

The Role of Activity-Based Costing (ABC) in Cost Reduction within Economic Enterprises: A Case Study of Algeria Telecom, Djelfa Agency

Djerd noureddine^{1*}

¹University of Djelfa, Algeria, n.djerd@univ-djelfa.dz

Received: 8/8/2024

Accepted: 10/14/2024

Published: 10/31/2024

Abstract:

This study aims to explore the Activity-Based Costing (ABC) method and its place among modern cost control methods, as well as to clarify its accuracy in cost measurement.

By applying the theoretical aspect to the economic enterprise (Algeria Telecom - Djelfa Unit), the study reached a set of conclusions, the most important of which is that the ABC system provides diverse information that contributes to accurately measuring product costs based on its analysis of the relationship between costs and activities, moving away from the classical division used by traditional methods. This enables the enterprise's managers to control costs and, consequently, achieve strategic cost management.

Keywords:

Cost Accounting, Activity-Based Costing, cost reduction, Cost Drivers

JEL Classification : M49, M41

ملخص :

تهدف هذه الدراسة إلى التعرف على أسلوب التكاليف على أساس الأنشطة ومكانته ضمن الطرق الحديثة للرقابة على التكاليف وتوضيح مدى دقته في قياس التكلفة.

بعد إسقاط الجانب النظري على المؤسسة الاقتصادية (اتصالات الجزائر - وحدة الجلفة) توصلت الدراسة إلى مجموعة من النتائج، و من أهمها أن نظام ABC يوفر معلومات متنوعة تساهم في قياس تكلفة المنتجات بدقة، بناء على تحليله للعلاقة بين التكاليف والأنشطة بعيدا عن التقسيم الكلاسيكي الذي تنتهجه الطرق التقليدية، وهو ما يتيح لمسؤولي المؤسسة التحكم في التكاليف ومن ثمة تحقيق الإدارة الإستراتيجية للتكلفة.

الكلمات المفتاحية: محاسبة التكاليف، طريقة ABC، تخفيض التكاليف، مسببات التكلفة

تصنيف جال: M41, M49

*: Corresponding author.

1. Introduction :

In the contemporary economic environment, information systems are pivotal for optimizing enterprise efficiency and strengthening competitive advantage. Accordingly, numerous enterprises have prioritized the design and deployment of information systems to manage the vast volumes of critical data required for effective enterprise management. These systems ensure the accurate and timely dissemination of information across all managerial levels, thereby supporting informed decision-making. Cost accounting systems, as integral components of the overall information infrastructure, play a crucial role in this context.

The increasing emphasis on cost management as a key determinant of enterprise efficiency has necessitated a reevaluation of traditional cost accounting methods, which have been widely criticized for their lack of precision. In response, innovative cost accounting methodologies, such as the Activity-Based Costing (ABC) method, have emerged. These methodologies provide accurate and relevant information for decision-making, aligning with the dynamic nature of the business environment. This transformation has shifted the role of cost accounting from its traditional calculative function to a strategic one, Thus the Activity-Based Costing (ABC) method emerged, distinguished by its different approach to handling indirect costs.

Statement of the Problem:

Does the application of the Activity-Based Costing (ABC) method provide information that enables an economic enterprise to control its costs?

Based on this, the following sub-questions can be raised:

- On what basis is the ABC method founded?
- Does the ABC method contribute to the elimination of costly activities?
- Does the application of the ABC method aid in cost control within the economic enterprise?

1.1. Hypothesis:

- The ABC system is based on using activities as the basis for cost calculation.
- The ABC method helps reduce the time and effort required to perform activities by eliminating unnecessary activities.
- The application of the ABC method in an economic enterprise contributes to accurate cost determination and control.

