.1 Historical development	26
2.2 Segregating costs: Fixed, Variable and Overhead cost	28
2.3 Methodology: Cost allocation in operational management	33
2.3.1 Phases and purposes of the process	35
2.4 Differences between two different accounting system	42
2.5 Evolution in recent years: Activity Based Management	46

CHAPTER 3

FRO	OM BU	SINESSES TO BANKS: HOW ABC AFFECTS MANAGEMENT		
3.1	1 Mission and vision4			
	3.1.1	Creating value for shareholders, customers and employees5		
3.2	Differe	ences between run a company and manage a bank55		
3.3	Reven	ues and expenses: Financial Area and customers57		
3.4	Creati	ng value into processes: ABC and managing costs59		
СН	APTER	4		
OV	ERVIE	W FROM INSIDE: BANCA PROMOS S.P.A.		
4.1	Presen	tation of the bank70		
4.2	.2 Auditing process: Deloitte			
	4.2.1	Deloitte approach: ABC output and budgeting process: a view from		
		inside8		
	4.2.2	Analyzing accounting entries90		
	4.2.3	A possible merger, why not? Decision making based on ABC99		

CHAPTER 5

RESULTS AND POTENTIAL DEVELOPMENTS

5.1	To recap: analyzing our "path"	101
5.2	Pros coming from ABC: planning the future	103
5.3	Potential developments of the strategy	105
Sun	nmary	106
Bib	liography	.121
We	bsites	
Rin	graziamenti	

INTRODUCTION

"A computer on every desk and every PC with Microsoft installed in."

The phrase reported below is one of the most famous quotes of Bill Gates, the founder of Microsoft and one of the most brilliant businessmen of the last 50 years. It was Gates' vision, as well as his business brain, that helped to turn Microsoft from a small 30-man operation based in Albuquerque into the multinational behemoth it is today. In few words, we can note all the corporate vision of this genius. The most interesting question about this subject is: "what is vision? Why it is so important for every company which wants to become healthy?" This elaborate intends to start the analysis of the present relying on the past, starting from newest thoughts based on visions coming from entrepreneur and economists as Bill Gates. The subject we will deal with during this path is the vision, the mission of contemporary firms, the new kind of accounting system, and how all these items connect themselves one to each other. Given that finding a definition of "corporate vision" or "corporate mission" is hard work, we will try to do it, relying on who studied the transformation of the businesses during last years. This project is composed of four chapters, plus a final one, in which we will try to analyze pros and cons of the most used accounting system of the 21st century: Activity Based Costing.

The first chapter covers pillars of handling a company during the modern era: planning and control. In an economic world that changes year by year and sector by sector, the more eclectic you are, the more you have success. Industrial environments change speedily, and to find the best business plan for society is every day harder. Planning becomes the success key: a 3/5 year business plan nowadays is one on the hardest document to prepare for a management team of a firm. For this reason, the entrepreneur that has this fundamental skill can exploit this exponential advantage against competitors.

¹ The Telegraph – "Bill Gates's dream: "A computer in every home" by Claudine Beaumont

Anticipating market moves, learning from spillovers coming from outside, implementing new business strategies, adapting moment by moment the input/output process, is the best way to obtain success. Then, the first chapter covers this particular case of "new era economy," and another one too, related to the first: control. During years, as we just say before, economic environments change. During 20' and 30', the key success was to obtain a standard product, with enough quality in a reasonable time of production. Over the years, customers' requests evolved, and quality became a significant success rate. Thanks to globalization too, in these dynamics, became fundamental the control. Total Quality Management², Six Sigma Theory³, demonstrate continuous research of perfection of production; we will deal with costs and production control, forecasting process to provide revenues enough to obtain Break Even Point (BEP), and finally, we will treat Activity Based Costing and its relationship with the accounting systems. Analyzing the accounting system, starting from the traditional one, we will deal with some important transformation about it, explaining pros and cons too.

The second chapter covers and analyzes in a specific way the Activity Based Costing, starting from the historical development and its evolution. After this, we will discuss segregating costs and the methodology. About it, we will present the cost allocation in different ways, dividing analytical accounting system in one using cost center and one not using it. Finally, we will analyze differences between these two different types of accounting systems. At the end of the second chapter, we will introduce the natural evolution of the ABC, the ABM (Activity Based Management). Governance can plan the future following corporate vision and mission, relying on cost analysis and accounting system. This matter will be critical because it gives the theoretical basis to understand in the best way the business case located

² "Total Quality Management (TQM) consists of organization-wide efforts to install and make permanent a climate in which an organization continuously improves its ability to deliver high-quality products and services to customers."

³ "Six Sigma (6 σ) is a set of techniques and tools for process improvement. It was introduced by engineers Bill Smith & Mikel J Harry while working at Motorola in 1986. Jack Welch made it central to his business strategy at General Electric in 1995. It seeks to improve the quality of the output of a process by identifying and removing the causes of defects and minimizing variability in manufacturing and business processes."

inside chapter 4. As we will see, the best output of the accounting system is the budgeting process, because accounting gives all information needed to extract projected values for the business. Banca Promos,⁴ (apparently, the case study), does a fantastic budgeting work every day and we will analyze it looking for official and worked documents. Lastly, we will discuss the pros and cons of this different handling business.

The third chapter, instead, covers the path from companies to banks about ABC. Thanks to my experience in GFSI Audit department of Deloitte & Touche s.p.a, I collected an excellent knowledge in banking about auditing, and more in general, about the processes behind the evolution of a bank. The most significant output of this particular kind of business is "creating value" for shareholders, customers, and employees. There are a lot of difference between running a bank and a company, and for this reason, we will analyze these differences; in a particular way, we will deal with revenues and expenses, focusing on the absence of raw materials, talking about financial area and procurement of new customers. Finally, the third chapter covers how ABC and then ABM affect management inside a bank and how much governance rely on it to plan the future strategies. Out path is near to end, and this is the reason why we will introduce at the end of the third chapter, the business case that I had the possibility to study from inside: Banca Promos s.p.a.

The fourth chapter presents this bank, its history and its developments over the years. A little focus on the businesses as trading and financial area, then a look to the corporate structure. Hence, after this important presentation, the chapter focus on the auditing process of Deloitte, and thanks to it, we will analyze why this bank decided to use the Activity Based Costing system, which pros it earned and mostly how ABM affects the decision making of the governance of the society. I had the possibility to have a real overview from inside, thanks to my position in Deloitte, and for this reason, we will see remarkable pieces of evidence of ABC using inside accounting system, as

=

⁴ The bank in which I worked as auditor and, thanks to my position I collected information enough to present this thesis

accounting entries and financial statement of the bank. In conclusion, the fourth chapter is the nucleus of the project, in which we can discover the advantages coming from this system and the potentials for improvement still unused. The aim of this chapter is to study from inside this particular technique and note all the advantage that it leads to business.

The fifth and final chapter covers the result of this path, thoughts about potential development in the future for ABC and ABM strategies and finally, will analyze differences inside Banca Promos before and after the implementation of ABC.

To write this elaborate, we needed to consult books and project that gave us a theoretical base about Activity Based Costing as Staubus, George J. "Activity Costing and Input-Output Accounting", Kaplan, Robert S. and Bruns, W. "Accounting and Management", and Velmurugan, Manivannan Senthil, "The Success And Failure of Activity-Based Costing Systems". We consulted Deloitte's memos and reports about accounting rules to follow during work on a customer that gave another major help to describe in the best way all the environment of the banking industry. In this way, the reader after chapter one and two, has a perfect idea of what means "planning and control" and how much is necessary the "cost allocation" inside a business. Instead, during chapter three, the primary objective is to explain to the reader what is the banking industry and which is the fundamental link between industrial and banking environment. Hence, we will focus on the business case, which has the principal aim of demonstrating all the technical matter explained in first three chapters, applying it in a real case. The classical passage from theory to practice.

CHAPTER 1

ACCOUNTING SYSTEM AND COST ANALYSIS

During introduction we dealt with pillars of this project; every chapter has a particular aim and thanks to it, the reader takes an important step to acquire the needed knowledge to understand the final goal of the work. Chapter 1 is beneficial to give a panoramic view of the environment in which we are working now. It represents the first step of our path, and obviously, it helps us to recognize definitions and most essential tools to introduce in the best way the focus of the job. Summarizing, we will deal with the concept of mission and vision, the evolution of concepts like planning and control inside a business, the accounting system and cost analysis (during chapter two we will focus more carefully on this particular theme). Finally, we will introduce the Activity Based Costing like the natural evolution of the historical development of accounting system during years.

"Accounting is a language that communicates economic information to people who have an interest in an organization – managers, shareholders and potential investors, employees, creditors and the government. Managers require information that will assist them in their decision-making and control activities"⁵. The emeritus professor Colin M. Drury in his book titled "Management and cost accounting" tries to define the accounting analyzing the scope of the management starting from its basis. The primary aim of accounting system is to give managers the opportunity to estimate the real cost of everything creates value for the business. Hence, Prof. Drury continues: "the objective of accounting is to provide sufficient information to meet the needs of various users at the lowest possible cost. Obviously, the benefit derived from using an information system for decision-making must be greater than the cost of the operating system."

⁵ "Management and cost accounting," Colin M. Drury – 1992.

Remembering that this content comes from a book written in 1992, it is easy to understand that things have changed during last 25 years. However, the objectives and goals of accounting did not change.

Accounting system helps the business to find:

- Information about costs the society has to face during a process.
- Information coming from accounting system helps planning in midterm because it gives feedback about that particular process, useful for planning into the future a similar one.
- Information useful to create a panoramic view of costs faced by a business, advantageous to build a strategic plan too.
- Information valuable to determinate important decision about implement or not a new strategy.
- Information suitable to destroy the gap between expected expenditures and real costs faced during a process.

Finally, accounting system of a society is the best way to understand everything matters about methods, intentions, and plans of the business. It is essential to note that advantage to use in planning or control of a firm, resulting from the exploitation of a structured accounting system, is not enough to create value without a "well done" cost analysis too.

What is cost analysis and what are goals managers want to achieve exploiting these strategies?

"Cost benefit analysis (CBA), sometimes called benefit cost analysis (BCA), is a systematic approach to estimating the strengths and weaknesses of alternatives (for example in transactions, activities, functional business requirements). It is used to determine options that provide the best approach to achieve benefits while preserving savings."

⁶ David, Rodreck; Ngulube, Patrick; Dube, Adock (16 July 2013). "A cost-benefit analysis of document management strategies used at a financial institution in Zimbabwe: A case study." SA Journal of Information Management.

"Broadly, CBA has two primary purposes:

- 1. To determine if an investment/decision is sound (justification/feasibility) verifying whether its benefits outweigh the costs, and by how much;
- 2. To provide a basis for comparing projects which involves comparing the total expected cost of each option against its total expected benefits."⁷

We have hinted at the concept of the CBA because it is a fundamental issue to understand how accounting system works entirely. Chapter two will explain that particular theme.

1.1 Mission, vision, and accounting. How to connect them?

Advantages resulting from the combined use of accounting system and planning⁸, and the CBA purposes I just described, follows two fundamental concepts appointed inside the introduction: corporate vision and mission.

Every manager has an idea of his firm, an image of his company in 10 years, maybe like a result of his planning of 10 years before.

What is the "corporate vision"? What is the "mission"?

A first significant help to find a definition of this couple of fundamental elements comes from "UtilGroup" management direction plan.

⁷ California Government - October 16, 2008, archived at the Wayback Machine.

⁸ Economic planning be defined as the process through the firm sets its goals, by the analysis of the advantages and the risks of that particular process. This issue will be explained in detail in Paragraph 1.2.

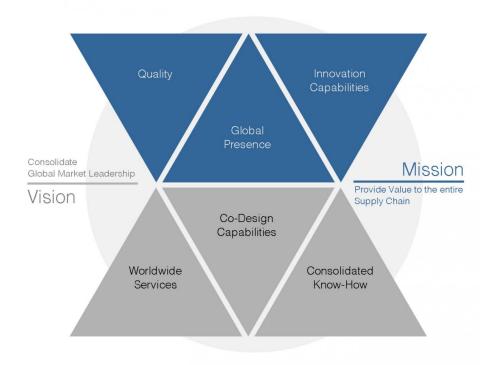


Fig. 1 – Vision and Mission: goals and objectives⁹.

"Leaders understand that life is a process of competition and selection. They compete for the minds and hearts of those who would join or follow them. A leader's vision implies an understanding of the past and present. More important, it offers a roadmap to the future and suggests guidelines to those in a given enterprise-how people are to act and interact to attain what they regard as desirable. A leader's vision may be intuitive or highly structured, but it is the bedrock of success in meeting the twin tests of competition and selection. The importance of vision cannot be emphasized enough, but it must be coupled with other attributes. ¹⁰"

Hence, vision is how entrepreneur imagines his company in 3/5/10 years and suggests the guidelines grow up to all people who are part of the project. It

⁹ www.utilgroup.com/en

¹⁰Joseph V. Quigley: "Vision, How leaders develop it, share it, and sustain it," pages 37-41 from "Business Horizons,", September–October 1994.

describes the thought, the idea, behind the success of every company, every project, and every planning. What about the mission?

Mission defines the final scope of a company, the main reason of its existence, what distinguishes it from other companies of the sector/business. The greater explanation of it is the "mission statement." Here an extract from David/Pearce II about it.

"Developing a mission statement is an important first step in the strategic planning process, according to both practitioners and research scholars. [...] An effective mission statement defines the fundamental, unique purpose that sets a business apart from other firms of its type and identifies the scope of the firm's operations in product and market terms. [...] A mission statement should create an organization identity larger than the limits placed on the firm by any individual. It helps to satisfy people's needs to produce something worthwhile, to gain recognition, to help others, to beat opponents and to earn respect"¹¹.

The greatest way to understand the value of mission statement is to analyze big companies ones during last years. Communicate inherent in it sums up who is the company, what are its goals and how they want to obtain it.

Walt Disney: "To make people happy." 12

Wal-Mart: "To give ordinary folk the chance to buy the same thing as rich people." ¹³

NIKE: If you have a body, you are an athlete."14

In few words, we can immediately capture the corporate vision, scopes and primary goals of the company; like a slogan, but not only used for customers'

¹¹ John A. Pearce II, Fred David: "Corporate Mission Statements: the bottom line." – Academy of management executive, 1987, Vol.1 No.2, pp. 109-116

¹² Walt Disney website. www.waltdisney.com

¹³ Wal-Mart website. www.wal-mart.com

¹⁴ Nike website. www.nike.com

experience. We saw how corporate vision and mission statement are connected and how they can drive business to success.

Mission and vision statements play three critical roles: (1) communicate the purpose of the organization to stakeholders, (2) inform strategy development, and (3) develop the measurable goals and objectives by which to gauge the success of the organization's strategy. These interdependent, cascading roles, and the relationships among them are summarized in the figure.



Fig. 2 – From mission to goals: four steps¹⁵

This couple of element linked to accounting system too. If managers want to plan a strategy, will certainly follow the corporate vision, trying to obtain goals described by the mission statement. In practice, these ideas need numbers and pieces of evidence supporting it.

All these information is coming from the accounting system and cost analysis. This information is the reason why we connect them, and we define it as the basis of planning and control.

-

¹⁵ Hamel, G., & Prahalad, C. K. (1993, March–April). Strategy as stretch and leverage. *Harvard Business Review*, 75–84.

1.2 Planning and control: looking to past and present to forecast the future.

The best way to find the key to success for a manager is trying to forecast the future, anticipating competitors' next moves and trying to benefit from market changes. We can sum up all these concepts in one simple word: "planning."

Looking through the scientific research papers coming from authoritative experts about planning and control, the greatest definition of this particular concept is:

"Strategic planning is an organization's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy. [...] It is executed by strategic planners or strategists, who involve many parties and research sources in their analysis of the organization and its relationship to the environment in which it competes" ¹⁶.

Hence, planning means to improve the management system of an organization to drive the growth of the business. "The management system of organization is a series of tools, practices that are trying to implement the mission and the vision of the company. They are trying to translate this mission and vision into a series of plans and budget, and eventually take care of analyzing the cost of this implementation"¹⁷.

We told before that the managers need these skills to forecast the future, to create value and to take advantage. Where this information come from? Who is the brain generating data to analyze the company, the environment around and finally create a plan?

Looking to a standard planning department organization chart, we find this situation:

¹⁶ Mintzberg, Henry; Quinn, James B. (1996). The Strategy Process: Concepts, Contexts, Cases. Prentice Hall. ISBN 978-0-132-340304.

¹⁷ Cristiano Busco (2016), Presentation of "Planning and Control" course at Luiss University. http://www.luiss.it/cattedreonline/corso/SGE/0/19CLMBASE/2015

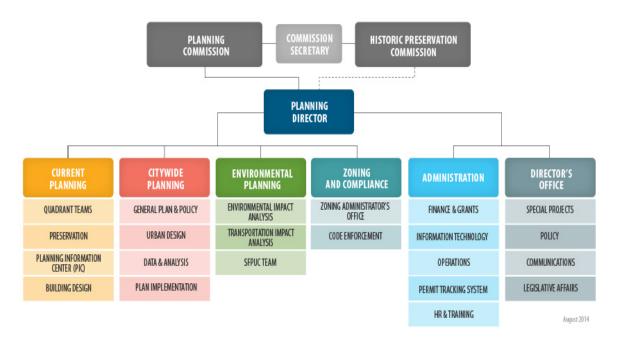


Fig 3 – Typical organizational chart¹⁸

Data comes from the bottom, and planning staff analyzing every environment around the company. In this way, all the information needed arrives up, where brains driven by corporate vision goals, helped byways suggested by mission statements to achieve these aims, try to create the best plan to improve the company and arrive at success.

It is a particular and so complicated process, but it is also an efficient way the new firms has to achieve goals. Planning the future, thanks to 3/5 years business plans, budgeting every kind of cost they will face during years it results profitable.

Hence, the planning process is composed of three key phases:

1. Provisions of data: this information arrives inside the firm coming from the market analysis(often, this role is covered by marketing department), cost analysis(Accounting area produce this kind of information, that Planning staff has to study and re-use it), surveys and feedbacks from the past. A typical example could be a particular

¹⁸ http://sf-planning.org/organizational-chart-and-directory

process the firm usually implement; during years probabilities of mistakes fall because of improvement and knowledge about that matters.

- 2. Decision-making process: in this phase, planning team assembles all necessary data to have a complete vision of what they are planning for. This is the "brain-phase," in which team create and think about a lot of different strategies to implement, and using data supplied by various areas of the firm (previously quoted), they search the best solution to find the plan can create more value for the business. This phase represents the largest and awkward step of the process. Next one and last is the budgeting, that converts into values all strategies and decisions made at this moment
- 3. Budgeting process: the final step, in which we can find values and numbers that represent decisions made by the planning team. CIMA defines budget as "a quantitative expression of a financial plan for specified period. It may include expected sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. It expresses strategic plans of business units, organizations, activities or events in measurable terms" Accounting system helps this phase of the process because it gives valuable feedbacks and suggestions to the team that wants to create a specific plan that forecasts expenditures and revenues generated by the project in the future. It is one of the hardest tasks to face, and for this reason, economists consider this phase the "most remunerative" in firms' midterm analysis.

What about control?

In a firm, control is the operating system that has to drive society to achieve goals planned by the process previously quoted, detecting deviations between expected aims and fulfilled objectives through measurement indices, and

¹⁹ "CIMA Official Terminology" on 2013-08-10.

reporting it to bodies responsible for it ensure that they will find solutions about that matter.

This simple definition clarifies the one-to-one relationship between planning and control.

The control process takes cyclically place (generally one year – cycle) and shall comprise the following phases:

- 1. Previous control
- 2. Concurrent control
- 3. Subsequent control

Previous control (budgeting)

This phase interfaces with the third stage of the planning process. Through this tool, team:

- Make measurable all objectives the firm has the intention to achieve
- Recognize human and financial resources necessary to implement the plan.
- Assign corporate bodies responsible for these goals.

During this process, as I said before, the team uses some useful indices to summarize a particular situation they are controlling. These indices can be:

- 1. Performance index: when it is possible to study a relationship between results achieved and set objectives
- 2. Efficiency index: when it is possible to investigate a relationship between results obtained and utilized resources (explained regarding costs)

Concurrent control

This kind of power has the most important role in the process, because it drives all the operations gradually and gives a real-time firm situation in every moment or step of the process.

Most important tasks of this process are:

- 1. Periodic measurement of indices, through recognition of costs and results, obtained.
- 2. Reporting this information to management.
- 3. Deciding on this matter to reduce the gap between expected and effective results. (Management cover this important role of decision making)
- 4. Implementation of these decisions.

Subsequent control

Subsequent control represents the last step of the control process and closes the cycle, communicating control process results To Whom It May Concern (usually management director, CEO) with two fundamental aims:

- Supporting next budgeting cycle
- Provide information to help manager valuation, when employee evaluation system and control system are integrated.

In few words, we can summarize concurrent and subsequent control work with the term "reporting." It is "the regular provision of information to decision-makers within an organization to support them in their work." The natural evolution of the concepts explained below is the Management Control System, a system which gathers and uses the information to evaluate the performance of different organizational resources like human, physical, and financial and also the organization as a whole in light of the corporate strategies pursued.

According to Simons (1995), Management Control Systems are the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities.²¹

²⁰ Hill, Gregory. "A guide to enterprise reporting." 2013

²¹ Simons, 1995, Levers of Control, Boston: Harvard Business School Press, p. 5

Anthony & Young (1999) showed management control system as a black box. The term black box is used to describe an operation whose exact nature cannot be observed.

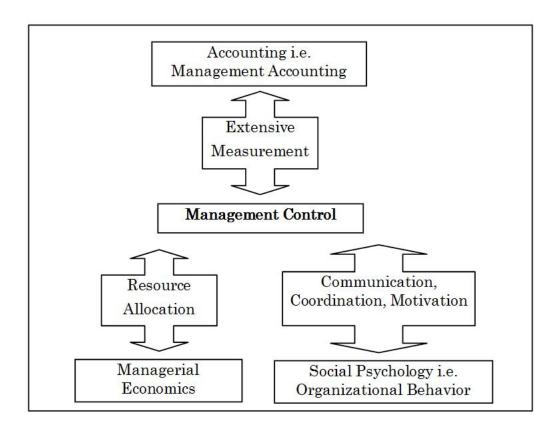


FIG.4. Organizational chart: management control role²²

In this way, as shown in the figure, the process begins with an input, then we find the black box, and the result of its activity represents the output. If a firm can hide "secrets" by the "black box" and conceals it in the best way discouraging potential competitors' spillovers, can obtain success and above all, can keep this advantage for a long time.

Hence, as shown in the picture, management control represent the most important link between accounting (and management accounting) and the managerial economics, the organizational area in which ideas and strategies became a reality.

²² https://en.wikipedia.org/wiki/Management_control_system

1.3 Traditional accounting system.

Discussing mission and vision, during chapter 1.1 "Mission, Vision and accounting. How to connect them?" I showed the best way to analyze links between these three concepts, closer to each other but not ever easy to put in line during a process.

