UGANDA MANAGEMENT INSTITUTE

EFFECTS OF CREDIT MANAGEMENT ON PERFORMANCE OF SUCCESSOR PUBLIC UTILITY COMPANIES-A CASE STUDY OF UGANDA ELECTRICITY DISTRIBUTION COMPANY LIMITED

BY

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REG. No. 02/MFINM/073

A DISSERTATION SUBMITTED TO THE HIGHER DEGREES DEPARTMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE MASTERS DEGREE IN MANAGEMENT STUDIES (FINANCIAL MANAGEMENT OPTION) OF UGANDA MANAGEMENT INSTITUTE

JULY 2010

DECLARATION

I, VINCENT SSENYANGE MAYANJA, do hereby declare that this dissertation is truly my own work and is a true result of independent investigations of both primary and secondary data sources. Wherever it is indebted to work of others, due acknowledgement has been accorded. It is my original piece of work and has never been published and /or submitted to any University or any other Institution for the award of any academic qualification.

Signed: ……………………………………..

Date: ..………………………………….

APPROVAL

This is to certify that this dissertation was done under our supervision for the award of The Masters Degree in Management Studies, (Financial Management Option), of Uganda Management institute.

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DEDICATION

This dissertation is dedicated to my late wife Justine Mayanja, my mother Gladys Sinakwoyo

Kagumba, Irene and Assumpta for their personal counseling.

ACKNOWLEDGEMENT

ACRONYMS

B.COM	-	Bachelor of Commerce
BITS	-	Billing Information Technology System
BPP	-	Better Payment Practice Group
CMRC	-	Credit Management Research Centre
DMS	-	District Data Management System.
EDS	-	Economic Development Studies.
FM	-	Financial Management
IMF	-	International Monetary Fund
ISO	-	International Standards of Quality
KCSA	-	Kampala Customer Service Area
MUK	-	Makerere University Kampala
NWSC	-	National Water and Sewerage Corporation
PERD	-	Public Enterprises Reform and Divestiture
PGD	-	Postgraduate Diploma
SAP	-	Standards of Accounting Practice
SIAP	-	Standards of International Auditing Practice
UCB	-	Uganda Commercial Bank
UCC	-	Uganda College of Commerce
UDA	-	Uganda Diploma in Accountancy
UEB	-	Uganda Electricity Board
UEDCL	-	Uganda Electricity Distribution Company Limited
UETCL	-	Uganda Electricity Transmission Company Limited
ULA	-	Uganda Licentiateship in Accountancy
UMI	-	Uganda Management Institute
UPTC	-	Uganda Posts and Telecommunications Corporation
UTL	-	Uganda Telecommunications Company Limited

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ABSTRACT

The study aimed at assessing the relational effect of credit management policy on performance and identifying UEDCL credit management system strength and weaknesses. Specific objectives were; to explore the UEDCL credit policy establishment; to investigate the UEDCL's credit policy functional validity extent on performance; to examine the functional relationship between UEDCL's credit management policy and performance and to assess the functional effects of UEDCL's credit management policy on performance. The study was conducted in Kitintale (UEDCL) district, Kampala. It used a multiple methods strategy, adopting inductive and deductive approaches, combining cross sectional survey and case study with integrated exploratory, descriptive, analytical, qualitative and quantitative methodology designs. The study participants included 400 domestic energy consumers randomly sampled. Ten senior management staff, 9 support staff, 3 stakeholders and 3 debt collection agent respondents that were purposively selected. Both primary and secondary data was collected through interviews, observations and records review, questionnaires, schedules and internet as research techniques and tools. The study revealed that UEDCL established a mandatory credit policy manual with similar internationally recognized contents, primafacie. However, there were poor indicators of functional validity extent, characterized by inadequately designed and practiced credit sales accounting and controls procedures in regard to policy matters' documentation and information system, logistics provisions, resource management and risks management, that impacted on performance intensity, more so on implementation process. It revealed a significant functional relationship amongst credit policy operations (variables) and performance/customer satisfaction, hence, their individual functional inadequacy (i.e. inadequate functional validity, non authentic credit sales accounting, inadequate customer evaluation, unoptimum credit stipulations and non aggressive collection effort), relatively, impacted on individual performance and general credit extension performance. Therefore, credit extension resulted into vexatious persistent rising trend of receivables defaults/losses that are not hedged, ultimately, in effect, to the dismay of customer/stakeholders.

It was concluded that, i) on strength of credit manual version 2001 with similar internationally recognized standards, UEDCL has a mandatory credit management policy primafacie. ii) UEDCL failure to adequately formulate credit policies, improperly integrated and embedded, in view of the aspects of the concerned parties unawareness, inadequacies in:- a credit sales accountability and control; technical support for energy product/customer location; organization structure and atmosphere gaps were indicative of ineffective credit policy functional validity that cramped the credit implementation process/performance. iii) There were significant functional relationships amongst the credit policies on customer evaluation; credit stipulations and collection effort that relatively influenced each other and overall performance. iv) The above operational relationships amongst the credit policies, in effect, impact on the overall credit extension returns portfolio and customer satisfaction with variation ($r^2=30\%$).

It was recommended that, to enhance performance, UEDCL should improve credit sales accountability and optimum internal controls, credit customer evaluation, credit terms manipulation and collection effort to ensure effective credit extension performance and customer/stakeholders satisfaction.

CHAPTER ONE

INTRODUCTION

1.0   INTRODUCTION

This study investigated the effects of credit policy management on performance of successor public utility companies, in Uganda, in reference to Uganda Electricity Distribution Company Limited. Credit management policy was conceived in this study while the effect(s) on performance were the dependent variable(s), in form of credit extension returns portfolio or in form of customer/stakeholders satisfaction perceptive indicators, vis-à-vis Quality of service delivered; credit sales returns-(activities/profitabilities); shareholders' values, corporate survival and corporate image. This chapter presents background to the study, the statement of the problem, the general objective of the study, the specific objectives of the study, research questions, the hypotheses, the scope of the study, the conceptual framework with operational definitions of key study variables and terms used.

1.1   BACKGROUND TO THE STUDY

Worldwide, credit management phenomenon has been proved to be an inevitable evil in the complexity of developing and imbalanced economies (World Bank Report (1989); Hall. D-(2008) P.S.I R.U. World Bank). The Global credit crunch cannot go without being noted in the history of world economy crisis. However, it has been noted by Suruma (2008) that "Credit is the blood of any economy". "Uganda's external debt has grown up to an unsustainable level of $4.0 billion" (Bumba. S. (2009) – Budget speech 2009/ 2010). Part of this was a creation of state public utilities, due to failure to meet their financial obligations promptly for the goods and services rendered to them through government guarantee (ATUHAIRE, 2003; Appendix V). This was also as a result of persistent past and current cumulative irrecoverable receivables

due to customer's chronic defaults. Despite the massive investment into these successor companies, most of them failed to achieve the self sustainability objectives fostered for, by the International Monetary Fund (IMF). Today, inspite of successive debts write off; Uganda owes World Bank, among other creditors, more than U.S. $ 1.2 billion (Karugaba. May 2008). Uganda Electricity Distribution Company (U.E.D.C.L), with a Uganda Government debt of Shs 214.5 billion was among the Ug. Shs 1.2 trillion defaulters sought to be written off (New Vision 26th Oct 2007; Appendix VI).

The above deplorable state is a scenario that has been largely blamed on *companies' persistent credit operational inefficiencies and inability to collect debt dues from their customers.* However, business and economics gurus assert that poor trade credit policy and practices result into receivable recovery inability, customer's relations jeopardy, hence, adverse performance portfolio and detrimental organizational survival (Pandey 2002 and others).

1.1.1   Contextual Background

Uganda Electricity Distribution Company (UEDCL) is one of the four successor companies of Uganda Electricity Board (UEB). The company came into operation on 1st April 2001 and was put under the supervision of the Ministry of Energy, Public Enterprises Reform and Divesture (PERD) and Electricity Regulatory Authority (ERA) on behalf of Government as the proprietor. UEDCL was formed on the premise of gaining financial self reliance through distributional provision of safe, adequate and quality energy services, that are reliable, focusing on the customer satisfaction and stakeholders' appreciation to enhance investment and industrial development criteria (UEDCL Mission Statement Brochure, 2001, Appendices VII and VIII). Like most public utility services in Uganda, energy services are rendered on trade credit extensions, on "Open Account" basis.

The company, however, inherited a number of problems indicated by a heavy debt burden, persistent accumulating energy trade receivables, defaults and the rampant controversial non accountable energy sales losses due to the poor credit policy implementation framework from UEB against which the auditors have been warning on its obvious adverse performance implications (Appendix XI). Auditors, continuously with caution, advised management that there was a need to take up measures and institute adequate and effective credit management procedures and practices (credit policy) that could result into optimum and favourable debts recovery process in order to avoid the risk and other consequential organization's unfavorable financial performance incidences.

Credit management gurus argue that poor credit management policy manipulation results into adverse organization's financial performance implications (Pandey 2002, Kakuru 2002, Weston 1989 and Copeland 1981). Good credit policy should include credit standards and analysis, criteria for a credit customer evaluation and rating; properly set optimum credit terms (credit stipulations), and collection effort (credit customer monitoring and prompt debts recovery procedures). On the other hand, further, (Salima 2002), in her research articles, noted that organization's credit management policies fail because of not being adequately and strategically designed, integrated and embedded within the organization's strategic management operation systems for their effective concerted performance. Similarly, this coincides with Kirk Man (1977), Bank (2000), Cole (2001) and the 'International Standards Management Systems Requirements (ISO 1900; 2000E)', necessary as a measure for quality services assurance for customer satisfaction. Credit policy package is defined as a set of guidelines defined to attain optimum credit extension results. A good credit policy management package should ensure operational consistence and adherence to uniform and sound practices (Varne Horne 2003, Kakuru 2002); hence with specific objectives of;- (a) maximizing marginal credit returns, performance portfolio in form of quality service delivered, activities and

profitabilities like sales growth, market share, returns on capital invested or share holders'
values; and (b) While minimizing the cost of investments in accounts receivables, defaults
(losses) by ensuring optimum organization debtors prompt recovery process, corporate image
and corporate survival for customers'/ stakeholders' satisfaction.

At UEDCL, since its inception, there have been:-

(a)   Operational inefficiencies and inabilities to collect recurrent receivables and old ones,
according to internal debts aging schedules, ranging from 91 days to over 5 years, against
auditors continued advice (Appendix XI). Though there was a rising trend of sales growth,
there was an indicator of company funds tie up, in receivables, moreover being accompanied
by a rising trend of unproportionate impairment provisions for defaults and losses as shown in
figure I and table I below.

FIGURE I: TRENDS OF RECEIVABLES VERSUS IMPAIRMENT PROVISIONS

Source: UEDCL Statistics

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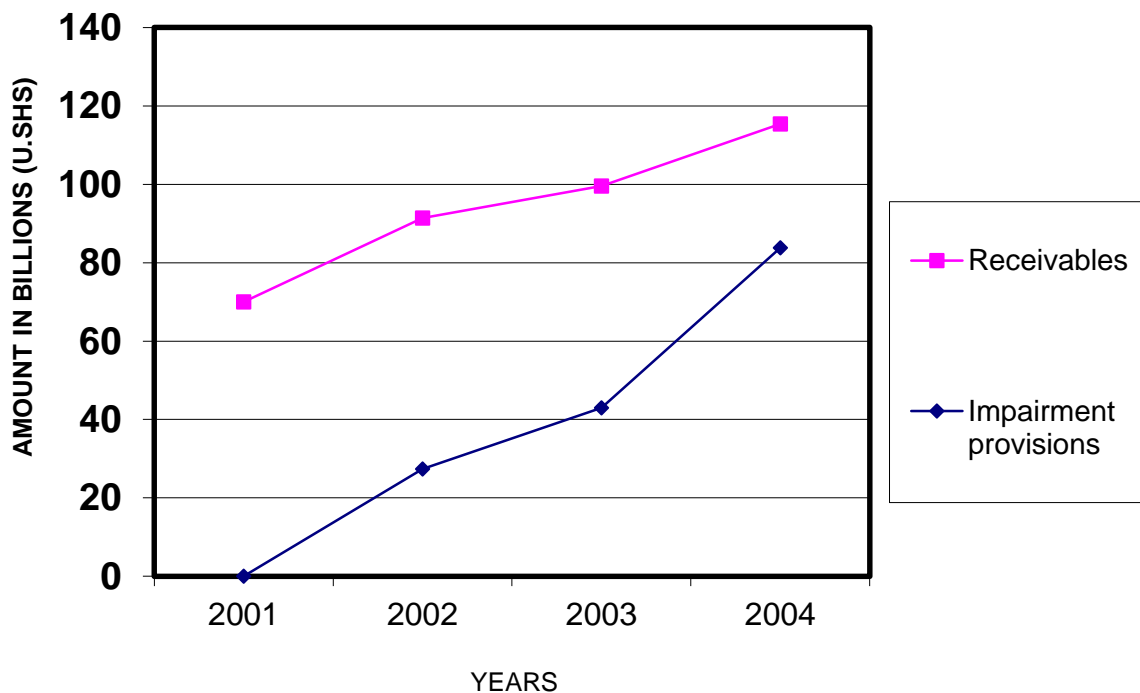
TABLE I: PERFORMANCE OF UEDCL (LOSSES COMPARED TO RECEIVABLES REGISTERED)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
P/Loss	(.78)	(.90)	(13.5)	(26.5)	4 Surplus	-	(2.4)	(29.3)	(8)	(34.23)
Receivables (Billions Ug Shs)	41.5	55.6	52.1	56.7	57.8	-	72.0	83.3	101.6	(115.76)
Impairment %							6.6	28.3	40.3	56.2

Source: UEDCL Corporate statistics

From figure I and table I above UEDCL receivables were above Uganda Shillings 70 billion at the end of 2001, 80 billion (2002), 100 billion (2003) and 115billion (2004), while debts impairments were shillings 4.9 billion, 23.6 billion, 41 billions and 65 billion for the years 2001, 2002, 2003 and 2004 respectively. It is further portrayed in Table I that debts Impairments rose from 6.6% in 2001 to 56.2% in 2004 while operational losses were incurred from shs 2.4 billion in 2001 to shs 34.23 billion in 2004 an indicator of UEDCL adverse credit operation. According to Kampala Customer Service Area performance reports (KCSA), there has been a persistent declining trend of debt recovery with no visionalized credit customer qualities, indicative of customers' debts recovery intention and ability (i.e. lack of adequate customer evaluation and rating), observation of optimum favourable credit stipulations and aggressive collection effort for ensuring prompt organizations funds recovery, (KCSA records 2001-2004).

b. Consequently, persistent accumulating energy debtors' accounts despite the fact that shillings 48 billion had been unknowingly adjusted according to UEDCL Published accounts, (2001/2002; Appendices IX and X) an indication of poor credit sales accountability and control.

c. Liquidity crises, only solved by external borrowings hence a rising trend of interest worth billions shillings incurred by UEDCL as debt service as shown in figure II below. UMEME, its armpit company, also today tends to use borrowed capital stock rather than the share holders' equity due to continued initial loss makings. (Hall D- P.S.I.R.U 29th April 2008).

FIGURE II: UEDCL FINANCE COSTS (INTEREST AND FOREIGN EXCHANGE COSTS) 1995-2003
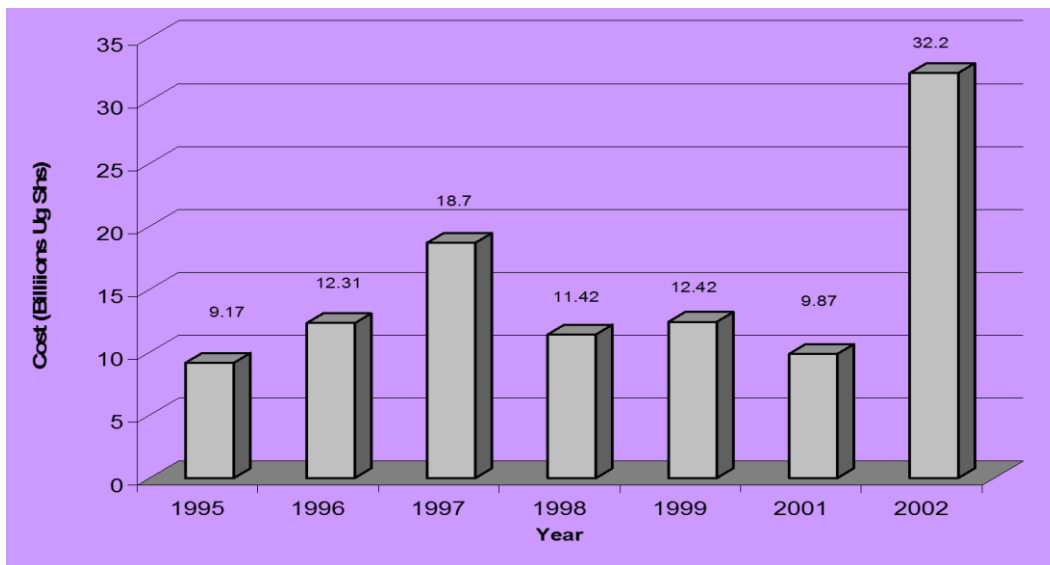
Source: UEDCL Statistics

Figure II above indicates that finance costs were incurred in succession right from UEB to UEDCL, with a rising trend from shillings 9.8 billion in 1995 to 32 billion in 2002. These were mere debts maintenance costs incurred as lender's interests on principal amounts and incidental foreign exchange mishaps.

Moreover, there have been chronic qualified audit opinions, pre and post UEDCL reports, as regards the authenticity of receivables accounts due to inadequacy in credit sales accountability and control, bills development and receivable collection practices. This has also chronically

been reflected by stakeholders and customers' outrages over UEDCL performance. (Appendices XV-XVIII), hence dissatisfaction over UEDCL services.

Today, the dilemma above seems to continue haunting UMEME as well (Appendices XIX-XX) *"Electricity Users owe UMEME Uganda Shillings 103 billion an amount that is hampering the company's operations" (Ahimbisibwe F. Vision 23/3/2007).*

All in all the picture of UEDCL's overall performance scenario depicted from the afore background paragraphs, tables, figures and appendices, is indicative of poorly instituted credit management policy, with inadequately designed and implemented policy package (procedures and practices, indicative of inefficient credit policy integration and embedding into the entire organization system or not effective enough/with no functional validity) to ensure effective performance results. There has been a rising trend of losses due to persistent defaults (Figure II and Table I) despite the increase of receivables of which the auditors assert "if it was not for questionable receivable accounting and debt write offs, the results would be worse than what is portrayed." (UEB/UEDCL Annual Audit reports 1995-2004).

1.2   STATEMENT OF THE PROBLEM

At UEDCL, since its inception there have been;

(a)   Operational inefficiencies, inabilities to collect recurrent and old trade receivables, according to the available records (internal and published accounts, 2001-2004), characterized by individual rampant customer debts recovery period beyond 180 days to over 361 days against the official 90 credit days and persistent skyrocketing individual non limited balances, resulting into huge amounts and beyond one year to over 5 years. This practice was against auditors' endless advice and credit management gurus, as noted in paragraph 1.1 above and appendix xi. This was an indicator that UEDCL management failed to institute credit policy package, with visionalized and well articulated credit customer qualities based on credit

standards and analysis criteria for customer evaluation and rating procedures, credit terms setting procedures and practices to ensure optimum and favorable customer payment terms, and aggressive collection effort for monitoring individual credit customer stipulations for prompt debts recovery to avoid credit extension adverse financial implications and ensure achievement of effective performance in view of corporate goals. Although there was a rising trend of sales growth of about 11% between 2001 and 2003, investment in receivables, unproportionately went up by 22% and the impairments for default losses shot up to the tune of 93% according to the data portrayed in tables and figures in paragraph 1.1, an indicator of UEDCL's funds tie-up in credit strategy investment and consequential adverse credit extension returns in regard to stakeholders values, corporate survival and corporate image.

(b)   Moreover, there was a portrayed controversial credit sales accounts adjustment to the tune of UGX 48 billion in 2001, (Appendices IX-X), and rampant finance energy losses unaccounted for in the credit management process, (Appendices X,X,), of which management itself tended to accept (Appendix XXXVI), in addition to auditor's qualified accounts reports on basis of UEDCL inadequate energy accountability and control procedures (UEDCL annual audit reports 2001-2004). Nevertheless, there has been an endless public outcry about the billing inconsistencies. (Appendices XVI-XVIII, among others). Previous research on credit management was by Tumuhimbise (1997) on unbundled (UEB), and Delewa (2003) on financial institution (UCB); both organizations that were purely seen as government utilities by then (Appendix XXVIII).

This study therefore set out to assess the functional relationship and effect of UEDCL Credit policy on performance, focusing at customers/stakeholder satisfaction, with the aim of identifying areas of strengths and weaknesses that could be addressed to improve credit management in utility companies in Uganda.

1.3   General Objective of the Study

The general objective of the study was to assess the functional relationships and effects of UEDCL credit management policy on performance.

1.3.1   Specific Objectives

The specific objectives of the study were:-

1. To explore the UEDCL credit policy establishment..

2. To investigate the UEDCL's credit policy functional validity extent on performance.

3. To examine the functional relationship between UEDCL's credit management policy and performance.

4. To assess the functional effects of UEDCL's credit management policy on performance.

1.4   RESEARCH QUESTIONS

(a). Has UEDCL's formulated mandatory credit policy?

(b). To what extent does UEDCL's credit functional validity affect performance?

(c). Is there any functional relationship between UEDCL's credit policy and performance?

(d).   What are the functional effects of UEDCL's credit policy on performance?

1.5   HYPOTHESES

1. UEDCL has not established a mandatory trade credit policy.

2. UEDCL's credit policy functional validity has not effect on performance.

3. There is no functional relationship between   UEDCL's credit management policy and performance.

4. There is no UEDCL credit policy functional effect on performance.

1.6   SCOPE OF THE STUDY

Content Scope

This study focused on the credit management policies.

Geographical Scope

The study was conducted in Kitintale district, Bugolobi office, an area assumed to be representative of all characteristics of UECDL/UMEME.

Time Scope

The study focus was on the period between 1995- 2005, taking into consideration the pre and post incorporation period of UEDCL operations. However, Qualitative and descriptive data were incorporated beyond the stipulated period as UMEME concessionaire is still in the armpits of UEDCL.

1.7   SIGNIFICANCE OF THE STUDY

The findings from this study are expected to benefit the following:-

i.   UEDCL's management who can use the findings to identify the credit management system successes to capitalize on and failures to improve or review policies and controls within the credit management functions;

ii.   The UEDCL debt recovery committee by learning about the nature of the debts ages and their recoveries possibility or otherwise.

iii.   The new private organization in utilities services (like UMEME Ltd) may use the study evaluation to formulate effective policies and controls for the credit management function.

iv.   The debt collection agents to have a clear picture of the nature of the debts they intend to collect on commission basis.

The study has in general, therefore, contributed towards the development of understanding of the credit management concept.

1.8   CONCEPTUAL FRAMEWORK

To guide this study, the Conceptual Framework (Fig.III) below, in a summarized diagrammatic structure was derived.

FIGURE III: TRADE CREDIT CONCEPTUAL FRAMEWORK SHOWING FUNCTIONAL RELATIONSHIPS BETWEEN UEDCL

CREDIT MANAGEMENT POLICY AND PERFORMANCE

INDEPENDENT

TRADE CREDIT MANAGEMENT POLICY

Credit standards and Analysis (credit extension criteria-5Cs)

Credit terms and instruments (Credit extension stipulations)

Collection Effort (credit Monitoring and Recovery Procedures)

CREDIT EXTENTION CONTROL

➢ C
➢ C
- n
- I
- D
- R
- S

➢ c
➢ C

INTERVENING VARIABLE

MODERATING VARIABLE

POLICY FUNCTIONAL VALIDITY
- Customer Data management
- Management capacity
- Risk Management/credit controls

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DISTRIBUTION UPSETS

– Environmental opportunists

Figure III above shows the functional relationships between the UEDCL credit management policy (independent variables) and its effects on performance (dependent variables), hence showing "a cause and effect relationship" model adopted from Travino and Youngblood (1990) , "Conceptual Framework for ethical decision making" cited by Fisher *et al.,* (2007 p.127). Other moderating and intervening variables' functional relationships are also integrated. This was consequent to the brief theoretical analysis of the background to the study (UEDCL), in collaboration with brief literature review. The study variables are operationalized in the on going paragraphs.

1.8.1   Study variables

The following key study variables were identified (as shown in the conceptual framework above):

(a) Independent variable (s)

An independent variable is the presumed cause of the event (Dependent Variable or presumed effect) "It is thus one which explains or accounts for variations in the dependent variable(s) (AHuja 2005; Kakooza T 2002). Relatively, therefore, the independent variables in the UEDCL case study, according to its 'Policy manual Version 2001', were the trade credit policy that included the components namely:-

    i)   Credit standards and Analysis (credit customer evaluation process).

    ii)   Credit terms and instruments (credit extension stipulations); and

    iii)   Collection effort (credit customer monitoring and recovery Procedures).

These were supposed to be simultaneously manipulated to affect performance/corporate goals achievement- dependent variable (Pandey 2002). UEDCL in its identified routine credit management operations was supposed to evaluate and rate its credit customers basing on surrogates of 5Cs i.e. customer character, capacity, capital and condition in order to predetermine the credit customer quality (anticipating customer intention and ability or how

quickly the customer would pay-debts recovery rate and the likely defaults rate). Also collateral or security deposit was supposed to be attached (Weston and Copeland 1989). Basing on evaluated customer intension and ability to pay, varied credit stipulations (credit terms) were supposed to be set optimally either on individual or as a group depending on the risks degree involved for aggressive collection effort i.e. monitoring and receivables recovery procedures against the above set stipulations to ensure effective performance, in terms of the corporate aims.

b) Moderating / Intervening Variables

There are variables that set in between the independent and dependent variables that are referred to as moderating or intervening variables. Moderating variables impact positively, as credit policy smoothers of the credit policy function for effective implementation /performance while, on the other hand, intervening variables negatively impact, (threats) on implementation/performance and are noted as constructs that account for a direct unobservable process within the system that in turn account for a postmortem behaviour in the control (credit extension evaluation) process (Ahuja 2005 among others), and where eventually the management has to revisit the credit policy or to remain on their course of action in its control process hence a two-way arrow between control and credit policy. Credit policy decision is not a one time static decision but a slow process thus, it is dynamic (Pandey 2002 p.85; ISO 9001: 2000E).