1.2. Importance of the Study:

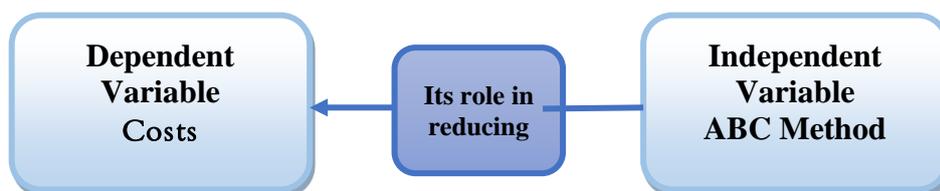
- Addressing a gap in the accounting literature by linking modern cost accounting methods (ABC) with cost reduction strategies in economic enterprises.
- Highlighting the critical role of the ABC method as a contemporary accounting tool that facilitates precise cost management and optimal resource use.
- Evaluating the impact of ABC implementation on cost reduction.

1.3. Aims of the Study:

- Elucidate the fundamental concepts underlying the ABC method.
- Analyze and demonstrate the impact of ABC implementation on cost reduction within economic enterprises.

1.4. Study Model:

To achieve the study's objectives, the following model was employed:



1.5. Research Methodology:

This research employs a descriptive methodology, deemed appropriate for the investigation at hand. Furthermore, a case study approach was adopted to apply (ABC) method within the Djelfa unit of Algérie Telecom.

1.6. Structure of the Study:

- A theoretical framework on the ABC method and its role in cost reduction within economic enterprises.
- An empirical analysis at the Djelfa unit of Algérie Telecom.

2. Theoretical Framework on the ABC Method and Its Role in Cost Reduction within Economic Enterprises

2.1. The Activity-Based Costing (ABC) System:

The development of management accounting is considered a response to a set of circumstances faced by institutions, through work to develop known technologies and discover other techniques, while the current focus is on reducing the waste of resources and rationalizing their use in generating value. Among these modern methods we find ABC system.(Miloud, 2021)

The ABC system is a contemporary approach to cost accounting methodology developed in response to the evolving industrial environment, characterized by increased competition and diversified production. In 1987, Kaplan and Cooper introduced the Activity-Based Costing System, which has since revolutionized the allocation of indirect costs and become widely adopted.

2.1.1. Definition:

The ABC system can be defined in various ways:

- It is a comprehensive costing system that calculates the cost per unit of a product by taking into account the inputs, processes, and outputs. (Ismail, 2007)

The Role of Activity-Based Costing (ABC) in Cost Reduction within Economic Enterprises: A Case Study of Algeria Telecom, Djelfa Agency

- A system that allocates costs in two stages, where costs are first distributed to activity centers and then allocated to products based on their consumption of these activities. (Davidson, 1994)
- Generally the ABC system is an approach that uses activities as the basis for cost calculation, positing that activities consume resources while the produced units consume those activities.

2.1.2. Components :

For the ABC system to function effectively, it must be based on several essential components:

- **Activities:** are fundamental to the ABC system; each activity comprises a series of processes. that accomplish a specific task, varying based on the analysis perspective and objective. An activity is defined as an event that causes resource consumption within the enterprise.(Ashour, 2004)
- **Cost Drivers:** A cost driver is a variable (such as activity level or volume) that impacts costs in a non-consistent way.(Horngren, 2006)
- **Cost Pools:** A cost pool is a collection of costs associated with a single activity, involving the aggregation of homogeneous activities governed by a single cost driver, thereby simplifying the number of activities and their drivers.(Arab Society of Certified Accountants, 2001)
- **Cost Allocation Basis:** This refers to the factor that links indirect costs or cost pools to the cost unit. The allocation basis can be financial or non-financial. (Horngren, 2006)

2.1.3. Objectives :

The ABC system aims to achieve the following objectives:

- Provide management with useful information for decision-making and identify the causes of cost increases.(Gary, 2001)
- Offer a clear and accurate picture of cost-driving activities.
- Remove subjectivity in distributing indirect costs among various products.(Yong, 2017)
- Distribute indirect costs between products more accurately and objectively (Ismail, 2007)

2.1.4. Importance:

The ABC system holds significant importance as highlighted below: (Issam, 2003)

- Determine the activities and resources needed to accomplish tasks and identify the cost drivers affecting each resource's usage within those activities to adhere to a specific budget or plan.
- Improve the accuracy of product cost measurement by evaluating the costs of activities undertaken by the organization and assigning those costs to products based on how much each product uses different activities.