Accounting system is the method utilized by every company to control all types of costs and revenues of the business and to work on them to find indices, sums of import and important variations from a year to the previous one, to summarize the company situation and to underlines impact of income and expenditures on firm's performance.

An authoritative definition of accounting system comes from Needles and Bishop:

- "Accounting or accountancy is the measurement, processing, and communication of financial information about economic entities." ²³
- "The language of business.",24

As I told before, the accounting system is the first and most important method to summarize business conditions, and from it, managers can keep the best information they need to understand real capacities of the firm in mid-term and to implement the right strategies basing of this information. For this reason, the accounting system is fundamental in planning or strategic view. In a general opinion of businesses, accounting is the base for every strategy of improvement of the societies.

This picture sums up this concept in a very concrete way.

²⁴ Peggy Bishop Lane on Why Accounting Is the Language of Business, Knowledge @ Wharton High School, September 23, 2013, Retrieved 25 December 2013

²³ Needles, Belverd E.; Powers, Marian (2013). Principles of Financial Accounting. Financial Accounting Series (12 ed.). Cengage Learning.



Fig. 5: Accounting like center of business environment²⁵

The message transmitted by this image is basic: every action connected with companies, firms of societies revolves around accounting or its shades.

Precisely because of its fundamental role in development, accounting system has an ancient history that can be traced to ancient civilizations.

Historical discovers during years, demonstrate the existence of it thanks to traces of accounting, counts of money and similar just looking to Egyptians, Babylonians or ancient Mesopotamia people. We have to wait for the medieval Europe to find the first example of double-entry bookkeeping, thanks to the Italian mathematician Luca Pacioli²⁶ and the accounting split into financial accounting and management accounting with the development of joint-stock companies. In the nineteenth century, accounting began to transition into an organized profession. Born in Institute of Chartered Accountants in England and Wales in 1880 demonstrates it.

During last 30 years, accounting system observes many transformations and improvements of the traditional system, thanks to the development of the financial accounting and above all the new planning view of the accounting

.

²⁵ http://www.smartaudit.az/accounting/

²⁶ Lauwers, Luc & Willekens, Marleen. "Five Hundred Years of Bookkeeping: A Portrait of Luca Pacioli" (Tijdschrift voor Economie en Management, Katholieke Universiteit Leuven, 1994, vol:XXXIX issue 3, p.302).

system that helps manager into creations of business plans starting from cost analysis.

Traditional system has many pros like:

- Vision in complex of the financial statement
- Book entry of every financial and economic movement of the company
- Flexibility

Contemporary accounting system exploits these great advantages but, at the same time, tries to beat some major cons as:

- Adaptability: Thanks to this quality, new types of accounting systems, because of planning and vision views, can give to FS needed qualities to adapt itself to changes in the environment around.
- Vision: Traditional accounting system, offers a sophisticated view of
 the financial statement without focusing on real provenience or
 competence of some kinds of costs. Trying to apply planning vision to
 accounting system, the best advantage is an efficiently and global
 vision of the business that helps to plan and calculate revenues to
 obtain the Break Even Point and to handle in the best way costs too.

1.4 Introducing new accounting system approach: Activity Based Costing

The more I know about my business and its related expenses, the best I can handle it. The principle concept at the basis of this system, as I told before, is studying the real competence of every cost. In this way, managers can see actual costs contribution and planning process starts with this information.

What is the best practice to organize accountability in this way?

Firstly, we have to give definition of different types of costs a firm has to face during its entire life.

- Fixed cost
- Variable cost

Overhead cost

Spilling these cost helps to define and identify cost drivers too. For example, direct costs like labor force or raw material are relatively easy to trace to products or production lines, but it is harder to allocate indirect costs to product. The reason why it is too easy to identify is that if a firm faces a cost of energy for whole establishment, the hardest goal is to determine and split this cost for each product company produces because electric energy is a shared resource exploited by every line of the chain. To resolve these kinds of problems and optimize cost allocation process, we need to use "cost drivers."

"The cost driver is a factor that creates or drives the cost of the activity. For example, the cost of the activity of bank tellers can be ascribed to each product by measuring how long each product's transactions (cost driver) takes at the counter and then by measuring the number of each type of transaction."²⁷

The second step to do, after recognizing a cost, is to categorize it giving to "cost drivers" a criterion used for every type of that cost. This is the reason

²⁷ The design and implementation of Activity Based Costing (ABC): a South African survey Archived 13 August 2011 at the Wayback Machine, from https://en.wikipedia.org/wiki/Activity-based_costing

why, became every moment more valuable the accounting system by cost centers.

1.4.1 Accounting system by cost centers.

"A cost centre is a department within a business that does not produce directly but incurs costs to the business" 28.

There are two main types of cost centre:

Production cost centre

Service cost centre

The primary function of a cost center is the tracking of all expenses linked with an individual function. A typical example is marketing department that draws resources from various areas of the firm and carries important costs for different production lines. In this way, the cost allocation per cost center helps to identify all costs related to marketing department creating benefit to all accounting system. In this situation, is easier for the manager, for example, identify real cost/benefit margin of the area.

We dealt with most important principles of new strategic kinds of accounting system and we introduced some of the concepts at the basis of the modern accounting systems. We touched the planning and its related functions of budgeting; finally, we covered the relationships between results, plans and accounting system. An accounting system that also need, we just said it previously, help by cost analysis and BCA to provide useful information. In short, we created a panoramic view of the environment in which we collocate focus of the project. It is the moment to present and focus on the Activity Based Costing system.

25

²⁸ "What Are the Functions of a Cost Center in a Management Accounting System?" - Small Business - Chron.com. Retrieved 2015-11-04.

CHAPTER 2

ACTIVITY BASED COSTING

Chapter one covered pillars of the theme I purposed to treat with this "path," in particular way focusing on the concept of the accounting system and its evolution and development during years until arriving to talk about new accounting approach and its pros and cons. Activity Based Costing was the finish line of this path. Hence, the first chapter closes analyzing and introducing the new crucial approach described in far greater depth in chapter two.

This section represents a fundamental step to achieve goals and purposes of this work because the reader, at the end of it, will have capabilities and sufficient knowledge of the subject to understand the business case and aims that are at the base of this production.

Hence, during chapter one, we discovered that "Activity Based Costing is an approach to solving problems related to traditional cost management systems and to records the costs that traditional cost accounting does not do."

Inside chapter two, we more carefully describe the process and the methodology of ABC, starting from its historical development, the cost allocation analysis and arriving at the Activity Based Management process and reasons why it relies on cost analysis.

2.1 Historical development.

All the matter we analyze in this section that summarizes basis of Activity Based Costing strategy, is the result of years and years of evolution and development of accounting systems. During chapter one, we treated the development of the accounting system until the nineteenth century. During last century, there were many changes, which results in the contemporary accounting system.

What is the historical development of ABC?

"ABC is based on George Staubus' Activity Costing and Input-Output Accounting²⁹. The concepts of ABC were developed in the manufacturing sector of the United States during the 1970s and 1980s. During this time, the Consortium for Advanced Management-International, now known simply as CAM-I, provided a formative role for studying and formalizing the principles that have become more formally known as Activity-Based Costing.³⁰"

Robin Cooper and Robert S. Kaplan, proponents of the Balance Scorecard, started to focus on this matter during 80's, mainly starting from 1988. Until that year, rarely we can find scientific publishing which matter is Activity Based Costing. In 1988 Cooper and Kaplan notice these concepts in many articles published in Harvard Business Review.

They described ABC as an approach to solving problems related to traditional cost management systems. The main matter was that this system was unable to determine "real" cost of productions and cost of the related services. Consequently, managers were making decisions based on data that did not represent the true situation inside the firm, without estimated actual cost related to each production line or *cost center*. Problems grew up when managers had to analyze multiple product lines or when economies of scale and scope took action inside decision-making processes.

During chapter two we will focus more carefully on ABC process and methodology, to understand completely, all benefits and advantages coming from this strategy.

Finally, "activity-based costing was first clearly defined in 1987 by Robert S. Kaplan and W. Bruns as a chapter in their book Accounting and Management: A Field Study Perspective. They initially focused on manufacturing industry where increasing technology and productivity

-

²⁹ Staubus, George J. Activity Costing and Input-Output Accounting (Richard D. Irwin, Inc., 1971).

³⁰ Consortium for Advanced Manufacturing-International

improvements have reduced the relative proportion of the direct costs of labor and materials, but have increased relative proportion of indirect costs "31"

"Activity-based costing was later explained in 1999 by Peter F. Drucker in the book Management Challenges of the 21st Century. He states that traditional cost accounting focuses on what it costs to do something³²"

Hence, quoting authoritative economists of last century, we summarize development and changes of ABC during last years, arriving at a precise definition of its methodology, purposes, and benefits.

Quoting another time Peter Druker, "Activity-based costing records the costs that traditional cost accounting does not do"33.

Finally, the last matter to analyze historical development of ABC growing process is the results of all these concepts during last years: the Activity Based Management.

2.2 Segregating costs: Fixed, Variable, and Overhead cost.

Activity Based Costing is a new type of accounting system in which costs are segregated in three categories:

- Fixed Costs
- Variable Costs
- Overhead costs

Let's give precisely a definition of these separated costs.

Fixed costs are business expenses that are not dependent on the level of goods or services produced by the firm. They tend to be time-related, and firm has to face it in every situation until a zero-product production job (when production line stops). A typical fixed cost is an expense a society faces to rent

³¹ Kaplan, Robert S. and Bruns, W. *Accounting and Management: A Field Study Perspective* (Harvard Business School Press, 1987).

³² Drucker Peter F., "Management Challenges of the 21st Century." New York:Harper Business, 1999.

³³ Drucker Peter F, "Management: tasks, responsibilities, practices." Butterworth-Heinemann, 1999.

establishment in which locates production line. If the business does not sell outputs, it has to pay it anyway.

Variable costs are business expenses volume-related and are paid per quantity produced. In this way, if production grows up, in the same time variable costs becomes too. A typical example of variable cost concerns raw material. The everything concerns supply chain is related to variable costs because businesses rely on provisions in the proportion of sales volume. But, thanks to economies of scale, if revenues and sales volume grows, and consequently provisions grow too, costs per unit produced goes down and clearly, and profit margin rockets.

Profit margin is the difference between what customers pay to obtain product sold by the firm and what the business pay to produce it. If the profit margin is positive, increasing quantity sold, the company can cover fixed costs arriving to Break Even Point (BEP), that represent the situation in which business comes to balance between revenues from selling and costs from production. It can be expressed in volume of products produced and regarding value of it.



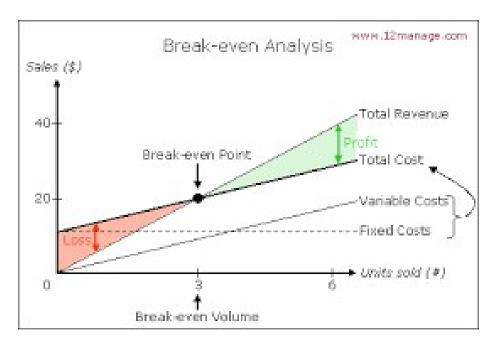


Fig.6 Scheme of calculation of Break Even Point³⁴

-

 $^{^{34}\} http://www.12manage.com/methods_break-even_point_it.html$

Looking to the figure, we can note Break Even Point (in volume and value) and the incidence of variable and fixed costs. It is easy to note and how the company bears fixed costs in mid-term too, thanks to the growth of units sold. Green and red areas represent a positive or negative profit. We note a real profit if the sales/cost margin exceeds Break Even Point.

The last one type of cost is the *overhead cost*.

"Overheads are the expenditure which cannot be conveniently traced to or identified with any particular cost unit. Therefore, overheads cannot be immediately associated with the products or services being offered, thus do not directly generate profits³⁵.

It means that to obtain a coherent cost analysis, we need to use cost drivers, that helps us to drive any cost directly to units produced in proportion to its utility.

Identifying every expenditure of a society and dividing it into these three different categories is the first step of the process to improve and implement its cost analysis. Before it, the first obstacle that management faces, which represents at the same time the starting and the final point of the "cost cycle," it is recognizing if each one of these expenses, supported by the business, will create value greater than the expenditure. This information is fundamental to plan, for example, a production process and it has at the base two different faces/values:

- Expected value: amount of expenditure that society expects to meet it to implement the process
- Effective Value: amount of investment society faces it to perform the process

The greater is the difference between these two values the worst will be the work performed by management and planning system.

٠,

³⁵ PMO and Project Management Dictionary - PM Hut." www.pmhut.com. Retrieved 2015-10-26.

Management, after realizing the process, will have more information about the external environment, real costs to face for this particular process and apparently next time it will develop a more coherent plan to face the same process. That is the reason why previously we have talked about "the finish point of cost cycle." The process starts facing a cost, and re-start another time in the future beginning from the same cost but with more information coming from the past.

The second relevant information for the management team relates to the difference between the total expenditure of the process and the total value created by the same one. Imagining that the process in matter describes the establishment of new branches of a bank, the decision-making process has to rely on different information coming from various areas of the bank. In which environment new office will be established by the bank, what people in that particular place expect concerning services from it, and what are potential revenues coming from this new opening. All these values, plans by management, should be greater than expenditures business will face in the mid-long term to create value. Hence, costs represent the other side of the coin, and it is too important to forecast its incidence to complete perfectly a budgeting process like the one we present previously. For example, imagine that the total expected amount of fixed, variable and overhead costs to establish and handle this new branch in ten years is equal to import, and revenues projected by management are 30% more than total costs supported during this period. Maybe management team will implement a budgeting process and will establish this new branch.

What happens if the original amount of costs exceed 60% of the total estimated costs?

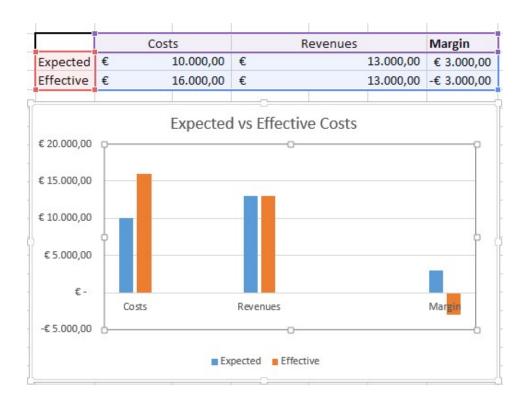


Fig.7 – Expected vs Effective costs

Business is not creating value in this particular case, instead the net value will be negative. What are the natural consequences of this situation? Maybe, two in particular:

- 1. Bank will open another branch exploiting a bigger margin between estimated revenues and planned costs (to cover planning mistakes and unforeseeable events).
- 2. Bank will have complete and coherent knowledge about the process of establishment of a new branch in that particular environment; in this way, next time the probabilities of mistakes falls.

The first target of a business process is to create net value and expenditures represents the hardest obstacle to overcome. Hence, to this end, "cost analysis" became fundamental. Which are main symptoms of an unsuitable cost system of society? The example explained previously helps to understand it. Here a list of ones considered significant.

- The presence of complex high-margin products. If this margin is high and it is not due to a growing price, it means that costs are falling. In this situation, cost handling is the greatest way to improve the margin.
 - The presence of profit margin not easy to explain.
- Suppliers that offer product components that are cheaper that intern production cost
- Demand indifference to growing prices. It could be mean that the firm is underestimating value created because it cannot recognize efficient costs carried to produce that particular product.

During a cycle, the company has to challenge many of these obstacles, and an excellent cost management represents the greatest way to be prepared to face it. As I told before, the Activity Based Costing approach is a useful method to manage costs. Next paragraph covers the methodology of this process.

2.3 Methodology: Cost allocation in operational management.

Introducing Activity Based Costing as the new accounting approach to simplify and optimize value created by accounting area of business, we just quoted "cost driver" as the most important filter of all costs a company has to bear. The selection of cost drivers is the fundamental process to give to ABC approach the possibility to improve the firm's cost analysis and to drive it to excellent results.

"Cost drivers are the structural determinants of the cost of an activity, reflecting any linkages or interrelationships that affect it." 36

This quote by Michael Porter sums up adequately the concept explained below. The reason why this initial process represents a significant step to implement in the right way the model is that during last 5-10 years there has been a considerable increase of "standard costs", it means that identify

³⁶ "Competitive Advantage," by Michael Porter

³⁷ The term "standard cost" shall means costs the company bears one time for more than one product line. The growth of the economy of scope explains this phenomenon.

which part of the cost the firm pays for that particular product line results every day harder. Cost drivers help management to carry out this hard task. In this way, it is easy to understand that the vast part of the results depends on the choice of the right cost driver. A typical example of a wrong decision about cost drive to utilize is "unit produced." Imaging we are part of the management team of a bank and its business core is represented by trading and finance area. Our job is to allocate electric energy cost. If we utilize a "unit produced" cost driver (for example labor force hours of work), we risk underestimating costs bring by that particular product lines. Obviously, the trading area could drain more energy (thinking about billions of data downloaded, computers all the time connected to a LAN) than a single branch of the bank. Maybe trading center and the bank's subsidiary has the same number of employees, and it means that if we try to allocate the cost using "labor force hour of work" as a cost driver, we will conclude that these two activities consume the same quantity of energy. It represents a mere of a wrong allocation of cost. In this particular case, the "net value of operations done" could be a cost driver that can summarize costs coming from these two different activities. In that way, the major value created by the trading activities reflects the major costs sustained to obtain them, better than the operations of the characteristic area do. Hence, the first important step is to find cost drivers that are coherent with corporate value chain to minimize the risk of mistakes, as I explained above.

Number of	Traditional	
allocational	accounting	ABC
bases	system	
More than one	**	•
cost driver		
One cost driver	✓	
Allocation of Indirect Activities	All activities allocated in every product	Activities allocated only when effectively consumed

Fig 8. Cost drivers in ABC and traditional accounting system³⁸

2.3.1 Phases and purposes of the process

"Activity-based costing (ABC) is an accounting method that identifies the activities that a firm performs and then assigns indirect costs to products. An activity-based costing (ABC) system recognizes the relationship between costs, activities, and products, and through this relationship, it assigns indirect costs to products less arbitrarily than traditional methods." 39

This quote underlines the fundamental role played by indirect costs in the accounting system of every business. To understand the difference between direct and indirect cost is preferable to explain before which is the difference between characteristic activity and indirect activity inside a firm.

The characteristic activity represents activities related to the core business of the society; looking to the example explained previously to identify the right cost drivers, all operations related to trading area or classical operations of a bank (as accounting openings for customers) represent a typical characteristic activity. Operating income summarizes the result of all these actions during a fiscal year.

³⁸ The table shows principles of allocation using ABC or Traditional accounting system. (PBM)

³⁹ Invenstopedia.com – "Activity-based Costing method."

Extraordinary activity includes extraordinary⁴⁰ charges and incomes attributable to prior periods or imputable to the current period but not directly connected to the core business of the firm. Management of the enterprise provides other types of activities that are not relevant to explain in this section. Costs related to an activity could be direct or indirect; which is the difference? Direct costs are costs directly attributable to single unit produced (typical example are raw materials for production lines and cost sustained by the bank to open new customer's account). Indirect costs are costs attributable to single unit produced, only if it is possible to use a common base of allocation. It is important to pay attention to the criterion which based this differentiation: it seems similar to fixed-variable cost differentiation, but we are not talking about the same thing. Last one concept we need to explain to make it easier to understand the process is "full-costing",41 notion. "Fullcosting" is a definition of the cost that includes all types of expenditure sustained by the firm (as taxes, overhead costs, and borrowing costs). Its aim is to summarize all costs business must face completing an activity. Activity based costing accounting approach takes into consideration all these differentiations about costs, and it tries to find the right base of allocation to allocate expenses in the best possible way.

We can divide the entire process into different phases:

- 1. Identify the "full-cost" of activity.
- 2. Split it into direct and indirect costs.
- 3. Set direct cost and analyze indirect ones; in this way is useful to find the most coherent base of allocation (it could be the hardest phase of the process)

⁴⁰ "extraordinary" in this context means revenues stemming from activities not directly related to characteristic area of the business. It could include earnings arising from windfall gains or capital gains and losses not directly related to core business)

⁴¹ The principle of "full-costing" was spotted by two English economists, R. L. Hall e C. J. Hitch. R. L. Hall e C. J. Hitch, «Price Theory and Business Behaviour," in T. Wilson e P. W. S. Andrews, Oxford Studies in the Price Mechanism, Oxford, 1951, pp. 106-138.

- 4. Apply this base to different production lines or at various products; the goal is to find the percentage of the base of allocation related to each product taken into account.
- 5. Calculate incidence of indirect cost and add it to direct cost to obtain the recalculated price.
- 6. Account for these entries.

These phases represent the first part of the process, the operative one. Next one is composed of concomitant and subsequent control in which we have to collect every data deriving from the process and communicate it to management area (reporting process). In this way, we are creating a useful feedback about that particular products/production lines.

The example below, explained puts into practice what I said.

"[...]Let's illustrate the concept of activity based costing by looking at two common manufacturing activities: (1) the setting up of a production machine for running batches of products, and (2) the actual production of the units of product. We will assume that a company has annual manufacturing overhead costs of \$2,000,000—of which \$200,000 is directly involved in setting up the production machines. During the year the company expects to perform 400 machine setups. Let's also assume that the batch sizes vary considerably, but the setup efforts for each machine are similar. The cost per setup is calculated to be \$500 (\$200,000 of cost per year divided by 400 setups per year). Under activity based costing, \$200,000 of the overhead will be viewed as a batchlevel cost. This means that \$200,000 will first be allocated to batches of products to be manufactured (referred to as a Stage 1 allocation), and then be assigned to the units of product in each batch (referred to as Stage 2 allocation). For example, if Batch X consists of 5,000 units of product, the setup cost per unit is \$0.10 (\$500 divided by 5,000 units). If Batch Y is 50,000 units, the cost per unit for setup will be \$0.01 (\$500 divided by 50,000 units). For simplicity, let's assume that the remaining \$1,800,000 of manufacturing overhead is caused by the production activities that correlate with the company's 100,000 machine hours. For our simple two-activity example, let's

see how the rates for allocating the manufacturing overhead would look with activity based costing and without activity based costing:

Mfg overhead cost allocations	\$500 setup cost per batch + \$18 per MH	\$20 per Mi
Mfg overhead costs per MH	\$18	\$2
Machine hours (MH)	100,000	100,00
Mfg O/H costs allocated on machine hours	\$1,800,000	\$2,000,00
Less: Cost traced to machine setups	200,000	-0
Total manufacturing overhead costs	\$2,000,000	\$2,000,00
Mfg overhead cost per setup	\$500	\$-0
Number of setups	400	Not applicable
Mfg overhead costs assigned to setups	\$200,000	\$-0
	With ABC	Without ABC

Next, let's see what impact these different allocation techniques and overhead rates would have on the per unit cost of a specific unit of output. Assume that a company manufactures a batch of 5,000 units and it produces 50 units per machine hour, here is how the cost assigned to the units with activity based costing and without activity based costing compares:

	With ABC	Without ABC
Mfg overhead for setting up machine	\$500	\$-0
No. of units in batch	5,000	Not applicable
Mfg O/H caused by Setup - Per Unit	\$0.10	Not applicable
Mfg overhead costs per machine hour	\$18	\$2
No. of units produced per machine hour	50	5
Mfg O/H caused by Production - Per Unit	\$0.36	\$0.4
Total Mfg O/H Allocated - Per Unit	\$0.46	\$0.4

If a company manufactures a batch of 50,000 units and produces 50 units per machine hour, here is how the cost assigned to the units with ABC and without ABC compares:

No. of units in batch Mfg O/H caused by Setup - Per Unit	50,000 \$0.01	Not applicable Not applicable
Mfg overhead costs per machine hour	\$18	\$20
No. of units produced per machine hour	50	50
Mfg O/H caused by Production - Per Unit	\$0.36	\$0.40

As the tables above illustrate, with activity based costing the cost per unit decreases from \$0.46 to \$0.37 because the cost of the setup activity is spread over 50,000 units instead of 5,000 units. Without ABC, the cost per unit is \$0.40 regardless of the number of units in each batch. If companies base their selling prices on costs, a company not using an ABC approach might lose the large batch work to a competitor who bids a lower price based on the lower, more accurate overhead cost of \$0.37. It's also possible that a company not using ABC may find itself being the low bidder for manufacturing small batches of product, since its \$0.40 is lower than the ABC model of \$0.46 for a batch size of 5,000 units. With its bid price based on manufacturing overhead of \$0.40—but a true cost of \$0.46—the company may end up doing lots of production for little or no profit."