The UEDCL identified moderating variable, referred to as the credit policy functional validity was indicated by procedures and practices on the following to indicate the trade credit policy integration and embedding to the entire organizational operation system:

i)   Customer data management i.e. credit policy documentation and communication system

ii) Capacity management (human resource /Logistics) i.e. organization structures, worker environment, and logistics provision procedures and practices.

iii) Risk management or control framework for uncertainties.

These were supposed to facilitate UEDCL credit policies by their integration and embedding in the entire organizational structures for effective credit management policy implementation/ control and effective performance.

On the other hand, intervening variables perceived as likely to upset UEDCL credit energy distribution process were:-

i) Social behaviors - Customers /Staff Collusion, patronage/nepotism, bureaucracy and customer volatility (unnoticed customer nomadic character)

ii) Economic factors – inflation and exchange frustrations

iii) Regulations - Electrical Regulations and sequestration laws

These are variables that tended not to be within the management control but, with provision of risk management procedures, should be considered as uncertainties that should be precautiously catered for or else to review, timely, the credit policy management process through the control/evaluation process for corrective action or remaining on course of action. Credit policy management is a slow process and dynamic (Pandey, 2002).

Dependent Variable(s)

On the presumed credit policy management effects side, this is performance (credit extension return portfolio), in view of customer/stakeholders satisfaction (corporate goals) assumed to be indicated by the following study indicators:-

➢ Quality of service Delivered (in terms of the trade credit policy function

➢ Corporate image.

➢ Credit sales performance returns (activities / profitability)

- Market share, volume,

- Investment in receivables/cost

- Debtors recovery rate

- Returns on capital invested

- Shareholders' values.

➢ Corporate survival

All in all, the concept model represents the UEDCL trade credit sales strategy functional relationship. Credit management policies (independent variables) are manipulated simultaneously, coupled with procedures and practices on facilitation factors (study moderating variables - capacity management and risk management or controls) by being integrated and embedded in the entire organizational structures and systems for effective implementation (functional validity), while being conscious on system implementation uncertainties (intervening variables) through control/evaluation process, to achieve positive performance/corporate goals (dependent variables).

1.9 Definitions of terms

For explicit understanding of the terms/concepts as used in the study it was deemed appropriate to have been defined as follows:

1 **Successor Companies** – Operator companies incorporated under Companies Act cap 85 and in accordance with the electricity Act 1999 of the Republic of Uganda.

2 **Grid network** - Electrical transmission lines (wires and transformers for energy conveyance to consumers.

3 **Watts** – the smallest energy consumption measuring units in the distribution process

4 **Megawatt** – Big generated electricity unit measured in electricity production, Transmission and distribution processes.

5 **Utilities losses** – Power losses encountered during the transmission and distribution processes on the Grid network system.

6 **Consumers** – Energy products / services consumer.

7 **Domestic consumer** – These includes commercial and residential consumers.

8 **Consumer Volatility** – Customer movement from place to place changing residences (nomadic behavior).

9 **Stake holders** – These are government agents, under 1997 Electricity Act.

CHAPTER TWO

LITERATURE REVIEW

2.0   INTRODUCTION

This chapter presents a critical review of literature on issues that have been studied from both theoretical and empirical point of view of the arena of trade credit management or in USA terms "Accounts Receivable Management", and its impacts on organizational performance. The literature review was done following the research objectives and questions, generally aiming at examining UEDCL credit policy and assessing its functional effect on performance focusing on customers / stakeholders appreciation.

In Uganda, private enterprises are still in their infancy, and others like UEDCL are still in transitional period to full privatization. Therefore relevant literature on the local scene is largely lacking. Hence most of this literature is drawn from the developed world, where the private sector plays a big role in the business operations with a large scale trade credit extension. It should be noted though that credit management itself has not been embedded and integrated in business strategic operation of many business enterprises (Kirkman, 1997; Wiljest, *et al.*, 2002; Salima, 2002).

Most of this literature was sourced from the various research centers including Uganda Management Institute, Makerere University Business School (MUBS), and British Council Library as well as from the Internet.

2.1 TRADE CREDIT CONCEPT DEFINITION AND IMPORTANCE ON PERFORMANCE

This term is used to refer to a sales transaction (deal) where money is not exchanged at the point of delivery. When a firm sells its products and services and does not receive cash for them immediately, they result into trade credit or accounts receivables (Pandey, 2002; p. 843).

In some economies, trade credits form a considerable proportion of the business enterprise. For example, in India, a third of current assets are formed by accounts receivables (Weston *et al*., 1989, p. 239; Van Horne (2003). In the United Kingdom (UK), a recent survey found out that more than 80% of the firms make the bulk of their sales on credit and the trade credit figures in the balance sheets were estimated to have risen to an average 35% of total assets in 1998 compared to 21% in 1990 (Salima, 2002).

In Uganda, apart from some companies in the communication sector where firms like Warid, UTL, MTN and CELTEL (Zain) have control facilities on their service networks for prepaid services, the majority of public utility firms survive entirely on Trade Credits. UEDCL's credit balance sheet figure was two thirds of the current assets and constituted a substantial portion of 42% and 51% of the net assets of the company in 2002 and 2003 respectively (New Vision, 11th April 2003, Appendix IX (a))

Kakuru (2002, 2007) advanced nine reasons to justify trade credit in a firm's operations namely:-

1. It is used as a marketing tool;
2. It is used in competitive and recessional economic conditions;
3. It is used as a tool for market growth or market share maximizations;
4. Builds customer good will as a reward to the customer's loyalty;

5. Acts as a bridge for the movement through productive and distribution stages to customers; thus production and revenue enhancement. For example India is using trade credit strategy by exporting textiles to foreign countries on credit in order to reduce on their stocks;

6. It enhances the company's bargaining power build up;

7. Large sums of money are collected easily;

8. It is an incentive as industrial practice; and

9. Buyers' relationship enhancement.

These criteria are supported by other prominent authors such as Pandey (2002), Kotler (1997) and Weston *et al.,* (1989). Salima (2002), citing Pike and Cheng (1996), noted that there are generic forces behind the offer of trade credit. The authors compared theoretical explanations of motives with what actually happens in practice and found a strong link between trade credits motives and competitiveness, pricing, investment and finance. Boggess (1989), and Salima (2002), citing Pearson *et al.,* (1997) and Wilson *et al.,* (1998) noted that small companies use trade credits as a means of attracting customers, signaling supplier commitment and showing their financial health. Wiljst *et al*., (2002) researched on determinants of trade credit and came up with similar motives basing on theoretical and empirical study cases.

Most credit management authors, however, acknowledge the risks involved in the trade credit extension of future economic value and its associated costs that call for a trade off between the benefits and the cost optimum conceptualization (Kakuru, 1998, p. 104). This functional approach calls for designed strategic credit policies to be integrated and embedded in the entire organization management system to forge the organization credit customer/ services quality portfolio (Salima 2002; Kirkman 1997) indicative of effective performance. Performance, in general, according to management gurus, is viewed as "a routine carry on" activities of the organization in adherence to the visualized organization aims, strategies and

objectives/corporate goals (Cole 2001, Lawrencea 1995 and Boyce 1976). According to Fayol's definition of management, as cited by Cole (2001; p.12) there are six outlined activities namely; i) Technical activities e.g. production; ii) Commercial activities e.g. buying and selling; iii) Financial activities e.g. funds mobilization; iv) Accounting activities e.g. accountability and financial reports; v) Security activities e.g. safeguarding organizational property then vi) Managerial activities e.g. planning and organizing. Therefore, this indicates that all organizations activities, in performance process have to be managed by competent managerial team, through planning, organizing, motivating and controlling. Trade Credit extension activities, in view of mobilizing funds, gaining market share in the competitive business world, ensuring stakeholders values as well as organizational financial sustainability and survival, is subjected to managerial activities hence evolution of the concept of trade credit management (Pandey 2003 and Kakuru 2002).

Emperically, in general, trade credit management is built on the basics of sound quality of trade credit management policies that must be executed effectively (Properly established, implemented and controlled optimally) to enhance performance of the organization. In the context of UDCL, performance is indicated in terms of quality of services delivered, corporate image, credit sales returns, shareholders values and corporate survival. These concepts tend to agree with credit management gurus as reviewed in the ongoing paragraphs.

It has been pointed out by Wiljst *et al.,* (2002), that "although trade credit is comparatively 'a small' topic in finance, many theories explaining its use have been presented over the years." On the other hand, Salima (2002) argued that "despite its importance, trade credit has received only limited research attention." It is also noted by Samuel, *et al.,* (1995) that the subject has not been one in which many advanced analytical ideas have been developed or even proposed. Salima (2002) noted that Trade credit has not been a major focus of research", by citing Wilson and summers, (1998, p. 1).

In Uganda, the subject of credit management has just started to draw the attention of researchers and business practitioners. Although volumes of credit literature on microfinance and other financial institutions can be found today, not so much trade credit literature is found written on credit extension side, but only on the receiving side, emphasizing the necessity of free financing of the business in the short run as a way of evading the hiked interest rates of Bank overdrafts or short term financiers. Therefore there is a general failure to recognize the fundamental importance of embedding and integrating sound credit management policies and practices in every aspect of commercial operations (Salima, 2002).

This little focus on trade credit by researchers and business community, has led to underdeveloped ideas about it theoretically and empirically. Therefore many companies like UEDCL, whose entire business operations are based on trade credit seemed to have been not yet fully conceptualized its principles.

2.2   TRADE CREDIT POLICIES DESIGNS AND PERFORMANCE

In this inevitable era of privatization with dynamic changes of trade tides, public utilities companies have to strive for self-sustainability. These companies in Uganda, inherited huge contentious debtors' accounts stock, though inevitably, are still continuing to rely on credit extensions as a means of their marketing strategy. However, the success of the trade credit strategy greatly depends on the credit management policies that govern it (Pandey, 2002), and should be embedded and integrated in the whole organizational process (Salima, 2002).

Trade credit policy management system refers to the management functions related to trade credit that create receivables or book debts. It is a business management activity concerned with the philosophy of "buy now, pay later" (Boggess, 1989, p.13). It is an activity of trade

credit extension with "term strings," receivables collection at agreed time, while minimizing

bad debts as well as cost optimization for optimum returns (Pandey, 2002, p. 847). Hence a

prerequisite need for trade credit policy manipulation enhanced by functional validity factors

(Credit extension support functions) that are optimally embedded and integrated, forming

credit customer quality portfolio for inspired performance by all stakeholders. (Buckley 1982).

Kirkman (1997) observed that many business executives are only following the business norm

of credit extension. Two decades later, other authors still observed that traditional trade credit

management is perceived as a functional requirement to collect overdue debts on consumer's

accounts; therefore this has been a failure of policy integration and embedding in the whole

business system. "Then the primary task becomes the prevention of bad debts implying that

much time then is spent on back-end activities such as chasing and resolving disputed invoices

as a sale can never be considered complete until the product or service is paid for" (Salima,

2002). MTN and others in communication sector opt for prepayment while UEDCL, with an

open account system, rushes for post mortem disconnections only as a means of saving its

massive outlay. This seems to haunt UMEME as well as portrayed by Appendix XIX. This is

of course a sign of inefficient trade credit management policy that results in poor debt recovery

(Tumuhimbise, 1997 p.3). According to Salima (2002) citing, Pike *et al*., (1998), trade credit

policy should be part of the over all strategic management focuses as its objectives directly

affect corporate survival and prosperity.

Some marketing professionals look at credit extension as a liberal decision to solve the market

imperfections (Kotler (1997); Ntayi (1998) Wiljst *et al*, 2002). This enables the discharge of

their duties easily and possibly putting forward their claims for sales commissions after a

service of sale to the company.

For a business keen to break into a new market or a member of sales force trying to win

commission for extra sales, it is very tempting to go for sales at all costs, even if this means

offering credit without proper safeguards. "It is an unwise course to take" (Lewis, *et al*., 1994, p.448) cited by Wiljest (2002). The financial managers on the other hand, when they are not on the demand side (trade credit receivers) they perceive trade credit as an aspect requiring investments outlay, mobilizing extra funds, calling for extra efforts for the firm's liquidity controls within the working capital structure. Copeland and Khoury (1981) argued that credit extensions is a commitment of funds for uncertain returns to an organization which even lead to total failure due to extra costs and bad debts incurred. Tumuhimbise, (1997) citing Ross and Westfield (1988), identified two costs involved in the credit extension, namely;

    a. Carrying costs which included rate of return on invested capital in receivables and

    b. Opportunity costs if the credit is not offered.

Buckley, (1982), elaborated further on the above costs as follows;-

    i. The rate of return is capital cost related to the desired firm's internal rate of return.

    ii. Normal running costs related to an extension of support functions and extra ordinary costs of debt default administration like extra services hiring fees, similar to extra service of Sigma, revenue protection unit and legal revenue collection agents' in the UEDCL case study, and also imitated by UMEME today.

Kakuru (2002) a known Makerere University (Uganda) financial academician came up with the present value concept to act as an eye opener for financial managers faced with investment decisions, whereby the trade credit aspect of investment in receivables is one of them, to evaluate the futuristic economic value of a shilling against the present value (by discounted inflows) before any investment project is undertaken. This view is shared by both Pandey (2002) and Brealey *et al*., (1991).

Nevertheless, most authors of finance and marketing management tend to believe that trade credits can enhance the firm's sales as well as possibly increasing the profits, thus affecting the corporate survival and prosperity (Salima, 2002 Citing Pike *et al.,* 1998). Therefore, the

business executives face a dilemma, of credit policy manipulation based on cost- Benefit or marginal returns analysis (Pandey 2002). Copeland and Khoury (1991) argued for risk management to be integrated within the credit management system for effective discharge.

Sound trade credit management is vital for the success of an organization and organizations should develop optimum credit policies (Pandey, 2002, p. 847). Formulation of risk management policies involves the following steps;

    i.   Estimation of incremental operating profits

    ii.   Estimation of incremental investment in accounts receivables.

    iii.   Estimation of the incremental rate of return on investment

    iv.   Comparison of the incremental rate of return with the required rate of return.

Credit management policy refers to a composite credit policy with components of credit standards, credit terms and collection effort (Pandey, 2002, p.844). Credit management policy may be described as a legitimate plan of action or guideline procedures and practices, strategically formulated for the trade credit operational process, focusing at the desired objectives (Boyce, 1967; Lucey, 1996, p. 137; Millchamp, 1996, p.85).

Kakuru (2002, p.115) defined a credit policy as a set of actions designed to minimize costs associated with trade credit while maximizing the benefits from it. Gittman (1982) and Brealy *et al.,* (1991) articulated the policies to mean the following functions;

a. Setting standards

b. Choice of instruments to use for legal actions effectiveness

c. Establishment of credit terms

d. Establishment of credit limits

e. Establishing credit monitoring and collection procedures

Following corporate strategic objectives of trade extension decision, managers formulate policies (study independent variable i.e. credit standards and analysis, credit terms, and collection efforts), facilitation and control policies (study modulating variables or policy functional   validity i.e. policy documentation and information system procedures-data management, logistics provision and human resource management; and risks management/ system controls), well integrated and embedded in the entire organization structures and systems, cautious about the environmental uncertainties likely to cause operational upsets (study Intervening factors), for effective implementation, as credit extension quality assurance for positive performance/corporate goals achievement (study dependent variable). Staff commitment or concerted efforts are prerequisite for effective designs and manipulations ((ISO 9001: 2000E), Cole 2001; Kirkman 1997); Hence in the end there is a perspective. "Jigsaw fitted puzzle picture" (Coventry, 1977). Japanese business success secret depends on this togetherness or "We" practice as "Total quality management concept" (Cole, 2001). In other words the key factor in policy formulation, in essence, is that sound and effective policies and controls must be given a recognition and their need felt by all the parties in the organization, so that they are capable of passing the compliance and adherence tests (Millchamp, 1996, p.88-105; Manning LG *et al*, 2004).

Several authors like Tumuhimbise (1997), Biribonwa, (1997) and Onek, (2000) made observations about UEDCL parent (UEB) operations that reflected poor trade credit management system characterized by inadequate credit policy design and practices coupled with poor habits of staff/customer collusions with the controversial defaults/energy losses. UEDCL with its concessionaire (UMEME) was found to be still faced with the same inadequate credit management conceptualization with poor quality services assurance package considering the study found persistent levels of adverse performance and public out cry over

their services according to published media evidences within and outside (UEDCL routine and annual reports 2001- 2004, Appendices IX-XIX).

2.2.1 CREDIT STANDARDS AND ANALYSIS AND PERFORMANCE

Credit standards are the criteria which are followed for credit customer evaluation by managers. There are two options namely: - (a) selective credit extension system, referred to as tight or stringent standards. Such an approach tends to avoid bad debts and lessen costs of credit administration. However, with such, the firm may not be able to expand sales. Pandey (2002, p. 857) argued that the profit sacrificed on lost sales may be more than the costs saved by the firm;- (b). On the contrary if lenient option or liberal credit extension standards are followed, the firm may have larger sales that might result in larger receivables with an increased risk of bad debts, accompanied by increased costs of credit administration, that are likely to sink the organization permanently.

Pandey (2002) argues that "analysis of customers by credit standards raises the quality of the firm's customers." There are two determinant aspects of the quality of customers:-

i.   The time taken by customers to repay credit obligation.
ii.   The default rate

The average collection period (ACP) determines the speed of payment by customers. It measures the number of days which credit remains outstanding. If longer periods are experienced investments have to be incurred and financed by either outside borrowing or internal suffocation of other undertakings. Default rate can be measured in terms of bad-debts losses ratios/proportion of uncollected receivables and it is an indicated default risk. The default risk is the likelihood of the customer's failure to pay.

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Weston and Copeland (1989. p.292) categorized credit analysis based on what has been named as the Five Credit Customer Evaluation Criteria (5Cs), namely;-

i. Character: referring to the behavioral aspect of the potential existing customer in order to test for his willingness to pay.

ii. Capacity: describes a subjective judgment of the credit customer's ability to pay. It is gauged by the customer's income sources.

iii. Capital: credit worthiness measured by the general financial position of the tangible net worth assets of the customer.

iv. Collateral: any recognizable asset offered by the customer as security deposit for the credit extended.

v. Condition: this has to do either with environmental influences, political, economical or social, that are gauged on probability basics.

The above credit customer evaluation criteria are the factors by which judgment of credit customer rating is done.

Authoritative literature on financial management emphasizes that credit standards are fundamental credit policy variable, in that the core party to the credit sales contract (credit customer), must be evaluated and monitored carefully otherwise the celebrated increase in sales can be outweighed by the heavy losses due to default resulting into bad debts, redundant receivables accounts or dormant bad debt stock, and hence stakeholders dissatisfaction, an indicator of poor credit management and resultant adverse performance. This has been emphasized by e-bay- "buy and sell with confidence" that constant knowledge and monitoring of your customers is paramount to credit management (E-bay, http://pages.ebay.com/help/confidence/hub.html 5/16/03).

Previous researchers on the parent parastatal (UEB) found that customer screening and rating was inadequate and also suggested that where capacity and characters are subjective, surrogates must be identified (Tumuhimbise, 1997, p.13, 41 and 67). This was found to be a handicap factor for the collection of debts by UEB. UEDCL/ UMEME's continued exhibition of media published defaulters seemed to be facing the same dilemma. (Appendices IX-XII and XV), in that there has been all along a poor manifestation of credit customer quality due to their inadequate credit customer evaluation and rating process.

It was however, noted from literature, that environmental influences, other than industrial norms, such as social culture, attitudes or prevailing laws tended to affect the above aspect and should be guarded against with minimum controls (Biribonwa, 1997 Tumuhimbise, 1997; AON, 2003; Appendix XXVIII), though with industrial norms where there are heavily capitalized firms with enormous customers like UEB/UEDCL, open account system is argued for with tight monitoring (Buckley 1982; Brealey 1991). This is a matter of fact in Uganda business context. UEDCL's inherited debt stock might have been a result of environmental waves too. Cost of credit analysis, nevertheless, must not exceed the expected benefits (Van Horne 2003). Credit policy, as is defined as a plan of action designed to minimize costs associated with credit extension while maximizing the benefits (Kakuru, 2002).

2.2.2 CREDIT TERMS AND PERFORMANCE

Published literature does not indicate consensus on the precise definition of this policy variable "credit terms." However several finance management authors have defined credit terms as "stipulations under which the firm sells on credit to customers (Weston *et al*., 1989 p. 295; Pandey, 1997, p.798; Kakuru, 1998 p. 115). A credit transaction should provide for expected due date or credit period, amount and form of payment, cash discount inclusive, in addition to other sales conditions like delivery, acceptance of goods, notification of defaults, replacement

etc as terms of sales through formal communications to either party to the contract and there must be an evidence of consent (Kirkman, 1997 p. 62). In most cases the two principal parties sign an agreement form and consent to each particular term executed as pre-requisite for future evidence (Saleemi, 1992, p. 304, Sale of Goods Act, Laws of Uganda, Cap 79).

Kirkman (1997, p.62) noted that "Credit Managers, if at all recruited, were not so serious with the conditions of sale, although they have been faced with occasional disputes, before then the importance of credit terms was not realized till the Romalpha Aluminum case in court of appeal in United Kingdom and reported in several financial journals in the early part of 1976; there after the introduction of "reservation of title" clause in conditions of sale was effected". Brealey and Myers (1991, p. 747-749) do not specifically define the terminology although it is noted that there are many trade terms across business boarders. (Salima, 2002 cited Wilson and Summers1998). In view of safe trading and protection measures especially for trade credit, it is argued by the eBay, "buy and sell with confidence" that product specifications are vital for both parties and should be part and parcel of the sales terms and conditions (eBay, 2003).

According to Bakibinga (1996) and Saleemi (1992), the Sale of Goods Act, Laws of Uganda, and Kenya, transfer of property under sales goods act section 20 to 50, include the terms of delivery, ascertainment or measurement, transfer of title in addition to payment terms and payment instruments. This may explain why there are no conclusions on what should be included in the definition of the credit term concept. Compounding it all UEDCL, has many credit terms aspects to consider for its customers in addition to credit period and discount that are involved in power consumption and bills delivery and payment process, pricing or tariff setting has been observed as a critical credit term in electricity supply worldwide. Onek, (2000) argued on this, in his 'Organizational competence for customer satisfaction'. It has been also

chronologically characterized by various moments of public woes against UEDCL/UMEME services (Lukyamuzi, 8.8.03, Suubi FM 2008).

a) Credit Period

This refers to the length of time for which credit is extended to the customer. It is set in terms of net dates. For example if a customer has to settle the bill within 30 days, the credit period is 30 days NET or "Net 30." Pandey, (2002), noted that a firm lengthens credit period to increase its operating profit through expanded sales, but net surplus is only earned when the cost of extended credit period is less than the incremental operating profit. With increases in sales and expanded credit period, investment in receivables would increase. Lengthening credit period is likely to stimulate sales but there is a cost of tying up funds in debtors (Weston, *et al*, 1989, p. 296). For example, if a firm changes its terms from 30 days to 60 days, the average debtors for the year may rise from Ush 100m to 300m, thus the increase caused partly by the longer credit period and partly by the large volume of sales due to credit terms relaxation or inappropriateness. Therefore, there must be a stable and optimal period in order to ensure certainty of funds flow timing and profitability.

Pandey (2002, p. 859-863) devised cost benefit analysis model based on incremental costing. The analyzed net result could be further compared to the internal rate of return required by the firm. Similarly, Weston, *et al*, (1989 p. 297-299) made an analysis model based on present value concept. Additionally, Brealey and Meyers (1991, p. 755-757) used "Net present concept and Decision tree" to arrive at the profitable credit period. Tumuhimbise (1997, p. 50-52) found out at UEB that the official credit period was 90 days and the average collection period was 258 days. At UEDCL, according to available records and published accounts, the practical credit float was over 105 days and the average collection period was over 275 days (Appendix XII). This results in accumulated receivables and bad debts in spite of increased sales (Gitman,

1982). UMEME, as well seemed to be witch haunted by this considering the long publicized huge debts list (Appendices XX-XXI)

b) Cash Discounts

This is an allowable cash deduction from the customer's prompt payment, as an incentive for payment within a specified period. It is normally expressed in abbreviation, such as "2/10 net 30 days". This means that a 2% discount would be granted if the customer pays within 10 days, otherwise, he has an obligation to pay within 30 days, after the invoice date. It is a tool used to increase sales and accelerate collections, generally, from slow paying customers. It is an incentive to motivate the customers to meet their obligations promptly (Pandey, 1997, Weston 1989, Brealey *et al*., 1991). Cash discounts may be used as an alternative to credit period lengthening and hardship in collection of debts, done to slow payers or in market imperfections situation (Pandey, 2002; Wijst, 2002; Kakuru, 2000; Brealey *et al*., 1991 and Weston, 1989). Price discrimination is prohibited in the trading practice (Brealey *et al*., 1991, p.735, Wijst *et al*., 2002). Therefore, the only solution to affect the price is by means of cash discount systems, apart from the production concept approach model in Chile by Enersis, an electrical enterprise (World Bank report 1995). Pandey (2002) and Battey (1977) also highlighted the danger of malpractices with cash discount, as well as power consumption rates differentiation. Therefore UEDCL with reference to its predecessors, UEB, with customer/ staff collusion culture, might have a reason of not extending this facility. According to available records (circular of 7th October, 2002) UEDCL had made a general persuasive tariffs change as an incentive to its customers, with also a new feature of government of Uganda relief (GOU) and rebate system portrayed in their invoices. The effect of granting cash discounts can be analyzed in similar manner like other terms by establishing optimal benefits (Weston *et al*., 1989 p.296). However, according to available records from customers and management circles, the discount seemed to have a negative effect on the customers' satisfaction and anticipated profits.

c) Credit Limit

This variable, although included here, has not been properly placed along the other credit policy variables such as credit standard, credit terms and collection effort, though it has been in theory discussed for a number of years. Pandey (2002, p. 867) discussed it with no identity. Similarly, Kirk man (1997 p.138) linked it with credit period referring to it as credit term aspect. Credit limit is defined as the amount of credit which the firm can extend to customers at any point in time. Kirk man (1997 p.105) said "it indicates the extent of risk taken by the firm by supplying goods on credit to a customer".

