TSU-International Journal of Accounting and Finance (TSUIJAF)
e-ISSN: 28811-2709, p-ISSN: 28811-2695.Volume 4, Issue 2 (June, 2025).

IMPACT OF MANAGEMENT OF ACCOUNT RECEIVABLES AS A DETERMINANT OF EFFICIENCY IN TARABA STATE WATER SUPPLY AGENCY, MAGAMI DISTRICT, JALINGO

Godwin Nnabueze Ituma

Department of Accounting, Taraba State University, Jalingo, Taraba State. Nigeria.

godwinnitumatsu@gmail.com

Abstract

This study investigates the impact of accounts receivable management on the operational efficiency of public corporations, with specific reference to the Taraba State Water Supply Agency (TSWSA), Magami District, Jalingo. The objectives include evaluating the relationship between accounts receivable and organizational efficiency, identifying the causes of high debt levels owed to the agency, and assessing how these factors collectively influence its overall performance. A descriptive survey design was adopted for the study. Data was collected through structured questionnaires administered to a sample of twenty-eight staff members of TSWSA. The collected data were analyzed using descriptive statistics, including frequency tables and simple percentages, to summarize the responses. Additionally, chi-square (χ^2) statistical technique was employed to test the formulated hypotheses and assess the significance of the relationships observed. The findings reveal that poor management of account receivables significantly contributes to inefficiencies in service delivery and revenue collection within the agency. Major causes of high debt accumulation include inadequate billing systems, lack of enforcement mechanisms, and customer unwillingness or inability to pay. Furthermore, the study confirms a strong correlation between effective receivables management and improved organizational efficiency. Based on these findings, the study recommends the implementation of a more robust and automated billing system, regular training for staff on credit management, and the introduction of stricter policies for debt recovery. Strengthening internal control and monitoring mechanisms will also enhance receivables collection and improve the financial sustainability of public service institutions like TSWSA.

Keywords: Account receivable, Efficiency, Water Board, Jalingo

Introduction

In today's dynamic business environment, the effective management of accounts receivable is critical to the financial stability and operational efficiency of both private and public organizations. Many businesses do not possess the time, expertise, or resources to appropriately administer accounts receivable and other closely related financial functions. Accounts receivable management goes beyond the simple recording of payments due; it encompasses a strategic process involving credit control, collection efforts, and coordination among departments such as sales, finance, marketing, and accounting (Pinto et al., 2014). These functions often have competing interests. Sales may push for increased credit sales to drive revenue, while finance may prioritize liquidity and timely cash inflows. Effective management, therefore, requires a balanced and integrated approach to avoid internal conflicts and to ensure the health of the organization's cash flow.

The management of accounts receivable becomes even more crucial in public corporations and service agencies, where delayed or unpaid receivables can lead to severe financial strain. It is increasingly evident that inadequate attention to receivable management has caused many organizations to suffer liquidity crises and, in some cases, even face liquidation. Profit, while an essential measure of success, remains unrealized until receivables are successfully converted into cash. In this regard, receivable management plays a fundamental role in determining the true profitability of a business. Whether an organization is large or small, the degree to which it efficiently manages its accounts receivable significantly impacts its financial sustainability.

Accounts receivable management is heavily influenced by two critical components: credit policy and collection procedures. A sound credit policy provides criteria for evaluating the creditworthiness of customers, helping the organization avoid risky or non-creditworthy clients. On the other hand, an effective collection procedure outlines a clear process for following up on overdue payments, ensuring minimal delays and reducing the number of outstanding receivables (Vaidya, 2011). The overarching objective of debt and receivables management is to minimize the time lapse between inventory acquisition, sales, and the actual receipt of cash, thus optimizing the organization's cash conversion cycle.

Accounts receivable also serve as an indicator of a firm's efficiency in collecting payments from its customers. According to Khan (2018), the number of days it takes a firm to collect outstanding payments commonly referred to as Days Sales Outstanding (DSO)—is a vital measure of operational efficiency. Prolonged collection periods can severely affect cash flows, limit the ability to reinvest in operations, and constrain the organization's capacity to meet its own financial obligations.