The example below expresses application of the typical operative phases of ABC method which are to be followed by reporting step in which it is possible to give cyclicality to the one. Velmurugan, an Indian economist, tries to take into account reporting and operative phase inside a single implementation procedure.

"According to Velmurugan, Activity-based costing must be implemented in the following ways:

- 1. Identify and assess ABC needs Determine viability of ABC method within an organization.
- 2. Training requirements Basic training for all employees and workshop sessions for senior managers.
- 3. Define the project scope Evaluate mission and objectives for the project.
- 4. *Identify activities and drivers Determine what drives what activity.*
- 5. Create a cost and operational flow diagram How resources and activities are related to products and services.

-

⁴² https://www.accountingcoach.com/activity-based-costing/explanation

- 6. Collect data Collecting data where the diagram shows operational relationship.
- 7. Build a software model, validate and reconcile.
- 8. Interpret results and prepare management reports.
- 9. Integrate data collection and reporting."43

This vision is so compelling because of the fusion of all the process inside one implementation strategy that tries to optimize all advantages related to using ABC.

The figure below explained a "graphic view" of the ABC method application.

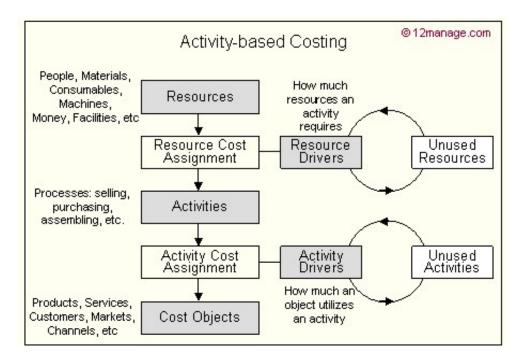


Fig. 9 – Activity Based Costing cycle⁴⁴

The primary aim of the picture is to explain how similar is the ABC process applied firstly to resources and then to activities. Activity Based Costing shows a lot of pros, but like every economic theory presents some cons too.

Which are limitations of ABC method?

1

⁴³ Velmurugan, Manivannan Senthil. "The Success And Failure of Activity-Based Costing Systems." Journal of Performance Management 23.2 (2010): 3-33. Business Source Complete. Web. 15 Mar. 2012.

⁴⁴ www.12manage.com

The key problem with ABC method is that it treats fixed costs as if they are variable; this situation can bring to wrong decision by the management team.

Particular classes of costs for which is impossible to find a coherent base of allocation, but that represent costs the business has to face anyway represent another significant problem. "CEO Salary" is a typical example. "These costs are termed 'business sustaining' and are not assigned to products and customers because there is no meaningful method."

In general, it means that all costs related to the management team and direction one, who has the task of handling the company, represent expenses not allocated to single a activity. Provocatively, it could be considered as "fixed costs."

The last one limit of ABC method is the impossibility to transform it into an "automatic accounting model." The new economy needs method available automatically because of the large quantity of data and entries produced every day. Remembering that the "base of allocation" chosen it represents the "pillar" of Activity Based Costing, it is easy to understand that management team reduced only to fundamental entries the applicability of the method. Chapter four and five will explain, giving a panoramic view from inside the bank, the exact meaning of this sentence. We will see that ABC method could be applied only to manual entries of accounting office, instead of nothing they can do about automatic entries. ⁴⁶Taking into account all different types of cost hidden behind a single accounting cost entry, we can find accounting methods different to ABC. The most important one is the "Environmental full-costing accounting" ⁴⁷. EFCA is a contemporary accounting method that takes into

-

⁴⁵ https://en.wikipedia.org/wiki/Activity-based_costing

⁴⁶ As we will see, "automatic entries" refer to entries that the automatic system, chosen by the bank, it registers inside statement accounts without a control by the office(a typical example are the commissions and interests paid by customers on their credit lines. The debit takes place directly on single customer's balance account and it is directly registered by the system inside the corresponding account.)

⁴⁷ Shortened EFCA: "a method of cost accounting that traces direct costs and allocates indirect costs," Schaltegger, S. & Burritt, R. (2000), Contemporary Environmental Accounting: Issues, Concepts and Practice, Sheffield: Greenleaf Publishing, p. 111. It is also known as true-cost accounting (TCA).

account the "triple bottom line", composed of environmental, economic and social costs. It could be an alternative to ABC method.

"EFCA tries to account for:

- Costs rather than outlays
- Hidden costs and externalities
- Overhead and indirect costs
- Past and future outlays
- Cost according to life cycle of the product."⁴⁹

The most significant difference between this method and the ABC one is represented by the overhead costs; in this way, they include the "business sustaining" costs, which are so difficult, so account using ABC method.⁵⁰

2.4 Differences between two different accounting system.

In this section, we pursue the objective of analyzing the difference between the traditional accounting system and the Activity Based Costing. Firstly, we need to give some guidelines for traditional accounting so as to have a 360° view on the topic and to complete the analysis coherently.

"(Also known as "Conventional method") the traditional method of cost accounting refers to the allocation of manufacturing overhead costs to the products manufactured. It assigns or allocates the factory's indirect costs to the items manufactured on the basis of volume such as the number of units produced",51

The traditional method uses redundant processes, standardized by time and experience, utilizing cost centers as the only of the base of allocation for every

 $^{^{48}\,}$ The possible environmental, social and economical costs and benefits or advantages deriving from collecting a cost.

⁴⁹ https://en.wikipedia.org/wiki/Environmental full-cost accounting

⁵⁰ Please see "ABC Limitations," note 41.

⁵¹ https://www.accountingcoach.com/blog/taditional-method-cost-accounting

cost we have to account for. In this way, the accounting method does not create net value for the enterprise and especially does not add value to management knowledge because there are no reporting phases and there are not feedback to improve operations in future. "Another disadvantage of solely using the traditional costing system is that it can lead to bad management decisions because it excludes certain nonmanufacturing costs." 52

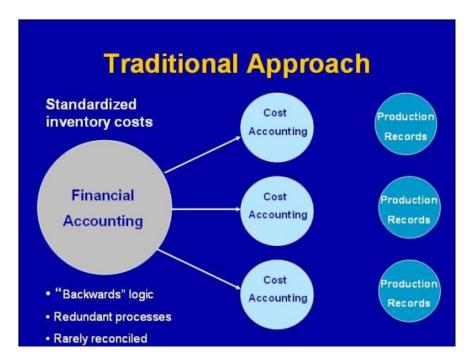


Fig. 10 – Traditional accounting scheme.⁵³

However, this method presents some pros too.

- It is simple to utilize
- Probability of mistakes falls because there is not a decision-making phase
- Process automation is easy
- The method is in line with GAAP (General Accepted Accounting Principles). It means smooth implementation for companies.

-

 $^{^{52}\} http://small business.chron.com/traditional-costing-vs-activity based-costing-33724.html$

⁵³ http://www.fbssystems.com/ManagerialAccounting

Hence, we are now able to draw a comparison between Activity based costing method and traditional accounting. Firstly, we will show an emblematic picture, and then we will try to list it

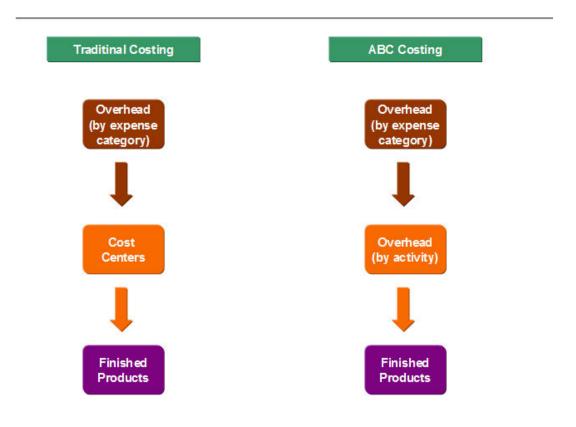
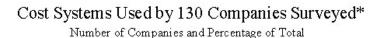


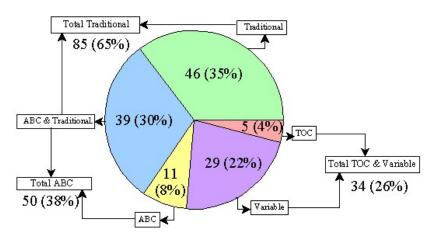
Fig. 11 – Traditional Costing vs ABC Costing.⁵⁴

The figure below expresses the most important difference between these two methods: Traditional costing uses standard cost centers to allocate costs (unit produced, unit sold, hours of work). ABC, instead, creates every time a different base of allocation studied by activity implemented to produce that particular product, to sell that particular unit or to attract that particular customer. In this way, ABC provides a Greater costing accuracy that represents the primary benefit of activity-based costing. The second big difference between these two methods is that ABC can adapt itself to economic evolution and change instead traditional accounting bases its function on standard cost centers that cannot follow modern improvements. The third difference is related to the management system. Thanks to ABC we

⁵⁴ http://www.blogbigtime.com/business/understanding-traditional-costing-and-activity-based-costing

observe a direct contact between management and accounting system, because of the presence of the reporting phase that is absent inside traditional accounting. It means that ABC brings improvements and new relevant data to management team; instead, traditional accounting cannot do it. In some fields, traditional accounting gives advantages that ABC cannot bring. The typical example could be a company with limited funds. ABC, in fact, creates value but it needs many resources to be implemented. The last one "disadvantage of using activity-based costing is that it is easily misinterpreted by some users". It is impossible that it can happen using traditional accounting system. Despite many advantages presented by ABC, the no possible automation of the process, and the resources needed to implement it shall ensure that there are a lot of company that not leave the traditional accounting system, as shown by the figure below.





^{*} Developed from Hughes & Gjerde 2003 survey data.

Fig. 12. Spread of ABC inside companies – survey

"The survey results reported that out of the 130 companies surveyed, 46 use traditional cost systems, 11 use ABC systems, 39 use both traditional and ABC cost systems (for result reporting purposes, the ABC users were combined

⁵⁵ http://smallbusiness.chron.com/traditional-costing-vs-activitybased-costing-33724.html

with the traditional and ABC users), and 34 use variable-cost and TOC systems.",56

(TOC system means Theory of constraints, "a management paradigm that views any manageable system as being limited in achieving more of its goals by a very small number of constraints")⁵⁷

The link between accounting system and management system using ABC approach is very clear. It is the reason why in recent years we observed the development of a new method: Activity Based Management.

2.5 Evolution in recent years: Activity Based Management

Using Activity Based Costing to give the possibility to managers to base their decision-making process on coherent data, means that their planning and budgeting processes and strategies will perform in a greater way, taking into account all shapes hide behind value chain.

"Activity-based management is a management control technique that focuses on the resource costs of organizational activities and processes, and the improvement of quality, profitability and customer value. This technique uses activity based costing information to identify strategies for removing resource waste from operating activities. Main tools employed include: strategic analysis, value analysis, cost analysis, life-cycle costing, and activity based budgeting. As well, activity based management uses activity-based cost information for a variety of purposes, including cost reduction, cost modeling, and customer profitability analysis⁵⁸."

We can divide activity-based management into two different areas:

• Operational ABM that implement planning decision operating changes inside value-chain. In few words: "doing things right."

⁵⁸ http://www.financepractitioner.com/dictionary/activity-based-management

⁵⁶ http://maaw.info/ArticleSummaries/ArtSumHughesGjerde03.htm.

⁵⁷ https://en.wikipedia.org/wiki/Theory_of_constraints

• Strategic ABM, which analyzes the outside environment, and using data coming from ABC analysis, choose the right strategic plan to use to perform in the best way. Easily, "doing the right things."

It is easy to understand that ABM is an implementation of ABC strategy process. The figure below explained this concept.

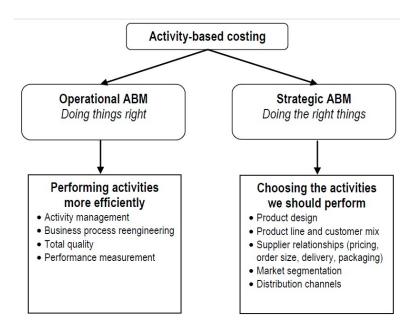


Fig.13: Differences between operational and strategic ABM⁵⁹

There are some substantial risks to face using ABM and ABC approach. The first and more important is that, if managers are not flexible using this approach, they risk not to underline activity that has an inherent and essential value as a customer that represents a loss based on committed actions, but that give to the firm possibility to open unloads in a new market. This particular type of customer, with an ABM approach, can be analyzed like a low-value customer, while it has an excellent potential value for the business. The last one aim of this section is to explain the process of ABM briefly. Thinking that it "is a procedure that originated in the 1980s for analyzing the processes of a business to identify strengths and weaknesses" it recognize areas or

-

⁵⁹ Ildikó Réka CARDOŞ, Ştefan PETE, adapted by Kaplan & Cooper (1998), "Activity-based Costing (ABC) and Activity based Management (ABM) Implementation – Is This the Solution for Organizations to Gain Profitability?."

⁶⁰ http://www.investopedia.com/terms/a/abm.asp

activities of business in which the firm or the bank are losing money. After this recognization, using ABC principles, it tries to find the right base of allocation to localize the provenience of the problem and to find a solution to solve it. In this way, the result is that not profitable operations can be deleted of improved by management activity.

Hence, "ABM analyzes the costs of employees, equipment, facilities, distribution, overhead and other factors in a business to determine and allocate activity costs" ⁶¹

As told at the beginning, the primary aim of this chapter is giving to the reader a panoramic view of all the theories at the base of the "path" described during the introduction. We covered cost analysis, and new accounting approaches like EFCA and ABC, differences between this last one and the traditional accounting system and finally, we dealt with the ABM. The reader has now all knowledge needed to face the application of these theories to banking industry until to deal with the business case of this work.

⁶¹ http://www.investopedia.com/terms/a/abm.asp

CHAPTER 3

FROM BUSINESSES TO BANKS: HOW ABC AFFECTS MANAGEMENT

Chapters one and two covered accounting system and its developments during years, until arriving at deal with not traditional ones like Activity Based Costing and the linked Activity Based Management. Thanks to these two chapters, the reader has now a clear idea of what are the ABC aims and objectives and mostly in which fields it can excel and in which it is not a useful approach. Information coming from these two chapters teach that ABC approach is helpful to identify firm's activities and its related costs. If we try to think about an environment far from firms' one, the first and the most important we find is banking industry: exploit ABC inside this world is not easy but it can be in the same way useful.

Chapter three aim is to explain briefly, the value chain of a bank, its most important activities and especially which are the activities that can be considered part of "Characteristic area," and which ones can be part of "Extraordinary area"⁶². In this way, it will be easier to find operations and related cost drivers to apply Activity Based Model to optimize cost allocation process. Next, we will try to explain differences between run a company and manage a bank, focusing on revenues (analyzing differences by bank revenues and an industrial company ones)and expenses (the most important focus will be the absence of raw materials inside a bank, that are the best criterions to find the most efficient cost driver). Finally, we will deal with the process of value creation looking to it from an ABC point of view.

Remembering that, as told before, the case study explained during chapter four and five, refers to a small-medium Italian private bank, we will consider characteristics and objetives of that category of bank.

⁶² We dealt with these definitions during chapter two.

3.1 Mission and Vision

As explained before, ABC model can also be used to improve banks' cost allocation process. However, the real question to ask is: "which is the difference between a bank and an industrial company"? During years, this simple question powered many theories about this matter. Starting from classical definitions of bank activities and objectives, we will try to give and answer to this question. In this way, we will be able to understand how Activity Based Costing can be perfect to analyze banks too. "Banking is one of the oldest trades in the world and from the start it had an international vocation calling (exchange, financing of international trade). It is a company like others, its behavior and strategy can be analyzed with the same relevant structures and analysis tools than any other company. However, banking is special and the consequences of this uniqueness have always been significant."

There are different categories of banks like:

- The International Bank
- The Commercial and Investment Bank
- The Central Bank
- The Business Bank

The commercial and investment bank represent the two classes of banks that can fit the bill of explanation of the relationship between firms and banks. The differentiation between these two types is so hard; in fact, "in the United States, a conflict of interest has been created by the 1933 Banking Act, best-known as the Glass-Steagall Act, between the activities of:

• Commercial bank, which receives deposits and make loans.

 $^{^{63}\} http://www.banque-credit.org/EN/banks/banking-firm.html$

• Investment bank, which makes the transactions on stocks and real estate prices."64

The differentiation in categories is fundamental to identify the specific area of a bank. It means that commercial banks have to implement relations with customers, while investments banks have to collect investors' money and invest it in creating value.

Hence, there are many types of banks but we will treat especially commercial and investment banks.

3.1.1 Creating value for shareholders, customers, and employees

"Banks act as payment agents by conducting checking or current accounts for customers, paying cheques drawn by customers on the bank, and collecting cheques deposited to customers' current accounts. Banks also enable customer payments via other payment methods. [...]

Banks borrow money by accepting funds deposited on current accounts, by accepting term deposits, and by issuing debt securities such as banknotes and bonds. Banks lend money by making advances to customers on current accounts, by making installment loans, and by investing in marketable debt securities and other forms of money lending. Banks provide different payment services, and a bank account is considered indispensable by most businesses and individuals."

Hence, banks have a fundamental role in world economy, and we just explained the characteristic activities. However, how banks create value and for whom?

Banks can create value for:

- Shareholders
- Customers

-

⁶⁴ http://www.banque-credit.org/EN/banks/banking-firm.html

⁶⁵ https://en.wikipedia.org/wiki/Bank#Bank

• Employees

- *Shareholders*: Banking industry represents a particular environment in which investors that decide to invest want in return good yields accompanied by lowrisk items. The "Cet1⁶⁶" represents the most utilized index to test the capital level of risk of a bank. In this way, shareholders do not care about how a bank creates values; they are investors and gains represent the only one interest for them.
- *Customers*: As told before, there are different types of bank and each one of these offers various critical services. The only one characteristic common to every bank is the banking services. It represents cash deposit, accounts, midterm loan. It means that every kind of customer expects that his bank offers this kind of services. How can a bank create value for its customers? A lowrisk environment in which customers feel safe and are happy to invest their money represents the core of success.
- -Employees: Bank is a particular place in which work. Analyzing various surveys jumps out that bankers looking for a place in which work is not stressful, with the high-value possibility of career development and especially they want to work for a society that offers services in the right way, helping its employees too, proposing to them facilities for services provided.

The value-creation process acquired importance during last years because of the financial crisis of 2008. After that, customers lost confidence with bank environment and started to search new ways to handle their money. In this complicated situation, management acquired a fundamental role to improve the value-creation process. Jelena Stankeviciene and Marta Nikonorova's work represent and excellent summary of this matter.

Source: http://www.investopedia.com/terms/c/common-equity-tier-1-cet1.asp#ixzz4gl9BZv8E

⁶⁶ "A component of Tier 1 capital that consists mostly of common stock held by a bank or other financial institution. Common Equity Tier 1 (CET1) is a capital measure that was introduced in 2014 as a precautionary measure to protect the economy from a financial crisis. It is expected that all banks should meet the minimum required CET1 ratio of 4.50% by 2019

"The prevention of the collapse of banking industry during the financial downturn is crucial to the on-going viability of any banking organization. Therefore, keeping sustainable economic performance and quick recovery is among the most important activities conducted by banks. [...] One option how to determine sustainable value was offered by Figge & Hahn (2004, 2005). The main idea of the model is to consider the economic, social and environmental resources that must be measurable and quantifiable in meaningful way. It must be defined indicators that would measure the resource use. In order to know the efficiency of the resources, there is a need to establish how much return a company creates per resource unit. In addition to this, it could be said that in this case, a sustainable value could be identified by the difference between return and opportunity cost through the Return to Cost Ratio. [...]

According to Gilding, Hogarth, & Don Reed (2002), and his report single Bottom Line Sustainability, identifies four primary drivers of value creation:

- 1. Margin improvement. This can be achieved through actions that increase operational effectiveness, such as ecoefficiency measures and creating premium pricing opportunities through enhanced customer loyalty, product differentiation, and gaining access to new market segments.
- 2. Risk reduction. Sustainability actions can reduce both financial risk and protect corporate and brand reputations through actions that create positive stakeholder relationships, generate community support, and increase employee loyalty; thereby reducing the risk of delay in new product introductions and negative shareholder resolutions.
- 3. Growth enhancement. This may be accomplished through product and process innovation, and also by developing capacity in new markets, motivating employees, and increasing sales of existing products.

4. Capital efficiency. Return on investment can be improved by reducing working capital requirements, replacing products with service, or materials with knowledge."⁶⁷

The best of the presented way to measure the value-creation of financial institutions is represented by the four – drivers theory: thanks to it, analyzing a bank, you can create in the image of a bank in which you can summarize the risk and the growth that are linked to the capital efficiency.

The figure below represents an excellent value-creation process summary.

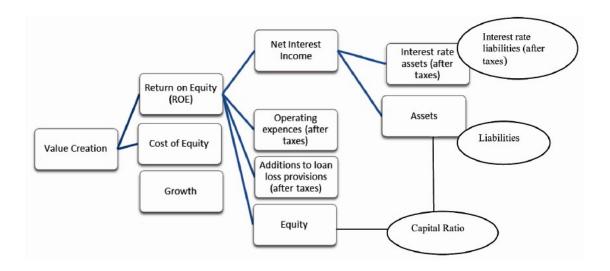


Fig.14: The value creation process⁶⁸

The model explains which are most important bank costs (cost of equity) and best paths to generate profits. In this paragraph, we just tried to explain which are the most necessary drivers to explain and measure the value-creation process of a bank. Evaluation skills are usually utilized to evaluate industrial company; so, which are differences between managing a bank and run a business? We will explain it during next paragraph.