Credit limit must be reviewed periodically and the concerned customer must be made aware of the various credit limits that should be fixed gradually with a sense of personal judgement based on experience and prevailing conditions (Battey 1977 p.662; Pandey 2002; Kirkman 1997 p.138; Weston *et al.* 1989 and British Institute of Management 1994; cited by Kirkman 1997). According to Tumuhimbise (1997), UEB had no specific credit limits. UEDCL similarly, was found with no credit limit policy on the ground. Hence rampant individual large amounts of receivables and defaults were revealed, according to internal records debts aging schedules. The formulation and implementation of optimum credit terms with observation of credit limits do not only affect debtors but also the firm's working capital requirements, here there has been rampant liquidity crises in UEDCL.

d) Commercial Credit Instruments vis-à-vis Title (Property Transfer) and Settlements instruments.

Reviewed literature does not conclusively place this variable with the others. Brealey *et al.* (1991 p.748) argued that the terms of sale define the amounts of any credit but not the nature of the contract. He observed that repetitive sales to domestic sales are almost always made on open account and involve only an implicit contract. They are simply a record in the seller's

book and a receipt signed by the buyer. He further observed that "I Owe You (IOU)" is usually signed where there is no complication of cash discounts. Commercial instruments for future indebtedness usually are;

a. Cash on delivery (COD-Cheques or cash coins/papers)

b. Post dated cheques

c. Promissory Notes

d. Commercial draft, used as an arrangement before goods are delivered

e. Time draft or sight draft for immediate payment and acknowledgement by the customer;

f. Trade acceptance or bank acceptance as a result of the above; and

g. Irrevocable letter of credit for export purpose for greater certainty

AON (2002) on risk management of credit transaction was concerned with credit processing instruments, in addition to payment instruments, especially with multinational companies that are faced with more complex trade across borders. Evidence of commercial transaction documents such as Local Purchase Order (LPO), bills of lading or invoices should be exhibited with consent of both parties as contract executioners. Section 3 (4) of Sale of Goods Act Cap 79, laws of Uganda, differentiates sale contract effect positions. Where the property in goods is transferred from the seller to the buyer the contract is called a sale, but where the transfer of property in goods is to take place at a future time, or subjected to some conditions thereafter to be fulfilled, the contract is called an agreement of sale. The essence of this statement is about the state of transfer of property (ownership) in goods and risk of loss (Saleemi, 1992). The terms specifically for delivery state, measurement, approval on delivery, transfer of titles are stipulated in section 20 and 21 of Sales Act Cap 79 laws of Uganda. Therefore, it is noted that, trade credit transactions do not require only commercial instruments connected with payment or acknowledgement of indebtedness, but also instruments connected with goods and services delivery, measurements for economic value ascertainment (Invoicing).

In the case of UEDCL, the credit instruments include also metering, for service delivery and consumption ascertainment as the basis of invoicing or billing that should be consented by the customers if approved by Uganda National Bureau of Standards and "ERA" and should be exhibited as evidence for indebtedness obligation. Postdated cheques were occasionally used in addition to cash settlement of bills. Swapping was used on government or big institutions. However, the receipts process for receivables clearance was still a problem despite the introduction of the decentralized system according to public out cry about delayed reflection of payment acknowledgments in UEDCL invoices. There has been on the whole irregularities found within the process (Appendices XVI-XVII). This was an indicator of poor quality of services rendered to customers.

2.2.3 COLLECTION EFFORTS AND PERFROMANCE

This is the third credit policy variable that can be manipulated simultaneously with the credit standards, terms and limits, as a way of affecting the investment in accounts receivables (Pandey, 2002 p.790). It has been defined as the chronological pattern according to which the receivables created during a given interval are converted into cash. Hence invention of credit policy variable concerned with credit monitoring and recovery procedures (Tumuhimbise, 1997 p.25).

Prompt collection is needed for faster turnover of working capital, while limiting collection costs and bad debts and maintaining collection efficiency. Regularity in collection keeps debtors alert and they tend to pay their dues promptly (Pandey, 2002 p.863). Similarly, Kirkman (1997 p.177) observed that the decision to sell goods on credit must be followed by establishment of proper collection policies in order to avoid cash flow or liquidity crises. Therefore, collection effort is what is referred to as receivables collection system, with

predetermined guideline actions (policies) and procedures, laid down for practicing, modified by collection capacity provision (human resource, information and logistic provisions for credit sales accounting, monitoring and controls), in an effort to accelerate collection from slow payers and to minimize the collection related costs and bad debts while observing the customers relationship (Lawrence, 1998 p.5; Boyce, 1976 p.6; Evancerich *et al.*, 1991 p.448).

UEB was found to have a slow pace on the follow up of domestic electricity consumers who had not paid. Eighty three (83%) percent of them were beyond 90 days and the 17 percent that was below 90 days were as a result of a special collection program (Operations Thunder), similar to the Operation Sigma of UEDCL (Tumuhimbise, 1997 p.25-29). However, such operations were not popular with the public and the regulatory authority (ERA). There was evidence from internal records showing 51% collection efforts by UEDCL suggesting that collection policies and procedures had not been adjusted from those of the parent parastatal, UEB, suggesting that the increasing collections were probably due to tariff hiking than collection efficiency. UEDCL on the other hand without a proper credit control department was still inclined to the old approach inherited from UEB, where it was taken for granted that customers would immediately clear their debts which obviously was not the case (Tumuhimbise 1997, p.62) and later on waiting for disconnection of defaulters as last resort, consequently was trapped by persistent uncollectable receivables that had ultimately ended up in bad debt losses according to internal records and published accounts. Explicitly, the collection effort policy and practices should involve the following functional operations.

(a) RECEIVABLES MONITORING METHODS

The driver with a message echo to the brains and eyes, basing on a perfect working gauge, speedometer, is made aware of the remaining amount of fuel in the tank compared to journey destiny so that appropriate action is taken. Similarly, the credit controller with accurate

information provision most likely from sophisticated information computerized gadgets is accessed to knowledge of what customer has paid and the likely defaulter (Brealey *et al*., 1991 p. 759; Tumuhimbise 1997 p. 25 and Weston *et al*., 1989 p. 259 – 296).

The traditional approaches for monitoring debt collection status are:

 i. Average collection period, and

 ii. Aging schedule, with the collection experience matrix as advocated by Pandey (2002)

 i. <u>Average Collection Period</u>

  Average collection period defined by the following formula

$$ACP = \frac{360}{\text{Debtors turnover}} = \frac{\text{Debtors x 360}}{\text{Sales}}$$

 Where:

ACP is the Average Collection Period or the time taken or remains outstanding collection period or the time taken to settle the invoiced bill on average.

Debtors mean the average debtors i.e. opening plus closing balance divide by 2 and; 360 are the assumed effective days in a year.

The average collection period so calculated is compared with the firm's stated period to measure the collection efficiency. The normal collection period for UEDCL was 90 days but was found exceeded by a credit float of over 105 days and ACP of over 275 days, an indicator of working capital tie up and liquidity crisis, hence resorting to borrowed funds with heavy interests to meet the stretched financial obligations in time.

 ii. **Aging Schedule**

This approach removes the limits of the average collection period (Pandey 2002). Empirical observations in UEDCL revealed this was the form of information provided by the Billing

Information Technology Systems (BITS), roughly on quarterly basis indicating the stratified data of customers for each particular maturity age viz 90, 180 and above 360 days. However networked system for that information dissemination was inadequate, hence resulting, probably in delay of collection prompts.

iii. Collection Experience Matrix

The above traditional methods only give differential signals about the status of the debt. They aggregate sales and book debts data differently (Pandey, 2002, Tumuhimbise 1997). On the other hand, the collection experience matrix approach is a method that disaggregated the book debts data and sales over a period of time and a matrix is constructed. However this method has not yet been adopted by UEDCL.

(b) REMINDING PROCESS AND RECOVERY PROCESS.

Most authors on credit management recommend that communication by use of modern technology or information systems should be in sequence, aiming at accelerating the debt collection from the slow payers who seem to be either financially crippled, unaware, or trying to buy time because of the ineffective reminding system. Therefore, following a survey conducted by the Institutes of credit management in UK companies, various communication techniques and methods were recommended (Kirkman, 1977 p. 180). These included the use of letters, telephones, telexes, or telegrams or computer networks and personal visits.

However, invoices should be delivered urgently as fore action (Kirkman, 1977 p. 179; Onek, 2000). Today, utility companies like Uganda Telecommunications (UTC), National Water and Sewerage Co-operation (NWSC) and UEDCL/Umeme consortium, are trying to minimize the bills delivery float by hiring outside sources. NWSC has gone far by prior wiring communication to customers before invoice delivery. This has been noted to be a healthy control, for enterprises with numerous customer accounts and repetitive orders (Brealey, *et al*.,

1997 p. 757). Most of the above stated enterprises have designed invoices catering for customer accounts statement as well as due current bills. However, with further credit sophisticated techniques, electronic invoicing is soon to be introduced (Radecki *et al* 1999), an issue emphasized by Manning LG. *et at* (2004) with sales, Technology strategy. Local example today is National water and sewerage corporation (NWSC).

2.3   GENERAL CREDIT EXTENSION CONTROL AND PERFORMANCE

Control in management, according to Cole 2001 p 225 – 241), is viewed as a process of monitoring and measuring the once planned, organized and motivated activities (POMC); Hence with a motive of measuring routine or overall performance against aims, objectives and set budgets or standards, for corrective actions or keeping plans on course. Similarly, Lawrence (1995) and Boyce (1976) were with the same view. Therefore control is concerned with feedback systems or timely evaluations through out the organization activities, quantitatively or qualitatively. It is also one way of risk management or error prevention process cautious of uncertainties that are internal or external (Pandey, 2002). Thus should be backed up by concerted effort (Cole 2001). United States Energy Regulatory Commission (ERC) with "Energy Round Trip Trades" argues for aggressive receivables accounting, controls and collection procedures (Kennedy 2003).

Empirically in general, sound quality of credit policies management must be executed effectively (i.e. properly established, implemented and controlled optimally), to enhance the performance of the organization (Pandey 2002 p 790). The basic elements of control outlined by Cole (2001; p225) are; i) establishment of performance standards; ii) measurement of performance; iii) compassion of actual results against standards and iv) taking corrective action where required. The contributing function consists of planned actions (policies) and decisions

managers, with their team, undertake to ensure that actual results are consistent with the desired manipulated or implemented policies so as to affect the sales volume, collection period and consequently investment in accounts receivable as well as return on capital invested (ROCE) (Ivencerich, *et al.*, 1991; Pandey, 2002). Kirkman (1997 p. 235) argues that several management reports, routine and periodical, are required and information should be provided regarding the effect of credit policies and procedures i.e. sales performance, the investment in trade debtors and Credit costs.

UEDCL on one hand was set to achieve specific goals/ objectives. These include ensuring customer satisfaction, having a well facilitated and motivated work force, optimal utilization of resources, minimized energy losses (non-technical), improving billing/meter reading, improved revenue collection, increased customer base, all stakeholder appreciation, reduction on bureaucracy/decision making and be more social conscious organization (UEDCL strategic Plan 2002). However, environmental factors affected the successful implementation of the policies and the ultimate goals of the credit management hence the evolution policy management function of Risk management designs for possible guard againsting uncertainties within the credit management process, (Pandey, 1997; Brealey, 1991 p. 627)

On one hand, the major activities of the credit controller are to aim at minimizing bad debts and other associated receivables costs. The policy therefore should aim at speeding up the collection of dues with prudence. (Pandey, 2003; p. 808; Salima, 2002). If collections are delayed, chances of defaults increase, and if alternative arrangements of finances are not made to sustain production and sales, this affects organization liquidity and working capital as a whole. Therefore, this requires proper controls, risk analysis, credit accounting, monitoring and timely evaluations, as the receivables are one form of the firm's investment decisions that must be made diligently (Kirkman, 1977; Brealey *et al.*, 1991 p. 760; Pandey, 2002 p. 516-517, 808).

Mitigation process may include factoring and insurance, litigation arrangements as risk process, bad debt write off and choice between liquidation and re-organization if the worst has occurred (Kirkman, 1997 p. 198-233; Brealey *et al*., 1991 p. 760 – 766; Pandey 2003 p. 812 – 826). However, UEDCL non credit sales accounting authenticity seemed to be a major hand cup as noted from the internal and external sources. Nevertheless, an effective control aims at organizational performance evaluations in view of the corporate goals achievements. In case of UEDCL performance was evaluated against its above stated objectives (achievable goals), customer satisfaction in addition to monitoring methods (2.3.3.0), was evaluated in regard to customer/stakeholders satisfaction.

2.3.1 CUSTOMER SATISFACTION

Customer satisfaction refers to the fulfillment of customer expectations and meeting their needs. It is a reflection of organizational competency or its capability in delivery of services to the customers, i.e. responsiveness, reliability, efficiency, effectiveness, and customer commitments (Onek, 2000 p. 50) by determining the needs and wants of target markets and deliver to the desired satisfaction more effectively and efficiently (Kotler, 1997 p. 16). Similarly economists agree to the same and the desired satisfaction must be supported by effective or responsive demand, value preference over alternatives and willingness to pay (Dwivedi, (1997) p. 47; Onek, (2000) p. 50-51; Balunywa, (1998) p. 167). Kotler (1997) noted that it is cheaper to maintain the old customer than to look for a new one though the economists and marketers strive for market share maximization or customer base expansion. He noted that a satisfied customer always:- Buys again, talks favorably to others about the company, pays less attention to competing brands and advertisements and buys other products from the same company. Therefore, the key to customer retention is customer satisfaction, where total customer value creation is the competitive advantage aimed at (total of all the products, services, personnel and image inclusive (Kotler 1997; Manning *et al*, 2004).

Today, in the arena of privatization in Uganda, organizations like MTN, CELTEL, Radio stations and various banks are trying to forge out various tactics in order to win more customers. The admired Japan achievements are based on Total quality management concept with inspiration, motivation and all stakeholders' involvement (Total organization commitment) as an essential motion (Cole 2001; Manning *et al* 2004).

Customer satisfaction is one of the parameters used to measure performance or competencies of organizations (Drejer, 2000, Onek 2000), as one of the final effects of the credit policy manipulations (Pandey, 2002 p. 790). According to UEDCL's internal records and public woes through various information media (Study appendices) it seems to be apparent that customers were dissatisfied with its extended services, specifically with power connections. Metering, invoicing, bills delivery and collection procedures. The study used the above performance indicators evaluate customer satisfaction.

2.3.2 STAKEHOLDERS APPRECIATION AND CORPORATE IMAGE

The term stakeholder refers to owners, creditors, managers, internal staff and other interested parties (Pandey, 1987, p. 28-29). However, for this study, Energy services buyers (Customers) were specifically isolated from other stakeholder.

Today, many organizations in Uganda are striving to achieve self sustainability or survival ensuring stakeholder values with corporate image. Most of those recognized to have a positive image include MTN, Shell, Stanbic Bank, Crane bank and National Water and Sewerage Corporation that have the human resource concern and Customers at heart.

In its strategic corporate plan, UEDCL pledged commitment to meet the interests of its stakeholders, as previously noted in the strategic plan 2002. However, there are public perceptions tending to view that there been no genuine management changes in electricity distribution sector due to inefficient services and persistent losses due to defaults registered by UEDCL/UMEME, according to various media publications. The installation of informal campaigns like Operation Sigma alongside the formal organizational structure was a manifestation of a human resource management dilemma. Moreover UEDCL consultancy reports indicated poor working relationship between the management and support employees, l*et al*one the portrayed controversial chronic power losses year by year according to published accounts. Therefore, stakeholders' appreciation was measured through credit policy operation returns as effects of credit policy on performance in view of stake holder's values (investors). The human resource was assessed by their efficiency ratios and attitude towards UEDCL, their employer or job security and staff commitment. To day modern marketing gurus argue for sales partnership strategies, (Manning L.G. *et al.,* 2004). In fact some local organizations witnessed, on certain visits, such as Uganda shop rites have resorted to employee bonuses share or corporate shareholding as sales commissions.

2.4   SUMMARY OF LITERATURE REVIEWED IN THE CONTEXT OF TRADE CREDIT MANAGEMENT IN UEDCL.

Theoretical and empirical studies in the Trade credit management arena, in relation to UEDCL case study and guided by the study research objectives and questions out lined in chapter one, generally, aiming at investigation of (UEDCL) credit management policy and assessing its relational effect on performance in view of customers/ stakeholders appreciation were reviewed. Mostly it was drawn from the developed countries due to local scenes infancy. Archives of institutions of higher learning, enhanced by internet café, have been utilized.

a. Trade Credit Concept

This is the term used to refer to the sales transactions (deal) where money is not exchanged at the point of delivery. There are noted generic forces behind it that are compounded by credit motives and competitiveness, marketing, pricing, investment, and finance according to various authors. Hoverer, there are recognized trade credit risks involved; futuristic economic value plus its associated costs and bad debts, though the growing trend of the trade practice implies that it is an "inevitable trade evil" in the eyes of business trade practitioners and researchers. Arbitrarily, trade off between trade credit benefits and costs have to be weighed carefully by adoption of optimum course of decision, by adequate credit policy design, implementation and control though their integration and embedding in the entire organization structures and systems.

Credit policies consist of three major composite variables that should be simultaneously manipulated for efficient operation, namely:- credit standards and analysis, credit terms and instruments and collection effort. (*Referred to as study independent key variables)* These must be optimally developed for their effectiveness hence a need for the policy functional validity factors (*study modulating variables)* designs to support them, by embedding and integrating them in the entire organization structure so that concerted effort could result into credit customer/services quality portfolio (quality service assurance) focusing at the corporate goals. The study functional validity factors include the customer data management, credit capacity management, (Manpower and logistics), and risks management or control frame work. The process has to take into environmental risks due to uncertainties (study intervening variables) that are perceived to upset the credit extension process. In UEDCL, it was found that its credit management process was inadequately constituted in terms of credit policy, credit integration and embedding, as well as control and risk management procedures, hence there was room for its management to improve on it.

b. Credit Management Policies and performance (Policy establishment, implementation/control and effects).

(i) Credit standards and analysis are criteria upon which customers are evaluated for determination of appropriate trade term (Stringent/ Liberal) and other appropriate actions. These must be based on information internally or externally generated through credit house information centers or from customers themselves with reference to the criteria of five "Cs", according to (Weston and Copeland 1989 P. 292), namely character, capacity, capital, collateral, and condition. High quality credit customer portfolio is subsequently established by the degree of payment response rate, (time period and default rate). UEDCL/UMEME seem to be carrying on a relaxed credit customer evaluations due to longer periods of 275 days beyond the official 90 days and high receivables defaults resulting into operational losses according to published accounts.

(ii) Credit terms and instruments are stipulations under which credit sales are transacted. In nutshell these are the stipulations agreed on by both parties, but set by the vendor and refer to period in which to pay, and the instruments to be used, the debt volume limit and incentives set within the sale contract, inclusive of prices or Tariffs. There are many trade credit terms unexplored but are similar across the trading firms as empirically noted by various researchers in the credit management field. Those for UEDCL include billing process that involves service connections, metering, pricing or invoice computation as well as bills delivery. Good designed and implemented credit terms ensure prompt payment by the customers. However, there have been various moments of public outcry against UEDCL energy invoices an indicator of unjustified credit stipulations in the eyes of the public.

(iii)   Additionally, collection effort is the laid down polices and procedures for credit monitoring and debt collection promptness. Credit monitoring techniques and reminding procedures coupled with sound information system and logistic must be established to avoid huge defaults and bad debts or ultimately organizational losses.

(iv)   All in all, emphasis should be put on controls for routine and final performances evaluations to ensure corrective actions, within the time limit, with the aim of achieving the desired budgets/ standards and ultimate corporate objectives/goals. However, previous researchers found the entire credit management system of UEB (UEDCL parent) inadequately designed, implemented with weak controls that resulted into poor credit policy performance, amidst/staff collusion observed character (Tumuhimbise 1997; Biribonwa 1997; Onek 2000). In case of UEDCL public woes, based on witnesses from various evidences (internal and External), on energy bills and controversial energy losses, UEDCL seems to be still having a dilemma of credit management conceptualization.

CHAPTER THREE

METHODOLOGY

3.0   INTRODUCTION

This chapter presents the methodology through which data was gathered to achieve the study objectives. The adopted strategies were applied in the study with regard to the research aspects of validity and reliability, forming the sound basics of findings presented, analyzed and interpreted/discussed and, thereafter, conclusions with recommendations were made. It provides the research design, description of study population, sample frame, sample size and

sampling procedure, the collection techniques and instruments used in the data collection, processing and analysis as well as study limitations and constraints encountered.

3.1   RESEARCH DESIGN

The research used a cross sectional survey design within the case study (UEDCL). Basically, the research was a case study of UEDCL, reviewing its credit management system, as a successor public utility company. The case study enabled the researcher to carry on an intensive investigation (in depth) of UEDCL credit management systems, in its natural set up, so as to give a holistic account for its effect on performance (Saunders *et al.,* 2003). An inbuilt cross sectional survey design involved gathering data from the surveyed population samples at the particular period of the study. It helped the researcher in obtaining "a cut across", broad based and representative overviews of the surveyed population samples at once within the study period (Fisher *et al.,* 2007 p.59).

The study along that line adopted inductive and deductive approaches deemed appropriate in view of the study objectives and questions. These approaches, in the researcher's view, provoked him to be flexible in the data collection method designs within the same study. Inductive approach was aimed at obtaining new insight information, through exploratory techniques, and descriptive techniques mostly with open-ended questions for discovery of new insights of UEDCL credit management policy and other facts like attributes/characters, while deductive approach designs were theory/ hypotheses intended to extract data for explanation and/or analysis, so as to account for the relationship and effects of UEDCL's credit management policy on performance. The above process was supplemented by integration of qualitative and quantitative approaches for data collection, processing and analysis in order to derive text words, descriptive and inferential statistics. The research, therefore, used multiple methods designs to meet the study challenges concerned with answering the "why", "what", and "how" questions from multiple and broad based sources of evidences, as stipulated in the

ongoing paragraphs. According to Saunders *et al.,* (2003), multiple methods designs allow the use of different data collection methods for different purposes in the study and, on the other hand, this enabled research triangulation to derive valid and reliable evidences on controversial or contentious research issues. All in all the designed strategy was specifically meant for primary and secondary data collection.

3.2.   STUDY AREA

UEDCL'S aging debt schedules' (2001-2003) extract showed that Kitintale was the worst hit by the receivables collection inefficiency, with a default rate of over 11 billion shillings, over 70% of which were domestic customers. Therefore this study was conducted in Kitintale (UEDCL) District, Kampala Customer Area that was considered to be representative of UEDCL customers' characters as observed by Tumuhimbise (1997); Biribonwa (1997), Oneck (2000)

3.2.1   STUDY POPULATION

The study population consisted of domestic energy consumers and other participants that interfaced with UEDCL routine operations.

Consumer populations were scattered and located all over Kitintale District and included industrial areas of Namuwongo, Jinja Road, Kibira Road, First to Seventh streets, Kiswa, Mbuya, Bugolobi, Kitintale, Mutungo, Biina and Luzira. They were identified by geographical location zones, villages, transformers, and marked feeder as per the Engineering Department of UEDCL. However there were discrepancies found on the ground referencing of the customers. The total population of consumers in the district was 10026 domestic consumers based on the reconciled monthly billing schedules with the District consumer registers that were also used to compute the sample framework.

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The other study participants were from:-

(i)   UEDCL management (Ten senior managers);

(ii)   District support staff (Nine subjects);

(iii)   Stakeholder (Three) and collection agents (Three) – (interest group).

3.3   SAMPLE SIZE AND SAMPLING PROCEDURE

A sample size of 400 subjects was derived from the computed sample frame work of 10026 district domestic customers as a major study group for statistical inference. This was determined in accordance with the desired study objectives and answers to the questions and, in reference to the various authors' mathematical formulas and statistical tables that came up with a figure of 385 subjects but smoothed to 400 subjects for validity and reliability, and in recognition of the inertia law in view of sample precision. The study adopted, formulae by fisher *et al.,* cited by Mugenda *et al.,* (2003), corroborating it with Krejcie and Morgan (1970) table on the sample size determination (Appendices xxii and xxiii).

The researcher adopted a simple random sampling procedure and assigned to each domestic customer numbers from 00001 to 10026 within the computed sample framework base. This framework was computed in accordance with the reconciled monthly billing schedules and the District Customer Register. Using Tippets Table of random numbers, 400 subjects were selected.

The other study group was purposively selected considering their credit management routine interactions with UEDCL and acceptability to be part of study respondents as follows:-

Ten UEDCL senior Managers; sourced from Organization chart.

Nine support staff at the district; sourced from district register

Three Debt collection agents sourced from Kampala District Customer service office and;

Three stakeholders (Government representatives-Derived authority from Electricity Act 1997).

3.4   DATA COLLECTION METHODS

The research methods and tools used were deemed to be relevant in view of the multi methods research strategy that required multiple data sources of evidence. The data collected were from primary and secondary sources. The study utilized a combination of survey interviews, observation and documentary or content analysis techniques.

3.4.1   RESEARCH INSTRUMENTS

The research instruments (tools) included questionnaires, interview schedules, observation guide schedule, check lists, libraries, UEDCL computer facilities, diaries, books and internet.