- Provide more precise and objective cost information, enabling management to make better decisions regarding production and various activities.

Allow management to understand the extent of changes in the costs of certain services resulting of some decisions.

2.1.5. Steps:To apply the ABC system in an organization, the following must be done:

- **Determine Activities:** This requires analyzing the organization to comprehend the nature of work in each department and the production process.
- **Determine Cost Drivers:**During this phase, activities are measured using metrics that connect the volume of activity to its cost, called cost drivers, which affect the expense of that activity. (Kamal, 2007)
- **Establish Cost Pools:** Indirect costs are aggregated into cost pools according to each activity. The costs associated with each activity must be examined using the production factors utilized to complete the activity. (Patrick, 2005)
- **Allocate Indirect Costs to Activity Units:**Indirect costs are accumulated based on the activity units, whether they are products or services, according to the number of service units required. Cost drivers are used as demand measures, and The product's activity demand is indicated by the quantity of transactions generated by the cost driver. (Kamal, 2007)

2.1.6. The Benefits and Drawbacks of the ABC System:

The ABC system, like other systems, has its advantages and disadvantages:

The Benefits of ABC System:

The Chartered Institute of Management Accountants (CIMA) outlines the advantages of employing the ABC system as follows:(Iman, 2016)

- The ABC system offers more precise costing for products and services.
- The ABC system allows you to understand expenses and their causes.
- It clearly depicts the costs of non-value-adding activities, helping managers reduce or eliminate them.
- The ABC system enhances the company's ability to use other managerial accounting methods that support its competitive position and improve financial and administrative performance.

Drawbacks of the ABC System :

Despite its advantages, the ABC system has drawbacks, including: (Ammar, 2018)

- ABC data can be subjective and difficult to verify.
- Data storage and processing are costly.
- Most ABC models are localized and do not provide a comprehensive view of profitability opportunities across the enterprise.
- Updating the ABC system based on changing conditions can be challenging.

2.2. The ABC Method's Role in Cost Reduction: The ABC method is an optimal tool for improving cost systems as it focuses on individual activities, allocating costs to products or services according to their consumption of these activities. It examines indirect costs and reclassifies them as direct costs by segmenting cost pools and associating them with specific activities. Moreover it simplifies product design without wasting resources, leading to cost rationalization.

Overall, the ABC method contributes to cost reduction through the following steps:

1. Decreasing the time and effort needed to complete an activity.
2. Removing unnecessary activities, a crucial step as activity analysis can reveal activities that do not add value to the products or services desired by consumers.
3. Selecting the lower-cost activities when competitive activities achieve the same purpose at a reduced cost.

3. Empirical Study at Algérie Telecom – Djelfa Agency :

Building upon the theoretical framework of (ABC) method, this section applies the ABC approach to Algérie Telecom – Djelfa Agency – by employing their financial statements and information provided by their officials. The objective is to achieve cost reduction in service delivery.

3.1. Overview of Algérie Telecom – Djelfa Agency Costs for 2019 :

Table 1: Costs of Algérie Telecom for 2019

Account Number	Total Costs	Direct Costs	Indirect Costs
60	199.180.608,81	30.102.551,69	169.078.057,12
61	56.814.129,97	10.410.516,51	46.403.613,46
62	41.186.077,35	6.347.875,35	34.838.202
63	381.776.490,44	283.183.249,49	98.593.240,95
64	20.240.084,54	00	20.240.084,54
65	9.075.374,29	00	9.075.374,29
68	237.571.533,93	00	237.571.533,93
Total	945.844.299,33	330.044.193,04	615.800.106,29

Source: Compiled by the researcher based on data from Algérie Telecom.