In view of the above, this study seeks to investigate the impact of accounts receivable management on the efficiency of public corporations, with a specific focus on the Taraba State Water Supply Agency, Magami District Jalingo. Given the agency's essential role in public service delivery, understanding how receivable management affects its operational performance is crucial to improving service efficiency and ensuring financial sustainability.

Many businesses, including public service agencies, struggle with the effective management of accounts receivable due to a lack of time, expertise, and resources. The management of accounts receivable is a complex process that requires coordination among multiple departments such as sales, credit control, marketing, finance, and accounting. When these functions are not harmonized, it can lead to inefficiencies and conflicting interests that jeopardize the financial health of an organization. Specifically, poor accounts receivable management can result in liquidity problems, reduced cash flow, and potential long-term losses. In the context of the Taraba State Water Supply Agency, Magami District Jalingo, there is a pressing need to examine how the current management of accounts receivable impacts operational efficiency. This study therefore aims to investigate the extent to which accounts receivable management affects the efficiency and financial sustainability of the agency.

The specific objectives are as follows: to;

i. Assess the efficiency of account receivable in Taraba State water supply agency, Magami district Jalingo.
ii. Assess the relationship between the management of account receivables and the efficiency of Taraba State water supply agency, Magami district Jalingo.

For the purpose of this research, the researcher formulated the hypothesis to help in laying out statistical test based on the subject matter of this research work. To this end the following hypothesis stands to be tested.

$H0_1$: There is no significant inefficiency in the management of accounts receivable in Taraba State Water Supply Agency, Magami district.

$H0_2$: There is no significant relationship between the management of accounts receivable and operational efficiency in Taraba State Water Supply Agency, Magami district.

LITERATURE REVIEW

Concept of Account Receivables

Accounts receivable is the money owed to a company as a result of having sold its products to customers on credit (Brigham & Ehrhardt, 2016). The major decision regarding accounts receivable is the determination of the amount and terms of credit to extend to customers (Ross et al. 2019). The total amount of accounts receivable outstanding at any given time is determined by two factors: the volume of credit sales and the average length of time between sales and collections (Gitman, 2009). The credit terms offered have a direct bearing on the associated costs and revenue to be generated from receivables. If credit terms are tight, there will be less of an investment in accounts receivable and fewer bad debt losses, but there will also be lower sales and reduced profits (Hill et al. 2010). Trade credit occurs when there is a delay between the delivery of goods or the provision of services by a supplier and their payment. For the seller, this represents an investment in accounts receivables, while for the buyer it is a source of financing that is classified under current liabilities on the balance sheet (García & Martínez, 2010).

Accounts receivable management

According to Kontus (2013) there are three primary issues in the management of accounts receivable; to whom to extend credit, what the terms of the credit should be, and what procedure should be used to collect the money. Extending credit should be based upon a comparison of costs and benefits. The analysis must build in uncertainty because we are uncertain of future payment, and we will handle this by computing the expected costs and expected benefits through payment probabilities. The potential cost of extending credit is that the customer will not pay. Although there is a temptation to compute this cost as the full price of the product, it is almost always more appropriate to use the actual cost of the product. The potential benefit of extending credit is not just the hope for profit on the one transaction; rather, it is the potential value of the customer for a long-term relationship.

The decision of how much credit to offer must be made when the customer initially requests credit and when the customer requests additional credit. The fundamental principle that guides financial decisions can be used: marginal benefit versus marginal cost. The marginal cost is the additional potential lost costs of the product. The costs of past uncollected sales are sunk costs and should not be included as marginal costs. The marginal benefits are the potential sales and interest revenues, including the potential to recover past sales that remain uncollected

Once the decision to grant credit has been made, the firm must establish the terms of the credit. Credit terms are often separated into two parts: the credit period and the credit discount.

Collection of accounts receivable is an important process for a corporation and requires a well-designed and well-implemented policy. One technique is the factoring of accounts receivables. In a typical factoring arrangement, one firm will sell their accounts receivable outright to another firm for an agreed-upon price. There is usually no recourse in such transactions, such that the buyer (also known as the factor) takes the loss if the purchaser of the goods does not ultimately pay for them.