3.5   RESEARCH QUALITY CONTROL

a) Validity

Validity means the extent to which an instrument measures what it was constructed to measure (Wangusa T. 2007 p44). In other words, it is a researcher's process of ensuring that any measuring instrument selected measures what it purports to measure or portrays the truth in findings that are consistent with the desired objective or theory. Reliable but invalid instruments may yield consistently inaccurate results (Ahuja 2005 p337). For example, when an electricity meter was not properly set (not calibrated) it gave less or more consumption readings consistently for sometime before being tested. This measuring instrument was said to be invalid as it lacked the measuring standards suitable for the purpose. According to research gurus, there are few measures of ensuring or confirming instrument validity namely; (i) Content/face validity test. (ii) Criterion-related validity test and (iii) Construct validity test.

For the study, the researcher sought expert opinions on the instruments contents, and afterwards made adjustments. A Pilot study was conducted on 40 random sampled subjects and asked to

assess on the questionnaires or to comment on the instruments content by indicating relevant and irrelevant questions. The statistical formulae was applied for computation, Sekaran (2000), using item analysis and assessment, for content validity index that follows:.

CVI = <u>Number of questions rated as relevant(R)</u>

Total number of questions in the instrument (R+IR)

The results were as indicated in appendix XL.

The results showed that the content value index was in the range of 0.8571 and 0.9298 which was above 0.5 and was a satisfactory range according to Sekaran (2000).

On the other hand, secondary data sources and contents were evaluated with caution for their overall suitability of the study purpose. Data source credibility, data update, biasness or likely distortions and timing aspects were considered through content analysis technique.

b) Reliability

Reliability occurs when the instrument used in the various series of measurements yield the same results, hence proved to be consistent in measurement as long as the measured variable has not undergone a change. (Wangusa. T. 2007 p43). Likewise, reliability can be ensured by various methods that include; (i) Test-Re test, (ii) Split half method, (iii) Alternative forms, (iv) Average item–Total correlation, (v) Average inter–Item correlation. The researcher on reliability test of the instrument (customer questionnaire) used internal consistence technique with single pilot survey questionnaire on 40 subjects used in the content validity test above. The results showed homogeneity within the two half split tests. It was determined by use of cronbach's coefficient alpha based on Kunder Richardson (K-R) formula (Appendix XLI) cited by Mugenda *et al.,* (2003). Cronbath's alpha was used to determine the average value of reliability coefficients obtained for all possible combinations of items that were split into half tests. The results by use of SPSS output revealed that the standard item alpha was 0.8192 which was considered to be reasonably good, according to George and Malley, (2003) cited by Glien

and Glien, (2003). Moreover, the final study findings on variables from which a conclusion was derived was subjected to a probability test using Parsons correlation coefficient that showed significance at the level of less or equal 0.01 or less than 0.05 and an SPSS computed reliability coefficients results showed 293 cases, 8 items and alpha of 8089.

3.6   DATA COLLECTION PROCEDURES

Prior to data collection undertaking in the field, an introduction letter was sought from Uganda Management Institute and accessibility was granted by UEDCL management. Three research assistants were trained, and introduction letters were served to them for research subjects' accommodative welcome (Appendices xxiv and xxv). On the whole, research instruments were formatted according to the research themes, consistent with research objectives and questions within the research conceptual framework (Appendices I to IV). The instrument formatting were also in consistence with the study variable measuring scale on the study subject responses (ratio-five points on the continuum). "The more precise the level of measurement scale the greater the range of analytical techniques are available to you" (Saunders *et al.,* 2003 pg 330). Introductory rapport, guideline instructions, anonymity and "thanks in advance" were aspects observed.

Primary data was derived from individual responses. It was sourced by application of the survey interview and on spot observation with the support of guideline schedules and self administered questionnaires (Appendix I-IV). Customer questionnaires were supplied by the research assistants, guided by area map schedule, under the researcher supervision. Other questionnaires and interviews were conducted by the researcher for protocol observation. Customer survey interviews/questionnaires extracted customer behaviors and elicited data regarding to their attitudes/opinions they had towards the UEDCL credit management system. Other study participants' interview/questionnaires elicited their expertise experiences and

opinions on how UEDCL credit management system was designed and implemented as well as their notions on system improvement or shortcomings' redress. Observation technique was used purposely on spot checkups or new insight exploration or triangulation to yield most informed research data on contentious or controversial researched issues.

3.7   DATA ANALYSIS

This was a process of transforming the raw collected data into meaningful data to derive informed decisions (Ahuja 2005). Data collection was followed by a data reduction process that was executed manually and electronically. It involved editing, categorizing, coding, computerization and data explorations with statistical analytical techniques. Data editing was done with a view of completeness, uniformity and accuracy.

Data was analyzed both qualitatively and quantitatively with the view of bringing up meaningful information to achieve the study objectives. Questionnaires, interview/observation schedules were first categorized according to the study participants groups and relevant open ended responses extracted according to the set research themes. Secondary data sourced from various documents of institutions' archives were analyzed, using content analysis techniques, qualitatively and quantitatively. Further data manipulations were done electronically by support of an advanced data management software package-statistical package for social scientists (SPSS) which is suitable for social studies and user friendly (Fisher *et al.,* 2007; Saunders *et al.,* 2003). Computer manipulations derived, through data exploration, were frequency distribution tables and diagrams showing comparable occurrences and trends in consistence with the study themes/ variables

Further statistical correlation analysis was done to achieve the research objectives and questions that were concerned with assessment of credit policies functional relationships and effects on UEDCL performance and significance. Hence simple but powerful statistical

correlation analysis mode of SPSS, adopting Karl Pearson's coefficient of correlation or product moment correlation coefficient denoted by "r", (Ahuja 2005 among others), was engaged in determining variable-variable relationships and significance for inference analysis.

3.8 MEASUREMENT OF VARIABLES

This was a process for measuring variables to meet the study challenges. Therefore this involved measurement of operational concepts (study theme variables). There are four categories of measurement scale namely: Nominal, Ordinal, Interval, and Ratio in that order. Assessments in the study were done by measurements of the variables (attributes, attitudes/opinions) derived from a precise level of measurement scale (Ratio) that was deemed suitable for all kinds of technical analysis and yet is compatible with other levels, with adoption of Likert method, in view of the study purpose that was mainly concerned with prediction of correlation relationships. Pearson's statistical test is one of the best measures of association as it involves determination of correlation coefficient and significance (Fisher *et al.,* 2007: Ahuja 2005: Saunders *et al.,* 2003). This is denoted by 'r', meaning coefficient taking on any values between +1 (between perfectly positive or perfectly negative). According to Ahuja 2005 citing Burns 2000 p265 came up with a general guideline for interpreting a correlation coefficient 'r' as follows;

i)   Correlations of 0 means that the variables are perfectly independent

ii)   Correlations of (0.20 to 0.40) show low coefficient or weak relationship between the variables and with only 4% variance accountability [(ie $r^2 = 0.20$ X 0.20) X 100].

iii) Correlations of (0.40 to 0.70) showing moderate correlations but significant enough when combined with other correlations in a multiple equation.

iv)   Correlations of (0.70 to 0.90) are strong enough to make possible group predictions that are accurate enough.

v) Correlations of Over 0.90 indicate a very strong or close relationship between the two variables. The study assessments of the credit policy relationships and effects on performance were based on the above measurements. The results showed a close and significant relationship among the credit management policy operations and performance, suggesting that an improvement in one or more could enhance the other operations and ultimately organizational performance.

3.9   STUDY LIMITATIONS

The limitations of this study were twofold;

1. This study was conducted in only one district. Therefore, generalization of the findings to all areas of UEDCL operation in Uganda has to be cautiously done.

2. This was a case study based on cross sectional survey design. Therefore, unlike in longitudinal studies, temporal relationship between "cause and effect" may not be conclusively drawn.

3. The study was conducted during transitional period from Government status to privatization process with an impending takeover by UMEME consortium.

However, UEDCL customers' characters homogeneity and the desired 'on going' entity succession conception", by both the Government and UMEME tended to make the research findings hold water. Healthy opinions and facts gathered from UEDCL staff with its consortium (UMEME) staff within the general credit management circles plus straight forward stakeholders' representatives' views added confidence in research, though varied degrees of customer enthusiasms on UEDCL performance, staff anxieties and restrictions on information released, at that particular situation, could not be over ruled.

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CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

4.0   INTRODUCTION

The findings are presented according to research objectives, and analysed according to identified credit management operations at UEDCL, with reference to the literature reviewed (as portrayed in figure III), using descriptive and inferential approaches. The statistical tests used were frequencies and Pearson's correlation tests. Qualitative data was integrated to support the statistics.

4.1   RESPONSE RATE

The study was conducted on the under mentioned categories of subjects whose characteristics are indicated in the tables below:-

TABLE II: DOMESTIC CUSTOMERS (MAJOR STUDY GROUP) RESPONSE RATE

TYPE	SAMPLED SIZE	RESPONSE NO.	RESPONSE RATE
DOMESTIC CUSTOMER	400	293	73%

There were 293 customer questionnaires that were filled and returned out of the 400 supplied questionnaires to the surveyed domestic customers. Most of the non responses were due to the reasons incorporated in the main findings on the controversial huge bills (4.4.3.3). Nevertheless, the response rate of 73% was within the normal outturn response rates observed by various researchers (Saunders *et al.,* 2003 p.59).

TABLE III: OTHER STUDY GROUP RESPONSE RATE

TYPE	SAMPLE SIZE	RESPONSE	PERCENTAGE
a. Management staff	5	5	100%
b. Support staff	9	9	100%
c. Collective agents	3	3	100%
d. Stake holder (Government Agents)	3	3	100%

All the above subjects of the study group responded positively to their questionnaires by filling and returning them (100% response outturn). This was due to the researcher prior contacts with them, hence, on indication of their acceptability and willingness. Moreover, these were the main interacting parties with UEDCL credit management policy operations. Hence, collected data from them were paramount to the study.

4.1.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

TABLE IV: DOMESTIC CUSTOMER AGE GROUP

AGE BRACKET	FREQUENCY	PERCENTAGE
18-35	94	32
36-45	103	35
46-55	55	20
Above 65	38	13
TOTAL	**293**	**100**

TABLE V: DOMESTIC CUSTOMER EDUCATION STATUS

EDUCATION LEVEL	FREQUENCY	PERCENTAGE
Primary Level	51	31
Senior 1-6	117	40
Diploma and above	85	29
TOTAL	**293**	**100**

Findings above (Table VI and VII) revealed that most of the domestic consumer respondents were within the mature working bracket (87%) and with reasonable education status (69%) hence, portraying payment ability character and the literacy among the consumers who filled the questionnaires.

However, contrally to the above perceptions, previous researchers observed that education and income statuses were not correlating significantly with consumer intentional obligation to pay (Tumuhimbise1997). Premises occupants' statutes character was revealed in the filled questionnaires as indicated below (TABLE VI)

TABLE VI: PREMISES (OCCUPANTS) STATUS

TYPE	FREQUENCY	PERCENTAGE
Landlords	140	48%
Tenants	153	52%
TOTAL	**293**	**100%**

Source: Primary Data

The findings above revealed that majority of the UEDCL energy consumers (52%) were just tenants. Further investigations a little more, revealed that 54% of the respondents that posed

as Landlords were actually tenants who had signed on behalf of landlords. This confirmed an observed indicator of volatile (nomadic) consumer status in UEDCL (Biribonwa 1997; Tumuhimbise 1997), an indicator, partly, of high default rate cause found in UEDCL.

TABLE VII: ENERGY PURPOSE (DOMESTIC CONSUMERS)

Group suppliant list appliances (N=293)

CATEGORY LABEL	CODE	FREQUENCY	PERCENTAGE
Light	1	293	100
Radio	2	293	100
T.V	3	175	60
Flat Iron	4	57	19
Refrigerator	5	55	18
Cooker	6	18	6
Kettle	7	11	3
Heater	8	10	3
DVS/DEC	9	3	1
Fan	10	3	1
Computer	11	12	4
Washing Machine	12	3	1

Findings on the purpose of domestic customers energy procurement was mainly for lighting (100%), Radios (100%), TV (60%) and followed by flat iron (19%), Refrigeration (18%). This indicated that most of the power consumed was for the common man's household purpose. Considering the customer's tenancy statuses reflected in Table VI, the individual kilowatts consumed were low but it was found that these could be accumulated if one meter was used by many households' tenants within one premise location. Hence, this meter looping character was found misinterpreted in varying the rates of tariffs by UEDCL.

4.2 UEDCL MANDATORY CREDIT MANAGEMENT POLICIES ESTABLISHMENT.

Objective one of this study was to examine the UEDCL's credit policy establishment. This objective was achieved by ascertainment of the existence of a policy document and examination of its contents against recommended international trade credit policy standards.

The credit policy was found in a manual titled, "The UEDCL POLICY AND PROCEDURES MANUAL VERSION 2001." The stated objective of developing a written policy in form of a manual was to ensure that; (i) "All parties are aware of the policies and procedures that have been issued out in accordance with the instructions of UEDCL management; (ii) "All parties refer to the same version of document issued." This was an operational guiding Bible though subjected to dynamic changes. Therefore this was the document to which all parties concerned were supposed to refer during the execution of duties.

According to the manual, UEDCL's entire business operation was based on credit extensions sales strategy, moreover electricity as a commodity cannot be stored (Biribonwa, 1997). Credit extensions were enhanced as a National social service policy on behalf of the government, and an industrial trading incentive practice seen as justifiable within the circumstances of the developing world (Weston *et al*., 1989 p.239; Kakuru, 1997 and 2007; Wiljest *et al.,* 2002).

The major UEDCL operations identified by the manual that were related to credit management were; customers sourcing, and service connection; invoicing process (including meter readings, billings, and bills delivery); revenue collection effort inclusive of cash receipts and accounting, delinquent debts recovery process, that were similar to the authoritative credit policy variables which include credit standards and analysis for (customer sourcing); credit terms (stipulations for service delivery, and invoicing) and collection effort- credit monitoring and debts recovery (Pandey 2003). Therefore, this was an indicator that, UEDCL had established, primafacie a mandatory credit management policy.

4.3 CREDIT POLICY FUNCTIONAL VALIDITY EXTENT ON PERFORMANCE

This variable was used to measure the established credit policy's adequacy and adherence, conformity to the recommended generic international standards for quality management systems

requirements, vouching for quality services assurance in view of UEDCL corporate goals. The study assessed the UEDCL identified functional validity key indicator variables. These included Customer data management, Management capacity and Risk management with the following measured indicators;

i) Credit policy documentation and information system. (Dissemination guidelines and practices for policy awareness and accountability transactions).

ii) Infrastructures, Logistics Provision procedures-(for operational credit instruments' effectiveness); and

iii) Organization structures and work environment (for staff commitment and appreciation) The study looked at the laid down policy strategies attached to them.

4.3.1   Credit Policy Documentation and Information System.

UEDCL policy Manual Version 20001, as afore said, was in the Corporate Head Office. It outlined policy on communication. The information system was backed up by the advanced technological systems managed at the head quarters (Billing information and Technology systems-BITS). Additionally it was supported by the corporate planning and support services responsible for the information co-ordination and dissemination within the entire organization (UEDCL) and to all parties concerned. However, findings on the procedures/practices on documentation as regards to information dissemination are exhibited in the following extracts (figures IV –VI).

TABLE VIII: RESPONSES ON AWARENESS OF CREDIT POLICY EXISTENCE

(Are you aware of Credit Policy existence?)

	Management Staff	Support Staff	Stake holders	Collection agents	Average

	No	%	No.	%	No.	%	No.	%	
Yes (%)	10	100	6	67	3	100	3	100	89
No (%)	0	0	3	33	0	0	0	0	
TOTAL	10	100	9	100	3	100	3	100	

Source: Primary Data

Data summarized in Table VIII above indicated very high level (100%) of awareness among the senior management, stakeholders and debt collectors Agent. However, 33% of the support staff members, who were the policy implementers, were not aware of the existence of this policy document. This document was not common to all offices concerned.

Similar discrepancies were found by previous researchers in UEB, the parent company (Tumuhimbise, 1997 and Biribonwa, 1997).

Furthermore, internal communication system at UEDCL and sensitization of customers are portrayed in figures and tables that follow.

FIGURE IV: MANAGEMENT RESPONSES (IS THERE ROUTINE POLICY COMMUNICATION SYSTEM TO SUBORDINATES?)
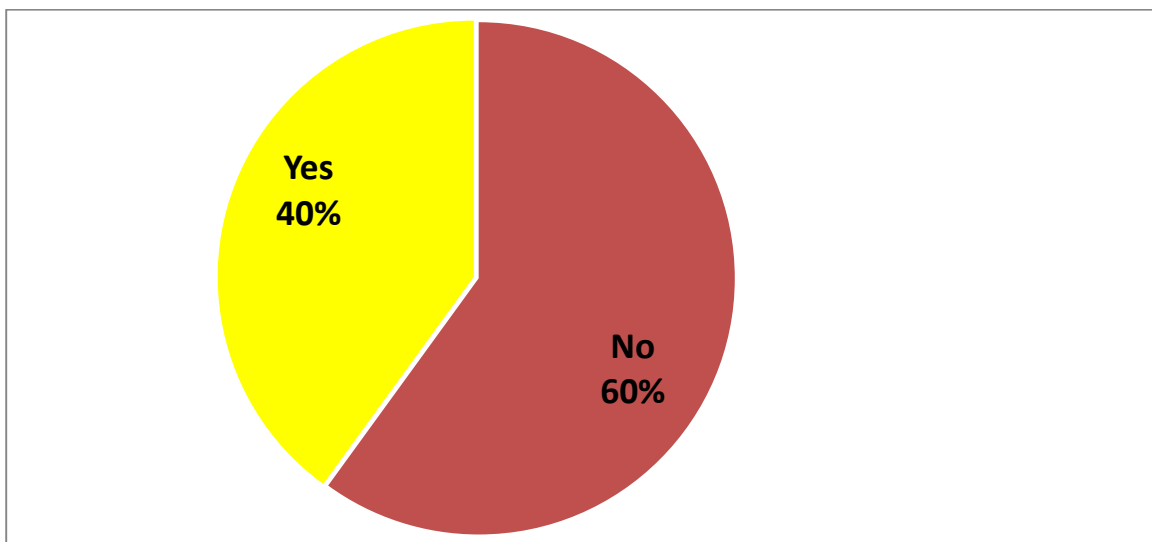
Source: Primary Data

Only 40% of the management respondents believed that the policy was routinely communicated to their subordinates. Therefore, unawareness of the routine policy is a handicap to subordinates' execution of their duties. (Forrest A. 1992).

FIGURE V: MANAGEMENT RESPONSES (IS THERE POLICY COMMUNICATION TO CUSTOMERS FROM TIME TO TIME?)
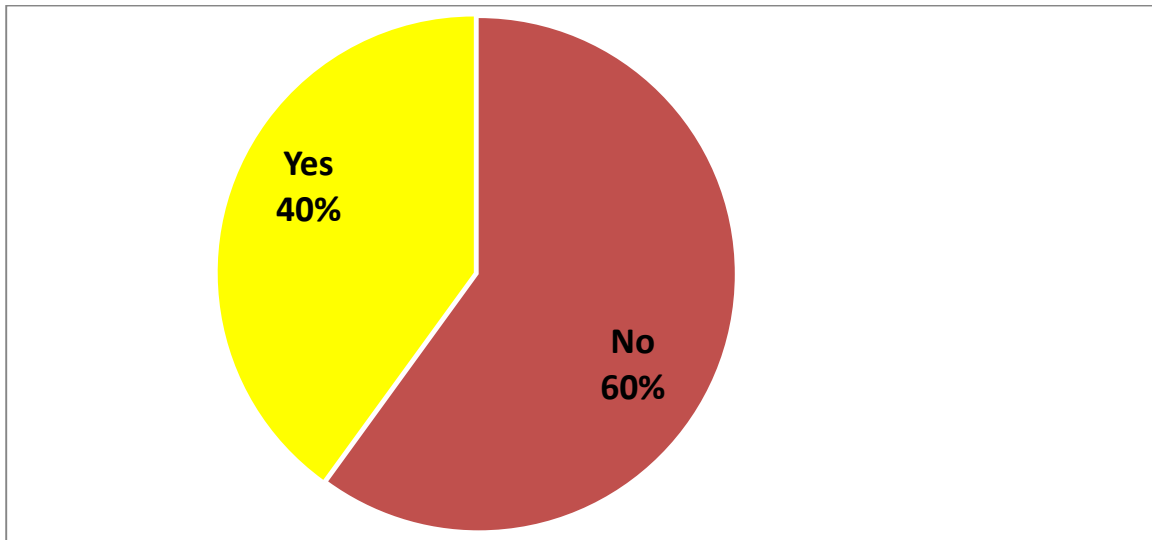
Source: Primary Data.

FIGURE VI: MANAGEMENT RESPONSES (ARE CUSTOMERS ALWAYS SENSITIZED ABOUT THE POLICIES?)
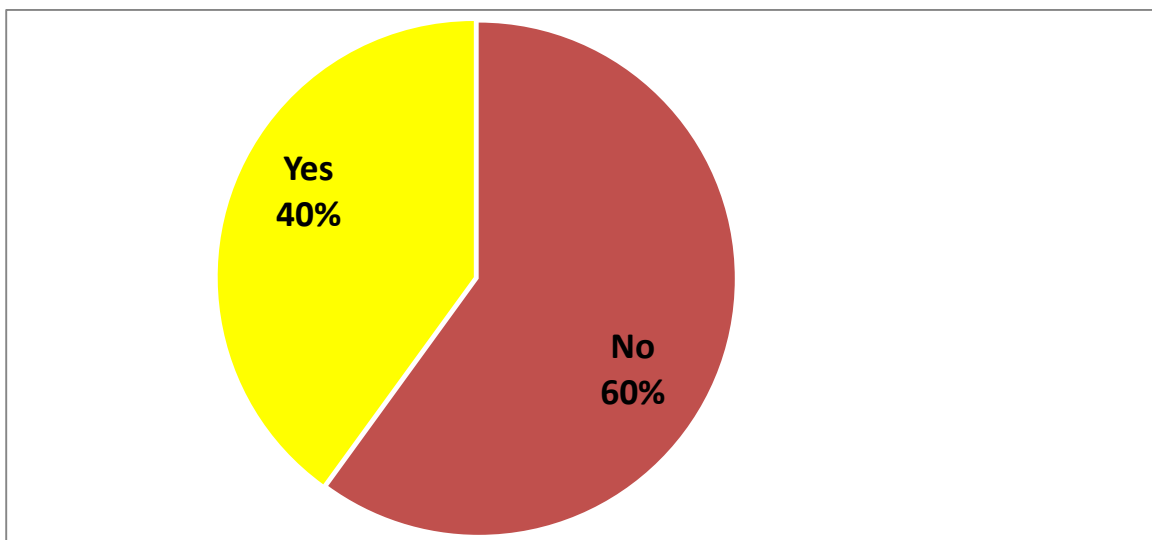
Further more, the figures (V & VI) above revealed that only 40% of management respondents believed that customers were either routinely communicated to or sensitized contrary to business operation norms (Manning L.G 2004, UEDCL policy Document version 2001). Supporters' response confirms communication defect as portrayed below:-

TABLE IX: SUPPORT STAFF RESPONSE TO POLICY COMMUNICATION (IS THERE ROUTIN POLICY COMMUNICATION?;)

Response	i. To customers		ii. To staff	
	Frequency	%	Frequency	%
Yes	1	11	1	11
No	8	88	8	88
Total	9	100	9	100

On the whole, 88% of field staff response indicated that there was neither routine policy communication to them nor to customers.

4.3.2   *Credit Logistics Provision Policies*
Support staff was asked on the provision of logistical support to facilitate credit management while customers were asked about logistics provided to facilitate their connection to Power Grid. Findings are summarized in Table X and XI below:-

TABLE X: SUPPORT STAFF RESPONSES (ARE YOU SATISFIED WITH PROVISION OF LOGISTIC PROCEDURES?)

Response	Number	%
YES	2	25
NO	7	75
Total	**9**	**100**

The majority of support staff (75%) was not comfortable with the procedures connected with logistic provision to the staff attached to revenue collection. Secondly, the computer information relied on for their job execution, sometimes were out dated thus rendering their work difficult. Lack of clear logistics provision procedures was seen as a handicap to the field staff duty execution.

TABLE XI: CUSTOMERS RESPONSES (HOW DID YOU GET CONNECTED TO POWER GRID?)

Response	Number	%
UEB/UEDEL after bribing	185	70.3
UEB /UEDCL (formally)	9	3.4
Purchased own material and got connected	69	26.3
Total	**263**	**100**

Source: **Primary Data**

On provision of logistics essential for connection of new customers (table XI), 70% of the customers surveyed had to bribe UEDCL staff to get connected to power distribution, another 26% purchased their own materials, leaving only 4% who received them formerly from UEDCL.

The power sourcing and connection procedures and practices, in UEDCL, were found confronted by unraveling system havocs. There was no proper co-ordinated Geographical information system for customer's references as it is with National Water and Sewerage Corporation (NWSC). It was found that this system had been dropped long ago for no good reason given. This was contrary to the procedure of customers identity (e Bay 2003; UEDCL Policy objective version 2001), and Management Responsibility Guideline (ISO-9001; 2000E), on one hand, and it was made worse when this shortfall was found coupled with high degree of corruption manifested in customer (energy) connection and data set up in the customer management system. This was an indicator of lack of policy on controls in the credit extensions. Poor referencing is witnessed by field staff as portrayed below (Table XII and XIII).

TABLE XII: SUPPORT STAFF RESPONSE (IS IT EASY TO TRACE THE CUSTOMER BASING ON THE METER READING SCHEDULE ONLY?)

	No Frequency	Percent
Yes	3	33
No	6	67
	9	100

Source: Primary Data

TABLE XIII: SUPPORT STAFF RESPONSE (IS IT EASY TO IDENTIFY CUSTOMERS BASED ON OFFICE RECORDS GUIDE LINES?)