The above table shows the costs of the Algiers Telecommunications Corporation for 2019 by their nature, divided into direct and indirect costs. The overall total costs of the Algiers Telecommunications Corporation for 2019 represent a total of **615.800.106,29 DZD**

Table 2: Cost Distribution by Departments in Algérie Telecom – Djelfa Agency for 2019

Departments	Total Costs	Direct Costs	Indirect Costs
Commercial Department	18.215.442,74	1.966.425,57	16.249.017,17
Financial and Resources Dept	673.239.233,72	295.727.365,21	377.511.868,51
Technical Department	244.558.051,86	32.350.402,26	212.207.649,6

Finance and Accounting Dept	9.831.571,01	00	9.831.571,01
------------------------------------	--------------	----	--------------

Source: Compiled by the researcher based on data from Algérie Telecom.

The table above shows the division of the costs of the Algiers Telecommunications Corporation for 2019 by sections of the Corporation according to the importance of each section, thereby dividing the costs of each section into direct and indirect costs

3.2. Identification of Activities at Algérie Telecom :

In this phase, the activities at Algérie Telecom – Djelfa unit – are identified as shown in the following table.

Table 3: Departments and Activities of Algérie Telecom – Djelfa Agency

Departments	Activities	Proportions (%)
Commercial Department	Sales	٪60
	Customer Relations	٪40
Financial and Resources Dept	Training Management	٪40
	Personnel and Payroll Mgmt	٪30
	Logistics Management	٪20
	Property Management	٪10
Technical Department	Access and Loop	٪40
	Basic Infrastructure	٪40
	Network	٪20
Finance and Accounting Dept	Budgeting	٪30
	Accounting	٪40
	Treasury	٪30

Source: Compiled by the researcher based on data from Algérie Telecom.

The table above shows the identification of activities in each section of the Algiers Telecommunications Foundation on one side and thus the relevance of each activity to its section

3.3. Determining Activity Costs

Table 4: Distribution of Activity Costs by Department (Direct and Indirect Costs)for 2019

Departments	Activities	Direct Costs	Indirect Costs
Commercial Department	Sales	1,179,855.342	9,749,410.302
	Customer Relations	786,570.228	6,499,606.868
Financial and Resources Dept	Training Management	118,290,946.084	151,004,747.404
	Personnel and Payroll Mgmt	88,718,209.563	113,253,560.553
	Logistics Management	59,145,473.042	75,502,373.702
	Property Management	29,572,736.521	37,751,186.851
Technical Department	Access and Loop	12,940,160.904	84,883,059.84
	Basic Infrastructure	12,940,160.904	84,883,059.84
	Network	6,470,080.452	42,441,529.92
	Budgeting	0	2,949,471.303

The Role of Activity-Based Costing (ABC) in Cost Reduction within Economic Enterprises: A Case Study of Algeria Telecom, Djelfa Agency

Finance and Accounting Dept	Accounting	0	3,932,628.404
	Treasury	0	2,949,471.303
Total	/	330,044,193.04	615,800,106.29

Source: Compiled by the researcher based on data from Algérie Telecom.

The table above shows the division of direct and indirect costs for 2019 for each section of the Algiers Telecommunications Foundation into the activities of each section based on the ratios set out in the previous table

3.4. Identifying Cost Drivers:

In this phase, cost drivers for each activity are identified, which is crucial for future results. This identification is based on information provided by the head of the accounting department.

Table 5: Number of Cost Drivers for Telephone and Internet for 2019

Departments	Activities	Cost Drivers	Number of Drivers	Telephone	Internet
Commercial Department	Sales	Number of invoices	900	300	600
	Customer Relations	Number of customers	90,000	24,000	66,000
	Training Management	Number of trainings	100	40	60
Financial and Resources Dept	Personnel and Payroll Mgmt	Number of employees	241	90	151
	Logistics Management	Number of orders	45	20	25
	Property Management	Inventory count	40	20	20
	Access and Loop	Access	150	90	60
Technical Department	Basic Infrastructure	Growth rate	0.52	0.1	0.42
	Network	Number of maintenance	450	200	250
	Budgeting	Number of payments	550	150	400
Finance and Accounting Dept	Accounting	Number of approvals	550	150	400
	Treasury	Number of invoices	550	150	400

Source: Compiled by the researcher based on data from Algérie Telecom.