54

⁶⁷ Jelena Stankeviciene and Marta Nikonorova / Procedia - Social and Behavioral Sciences (2014)

⁶⁸ Fiordellisi and Molyneux model of shareholder value measurement.

3.2 Differences between run a company and manage a bank.

During chapter three we tried to explain bank's value chain and most important drivers to evaluate it. These skills are often used to assess industrial firms, but they can also be useful to understand in which particular fields a bank can improve to create more value. Anyway, there are a lot of difference between run a company and manage a bank but analyzing it from other points of view, it could be easy to find many points in common between these two different realities. Examining an industrial firm, the first value-creation process unit everyone starts to investigate is the production process. Naturally, in a bank, we cannot find supply chains, production lines and so on. It is a significant difference, and this is the reason why in a bank cost allocation we cannot find raw materials⁶⁹.

It is a simple example to explain differences between these two different types of company. Going into that, differences can be categorized by:

- Revenues
- Expenses
- Target

We will treat first two points of the list during paragraph 3.3 and 3.4; during this section we will deal with targets, identifying similarities and differences between them.

Target

Both banks and companies have to face the same critical challenge: to attract new customers and try to earn by growing of its total number. The difference between these two is the methodology applied to reach those objectives:

• Industrial companies shall bet on quality strategies or cost leadership strategies working on production lines, different kinds of raw materials or different incentive policies for employees. These firms can also focus on new

⁶⁹ The absence of raw materials represents the primary matter of the paragraph 3.4. We will discuss this further inside that paragraph.

marketing strategies finding new ways to reach the corporate mission. The best cost allocation strategy it has the easiest is the planning process to modify and improve oldest plans. Activity based costing helps in this way to give all information needed to create an excellent business plan and develop the business.

• Strangely, observing from a different point of view, looking at banks we find a similar situation. In fact, production lines' output can be represented by loans granted and raw materials employed could be interest rates; in this way, it is easy to understand that as a firm improves its production line basing on cost allocation and consequent planning, banks can do the same using ABC also them. Talking about marketing matter, it has different shades, but the fundamental concepts and aims are the same.

In short, both have to find new customers, and both have more or less the same possibilities to do that (obviously, with some exceptions) because as banks also firms need new customers to sell their products and grow. This similarity is one of the reasons why, during years, economists started to try to use ABC method also to improve banks' cost allocation. Looking to some outstanding companies, we will find a clear demonstration: during last years, major societies (especially whom sell expensive type of products) has launched "financial services branch" and own branded banks. BMW can be a typical example. These two words, during years, are drawing ever closer. Explained targets, it is now important to talk about revenues and expenses, to give a complete image of similarities and differences and to explain how exploiting similarities is possible to apply Activity Based Costing model to the banking industry.

3.3 Revenues and expenses: Financial Area and customers.

To understand where banking revenues come from, we have to define its business model that, as I told before, has to reach two different goals:

- Generate positive yields from financial business
- Generate gains from characteristic area and customers' operations.

"A bank can generate revenue in a variety of different ways including interest, transaction fees and financial advice. Traditionally, the most significant method is via charging interest on the capital it lends out to customers. The bank profits from the difference between the level of interest it pays for deposits and other sources of funds, and the level of interest it charges in its lending activities. This difference is referred to as the spread⁷⁰ between highly the cost of funds and the loan interest rate. Historically, profitability from lending activities has been cyclical and dependent on the needs and strengths of loan customers and the stage of the economic cycle. Fees and financial advice constitute a more stable revenue stream and banks have therefore placed more emphasis on these revenue lines to smooth their financial performance.",71

All this matter refers to characteristic area operations as customers' loans, mortgages, and activated accounts; the second way to generate a profit margin refers to the financial area. Each bank can exploit customers' cash deposit to invest it in capital markets making real yields and consequently a net profit.⁷² It is why most major banks have launched their "private bank" branches or securitisation special-purpose entities. In this way, banks can exploit

Source: Net Interest Rate Spread http://www.investopedia.com/terms/n/net-interest-ratespread.asp#ixzz4gmFRbA6f

⁷⁰ In simple terms, the net interest spread is like a profit margin. The greater the spread, the more profitable the financial institution is likely to be; the lower the spread, the less profitable the institution is likely to be. While the federal funds rate play a significant role in determining the rate at which an institution lends immediate funds, open market activities ultimately shape the rate spread.

⁷¹ https://en.wikipedia.org/wiki/Bank#Bank

⁷² During business case analysis, we will underline more clearly this matter, becuase Banca Promos s.p.a business core is represented by financial and trading area

enormous quantity of money they handle generating new profits, which they can also use to offer lower interest rates on the markets to attract new customers. In fact, making profits, they can also decide to lose some percentage points on loan spread to attract new clients.⁷³

The decision-making process explained need an exemplary planning process behind that ABC can support substantially. The best start point has to be the cost allocation: thanks to it, it could be easier to plan the future and create a great business plan to catch goals described before. Analyzing bank expenses, the absence of raw materials represent the strongest difference despite to industrial companies and the hardest obstacle to overcome to apply Activity Based Costing method. A solution can be linked to the matter explained before: looking to another point of view, differences between banks and firms boil down and the value process of capital efficiency, in which the interest rate spreads replace the absence of raw materials, and the fundraising or the retail activity replace the standard production line. In this way, costs can be allocated by activity following different lines eaching the same result. ABC model born by Kaplan to helps industrial companies and to streamline the production lines, which carried useless costs, not giving an image of the real situation inside a business; it was not created for banks, and this is the reason why it took years before applying to banks. During the last paragraph, we will demonstrate that despite the absence of raw material and the difficulties represented by not the usual value-creation path, ABC model can be fundamental for every banking business.

⁷³ I faced this matter in Deloitte, where analyzing SSP works, I noted many renegotiation acts due to banks' fights for new customers and relative falling interest rates to catch them.

3.4 Creating value into processes: ABC and managing costs.

Applying ABC to the banking industry, it may seem hard but giving some major premises, it could be interesting and especially useful. Primary step is recognizing principles of the method:

"Not surprisingly, the basic concept behind all of these alternatives is the same

– the same simple concept that drives Activity-Based Costing:

Premise: An organization's products and services cause it to perform activities and those activities cause it to incur costs.

Conclusion: Costs should first be assigned to the activities that cause them and the accumulated cost of each activity then assigned to the products and services that made each activity necessary.

It is as simple as that. Products and services cause activities and activities cause costs. The accurate assignment of costs to product and services can be accomplished by simply tracing costs backwards through this chain of cause-and-effect."⁷⁴

To apply the model, we need to divide banking industry process into two different activity center, to which will match two different kinds of costs we will explain after. The first activity center covers interest spread, the cost of capital and money sourcing by the bank, to create a good base to power the second business center, in which bank creates relations with customers, activates loans and mortgages and all activities explained before. The figure below, quickly explains the entire process described.

⁷⁴ Measuring Customer and Product Profitability at Community and Regional Banks; *Douglas T. Hicks,CPA, CMC Edmond J. Olejniczak III, CPA Bradley A. Curell*

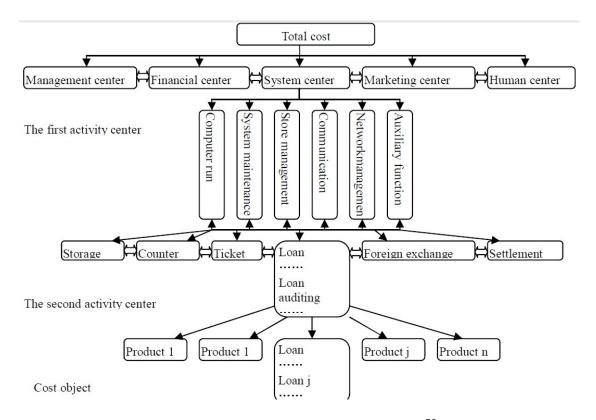


Fig.15 The total "cost process" applied to the banking industry. 75

Hence, the first step is dividing bank costs into two different categories: interest cost and bank activity cost (or characteristic area costs) as the model figured below explained.

 $^{^{75}}$ The Costing of Commercial Banks based on ABC, research on School of Management, China University of Mining and Technology paper.

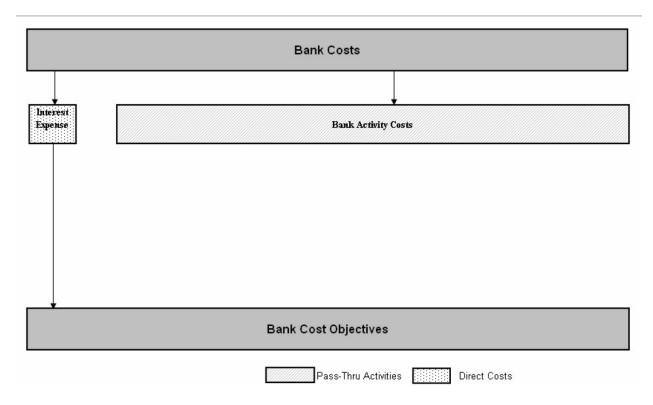


Fig.16: Division of the bank costs.⁷⁶

Recognizing these costs, it represents a fundamental step to divide operations into different activities and to identify costs to allocate. Remembering that ABC model based on cost drivers, the best way to start the approach is identify different activities⁷⁷. "We begin the process by breaking bank activities down into five basic categories: raising funds (accumulating deposits), using funds (making loans), supporting customers, supporting product/service lines, and managing the organization as a whole. Every activity performed by the bank can logically be included under one of these headings."

⁷⁶ Measuring Customer and Product Profitability at Community and Regional Banks; *Douglas T. Hicks,CPA, CMC Edmond J. Olejniczak III, CPA Bradley A. Curell*

⁷⁷ Analyzing ABC model approach, we will see in the business case, that Banca Promos s.p.a uses the same approach, dividing costs into activities and cost centers (in that case cost centers are branches and activities are represented in the same way: characteristic area activities and financial and trading area). During chapter four, we will analyze monthly budget: thanks to it, it will be clear how much the cost allocation is important for a banking business to identify profit margin of every single branch/activity.

⁷⁸ Measuring Customer and Product Profitability at Community and Regional Banks. Douglas T. Hicks, CPA, CMC Edmond J. Olejniczak III, CPA Bradley A. Curell

Fund-Raising activity

Fundraising is the essential business of every bank. Thanks to it, it can work: loans, mortgages, accounts are available only if bank has enough capital to meet customers' requests and invest money.

Fundraising can be divided into two different categories:

- General fund-raising (linked costs: marketing, bank activity operations)
- Transaction fund-raising activity (related costs: transactions, deposits, and checks).

Bank has got two different ways to raise capitals:

- Cash deposits
- "Buying" capitals from central monetary agencies (ECB).

In an Activity Based Costing model view, every action match a cost. Hence, the fundraising brings two kinds of costs: cost of capital and interest paid to depositors.

The example reported below, explains this matter⁷⁹.

FUNDRAISING COST					
			€ 50.000.000,00	Bank cash deposits	
Capital	€	450.000,00	0,90%	Cost involved to raise capital	
Interest	€	1.150.000,00	2,30%	Interest rate paid to depositors	
тот	€	1.600.000,00	3,2%		

In this case, our hypothetical bank need €50.000.000 and has to face two different costs. Both costs refer to the same activity, in this way we must consider both cost together, to have a real image of cost impact on this activity, as shown in the table below.

⁷⁹ Hypothetical numbers used only to simplify the explanation.

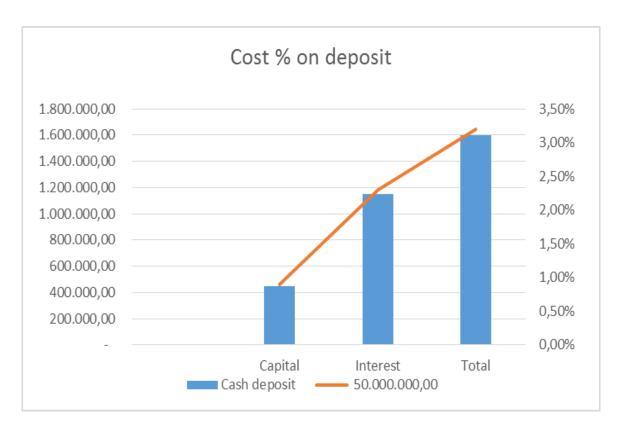


Fig. 17: Calculation of cost impact.

Thanks to the diagram, it is clear to understand that the orange line, representing the total cash deposit, rockets to more than 3% on cost impact, if we consider in the same time capital and interest expenses. This operation seems like useless, but it is fundamental if the bank has to analyze a not easy operation: if there is a particular customer that is in the same time depositor and borrower, it is imperative to have a clear cost situation. In this way, the decision-making process results easier and the manager will select the "project" that adds more value. 80

Fund-using activities and customer support

Fund-using activities represent the second activity center, directly linked to the first, the fundraising. The company, after reached capitals, has to invest those attracting new customers and opening new accounts. Granting loans,

⁸⁰ In few words, analyzing this particular case, the proposed solution is: the bank has a specific customer that is at the same time a borrower and a depositor. It means that this client has to pay a rate of interest on the funds he borrows, and he has to receive a percentage of interest on the capitals he deposits. If the management team has not a clear idea of which is the incidence of these two different costs, it can make the right decision.

mortgages or simply a personal loan, the bank is spending its money to securing a profit. In this way, the bank is offering a service and margin profit it is not possible to calculate easily by subtracting to the interest rate paid by the customer the total cost of fundraising activity as calculated before. Precisely because the bank is offering a service, management has to care about costs related to it and add it to costs deriving from fundraising activity. In this way profit margin falls, but it gives a real image of profitability of a single customer, helping analysis of most profitable operations of the company which on management has to bet .⁸¹

Costs related to service offered to customers could be:

- Cost sustained to support the contractor
- Bank employees
- Scheduling and monitoring contractor's performance
- Security operations before granting the loan
- Past-due payment lost by bank

Management that wants to calculate a cost per transaction, and consequently identify a right cost driver, has to take into account many variabilities like these described.

Marketing operations

As companies, the banks need a commercial and marketing area too; they work on different markets, offering different kinds of products(mortgages, auto loans, working capital loans real estate loans) developing different strategies to improve its customers' list. Typical examples could be related to classical strategy operations as horizontal and vertical differentiation or cost leadership strategies. In this context, the influent matter is that also banks have to face costs related to marketing and commercial area; and management,

⁸¹ Dividing costs analysis per single client means that the bank can calculate margins for every single customer approaches to the business. Clearly, it represents a theoretical supposition. But it helps to identify which are benefits deriving from ABC approach, and especially which are goals the management has to achieve.

during planning and budgeting, has to take into account this kind of costs to generate a coherent cost driver that summarizes the "cost per transaction." "As a result, activities should be established for each significant product or product line being sold by the bank. The cost of supporting each product line should be accumulated and a percentage add-on rate developed for assigning product line support to the products that fall within the appropriate product or product line category.",82

General direction costs⁸³

"Once all activity costs have been assigned to the general fund-raising, transaction fund-raising, contractor direct cost support, transaction fund-using, market, and product line categories, there will remain costs that can legitimately be described as "general and administration." These will include the cost of activities such as general accounting, regulatory reporting, general management, institutional marketing, and the like. They should, however, all be truly "general" in nature and not more appropriately assigned to one of the activities discussed earlier. The cost of these general and administrative activities should be accumulated in a single activity and a percentage add-on rate developed for assigning general and administrative costs to all of the bank's products and services."84

In this step of the process, management has to choose if it is preferred to split costs in cost centers or in activities. It should be more or less the same; splitting by cost centers gives advantages in budgeting per branches, and this is the situation shown in chapter four that covers Promos S.p.A accounting model. Hence, we will consider accounting and administration costs or overheads, demonstrating that accountability office spilt every kind of this cost per branches or activity.

⁸² Please see note n.74

⁸³ To simplify the comprehension of banking cost allocation during business case, we have chosen to summarize all costs resulting from administration, accounting and control area and all overheads costs, inside the "General direction costs" item, because Banca Promos uses this item to monthly collect all "not direct costs." Then, management has to spread these costs per cost centres to complete the monthly budget.

⁸⁴ Please see note 74

The last one category of costs we have to analyze is similar to "variable costs" we usually find inside production lines of industrial firms: we are talking about costs related to single customers' operations as manual transactions, transaction fees, personal banking movements, home banking.

Once described cost drivers and categories, the next step is the distribution of costs following cost drivers explained before. In this moment the most important activity to do is identify which cost are in common in multiple activities, searching for "departmental" or "general direction costs." Management has to split it for activities to be coherent with the model. The chart derives from Hicks, Olejniczak III and Curell, and explains this matter.

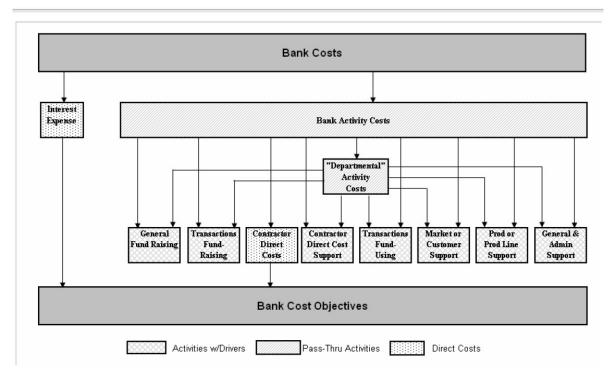


Fig.18: Next step of division of bank costs.85

We have described cost drivers, then we explained the model and what is the right way to handle common costs and general direction costs (it includes offices employees' salaries too). The last step to do is applying all these rules in the right way to obtain a coherent image of the situation inside the bank. It seems hard, especially because ABC born as an "industrial model," but

-

⁸⁵ Please see note n.74

following the rules showed below, it will be easier and efficient in the same way.

During chapter four, analyzing Promos S.p.A. financial statement, the significant difference we will find between this work and the Promos applied method, refers to the allocation of "departmental costs":⁸⁶ in fact, in Promos, we will find a different cost allocation, applied not per activity but per branches. The reasons why are two:

- 1. Budgeting process tries to show which are branches that are more profitable and which management has to invest on.
- 2. Reading financial statement, we discover that the bank has in program a merger; most important request in matter is the territorial diffusion of the merge result company. Of course, knowledge about profit margin of each branch represents for Banca Promos a standing point for the process. After this step, the bank knows everything matters about its costs, and it is all ready to apply planning method to exploit this excellent cost allocation and generating an extraordinary budgeting process.

The process described before, derived from theoretical paths, has to face many obstacles if applied to a small-medium size bank. It means that it is more difficult to find coherent cost drivers, and it is very hard to split general costs and overheads because of the small size of transaction and the usual existence of "common costs." Banca Promos S.p.A has overcome brilliantly these difficulties and in Chapter four we will show every single step of this model they apply. Our aim is to deal with Activity Based Costing and Activity Based Management both in the theoretical and practical way.

⁸⁶ As desribed before, "departmental costs" refer to a similar matter of "general direction costs" used inside case study. We want to take care of explain, in this phase, all steps to make it easier the comparison between the theoretical model and the applied one.

CHAPTER 4

OVERVIEW FROM INSIDE: BANCA PROMOS S.P.A

Chapter 4 represents the output of the research process and theoretical debate of the first part of this path. Chapter one, two and three cover pillar of planning and control, Activity Based Costing and its application inside and hard environment as the banking industry. Thanks to this work, the reader has now all basis he needs to understand the practical application of all these concepts. Hence, Chapter four focuses on a case study deriving from the Deloitte audit activity. In fact, Banca Promos is one of my first customers as an auditor, and it represents a fantastic environment in which grow up and understand how a bank works.

I decided to deal with this bank to explain the matter for two important reasons.

- Because of the particularity of this bank: as said before in the third chapter, Banca Promos is an atypical Italian bank because its nucleus and core business it is not represented by characteristic area, but by financial and trade area. It is a tiny example of an investment bank.
- The second reason because I have chosen "Banca Promos" is that its accounting office has to apply Activity Based Costing model because of budgeting oriented boards of directors. On the other hand, they are about to finalize a merger with other two important banks, and in this why they have to take a particular accounting process that focuses on its branches. It means that in the same bank we can find "ABC process" and "Tradition Accounting process": it is a rarity I want to exploit to explain differences between these two different points of view we tried to explain in a theoretical way during first part of the project.

Apparently, Chapter four will start with a presentation of the bank and its business, teaching different areas, the core business, and the business model they consider the best to grow up. After this explanation, it focuses on the work there for Deloitte & Touche spa. Then it covers the ABC model applied and its differences with traditional accounting one.

Finally, Chapter four analyzes accounting entries and the documents coming from the bank, to explain in a better way all the matter.

We will use private documents, and for this reason, we will report all numbers and sensitive data on percentage or hiring some figures.

4.1 Presentation of the bank



Banca Promos is an important investment and retail bank based in Naples since 1980. It has a central office and three branches. Employment is very various: it starts with operational employees, as other banks, and then we can find trading agents inside the trading room that tries to create gains every day. Finally, there is office employee for a total number of 48 people. As shown on Banca Promos website, we will list most important events in its history to explain its development during years to underline how much it has changed during years, to shape itself to changes in the market.

- "1980: Ugo Malasomma founds Banca Promos on 16 October as a Naples-based brokerage house for trading in Italian stocks and bonds.
- 1991: Following approval of the so-called "SIM Law" (Law 1 of 2nd January 1991), Promos once again quickly seizes the opportunities presented by the change in the regulatory framework, transforming the company into a securities broker. By registering with CONSOB, Promos can start operating as a securities house.
- 1993: The Company's international orientation becomes more and more visible as demonstrated by its membership in 1993 of ICMA International Capital Markets Association (former ISMA), and ASSIOM Associazione Italiana Operatori Mercati dei Capitali, the two prime sector associations for major worldwide operators.

- 1995: The Kuala Lumpur, Malaysia representative office is opened in 1995 to serve Far Eastern markets at a time when there were very few western operators located in that part of Asia.
- 1999: Banca Promos receives the authorization to operate in the United Kingdom, one of the most important financial markets. This is a year for great achievements, as also Promos Finance is established.
- 2002: Promos commences its transformation into a bank, which became desirable for a number of reasons associated with the general environment and the specific nature of the Company's position.
- **2004:** The Bank of Italy issues a banking license. Banca Promos continues to provide financial services, an area where the company has accomplished a considerable know-how
- **2007:** Promos implements its new business strategy: in January 2007, the first retail branch is opened in Naples.
- **2010:** The Company celebrates its 30th anniversary with two major changes: new head office premises and a new branch in Naples."⁸⁷
- 2017: The company starts to think about a possible merger with other important banks located in the Campania region.