	Frequency No	Percent (%)
Yes	3	33
No	6	67
	9	100

Source: Primary data

Findings in tables XII and XIII above revealed that (67%) of the field staff could not easily trace and identify customers on the ground basing on either meter reading schedules or office records guidelines. In fact by coincidence, the researcher was confronted by this dilemma, in the sampling process, hence contributed to the study margin of non-responses due to location failures, (i.e. 26% 400). Perusal of internal records, the same dilemma was also confirmed by the revelations on the ground (Appendix XXVII). It was revealed that, for a single billing cycle at UEDCL (meter reading), 31% of the customer's meters could neither be read nor estimated due to their location and identity failure.

A one time senior Minister, as one of the customers, complained about UEDCL, habit of cooking customer premises reference (Appendix XV). On the other hand, one learned professor also complained about Double charge and weighted meter (Appendix XVII). According to National Bureau of Standards, this same dilemma phenomenon seems to haunt UMEME as well, (Appendix XXX). This practice affects meter reading and ultimately billings with collection of

receivables handicap, due to the inadequate and ineffective ground control designs (lacking technical ground mapping and referencing. This is also contrary to risks management principles, hence, most probably leading to illegal consumptions and controversial energy losses of 40% (Appendix XX).

Further more, evidences from UEDCL documentary perusal (Appendix XXXI) indicated irregularities involving customer payments receipts at the Districts, hence this would automatically jeopardize the collection effort effectiveness leave alone the customers' foul cry and the distorted debtors figures in the financial books of Accounts.

Generally, the unraveling havoc pertaining to the credit instruments (logistic provision policy), in UEB/ UEDCL with the attached questionable procedures that had been characterized by unethical conduct had, most probably, haunted UMEME as well, hence, placing it in the most corrupt organizations today (Appendix XXXV).

In such dilemma, further assessments were made on the organizational structures with their integrated credit management atmospheric procedures and practices that were revealed by the findings that follow.

4.3.3 *Credit Organization Structure and Atmosphere*

Although there were many indicators of an organizational structure outlined by UEDCL in the policy document, two of these, namely presence of credit control staff (people) and availability of clear job descriptions (tasks) were used in this study to investigate whether there was a clear credit management organizational structure, well embedded/Integrated in UEDCL organization systems (Cole, 2001 p.174). The UEDCL policy document placed responsibility for credit management under the customer services manager, who was assisted by district executive officers (mostly of engineering profession), commercial officers and Revenue Assistants. Findings on the availability of credit controllers portrayed below in (table XIV).

TABLE XIV: RESPONSES ON CREDIT CONTROLLER EXISTENCE (IS THERE A CREDIT CONTROLLER?)

	Management Staff		Support Staff	
	Number	%	Number	%
Yes	-	-	-	-
No	10	100	9	100
Total	10	100	9	100

Source: Primary data

Research findings according to management and support staff revealed that there were no credit controllers or district sales ledger accountants to co-ordinate or account for credit sales (Table XIV above). This led to improper customer data management for credit sales accountability: Hence a breed of witnessed chronic Auditors' woes (UEDCL auditor's annual reports 1995-2004). The then UEB/UEDCL Chief Executive Officer, of late accepted this shortfall (Appendix XXXVI). Moreover lack of credit controller creates a gap of an arbitrator between sales, finance and customers (Brealey *et al* 1991). On the other hand findings were gathered in view of job descriptions. (Clear tasks) as portrayed below:-

TABLE XV: RESPONSES ON JOB DECRIPTION (ARE THERE CLEAR JOB DESCRIPTIONS IN UEDCL?)

	Management Staff		Support Staff	
	Number.	%	Number	%
Yes	6	60	4	40
No	4	40	5	60
Total	10	100	9	100

Source: Primary data

Findings above revealed that there were no clear job descriptions consistent with personnel skills and tasks. Knowledge of job descriptions was more prevalent among management staff (60%) than support staff (40%). Those who disagreed (40% of management and 60% of support

staff) alleged that the activities of the incumbent staff were not consistent with the organizational structures and designations. This lack of appropriate personnel might at least in part explain the inadequate accounting procedures of energy sales and a potentially dangerous practice of doctored accounts which has caused the annual reports limitations on accounts receivables due to lack of authenticity Assessment was made in view of credit management atmosphere/work environment, as indicated in tables that follows (Table XVI and XVII).

TABLE XVI: WORK ATMOSPHERE-MANAGEMENT RESPONSES

Is there total coordinated effort in UEDCL?			Is there total motivation impact?		
Response	*No.*	*%*	*Response*	*No.*	*%*
Yes	6	60	Yes	2	20
No	4	40	No	8	80
Total	**10**	**100**		**10**	**100**
Staff training availability			Availability Promotion			Appropriate Reward System		

Staff training availability			Availability Promotion			Appropriate Reward System		
Response	*No.*	*%*	*Response*	*No.*	*%*	*Response*	*No.*	*%*
Yes	4	40	Yes	2	20	No	10	100
No	6	60	No	8	80	-	-	-
Total	**10**	**100**	**Total**	**10**	**100**	**Total**	**4**	**100**

Source: Primary Data

TABLE XVII: SUPPORT STAFF RESPONSES

HOW DO YOU RATE YOUR WORKING RELATIONSHIP WITH YOUR EMPLOYER?			HOW MANY NUMBERS OF PROMOTIONS HAVE YOU ATTAINED?		
Response	*No.*	*%*	*Response*	*No.*	*%*
Good	1	11	One	2	20
Fair	2	22	None	7	80
Poor	5	56			

Very Poor	1	11			
Total	9	100	Total	9	100

Source: Primary Data

From tables above, 60% of the management staff believe coordinated effort was made, however 80% of them, indicated that there was no existence of any motivational impact on the staff. On the other hand majority of support staff (67%) claimed there was a poor working relationship between employees and employers. A marginal (20%) number of promotions within 10 years of service were reported. Moreover, findings on career development programs are indicated in figure VII that follows.

FIGURE VII: MANAGEMENT RESPONSES (IS THERE CLEAR POLICY ON CAREER DEELOPMENT?)
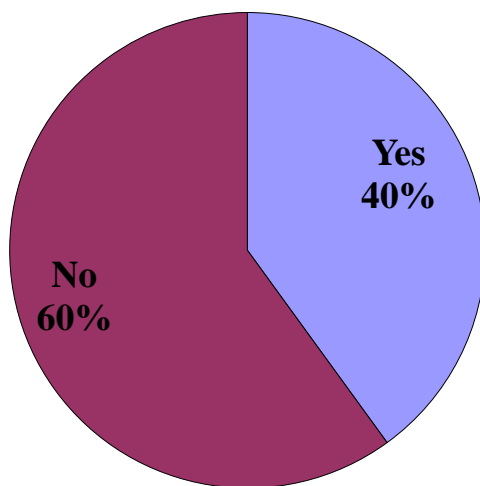
Source: Primary Data

The above figure reveals that 60% of the management staff could not witness for the existence of proper UEDCL Career Development Policy. Evidences portrayed were indicative of an administrative gap between management and support staff, most probably, this led to the revealed findings below (Table XVIII):-

TABLE XVIII: ETHICAL CODE/PUBLIC IMAGE-MGT RESPONSE.

Is there ethical Code of Conduct?			Conducts Adhered to?		
Yes	6	60	Yes	2	20
Not Sure	2	20	Not Sure	4	40
No	2	20	No	4	40
Total	10	100		10	100
Mgt Response on Whether Customers Talk Good About UEDCL (Image)					
Yes	6		20		
Not sure	2		40		
No	2		40		
Total	10		100		

Source: Primary Data

Regarding the ethical code of conduct, 60% of the management believed there was a laid down code of conduct policy but 40% of them said the ethical code of conduct was not adhered to and 20% were not sure of it. The lack of adherence to ethical code of conduct further explains why the majority of customers had to pay bribes or even purchase their own materials before getting connected to the grid inspite of earlier management's detection as manifested in the following comments; "It is important that fundamental shifts in values and commitment from the very top of the organization to the bottom is necessary; Moreover, we need to discover the root causes of our customer dissatisfaction and provide systems and attitudes necessary for improvement"- UEB deputy personnel manager (Oriokot Helen 1997). Concerning the public image of UEDCL (whether customers talk well of UEDCL), 80% of the management staff thought that customers do not talk good of UEDCL (poor public image) as portrayed in table (Table XVIII above).

All in all there was a revealed indication of non compliance to the "International standards of management systems requirements" (ISO 1900:2000E) - Ineffective policy functional validity on performance. There was no indication of proper policy integration and embedding in the

entire organization management system in UEDCL to ensure quality service assurance for effective performance/customers'/stakeholders' satisfactions.

4.4 UEDCL CREDIT POLICY FUNCTIONAL RELATIONSHIP WITH PERFORMANCE

Study objective two was examining the functional relationships between UEDCL's Credit policy and performance, in view of customers' satisfaction and stakeholders' appreciation. To achieve this, the aspects of UEDCL credit policy variables (credit standards, credit terms and instruments, and collection effort) in collaboration with its operational surrogates were analyzed and measured.

4.4.1 Credit Standards and Analysis and Performance

Credit standards, the criteria upon which the potential or existing customer is evaluated to determine the credit customer risk level, for determining trade offs (stringent /liberal) terms, were examined to ascertain their operational strengths, weakness and effects on UEDCL performance, customers satisfaction and stakeholders appreciation.

The credit supplier's survival is only ensured by construction of legal bargaining agreements (Sale of Goods Act Cap 79, 1997) coupled with enforceable collateral provisions (Fullerton and Associates, 2003). Nevertheless, binding legal contracts should be supported by explicit evidence of the customer's identity (E-BAY, 2003; Bakibinga, 1996). In this respect, UEDCL's policy document stated that the objective of credit standards was to ensure that, customers' accounts: -

(a) Were approved by authorized personnel with their limits of authority;

(b) Were opened where amounts would be recoverable.

The data flow process to ensure the above objectives was found with attached documents though inadequately designed.

Weston and Copeland (1989, p. 292) categorized credit analysis in 5 Cs; Character, Capacity to pay, Capital or financial position, Collateral and Condition or environmental influences. In this study, an assessment of UEDCL's customers screening and rating criteria for credit risk assessment was carried out using the same indicators, integrated with those used by UEDCL. The findings are summarized in table XIX that follows.

TABLE XIX: CUSTOMER RESPONSES ON UEDCL CUSTOMER EVALUATION

a) Did you apply for power supply?			*c) Did UEB/UEDCL visit your premises before signing the agreement?*			
Response	*No.*	*%*		*No.*	*%*	
Yes	197	67	Yes	197	67	
No	96	33	**No**	96	33	
Total	**293**	**100**	**Total**	**293**		**100**	
d) Why didn't you sign an agreement?		*%*	*e) Did you sign the agreement card with UEB/UEDCL?*			
Opening A/C is very slow		9			No.	**%**
UEB/UEDCL did not bather to tell us.		3	Yes		**199**	**68**
A/C is in the landlord's name.		66	No		44	32
The A/C is in the previous occupant's name.		22	Total		293	100
Total		100				
f) How did you get connected to power grid?			*g) How do you rate the procedure of getting power?*			
	No.	*%*			*No.*	*%*

Formerly by UEB/UEDCL after bribing	205	70	Very good	3	2	0.8
Formerly by UEB Staff	12	4	Good	111	96	38
By staff after purchasing my own materials	76	26	Fair	99	87	34
			Poor	58	50	20
	293	100	Very poor	22	21	8.0
			Total	293	256	100

i. Did you pay security deposit?			*h) Reasons for rating*	No.	%
	No.	%	Some how fairs		
Yes	179	62	service	120	41
Not Sure	61	20	Expensive and service (corruption Oriented)	85	29
No	53	18	Inefficient (Delayed service)	88	30
	293	100	Total	293	100

J) Do you have permanent source of income?		
	Frequency	%
Yes	179	68
Casual	61	14
No	53	18
	293	**100**

Source: Primary Data

4.4.1.1 Character, Capacity and Capital Assessment)

These are used for customer settlement potentiality evaluation. On the basis of study respondents (Table XIX) considerable proportion (32%) of customers did not officially apply for power hence were connected to the network grid, prior to their formal connection legalization. Therefore the company did not obtain any baseline information about them. The reasons given for not applying included account being in the landlord's names (66%), account being in previous occupant's names (22%), account opening was very slow (9%) and 3% were not told about the application process. Worse still, findings, on spot check ups revealed that most of these so-called land lords or previous occupant had ceased, or were no where to be traced, confirming (Biribonwa 1997) noted observation of energy customer volatile (nomadic) state. This was also impliedly portrayed in the study findings (Table XX).

TABLE XX: CUSTOMER RESPONSES ON SETTLEMENT BASE INDICATORS

Type of Occupancy(A/C owners premises status)			(Source of Income)		
	Number.	%		Number	%
Landlord	140	48.0	Permanent	187	68
Tenant	153	52.0	Casual	39	15
Total	293	100.0	God's mercy	67	17
				293	100

Source: Primary data

The above findings revealed large proportion (52%) UEDCL's customers were of tenancy occupancy type, moreover, (32%) with unreliable sources of income.

As part of application processes, customer identity was meant to be supported by a visit to the premises to ascertain location and identity. Finding on this is as follows.

FIGURE VIII: CUSTOMER RESPONSES (DID UEDCL STAFF VISIT YOUR PREMISE PRIOR TO YOUR POWER CONNECTION?)

33%

67%

■ UEDC staff did not establish the location or customer identity 33%

■ UEDCL staff Visited but the final connection was through informal means hence location fraught again. 67%
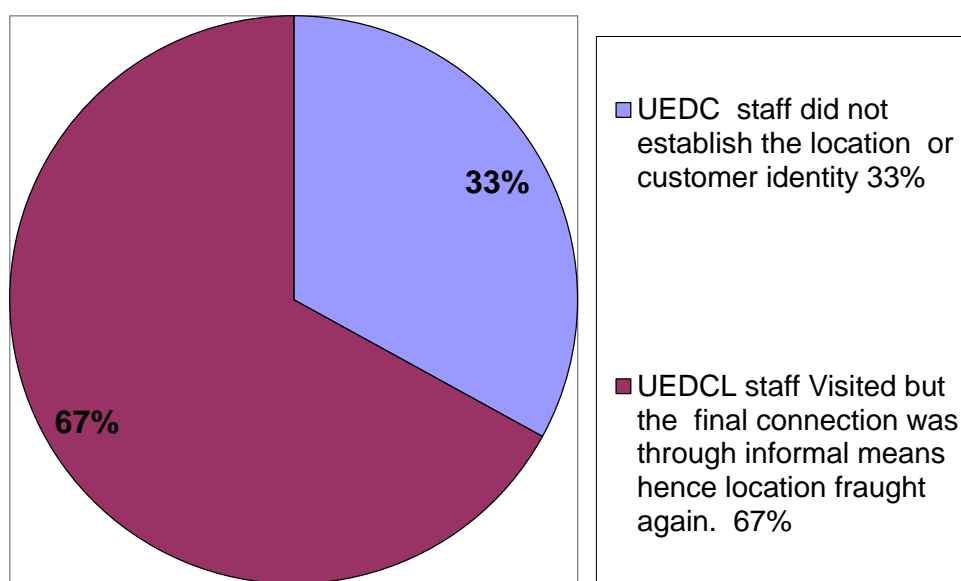
Source: Primary Data

Basing on the above portrayed finding (figure VIII). 67% of customers indicated a no pre-connection visit made to their premises by UEDCL staff. Indication of inefficient customer sourcing practice at UEDCL.

To conclude the deal in a trade credit system, a legally binding agreement has to be endorsed by both parties. At UEDCL/ UMEME, such a document was represented by agreement forms D22 (Appendices XXXII-XXXIV). However, from table XXI, 32% of the customer respondents never signed the said agreement forms. Moreover in the functional validity assessment (logistics provision policy/connection process - table XIII) there were irregularities encountered as portrayed in figure that follows (figure IX).

FIGURE IX: CUSTOMER RESPONSES ON UEDCL POWER CONNECTION PRACTICES
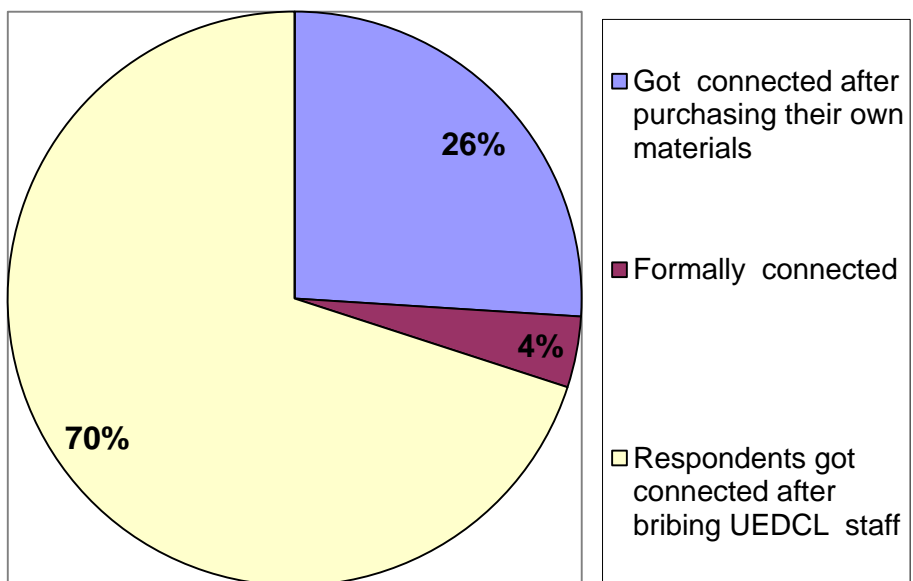
Source: Primary Data

Majority of the respondents (customers 70%) said they had got power after they had bribed staff and only 4% through formal means, while the remaining 26% got power after purchasing their own materials (Figure IX).There fore, customers (96%) view Power sourcing/ connection process as too bureaucratic pretext, even in UMEME today.

Direct interviews, with surveying personnel (UEDCL Technical Staff) revealed that forms D10 and 20 used in customer sourcing/ power connection were no longer in use. The reasons given were lack of stationery, contrary to the policy guidelines (UEDCL Policy document 2001; ISO 9001:2000E).

The executive ad hoc exercise (Operation Sigma) of eliminating the un billing consumers account opened discovered that 90% of the connection forms, were with neither location maps nor references attachments thus were insufficient for their identification or location (i.e. their geographical survey references were just misleading. Therefore this might at least in part account for the controversial losses of 40% which could be arising from missing or unbilling consumers whose particulars were insufficiently documented in the UEDCL and yet were getting free power. This was also a persistent handicap for the debts collection. This situation seemed to have haunted UMEME as well. (Appendix XXIX). The billing data declaration form for the month of October 2003 indicated that 1646 customers billed in the cycle, 511 (31%) were not read hence were developed as zero (despite their presence on the meter reading schedule) and probably unallocated, claiming they were to be investigated for actual existence. (Appendix XXVII).

4.4.1.2 Collateral Assessment

Collateral refers to any recognizable asset offered by the customers as a pledge for security for the credit extended (Weston, 1989, p.292). UEDCL, as part of conditions of electricity supply,

opted to take 3 months security deposits payment in lieu of capacity and capital assessment. Findings on this are portrayed below; (Figure X).

FIGURE X: CUSTOMERS RESPONSE (DID YOU PAY THE SECURITY DEPOSIT?)
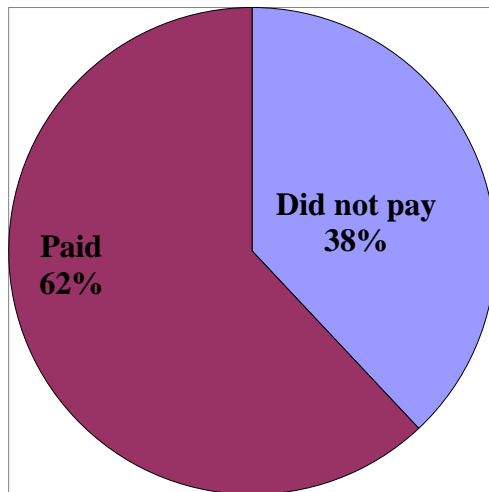
Source: Primary Data

While 38% of the customers indicated no security deposit payment, 62% paid only one month deposit. (Table XIX, figure X).

4.4.1.3   The Statistics (Inferences) on Credit Standards:-

The inferred statistical assessment of the strength of UEDCL credit standards and analysis (credit evaluation Criteria) variable function relationship based on primary data was also computed using Pearson's correlation co-efficient test. It derived the portrayed correlation coefficients, at significant level of $P = $ or < 0.01, hence statistically implying that the probability (p) of the test statistics or one more extreme by chance alone was equal or less than 0.01. (Table XIX).

TABLE XXI: FUNCTIONAL RELATIONSHIP WITHIN UEDCL CREDIT STANDARDS AND ANALYSIS POLICIES, VERSUS PERFORMANCE / CUSTOMER SATISFACTION.

(Pearson Correlation significant co. efficient)

	PA	CPV	CI	PSD	SA	PSI	CS
PA	1.00						
CPV	0.77**	1.00					
CI	0.48**	0.58**	1.00				
PSD	0.66**	0.70**	0.51**	1.00			
SA	0.69**	0.83**	0.49**	0.79**	1.00		
PSI	0.07	0.16	0.01	0.100	0.04	1.00	
CS	0.09	0.04	0.05	0.00	0.04	0.04	1.00

N.B: 1 Sample number = 293

2. Key

PA=Power Application; CPV= Customer Premises Visit; CI= Customer Identity; PSD= Payment of Security deposit; SA= Signing of Agreement; PSI= Permanent Source of Income; CS= Customer Satisfaction

3. ** Correlation was significant at 0.01 level (2 tailed)

* Correlation was significant at 0.05 level (2 tailed)

It was revealed that there exist statistically significant strong positive relationships within the functionalities of the credit evaluation operations though on the other hand there exists no significant relationship with customer satisfaction as the process is in the interest of UEDCL management.

There was a strong relationship between Signing of Agreement and power application, customer premises visit, customer identity and security deposit payment (r =0.69; 0.83; 0.49; 0.79, p = or < 0.01 respectively).

This implies that for effective customer sourcing and evaluation UEDCL needs to synchronize the system operations by sticking to customer power application, customer premises visit, and customer identity, there after, payment of security deposits on signing of power supply agreement to seal the energy sales contract. On the other hand, how ever, the system should not be viewed as a mere bureaucratic pretext but a justified operation in the eyes of the customers. This was a fact that customers (96%) acquired power through UEDCL staff bribery (corruption).

4.4.2 Credit Terms

These are stipulations under which the organization extends the credit sales to its customers. They are supposed to be optimally set up for a normal credit operation -i.e. stringent/ liberal terms trade off (Pandey 2002, Kakuru 2002; Brealey *et al.,* 1991; Weston *et al.,* 1989). Normally, these refer to credit period or length of time, credit limit, discount or consumer incentives as well as credit instruments under which credit is extended to the consumer (Pandey 2002).

To asses the stipulations under which UEDCL was selling on credit to its customers, primary and secondary data were used to ascertain their operations character and effects.

4.4.2.1 Credit Period and Limit Amount

Customer awareness of credit terms leads to credit terms compliance and adherence hence improves bills settlement. Clear credit terms must be consented to by sale contracting parties (Sale of Goods Act cap 79; eBay, 2003; BPP, 2004). Finding revealed the following. (Table XXIV),

TABLE XXII: AWARENESS OF CREDIT TERMS (CUSTOMERS' RESPONSE)

Were all the terms and conditions of power explained to you?	No.	%	Are the credit limits communicated to you always?	N	%
Yes 41		14	Yes 91		31
No 252		86	No 202		69
293		**100**	**293**		**100**

Source: Primary Data

 Although 67% of the customers indicated that they signed a power supply agreement card, (table XI), 86% of them were not aware of the terms and conditions of service. Similarly, 69%

of the customers' were not aware of credit periods and limits set for them from time to time. This arises out of the earlier noted shortcomings on communication policy.

According to the then available records, UEDCL inherited a set of credit limit of 50,000/= from UEB of which was indiscriminately applied to all customers. Many customers (90%) who had been disconnected for the first time thought that the deposit they had paid was to cover the first amount against their bills; hence findings revealed that no customer had paid his first bill in less than 90days.

From the invoices scrutiny, it was evidenced that customers were given two types of credit periods, 2 days (48 hrs) and 14 days. It appeared that the lenient credit period of 14 days was given to customers who promptly paid before the next billings and 48 hours (2 days) was given to someone who had not paid within the past two billing cycle. Further findings reveals that credit terms could not be adhered to by customers as portrayed below (Figure XI).

FIGURE: XI: SUPPORT STAFF RESPONSES (WERE THE CREDIT TERMS AND LIMITS ADHERED TO?)
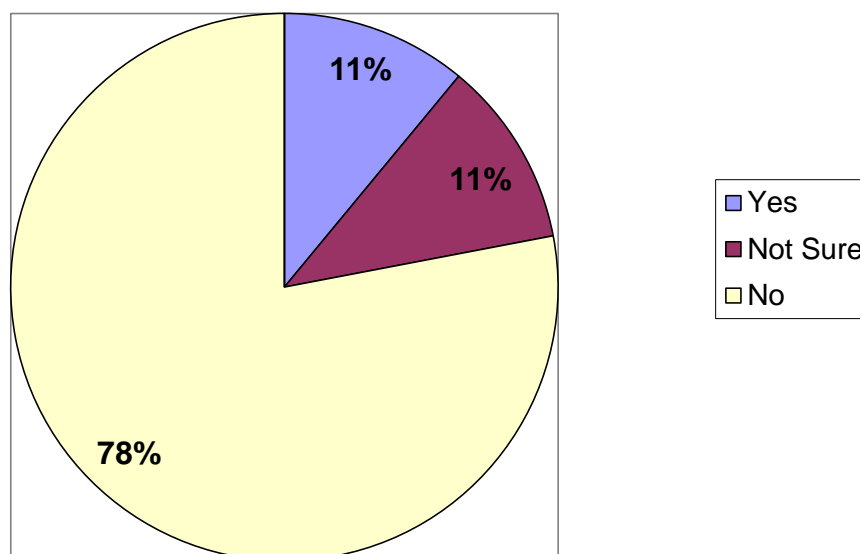
Source: Primary Data

When support staff was asked whether credit limits were adhered to only 11% of the respondents believed so. However, it was noted that customers could not adhere to the limits that are not clearly stipulated and communicated to them.