3.5. Calculating Indirect Unit Cost per Activity According to ABC :

Table 6: Indirect Unit Cost per Activity for 2019

Departments	Total Cost	Activities	Total Cost	Unit	Number of Drivers	Unit Cost
Commercial Department	16,249,017.17	Sales	9,749,410.302	Number of invoices	900	10,832.67
		Customer Relations	6,499,606.868	Number of customers	90,000	72.21
Financial and Resources Dept	377,511,868.51	Training Management	151,004,747.404	Number of trainings	100	1,510,047.47
		Personnel and Payroll Mgmt	113,253,560.553	Number of employees	241	469,931.78
		Logistics Management	75,502,373.702	Number of orders	45	1,677,830.52
		Property Management	37,751,186.851	Inventory count	40	943,779.67
Technical Department	212,207,649.6	Access and Loop	84,883,059.84	Access	150	565,887.06
		Basic Infrastructure	84,883,059.84	Growth rate	0.52	163,236,653.53
		Network	42,441,529.92	Number of maintenance	450	94,314.51
Finance and Accounting Dept	9,831,571.01	Budgeting	2,949,471.303	Number of payments	550	5,362.67
		Accounting	3,932,628.404	Number of approvals	550	7,150.23
		Treasury	2,949,471.303	Number of invoices	550	5,362.67

Source: Compiled by the researcher based on data from Algérie Telecom and Tables 4 and 5.

The table above shows the determination of the unitary cost of each of the activities of the Algerian Telecommunications Foundation through the apportionment of the total cost of each section on the causes of the cost of each activity, which were determined on the basis of interviews conducted with the officials of the Algiers Telecommunications Foundation

3.6. Calculation of Total Indirect Costs for Each Service : We can calculate the cost of services according to the ABC method as follows:

The Role of Activity-Based Costing (ABC) in Cost Reduction within Economic Enterprises: A Case Study of Algérie Telecom, Djelfa Agency

Table 7: Aggregate Indirect Costs Allocated to Telephone and Internet Services for 2019

Departments	Activities	Telephone	Internet
Commercial Department	Sales	$10,832.67 \times 300 = 3,249,801$	$10,832.67 \times 600 = 6,499,602$
	Customer Relations	$72.21 \times 24,000 = 1,733,040$	$72.21 \times 66,000 = 4,765,860$
Financial and Resources Dept	Training Management	$1,510,047.47 \times 40 = 60,401,898.80$	$1,510,047.47 \times 60 = 90,602,848.20$
	Personnel and Payroll Mgmt	$469,931.78 \times 90 = 42,293,860.20$	$469,931.78 \times 151 = 70,959,698.78$
	Logistics Management	$1,677,830.52 \times 20 = 33,556,610.40$	$1,677,830.52 \times 25 = 41,945,763$
	Property Management	$943,779.67 \times 20 = 18,875,593.40$	$943,779.67 \times 20 = 18,875,593.40$
Technical Department	Access and Loop	$565,887.06 \times 90 = 50,929,835.40$	$565,887.06 \times 60 = 33,953,223.60$
	Basic Infrastructure	$163,236,653.53 \times 0.1 = 16,323,665.35$	$163,236,653.53 \times 0.42 = 68,559,394.48$
	Network	$94,314.51 \times 200 = 18,862,902$	$94,314.51 \times 250 = 23,578,627.50$
Finance and Accounting Dept	Budgeting	$5,362.67 \times 150 = 804,400.50$	$5,362.67 \times 400 = 2,145,068$
	Accounting	$7,150.23 \times 150 = 1,072,534.50$	$7,150.23 \times 400 = 2,860,092$
	Treasury	$5,362.67 \times 150 = 804,400.50$	$5,362.67 \times 400 = 2,145,068$
Total	/	248,908,542.05	366,890,838.96