Another technique to expedite the receipt of accounts receivable is to utilize lock boxes. Lock boxes are payment collection locations spread geographically so as to reduce the amount of time required for checks mailed to the firm to be deposited and cleared. The lock boxes are typically post office box addresses from which deposits go directly to a bank on the day of receipt. The reduction of mailing time and check clearing time for the banks can produce significant savings when large sums of money are involved.

Brief History of Taraba State Water Supply Agency

Taraba State Water Supply Agency was established by Law No 5 of 1992 and saddled with mandate for the supply of water for various uses in urban and semi-urban centers in Taraba State with the general headquarters in Jalingo. According to Gimba (2011) there are fourteen (14) water supply schemes spread across the state including Jalingo metropolis, but only Jalingo and Ibi - Wukari are operational. The remaining 12 water treatment plants are either grounded due to broken down machines and equipment in some cases or not operational due to lack of operation inputs such as diesel, lubricants, water treatment chemicals, etc. The State Government since 2007 has embarked on spring water development for community water supply under the small-town water supply in collaboration with the MDGs/CGS programme of the Federal Government. The towns include Mbamnga, Nguroje, Furmi, Mayondaga, Dorofi, Bang-3 Corner, Tamnya, Maisamari, Leme, Gomu, Munga-Lelau and Bambuka. In order to meet the state's water supply and sanitation provisions, the State Government established Taraba State Rural Water Supply and Environmental Sanitation Agency under Edict No 5 of 1996. This agency service delivery coverage for potable water and sanitary facilities stand at 53.5% and 41.3%. This is achieved through the support of the State, FGN, LGAs, External Donors and NGOs.

Efficiency in Public Corporation

In any sphere of activity, efficiency is defined as the rate of return or rate of result obtained to the means used. In simple term it is the ratio of achievement to the means used. Similarly, it can be defined as a measure of time, cost and effort, with comparison to productivity. Measuring of efficiency includes goods or services, time of processing, the functionality of the solution etc.

Narain and Garg (2011) defines efficiency in public corporation as "efficiency is the ability to produce the designed effect with minimum of effort, expenses or waste". It is important to decide that whether or not strict rules to adopt for measuring efficiency in public enterprises. Public enterprises have legitimate reasons to treat efficiency as secondary in some cases.

Characteristics of Accounts Receivable

Since Accounts receivable arise when a firm sells goods or services to another without receiving immediate payment for the goods, this asset has two common salient characteristics. Firstly, the existence of credit risk element. Credit risk is the potential loss that may arise out of failure by the credit customers to honor their obligations as and when they fall due (Kalunda et al., 2012).

When a firm sells goods on credit to another, it assumes a risk since it is not certain as to whether the customer will pay for them in good time or ever at all. Typical examples in Kenya are two local banks namely; Rural Urban Credit Finance Limited and Trade Bank which collapsed in the 1980s. The major causes of failures of local banks during the period were accumulation of bad debts because of fraudulent of imprudent lending. Rural urban credit finance which collapsed in 1984 is said to have for instance, given out thousands of largely unsecured loans to residents of a slum area in Nairobi to buy matatus, plots and houses. As it turned out, nearly all of the loans were non- performing loans and the bank had to close its doors. In the case of Trade Bank Ltd, it is said that the bank was coerced into lending a company by the name LZ company limited four hundred million shillings, an amount way above the bank's capital base. The money was utilized to put up a business Centre. On suing for recovery, LZ Co. Ltd called a valuer who "valued" the building at nine hundred million shillings meaning that, even if Trade Bank was to acquire the asset it still would have to pay an additional five hundred million. Inevitably this bank too had to go under (Oyuke, 2011). A credit customer may fail to honor its obligation for a number of reasons including; stiff competition, inferior quality of products, poor pricing policies, but most importantly, poor management among other reasons. The second common characteristic of account receivable is the time value of money. The value of the money received later for goods supplied now is lower due to factors such as inflation and loss of investments opportunities for the money held by the trade debtors in form of accounts receivable.