The above findings from support staff was a direct indicator of receivables collection incapacitation and contrarily to argued modern partnership marketing strategy (Manning L. *et al.*, 2004). This also contributed to the collection period of over 275 and aging date stock as shown in the (figure XII) that follows.

FIGURE: XII: UEDCL DEBTORS AGE ACCORDING TO THE CLOSE OF YEAR INTERNAL AGING SCHEDULE AS AT 31/11/2003
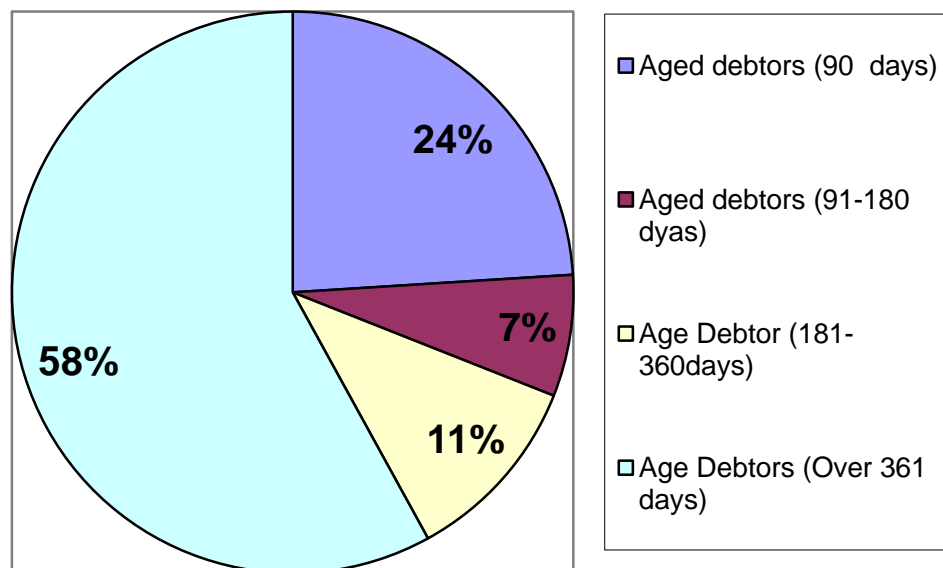
Source: BITS statistic

The above figure indicates that 58% of the debt stock, (beyond 361 days) was created, most probably, by virtue of lack of credit period /limit clear specification and adherence.

4.4.2.2 Power supply/Consumption ascertainment (credit measurement instruments)

81

This is believed to be a core variable in that it is the basic for unit consumption measurement that causes bills payment obligation. (Sale of Goods Act 1997, Kirk man 1997). Past researchers similarly could not spare it out (Tumuhimbise, 1997). Therefore assessment of this variable was made in view of UEDCL operations ingredients (as indicated in Table XXIII), that follows, to derive its functional relationship and impact on UEDCL operational performance and customer/stakeholder satisfaction. These were examined in view of bills developed (metering, tariffs, discounts and adjustment and affordability of the invoiced bills) as indicated in the ongoing paragraphs.

TABLE XXIII: CUSTOMER RESPONSES ON METERING, BILLING AND TARIFFS (PRICING)

a) **Is your power metered?**	**No**	**%**	**b) if not metered for how long**		%
Yes	247	84	0-1yr		77.0
No	46	16	1-2yrs		9.0
			3-4yrs		9.0
			Over 4yrs		5.0
	293	**100**			**100**
			Reasons		
			No meter		63
			Taken by staff		11.0
			Meter burnt		26.0
					100
What types of bills do you get?			**Do you get bills with proper cash acknowledgement?**		
Estimated	85	29.0	Yes	141	55.0
Actual	145	51.0	Occasionally	88	34.0
Both	63	20.0	Never in life	27	11.0
	286	**100**		**293**	**100**
How do you rate metering reading?			**How do you rate billing?**		
Very good	6	2.0	Very good		0.0
Good	21	7.0	Good	23	8.0
Fair	147	50.0	Fair	141	48.0
Poor	111	38.0	Poor		40.0
Very poor	9	3.0	Very poor	12	4.0

			I do not understand UEDCL'S meter readings (customers)			Bills delivery		
Total	**293**	**100**		**293**	**100**
I do not understand UEDCL'S meter readings (customers)			**Bills delivery**		
Strongly agree	29.0	10.0	Very good	15	5
Agree	167	57.0	Good	**184**	63
Not sure	25	9.0	**Poor**	**47**	16
Disagree	64	**22.0**	Very Poor	47	16
Strongly disagree	8	**2.0**	Total	293	100
Total	293	**100**			100

Source: Primary data

Findings in table above are in accordance with the credit terms (UEDCL credit stipulations) that as follows;

(i)Bills Development (Metering)

Meter connection at UEDCL is the first step in the process of the bills/invoices' development. Power Connection was supposed to be executed by supply of meter for consumption ascertainment. The meter connection and reading are taken as the evidence of the power (property) transfer from UEDCL to customers. The policy document specified that every customer must be provided with a measuring unit (meter) before power supply is connected to the premises. In case of emergency transmission, consumption terms should be agreed upon before by the concerned parties and evidenced by a written consent.

In practice however, it was found that sometimes consumers were connected before even the sales agreements were concluded. UEDCL tended to address metering problems through institution of ad hoc task forces to install meters in various districts the act of which seems to be haunting UMEME as well. This did not only mean that meter installation was not synchronized with power connection but also disrupted the normal channels for customer data updates by BITS resulting into delays of billing.

From tables XXIII it is revealed that, although 84% of the customers had their power metered, 75% said they did not understand the meter readings. Previously, UEB had meter-reading cards inserted in the meter boxes at each premise, which had to be endorsed by the meter reader in presence of the concerned consumer, however, it was not witnessed anywhere. In the tables above, some customers without meters could stay on power for over a year without a meter and unattended. Reasons given included lack of metering devices (63%), meter burnt (11%) and taken by staff (26%) for unclear reasons.

Many customers (51%) indicated that they were getting bills based on actual meter readings, while 29% said their bills were estimated and 20% said they got one month actual two months estimates. However, a majority (59%) of customers rated the meter reading process as fairly done and 41% saw it as a poorly done operation. The major reason given for poor rating included estimation of bills when meters were supposed to be read monthly.

Poor meter reading in one way is viewed as a result of deficient consumer referencing and identification by the Meter readers. In fact 32% of the customers could not be traced hence resulting into improper consumption ascertainment (meter reading) for individuals and the market area (district).

(ii)Bills Development - Tariffs (Pricing), Discounts and Adjustments

UEDCL's had a centralized billing process executed by the billing information and technology systems department (BITS). Meter reading input data was down loaded from various districts fields on diskettes also centrally supervised even in UMEME today. The process involves computations of consumption value and consumer accounts updates inclusive of payment acknowledgements at the billing date.

In reference to table XXIII the majority of customers (56%) rated the billing process as fairly done, while 44% believed it was poorly done. The major reasons for poor rating was estimated

bills, delayed adjustments of errors and cash payments, especially where manual receipts were given, and high tariffs encountered due inefficient tariffs component variables controls like meter readings and other UEDCL operation costs. This was an indicator of inefficient control of the tariffs computation inputs, hence, UEDCL derived an optimum credit customer stipulations against recommended costing principles Arora (2006). This had obviously resulted into the under mentioned customers' bills affordability dilemma.

(iii)   *Affordability of energy bills (prompt bill settlement- Acceptability)*

To assess the effectiveness of the UEDCL customers' bills affordability responses from customers and collection agents were analyzed. (Table XXIV)

TABLE XXIV: (SUBJECTS RESPONSES). WHAT ARE THE HINDRANCES TO BILLS PROMPT PAYMENT (BILLS AFFORDABILITY)?

Reason	Customers (%)	Collection Agents (%)
Expensive power	44	40
Poor bills (estimates)	30	38
Delayed block bills	11	10
Bills of previous occupants	15.1	12
	100	**100**

Source: Primary data

Customers (44%) cited cost of power was expensive, the bills were delayed and yet estimated (30%), were delayed to cause block bills (11%), as hindrances to bills prompt payment. These findings were collaborated with debt collection agents, 40% attributed poor payment to high cost of power, 38% to estimated bills, although customers (68%) rated the bills delivery as good (table XXIII).

Additionally, findings, according to internal records revealed that, in the decentralized revenue collection system, there were some witnessed operational irregularities that had to impact on the billing and collection effort. Whereas receipts for small amounts of less than 100,000/=

were properly given, acknowledgments for amounts above were sometimes subjected to petty questions, which were irritating customers. This could again, at least in part, explain why consumers of less than Shs 100,000/= were not in arrears (Table XXVII). By the time of the study the direct Banking Practice was not effective as there was no much sensitization on it. Moreover bank slips acknowledgement were also delaying hence, up to today UMEME customer queues are sited at every District. There was also evidence of delays in payment acknowledgements by BITS as shown in table XXV that follows.

TABLE XXV: CUSTOMER RESPONSES ON PAYMENT ACKNOWLEDGEMENT

Response	No.	%
Good	5	2
Fair	164	56
Poor	111	38
Very poor	12	4
Total	293	100

Source: Primary Data

While 58% of the customers' were fairly satisfied with the payment acknowledgement 42% were not satisfied. This indicated that, customers, basing on computer invoices were continuously disturbed by the field disconnection teams.

4.4.2.3 Inferred Statistics on Credit Terms Operation and Customer Satisfaction

Statistically, Pearson's correlation coefficient Test was used to derive the functional relationships between credit terms and customer satisfaction (Table XXVI) that follows.

TABLE XXVI: CORRELATION AMONG UEDCL CREDIT TERMS FACTORS AND CUSTOMER SATISFACTION (PEARSON'S CORRELATION SIGNIFICANT CO-EFFICIENT)

	Meter Reading	Billing	Payment Acknowledgement	Customer Satisfaction
Meter Reading	1.00			
Billing	0.56**	1.00		
Payment of Acknowledgement	0.17**	0.35**	1.00	
Customer Satisfaction	0.54**	0.69**	0.56**	1.00

N.B: 1. Sample Number = 293

2. ** Correlation was significant at 0.01 level (2 tailed)

* Correlation was significant at 0.05 level (2 tailed)

It was revealed that there exists significant moderate positive functional correlation (at the level of $p \leq 0.01$) amongst the UEDCL Credit terms (credit stipulations functions) as well between them and customer satisfaction.

(a) There is a strong functional relationship between: (i) Billings and meter reading, (r=0.56); (ii) Customer Satisfaction with meter reading, Billing and; Payment Acknowledgement (r = 0.54; 0.69; and 0.56 respectively).

(b) This implies that improved meter reading improves billing process and if coupled with justified computations with proper payment acknowledgement, enhances customer satisfaction level.

4.4.3   Collection Effort and Performance Appraisal

Collection effort variable was used to examine the characteristics and procedures of receivables monitoring, debts recoveries, as related to UEDCL's performance as well as their effects on performance in view of customers/stakeholders satisfaction. Under the decentralized system,

the receivables monitoring and collections had been entrusted to the District Managers. However, the process was entrusted to staff whose designations were not consistent with their job descriptions (Onek 2000; Tunruhumbise 1997). Relatively, as noted before, the fore policy variables designs and implementation short falls had to haunt the collection effort as well as indicated in figure XIII that follows. This meant that the poor customer sourcing, connection, meter readings and billings could not contribute to the effective collection effort (debit monitoring and recovery).

FIGURE: XIII: RELATIONSHIP BETWEEN POLICY OPERATION AND THEIR PERFORMANCE (EFFICIENT/ INEFFICIENT) INDICATORS.
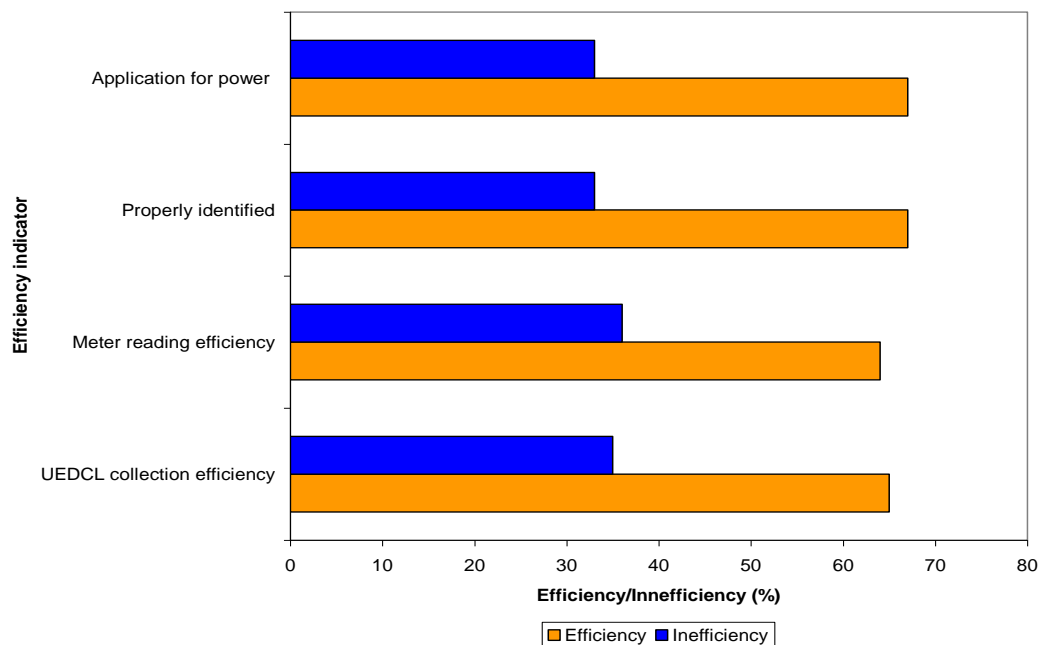
Source: Primary Data

Basing on the depicted view from the above figure, there was unraveling finding of the consistent efficiency/inefficiency performance ratio levels (60-70 versus 30- 40% respectively) within all the UEDCL credit policy operations. These relationships findings, by coincidence, were amenable to government circles and internal records. (Appendices XIX, XX and XXXIII), this of course recognizes Anderson's (1990) argument on systems operation of "Garbage In Garbage Out (GIGO)"

4.4.3.1 Debt Monitoring and Recovery

Individual Customer's dues and balances were contained in monthly customers' computer billings schedules processed by BITS, the department responsible for bills development. At the district, the copy customer billings were compiled and filed in ledger binders according to their respective district billing cycles. This same information could be transmitted by use of information package known as TAD-DMS, for the districts connected to the central system. These were, in actual sense, copy invoices sent to customers with multipurpose of message (Accounts statement and credit disconnection period notices of 48 hrs or 14 days). Routine delinquent accounts were then supposed to be followed after reconciling them with current credits. Occasionally, collection agents were hired to enhance the delinquent account collection and this seems to continue haunting UMEME (Appendices XIX-XXI). Due to unavailability of specific data, the impact of these collection agents was difficult to verify for their value for money performance. It was observed, that the reminders documents that used to be issued to customers, were no longer in operation and had been replaced by the invoice notices at the time of bills delivery that are followed by the disconnections at the district discretions. Documentary analysis was further conducted and extracts portrayed in table XXVII were made, on UEDCL receivable arrears according to their aging period.

TABLE XXVII: DOMESTIC ARREARS AS AT 25TH/11/03 FOR ALL DISTRICTS

No of customers	%	Denomination	Total Arrears (x000,000)	%	Days 0-90 (x000,000)	%	91-18 (x 000,000)		181-360 (x000,000)	%	Over 360 (x000, 000)	%
96872	56	0-50	2217	7	1695	24	522	28	-100	0	-5132	0
39915		51-100	2844		2131		713		-375	0	-34	0
76802	32	101-500	15737	23	5900	36	485	11	2634	34	6718	17
17512	7	501-1m/=	12164	18	1859	12	921	20	1498	19	7886	21
12633	5	Over 1m/=	34162	52	4591	28	1840	41	3666	47	24065	62
243734	100	**TOTAL**	67124	100	16176	24	4481	7	7798	11	38669	58

Source: Secondary Data (BITS)

Findings revealed that, there was total customer arrears of shs 67.12billion, i.e. investment in accounts receivables, by 31st November 2003 owed by 243,734 customers. It is observed that all the UEDCL's customers, at least held their dues between 91-180 days. The arrears were in component of: - Shs 16.2 billion (24%); shs 4.5billion (7%); shs 7.8billion (11%) and 38.7billion (58%) that were due by 90; 180; 360 and over 361 days respectively. This was also portrayed in figures XIV and XV) that follows.

FIGURE XIV: TOTAL BILLS AGE VERSUS AMOUNT OWED
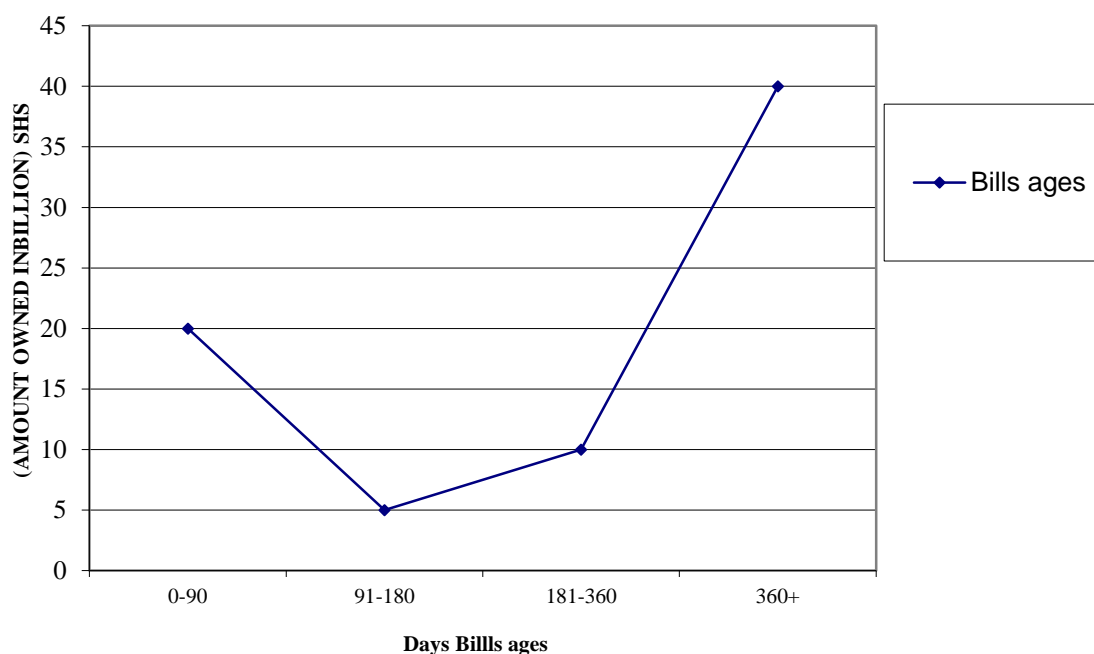
FIGURE XV AGED BILL DENOMINATION AS PERCENTAGE
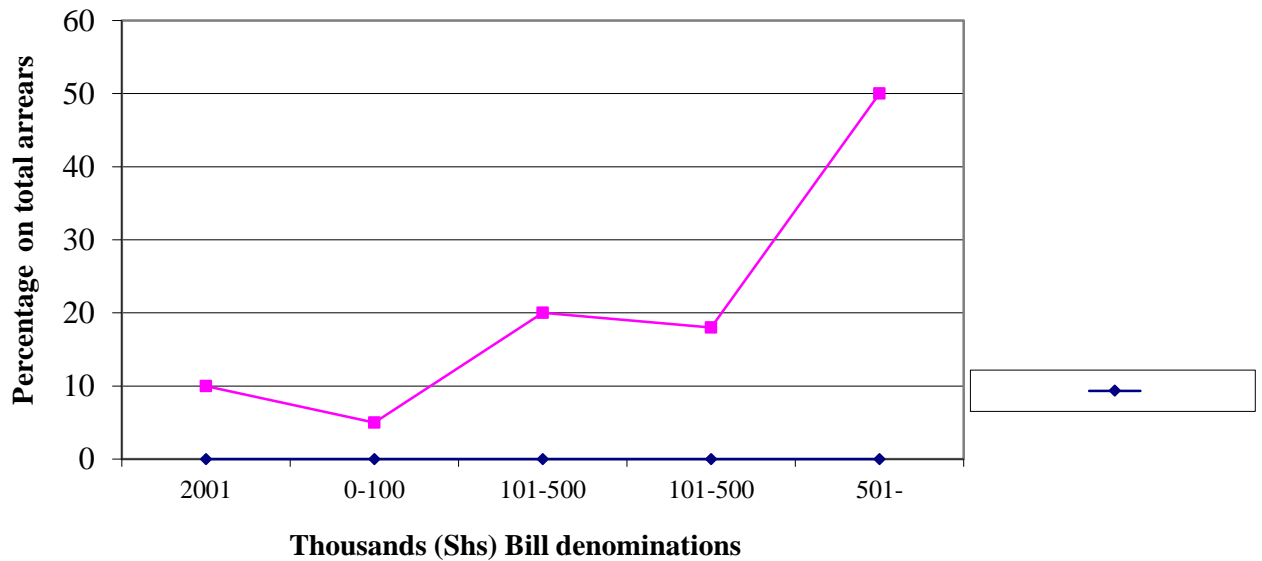
Source: Researcher Computation based on secondary data (UEDCL BITS)

It was noted from the above figures that bills tended to be cleared within 91 to 180 days and then started tremendously rising after the sixth-month up to deplorable climax of over 361days (1 year and above) with a rampant figure of 38.6 billion. This was an indicator of the periods or credit days in which UEDCL's funds were tied up. Hence, contributing to the total investment in accounts receivables at the end of the year. It was also noted that bigger bills were not promptly settled.

It was further revealed, from the above table and figures, that 136,787 domestic customers (56%) whose due bills were below shs 100,000/= per month owed only shs 5.061 billions (which was 7% to the total arrears stock) and was cleared within sixth months (180days). This was an indicator that 56% of UEDCL customers who had the monthly bills below shs the 101,000/= cleared their bills at least by the end of the sixth month. On the other hand it was peculiar to note that the higher the arrears denominations the longer the debt aged days despite the declining numbers of debtor customers portraying an inverse proportion. Hence an indicator that huge bill debt stock was left in the few hands of customers that were created by persistent monthly cumulative debt recovery deficits, as shown in table XXVIII below.

TABLE: XXVIII KAMPALA CUSTOMER SERVICE AREA COLLECTIONS AGAINST BILLINGS FOR THE PERIOD BETWEEN JANUARY TO NOVEMBER 2003. (CUMULATIVE UNCOLLECTED DEBTS)

Date Month	Billings (Shs)	Collection (Shs)	Deficit (Shs)	Collection (%)
Jan	11,384,591,536	6,018,247,240	5,366,3444,296	52.8
Feb	7099404950	4,599,011,369	2,500,393,581	64.7
March	10788977037	5,994,994576	4,793,982,461	55.5
April	5965621978	6,636,145,393	670,523,415	111.0
May	9864004797	7,185,853,506	2,678,151,291	72.8
June	9695384963	7,190,392737	2504992,226	74.1
July	9703675500	9,937,311,412	(635912)	102.4
August	12085986073	7029,543,819	5056,442,254	58.1
Sept	11285912937	7137468409	4,148,444,528	63.2
Oct	10862108477	7601841444	3,260,27,033	69.9
Nov	10,862108477	7601841444	3,260,267,033	69.9
Total	110,732,082,702	79783484847	32665125376	-
Average	10,066552979	7,253044077	2,813,508,902	72.0

Source: Secondary data (BITS: KCSA)

On average there was a revealed deficit of 2.8 billion monthly that most probably contributed to the depicted debt stock (38.7 billion that constituted 58%). This indicates further that those bills (above shs 101,000/=) were either disputed for or failed to be collected by the revenue collectors especially after the sixth month (180days) hence hiking the average collection days to over 275 days. However it was further noted that 80% of the monthly billings of industries were cleared within only 14 days (2 weeks) after bills delivery. This was an indicator that UEDCL'S collection emphasis had been put on industrialists, and less on domestic. Indications of improper domestic debt collection revealed that; only 18% of the customers disconnected were officially reconnected on payment and this accounted only for 14% of the total monthly disconnected value (Exhibit XV).

The reasons allegedly given by the field staff were that some of the customers especially those with bills that were over shs 0.5million and 1 million could neither be easily located indefinitely, nor be undisputed for by the customer concerned, hence, to them, this was viewed

as a time wastage, on the side of the staff whose performance rate was measured by effective amount of debts recoveries. This kind of debts recovery situation, more probably, might have contributed to the collection deficits. However, the collections in July were always high due to government institutions budget Coffs.

Never the less, the inconsistent recovery phenomenon seemed to be as a result of many mixed causes that need to be researched on further viewing it from different angles hence researcher opted for triangulation methods on controversial huge bills and longer aged accounts to get to the problem gist (Saunders *et al* 2003).

4.4.3.2 Findings on Controversial Bills (Huge Bills and Aged Accounts Over 361 Days)

Triangular finding from primary and secondary data, on the controversial bills are summarized in table XXIX that follows.

TABLE XXIX: FINDINGS ON CONTROVERSIAL BILLS OF OVER SHS 0.5M/=

REASONS FOR DEBTS ACCUMULATION		
	No.	%
Completely untraceable	24	20
Abandoned service	30	25
Poor billing	24	20
Collection inefficiency	34	28
Mgt Bureaucracy	8	7
	120	100

Source: Primary and Secondary data. (On sport checkup collaborated with documented Invoices).