Source: compiled by the researcher, based on data from Tables 5 and 6, adhering to the ABC method

3.7. Determination of the Overall Cost for each service:

After determining the indirect costs for each service, the total cost of each service provided by AlgérieTelecom can now be calculated. The table below illustrates the detailed cost breakdown for each service:

Table 8: Total Costs of Services Provided by Algérie Telecom for 2019

Departments	Activities	Telephone	Internet
Commercial Department	Sales	3,249,801	7,679,457.34
	Customer Relations	1,733,040	5,552,430.22
Financial and Resources Dept	Training Management	95,889,182.62	173,406,510.45
	Personnel and Payroll Mgmt	68,909,323.06	133,062,445.47
	Logistics Management	51,300,252.31	83,347,594.12

	Property Management	27,747,414.35	39,576,508.96
Technical Department	Access and Loop	51,847,813.59	45,975,406.31
	Basic Infrastructure	17,241,643.54	80,581,577.19
	Network	19,321,891.10	29,589,718.85
Finance and Accounting Dept	Budgeting	804,400.50	2,145,068
	Accounting	1,072,534.50	2,860,092
	Treasury	804,400.50	2,145,068
Total	/	339,921,697.07	605,921,876.91
Cumulative total costs for Algérie Telecom		945,843,573.98.	

Source: Compiled by the researchers using simulation techniques based on data from Algérie Telecom and Table 7.

The above table shows the cost of various activities in the sections of the Algiers Telecommunications Corporation after applying the activity-based cost method for 2019 after calculating the unitary cost of each activity and then calculating the total cost

4. RESULTS AND DISCUSSION

The subsequent table delineates the discrepancy in costs for Algérie Telecom subsequent to the adoption of the ABC methodology:

Table 9: Comparative Cost Analysis between Traditional and ABC Methods for 2019

Description	Cost (DZD)
As per Traditional Method	945,844,299.33
As per ABC Method	945,843,573.98
Variance (Difference)	725.35

Source: Synthesized by the researcher, drawing from Tables 1 and 8.

The analysis depicted above demonstrates that the implementation of the ABC method at Algérie Telecom facilitated a marginal cost reduction of **725.35 DZD**. This variance indicates that the product was previously burdened with superfluous (indirect) costs, which the ABC method effectively minimized.

5. CONCLUSION

This study underscores the imperative of precise cost determination within increasingly competitive markets, accentuated by rapid technological advancements. Enterprises are compelled to accurately ascertain the cost of their products and services to sustain a viable profit margin that assures their market position and operational continuity. This necessitates the adoption of managerial methodologies that furnish comprehensive and accurate activity-related information, a role effectively served by the Activity-Based Costing (ABC) method. This approach significantly aids in the rationalization of

managerial decisions related to the enhancement and development of production processes. The key findings and recommendations from this study are outlined below:

Hypothesis Testing Results:

- The ABC system is an approach based on using activities as the basis for cost calculation. It assumes that activities consume available resources, while the produced units consume those activities.
- The ABC method contributes to cost reduction by decreasing the time and effort required to perform activities through the elimination of non-value-adding activities for the products or services demanded by consumers. This aids in the selection of activities based on the lower cost when there are competitive activities serving the same purpose.
- The application of the ABC method in Algeria Telecom (Djelfa Unit) contributed to accurate cost determination and a cost reduction of 725,355 DZD, highlighting the importance of applying this method in the enterprise.