Theoretical Review

Commercial Theory: Proponed by Bansal & Joshi (2016)

Highlight trade credit's role in price discrimination and market expansion**.** Trades credit increases product sales, facilitates market reach, and enables price differentiation. Accounts receivables are debts owed to the firm by customers arising from sale of goods or services in ordinary course of business (Valliammal & Mohan, 2014). Hence accounts receivables are asset accounts representing amounts owed to the firm as a result of the credit sale of goods and services in the ordinary course of business. There have been many theories proposed for trade credit. The Financial theory (Mukhoma, 2014) argues that firms able to obtain funds at low costs will offer trade credit to firms facing higher financing costs. Thus, for sellers, trade credit is a more profitable short-term investment than marketable securities.

The Operational theory stresses the role of trade credit in smoothing demand and reducing uncertainty in the payments. Mukhoma (2014) argue that trade credit can reduce cash flow uncertainty by separating the payment cycle from the delivery cycle so that both the buyer and seller can save on cost of handling liquidity. According to the Commercial theory, trade credit improves product marketability by making it easier for firms to sell (Hosen, 2013). Also, trade credit can be used to maximize profits through price discrimination (Bansal & Joshi, 2016) that is selling the same product at different prices to different customers. Potential buyers with difficulties to obtain credit of the banking system constitute new opportunities; giving easier terms to this segment through trade credit seller's market can be extended. Proponents of the Product quality theory argue that firms extend trade credit to guarantee product quality by alleviating information asymmetry between buyers and sellers (Smith, 2009). This study will lean more closely towards the Commercial theory of trade credit.

According to International Financial and Reporting Standards (IFRS) and International Accounting Standards (IAS), accounts receivable are recognized and measured according to IAS (39) and are disclosed by IFRS (7). According to IAS (39) on Financial Instruments Recognition and Measurement, trade debtors are measured at their fair value. IFSR (7) set out disclosure requirements that are intended to enable users to evaluate the significance of financial instruments for an entity's financial position and performance, and to understand the nature and extent of risks arising from those financial instruments to which the entity is exposed. These risks include credit risks, liquidity risks and market risks. This study partly seeks to establish the extent to which public corporations carry out credit analysis and evaluation on their potential customers and the procedures employed in credit monitoring to establish the health status of the accounts receivable held by the firm at any given time.

Trade credit creates receivables or book debts which the firm is expected to collect in the near future. Accounts receivable is money owed to a firm when it sells its products or services on credit and does not receive cash immediately (Pandey, 2016).Selling on credit is one of the company's approaches in enhancing sales and it has turned up to be an enticement for customers in retaining the business relationship with the company and in time increase the company's sales volume and eventually optimizing the company's profit (Barad, 2010). Selling on credit is almost a universal practice especially for manufacturing firms who sell primarily to other firms. Almost all sales are on credit terms making accounts receivable to account for a significant proportion of the firms' current assets.

Empirical review

Enqvist et al. (2014) investigates the impact of working capital management on firm profitability in different business cycles the findings revealed that the management of receivables plays a more significant role in downturns, highlighting the need for stricter credit control in public enterprises. The study suggests public corporations should adopt dynamic receivables strategies depending on macroeconomic cycles. Panel data analysis on Finnish listed companies was used.

Uremadu et al. (2012) examined the working capital management, liquidity, and corporate profitability in Nigerian quoted companies. The findings revealed a significant negative relationship between accounts receivable days and corporate profitability. The study emphasizes the need for effective receivables collection policies in Nigerian public corporations to improve operational efficiency. 30 publicly quoted Nigerian firms from various sectors including utilities and services was used as sampling.

Raheman and Nasr (2007) examined the working capital management and profitability a case of Pakistani firms. Findings revealed the average collection period is inversely related to profitability. Efficient receivables management contributes to better resource utilization and performance in public sector organizations. Sample of 94 Pakistani firms listed on the Karachi Stock Exchange over 6 years was used.

Deloof (2003) examined if working capital management affect profitability of Belgian firms, the findings reveals that shorter accounts receivable periods are associated with higher profitability. It implies that effective management of accounts receivables can significantly enhance efficiency and financial performance, even in public institutions. Regression analysis of 1,000 Belgian firms using financial data from 1992–1996 period was used.

METHODOLOGY

Descriptive research design was employed in obtaining the required data and used questionnaire as instruments of data, collection using a 4- point Likert scale. However, twenty-eight (28) employees among administrative and executive staffs were purposefully selected as research participants. Again, chi-square an inferential statistical tool was used in testing the research hypothesis.