Examination of 120 invoices of controversial (huge) bills build up revealed abandoned meters no longer used and untraceable (20%) due to area redevelopment and other unknown reasons, abandoned hanging meters no longer used by occupants (25%); delayed correct bills production

(disputed huge bills or estimated-Appendices LXI-LXII for UMEME as well) accounted for 20%. Usually, by the time corrected bills were developed, the rightful consumers, especially tenants, had already left the premises and could not be traced. Collection inefficiency (corruptions element) contributed 28% of huge debt and. Management bureaucracy, especially during opening of account previously occupied by other customers (7%). Generally there was unrevealing finding, on the ground, of many family consumers looping on one meter in addition to the tenancy status problem. In fact by coincidence, most of these accounts were among those in non-responded rate in the study customer questionnaires. Proper collection procedures ensures prompt payments as well as bad debts lessening [BPP, (2004); Kennedy, (2003); Pandey, (2003); and Kirkman, (1997)], but it seems UEDCL performance was contrary to this. Worse still the hedging factor of UEDCL debts was found not yet affected due to improper sales accountability to vouch for Debtors receivables schedules authenticity of which management tended to accept (Appendix XXXVI). The above scenario, in part, contributed to persistent accumulation of aging debtors that contributed consequently to adverse performance as portrayed in figure XVI below.

FIGURE XVI TREND OF UEDCL RECEIVABLES AND PROFIT /LOSSES TREND FOR YEARS 1995 –2004
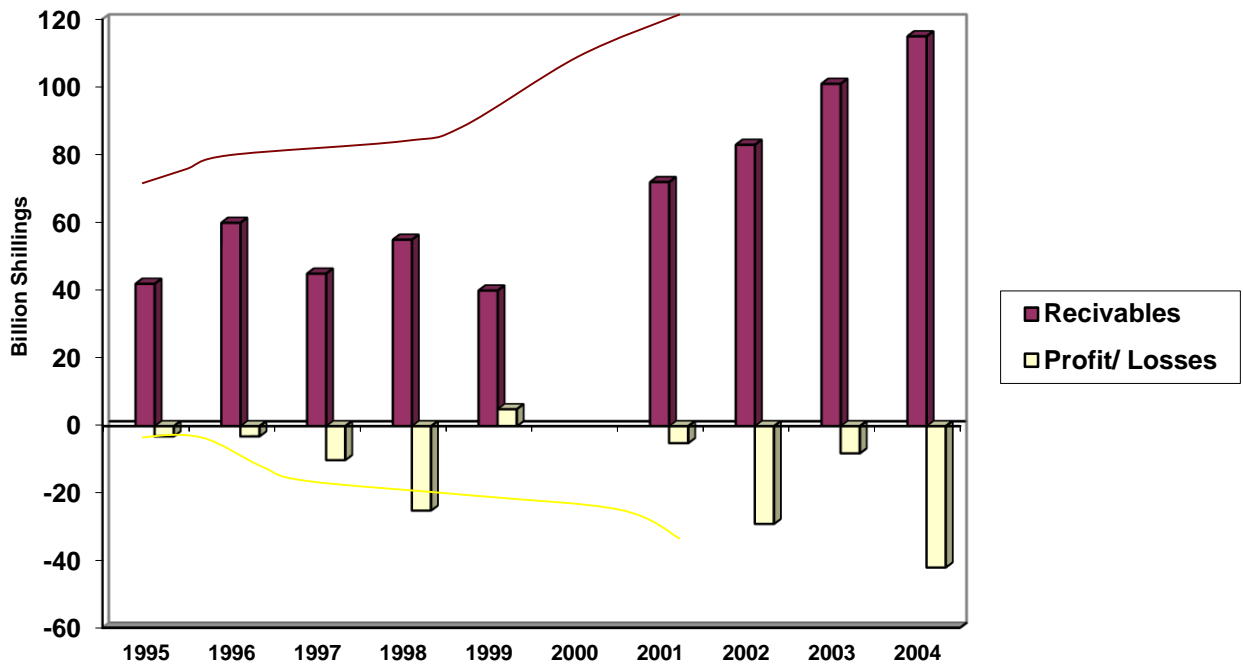
Source: Secondary data based on UEDCL annual accounts

The above table revealed a rising trend of receivables (Company funds tie up) against the down word trend of losses encountered by UEDCL, an indicator of adverse performance/ stake holders' discontent.

4.4.3.3 Statistics (Inferences) On Collection Effort With Customer Satisfaction

On the other hand, confirmatory data (inferential statistics) using Pearson's correlation coefficient test was computed and the following results were revealed statistically (at the level of $P \leq 0.01$) as shown in table XXX that follows.

TABLE XXX: CORRELATION AMONG UEDCL'S COLLECTION EFFORT FACTORS AND CUSTOMER SATISFACTION

(Pearson Correlation significant co. efficient)

	BD	DP	RP	SC	CP	ReP	CS
BD	1.00						
DP	0.13*	1.00					

RP	0.12	0.48**	1.00				
SC	0.26**	0.21**	0.31**	1.00			
CP	0.26**	0.11	0.30**	0.53**	1.00		
ReP	0.14**	0.23**	0.21**	0.27**	0.53**	1.00	
CS	0.48**	0.55**	0.65**	0.64**	0.51**	0.34**	1.00

N.B: 1 Sample number = 293

2. ** Correlation was significant at 0.01 level (2 tailed)

* Correlation was significant at 0.05 level (2 tailed)

3. Key

BD=Bills Delivery; DP = Disconnection process; RP = Reconnection process; SC = Staff Commitment; CP = Collection procedure; Rep = reminding process; CS = Customer Satisfaction

On the whole, it was remarkably observed that there exists a positive significant correlation co-efficient (functional relationship) between customer satisfaction and bills delivery, disconnection process, reconnection process, staff commitment and general collection procedures (r = 0.48; r = 0.55; 0.65; 0.64 and 051 $P \leq 0.01$ respectively). This implies that improvement in general collection procedures, with staff commitment enticement, timely bills delivery and reminding process, prompt justified disconnection and reconnection, enhances the collection effort objectives/ customer satisfaction.

4.5   UEDCL GENERAL CREDIT POLICY CONTROL AND PERFORMANCE/EFFECTS EVALUATION.

In view of the general perspective of UEDCL credit policy operation, the study looked at the following indicators based on the corporate objectives/goals for their evaluated performance/effects. This was in view of achievement of the fourth study objective.

4.5.1 Customer Satisfaction or Loyalty indicator Level

Customer satisfaction refers to the fulfillment of customer expectations and meeting their needs. It is a reflection of organizational competency or its capability in delivery of services to the customers, i.e. responsiveness, reliability, efficiency, effectiveness, and customer commitments (Onek, 2000 p. 50). This study used customers' perception on the credit policy operations indicators of quality of service delivered i.e. metering, invoicing, bills delivery and collection effort factors to evaluate customer satisfaction. Findings on these indicators are summarized in Table XXXI (with reference to fore study findings)

TABLE XXXI: OPINIONS ON CAUSES OF PUBLIC WOES ON UEDCL SERVICES

Customers (No.293)		(%)	Stake Holders and Collection Agents on payment delay (No.6)	
Connection inefficiency	281	96	Service connection inefficiency	80
Poor meter reading	120	41	Poor bills	42
Poor billings	120	44	Inefficient debt recovery procedures	42
Poor reminding and recovery process	117	40	High tariffs	40
TOTAL				

Source: Primary data

Deplorable connection procedures in addition to high costed bills coupled with poor recovery system were cited by the customers as one of the hindrances to their prompt bills payment. (Table XXXI).

Overall, basing on previous study findings 92% of the customers had their power metered though not through formal procedures (96%) indicated service connection inefficiency. However, 75% said they did not understand the meter readings, an indicator of lack of corporate assertiveness. Some customers had been on power for over a year without getting meters.

Reasons given included lack of metering devices (63%), meter burnt (11%) or taken by UEDCL staff (26%) for unclear reasons.

Customers (49%) did not believe the bills delivered were based on actual meter readings, 29% said their bills were simply estimated, while 20% said just a few of the bills they got were actual, while the rest were estimated.

Basing on primary data, the majority (59%) of customers rated the meter reading process as good and 41% as a poorly done operation. The major reason for poor rating included estimation of bills when meters were read monthly, though 56% rated billing process as fairly executed. This might be due to the majority (56%) customers that had bills of less than shillings 100,000 per month found meeting their payment obligations according to corroborated secondary data findings (table XXVII).

On the whole statistically, using Pearson's correlations coefficient test, it was found that there exists significant correlation (functional relationship) amongst the credit customer screening and rating (credit standards and analysis) operations and with no significant functional relationship between them and customer satisfaction as this was in the interest of the management although it was viewed as a bureaucratic pretexts in the eyes of customers. In other wards it implies that review and improvement on the above operations enhances performance as well as forming basis of optimum or justified credit terms in view of customer's satisfactions. On the other hand it was found that there exists significant relationship between UEDCL credit terms, collection effort and customer satisfaction, (on average $r = 0.55 \ P \le 0.01$). These functional relationships imply that improvement on each of them, simultaneously, is likely to raise customer satisfaction level. In other wards, the above operations variations ($r^2 = 30\%$) account for the variation in customer satisfaction indicating that *there was a gap to fill on the quality of services delivered as perceived by the UEDCL customers.*

4.5.2 Stakeholder Appreciation

The term stakeholders refer to owners, credit managers, internal staff and government and potential investors [Pandey, 2003; Accounting Practice Board (APB) statement Cut No. 4 Par 125). Mill champ 1996: Wood F. (2002].

It was found from UEDCL's strategic corporate plan (2002) that the above parties were its interested parties. Its specific objectives included human resource improvements, reduction in bureaucracy, minimized non technical energy loss, optimal utilization of resources, improved revenue collection, return on investment, corporate image and increased customer base. Hence these were also treated as study credit management performance indicators for effects evaluation.

Research in regard to stakeholders' interests and in reference to corporate objectives, performance indicators were measured basically from primary and secondary data (study respondents, published accounts and internal records). These included UEDCL credit performance portfolio (table XXXII) that follows.

TABLE XXXII: UEDCL PERFORMANCE INDICATORS IN REGARD TO STAKEHOLDERS' APPRECIATION

	A. Sales Performance/ Year:	2001 (%+; -)	2002 (%+; -)	2003 (%+; -)	2004 (%+; -)
1	Number of customers	200212	224869 (+ 12.3) **	243734 + 8.3	252,000
2	Units (KWH billed in millions)	706.0	891.6 (+ 26.3) **	917.9 + 12.9	__
3	Value (in UShs billions)	97.2	140.4 + 44.4) **	156.0 (+ 11.1)	146.5 (-6.4)
	B. Credit Investments:				
1	Receivables (Debtors UShs Billions)	72.0	83.3 (+ 15.7)	101.6 (+ 22.0)	116.3 (+14)
2	Debtors turn overs	1.34 times	1.68 times	1.53 times	1.25 times

3	Capital employed (UShs Billions)	241.15	216.78 (− 10.0)	233.4 (+ 22.0)	216.42 (− 7.2)
4	Working Capital	76.1	48.16 (− 36.71)	63.14 (+ 31.1)	1.41b
5	**Costs of Credit**				
	a) Cost of Sales (UShs billions)	55.5	71.2 (+ 28.3)	59.3 (− 16.7)	51.5 (−7.8)
	b) Financial Interests	9.9	32.2 (+ 226.6)	26.2 (− 18.7)	8.14
	C. Returns (profitability)				
1	Profit/Losses (Ushs billions)	2.41 +ive	(29.32) –ive	8.07 +ive	(42.4)-ive
2	Rate of Return (%)	0.01 % +ive	(13.5) – ive	3.5 +ive	(11.2) -ive

Source: Researcher's computation based on UEDCL Published Accounts

NB: Computation formulas based on traditional financial management gurus.

(a)   Debtor turn over =   sales   = Number of times Debtors turns over each year

Debtor

Average Collection period (ACP)

     360   or   Debtors   x 360 = Number of days, on average, taken to clear the debt

Debtors Turns over   Sales

c.   Capital employed = All company Assets (fixed and current) Less Current Liabilities or

equity and long-term borrowings (Pandey 2002).

2001: (165.05 + 163.35) – 87.25 = 241.15 (Ushs billions)

2002: (168.62 + 154.71) – 106.55 = 216.78 (Ushs billions)

2003: (170.22 + 183.93) – 120.79 = 233.36 (Ushs billions)

2004: (215.69 + 120.16) – 119.43 = 216.42 (Ushs billions)

d.   Working Capital = Current Assets Less Current Liabilities

2001: 163.35 – 87.25 = 76.1 (Ushs billions)

2002: 154.71 – 106.55 = 48.16 (Ushs billions)

2003: 183.93 – 120.79 = 63.14 (Ushs billions)

2004: 240.31 – 238.9 = 1.41 (Ushs billions)

e.   Return on Capital Invested =

ROCE   Profit   =   Net Profit before tax and interest

      Capital employed   Gross capital Employed (Total Assets)

2001: <u>(2.41)</u> * 100= (0.01%)

    241.15

2002: <u>(29.32)</u> * 100= (13.5%)

    216.78

2003: <u>(8.07)</u> * 100= (3.46%)

    233.4

2004: <u>(24.2)</u> * 100 = (11.2%)

    216.42

4.5.2.1 Credit Sales Performance (UEDCL Activity Turn Over)

(i)   Customer base growth

This was measured in terms of number of customers, units (KWH) consumed and value in Uganda Shillings. Findings showed there was an increase in the above factors. Significant increase was encountered in the year 2002 that registered an increase of **12.3%, **26.3% and ***44.4% increase respectively. However, findings revealed that though UEDCL customer base had increased from 130, 000 to 250,000 customers, this only accounted for less than 10% of the country wide population.

(ii)   Credit Investments and Cost of Credit

Performance indicators measured were investment in receivables, capital employed and working capital (Table XXXII above). There was an increasing trend of investment in receivables (debtors) by 15.7%, 22% and 14% for years 2002, 2003 and 2004. In as much as there was a noted increase in receivables in 2002, there was a remarkable decline in capital employed by 10% and working capital by 36.71%. The cost of credit is portrayed in table XXXIII that follows.

TABLE XXXIII: CREDIT COST

Credit Cost	2001 (000)	2002 (000)	%	2003 (000)	%	2004 (000)	%
Cost of sales (Energy)	55,476,143	71,197,424	28.3	59,321,822	-16.7	51,500,000	-7.8
Operation costs (Bad debts provision inclusive)	34,309,267	66,323,222	93.3	62,449,027	-5.8	87,898,284	+28.9
Finance costs (Loan interest)	9,865,759	32,223,030	226.6	26,190,357	-18.7	8,400,000	
Total Cost	99,651,169	169,743,676	70.0	147,961,221	-12.8	147,798,284	-1
Bad debts provision	4,863,913	23,659,910	+386	41,000,000	+73	65,000,000	58.5

Source: Researcher's computation based on Published Accounts

The cost of credit was too high in 2002 with an overall increase of 70%, that included increase of 28.3% cost of sales, 93.3% operational costs and financial interest of 226.6% increase due to borrowed capital. In effect there was a 36.7% decrease in working capital in 2002, (table XXXII), an indicator of liquidity crisis due to funds mismanagement (Kirkman 1997). Though there was a slight improvement in financial management as reflected in the financial returns of 2003 that registered a marginal profit of 8.07 billion compared with a crucial loss of 29.3 billion in 2002 and net return of 3.5% compared to -13.3% in 2002, again a reversed sharp negative trend was encountered in 2004 that left only 1.41 billion shillings working capital, (table XXXII), with a registered year increase in operational costs (28%), and debts impairment provision (58.5%).

TABLE XXXIV: CREDIT FUNDING EFFECT (BILLIONS)

Liquidity position	2001	2002	2003	2004
Investment in receivables (debtors) billion shillings	72.0	83.3	101.6	115.7
Current Ratio		1.46:1	1.52:1	1:1
Acid Test		1.3:1	1.3:1	
Debtor on Current Assets (%)		53.8	55.2	48.1
Debtor's days	270	259	256	284
Expense on funding (billions on 90 days)	32.3	34.6	38.5	
Actual Expenditure (Based on actual days)	71.8	99.6	109.4	
Extra Funding	39.5	65.1	70.9	

Depictions from the above tables are indicative of poor liquidity position portrayed also by liquidity position extract. That is to say 270; 259, 256 and 284 days were the number of days in which UEDCL funds were tied up. Poor collection arrangements leads to funds tie up (Gittman 1982; Pandey 2002). Therefore, extra funds of 39.5; 65.1 and 70.9 billion shillings had to be mobilized from the government borrowings. Creditors payments could be stretched, or else interest funds had to be sought from financial institutions beyond equity capital. To day UMEME projected investment source is outside borrowing according to David Hall, 2008.

On the whole the UEDCL credit / services performance portfolio was indicative of stake holders dissatisfaction and with no regard to share holders value, among others.

4.5.3   Customer/Stakeholders Suggestions on how to improve UEDCL Credit Management.

Respondents' suggestions were aimed at making improvements and remedies in the credit policies operations as sourced from the primary data (research respondents opinions), portrayed in (table XXXV) and were assessed based on opinions aggregations, in reference to literature review to eliminate biasness and to ensure study recommendation validity.

TABLE XXXV: RESPONDENTS SUGGESTIONS FOR IMPROVEMENT

	Customer (%)	Staff (%)	MGT (%)	Collection Agents (%)	Stake Holders (%)	Average	Reasons
Proper identification of consumers	90	80	80	100	100	90	Data Mgt
Computerization of all districts	100	80	80	100	100	92	Data Mgt
Customer sensitization and counseling	90	90	60	100	100	88	Customer care
Timely provision of materials	100	90	60	80	100	86	Customer
Property attachment	80	90	90	100	100	92	Easy debt security
Improvement of staff conditions	90	100	60	100	100	90	Increase staff commitment
Close supervision and monitoring of billings	100	80	80	100	100	92	Correct bills production
Timely bill delivery	80	60	60	100	100	80	Prompt payment
Tariff reduction	90	70	40	80	80	72	Payment affordability
Timely disconnection	76	72	80	100	100	86	Avoid debt accumulation
Sticking monthly consumption	90	100	100	100	100	98	Do
Prepayment system	90	60	100	100	100	90	Do
Prior investigation of terminated A/Cs	80	90	60	100	100	86	To get right balance
Re-registration of consumers	90	90	60	100	100	90	To get right customer base
Bills To be paid at Banks	60	80	100	100	100	88	Easy payment
Improvement on sigma	90	50	90	90	90	82	To check on illegal
Debts residual	90	80	50	80	60	72	Debts clearance
Debts write off	90	80	40	80	60	70	To clear debts vacuum
Distributional: collection contracting out	50	50	60	100	100	72	Easy receivables collection

Source: primary Data based on returned questionnaires and interview schedules.

In overall (on average), based on respondents' suggestions portrayed in table XXXV above, 90% felt there was a need to improve on UEDCL's credit extension accounting and control procedures and practices to ensure effective customer identity and energy flow trace ability/sales, effectively integrated and embedded for concerted effort. This is in line with ISO 1900-2000E compliance requirement for credit quality assurance. These also include components of: districts computerization (92%) customer sensitization and counseling so as to improve customer care (92%). Literature studied supports this (Manning L.G. *et al,* 2004; Cole 2001; Frenzel 2000 among others).

Further more on the proper bills production they had the following views on its components; 86% timely provision of service materials; 90% actual meter readings; 92% close supervision and monitoring of billings On the other hand, 72% made plead for justified tariff computation as customer incentives for payment willingness and affordability. This was also a view held by Onek 2000; Tumuhimbise 1997; and Brealey 1991.

Further to payment promptness 80% recommended for timely bills delivery and this was a viewed held by Brealey 1991; and Kirk man 1997. 88% wished to pass their payments direct to the bank, while 90% argued for prepayment meters for **"pay as you consume"**. However literature subjects this on sequestration laws. 86% timely disconnection and reconnection while 98% argued UEDCL should stick on monthly consumption as credit limit, while 86% recommended for prior investigation of terminated accounts or overdue debts, especially those beyond 360 days. Over roll 100% recommended ad hoc general company debtors' review exercise to reflect the true debtors with the company, hence customer re-registration. For debts clearance, 72% appealed for debts rescheduling and payment arrangements, a view held by **Aon, 2003-**advice on credit management

risks process. While, 70% felt that debts should be vouched for complete debts write off on the other hand 90% argued for improvement of sigma operations, to check on illegal, while 72% suggested for out sourced collection by contracting out zoned or market segmented agents so that responsibilities are fixed, hence a need for control area distribution meters at least per each transformer.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0   INTRODUCTION

The purpose of this study was to assess the effect of credit management policy on performance as well as identify the strength and weaknesses of the credit management systems of UEDCL, focusing on customer satisfaction and stakeholder appreciation.

5.1   UEDCL CREDIT POLICY ESTABLISHMENT

Findings show that UEDCL had an established credit polity, prima fancy, evidenced by the "credit policy Document Version 2001" that contained operational set up similar to the internationally recognized credit management policy constituents i.e. Credit Standards and Analysis-UEDCL Customer Sourcing and Evaluation procedures; Credit Terms-Credit extension stipulations inclusive of service connection, metering, invoicing, bill delivery and payment terms/conditions; Collection Effort-Customer account monitoring and revenue or receivables recovery procedures. The policies aimed at customer satisfaction and stakeholder appreciation. Credit management policy refers to a legitimate plan of action or guideline procedures and strategies formulated for the trade credit management (Kakuru 2002). Organizations striving for self-sustenance for survival and prosperity in the competing business arena need to design credit policies necessary for effective control of receivables (Pike *et al.,* 1998, *cited* by Salima 2002). Therefore UEDCL's establishing a documented trade credit management policy was in line with the credit management gurus (Pandey, 2002). Having policies for constant reference in a manual form is important since credit policy decision is not a one time static decision, but a slow process (Pandey, 2002, p. 85;

ISO 9001: 2000E). The policy was specifically in view of UEDCL reliance on credit energy sales strategy. Therefore the need to pursue promotion of sales growth through credit extension would allow UEDCL also to operate to capacity for the sake of massive capital outlay being invested in it (Buckley, 1982). It was found therefore, that UEDCL had established, primafacie, a mandatory credit management policy.

5.2   CREDIT POLICY FUNCTIONAL VALIDITY

However, on the other hand, in regard to the UEDCL credit policy integration and embedding in the entire organization, it was found that, the aspects of credit management facilitation (functional validity) had been inadequately formulated.. This was contrary to the integrated and embedded credit control system argued for by management gurus (Salima, 2002; ISO 1900-2000E; Cole, 2001 Banker, 2000; Druker, 1995; Frenzel, 1992), though slow process is some how healthy (Pandey, 2003).

"*Every time that you deal with organizations you are dealing with systems, procedures and structures that should be got right*" Nsubuga (2008)" *cited* by Mugalu M. Sunday Vision 2008). Moreover, on the other hand, management gurus argue that the key factor in policy formulation is that sound and effective policies and practices, as a control measure must be given a recognition and their need felt by all parties in an organization so that they are capable of passing the compliance and adherences' Tests (Mill champ 1996), hence a need for policy's embedding and integration in the entire organization for all parties awareness and concern - commitment (Salima: 2002). In UEDCL, in view of the above mentioned aspects referred to as credit functional validity in the study, the procedures and practices attached to the elements of Data Credit Management that is to say; Credit Policy Documentation and Information system inclusive of Credit Sales

Accountability, (energy product flow and credit customer location and identity), infrastructure or logistics provision procedures; Capacity Management referring to human resource that is to say organizational structure and work environment as well as Risk Management referring to credit extension controls should be integrated and embedded with the established credit policy, as an indicator of total organization effort to ensure quality service assurance and forge effective or positive organization performance (Cole 2001; ISO 1900; 2000E).

Findings on research survey on domestic customers and UEDCL credit management routine interacting personalities (that is to say senior management, support staff, debt collection agents and government agents as stakeholders) revealed that;

a) **Credit policy documentation, information system and performance**

33% of the support staff and the majority of the customers were not aware of the documented policy package and routine policy changes. This was an indicator of policy implementation handicap hence eminent none implementers' credit policy compliance and adherence. It was noted from Forest A. (1992) that "it is unraveling, new younger, better educated and informed workforce want to know why they are being told to do something". She further made observational note that "Hong Kongs and Asians hierarchical management systems often forced the chief executive officers to act the "all knowing father or order giving Generals", an act of which is out dated by the Japanese's business management success secret (Cole 2001; Bank 2000). "Support staff who are unaware of company guidelines are less likely to adhere to standards and guidelines" (Mill Champs, 1996).

In today's competitive business arena there is need for every organization to have a well laid down information and communication system either composed of business specialists who direct or

discipline their own performance through organized feed back from colleagues, customers, and headquarters (Frenzel 1992). Prompt attendance to customer's needs, as well as sensitizing them, where necessary, is a prerequisite activity for their prompt responses to their bills settlement [Ntayi (2000), Manning L.G. *et al.,* (2004)]. The Government Agents are chronically complaining about energy distributor's lack of assertiveness to the public (Appendix XX). For large corporations like UEDCL, the competitive advantages of the technical management information system (MIS) are well documented. For example, decentralization of MIS in Merrill Lynch (company) was reported to have reduced expenses by millions of dollars because each unit structure would do what it needed to do in time (Frenzel, 1992), and meet their customer's expectations and collecting receivables on time if manned effectively. Contrarily, UEDCLs implementation of the centralized BITS with absolute field powers appears to be a handicap to the district managers' duty execution of customer data management.