Findings :

1. The ABC method allocates costs to products based on their consumption of activities, which helps in selecting the activities with the lowest cost.
2. The ABC method provides a database that enables more accurate measurement of product costs because it is based on the actual cost drivers.
3. the financial and non-financial data generated by the ABC method play a pivotal role in cost reduction initiatives.
4. The ABC method helps identify value-added activities, which encourages the organization to continually develop and reduce their costs, positively impacting product costs.
5. The ABC method provides a rich database on the organization's activities, allowing for accurate analysis and measurement of these activities' costs, thereby meeting the requirements of strategic cost management.
6. It allows enterprises to conduct comparative analyses of activities to determine the most efficient ones and to eliminate unnecessary activities that do not add value to the products or services.
7. The ABC method improves the company's products and reduces manufacturing errors by enhancing control processes and improving quality.
8. The application of the ABC method in the company contributes to achieving a cost leadership strategy by reducing product costs and providing clearer insights into the profitability of various products and distribution channels.

Recommendations :

1. There is a need to further develop cost accounting methods within economic enterprises to furnish the necessary data that aids in cost reduction.

2. Enterprises should focus on contemporary cost management techniques, especially the ABC method, to ensure its successful implementation.
3. Adoption of the ABC method is recommended due to its contribution to providing detailed cost information on activities involved in product and service delivery, which facilitates cost reduction.
4. Economic institutions should focus on the human factor and its importance in overcoming the obstacles to implementing the ABC method.
5. Economic institutions in Algeria should emulate global companies in developing a strategic vision of cost and its significance in contributing to strategic decision-making.
6. Managers of economic institutions in Algeria should focus on fostering a culture of teamwork and cooperation across various internal functions of the organization

9. Bibliography List :

Books :

1. Arab Society of Certified Accountants. (2001). *Managerial Accounting: Basic Concepts*. Amman, Jordan: Al-Shams Press.
2. Ashour, A. S. (2004). *The Strategic Perspective of Cost Management: Contemporary Issues*. Cairo, egypte: Ain Shams Library.
3. Davidson, S. (1994). *Managariel Accounting an Introduction to Concepts Methods and Uses* (éd. 5th edition). india, india: C.B.S publishing.
4. Gary, C. (2001). *Activity – Based Cost Management : An .Executives Guide*. New york, USA: john wiley & sons , INC.
5. Horngren, C. T. (2006). *cost Accounting:A ManagerialEmphasis* (éd. 12th edition). New jersey, USA: prentice – Hall.
6. Ismail, Y. A.-T. (2007). *Advanced Cost Accounting: Contemporary Issues* (éd. 1st ed). Amman, Jordan: Dar Hamed for Publishing and Distribution.
7. Issam, F. A.-A. (2003). *Managerial Accounting* (éd. 1st ed). Amman: Dar Al-Manahij for Publishing and Distribution.
8. Patrick, B. (2005). *Contrôle de Gestion*. paris, France: edition vuibert.
9. Yong, w. (2017). *Activity Based Costing for Construction Companies*. USA: john wiley and sons ltd.

Journal article :

10. Ammar, Z. (2018). A Comparative Study Between Time-Driven Activity-Based Costing and Classical Activity-Based Costing: A Case Study of Algerian Telecommunications in Bir El-Ater. *Journal of Advanced Studies in Finance and Accounting*, 01 (02), 297.
11. Kamal, S. (2007). The Activity-Based Costing System in Cost Rationalization as a Continuity Strategy for the Institution in the Context of Competition. *Journal of Social and Human Sciences*, Issue 17, 208-209.

The Role of Activity-Based Costing (ABC) in Cost Reduction within Economic Enterprises: A Case Study of Algeria Telecom, Djelfa Agency

12. Miloud, b. k. (2021). Strengthening management accounting in light of cyber security challenges for the financial performance of the enterprise. *Journal of contemporary economic research*, Vol 4 (2), 182.

Thesis :

13. Iman, Y. A. (2016). The Impact of Using Modern Managerial Accounting Methods on Increasing Investor Confidence in Public Shareholding Companies Listed on the Palestine Stock Exchange. *Majister's thesis* , 36. Gaza, University, Palestine: Islamic University.