As told before, this bank is relatively young, but we can just observe many changes because of the result-oriented management, that tries every time to shape the business structure to exploit in the better way all opportunities markets offer. Hence, analyzing the bank today, we can say that it represents a major issue in the retail market, in which it is growing up, adding new customers, and trying to expand its policies every day. On the other hand, we have the core business of the company: the trading and financial area specialized in investment trades and well placed inside foreign dynamics (Banca Promos has a high-margin functional promoter in London).

⁸⁷ www.bancapromos.it/en/storia

As shown in history chart, Banca Promos has a central office and three important retail branches⁸⁸. It is an important issue to underline because, during the analysis of the accountability, we will note that, costs referring to retail area are divided per branch (following traditional accounting model). Instead, costs linked to financial and trading area, namely the core business of the company, are divided per activity or sold product (following activity based costing model)⁸⁹. This is one of the reason because I have chosen this bank as a business case of the project, because of thanks to this double use of accountability, it is easier to understand differences between these two different kinds of "accountability." As shown inside the relations reported below, the financial statements, the most significant Banca Promos task inside this possible merger is taking care of the financial and investment area. In this way it will be possible to create a new bank that exploits its skills about this matter, helping and supporting Banca Promos deficiencies in retail area. An outstanding example of how important is the financial field for this company, it is represented by the scheme below.

Dati economici

Dati economici (migliaia di euro)	31/12/2016	31/12/2015	Variazioni Assolute	Variazioni %
Interessi netti	1.183	1.366	(183)	(13,4)
Commissioni nette	20	293	(273)	(93,2)
Risultato dell'attività di negoziazione(*)	3.235	2.943	292	9,9
Proventi operativi netti	4.628	4.750	(122)	(2,6)
Oneri operativi	(4.432)	(4.918)	(486)	(9,9)
Risultato della gestione operativa	196	(168)	364	-
Rettifiche di valore nette su crediti	(520)	(580)	(60)	(10,3)
Risultato netto	(228)	(531)	(303)	(57,1)

Fig. 19: "Dati economici essenziali" from: Promos Financial Statements

⁸⁸ Three branches are: Naples - Via Alessandro Manzoni, 113; Naples : Via Tommaso Campanella, 1 and Salerno - Via Pietro da Eboli, 15-17

⁸⁹ When we will analyze the budgeting model of the society, we will note that budgeting is based on the different branches; in this way it is easier to underline which one is more profitable, dividing this profit in products before and than in branches. Tiziano Carano covered this matter during our dialogue saying "it is very important for Banca Promos to know everything about its branches, becuase every new step need detailed information to push on profitable matters."

"Risultato netto dell'attività di negoziazione" (trading area result) represents a significant part of bank's revenues. During our work inside the bank, I requested to have a meeting with the President, Ugo Malasomma, the CEO Tiziana Carano and the accounting office composed by Marina Giaccio and Angela Gabellone. During the meeting with the President, I discovered that the intention of the bank is just the one described below: bet on the most valuable assets and continue to create a profit margin to invest in the company and grow up in the retail area too. It is more or less the same concept we can find inside the presentation of the financial statement.

At this moment, it could be substantial focus on projects and aims of the bank, because they represent the result of an important activity – the budgeting process. ⁹⁰ Before it, we want to underline some important indices that summarize the current situation of the society.

⁹⁰ During our analysis, we often will talk about budgeting process, because it represents the natural output of the activity we want to focus on. This output gives efficient information to accounting office to implement valuable strategies.

Indicatori di Redditività (Valori percentuali)	31/12/2016	31/12/2015
Risultato netto / Patrimonio netto (ROE)	(1,6)	(3,6)
Return On Asset (ROA)	(0,5)	(1,1)
Cost / Income ratio (Oneri operativi / Proventi operativi netti)	95,8	103,5
Margine di interesse / Margine di intermediazione	26,7	29,7
Risultato netto gestione finanziaria / Totale attivo	6,1	5,9

Indicatori di Rischiosità (Valori percentuali)	31/12/2016	31/12/2015
Attività deteriorate / Crediti verso clientela	12,9	8,0
Sofferenze nette / Crediti verso clientela	4,9	2,1
Inadempienze probabili / Crediti verso clientela	6,0	5,4
Finanziamenti scaduti e sconfinati / Crediti verso clientela	2,0	0,4
Rettifiche di valore complessive su crediti / Impieghi lordi		
(indice di copertura)	7,1	4,9

Coefficienti patrimoniali (Valori percentuali)	31/12/2016	31/12/2015
Capitale primario di classe 1 / Attività di rischio ponderate	30.4	20.0
(Common Equity Tier1) Capitale di classe 1 / Attività di rischio ponderate	30,4	29,2
(Tier 1 ratio)	30,4	29,2
Totale Fondi Propri / Attività di rischio ponderate		
(Total capital ratio)	30,4	29,2
Attività di rischio ponderate (in migliaia di euro)	46.713	49.338
Fondi Propri	14.203	14.423
Eccedenza CET1 rispetto alla soglia del 7,00% (ex SREP)	10.466	10.476

Fig.20: Performance indices from Promos Financial Statement

During the presentation of the bank, the most important values we want to summarize because we consider it the most coherent are: Cet1⁹¹, ROE⁹² and "Margine di Interesse/Margine di Intermediazione."

Cet1 is a solidity index and represent the current financial situation of the bank. A high value for this index means the customers can rest stay assured;

⁹¹ During Chapter 3, we just dealt with "Cet1 ratio." "A component of Tier 1 capital that consists mostly of common stock held by a bank or other financial institution. Common Equity Tier 1 (CET1) is a capital measure that was introduced in 2014 as a precautionary measure to protect the economy from a financial crisis. It is expected that all banks should meet the minimum required CET1 ratio of 4.50% by 2019." (Source: http://www.investopedia.com/terms/c/common-equity-tier-1-cet1.asp). This ratio is a very important advertising asset for the company because it is very high. In fact, it is the subject of the first slideshow you can find on bank's website.

⁹²"The return on equity (ROE) is a measure of the profitability of a business in relation to the book value of shareholder equity, also known as net assets or assets minus liabilities. ROE is a measure of how well a company uses investments to generate earnings growth." (Source: https://en.wikipedia.org/wiki/Return_on_equity)

their money is safe. The bank takes care of this index and believes that this solidity can attract new customers. In fact, it is every time present on the society website homepage.

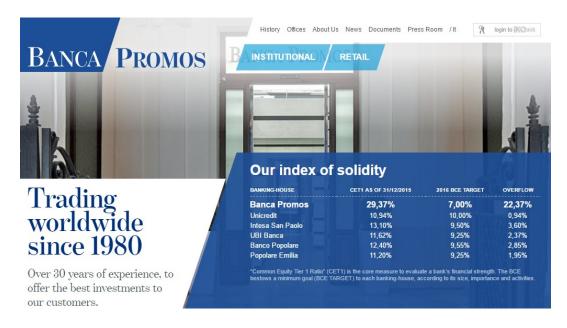


Fig.21: Banca Promos homepage (2015 indices)



Fig.22: Banca Promos homepage(2016 indices)⁹³

ROE index tries to calculate the relationship concerning results, between management of the company and money invested in it. If this index is more

 93 It is easy to note the comparison with major banks operating in Italy. It means how significant is for Promos the Cet1 ratio.

75

than 1, it means that for each € invested in the business, Banca Promos generates €1,6. It is a good result, motivated mainly by our third index.

"Margine di Interesse/Margine di Intermediazione" analyzes the trading business placing in relationship Interest margin and brokerage margin. Thanks to this index, it is possible to localize the core business of the society. Mostly, revenues come from brokerage business.

Making a comparison with 2015 Financial Statement, we can note that business profitability falls; we will analyze the reasons why it happened during budgeting analysis, in which we will underline methods the company uses to forecast all changes in its external environment to shape the business structure ad a function of these.

The general banking situation in the world explains this matter and, in a particular way, this sharp decrease. Looking to "Relazione sulla gestione" in 2016 Financial Statements, we can note what Pres. Ugo Malasomma thinks about it and how he tries to communicate the matter to shareholders.

"I dati disponibili sul terzo trimestre 2016, evidenziano negli Stati Uniti un'accelerazione del PIL superiore alle attese (3,5% in ragione d'anno), riconducibile soprattutto al contributo delle esportazioni e all'espansione dei consumi privati. Nel Regno Unito, nello stesso periodo, la crescita è rimasta stabile al 2,4% in ragione d'anno, cosa che è servita ad allontanare, almeno nel breve termine, i timori di una brusca frenata in seguito al referendum sulla Brexit. Naturalmente resta elevata la preoccupazione sulle ripercussioni economiche dell'uscita dall'UE nel medio periodo. Anche in Cina la crescita si è mantenuta stabile, mentre in Giappone il PIL ha rallentato all'1,3% su base annua, risentendo della domanda interna debole e degli investimenti scarsi. Venendo all'Unione Europea, la crescita del prodotto è proseguita a ritmo moderato ma costante, grazie alla spinta della domanda interna. Per una completa analisi della situazione nell'area euro, tuttavia, occorre tener conto anche di particolari emergenze, quali la gestione di flussi migratori eccezionali, e la crescita di movimenti. apertamente contrari alla moneta unica e a progetti di ulteriore integrazione, che ostacolano talvolta l'espressione di iniziative comuni di ampio respiro. In Italia, il 2016 è stato un anno di moderata ripresa. Nella seconda metà dell'anno, in linea con l'area euro, il PIL è cresciuto (+0,3% rispetto al periodo precedente nel terzo trimestre), grazie all'apporto degli investimenti e della spesa delle famiglie. L'inflazione al consumo è rimasta bassa. Il reddito disponibile delle famiglie è in lieve avanzamento, sono aumentate le esportazioni in tutti i settori produttivi, e l'occupazione mostra qualche timido segnale positive." ⁹⁴

Hence, in first pages of the FS, Malasomma attempts to summarize the situation in powerful nations of the world: UK, USA, China, Japan, EU and certainly Italy. He reports PIL data and some considerations about growing markets. After this speech, which wants to introduce shareholders to Promos intern situation (and maybe to justify the closure of loss), Ugo Malasomma focuses on the capital markets and the banking industry in Italy.

"Nel corso del 2016 sul mercato italiano sono state collocate 106 emissioni di Mini-Bond da parte di 88 imprese, di cui ben 74 facevano ricorso per la prima volta a questo strumento. Il fatturato medio delle imprese emittenti, inoltre, si è ridotto rispetto agli anni precedenti. A fine 2016 risultavano emesse obbligazioni per un valore nominale totale di oltre 11 miliardi di euro; il contributo di flusso dell'anno è stato di oltre 3,5 miliardi (contro1,8 miliardi del 2015). Dopo un inizio in cui le operazioni sono state sporadiche e discontinue, negli ultimi due anni la crescita è stata lineare ed è culminate in un vero e proprio record nel mese di dicembre 2016. Il consenso incontrato ha spinto tutti gli attori coinvolti (advisor, arranger, società di rating, banche agenti e depositarie) a standardizzare i processi per ridurre i costi del collocamento. I numeri espressi dal sistema hanno ancora ovviamente una rilevanza soprattutto in termini tendenziali, ma esprimono con sufficiente chiarezza che le imprese, anche di piccole dimensioni ed anche per operazioni nel breve termine, iniziano a considerare il mercato mobiliare come una fonte di finanziamento accessibile. Sotto il profilo delle condizioni del credito si osserva una leggera distensione."95 IMHO, this speech is the fundament of the

⁹⁴Banca Promos Financial Statements: "Relazione sulla gestione"; introduction to shareholders.

⁹⁵ Banca Promos Financial Statement : "Il sistema bancario in Italia" ; Introduction to shareholders.

path of this project. In few words, we can note all the ambition the President Malasomma has to improve this project. In fact, inside the introduction of chapter 4, we dealt with the history of this bank and in fact Banca Promos diamond tip is "mini-bond" and relative products. In this speech, the president wants to underline the great potential of this tool, and that Italy has started to appreciate it.

During the audit process for Deloitte, more and more times I had the possibility to talk with him and to exchange our opinions. His message is very clear:

"We have a great potential and know-how enough to excel in this sector. Years ago, this was our core business, in a period in which small-medium banks never thought about it. It remains our business focus today, but markets, as I tried to explain in Financial Statements' introduction, oblige us to differentiation and to improve our retail sector. In this way, we can build basis to exploit our business core in the best way we can."

Hence, objectives are clear and the new project started are a great witness.⁹⁷ The business core remains the same, sources of capital have to shape to the market. It is in few words the thought expressed by him.

Talking to the CEO, "Dott. Tiziana Carano" we tried to explore other two important points of the strategic plan of the society:

- Growing planning
- Budgeting

First, we decided to conclude the speech started with Malasomma, and to complete the overview of the situation talking about future aims of the bank in the retail sector. The first and most important answer received covers the possible future merger with other two important banks in Campania Region. One of that is "Banca Regionale di Sviluppo." Promos owns the shares of this

⁹⁶ Statement made in Italian language and reported in English language.

⁹⁷ Looking to FS, it is easy to find some important projects presented to shareholders, as the new mini.bond actions to some new important customers.

bank and Dott. Carano is the "Vice-President" in chair. ⁹⁸ This strategic operation intends to exploit its skills in the retail sector, to improve Banca Promos situation. It could be a crucial deal that can help Promos to improve and grow up itself. The quoted dialogue with CEO Tiziana Carano, helps us to introduce the main aim of this chapter: introduce and analyze the core business of the bank. Before starting with the analysis of the business just in part described below, I would want to thank the President Ugo Malasomma, the CEO Tiziana Carano and for the accounting office, Angela Gabellone and Marina Giaccio who showed me every day passion for the work they do and an enormous willingness to help me on this important path.

4.2 Auditing process: Deloitte.

During my stage in Deloitte I had the pleasure to cooperate with a team to complete the final process of auditing and reviewing of Banca Promos Financial Statements. Thanks to this opportunity, I had a chance to interface with the management and the accounting office of the bank. In this way, I also had the possibility to observe from another point of view all the strategies hidden behind success or loss; I came into contact with all accounting entries, analyzing them and discovering the reason with the company decides to use a method or another. A great experience that helped to grow up and to understand what means handle a bank.

Coming back to the matter, my role gave me the possibility to analyze and understand everything happened and happens inside the Banca Promos, and thanks to it, it is now easy to explain which are focusing operations to underline, to treat in the best way all this business.

First, we have to emphasize another time the difference between the retail area and the financial one. Retail sector tries to use traditional accounting model (or sometimes ABC applying some different cost driver) because the primary aim about this area is to give every time a coherent situation of expenses

⁹⁸ https://brsspa.it/gli-organi-sociali/

relative to each branch. As we will see analyzing the monthly budgeting, the contribution margin of each branch is fundamental to underline profitable areas. We need to talk about a different matter if we want to focus on revenues: in this way, the applied model is the ABC. In fact, looking to the monthly budgeting, all scores and profit percentage calculated refer to single product sold.

4.2.1 Deloitte approach: ABC output and budgeting process: a view from inside

As told before, to analyze and account financial area, Banca Promos uses ABC model; in this case, it is easy to understand that this area has to face some costs that are not directly linked to the specific area of operations. For that costs, the bank uses the traditional accounting model. It seems like hard, but analyzing documents it will be easier to understand.

Before starting this approach, we need to know last three tools:

- **Promos 5.4:** it is a homemade budgeting software that Promos developed to use it for its budgeting process. "It represents a fundamental tool to represent every day and every month, a clear situation of costs and revenues and its foreseen values."
- **Budgeting process:** As explained before, it represents the output of the accounting process and looking to it, it is easy to underline reasons why for a matter, management decides to use a principle, and for others decides in another way.
- OTM: In the Italian language it means "Organico Teorico Medio." During my dialogue with CEO, she explained me this concept. "È un valore teorico che in qualche modo vuole sintetizzare quello che dovrebbe essere il numero di persone necessarie in quella determinate area della società, per generare i profitti che realmente poi si generano. Se tale valore, messo in rapporto con l'effettivo numero di lavoratori impiegati supera l'unita, vuol dire che il valore creato è superiore alla media da noi stabilita; situazione opposta in caso il

⁹⁹ Declaration made by Tiziana Carano in Italian language and reported in English language.

valore sia sotto 1. In questo modo, abbiamo un indicatore proprio della profittabilità del lavoro svolto, sia dai dipendenti, che da noi del management in chiave di concessione dei tools necessary per svolgere al meglio il lavoro" ¹⁰⁰

The best way to understand which the reasons at the base of a project are is to analyze the result. If I know which objective I have to achieve, I am facilitated to make right decisions. It is why, before starting the focus of Deloitte Audit Process and so the Banca Promos Accounting one, it is useful to look at the output of it, the budget chart.

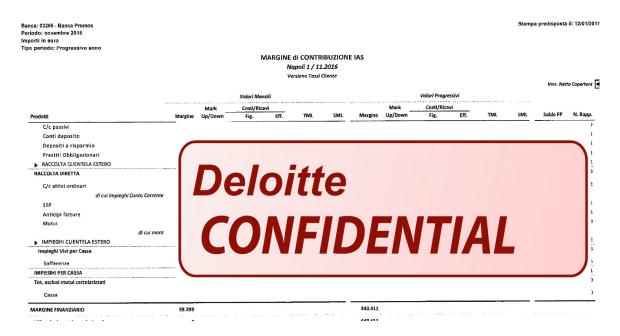


Fig.23: 2016 Promos final budget

The figure reported¹⁰¹ (Chart 1) below analyze margins generated by "Napoli 1" office, in relation to other branches of the bank and in relation with the

Mark Up/Down: Ratio that measures the performance of the selected branch in relation with all other branches.

¹⁰⁰OTM means Theoretical Staff Average and measures the performances of all employees, presuming a theoretical value or number of employees the company need to achieve that determinate output. This value, divided for the effective number of employees, returns a ratio. If this ratio is equal to 1 or more, it means that staff are working better than theoretical expectations, otherwise the other way around.

¹⁰¹ Banca Promos confidential data: we hide all sensitive data for privacy reasons. The resulti s an empty form, that gives the idea of which are the most important drivers used to calculate and forecast the profit margin of each branch. Some simplifications about abbreviations used.

averages of the similar sector (It tries to use a concept similar to "Multiples method" used in the matter of enterprises evaluation¹⁰²).

The first aim is finding where Activity Based Costing principles are present. Looking to the column "Prodotti," we can note that all values and indices cover single product: in this way, we have a single calculated profit margin for "C/c Passivi" 103, a single one for "Depositi a Risparmio" 104 and so on. It means that using the driver of "category of product sold," the company has monthly an idea of how much value the single branch creates for each product sold. After that, Activity Based Management process starts, and the decision-making area has to decide on which products bet. It is a simple way to use ABC principles to create a perfect budgeting process. Now, we will see the result of this analysis: the monthly budget.

TML: "TASSO MEDIO LIQUIDO." Ratio that reports the average value in the sector for that particular product/Value

SML: "SALDO MEDIO LIQUIDO." Ratio that has the same aim of the previous one, but expressed in value and not in percentage.

Saldo FP: This Item, Marina Giaccio explains, refers to fiscal year-end ratio of assets on fundrraising activity. Applying TML on this ratio, we can obtain the expected margin of contribution

N.Rapp: Total number of "products sold" of that category.

¹⁰² This method tries to calculate the theoretical value of a business basing on values deriving from similar activities, applied in similar sector, with similar characteristics as number of employees of category of products sold.

¹⁰³ Deposit Accounts.

¹⁰⁴Deposit of savings.

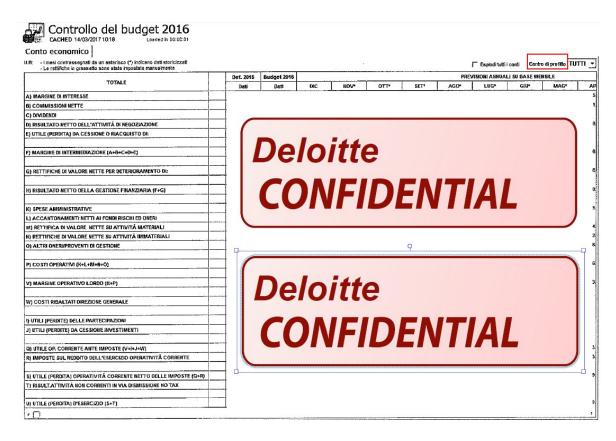


Fig.24: 2016 Promos final budget (overview chart).

The figure below 105 (Chart 2) describes the budgeting model for the fiscal year 2016, divided per month and giving a result in a complex of data deriving from models like the one described before.

The table includes all entries of "Conto Economico," until the total profit/loss of the fiscal year. It represents a fundamental tool to have the "photograph" of the current situation of the society. We hide data because of privacy reasons. The extract also made a comparison with the 2015 fiscal year; in this way, "we can have an efficient benchmark to measure our performance and our growing process results."106

Finally, the circled item "centri di profitto" underlines the main aim of the management: the possibility of isolate every single profitable asset using its

¹⁰⁵ The representation derives form the just quoted software "Promos 5.4."

¹⁰⁶ Explanation by Tiziana Carano.

^{107 &}quot;Centri di Profitto": A function of "Banca Promos 5.4" to differentiate the analysis according to different types of profit assets. In this way, it is easy to underline how much any asset is profitable. It represents another Banca Promos 5.4 tool, that demonstrate the ABC policy applied by the bank.

budgeting software. In our extract, the tool returns "tutti," namely all items showed to have a complete view of the budgeting; we decided to show this particular frame to point out the monthly budgeting activity made by the Banca Promos management. In fact, all values reported in the various columns of different months, result from calculation activity composed of two phases:

- 1. Forecasting the expected value for the end of the year, basing on results referring to previous months (for example, if we have a 3.5% growth in the period Jan-Apr, maybe we will find a similar projecting percentage for the end of the year, also in the column "may")
- 2. Forecasting the expected value, based on performances of the previous year, bearing in mind changes in the external environment and following growing percentages. (for example, if in the period Jan-Apr of the fiscal year 2015, we have an average loss of -2%, and during fiscal year 2016, in the banking sector we observe an average loss of -0,8% we expect not excellent results in the same period by Banca Promos). 108

As told before, all values foresaw per branch (please refer to chart one) feed the table two. The second one contains a panoramic view of all items of revenues and costs of the Financial Statement and it represents a fundamental step to improve the business management. There is another critical chart, that summarizes all this matter and that the accounting office prepares every month, to control the correct application of all principles described.

In this graph, it is possible to see:

• Every item of every accounting voice of the FS(it represents an "explosion of all item showed in chart two).

Tiziana Carano explained all this matter showing data and giving a clear idea of all the reasons at the base of this operation. As told before, because of privacy reasons, we can't show this internal data. The calculation terms with a thoughtful average of various indices related to the external environment, the projected values of the bank and the results related to the same period of the previous fiscal year. Clearly, management team gives different "weight" to each index, in order to follow guidelines prepared at the beginning of the year (instead, if we refer to a strategic plan, CEO prepares strategies for more than one year).

- Projection of this data per month, and to end of the period
- Data deriving from the past (apparently, these data report all information until the month before the one in which budgeting is calculated) to make a constant comparison between effective data and foreseen one. In this way "we can observe every month if we are doing well our work and if the bank is performing better or worse than the expectations.
- Any adjustments needed because of some changes that have emerged after the budgeting process.