RESULTS AND DISCUSSION

This section presented data analysis, findings of the study and conclusions arrived at.

Questionnaire Administration

Questionnaire	Administered	Returned	Percentage %
Staffs	28	15	9
Total	28	15	100

From the above table one can see that out of the total number of 28 questionnaires that was distributed which represent 100% of the questionnaire, one can only see 15 that was returned while others were not returned

Table 1

How long have you been a staff of TSWSA?

Response options	Respondent	Percentage %
Below 1 year	7	47
1 – 5 years	6	40
6 – 10 years	2	13
11 years and above	-	-
Total	15	100

From the table above one can see that out of the 15 questionnaires returned 7 persons have been a staff of TSWSA between one year and below with 47%, 6 persons have been a staff between one year to five years, 2 persons have been a staff between six to ten years with TSWSA and we have no body under the category of eleven years and above.

Table 2

Does the management of accounts receivable influence the efficiency of TSWSA?

Response options	Respondent	Percentage %
Yes	13	86
No	1	7
Not answered	1	7
Total	15	100

From the table above one can see that out of the 15 questionnaire returned 13 persons that is 86% are of the opinion that the efficiency of public corporation (TSWSA) is affected by the impact of management of account receivables, while 1 person which is 7% is saying that the efficiency of TSWSA is not affected by the impact of management of account receivables also we have 1 person who did not answer anything in this part.

Table 3

Is there any relationship between accounts receivable and the efficiency of TSWSA?

Response options	Respondent	Percentage %
Yes	14	93
No	-	-
Not answered	1	7
Total	15	100

Source: Field survey 2019

From the table above one can see that out of the 15 questionnaires returned 14 persons are saying that there is a relationship between account receivables and the efficiency of TSWSA which is 93% while we have 1 person which is 7% who did not answer this part of the question.

Table 4

To what extent is the efficiency of TSWSA affected by accounts receivable?

Response options	Respondent	Percentage %
deep	8	53
Very deep	4	27
Not at all	2	13
Not answered	1	7
Total	15	100

Source: Field survey 2019

From the table above one can see that out of the 15 questionnaires returned 8 persons think that the efficiency of TSWSA is affected by account receivables deeply that is 53%, 4 persons are for very deep which is 27%, 2 persons are for not at all which is 13% and 1 person did not answer this part.

Test of Hypotheses and Interpretation

Formula for chi-square x^2 is

$X^2 = \sum(O-E)^2/E$

O= observed frequency

E= is the expected number or figure

$H0_1$: There is no significant inefficiency in the management of accounts receivable in Taraba State Water Supply Agency, Magami district.

$H0_2$: There is no significant relationship between the management of accounts receivable and operational efficiency in Taraba State Water Supply Agency, Magami district.

The response to table two (2) of the questionnaire on, Does the management of accounts receivable influence the efficiency of TSWSA? was used in testing this hypothesis

Analysis of response

Response options	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Yes	13	5	8	64	12.8
No	1	5	- 4	-16	-3.2
Not answered	1	5	- 4	-16	-3.2
Total	15	15		32	$X^2 = 6.4$

$X^2 = CAL\sum (O-E)^2/E$ is now compared with the critical value from the table K-1 degree of freedom, where K is the number of categories therefore K = 3-1 = 2 degree of freedom from the table of critical value of degree of freedom. The critical value at 5% level of significance is 5.991

Decision rules

Accept Ho if X^2 CAL< X^2 TAB (accept Ho)

Reject Ho if X^2 CAL> X^2 TAB (reject Ho)

From the above computed value:

X^2 TAB = 5.991 at 5% level of significance

X^2 CAL = 6.4

X^2 CAL 6.4 > X^2 TAB 5.991

Therefore, Ho is rejected according to the above decision rule that the efficiency of a public corporation has been affected by the impact of the management of accounts receivable.

Discussion of the Findings

The findings reveal that poor management of account receivables significantly contributes to inefficiencies in service delivery and revenue collection within the agency. Major causes of high debt accumulation include inadequate billing systems, lack of enforcement mechanisms, and customer unwillingness or inability to pay. Furthermore, the study confirms a strong correlation between effective receivables management and improved organizational efficiency.