The information system has been centralized to one department charged with bills development (meter reading, computerization, and bills delivery) that seem to hinder district managers execution of their responsibilities at the right time contrary to Frenzel (1992) and Manning L.G *et al* (2004) arguments and had to affect the UEDCL performance accordingly. On the other hand, basing on secondary data, mostly published accounts, it was found that, UEDCL had not instituted proper credit sales accounting and control procedures and practices. This was an indicator of inadequate accounting information procedures and practices instituted in UEDCL that resulted, partly, in none authenticity credit sales records (inclusive of accounts receivables as management itself tended to accept - Appendix XXXVI)

In general the credit policy documentation and information system in UEDCL was found inadequate, resulting into an information gap or information asymmetry, contrary to the stated

objective of keeping all concerned parties informed and argued for "sales partnership strategy" (Manning LG *et al* 2004). This encountered shortfall had a negative impact on UEDCL Policy implementation as well as credit sales authenticity with overall adverse organization performance.

b) Credit Extension Logistics Provision Procedures and Performance

On Logistic provision, findings, basing on 96% customers' response, revealed that, there was an astounding degree of corruption in the power services material provision, within the power connection process to consumers hence this was an indicator, partly, contributing to the manifested large number of illegal connections, as resorted alternatives by unscrupulous public. This was an indication of the resultant none adherence to the ethical code of conduct of wcih management itself accepted and poor UEDCL corporate image (80%). The staffs (75%) themselves were not adequately provided with logistics for their collection effort. Today marketing gurus urge for customer value creation through "Consumer Relations Management partnership" with technological support (Manning L.G *et al* 2004) Skills alone are not enough; tools and processes along with management system in which these processes operate effectively are necessary conditions for success (Frenzel, 1992). This was also an indicator of credit management handicap. There was no clear designed Geographical Grid Net Work Mapping for energy flow and potential/existing customers locations coupled with identity (energy/customer referencing), resulting into the questionable data set up for the credit sales accounting and customer monitoring (customer data management) characterized by high degree of corruption and non adherence to the ethical code of conduct by staff as accepted by the management itself. The ineffectiveness in identification and traceability of customer and product flow was claimed by (67%) of support staff, although this is emphasized in ISO quality management system requirements guidelines (ISO 9001; 2000E). Hence this deterred the other UEDCL credit policy operations.

c) Credit Procedures and Practices on Organizational Structure, Work Environment and Performance

Finding, basing on management and support staff, revealed that, there was no adequate or right structures for credit management and inadequate conducive atmosphere. There was not clear job descriptions as was reported by (60%) of the support staff and (40%) management staff. It was reported that there was a discriminatory incentives system, accepted by management, in terms of training and career development (60%), that was characterized by low motivational impact on staff (80% of management response),.moreover, it was found that (80%) of the interviewed staff had never received any promotion in the past ten years period. An employee is the first customer that needs to be satisfied for total quality management and organizational excellence. Employee commitment or engagement is very vital for business success (Manning G.L 2006; Cole, 2001). *"There is a need to involve every one in the organization, as well as customers and shareholders in improving the business. Quality staff both as individual and as teams working together will provide turn around in our customer care"; observed by a one time senior manager of UEB senior manager, (Oriokot H 1997).* Today by Manning *et al.,* (2004) argues for the "sales partnership strategy". Although best structures do not ensure good performance, poor organizational structure makes high performance impossible (Druker, 1995). However, the human resource requires more than structure (Onek, 2000). The above findings portrayed low incentive and discriminative system due to lack of duty enticement and enthusiasm practiced by UEDCL. This is not only against modern management philosophies, but has implications on labour laws (Cole, 1995 p. 405). These work conditions might be the breeding ground for the rampant lack of job ethics and consequently poor performance, customer/ stake holders' dissatisfaction and poor corporate image (Appendix xviii).

Moreover, in their defense, 90% of the management staff reasoned that there were still bureaucratic indecisive procedures that tended to be chronically inherited in succession, an issue that needs further research as this seems to be along term staff woes according to manpower audit. There were no credit controllers or district sales ledger accountants to co-ordinate or account for credit sales basing on (100%) management and support staff response. This, in part, led to improper customers' data management for credit sales accountability, hence a breed of witnessed chronic Auditor's woes (UEDCL Auditors Annual Reports, 1995-2004). This indicates that, UEDCL credit management lacked a controller or arbitrator between sales, finance and customers (Brealey *et al.,* 1991). "Deceptive accounting machinations" have landed other energy trading companies in trouble, most famous being the recent scandal of Enron in USA, leave alone the current Global Credit crisis. Some analysts had even been led to question whether power trading was still viable business since Enron's dramatic collapse (Kennedy–Wall Street on Power Markets, 3rd June 2003). UEDCL therefore needed to implement the policy document proposal to avoid a similar fate. An organization structure is the firm's ways in which it divides its labor into distinct tasks and then achieves coordination between them. Credit organization structure must be designed explicitly in order to have effective function (Cole, 2001, Onek, 2000). The credit policy or practices should be embedded and integrated in the entire organization structures and systems for their functional validity (Salima 2002). Human resource is one of the organization assets that need to be managed optimally and it's a key to the organization's success (Cole, 2001).

Crowning it all, it was found that, at UEDCL, there was no indication of perfect credit extension quality services assurance, economic credit sales accounting controls and evaluation guidelines an indicator of ineptitude of people in charge (Arora, 2006; Cole, 2001), due to managements' failure to formulate a well integrated and embedded credit management policy (functional validity) to

ensure effective performance and goal achievements. Sound (adequate credit policy formulation) well integrated, embedded, indicative of effective quality services assurance or effective functional validity is the only way for effective performance, ultimately/customer/stakeholders satisfaction (Frenzel 1992; Cole 2001, Druker 1995: Banker 2000; Onek 2000).

5.3 FUNCTIONAL RELATIONSHIP BETWEEN CREDIT POLICIES AND PERFORMANCE

(a) **Credit Standards and Analysis (Credit Customer Sourcing Evaluation and Rating)**

On the whole 33% of the interviewed subjects indicated that they did not formally conclude the legally binding power supply contract between them and UEDCL hence they neither formally made applications, nor had their premises visited by responsible staff first, nor subjected to collateral (security deposits), nor signing the agreements. 96% of them indicated getting connected to the power grid Net work through informal (corrupt) means. The above deficient process impacted on the other proceeding credit extension processes as well as the customer credit status that is to say, this affected the investment in accounts receivables, the receivables recovery rate and default rate hence creating losses. There was relaxed credit customer evaluation for their payment potentiality and risks aversion (credit standards and analysis) approach contrary to the credit customer quality management (Pandey 2002), amidst the customers tenancy and volatile residences statuses (Biribona 1997). Relaxed customer's evaluation was contrary to UEDCL basic guidelines and the trade credit international business norms that require optimum economic credit extension trade offs (UEDCL policy vision 2001; ISO 1900; 2000E, Copeland and Khoury, 1981). The lack of knowledge of its customers and/or inadequate control procedures to ensure that all its power purchases and sales were properly accounted for hampered the credit management system of UEDCL (E-Bay, 2003; Kenedy, 2003). This results into haphazard costed bills to the dismay of

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customers (Arora 2006) and unmaximized revenue collection efficiency (only between 60-70%). This was admitted, as mentioned earlier, by internal management (Appendix xxxvi). Moreover, UEDCL's Customer base (market share/growth) is still small consisting of only 10% of the national household population. The majority (92%) of customers are domestic and they are the category responsible for the greatest (80%) accumulation of receivables. Moreover, through customer character extraction, the number of tenancy status (52%) was exposed and was accompanied by one meter looping by many consumers unknown to UEDCL officially, as observed by the researcher through triangulation on controversial huge bills. Hence, this led to huge bill built-up due to failed credit stipulations variation and volatility exposed character that was still in resistance in UEDCL (Tumuhinmise 1997 and Biribonwa 1997 – Appendix XXVIII) Electricity being one of the bases of the national development, there is still a big gap to fill in order to live up with the government expectations (Hall, 2008).

Moreover, inferential statistics based on Pearson correlation tests on surveyed samples revealed that all the activities connected with customer screening at UEDCL had a statistically significant functional relationships amongst them though with no significant relationship with customer satisfaction. This implies that a review and improvement of the above activities should be done simultaneously for effective customer evaluation and rating for effective sales contract seal, nevertheless, aiming at a trade off between stringent and liberal terms, in a justifiable manner in the eyes of the customers as well as for the good of stakeholders by observing their expected values, but not to be seen as a mere bureaucratic pretext process.

b) Credit Terms and Instruments (Credit Extension Stipulations)

The credit terms and instruments (stipulations) were found inappropriately or unoptimally fixed, moreover, with no amenable inducements to customers. 44% of interviewed customers were disputing metering and billing processes inclusive of Tariffs Settings based on only total costing according to formula with "ERA". Customers interviewed (76%) were not even knowledgeable to the measurement of their energy consumption (metering). "Goods or services description and measurement must be with concerned parties consent if legal implications were to be upheld (Sale of Goods Act 1997, Kirkman 1997). This shortfall ultimately ends up with imaginary power losses and tariffs hikes as evidenced in the directors' report – *"due to inconsistencies in billing, tariffs were adjusted to cater for the power losses"*. Audit (Report, 1997–2003, Appendix xiii) The PERD 2003 and ERA formula for tariff setting confirm this. Hiking of power tariffs however is not the solution to inefficiencies encountered in the ascertainment process" as witnessed in Enersis - Chile (World Bank report 1995).

The Government is subsidizing the UEDCL /UMEME with billions of shillings, to no effect realized as evidenced by customers' woes leave alone the persistence dissatisfaction state encountered by the Government itself (Kasasira R. 29/06/2009 – Appendix xx).

On the other hand, although UEDCL did not have an official discounting policy, there were some irregular power charge reliefs, "Government of Uganda Relief" (G.O.U.R), Rebates and others like ordinary, peak or off peak hourly rates and an incentive rate for low income eanerw usually 30-50 kilowatts allowance as first consumption bracket. However, billing basics could not be explained properly by UEDCL to the public hence customers and "ERA" were persistently discontented with the power prices [Lukyamuzi August 2003, Suubi FM Radio 2008. Appendix XXXIII]. There were various credit periods, limits and Rebates that were not clearly set and made abreast of. Findings revealed that, the average collection periods rose up beyond 275 days as a

consequence, contrary to the 90 official days. There was a persistent cumulative rising trend of Receivables stocks beyond 360 days (58%), moreover characterized as delinquents or irrecoverable, hence, an indication of high defaults, portrayed by UEDCL records rising trends of debts impairments. The act of bills backdating adjustments was evident in the published final accounts for year 2001 that showed a net loss of Shs 29 billion after accounts reconstruction a year later. This is one way of deceptive (creative) accounting mechanisms of which investors and analysts are worried of as far as the energy trade is concerned (Keneddy – (wall street), 2003). This is also a barrier to the collection effort of which, consequently, has to result into poor credit customer portfolio (Pandey, 2002). Customers are always watchful for their demanded goods and services economic value (Onek, 200l Frenzel, 2001, Kotler, 1997). These chronic complaints by the public tend to upset the stakeholders agents as deplored,

(i) "*These people are not efficient. I feel like crying when MPs keep coming to me every week to complain against them*" (Syda Bumba, Minister for Energy) Olupot, New Vision, 2003) (Appendix xviii).

(ii) "*Commercial losses caused by illegal connections, a poor billing system, long response time by UMEME to reported cases and new connections plus un metered connections, all contribute to the losses*" *(Kabagambe Kaliisa permanent Secretary ministry of energy 2008 cited by Kasita Ibrahim New Vision business column).*

On the whole, this indicates that UEDCL/UMEME centralized billing process is inefficient with unjustified computation basis that has led to a negative attitude towards the company by the public. The findings revealed also some irregularities in receivables acknowledgement and prompt adjustments especially for big bill amounts hence, 42% of customers interviewed were not satisfied with the above process. Proper acknowledgement instruments with less irregularities and proper designed control measures are necessary for payment affordability. (Onek, 2000; Kirkman, 1997,

BPP 2004, ISO 9001; 2000E). In such deplorable state customer royalty can not be ensured in the competitive business world. (Manning L.G. *et al.,* 2004; Kotler, 1997).

It was revealed statistically, using Pearson correlation coefficient test, that there is a significant correlation coefficient (relationship) amongst the functions of credit terms and with customer satisfaction which implies that improvement on each of them enhances customer satisfaction (i.e. meter reading, billing, payment acknowledgement = customer satisfaction).

c) Collection Effort (Credit Customer Monitoring, Receivables Recovery and Accountability)
The collection effort was found inadequate, mostly because of laxity of customer identity (location and referencing) poor metering, billing and inefficient logistics provisions and general non aggressive recovery procedures. Inefficiencies were also noted in the debts monitoring and disconnections on lack of credit sales accounting authenticity.

Secondary data, extracted from UEDCL internal records analysis, revealed rampant individual customer huge balances an indicator that there was no close monitoring and sticking to credit limits. Moreover, the practice showed no definite credit limit to determine the individual customer delinquency. On triangulation, Examination of 120 invoices of controversial (huge) bills build up revealed abandoned meters no longer used and untraceable (20%) due to area redevelopment and other unknown reasons, abandoned hanging meters no longer used by occupants (25%); delayed correct bills production (disputed) accounted for 20%. Usually, by the time corrected bills were developed, the rightful consumers, especially tenants, had already left the premises and could not be traced. Collection inefficiency (corruptions element) contributed 28% of huge debt and. Management bureaucracy, especially during opening of account previously occupied by other customers (7%). Generally there was unexpected finding, on the ground, of many family

consumers looping on one meter in addition to the tenancy status problem. In fact by coincidence, most of these accounts were among those in non-responded rate in the study questionnaires. Proper collection procedures ensures prompt payments as well as bad debts lessening [BPP, (2004); Kennedy, (2003); Pandey, (2003); and Kirkman, (1997)], but it seems UEDCL performance was contrary to this. Worse still the hedging factor of UEDCL debts was found not yet affected due to improper sales accountability to vouch for Debtors receivables schedules authenticity of which management tended to accept (Appendix xxxvi). The above scenario, in part, contributed to persistent accumulation of aging debtors that contributed consequently to adverse performance. Ultimately, the average collection days of over 275 days were beyond the official credit days of 90 and persistent huge bills build up were encountered aging beyond 360 days that had to result into bad debts and consequently contributed to the company's heavy losses. 58% of debt stock was actually beyond 361 days.

Statistically, the Pearson's correlation significant test revealed, on average, a significant correlation coefficient (r=0.55 P≤0.01) within collection effort variables and between customer satisfaction. In nut shell this implies that there is a functional relationship amongst the collection effort variables and customer satisfaction. In other wards, it indicates that improved/aggressive general collection procedures, staff commitment enticement, timely bills delivery and effective reminding processes, prompt disconnection and reconnection on delinquent and paid up accounts respectively ensures collection effort objectives/customer satisfaction level enhancement.

5.4 THE FUNCTIONAL EFFECTS OF UEDCL TRADE CREDIT POLICY ON PERFORMANCE

Findings on the above were as a result of assessments of the functional effects in view of customer satisfaction and stakeholders' appreciation.

5.4.1 Customer Satisfaction

Generally, on the basis of customer perceptions, quality of services delivered could not live-up to their expectations. This was manifested by customers' perceptions indicative of non satisfaction with power connection procedures (96%), metering, billing or invoicing components like tariffs and other attached credit stipulations (44%). Statically, the credit policy functional operations were not significantly correlating with customer satisfaction according to portrayed customer characters and attributes from their questionnaire response as their function was not in their favour and to the fact that (96%) of the customer response viewed the credit screening process as a mere bureaucratic pretext due to unfavourable UEDCL power connection procedures. Customer is always a king whose satisfaction should be aimed at, first, by all trade organizations Manning .G. L. *et al.,* (2006); Cole (2001); Bank (2000) and Kotler (1997). Customer satisfaction refers to the fulfillment of customer expectations and meeting their needs. It is a reflection of organizational competency or its capability in delivery of services to the customers, i.e. responsiveness, reliability, efficiency, effectiveness, and customer commitments (Oneck, 2000 p. 50). Contrarily, at UEDCL, there was a manifested inadequate service quality assurance due to the above mentioned shortfall in the UEDCL power connection, with none conducive credit stipulation and collection effort.

On the other hand, in effect, there was a variation (r^2) in the credit stipulations and collection effort functions of generally, (30%) that could explain the variation in customer satisfaction, indicating that there was a gap to fill by UEDCL. The quality of services delivered as perceived by the UEDCL customers was still wanted.. This was due to the gaps encountered in the setup or formulated credit stipulations and practiced collection procedures.

5.4.2 Stakeholders Appreciation

Findings revealed an increased customer base or market share in terms of numbers of customers and value in Uganda shillings; from 212 customers in 2001 to 224869 customers in 2002 (12% increase) to 243734 customers (8.3% increase) and to 252000 (29%) and from UGX 97.2 to UGX 140.4 (an increase of 44.4%), to UGX 156.0 (an increase of 11.1%), to UGX 146.5 (a decrease of 6.4%). However, the customer base increase accounted for only 10% of the country wide population. Growth in customer base is an indicator of market share growth as a result of conducive trade credit terms that might be liberal (Kakuru 2000; Pandey 2002). In national interest, it is an indicator of development as energy is development-driving shaft in the economies (Biribonwa 1997; Uganda National Policy Plan 1997 cited by Tumuhimbise 1997). On the other hand, energy is one of the non-storable goods that need to be dispatched on production (Biribonwa, 1997). It therefore needs perfect trade credit customer evaluation for customer quality, optimum credit stipulations and formulations and properly laid down procedures and practices for customer prompt payment. However, according to portrayed evidences, there were findings of inadequate credit policy functional validity, i.e. indicative of management failure to integrate and embed proper credit management policy in the entire organization management system. This was manifested in inadequate credit policy documentation and information systems connected with credit sales accounting and controls, inadequate logistics and human resource management procedures, especially where it was found that, there was no properly designed power Grid Map reference for customer/energy location and identify improper credit personnel structure with no adequate motivational impact. Audit reports (2001-2005), revealed that, UEDCL had a problem of 40% power losses partly due to illegal connections (unregistered consumers). These illegal connections had been curbed by instituting special operation task forces like Sigma, Thunder, and revenue protection unit. Some of the customers subsequently registered voluntarily, in addition to

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the new connections. Nevertheless, the unjustified tariff computations increased customers' outcry, and energy consumption was seen as an inevitable evil in their eyes hence a likely-hood of tarnishing UEDCL/UMEME corporate image. This was therefore, in effect an indictor of inefficient performance in respect of quality of services delivered by UEDCL in the eyes of stakeholders as, these resulted into further stakeholder dissatisfaction on the under mentioned credit extension returns portfolio.

There was an increasing trend of investment in receivables (debtors) by 15.7%, 22% and 14% for years 2002, 2003 and 2004. In as much as there was a noted increase in receivables in 2002, there was a remarkable decline in capital employed by 10% and working capital by 36.71%. Liberal terms (unoptimized) cause increase of investment in receivables that can result into heavy non-cost benefit operations (Arora 2006; Pandey 2002; Salima 2000, citing Pike 1998). Credit extension is a commitment of funds for uncertain returns to an organization which can even lead to total failure due to extra costs and bad debts incurred (Copeland and Khoury 1981).

On the other the cost of credit was too high in 2002 with an overall increase of 70%, that included increase of 28.3% cost of sales, 93.3% operational costs and financial interest of 226.6% increase due to borrowed capital. In effect there was a 36.7% decrease in working capital in 2002, (table XXXII), an indicator of liquidity crisis due to funds mismanagement (Kirkman 1997). Though there was a slight improvement in financial management as reflected in the financial returns of 2003 that registered a marginal profit of 8.07 billion compared with a crucial loss of 29.3 billion in 2002 and net return of 3.5% compared to -13.3% in 2002, again a reversed sharp negative trend was encountered in 2004 that left only 1.41 billion shillings working capital, (table XXXII), with a registered year increase in operational costs (28%), and debts impairment provision (58.5%). This kind of performance therefore was indicative of poor liquidity position and poor working

capital management. That is to say 270; 259, 256 and 284 days were the number of days in which UEDCL funds were tied up. Poor collection arrangements leads to funds tie up (Gittman 1982; Pandey 2002). Therefore, extra funds of 39.5; 65.1 and 70.9 billion shillings had to be mobilized from the government borrowings. Creditors payments could be stretched, or else interest funds had to be sought from financial institutions beyond equity capital. To day UMEME projected investment source is outside borrowing according to David Hall, 2008.

Nevertheless, UEDCL like other energy firms are a worry for potential investors and the world body (Wall Street) is cautious with the energy accounting systems since Enron's case (Kennedy-2003). Therefore UEDCL being threatened by takeovers and lack of accounts authenticity as witnessed in published accounts of 2001 with adjustments made to the tune of 48 billion for alleged distorted billings, most probably could not escape the Wall Street "mechanized- creative accounting" slogan hence resulting into to day's credit crisis even in UMEME as well.

On the whole the UEDCL credit/services performance portfolio was indicative of stake holders dissatisfaction and with no regard to share holders value, among others.

5.5 CONCLUSIONS

The conclusions are derived, in view of the study findings, and consistent with study objectives.

Objective one was to explore UEDCL Credit Policy establishment.

UEDCL has "a Credit Policy Manual version 2001", with similar internationally recognized policy contents (i.e. Credit Standards and analysis, Credit terms or stipulations and collection effort or credit monitoring and debts recovery procedures, and with expressed aims), hence, it has an established, primafacie, a mandatory trade credit management policy.

The second objective was; to investigate UEDCL Credit Policy functional validity extent on performance.

UEDCL, failed to formulate adequate strategically laid down procedures and practices on the aspects of credit documentation and communication systems, logistical provision (lack of proper grid network mapping and other technological support, accounting structures with accounting controls as well as risks management process and motivation, generally portraying inadequate quality service assurance or inadequate credit policy integration and embedding into the entire organization's operational system hence contributed to the inadequate functional validity that resulted into performance shortfalls in terms of other credit policy functions accordingly.

The third objective was to examine the functional relationship between the credit management policy and performance.

The conclusions are; on basis of interviewed customers and statistical inference.

The credit management policy functional validity extent has a close relationship with performance intensity, therefore, impacting on UEDCL performance, accordingly in view of credit customer evaluation process, credit customer stipulation setting, and collection effort.

The credit customer evaluation, credit customer stipulation formulation and collection effort have a significant functional relationship that impacts on each other, accordingly as well as customer satisfaction, hence their improvement on each operation enhances customer satisfaction as well as ensuring stakeholders expectations.

The fourth objective was to assess the functional effects of UEDCL credit policy on performance.

i) The UEDCL inadequately integrated and embedded the credit management policy into the entire organizational system, in view of the formulation of inadequate procedures and practices on the aspects of credit policy documentation and information system, logistics and human resource management that contributed in effect to ineffective performance.

ii) UEDCL's credit customer evaluation and rating laxity (by average 32% shortfall in all credit policy operations), formulation of un-optimum credit stipulations with none aggressive collection effort, improper sales accountability; led to unfavourable credit customer quality portfolio, unfavourable debts' recovery defaults rates, high investment in receivables; liquidity crises; unjustified impairments; and debts hedging handicap that resulted into rampant losses (inclusive of controversial commercial losses of 40%), hence, ultimately contributed to UEDCL's none observation of shareholders value and corporate survival to the dismay of the stakeholders.

iii) The UEDCL initial power procurement process inefficiency, on basis of interviewed customers (96%), seen as a mere bureaucratic pretext; metering process (42%), power invoicing process (44%) and collection procedures (44%) contributed to customer non satisfaction variance (r2) of (30%), hence, portrayed inefficient quality of services delivered to the customers.

5.6   RECOMMENDATIONS

Given the findings of this study, the following recommendations are made to improve the credit management processes in UEDCL and possibly in its concessionaire (UMEME).

1   On the credit policy establishment, there is a need to revisit the established credit policy manual to integrate the current issues and sensitization to all parties concerned.

2   On credit functional validity there is need to review and improve on credit management policies design and practice, especially on the aspects of credit sales accounting and control procedures, credit policy documentation and information system, infrastructure or logistics procedures, organizational structure and atmosphere, to be integrated and embedded into entire management system, to ensure efficient quality credit services assurance or compliant to ISO 1900: 2000 E management systems requirements, hence, raising the credit functional validity intensity on performance.

3   On credit policy operation UEDCL needs;

(a) To evaluate all its credit customers, at least through proper customer sourcing and power connection procedures.

(b) To vary its credit customer terms according to type of customer at the sourcing stage i.e. care should be taken to identify marginal risk, full risk and committed customers sticking on credit limits and credit periods however with justified computed bills, conducive in the eyes of customers and stakeholders. This preferably should be based on closely monitored individual monthly consumption. There should be a clear and effective security deposit policy, as the company customers are mostly tenants and volatile (nomadic) moreover with accompanied meter looping. Explicit credit incentives (discounting system), should be introduced to ensure effective motivational customer satisfaction.

Acceptable unit consumption ascertainment equipment (meter), that are calibrated by National Bureau of Standards for amenable measurements and pricing (bills computations) and proper adjustments should be given with consent of both parties, resulting into

authentic demand notes. Consumers should be sensitized or counseled before any change from time to time.

b) Prompt committed and justified aggressive collection effort on part of the delinquents/ defaults. Authenticity sales accountability manipulation to ensure legibility for public trust (customers/ stake holders), debts hedging and economic evaluations.

Risk zone customers to be tendered but consequently ensuring for better collection or else prepayment meters should be installed in selected areas. However, UEDCL should liaise with National Civil Engineering Association and ERA to ensure for purposeful wiring specifications. Briefcase wiremen should be avoided.

New customers and re-registrations must be accompanied by distinct location descriptions to identify active customers. Redundant accounts should be isolated and written off. Illegal connections should be legalized with clear policy or else services should be recovered there and then.

4   All in all, in view of the consequential effect's aversion, UEDCL organizational structure should be culturally changed to be customer or corporate goals oriented, committed to self close supervision of credit policies implementation within the innovative and conducive atmosphere in order to measure up to the expected quality standards as par the stipulation in the prevailing International (ISO 1900; 2000E) management systems requirement guidelines or ISO Compliant with possible risks management procedures to ensure customer satisfaction and stakeholders appreciation.

5.7   NEED FOR FURTHER RESEARCH

There is need for further research in UEDCL credit policy management on the fact that, there are some UEDCL credit policy functions that indicates inadequate policy on credit sale accountability process, documentation and information system, logistics provision (specifically for energy product and customer traceability and identity), human resource management and risks management with immerging possible yielded elements of corruption, one meter looping and the commercial energy losses, among others, that have not been subjected to significant test in the study.

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