Therefore, this is the chart three (part one), one of the best representation of the application of ABC and ABM principles.

				_				
BUDGETING BANCA PROMOS	Def. 2015	Budget 2016	PREVISIONI ANNUALI SU BASE MENSILE	PREVISIONI ANNUALI SU BASE MENSILE	PREVISIONI ANNUALI SU BASE MENSILE	PREVISIONI ANNUALI SU BASE MENSILE	DELTA	
TOTALE	Dati	Dati	DIC	NOV*	OTT*	SET*	DELTA	
A) MARGINE DI INTERESSE	169.309,14	188.425,07	146.658,65	148.123,12	147.884,96	147.547,55	-41.766,42	
INTERESSI ATTIVI E PROVENTI ASSIMILATI	253.920,41	239.848,98	192.443,79	194.444,63	195.906,43	197.900,98	-47.405,19	
INT.ATTI.PROVENTI ASSIMILATI SU RAPPORTI CLIENTELA ORDINARIA	200.610,71	214.428,98	153.488,47	155.253,13	157.178,11	159.073,55	-60.940,52	
INT.ATT. CONTI CORRENTI	65.768,20	75.883,29	54.128,05	54.484,70	55.040,62	55.280,14	-21.755,24	
INTERESSI ATTIVI C/C - RESID CL. ORD.	64.272,17	75.880,56	42.482,41	42.809,97	43.328,54	43.384,24	-33.398,15	
INTERESSI TOTALI	64.272,17	75.880,56	42.482,41	42.809,97	43.328,54	43.384,24	-33.398,15	
INTERESSI QUOTA FILIALE NA1	- 10.826,44	- 9.459,09	- 7.965,26	- 8.006,69	- 8.060,35	- 8.111,81	1.493,83	
INTERESSI QUOTA FILIALE SA1	- 17.183,92	- 19.129,60	- 9.712,80	- 9.790,89	- 9.988,65	- 10.117,65	9.416,81	
INTERESSI SU C/C	10.826,44	9.459,09	7.965,26	8.006,69	8.060,35	8.111,81	- 1.493,83	
INTERESSI SU C/C	17.183,92	19.129,60	9.712,80	9.790,89	9.988,65	10.117,65	- 9.416,81	
INTERESSI QUOTA FILIALE NA2	- 17.072,32	- 23.924,06	- 13.347,86	- 13.506,01	- 13.728,14	- 13.595,66	10.576,21	
INTERESSI SU C/C	17.072,32	23.924,06	13.347,86	13.506,01	13.728,14	13.595,66	-10.576,21	
INT. ATTIVI ANTICIPI - RESID IND B/T CL. ORD.	-	-	11.319,80	11.370,64	11.424,08	11.616,08	11.319,80	
INTERESSI TOTALI	-	12	11.319,80	11.370,64	11.424,08	11.616,08	11.319,80	
INTERESSI QUOTA FILIALE NA1	-	12	- 1.525,82	- 1.547,53	- 1.578,17	- 1.613,95	- 1.525,82	
INTERESSI QUOTA FILIALE SA1	-	12	- 3.466,30	- 3.563,66	- 3.660,33	- 3.791,22	- 3.466,30	
INTERESSI SU ANTICIPI		12	1.525,82	1.547,53	1.578,17	1.613,95	1.525,82	
INTERESSI SU ANTICIPI		12	3.466,30	3.563,66	3.660,33	3.791,22	3.466,30	
INTERESSI QUOTA FILIALE NA2	-	- 1	- 1.435,30	- 1.378,18	- 1.365,24	- 1.421,98	- 1.435,30	
INTERESSI SU ANTICIPI	-	- 1	1.435,30	1.378,18	1.365,24	1.421,98	1.435,30	
INTERESSI ATTIVI C/C - NON RESID CL. ORD.	31,46	- 1	0,12	0,13	0,14	0,16	0,12	
INT. ATTIVI C/C - ESTERO - RESID VALUTA - CL. ORD.	0,62	0,62	0,59	0,60	0,61	0,19	- 0,03	
INT. ATTIVI C/C - ESTERO - NON RESID VALUTA - CL. ORD.	2.11	2.11	0.11	0.12	0.12	0.13	- 2.00	
INT. ATTIVI ESTERO ANTICIPI - RES - TASSO F EURO - CL ORD	1.461.85	-	325,01	303.23	287.13	279.34	325,01	
INTERESSI TOTALI	1.461.85	-	325.01	303,23	287.13	279.34	325,01	
INTERESSI QUOTA FILIALE NA1	- 157,48	12	- 207.45	- 202,40	-	- 176,40	- 207,45	
INTERESSI QUOTA FILIALE SA1	-	1/2	- 98,46	-	-	- 0,00	- 98,46	
INTERESSI SU FINIMPORT	157.48	12	207,45	202.40	-	176,40	207,45	
INTERESSI SU FINIMPORT	-	_	98,46	-	_	0,00	98,46	
INTERESSI QUOTA FILIALE NA2	- 1.147,00	12	- 97.84	- 83,18		- 85,80	-	
INTERESSI SU FINIMPORT	1.147,00	_	97.84	83.18	-	85.80	97.84	
ALTRI RAPPORTI ATTIVI	134.842.52	138.545.70	99.360.42	100.768,44	102.137.49	103.793.41	-	
INTERESSI ATTIVI DA ALTRI ENTI	-	-	391,02	427,21	469,23	522,32	391.02	
INTERESSI DI MORA SU MUTUI CL. ORD. TASSO F	601,29	13,02	512,27	539,16	565,97	589,78	499,25	
// INTERESSI ATTIVI DA COSTO AMM.: MUTUI	134.241,23	56.175,97		46.295.41	46.555.64		-10.184,48	
INTERESSI TOTALI	134.241.23	56.175.97	45.991.48	46.295.41	46.555.64		-10.184,48	
INTERESSI QUOTA FILIALE NA1	- 21.424.72		- 24.992.32		- 25.184.70	-	- 4.836.12	
INTERESSI QUOTA FSA1	- 5.028.20		- 6.544.72		- 6.371.76		- 2.089.15	

Fig.25¹⁰⁹: 2016 Promos final budget (intern worksheet, re-worked)

85

¹⁰⁹¹⁰⁹ It is produced monthly by accounting office and it reports sensitive data: because of privacy reasons, values expressed in the chart are purely for guidance. We cannot report official data, but using this "trial data," it is easy to understand how management controls its work. Before reporting on this project the

Some important notes about this table:

- Looking to the first column (we decided to report, for example, only a part of the "letter A" of the chart 2, only to explain the matter), it is possible to note that this kind of work is played on every item. It means that in every moment of the fiscal year, looking to this table(and thanks to the just quoted software Promos 5.4) it is possible to see the effective value and the projected value of every account as interest expenses and interest incomes of a branch as "Filiale NA1." What does it mean? It means that if the management team needs, for any reason, to know the plus/minus interest ratio for any branch, it can do it. If the control management team is implementing a new check for interest on advances, needs information about this particular activity. Thanks to this worksheet it can do it.
- Every single item shows its performance for every single branch ("FILIALE NA1," "FILIALE SA1"), and for every single product sold (as for chart reported below). It is a significant step because it gives the quantity of how much every branch and every product is profitable, and especially how much it performs better or worse than the previous year (please see the second column). It gives back also which are differences between foreseen data per month (fourth column for example) and effective data of that particular month (for the same example, please see the first column of chart four). For example the typical question a business or strategic plan has to answer is: how much value/profit the society could create in next 3/5 years? This chart supports this task. Projecting data is divided per single activity, foreseen value are more coherent, and the estimated value created by the society in the future is more precise. Another important question this chart can answer was quoted just by the CEO during the explanation of how the software works. She said: "Una delle più importanti attività del management, soprattutto in società medio/piccole che hanno intenzione di crescere, è quella di intercettare degli spillover dal mercato e capire quand'è il momento giusto per dare una spinta ed ampliarsi. Nel nostro caso, parlando di area retail, questo significa

document, I had a long dialogue with Angela Gabellone, Marina Giaccio and the CEO Tiziana Carano, to learn all issues and dynamics behind this kind of work.

aumentare il numero di filiali. Il nostro software, ed in particolare il budget, basandosi su una tecnica ABC, riesce a isolare le attività ed i margini di ogni singola filiale, mettendole inoltre in rapporto fra loro. Questo significa che, osservando lo schema, si ha una esatta idea del valore creato da ogni filiale e soprattutto da quali attività questo valore scaturisce, rendendo il lavoro decisionale decisamente più snello ed efficace"¹¹⁰.

- Naturally, every item increases every month its total because we are talking about the progressive calculation that starts from a hypothetical "0" on the first of Jan and ends with an overall performance of the year on 31 of DEC. Obviously, the projected data present value in each column until the end of the year, because growing policies at the base of this budget cover the entire fiscal year. If for example, we try to look at the 2017 budgeting scheme, we can find all projected columns with values and only a half part of effective values powered. It happens because of the management team powers every month the table with the values deriving from the previous one. Hence, if we consult the table in may, all effective data related to Jan-Apr are shown.
- The column "delta" puts in comparison the expected value for example for "DIC 2016" that, being the last month of the year and reminding what explained at the previous point, summarizes the total expected value for the 2016, and the effective value that it is possible to see in the first column "DICEMBRE/DATI" into the table three part two. Looking to the figures, and looking at the next chart too, if the subtract "BUDGET 2016" values and the "DICEMBRE/DATI" values, the result is equal to values in "DELTA" column.

¹¹⁰ Quote by Tiziana Carano; One of the most important management activity, especially in SME companies that wants to grow up, it is gather spillovers from the market to calculate what is the best moment to start a growing process. In this case, talking about retail area, it means opening new branches. Our software, especially the budget item, based on ABC approach, can isolate activities and related margins per every single branch, linking each one to others. It means that, observing the scheme, it is possible to have a clear idea of the value created by every branch and especially which are the most profitable activities that support this value creation. It makes the decision process more efficient.

$188.425.07 - 146.658.65 = 41.766.42^{111}$

Values in columns two and three gives the idea of the growth or the descent of performance in relation to the previous year for each item of the Financial Statements. It means that thanks to this work, Management team and the CEO can, every month, measure performance and values of every single product sold and using some "drivers" to match with "cost drivers" used in the accounting area, to obtain these results. The decision to continue or not with a product, change or not a particular strategy depends on this data. In this case, the question this tool wants to answer is: " how does the company work? Which are the most productive areas and which are the weakest ones?" These tables give an answer to these questions, highlighting the best activity, the best product, the worst area or even the worst strategy implemented in past that is not producing results.

This table showed, and the next one (chart three, part two) summarize all we told before during Chapter two and three about Activity Based Management, control matter, decision making and budgeting process.

¹¹¹ It represent only an example to explain how the tables work. Values in objects are the ones circled on charts

	-		-			Ü		
DICEMBRE	DIC	NOVEMBRE	NOV	OTTOBRE	отт	SETTEMBRE	SETT	
DATI	RETT	DATI*	RETT*	DATI*	RETT*	DATI*	RETT*	
146.658,65	1000	135.577,17	-	123.237,47	-	110.459,10		
192.443,79	12	177.975,27	-	163.255,36	_	148.155,38	21	
153.488,47	12	142.103,28	-	130.981,76	_	119.087,85	21	
54.128,05	12	49.869,87	-	45.867,18	_	41.384,58	_	
42.482,41	12	39.183,99	-	36.107,11	_	32.478,92	_	
42.482,41		39.183,99	-	36.107,11	_	32.478,92	_	
7.965,26	. 12	- 7.328,52	-	- 6.716,96	_	- 6.072,78	21	
9.712,80	12	- 8.961,60	-	- 8.323,87	_	- 7.574,42	20	
7.965,26		7.328,52	-	6.716,96	_	6.072,78	2.5	
9.712,80	12	8.961,60	-	8.323,87	_	7.574,42	20	
13.347,86	12	- 12.362,06	-	- 11.440,12	_	- 10.178,17	21	
13.347,86		12.362,06	-	11.440,12	_	10.178,17	21	
11.319,80	12	10.407,55	-	9.520,07	_	8.696,19	21	
11.319,80	1-2	10.407,55	-	9.520,07	_	8.696,19	20	
1.525,82	12	- 1.416,45	_	- 1.315,14	_	- 1.208,26	29	
3.466,30	1/2	- 3.261,82	_	- 3.050,28	_	- 2.838,24	20	
1.525,82	1	1.416,45	_	1.315,14	_	1.208,26	20	
3.466,30	142	3.261,82	_	3.050,28	_	2.838,24	20	
1.435,30	142	- 1.261,45	_	- 1.137,70	_	- 1.064,54	20	
1.435,30	12	1.261,45	_	1.137,70	_	1.064,54	29	
0,12		0,12	_	0,12	_	0,12	_	
0,59	12	0,55	_	0,50	_	0,14	-	
0,11	12	0,11	_	0,10	_	0,10		
325,01		277,55	_	239,28	_	209,12	_	
325,01	142	277,55	_	239,28	_	209,12	20	
207,45	142	- 185,26	-	200,20	_	- 132,06	20	
98,46	12	105,20	-	_	_	- 0,00	20	
207,45	-	185,26	_	_	_	132,06	20	
98,46	1	105,20			_	0,00	23	
97,84	112	- 76,14		_	_	- 64,23	20	
97,84	1 2	76,14		_		64,23	20	
99.360,42	-	92.233,40		85.114,58	-	77.703,26	2	
391,02	1,2	391,02		391,02	-	391,02		
512,27	1 1 1 2	493,50		471,64	-	441,53		
	- 423.110,00		- 394.957,00		- 366.577,00		- 318.218,00	
	- 423.110,00 - 423.110,00		- 394.957,00				-318.218,00	
	- 425.110,00		- 334.337,00		- 366.577,00	- 19.122,91	- 516.216,00	
24.992,32	-	- 23.048,38	-	- 20.987,25	-		-	
6.544,72	*-	- 6.008,54	-	- 5.309,80	-	- 4.958,14	-	

Fig.26: 2016 Promos final budget (intern worksheet re-worked, part 2)

It is another primary benefit deriving from applying ABC. All this matter, closer to ABM more than to ABC, shows all pros of this accounting method, underlining that the panoramic view the ABC can create, improve the management team decision-making process, giving more information and reducing the possibility of error.

Hence, we have given a complete view of what are most important outputs of the accounting process. As explained during this elaborate, the used approach is the input/output. Hence, during the last paragraph, we showed which is the result obtained and which are possible utilities. Now, we are now ready to focus on the accounting entries, showing some important issues using official data to understand when/where Banca Promos uses Activity Based Costing model and when/where not. It is a fundamental step because all the matter expressed before, all benefits deriving from this approach, could not be possible without and intensive and careful work on accounting entries, applying the right approach and following the Activity Based Costing rules.

 $^{^{112}}$ As for budgeting process, also for accounting area we need to hide all intern data. It will be visible the concept at the base of the approach.

4.2.2 Analyzing accounting entries

The first part of chapter four covers the story and presentation of the bank, its business core and how does it work. In few words, we deal with:

- History of the Bank
- Business structure
- Employment and management composition
- ABC approach and budgeting process
- Review of official document about this matter

Last part of this was presented as "output of accounting office work," and during the presentation of the bank, more times we talked about the differentiation between using or not of ABC approach. There are some areas in which it is used, and someone in which not. In these sectors, traditional accounting model replaced ABC. We will now analyze some important official documents deriving from accounting office to show the accounting of costs using traditional model.

The method used will be the one described below:

- Show some invoicing hiding number because of privacy reasons
- Show the accounting process of the society; 113 as described in the footnote, the numbers will be not visible, but talking about accounting model per cost centers, we will see the code of the branch in which the bank divides each value.
- Analyze the entries underlining the category each one belongs. 114

As I told before talking about budgeting process, the central part of the ABC model applied in Banca Promos covers the budgeting and planning process;

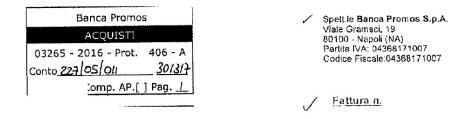
¹¹³ Thanks to Marina Giaccio and Angela Gabellone that gave me the possibility to take this kind of sensitive information from Banca Promos official accounting system. Obsiously we will hide numbers.

¹¹⁴ Thanks to this analysis, it will be possible to understand which is the process every cost undergoes when "arrive" inside the bank.

instead, we can find traditional accounting model applied about costs of characteristic and retail area. Now, we start with notarial deed charges. We will see some invoices from the notary office and then the "screen print" of the costs allocation made by Banca Promos. Then, we will analyze invoices from "Bloomberg"; the idea is the same: invoices and then "screen print," underlining how the stakeholder shapes charges in relation to Promos strategies.



Natura der servizi fermanti l'oggetto della prestazione TOTALE SPESE, DIRITTI ED ONORARI PER PROTESTI MESE DI APRILE 2016 RITIRO VIA MANZONI



Natura dei servizi formanti l'oggetto della prestazione: TOTALE SPESE, DIRITTI ED ONORARI PER PROTESTI MESE DI APRILE 2016 RITIRO VIA CAMPANELLA

Fig.27: Official notary invoices, re-worked.

¹¹⁵ One important note regards the fact that Promos communicates to its suppliers and stakeholders its allocation strategy and they shape charges in relation of it.



Spett.le Banca Promos S.p.A. Viate Gramsol, 19 80100 - Napoli (NA) Partita 1VA: 04368171007 Codice Fiscale:04368171007

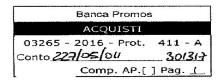
/ Fattura n.

Natura dei servizi formanti l'oggetto della prestazione: TOTALE SPESE, DIRITTI ED ONORARIO PER PROTESTI MESE DI MAGGIO 2016 RITIRO VIA MANZONI

Diritti e Competenze (A) IVA (22%) su €(A)

Anticipazioni (ex. art.15- D.P.R. 633/72) Totale Fattura Ritenuta d'acconto Netto a pag.

N.B.: La ritenuta d'acconto dovrà essere versata nei termini e con le modalità di legge. Al Notaio dovrà poi essere trasmessa la attestazione del versamento.



Spett.le Banca Promos S.p.A. Viale Gramsci, 19 80100 - Napoli (NA) Partita IVA: 04368171007 Codice Fiscale:04368171007

/ Fattura n.

Natura dei servizi formanti l'oggetto della prestazione: TOTALE SPESE, DIRITTI ED ONORARI PER PROTESTI MESE DI MARZO 2016 RITIRO VIA CAMPANELLA

Diritti e Competenze (A) IVA (22%) su €(A)

Anticipazioni (ex. art.15- D.P.R. 633/72) Totale Fattura Ritenuta d'acconto Netto a pag.

18

N.B.; La ritenuta d'acconto dovrà essere versata nei termini è con le modalità di legge. Al Notaio dovrà poi essere trasmessa la attestazione del versamento.

Fig.28¹¹⁶: Official notary invoices, part 2.

 $^{^{116}}$ To demonstrate the concept we want to explain, we decided to show only first two figures of the total invoice to match it with first two figure of next image, the "print screen."

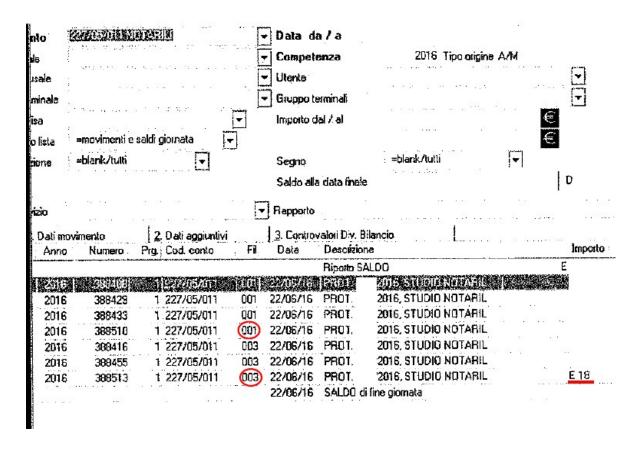


Fig.29: "Screen-print" of the accounting system

The last figure, deriving from the accounting system of the bank. It represents the cost allocation of costs coming from "notary office" for each branch.

Looking to the column "FIL," it lists the reference code of each branch:

• 001: Via Manzoni

• 003: Via Campanella

• 002: Salerno

• 090: Head Office

As explained before, we decided to show only two figure to match them with the accounting system. Looking to the invoice n.4, we underlined "Via Campanella," that matches with "FIL. N.003" and with the first two figures of the total import:"18."

In this way, we can note that the notary office sends to Banca Promos separate invoices for each branch to help the costs allocation following a traditional accounting model.

It represents only one example that refers to characteristic area. Otherwise, it is important also to represent the other way to allocate costs used by Banca Promos. One notable example is Bloomberg ("Bloomberg L.P. is a privately held financial software, data, and media company headquartered in Midtown Manhattan, New York City. Bloomberg L.P. was founded by Michael Bloomberg in 1981 with the help of Thomas Secunda, Duncan MacMillan, Charles Zegar, and a 30% ownership investment by Merrill Lynch"). 117 In this case, the stakeholder has precise information to follow. In the trading room of the head office, we can count three terminals, plus other in the branches. For this reason, the principal trading revenues come from the head office terminals. It represents why, looking at the invoice below, 118 we can find different rates for different using of the terminals. Thanks to this division, it is easy to allocate each cost in the best way. Another fundamental step regards the underline word "Attn." It refers to the user of the Bloomberg account. The reason why cost allocation covers who uses Bloomberg inside the bank is obvious: a part of the monthly salary is variable and linked to performances. The best practice is to take into account all costs deriving from each employee to allocate costs related to single activity. Finally, in the second invoice, ¹¹⁹ we can find rates related to each share in which it invests; it represents an important step to calculate if an activity is or not profitable for the company.

¹¹⁷ "Bloomberg LP History." FundingUniverse. Retrieved July 17, 2010.

¹¹⁸ Because of privacy reasons we decided to hide all numbers, showing only the invoice description.

¹¹⁹ In this case too, we hide all numbers, We did not hide descriptions about shares in which Banca Promos invests every day, because it is a public range that we can find inside the Financial Statement too.