Conclusion and Recommendations

This study shed some light on the impact of management of account receivables on efficiency of public corporation a study of Taraba State Water Supply Agency, Magami district Jalingo by analyzing data collected, and through the review of existing literature. The main objective of this study is to determine whether the efficiency of Taraba State Water Supply Agency, Magami district Jalingo has been affected by account receivables.

It is important to note that selling goods or services on credit is an equivalent of giving out interest free loans to customers the difference is that in the case of trade credit the funds go out in the form of money invested in the goods and services. Efficient management of trade credit or accounts receivable is therefore vital because of the ever-increasing concern for return on the asset investment. For most firms, a considerable amount of capital is invested in this short-term asset. There is therefore the need to ensure that only the optimal investment is placed in it in terms of profitability. The focus of trade credit management therefore goes beyond simply collecting receivables quickly, prudent management of this working capital item entails striking a sensible balance between the need to maximize profit and minimize risk. Therefore, in other that the problem of the efficiency of public corporation not to be affected by the account receivables, the management need to tackle the issue of high billing system and the issue of improper collection procedure

Based on these findings, the study recommends the implementation of a more robust and automated billing system, regular training for staff on credit management, and the introduction of stricter policies for debt recovery. Strengthening internal control and monitoring mechanisms will also enhance receivables collection and improve the financial sustainability of public service institutions like TSWSA.

REFERENCES

Abimaje Akpa. (2017). Business finance management: concepts and applications. High level Makurdi, Benue State, Nigeria: Aboki Publishers.

Bansal, M., & Joshi, H. (2016). Dunning Process of TDS Certificates. FORE School of Management.

Barad, K. (2010). Quantum entanglements and hauntological relations of inheritance: Dis/continuities, spacetime enfoldings, and justice-to-come. Derrida today, 3(2), 240-268.

García-Teruel, P. J., & Martínez-Solano, P. (2010). Determinants of trade credit: A comparative study of European SMEs. International Small Business Journal, 28(3), 215-233.

Gimba, W. B. (2011). Highlights of the Taraba State water supply agency existing water supply situation report. Jalingo, Taraba State.

Hosen, M. N. (2013). Institutional Analysis of Bank Syariah Mandiri (BSM) in Channeling Credit Program for Small Enterprises (KUR) at Depok, West Java and Ciputat, South Tangerang. International Journal of Academic Research in Business and Social Sciences, 3(12), 446.

Kalunda, E., Nduku, B., & Kabiru, J. (2012). Pharmaceutical manufacturing companies in Kenya and their credit risk management practices.

Khan, I. A. (2018). The Effect of Accounts Receivable Management on Corporate Profitability: Empirical Evidence from India.

Kontuš, E. (2013). Management of accounts receivable in a company. Ekonomska misao i praksa, 22(1), 21-38.

Mukhoma, K. H. (2014). Accounts receivables management and financial performance of manufacturing firms in Nakuru County, Kenya (Doctoral dissertation, University of Nairobi).

Narain, L., & Garg, S. N. (2011). Optimum Radiation Availability for New Delhi and Pune. Invertis Journal of Science & Technology, 4(4), 208-212.

Oyuke, J. (2011). IRA primes to steady insurance sector. Business Daily, 4(5), 17-24.

Pandey, A. K. (2016). Integrated Risk Management the Indian Banking Sector and Impact of Credit Risk Management of the Bank's Profitability.

Pinto, J., Marques, M. O., & Megginson, W. L. (2014). A comparative analysis of ex-ante credit spreads: structured finance versus straight debt finance.

Smith, G. (2009). Democratic innovations: Designing institutions for citizen participation. Cambridge University Press.

Vaidya, R. R. (2011). The determinants of trade credit: Evidence from Indian manufacturing firms. Modern Economy, 2(05), 707.

Valliammal, M., & Mohan, A. C. (2014). A study on financial management practices of poor households in chennai area. Clear International Journal of Research in Commerce & Management, 5(12).

Waweru, J. N. (2018). Effect Of Public Debt on Foreign Direct Investment Inflows in Kenya (Doctoral dissertation, University of Nairobi).