Bloomberg

BLOOMBERG FINANCE L.P. 731 Lexington Avenue New York, NY 10022 (Do not send checks to this location) FOR INVOICE INQUIRY, PLEASE CALL: Customer Support 39-02-8064-4225

PLEASE SEND ALL CORRESPONDENCE TO: BLOOMBERG L.P. 39-45 FINSBURY SQUARE LONDON, ENGLAND EC2A 1PQ HEAD OFFICE 731 Lexington Avenue New York, NY 10022

INVOICE

BIII To: BANCA PROMOS SPA VIALE GRAMSCI 19 80122 NAPOLI ITALY Attn: Customer: BANCA PROMOS SPA VIALE GRAMSCI 19 80122 NAPOLI ITALY Attn:

				Customer VAT		07		
Please	Please pay upon receipt			INVOICE NUMBER	INVOICE DATE	ACCC	OUNT NUMBER	
LINE	QTY	CHANGE F	RELATED DESCRIPTION ACCT		RATE	PERIOD START	PERIOD END	AMOUNT
1	1		Bloomberg Terminal					
2	1		Bloomberg Terminal					
3	4		Bloomberg Terminal					14
4	2		Bloomberg Terminal					
5	1		Bloomberg Anywhere					
6	1	Price Increase	Bloomberg Terminal					a te January
7	1	Price Increase	Bloomberg Terminal					i i i i i i

Fig.30: Bloomberg invoice (N. 1)

Bloomberg

BLOOMBERG FINANCE L.P. 731 Lexington Avenue New York, NY 10022 (Do not send checks to this location) FOR INVOICE INQUIRY, PLEASE CALL: Customer Support 39-02-8064-4225

PLEASE SEND ALL CORRESPONDENCE TO: BLOOMBERG L.P. 3-45 FINSBURY SQUARE LONDON, ENGLAND EC2A 1PQ HEAD OFFICE 731 Lexington Avenue New York, NY 10022

raye I UI Z

INVOICE

BIII To: BANCA PROMOS SPA VIALE GRAMSCI 19 80122 NAPOLI ITALY Attn: Customer: BANCA PROMOS SPA VIALE GRAMSCI 19 80122 NAPOLI ITALY Attn:

Customer VAT #: IT04368171007 INVOICE NUMBER INVOICE DATE ACCOUNT NUMBER Please pay upon receipt RATE PERIOD PERIOD AMOUNT RELATED DESCRIPTION QTY CHANGE START ACCT ACTIVITY Eurex LV 1 ALL GBI INDICES 2 Borsa Italiana LV 2 3 Borsa Italiana LV 1 4 Euro MTS NASDAQ LV 1 6 NASDAQ LV 2 Eurex LV 1 ALL GBI INDICES Euro MTS NASDAQ LV 1 10

Fig. 30.1: Bloomberg invoice (N.2)

Page 2 of 2

Bloomberg

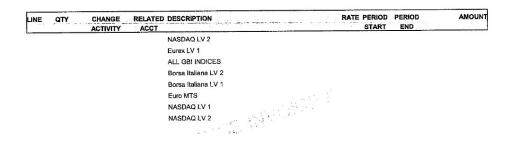


Fig. 30.2: Bloomberg invoice (N.3)

What we find inside invoice N.1 referring to "Attn," represents an obvious example of another fundamental step linked to ABC approach: the policy of employee stimulation. Banca Promos applied this strategy for many years until today. Cost allocation helps the management to focus on real profit margin generated by the single unit.

In fact, variable part of each salary depends on two different criteria:

- Firstly, there is a "bonus part" related to "if Promos closes the Fiscal Year with a loss or profit"; it represents a common stimulation strategy applicable using traditional Accounting system too.
- Furthermore, it exists an additional part tied to "results." Talking about the core business of the company, the results mean gains and margins deriving from the trading and financial area. This additional part it is nonapplicable using the traditional system, because it is tough to calculate each cost reported to each activity. Consequently, it is more difficult to isolate these costs and calculate a margin. As told before, the best you allocate costs, the easiest is the planning and budgeting activity.

It is easy to understand that in this way, thanks to the help provided by stakeholders, accounting office has to face far fewer problems reminding that management use all this information to create a perfect budgeting plan, which exploits cost allocation to follow ABC and ABM model. Studying these invoices, and using them, all calculations about branches margins, products profitabilities and similars becomes easier.

The last one type of invoice refers, instead, to a typical characteristic cost: electric energy power.



Fig.31: Electric energy invoice.

This is the front page of the electric power invoice of Banca Promos. As shown in the right way, the company addressed it to the head office of the bank, but it refers to every single branch. Looking to the accounting process shown below, we can find the witness.

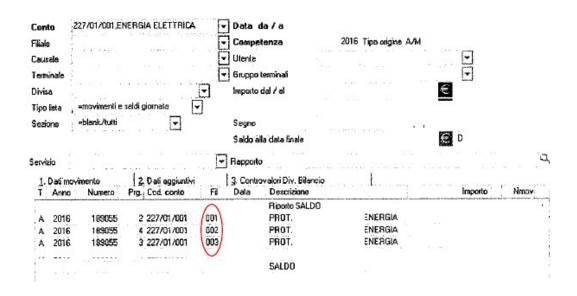


Fig.33: "Screen-print" of the accounting of the cost.

We cannot show figures, but the accounting office splits the total import of the invoice in various branches, to allocate in the right way the cost. Here we have the same situation we found with other bills. The supplier sends to the bank a split invoice, in which the bank can find the total import just split for branches. It is a typical example of traditional cost allocation using a cost center criteria. Focusing on a panoramic view of the process, also this application links to Activity Based Costing model: in fact, as we saw before, CEO Tiziana Carano exploits all information coming from the accounting, to draw up a total costs image per branch. In this way, using this tools, it is easier to apply an ABC/ABM approach to finalizing the budgeting process. We can observe a similar process talking about activities. During chapter four, we saw some charts in which it was possible to find different rates and ratio referred to single products sold. To finalize the calculation process, you must now everything about costs the company has to face to "produce" and sell that particular product. Exploiting all these information, the management team can create in the right way the model composed by:

- Costs the company has to face in total
- Costs the company has to face to "produce" that particular product. It represents the most valuable activity and to find it the management has to find the best "cost driver."

At the end of this process, the output is a panoramic view of the society, with some significant rates that summarize the situation, the profits, and the margin of each product and each branch. The differentiation of costs per branches represents the final and next step of our analysis.

¹²⁰ Here we use the quotation marks because , as I told during chapter two and three , ABC is a purely industrial approach, that during this path we tried to apply to banking industry. Inside this environment, banks sell capitals and money, so we not have a "production line."

4.2.3 A possible merger, why not? Decision-making based on ABC

During the presentation of the bank, we talked about the possible merger with other important banks in Campania region (as explained in the official Financial Statement). Reminding that the core business of Banca Promos remains the financial and trading area, if there will be this merger, inside the operation, we will obviously obverse the incorporation of the Promos retail sector inside this new important group. It means that, during the negotiation process, the management has to have a clear situation of every single branch, with its margin, its costs, and its generated profits.

The CEO about this matter:

"Abbiamo bisogno di avere una situazione ben chiara di tutte le nostre filiali, al fine di presentare progetti che riportano al 100% la realtà dei fatti, esaltando le qualità ma senza nascondere le eventuali lacune. Nulla riguardo la fusione è certo, è premature parlarne, ma sicuramente esiste un interesse ambo i lati ed è nostro dovere improntare la gestione della società anche al fine di compiere passi di questo genere."

In few words, Tiziana Carano summarizes all concepts expressed inside this chapter. Starting from the accounting system, following a traditional accounting system approach or an Activity Based Costing approach, the management has to work with complete information that gives the double possibility of handle the company in the best way and to present it externally in the right way.

In the light of the work done inside the entire chapter four, an important consideration about the matter could the following one: a merger represents a revolutionary step in every business life, and for this reason the choice should be accurate and well studied. In this way ABC helps a lot: it gives a double fundamental help because of its support to budgeting process (it means that ABC helps to project the company into the future); the second important aid provided by ABC refers to values created by the business before the possible merger. Its analysis results easier with this approach and it means that the management can make decision knowing exactly which is the situation inside

its own company: profits, margins, growing possibilities and more profitable activities. In this way, it is easy to understand, if the merger in question could be an improvement or not for the firm. Especially, exploiting this method, a potential post-merger analysis it could be easier; in fact, exactly knowing every single activity margins, make a comparison it could be more efficient to identify pros and cons deriving from the merger. With this little concept, we conclude the analysis of the Banca Promos accounting process.

We started with the presentation of the bank, its history, the environment in which it every day lives and focusing on the core business. We did a significant differentiation between financial and retail area, giving some important concept linked to the accounting approach used for each one of these. We continued with an outstanding analysis of the budgeting process, studying data from Financial Statement and bank's internal software; in this way, we gave an idea of what is the output of this work.

After, we went back from the output, moving up to the input: the accounting entries. We analyzed three different kinds of invoices with their respective accounting, underlining the fundamental criteria used by the company.

Thanks to this work, we clarified in a better way, which is the ABC role inside the society, and in which part of the control process it involves. All this matter brings us to the final step in which we will conclude our path with some personal considerations and comparisons.

CHAPTER 5

RESULTS AND POTENTIAL DEVELOPMENTS

5.1 To recap: analyzing our "path."

The last one chapter, chapter five, has a fundamental task: summarize all the matter we dealt with during this elaborate, giving some important considerations and food for thought for the reader.

To recap: during chapter 1 we gave a panoramic view of what was the matter we would be going to deal with; concepts as "mission," "mission statement," "vision," and "corporate vision." Then, inside chapter one we found some valuable information about which are the most important dynamics a corporation has to exploit to face different kinds of problems. In this way, we talked about planning and control, which are the goals of these two important concepts and especially, which is the fundamental link between that two concepts and the accounting. Why?

Because accounting is the base of our project and cost allocation, as explained in chapter one and two, is the base for all kinds of businesses. Keeping up along our way, we described which is the real mean of the sentence: "looking to the past to forecast the future," explaining how important is the planning process inside contemporary environments for companies. Coming back on the basis, we described the traditional accounting system, with its foundations and its task and then we gave some relevant information to introduce the focus of the next chapter: Activity Based Costing.

Chapter two covered the theoretical focus of this path, the ABC. In first part of this chapter, we dealt with its historical development, according to the leaders of the evolution of the accounting system. Before starting with the explanation of the ABC model, we covered the traditional approach focusing on segregating costs and the methodology of cost allocation. We "touched" arguments as: Break Even Point, the difference between fixed costs, variable costs and overhead costs. After this panoramic view, we started analysis of the

ABC theoretical approach, studying some notable examples deriving from authoritative books, and giving theoretical notes of how the Activity Based Costing has to work inside a company.

Next step was to explain the difficult passage from theory to practice: the primary problem to solve was that our business case was not "classical": the reason is that ABC is born as a process excellent for industrial companies. The main actor of our case is, instead, a bank.

For this reason, Chapter three treated the application of this model to banking industry(this banking application is more modern than the industrial one). During this section, following some important economics of today, we tried to recap all the matter about ABC applying its pillars to banking industry. In this way, we showed all the process to perform a perfect passage from industrial to banking sector in ABC application. There are some notable differences between these two worlds and we tried to analyze one to one: the absence of raw materials, the lack of a production chain and in particular the difficult to recognize a single activity to apply the model. We made a similar work about ABM. As I told before, ABM is the natural next step of ABC and this is why we decided to explain, during chapter three, this matter also about banks. The real reason is that, budgeting process and ABM represent the central part of the Banca Promos approach. Hence, thanks to first three chapter, we gave all information needed to understand in the best way our business case. We have walked a road, and during this path we recognize all the fundamental elements the reader needed to arrive "ready" for the last stop.

Chapter four is the focus, the nucleus of the elaborate and the practical application of all the matter explained before. In this section we started with the presentation of Banca Promos, outlining which are the core businesses of the company and which are the different areas in which it is developing. After this introduction part, we presented some official documents ad official budget 2016, notary invoices, Bloomberg invoices and electric energy invoice to explain in the best way which is the accounting process of the bank. We started showing the budgeting process because it is the output of all the process; in fact, as explained in the chapter, the particularity of the accounting

approach of this bank is that they use two different accounting system to arrive at the same result.

They use a traditional approach for some costs linked to retail area and different branches; instead they use ABC approach for all costs related to financial and trading area, and to elaborate the budgeting. For this reason, we decided to show firstly the output of the process and after all the matter hidden behind, to give the idea of the result and then of the work that bring to that result. In this part, we analyzed documents, invoices, "screen – print" from the accounting software of the bank, Deloitte reports and other interesting documents that gave us an idea of how really the accounting office works. We concluded the path with some important considerations about a possible future merger and which are the primary connections between this merger and the accounting approach chosen. The fourth chapter is the most relevant because opens doors to every kind of considerations as the ones we will show in the part below that has the double aim of conclude the elaborate and give food for thought.

5.2 Pros coming from ABC: planning the future.

As told more and more times during this elaborate, I had the possibility to work inside this bank as auditor, and for this reason, I have seen first hand all documents I reported inside this path. Everyone might get an idea about which are pros and cons of using the Activity Based Costing model inside a bank.

Obviously, I got a personal idea about this matter.

IMHO, we can list pros and cons as shown below.

Pros

• Coherent view: thanks to this approach, as we saw in a theoretical mood inside chapter two and three, and in a practical way inside chapter for, ABC is a fantastic tool that gives to the management team all the information they need to elaborate a perfect budgeting plan. Certainly, in terms of quantity of data, traditional accounting approach shall perform the same task. What is the difference? ABC gives precise and coherent information about every single

product sold (using an "industrial" terms, but how we explained the same argument can be express about banking industry) giving a coherent view about costs the company really has to face to be able to sell that particular product. Expanding the perspective, it means that CEO can calculate perfectly what is the profitable margin created by a product, a marketing campaign or a new branch. Traditional accounting system cannot do this. It can return "average information" about branches, products and so on. There is only a case in which the ABC and the traditional accounting model works in the same way: when we are anlyzing a single line, a single product or a single campaign. Analyzing that matter, we cannot use cost drivers, profit centers, averages and the obvious conclusion is that they work similarly.

• Budgeting support: accounting office has a very important role inside a business: all costs that "come inside the company" has to face firstly them. Accounting department has the fundamental task of channel and eventually split all this costs in particular categories or accounts. It represents the first step, and the base of the budgeting work. The best we do in this phase, the best will be our planning. The main "pro" of ABC is that it gives precise e quality information to support budgeting process.

Cons

All this path tried to explain how banks can use ABC and how much it could be useful to help its growing process. So, it is hard to talk about cons. The first and most relevant disadvantage is that it is a "long process." It means that the accounting office has to work hard and for long time to apply the method in the best way. Every cost has to be analyzed and every operation has to be channeled in the right way to give to the management team quality data. Another disadvantage could be related to the type of business we are talking about: there are a lot of business in which, maybe, ABC could be not the best solution because profit margins split per activities not represent the first aim of the company. We are talking about mono-product businesses (as we told before, when we are talking about a single line or a single product ABC does not work) or too small companies in which costs it has to face to implement this approach are higher than benefits coming from this choice. Finally, as its

growing process during last century demonstrates, ABC coulde be a fantastic tool to exploit in a lot of variants; this approach used in the right context with rationality can perform excellently giving back extraordinary results. Clearly, there are some valuable parts in which it can improve and we will analyze one of them inside the last paragraph of this elaborate.

5.3 Potential developments of the strategy.

Paragraph 5.2 reported pros and cons of this strategy.

Cleaerly, if we are talking about "potential developments," we have to start from "cons," and identify where ABC can improve. ABC can improve on one crucial matter: the time of application. As told before, accounting office has to work hard and regularly to obtain a good result. But, everyone knows that in the new-era economy, "the value of the time" increases day by day. So, a potential development could be a solution to solve this time problem. Accounting department works applying some set rules that depends on management choices in term of cost drivers. If a machine could learn all these rules and principles(and this is a not impossible thing to do looking to progress in the machine-learning field), it could help the accounting office to speed up the work. In this way, the machine will do the main part of the work and the accounting office members would engage in a control role. We know that machines can make mistakes, so the function of the office cannot be replaced. Hence, I imagine in a not-far future, a changing in the accountant role that became a controller of the machines works. Obviously, that machines "has to learn," and for this reason, the accountant should update them in line with changing in the external environment, regarding law and accounting policies. These machines, has also to shape themselves to the management team requests. Initially, it could be a hard work, but in a mid-term vision, it can lead to big achievements.

SUMMARY

INDEX

INTRODUCTION
1. ACCOUNTING SYSTEM AND COST ANALYSIS
2. ACTIVITY BASED COSTING
3. FROM BUSINESSES TO BANKS: HOW ABC AFFECTS MANAGEMENT7
4. OVERVIEW FROM INSIDE: BANCA PROMOS S.P.A
5. RESULTS AND POTENTIAL DEVELOPMENTS
BIBLIOGRAPHY1

It was the 1494, when Luca Pacioli defined for the first time the double-entry method. That date is popularly regarded as the beginning of the accounting. From that moment, a continuous but slow development was observed until arriving to the first half of the XX Century. As of this moment, a swift growth is observed: in few years, new methods, aims and visions are born until arriving to 1987, year in which Robert S. Kaplan and W.Burns presented for the first time the Activity Based Costing method. This methodology has a fundamental aim: giving to firms a tool to make auto-analysis, exploiting accounting entries as particular information to create a coherent panoramic view of the entire company. In this way, the result is an easier identification of the operations that add value and the ones that are not profitable.

The thesis aim is to explain how Activity Based Costing method really can bring important benefits to organize companies and those "companies" could be also the banks. It because this methodology is born to adapt itself to industrial firms, but recently some authoritative economists tried to apply this matter to banking industry too. So, the questions this elaborate answer are: How can a bank exploit ABC method? Which is the possible "best methodology"? And, especially, which are pros and cons? Are there any possible future development?

To answer to all these questions, it was decided to exploit an experience as auditor in a SME bank based in Naples, for Deloitte. This work is the result of a three months job, during which every day Financial Statements, budgeting reports, accounting entries and policies of employee stimulation owned by the bank were observed. Obviously, it means that the knowledge of the intern dynamics has improved and it resulted easier to identify areas in which the accounting method performs in the best possible way, recognizing benefits deriving from this application, and instead in which it can improve. This accumulated experience benefits also the possibility to think about and propose any possible future development referring to the single business case or to the entire matter.

The thesis is structured in five chapters.

1. ACCOUNTING SYSTEM AND COST ANALYSIS

The first chapter covers the pillars of handling a company during the modern era: planning and control. In an economic world that changes year by year and sector by sector, the more eclectic you are the more you have success. Economic environments change in an extremely fast way, and for a society is harder to find the best business plan . Planning become the success key: a 3/5 year business plan nowadays is one on the hardest document to prepare for a management team of a firm. For this reason, the entrepreneur that has this fundamental skill, can exploit this exponential advantage against competitors. Anticipating market movements, learning from spillovers coming from outside, implementing new business strategies, adapting moment by moment the input/output process, is the best way to obtain success. Then, the first chapter covers this particular case of "new era economy," and another one too, related to the first: control. During the years, the economic environments changed. During 20' and 30', the key success was to obtain a standard product, with enough quality in a reasonable time of production. Over the years, customers' requests evolved and quality became a very important success rate. Thanks to globalization too, in these dynamics the control became fundamental. Total Quality Management¹²¹, Six Sigma Theory¹²², demonstrate continuous research of perfection of production. Quality management, control systems and production chain represent a fundamental step inside the growing process of a business but not the base. It is an output, what customers see as final consumers, but it exists an input process thanks to which all this process is possible; a path that starts from the Mission statement ("who we are, what we value") and the Vision Statement ("what we want to became"), that bring to the Strategy ("how we will achieve our vision") and

¹

¹²¹" Total Quality Management (TQM) consists of organization-wide efforts to install and make permanent a climate in which an organization continuously improves its ability to deliver high-quality products and services to customers."

¹²² "Six Sigma (6σ) is a set of techniques and tools for process improvement. It was introduced by engineers Bill Smith & Mikel J Harry while working at Motorola in 1986. Jack Welch made it central to his business strategy at General Electric in 1995. It seeks to improve the quality of the output of a process by identifying and removing the causes of defects and minimizing variability in manufacturing and business processes."

then to Goals and Objectives("how we gauge our degree of success")¹²³. Hence, the essential issue in this phase is to explain and list what are the real foundations of a business; concepts as Vision, Mission, mid-term objectives and long term goals. These provide the basement on which growing process and planning process¹²⁴ are base on. In particular, the planning process, can be divided in three steps: Provisions of data, Decision-making process and budgeting process¹²⁵. Chapter one wants to focus on the position of the management team to underline what are its main responsibilities and why it decides to rely on new accounting methods.

The second part of the chapter covers the control process, and divide it in: previous control, concurrent control and subsequent control 126. In this way, the reader can understand the complete process of creating value in a business; starting from the idea and from the entrepreneurship, until arriving to the control on the production and on the management, giving to customers a product or a service that summarizes all the value created by the company along this chain. The following step is management control 127, in which a merger between control principles and planning concepts is observed. In this moment, it is easy to understand that this panoramic view gives the possibility to analyze in a better way the position of the accounting model in this chain, and which could be the development and the benefits it can bring. This is why, in its final part, chapter one introduces the traditional accounting system and then prepares the reader to confront the main matter, the Activity Based Costing.

-

 $^{^{123}}$ Chapter 1 – paragraph 1.1 Mission, Vision and accounting. How to connect them?; Fig.2 From mission to goals: four steps.

¹²⁴ Chapter 1 – paragraph 1.2 Planning and control: looking to past and present to forecast the future.

¹²⁵ Chapter 1 – paragraph 1.2 Planning and control: looking to past and present to forecast the future; Fig.3 Typical organizational chart

¹²⁶ Please see note n.4

¹²⁷ Related to a work by Anthony & Young (1999), chapter 1 – paragraph 1.2

2. ACTIVITY BASED COSTING

Making a comparison with the first chapter, chapter two has a completely different structure linked to dissimilar objectives. Chapter two follows a particular goal: to introduce all the issues related to the main concepts of the project, the Activity Based Costing. The first paragraph presents an historical development description of ABC, underlining changes and improving elements during more than five century of history. It starts from the beginning, with the emergence of the accounting system until arriving to the new era economy and its new shades. The first paragraph focuses on the traditional accounting system, and introduce the Activity Based Costing. Paragraph 2.2 provides an in-depth description of what are the main tools of the traditional accounting system, focusing on concepts as cost allocation, segregation of costs and Break-Even Point(BEP) model. 128 This analysis stands at the base of the CBA(Cost-Benefit Analysis 129) and it is the most important tool used by traditional accounting system. Following our aim and our methodology¹³⁰, it represents an essential step to create the best benchmark to make comparison with ABC results. Hence, paragraph 2.3 covers the methodology of the cost allocation in operational management. This part covers some basic ABC concepts as the "cost drivers," one of the most innovative principle and the first real big difference compared to traditional accounting system¹³¹. The "methodology phase" ends with an in-depth explanation of the theoretical and applied methodology of the Activity Based Costing. Paragraph 2.3 describes the ABC cycle, its strengths and its benefits, how to choose a cost driver and which are the "tricks" to perform in the better way using this method, are all

¹²⁸ Chapter 2 – paragraph 2.2 Segregating costs: Fixed, Variable and Overhead cost; analysis with cases, charts and calculation tables.

¹²⁹ Introduction to chapter 1

¹³⁰ As explained before, the aim is to make a continuous comparison between traditional accounting system and Activity Based Costing model to underline differences and try to list pros and cons. Focus on the matter: Chapter 2; paragraph 2.3

¹³¹ ABC presents more than one cost driver, instead traditional system only one.

concepts explained in this phase. Also, some limitations¹³² are pointed out. The other typology of approach used to fill this thesis is the input/output ratio: the question the elaborate answer in this case is: "how does the entire process work? What is the starting point and what is the final one?." Following this approach, the final part of the chapter two treats the natural evolution of the Activity Based Costing: the Activity Based Management. As described before, ABC creates the perfect input, with channeled information and coherent cost allocation; obviously, to complete the path, it is useful to focus on the output of this process that refers to the chapter one matter on issues relating to planning and budgeting process, the real profitable process of the entire path. Next step of the process is to explain the difficult passage from theory to practice. In particular, chapter four will focus on the case study of a SME investment bank, Banca Promos. Reminding that ABC approach easily adapts itself to industrial sector, chapter three will focus on this important passage, the different application from industrial sector to banking one.

3. FROM BUSINESSES TO BANKS: HOW ABC AFFECTS MANAGEMENT

Hence, chapter three treats the application of ABC to the banking industry (this banking application is more modern than the industrial one as explained in paragraph 2.1). After a brief explanation of the main characteristics of the bank used as case study, explaining its mission, vision, and value chain(to whom a bank creates value and in which way). The main goal of the chapter is to recap all the matter about ABC, applying its pillars to the banking industry. Hence, in the first part it refers to the process needed to perform a perfect passage from industrial to banking industry. There are some important differences between these two worlds and in this phase the aim is to analyze it one to one: the absence of raw materials, the absence of a production chain and especially the difficult to recognize a single activity to apply the model. The second part of the chapter describes the typical activities of a bank and

¹³² Limitations are the main matter of the chapter 5, which makes comparison between results deriving from business case and the ones describe in the theoretical part of the elaborate. At this point, some possible development strategies are described

which are the most profitable ones. It represents the best way to prepare the ground for the ABC application. Remembering that the cost drivers are essential for this application, and that the single activity margin represents the first important ABC output, it is necessary to introduce a clarification about how a bank creates value and which are the most profitable activities. The last part of chapter three, follows the approach used in the second one, namely giving some important concepts about the implementation of the input/output ratio: once given all the theoretical matter referring to value chain and ABC model, the ABM model is presented here again following the identical guideline of the chapter two. And that is what the project supposed to do: applying the same approaches, basing on the same guidelines, in different parts of it, giving to the reader all tools he needed to follow in the right way this path. Following the benchmark approach, the last paragraph analyzes how banks can allocate costs according to Activity Based Costing, dividing costs in two main categories (bank activity costs and interest expenses) and focusing on different cost drivers to obtain the same result. Finally, the last one objective of this part is to introduce some important examples of characteristic banking activities, giving solutions to apply the ABC model. The main example is the fundraising process¹³³.

¹³³ In this phase, the main aim is to present examples further far from the industrial sector, introducing typical activity not presented in a company using same principles, it will be easier to make a comparison between different branches of every company protagonist of this merger, in order to choose the more profitable ones.

¹³³ Obviously, a Deloitte label covers all figures because of privacy reasons.

¹³³ This ratio wants to summarize a fundamental concept: what is the ratio between how much value the branch produces with that particular activity exploiting that number of employees and how much value creates a similar bank in the same sector with the same number of employees. It has the double aim of measuring the employee performance (obviously, the variable part of the salary of each employee is related to this ratio) and to make a comparison between Promos and similar competitors in the market.

¹³³ It indicates the profitable margin created by every single activity of the branch, taking into account costs allocated by activity and revenues deriving from only that kind of activity that is not a bank. In this way, the chapter four analysis, results easier to understand and more coherent with what explained in the introducing part of the elaborate.

4. OVERVIEW FROM INSIDE: BANCA PROMOS S.P.A.

Chapter four represents the core session of the thesis and the practical application of all the matter explained before. It is the output of a three months job as auditor, in which obviously a competent knowledge of the matter has matured. Looking at a concept, an idea, a theoretical explanation it is not compelling as having a "panoramic view from inside"¹³⁴; instead, this approach is more interesting and functional to achieve important goals as produce idea and make comparisons. Fortunately, this project is based on this kind of approach and can give a perfect shot of the entire situation the business case refers to.

This chapter starts with the presentation of Banca Promos, focusing on the last fiscal year Financial Statements: some data, performance indices and extracts from "Relazione sulla Gestione" are presented and commented, with the goal of giving an idea of what is Banca Promos and what is the reason why it represents a perfect example to study the subject of this elaborate. Initially, the chapter starts with the analysis of the society, outlining what are the core businesses of the company and different areas in which it is developing. The initial part of the chapter gives information about the methodology used to analyze the data. In fact, this part describes the main differences between the main businesses of the society: the financial and trading area and the retail area. Here again, the chapter explains how much is important for this bank the accounting system, because of a possible future merger¹³⁵, in which Promos is allowed to keep an important role inside the financial and trading area, while it would offer some scope for retail and characteristic area to other two bigger components of the merger. Remembering that the principles Promos has to follow to allocate costs related to retail area are close to traditional accounting system, it is so interesting to analyze how the accounting office and the management team tries to channel this information applying in a second

¹³⁴ This concept gives the title to the elaborate.

¹³⁵ As explained more and more times inside chapter four, the costs related to retail area of Banca Promos has to follow some important principles imposed by two other actors of this merger. The reason is too clear: using same principles, it will be easier to make a comparison between different branches of every company protagonist of this merger, in order to choose the more profitable ones.

moment the ABC model. In this way, changing the input, the output does not change.

After this introduction part, in which all bases shall be provided to make the following analysis easy to read, the first part of chapter four focuses on the output of the entire process. Because of the difficulty of the process, the objective is to give a clear idea of what is the result of the entire process and, as a consequence, explain all the issues that stand behind this result, the input. It seems like a reverse of the input/output approach outlined before, but in fact it is the same. As chapter two explains, the ABM (strategic plan, budgeting process, manage the company forecasting the future) represents the final output of the ABC and accounting system process. So, the first official document presented in the chapter is the Contribution margin of the main branch for the 2016 , divided in activities, products sold and various performance indices. It is calculated and produced following an important ratio that Promos CEO, defined as the index that can give us with a perfect shot of every calculated indices: the OTM("Organico Teorico Medio" 136). Looking at the table, the first interesting thing that stands out is the calculation of "margin" and "mark up/down" After these, it is easy to note the ratio "Costi/Ricavi" and as a consequence the difference between "Fig." and "Eff." 140. The value added by this chart is the calculation of these indices for all the products sold and the activities done by the firm.

¹³⁶ This ratio wants to summarize a fundamental concept: what is the ratio between how much value the branch produces with that particular activity exploiting that number of employees and how much value creates a similar bank in the same sector with the same number of employees. It has the double aim of measuring the employee performance (obviously, the variable part of the salary of each employee is related to this ratio) and to make a comparison between Promos and similar competitors in the market.

¹³⁷ It indicates the profitable margin created by every single activity of the branch, taking into account costs allocated by activity and revenues deriving from only that kind of activity.

¹³⁸ Ratio that measures the performance of the selected branch in relation with all other branches.

¹³⁹ It represents the projected value deriving from the planning process based on the accounting office information.

¹⁴⁰ It represents the effective value registered for that activity.

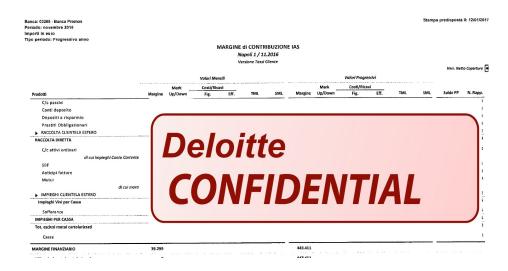


Fig.1: Margin of contribution of the main branch for the 2016

The second chart presented, related to the first, is the title as the overview chart and follows the same principles of the first described. The difference is that the values analyzed refer to all accounts of the income statement divided per center of profit. It demonstrates the ABC approach. In fact, thanks to this model, produced by "Promos 5.4"¹⁴¹, the user can select the preferred center of cost, to isolate the analysis to selected accounts. It represents a fundamental pros deriving from using ABC approach.

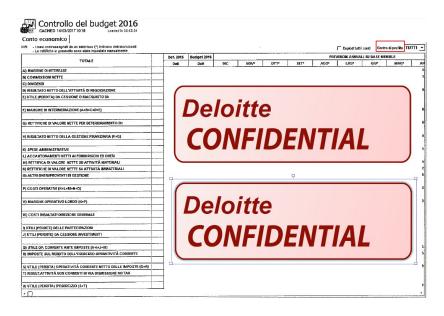


Fig.2: Final budget for 2016; overview chart

¹⁴¹ it is a homemade budgeting software that Promos developed to use it for its own budgeting process. "It represents a fundamental tool to represent every day and every month, a clear situation of costs and revenues and its foreseen values

The third and fourth tables shown refer to intern worksheets provided by the accounting office¹⁴². These two tables represent the nucleus of the ABC approach and the real output of it. In fact, in these tables, it is possible to isolate every single activity, looking at their respective columns, to find expected and effective progressive value divided per months. It means that the management team, thanks to these tools, can monthly make a comparison between foreseen values and effective values of every account, making decision in order to follow these values. It is another fundamental benefit deriving from applying ABC. All these issues, closer to ABM more than to ABC, shows the pros of this accounting method, underlining that the panoramic view the ABC is able to create, improving the management team decision-making process, giving more information and reducing the possibility of error. The second part of the chapter covers the reverse process from output to input: in this part, the main matter is represented by the accounting entries. Remembering that costs referred to retail area do not follows the ABC approach but the traditional accounting model, it represents the hardest task because of the needed transformation and channeling of all costs in an ABC view. Accounting entries reported in this chapter wants to demonstrate the traditional allocation used by Promos for that particular type of costs, without losing consistency in values of the charts presented before. Here the analysis of various accounting entries (in this case too, all the analysis derives from official documents with hidden values) and related accounting "screen-print" 143. Clearly, some invoices related to cost allocated in ABC view is shown; in particular, a Bloomberg¹⁴⁴ invoice, in which it is possible to note the agreement between customer and supplier; in fact, Bloomberg prepares a particular invoice divided per: rates related to single user, number of terminal connected and single share in which the bank

-

¹⁴² All data shown are modified toh ide the official data because of privacy reasons. The result is a coherent view, that gives the possibilità to under stand the matter, comment it, avoiding the sensitive data proliferation

¹⁴³ It refers to a virtual "photo" of the accounting office pc, that the accounting office provided to demonstrate the way they allocate the abovementioned costs

¹⁴⁴ Bloomberg L.P. is a privately held financial software, data, and media company headquartered in Midtown Manhattan, New York City. Bloomberg L.P. was founded by Michael Bloomberg in 1981 with the help of Thomas Secunda, Duncan MacMillan, Charles Zegar, and a 30% ownership investment by Merrill Lynch")

invested on. In this way, it is possible to divide costs per branch, per employee and especially per activity, simplifying the accounting office work. After this analysis, the process is complete and in fact, the chapter closes with a small digression about the possible merger and the decision-making process explained by the CEO.

5. RESULTS AND POTENTIAL DEVELOPMENTS

The fifth and last chapter has three important objectives to achieve: recap all the matter analyzed during this path; give considerations about result obtained and propose some possible new developments in the future.

Hence, in the first part, a resume that sums up what are the main purposes of the first four chapters is presented. After this brief summary, the chapter five lists all pros and cons of the approach providing some considerations and comments on results obtained.

Pros

• Coherent view: thanks to this approach, as explained theoretically inside chapter two and three, and in a practical way inside chapter four, ABC is a fantastic tool that gives to the management team all the information they need to elaborate a perfect budgeting plan. Obviously, in terms of quantity of data, traditional accounting approach shall perform the same task. What is the difference? ABC gives precise and coherent information about every single product sold (using an "industrial" terms, but how explained before, the same argument can be express about banking industry) giving a coherent view about costs the company really has to face to be able to sell that particular product. Expanding the point of view, it means that CEO can calculate perfectly what is the profitable margin created by a product, a marketing campaign or a new branch. Traditional accounting system cannot do this . It can return "average information" about branches, products and so on. There is only a case in which the ABC and the traditional accounting model works in the same way: when the object of the analysis is a single production line, a single product sold or a single campaign. Analyzing that matter, we cannot use cost drivers, profit centers, averages and the obvious conclusion is that they work similarly.

• Budgeting support: accounting office has a very important role inside a business: all costs that "come inside the company," firstly it has to face it. Accounting office has the fundamental task of channeling and eventually splitting all these costs in particular categories or accounts. It represents the first step, and the basis of the budgeting task. The best the accountant does in this phase, the best will be the output of the planning process. The main "pro" of ABC is that it gives precise e quality information to support budgeting process.

Cons

All this path tried to explain how banks can use ABC and how much it could be useful to help its growing process. So, it is hard to talk about cons of this approach, being in contrast with the main aim of the entire elaborate. Anyway, the first and most important cons, is that ABC application is a "long process." It means that the accounting office has to work hard and for long time to apply the method in the best way. Every cost has to be analyzed and every operation has to be channeled in the right way to give to the management team quality data. Another cons could be related to the type of business we are talking about: there are a lot of business in which, maybe, ABC could be not the best solution because profit margins divided by activities not represent the first data researched by the company. Typical example could be mono-product businesses, or too small companies in which costs they have to face to implement this approach are higher than benefits coming from this choice.

Clearly, Activity Based Costing prepares the ground for an excellent budgeting and planning process, giving a real-time "shot" of the business situation and helps the decision-making process. About the last one concept, some important considerations.

During the presentation of the bank, at the beginning of the chapter four, a possible future merger was mentioned. The same merger mentioned by the CEO and reported at the end of the chapter four, and mentioned by the President Ugo Malasomma inside the introduction part of the Financial Statement. After listing pros and cons of ABC approach, in the light of the

work done inside the entire chapter four, an important consideration about the matter could the following one: a merger represents a revolutionary step in every business life, and for this reason the choice should be accurate and well studied. In this way ABC helps a lot: it gives a double fundamental help because of its support to budgeting process (it means that ABC helps to project the company into the future)¹⁴⁵; the second important aid provided by ABC refers to values created by the business before the possible merger. Its analysis results easier with this approach and it means that the management can make decision knowing exactly which is the situation inside its own company: profits, margins, growing possibilities and more profitable activities. In this way, it is easy to understand, if the merger in question could be an improvement or not for the firm. Especially, exploiting this method, a potential post-merger analysis it could be easier; in fact, exactly knowing every single activity margins, make a comparison it could be more efficient to identify pros and cons deriving from the merger.

Finally, as its growing process during last century demonstrates, ABC could be a fantastic tool to exploit in a lot of variants; This approach, used in the right context with rationality can perform excellently giving back extraordinary results. Obviously, there are some important parts in which it can improve the last paragraph of this elaborate analyzed one of them.

Obviously, if we are talking about "potential developments," "cons" are the starting point, and the first move is to identify where ABC can improve. An example can obviously be the time of application. As explained before, the accounting office has to work hard and constantly to obtain a good result. But, everyone knows that in new-era economy, "the value of the time" increases day by day. So, a potential development could be a solution to solve this time problem. Accounting office works applying some set rules that depend on management choices in term of cost drivers. If a machine could learn all these rules and principles(and this is a not impossible thing to do looking to progress in machine-learning field), it could help the accounting office to

¹⁴⁵ As explained before, a merger revolts the entire history of a company and the best way to make the right decision is to forecast perfectly which future the firm is going to eventually change.

speed up the work. In this way, the machine will do the main part of the work and the accounting office members would engage in a control role. Clearly, machines can make mistakes, so the role of the office cannot be replaced. Hence, in a not-far future, it is possible to see a changing in the accountant role that became a controller of the machines works. Obviously, that machines "have to learn" and for this reason the accountant should update them in line with changing in the external environment, in terms of law and accounting policies. These machines, have also to shape themselves to the management team requests. Initially, it could be an hard work, but in a mid-term vision, it can lead to big achievements.

BIBLIOGRAPHY

Beaumont Claudine: The Telegraph –	"Bill Gates's	dream: "A	computer in
every home"			

David Fred , John A. Pearce II,: "Corporate Mission Statements: the bottom line." – Academy of management executive, 1987

David, Rodreck; Ngulube, Patrick; Dube, Adock: "A cost-benefit analysis of document management strategies used at a financial institution in Zimbabwe: A case study." SA Journal of Information Management, 16 July 2013

Drucker Peter F., "Management Challenges of the 21st Century." New York: Harper Business, 1999.

Drucker Peter F, "Management: tasks, responsibilities, practices." Butterworth-Heinemann, 1999

Drury Colin M. "Management and cost accounting,", 1992

Hall, R. L. and Hitch, C. J., "Price Theory and Business Behaviour," in T. Wilson e P. W. S. Andrews, Oxford Studies in the Price Mechanism, Oxford, 1951

Hamel, G. & Prahalad, C. K. "Strategy as stretch and leverage". Harvard Business Review, 1993

Hill, Gregory. "A guide to enterprise reporting.", 2013

Ildikó Réka CARDOŞ, Ştefan PETE, adapted by Kaplan & Cooper (1998), "Activity-based Costing (ABC) and Activity based Management (ABM) Implementation – Is This the Solution for Organizations to Gain Profitability?."

Kaplan, Robert S. and Bruns, W. "Accounting and Management"

Lauwers, Luc & Willekens, Marleen. "Five Hundred Years of Bookkeeping: A Portrait of Luca Pacioli", Tijdschrift voor Economie en Management, Katholieke Universiteit Leuven, 1994

Mintzberg, Henry; Quinn, James B. "The Strategy Process: Concepts, Contexts, Cases". Prentice Hall, 1996

Needles, Belverd E.; Powers, Marian. "Principles of Financial Accounting. Financial Accounting Series", 2013

Peggy Bishop Lane on "Why Accounting Is the Language of Business", Knowledge at Wharton High School, September 23, 2013

Quigley Joseph V.: "Vision, How leaders develop it, share it, and sustain it," pages 37-41 from "Business Horizons", 1994

Schaltegger, S. & Burritt, R. "Contemporary Environmental Accounting: Issues, Concepts and Practice" Sheffield: Greenleaf Publishing, 2000

Simons, "Levers of Control" Boston: Harvard Business School Press, 1995

Staubus, George J. "Activity Costing and Input-Output Accounting",

Velmurugan, Manivannan Senthil, "The Success And Failure of Activity-Based Costing Systems".

WEBSITES

- ➤ http://www.utilgroup.com/en
- ➤ http://www.waltdisney.com
- > http://www.wal-mart.com
- http://www.nike.com
- Cristiano Busco (2016), Presentation of "Planning and Control" course at Luiss University.
- http://www.luiss.it/cattedreonline/corso/SGE/0/19CLMBASE/2015
- ➤ http://sf-planning.org/organizational-chart-and-directory
- https://en.wikipedia.org/wiki/Management control system
- http://www.smartaudit.az/accounting/
- ➤ https://en.wikipedia.org/wiki/Activity-based costing
- ➤ http://www.pmhut.com
- ➤ http://www.Invenstopedia.com "Activity-based Costing method."
- https://www.accountingcoach.com/activity-based-costing/explanation
- http://www.12manage.com
- https://en.wikipedia.org/wiki/Activity-based costing
- ➤ https://en.wikipedia.org/wiki/Environmental full-cost accounting
- https://www.accountingcoach.com/blog/taditional-method-costaccounting
- http://smallbusiness.chron.com/traditional-costing-vs-activitybased-costing-33724.html
- ➤ http://www.fbssystems.com/ManagerialAccounting
- http://www.blogbigtime.com/business/understanding-traditionalcosting-and-activity-based-costing

- > http://maaw.info/ArticleSummaries/ArtSumHughesGjerde03.htm.
- ➤ https://en.wikipedia.org/wiki/Theory_of_constraints
- http://www.financepractitioner.com/dictionary/activity-based-management
- ➤ http://www.investopedia.com/terms/a/abm.asp
- http://www.banque-credit.org/EN/banks/banking-firm.html
- https://en.wikipedia.org/wiki/Bank#Bank
- http://www.investopedia.com/terms/c/common-equity-tier-1-cet1.asp#ixzz4gl9BZv8E
- http://www.investopedia.com/terms/n/net-interest-ratespread.asp#ixzz4gmFRbA6f
- http://www.bancapromos.it/en/storia
- https://en.wikipedia.org/wiki/Return_on_equity)
- https://brsspa.it/gli-organi-sociali/

Ringraziamenti

Sento doveroso ringraziare in primis il Prof. Cristiano Busco per avermi trasmesso la passione per questa materia durante il mio percorso di studi, nonché per avermi fornito supporto costante e presente durante la stesura della tesi. Un ringraziamento particolare va al Dott. Fabrizio Granà che durante questi mesi è stato un prezioso aiuto ed un fondamentale stimolo a portare al termine nel migliore dei modi il lavoro. Ringrazio inoltre la Dott.ssa Maria Federica Izzo, per il continuo confronto e l'impegno profuso e la disponibilità dimostrata, per consentirmi di arrivare qui con la giusta preparazione.

Un caro saluto ed un caloroso ringraziamento all'intera società Banca Promos s.p.a; il presidente Ugo Malasomma, il CEO Tiziana Carano, l'ufficio contabilità nelle persone di Marina Giaccio ed Angela Gabellone, e tutti gli altri componenti dell'ufficio, che mi hanno fornito durante il mio lavoro prima e durante la stesura della tesi poi, ogni possibile aiuto e supporto al fine del raggiungimento degli obiettivi prefissati.

Desidero ringraziare la mia famiglia, mia madre Paola per essere stata il motore emozionale di questo mio percorso, sempre pronta a tirarmi su nei momenti difficili e sempre al mio fianco nei momenti più intensi; mio padre Salvatore per essere da sempre stato per me motivo di orgoglio ed ispirazione in qualsiasi contesto, da quello accademico a quello della vita di tutti i giorni;mio fratello Felice, per essere stato un po' un secondo padre in tutti i sensi, aiutandomi nel tempo a crescere con equilibrio e incanalandomi spesso sulla giusta strada.

Vorrei inoltre ringraziare la mia "seconda famiglia," Luca, "Mito," Domenico, PierFrancesco, Giuseppe, "Peppone," Louis, Michelone, Paolino, Pasquale, "Peppe," Felice, con cui sono letteralmente cresciuto, persone con le quali ho condiviso qualsiasi tipologia di avventura ed emozione. Un gruppo fraterno a cui sono indissolubilmente legato da più di un decennio ormai.

Meritano ovviamente menzione i compagni di viaggio di questa avventura qui a Roma, Giuseppe, Fernando, Roberta, Sergio, Manuel, una vera fortuna

avervi conosciuto, nonché Antonella, con la quale i nostri percorsi di crescita oramai si incrociano da 10 anni.

In ultimo ma non per importanza, vorrei ringraziare Matilde, il mio sole a mezzogiorno, per avermi supportato e soprattutto sopportato durante tutto questo periodo davvero intenso e spesso tortuoso che mi ha portato fin qui oggi. Un sostegno costante, amorevole e mai assente che mi ha regalato ogni giorno la giusta serenità per affrontare, e poi superare ogni ostacolo.